

BATTLETECH

CAMPAIGN OPERATIONS™



FIGHT THE BATTLES, WIN THE WAR!



Forge your forces and prepare to fight any battle across the Inner Sphere! *Campaign Operations* completes the core rulebook series begun in *Total Warfare*. While previous rulebooks detailed game play at various levels—from a single MechWarrior, to a BattleMech company, to entire armies—this final volume focuses on the forces a player will build and run through any level of play.



Campaign Operations contains rules for creating and running forces, whether a down-on-their-luck mercenary battalion, or a fully-supplied House regiment. The volume also contains complete rules for devising solar systems, allowing players to recreate existing star systems or craft all-new worlds to challenge each other. The final sections of the book bring several options to the table for campaign play. Building off of previous sections in *Total Warfare* and *Strategic Operations*, the Narrative Campaign, Map-Based Campaign and Chaos Campaign rules allow players to build exciting, fun campaigns of almost any stripe for their newly-minted forces!

FOR USE WITH

BATTLETECH

TOTAL WARFARE

ALPHA STRIKE



CATALYST
game labs™

TOPPS

©2016 The Topps Company, Inc. All Rights Reserved. Campaign Operations, BattleTech, BattleMech, Mech and MechWarrior are registered trademarks and/or trademarks of The Topps Company, Inc., in the United States and/or other countries. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Production, LLC. Printed in USA.

WEBSITE: CATALYSTGAMELABS.COM



BATTLETECHTM

CAMPAIGN OPERATIONS

• **CATALYST GAME LABS** •

INTRODUCTION

6

FORCE CREATION

8

The Steps of Force Creation	8
STAGE 1: DEFINE THE FORCE	9
Step 1: Select Force Type	9
Step 2: Select Force Background	9
STAGE 2: SELECT FORCE SIZE	10
Step 1: Determine the Basic Budget	10
Step 2: Modify Budget	11
STAGE 3: PROCURE EQUIPMENT AND HIRE PERSONNEL	12
Step 1: Buy all the Stuff!	12
Step 2: Acquire Large Spacecraft	17
Step 3: Determine Special Abilities	20
Step 4: Leftover Funds	20
Step 5: Determine Support Personnel & Officers	20
<i>Technical Personnel</i>	20
<i>Administrative Personnel</i>	21
<i>Officers</i>	21
STAGE 4: DETERMINE OPERATING EXPENSES	24
Step 1: Complete the TO&E	24
Step 2: Calculate Peacetime Operating Costs	29
OPTIONAL CONSTRUCTION RULES	30
Alternate Flexible Force Construction	30
Player Character Influences	30
Dependents	30
Random Backgrounds	31
Taking on Debt	31

FORCE OPERATIONS

32

REPUTATION	32
Finding the Reputation Score	33
HIRING AND CAMPAIGNS	38
Stage 1: Contract Offers	38
Stage 2: Determine Employer	39
Stage 3: Determine The Mission	40
Stage 4: Negotiate Terms	40
<i>Base Payment</i>	41
<i>Length of Mission</i>	41
<i>Operations Tempo</i>	43
<i>Employer Multiplier</i>	43
<i>Reputation Factor</i>	43
<i>Transport Payment</i>	43
<i>Support Payment</i>	44
<i>Final Payment</i>	45
<i>Command Rights</i>	45
<i>Salvage Rights</i>	45
ADDITIONAL RULES	46
Wartime Definition and Costs	46
Contract Breaches and Mission Failures	46
<i>Mission Failure & Partial Failure</i>	47
<i>Contract Breach</i>	47
<i>Resolving Mercenary Contract Breaches</i>	47
<i>Resolving Government Contract Breaches</i>	48
Changing Force Type	48
Debt During a Campaign	48
<i>Loans</i>	49
<i>"Company Store"</i>	50
<i>Repaying Debts by Shorting Salaries</i>	50
Procuring Equipment and Personnel During a Campaign	51

Keeping Fit	51
<i>Training</i>	51
<i>Maintenance</i>	52
<i>Administration</i>	53
Chaos Campaign Conversions	53
Housing and Base Building	53
<i>Step 1: Obtain Land</i>	54
<i>Step 2: Base Construction</i>	54

FORMATION BUILDING

56

FORMATION BUILDING BASICS	56
Step 1: Select Battle Value Total	57
Step 2: Build a Formation	57
Step 3: Select Skills and Modify Unit's BV	57
Step 4: More Formations	57
Step 5: Special Pilot Abilities	57
Step 6: Special Command Abilities	57
UNIT ROLE	57
Ground Unit Roles	57
<i>Ambusher</i>	57
<i>Brawler</i>	57
<i>Juggernaut</i>	57
<i>Missile Boat</i>	58
<i>Scout</i>	58
<i>Skirmisher</i>	58
<i>Sniper</i>	58
<i>Striker</i>	58
Aerospace Unit Roles	58
<i>Attack Fighter</i>	58
<i>Dogfighter</i>	58
<i>Fast Dogfighter</i>	58
<i>Fire Support</i>	58
<i>Interceptor</i>	58
<i>Transport</i>	58
LANCES, STARS AND LEVEL IIS FORMATIONS	58
Formation Compositions	60
Formation Requirements	60
Ideal Role	60
Bonus Abilities	60
Variations	61
Naming Conventions	61
Ground Formation Types	61
Air Lance	61
Anti-Mech Lance	61
Assault Lance	61
Battle Lance	62
Command Lance	63
Fire Lance	64
Nova	64
Pursuit Lance	65
Recon Lance	65
Security Lance	65
Striker/Cavalry Lance	66
Support Lance	66
Urban Combat Lance	67
Aerospace Formation Types	67
Aerospace Superiority Squadron	67
Electronic Warfare Squadron	67
Fire Support Squadron	68
Interceptor Squadron	68
Strike Squadron	68
Transport Squadron	68

COMPANIES, BINARIES AND BEYOND

SPECIAL PILOT ABILITIES

Assigning Special Pilot Abilities	70
Animal Mimicry	72
Antagonizer	73
Blood Stalker	73
Cluster Hitter	73
Combat Intuition	73
Cross-Country	73
Demoralizer	74
Dodge	74
Dust-Off	74
Eagle's Eyes	74
Environmental Specialist	74
Fist Fire	75
Forward Observer	75
Foot Cavalry	75
Golden Goose	75
Ground-Hugger	75
Heavy Horse	75
Heavy Lifter	76
Hopper	76
Hot Dog	76
Human Tro	76
Iron Will	76
Jumping Jack	76
Light Horseman	76
Lucky	77
Maneuvering Ace	77
Marksman	77
Melee Master	77
Melee Specialist	77
Multi-Tasker	78
Natural Grace	78
Oblique Artilleryman	78
Oblique Attacker	78
Range Master	78
Ride The Wash	79
Sandblaster	79
Shaky Stick	79
Sharpshooter	79
Slugger	80
Sniper	80
Speed Demon	80
Stand-Aside	80
Street Fighter	80
Swordsman	80
Tactical Genius	80
Terrain Master	81
Urban Guerrilla	82
Weapon Specialist	82
Wind Walker	82
Zweihauder	82

SPECIAL COMMAND ABILITIES

Determining Experience Rating	83
Commanders and Command Abilities	83
Anti-Aircraft Specialists	83
Banking Initiative	83
Berserkers	83
Brawlers	83
Camouflage	83
Combat Drop Specialists	84
Communications Disruption	84

Enemy Specialization	84
Environmental Specialization	84
Esprit de Corps	84
False Flag	84
Forcing The Initiative	85
Ground Attack Specialists	85
Highlander Burial	85
Hit and Run	85
Off-Map Movement	85
Overrun Combat	86
Rapid Strike	86
Savages	86
Special Pilot Ability Specialization	86
Sharp Shooters	86
Tactical Adjustments	87
Tactical Experts (Engineers)	87
Tactical Experts (Hidden Units)	87
Tactical Experts (Physical)	87
Tactical Specialization	87
Zone Of Control	87

INNER SPHERE AT WAR CONVERSIONS 88

Converting ISW Combat Commands to ACS Formations, Combat Units and Teams	88
<i>Abstract Combat System Formations</i>	88
<i>Determine ACS Combat Units</i>	89
<i>Determine ACS Combat Teams</i>	90
Converting ACS Combat Teams to SBF Formations and Units	90
<i>Determine SBF Formations</i>	90
<i>Determine SBF Units</i>	90
Converting SBF Units to Battleforce, Alpha Strike and Total Warfare Elements	91
<i>Random Method</i>	91
<i>PV Method</i>	91
Converting Back From Battleforce, Alpha Strike And Total Warfare to SBF and ACS	91

SOLAR SYSTEM GENERATION 98

The Primary	98
<i>Star Type</i>	99
<i>Stellar Subtype</i>	102
The Planets	102
<i>Step 1: Generating Number of Orbits</i>	102
<i>Step 2: Placing Orbits</i>	102
<i>Step 3: Filling Orbital Slots</i>	103
<i>Step 4: Planetary Details</i>	104
<i>Common Details</i>	104
<i>Asteroid Belts</i>	106
<i>Moons And Rings</i>	106
<i>Size Of Moons</i>	107
<i>Distribution Of Moons And Rings</i>	107
<i>Atmospheric Pressure And Composition</i>	108
<i>Planetary Temperatures</i>	110
<i>Habitable Planet Details</i>	111
<i>Special Features And Occupancy</i>	114
Options	115
<i>Brown Dwarfs</i>	115
<i>Exotic Moons</i>	115
<i>Eccentric Planetary Orbits</i>	116

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

<i>High Axial Tilts</i>	116
<i>Hot, Hot, Hot!</i>	116
<i>"It's Life, but Not as We Know It"</i>	117
<i>Multi-Star Systems</i>	117
<i>Realistic Planetary Placement</i>	118
<i>Variable Stars</i>	118
<i>Very Young and Very Old Systems</i>	118
<i>Water, Water Everywhere</i>	119
<i>Planetary Location Versus Density and Exotic Densities</i>	119
Math Guidance	120
<i>Transit Times</i>	120
<i>Density Calculations</i>	120
<i>Surface Gravity Calculations</i>	120
<i>Escape Velocity Calculation</i>	120
<i>Planetary Year Length</i>	121
<i>Planetary Temperatures</i>	121
COLONY CREATION	122
Step 1: Population	122
<i>Population</i>	122
Step 2: Usilr Codes	123
<i>Exceptions</i>	129
Step 3: Governments	129
<i>Government Definitions</i>	130
Step 4: Other Features	132

NARRATIVE CAMPAIGNS 134

CAMPAIGN BACKGROUND	134
<i>Player Unit Rosters</i>	135
WEBBING THE CAMPAIGN	135
SCENARIO HOOKS	137
<i>Mission Balancing</i>	139
<i>Mission Creation & Webbing</i>	139
MISSION WRAP UP	139
<i>Salvage</i>	139
<i>Repair Cost and Time</i>	140
<i>Results and Follow Up</i>	140
NARRATIVE AND MAP-BASED CAMPAIGNS	141
FINAL TIPS & TRICKS	141

MAP-BASED CAMPAIGN 142

CAMPAIGN SCALE	142
RULES COMPLEXITY	143
CAMPAIGN SETUP	143
<i>Determining Campaign Objectives</i>	143
<i>Determining Map Objectives</i>	144
<i>Valuing Map Objectives</i>	147
<i>Force Building</i>	147
<i>Deployment</i>	147
PLAYING/RUNNING THE CAMPAIGN	148
<i>Map-Scale Turns</i>	148
<i>Formation Orders</i>	148
<i>Battles</i>	149
<i>Choosing Mapsheets or Terrain</i>	150
<i>Scenarios</i>	150
<i>Battle Wrap-Up</i>	153
<i>Key Locations</i>	154
WINNING THE CAMPAIGN	154
OPTIONAL RULES	155
<i>Multi-Force Campaigns</i>	155
<i>Double-Blind Rules</i>	155
<i>Dynamic Campaign Scaling</i>	155



CUSTOM CHAOS: CAMPAIGN CREATION 156

HOW TO USE THE CHAOS CAMPAIGN RULESET	157
Tracks	157
<i>Situation and Game Setup</i>	157
<i>Player Force Size</i>	158
<i>Opposing Forces</i>	158
<i>Warchest and Objectives</i>	160
<i>Special Rules</i>	160
<i>Aftermath And Next Track</i>	160
Warchest Point System	160
<i>Getting Started</i>	160
<i>Warchest Debt</i>	160
Warchest Points Between Tracks	160
<i>Optional Rule: Support Points</i>	161
<i>Purchase/Repair</i>	162
Skill Advancement	164
Changing Force Commands and Formation Types	164
Warchest Campaign Record Sheet	164
CUSTOM CHAOS: BUILDING YOUR OWN CAMPAIGN	165
Game Setup	165
Additional Forces	165
Objectives	166
Victory Conditions (Optional)	169
OPTIONS	169
Warchest	174
Special Rules	174
Situation	180
Aftermath	180
Next Track	180
BUILDING A TRACK	180
Game Setup	182
<i>Attacker</i>	182
<i>Defender</i>	182
Warchest	182
<i>Options:</i>	182
<i>Objectives:</i>	182
Special Rules	182
<i>Forced Withdrawal</i>	182
<i>Tinderbox</i>	182
Aftermath	182
<i>Victory</i>	182
<i>Failure</i>	182
Next Tracks	182

RECORD SHEETS & TABLES

CREDITS

Project Concept

Randall N. Bills

Project Development

Ray Arrastia
Ben H. Rome

Writing

Ray Arrastia
Randall N. Bills
Brian Bunch
Johannes Heidler
Joshua K. Franklin
Mike Miller
Ben H. Rome
Elliotte Want

Product Editing

Aaron Cahall

BattleTech Line Developer

Randall N. Bills
Assistant Line Developer
Ben H. Rome
Products Developer
Ray Arrastia

Production Staff

Art Director
Brent Evans
Assistant Art Director
Ray Arrastia
Cover Art
Marco Mazzoni
Cover Design
Ray Arrastia
BattleTech Logo Design
Shane Hartley, Matt Heerd
and Steve Walker
Evolved Faction Logos Design
Jason Vargas
Layout
Ray Arrastia
David Allen Kerber
Illustrations
Jeff Porter
Miniatures Painting & Photography
Camospecs Online

Additional Design and Development

The following people have been involved in the creation and development of *BattleTech* rules, either by writing material that was assimilated into the main body of the rules, serving as the *BattleTech* line developer in the past, or otherwise contributing to the game in a major way.

Ray Arrastia, Samuel B. Baker, Herb Beas, Randall N. Bills, Forest G. Brown, Chuck Crain, Chris Hartford, Clare Hess, Scott Jenkins, J. Andrew Keith, James R. Kellar, Dale Kemper, L.R. "Butch" Leeper, Bryan Li-Brandi, Jim Long, David McCulloch, Jim Musser, Bryan Nystul, Mike Nystul, Blaine Pardoe, Boy F. Peterson Jr., Rick Raisley, Ben H. Rome, Paul Sjardijn, Jerry Stenson, Christoffer Trossen, Wm. John Wheeler.

Playtesters/Proofers/Fact Checkers

In addition, the following people have been involved in the thankless task of playtesting, proofing, and factchecking *BattleTech* rules since the start of the core rulebook series, beginning with *Total Warfare*. Anyone we may have missed, we apologize in advance.

Matt Alexander, Sebastian Brocks, Brian Bunch, Aaron Cahall, Rich Cencarik, Bill Derer, Brent "Moonsword" Ezell, Bruce Ford, Eugen Fournes, Stephan Frabartolo, Joshua K. Franklin, William "MadCapellan" Gauthier, Keith Hann, Jason Hansa, T rence Harris, John "Worktroll" Haward, Matt Heerd, Johannes Heidler, Ross Hines, Ken' Horner, Daniel Isberner, Alex Kaempfen, David Kerber, Stephen C. King, Chris Marti, Mike Miller, William Pennington, Jan Prowell, Craig "Turboturtle" Reed, Luke Robertson, Andreas Rudolf, Eric Salzman, Chris Sheldon, Cameron Smith, Lee Thoms, Mike Timbers, Colin Toenjes, Drew Triebe, Øystein Tvedten, John Unchelenko, Elliotte Want, Chris Wheeler, Matthew Wilsbacher, Andreas Zuber.

Special Thanks

To *BattleTech* fans worldwide, your neverending addiction to this venerable game never ceases to amaze. The clamor for building campaigns has been constant for several years, and we're glad to finally present them to you in the last of the core rulebook lineup.

A special thanks to Paul Sjardijn, who helped develop the initial *Chaos Campaign* ruleset that debuted in *Dawn of the Jihad* and has morphed into an essential game aid for fans wanting to participate in iconic universe-setting campaigns.

Ben wishes to thank Randall for taking a chance way back when, giving him the chance to play "behind the scenes" with the game line and universe for so many years. And he also thanks his wife Ri, who continues to provide support and encouragement with all his creative endeavors.

Ray would like to thank Randall, Herb, Ben, Paul, Scott, and David—individuals who over the years have allowed and encouraged him to contribute to a game and universe that has always given him so much in return, as well as his wife Ibis for always cheering him on.

Dedication

To all the *BattleTech* fans that have kept the faith for so many years...thank you. Keep watch for the "next big thing!"

 2016 The Topps Company, Inc. All Rights Reserved. *Campaign Operations*, *Classic BattleTech*, *BattleTech*, 'Mech, BattleMech, MechWarrior and Topps logo are registered trademarks and/or trademarks of The Topps Company, Inc. in the United States and/or other countries. No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior permission in writing of the Copyright Owner, nor be otherwise circulated in any form other than that in which it is published. Catalyst Game Labs and the Catalyst Game Labs logo are trademarks of InMediaRes Productions, LLC.

Printed in USA

Published by Catalyst Game Labs,
an imprint of InMediaRes Productions, LLC.
PMB 202 303 91st Ave NE E502
Lake Stevens, WA 98258

FIND US ONLINE:

classicbattletech@catalystgamelabs.com
(e-mail address for any *BattleTech* questions)
<http://bg.battletech.com/>
(official *BattleTech* web pages)
<http://www.CatalystGameLabs.com>
(Catalyst web pages)
<http://www.battlecorps.com/catalog>
(online ordering)

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



The *Total Warfare* (TW) and *TechManual* (TM) rulebooks present the core game and construction rules for *BattleTech* (BT), otherwise referred to as the standard rules. These two volumes encompass eight core unit types—several of which contain numerous subunit types—and a host of weapons and rules, as well as covering many different game situations. However, despite the breadth of play covered, many game situations still fall outside those rules, not to mention a plethora of more advanced equipment, as well as a few advanced units.

ADVANCED RULES

Beyond the standard rules, a legion of advanced rules exists, allowing players to expand their games in any direction they desire.

In an effort to bring these rules to players in the most logical form possible, the advanced rules are contained in three “staging” core rulebooks, each one staging up and building off of the previous rules set. Additionally, each one focuses on a particular “in-universe time frame” that will allow players to easily grasp where a given rulebook will “plug into” their existing game play.

TACTICAL OPERATIONS

SitRep:

Forces on-world.

Conflict expected to last mere hours to achieve object.

Tactical Operations (TO) is the first in the “staging” Advanced Rulebooks. Its focus is during game play, and applies directly to a game as it unfolds on a world in the *BattleTech* universe; its rules represent hours in-universe, the time frame it takes for a single, moderate-sized battle to play out on a gaming table.

Building on *Total Warfare* and *TechManual*, *Tactical Operations* conveys numerous advanced rules for movement and combat across various units, while expanding core rules such as those for buildings, and implementing a host of advanced terrain and weather rules. Rules for the construction and use of advanced Support Vehicles are presented, as well as advanced and prototype construction options and weapons for use by almost every unit.

STRATEGIC OPERATIONS

SitRep:

Forces in solar system.

Beginning burn to planet.

Conflict expected to last weeks to achieve object.

Strategic Operations (SO) is the second “staging” Advanced Rulebook. It stages a player up to the next logical area of play, focusing on “in a solar system” and multi-game play; its rules represent weeks within the *BattleTech* universe, the time frame needed for several battles to conquer an entire solar system.

Strategic Operations contains advanced movement and combat operations emphasizing the importance of aerospace units, while extensive rules cover combat drops of numerous troop types into any situation. Linked scenarios and comprehensive maintenance, salvage, repair and customization rules provide an easy format for players to turn multiple games into an interconnected campaign to capture a target system, where the support crew of technicians and doctors and their skills can be just as important as any warrior. Complete game play and construction rules for advanced aerospace units are also included. Finally, a complete game system—*BattleForce*—allows players to use their existing miniatures and mapsheets to play quick, fast-paced *BattleTech* games, from small-scale skirmishes to large-scale planetary invasions.

INTERSTELLAR OPERATIONS

SitRep:

Forces marshaled.

Flotillas assigned to target solar systems.

Conflict expected to last months to achieve objectives.

Interstellar Operations (IO) is the final “staging” Advanced Rulebook. Players are staged up to the final level of play, where they can assume the roles of a House Lord or Clan Khan and dominate the galaxy; *IO* rules represent months in the *BattleTech* universe, the time frame for conquering numerous star systems.

Interstellar Operations contains rules for the running of an entire faction’s military as a player tries to conquer (or defend) numerous solar systems. More importantly, the system contains rules that allow players to stage any large-scale conflict back through the various rule sets, as they desire—from *BattleForce* or *Alpha Strike* as detailed in *Strategic Operations*, *Alpha Strike* and the *Alpha Strike Companion*, all the way up to the simple, easy-to-use rules of conflict at the largest scale. Players have complete flexibility for any type of conflict in which they wish to engage.

CAMPAIGN OPERATIONS

SitRep:

Prepare forces.

Assign objectives, targets, and plans of attack across a world or a swath of interstellar space.

Wage war to achieve your final objective.

Campaign Operations (CO) is the rulebook you are holding in your hands and the foundational book to prepare players for campaigns that can encompass all of the three “staging” Advanced Rulebooks. Incorporating elements from all of the previous rulebooks, as well as *Alpha Strike* and the *Alpha Strike Companion*, *CO* represents an entire campaign, scenario, or story arc within the *BattleTech* universe. Players can assume the roles of any unit within the universe or create their own iconic force.

Campaign Operations contains rules for the construction and detailing of solar systems, building an opposing force to put in conflict with the players, crafting specialized scenario and campaign arcs, and constructing a stylized *Chaos Campaign* that fits a group’s play style. Players and gamemasters can use these rules with *Total Warfare* (and subsequent Advanced Rulebooks), *A Time of War* RPG, and the *Alpha Strike* system.



CHOOSE WHAT YOU LIKE

As previously noted, *Campaign Operations* encapsulates a myriad of advanced rules. In effect, all the rules in this volume are optional. This means you can use as many or as few of the rules in this book as you want. (In fact, this book contains so many new rules that we recommend you try them out a few at a time, rather than attempting to use them all at once.) Furthermore, most of the new rules here can be added individually to a standard game—most of the rules do not rely on other rules in this book to work in existing *BattleTech* games. This allows you to tailor your *BattleTech* game to your taste by including only those rules that you find make the game more interesting or fun. Use whatever new rules you want and disregard the rest. Given the scope of the rules and the fact that they are optional, all players in a group should read through and agree to the use of any of these rules and weapons/equipment.

PLAYER ADJUDICATION

An advanced-rules book for any game is, almost by definition, more complex. In a game system with such a long and rich heritage as *BattleTech*—this rulebook alone draws from dozens of different sources across a large number of years—that complexity is even greater. Developers and writers have gone to great effort to make these rules as comprehensive as possible—not only from one section to the next in this book, but in how such advanced weapons and rules interact with the core game and construction rules as presented in *Total Warfare* and *TechManual*. However, the sheer scope of *Campaign Operations* (as with *Tactical Operations*, *Strategic Operations*, and *Interstellar Operations*) and the plethora of options provided means that it is not possible to cover all potential situations. Once this product reaches the players’ hands, they’ll envision scenarios and create situations on a game board that never crossed the minds of the developers or the legion of authors and playtesters that thoroughly worked over this product.

With that in mind, when players encounter situations not covered in the rules as they integrate the contents of *Campaign Operations* into their playing group, they are encouraged to adjudicate each situation appropriately; make up the rules that work for you. If in the process a playing group runs into an argument, feel free to let a die roll resolve any disputes so you can return to playing the game and having fun.

Finally, the forums on bg.battletech.com are an excellent resource. Players can tap into a strong and vibrant online community, tapping a wide selection of players for different ideas on how best to adjudicate a particular situation.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Arrayed for battle, a reinforced company of the Eridani Light Horse presents an armored wall bristling with destructive weaponry.

FORCE CREATION

This chapter is intended to allow players to produce military Forces of almost any type, and to do so relatively quickly. Significant freedom is granted in the process, requiring some restraint on the part of the players. On the other hand, the resulting Forces are considered to be the products of Advanced Rules and thus not suited for tournament play, so if players are happy with the resulting Forces, that is all that matters.

Terminology: These rules use the same terminology as *Total Warfare*: a “unit” refers to any mobile element that can be fielded in a *BattleTech* game, such as a BattleMech or a tank. Meanwhile, a “Force” denotes all units of a “named” organization. For example, Snord’s Irregulars circa 3067 consisted of two battalions, while the Star League Defense Force Second Army circa 2767 consisted of 4 Corps (6 BattleMech divisions, 17 infantry divisions and 9 independent regiments), yet both are considered a “Force.” Regardless of type or size, a “Force” denotes all units a player incorporates into the organization they will create and play.

THE STEPS OF FORCE CREATION

Force creation follows four stages, with several steps in each.

Stage 1: Define the Force

- Step 1: Select Force Type
- Step 2: Select Force Background

Stage 2: Select Force Size

- Step 1: Determine Basic Budget
- Step 2: Modify Budget

Stage 3: Procure Equipment and Hire Personnel

- Step 1: Procure Equipment and Hire Personnel
- Step 2: Acquire Large Spacecraft
- Step 3: Force Specialties
- Step 4: Leftover Funds & Post-Creation Purchases
- Step 5: Determine Support Personnel

Stage 4: Determine Operating Expenses

- Step 1: Complete the TO&E
- Step 2: Calculate Peacetime Costs

In Stage 1, the controlling player selects the Force they want from one of three types (government, mercenary, or pirate) and determines the Force’s background (era, faction or originating faction, etc.). These decisions affect the subsequent stages.

In Stage 2, the player rolls randomly to determine the Force's basic budget. A number of modifiers alter the basic budget to calculate a final budget.

In Stage 3, the player buys their desired equipment or hires infantry, within their available budget. Most procurement is handled with straight C-bill costs, but some large items such as JumpShips are purchased through rolls against availability charts. Also in this stage, players may add any Force specialties. Because the amount of equipment and personnel may differ from the size selected in Step 2 (due to under- or over-spending), the requirements for support personnel (administrators, techs, etc.) are determined at the end of this stage.

In Stage 4, the player tallies up equipment, personnel, and other costs. This is the most laborious stage in Force creation and is important only if the player wishes to realistically manage Force costs and supplies.

STAGE 1: DEFINE THE FORCE

Start by defining the Force.

STEP 1: SELECT FORCE TYPE

At the start of game play, the controlling player first determines whether their Force will be a government Force, a mercenary Force, or a pirate Force. Prior to the start of game play, the Force might have been a different type at some point in its history—for example, a government Force that was once mercenary but “went regular.” The *Force Operations* chapter (see p. 32) discusses changing the Force type during game play (for example, a government Force that turns to piracy). But for this step, what matters is the current Force type.

Government Force: Government Forces are those that report to an established national government, limited to a House, a major planet within a House, a Periphery state, or a Clan. Specifically excluded from government Forces are private troops belonging to a corporation and the personal guard of a noble (defined as nobles of lower stature than a national or planetary leader). Government Forces have a number of advantages over other Force types. First, it is quite reasonable to build government Forces up to multi-regimental levels (a Federated Suns RCT, an old Star League division, or a Clan Galaxy), though Forces much larger than the battalion/cluster level will be unwieldy in game play. Second, government Forces have somewhat lower administrative costs than mercenaries and pirates, reflecting administrative support by government departments external to the Force. Third, and perhaps most importantly, government Forces can usually depend on regular income and support. The disadvantage is that government Forces lack the freedom to pick their employer or missions.

Mercenary Force: Mercenary Forces have the freedom to pick and choose employers, at least as much as their bank account allows. In exchange for that freedom comes a lack of certainty. Mercenaries cannot always depend on the next

paycheck and, lacking the economies of scale of a government Force, have proportionally higher administrative costs. That lack of certainty also tends to limit the size of a mercenary Force to a regiment or less, with most Forces smaller than a battalion of BattleMechs (conventional merc Forces tend to be slightly larger). Mercenary Forces larger than a regiment have certainly existed in the *BattleTech* universe, some totaling five regiments or more, but these are very rare. Finally, the private guardsmen of most nobles and security Forces of corporations are treated as mercenaries due to their relatively small size.

Pirate: Pirates are handled similarly to mercenaries, but differ in a few major points. First, pirates are virtually unemployable (though some may find work from indiscriminating employers) and thus must be “self-employed,” raiding for the supplies and spare parts they need to keep operating. Second, pirates rarely have contracts and thus need not share salvage with employers. They also can often operate without paying wages (because pirate troops are not in a position to find transport elsewhere, not to mention that they face execution on many worlds). Problems develop when pirates cannot get enough spare parts and munitions to sustain their operations.

Arnold wants to build a small House Davion rapid-response combined arms company, something big enough to include all his friends in his BattleTech gaming group and able to handle interesting missions, but small enough to be easily managed (he hopes). Hence, he decides on a government Force.

Hannah is interested in a flexible Force that isn't tied down to one employer if a battle goes bad. She decides on a mercenary Force, a group of Terran ComStar veterans scarred by Tukayyid and the Schism.

Jason wants to try something different: a “sand box” campaign in the Periphery where he can build up an impoverished, independent planet into a force to be reckoned with...or at least not quite so pitied. Defending the world will require far more military firepower than it can afford, so the only way to support the Force will be extralegal liberation of military supplies from the Periphery's House oppressors. (Jason decides on a pirate group.)

STEP 2: SELECT FORCE BACKGROUND

Several background details strongly affect Force creation: the Force's originating faction and the era of game play. The options differ between Force types selected in Step 1.

Government Forces determine faction specifically: a House, a Clan, a major Periphery state, a minor Inner Sphere state (St. Ives Compact, Chesterton Trade League, etc.), the militia of a major planet or minor multi-world Periphery state (if the population is over 100 million or the planet has a military factory), or the SLDF (new or old). A list of factions per Era may be found in the *Alternare Eras* section of *Interstellar Operations*, pp. 14-17. Government Forces select their era from the Force Creation Era Table (p. 10).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

FORCE CREATION ERA TABLE

Inner Sphere / Periphery Eras	Description
2100-2412	Early Interstellar States and unrestricted Age of War, marked by small and novice militaries
2412-2570	Age of War under the Ares Conventions, an era of growing prosperity and industrial capacity
2571-2650	Reunification War and Early Star League
2651-2750	High Star League, an era of stability and ever-growing technology and military strength.
2751-2820	Fall of the Star League, First Succession War. Despite the grim period, this is, in fact, the peak of human military strength, technology, and prosperity.
2821-2900	Second Succession War and early Third Succession War, where population, industrial, and technological declines really take hold. The average wealth and technology are higher than the Third Succession War until the end of this period.
2901-3049	Third and Fourth Succession Wars. The great malaise of the Succession Wars defines most of the era; the technological revolution seen at the end of this period truly takes hold in the next.
3050-3067	Clan Invasion. Technological recovery sweeps the Inner Sphere, increasing standards of living—and military firepower—dramatically.
3068-3085	Jihad. The impact of the Helm Memory Core reaches its peak in this period before the Jihad wipes the progress away.
3085-3130	Late Jihad and Brush Wars. While civilians recover through this period, militaries remain much-reduced in size.
Clan Eras	
2800-2840	Exodus Civil War, Pentagon Campaign. The SLDF batters itself into warring fragments and then “reunites” into the balkanized Clans. In this era, the Clans are at their smallest and weakest.
2840-3025	Golden Century and beyond. The Clans’ population grows from a few million refugees and thus is militarily and industrially smaller than the Clans of the Invasion period.
3025-3072	Invasion-era Clans. The Clans reach the peak of their strength.
3072-3130	Post-Wars of Reaving. This era only applies to Homeworld Clans; Clans in the Inner Sphere and Periphery use the Inner Sphere/Periphery eras.

Mercenary Forces select their era from the Force Creation Era Table. (These eras are specific to Force creation, reflecting significant changes in technology, industry, and overall wealth.) Mercenary Forces also determine an originating faction; this is the faction from which a majority of their equipment came (if the mercs departed the service of a government within the past 10 to 15 years), which influences the amount of starting funds and available equipment. Viable originating factions include minor governments unsuitable for government Forces, and “nondescript” for mercenaries with origins too diverse or too distant to easily be associated with one originating faction. For the purposes of these rules, mercenaries cannot have Clan origins; Clan Forces are always built as government Forces. It would require a unique campaign for Clans to become mercenaries, a lifestyle they abhor.

Pirates select era and originating faction like mercenaries, and likewise may not have Clan origins for purposes of these Force creation rules. Clan Forces may become pirates in the course of play.

Arnold’s friends are having a burst of nostalgia, so as much as he’d prefer to use the fun toys available in the 3070s and stomp WoBblies into the mud, he sets his Force in 3025. The others don’t have a preference, so Arnold indulges his inner Davionista and selects the Federated Suns as his Force’s originating Faction.

Hannah, on the other hand, wants access to a wider range of technology and threats, so she sets her Force in 3071.

Jason, on the gripping hand, prefers an era where there’s a more level technological playing field between his planned House victi...generous donors and hosts, and his own independent Periphery planet. Being so impoverished is an obvious artifact of the Star League’s collapse, but the Inner Sphere gets a real jolt of technology beginning in the 3030s. Jason settles on 2990. If his campaign goes well, the planet will ring in the new millennium in a much better state.

STAGE 2: SELECT FORCE SIZE

STEP 1: DETERMINE THE BASIC BUDGET

This step may be used in one of two ways. The default method is to roll 3D6 on the Basic Budget Table and taking the funds on the corresponding row of the table. Alternately, if the Force’s player interested in less randomness, then the controlling player may simply select a starting budget from the table, assuming other players in the group, and if present, the gamemaster (GM), agrees. (If this is insufficient funding or flexibility for the controlling players’ needs, see Alternative Force Construction in *Optional Rules*, p. 30.)

While different currencies are used in different eras, C-bills are used throughout the Force Construction rules as a matter of compatibility with other core rulebooks. Players may convert them into currencies suiting their era and faction after Force creation is complete.



INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

BASIC BUDGET TABLE

Roll	Funds	Equivalent Force (Approximate)
3	10,000,000 CB	3025-era light BattleMech lance
4	20,000,000 CB	3025-era medium BattleMech lance
5	30,000,000 CB	3025-era heavy / mixed BattleMech lance
6	40,000,000 CB	3025-era well-funded assault BattleMech lance
7	50,000,000 CB	
8	60,000,000 CB	3025-era mixed BattleMech company
9	75,000,000 CB	3025-era assault BattleMech company
10	90,000,000 CB	
11	105,000,000 CB	
12	120,000,000 CB	
13	140,000,000 CB	
14	160,000,000 CB	
15	180,000,000 CB	3025-era mixed BattleMech battalion
16	210,000,000 CB	
17	240,000,000 CB	3025-era assault BattleMech battalion
18	300,000,000 CB	

Note that large spacecraft (DropShips, space stations, JumpShips and WarShips) are not directly purchased in the same way as other Forces due to their rarity and expense. Rather, they are handled in Stage 3 with random rolls. Also note that these budgets are scaled against classic BattleMech Forces. Forces consisting predominantly of infantry or vehicles will probably be larger for the same budget.

Arnold makes a 3D6 roll, getting a 7: 50 million CB. At approximately 5 million CB per 'Mech, that'd be about a company. Arnold starts to get an idea for a mixed arms company. A lance of BattleMechs will allow Arnold and his two friends to play MechWarriors, while a lance of tanks and a platoon of infantry will open up missions not suited for BattleMechs alone.

Hannah gets a 10, for 90 million CB. In an earlier era, that could be an assault 'Mech company. In an era of XL engines, not so much. With that budget, she wants something different than her past Forces of companies and battalions: a simple lance. A simple lance of assault 'Mechs, hired by other Forces that need some heavy punch in their missions.

Jason rolls the 18 he wasn't expecting for a financially-starved pirate Force. Well, the backstory can always expand to include a disgraced House battalion. The 300 million CB could also cover a sizable group of conventional Forces needed to garrison the many population centers on a planet, perhaps a militia raised on the planet before the game begins.

Next, determine the size of the Force.

STEP 2: MODIFY BUDGET

The Basic Budget Table supplies funds based on approximate estimates for 3025-era Inner Sphere equipment and personnel. The basic budget is then multiplied by a Faction Multiplier and an Era Multiplier from the tables on p. 12.

Selecting a Faction Multiplier requires some judgment, because the breadth and depth of *BattleTech* history (and the rise and fall of each faction's strength over time) precludes an itemized listing of all factions by era, and thus generalized examples are given. The controlling player may opt to use a x1.0 multiplier for faction instead of multipliers from the Faction Budget Multiplier Table.

When selecting multipliers from the Faction Budget Multiplier Table, note that a specific multiplier may only be applied once.

For example, a Terran Hegemony planetary militia of 2600 is part of a Super Power twice over (the Terran Hegemony and the Star League), but the Faction Multiplier for Super Power is not applied for both the Hegemony and Star League, just one of them. Similarly, only one faction type may be applied (a Force may not be both from a Super Power and a Major Power).

After all the faction and era modifiers are determined, multiply the basic budget by each in sequence. For example, a Force that has multipliers of 1.50, 1.25, and 0.75 would multiply its basic budget by 1.50, and then multiply the result by 1.25, and then multiply the second result by 0.75.

This step does not address particularly well-connected or wealthy Force founders, as the basic Force creation rules may be used without roleplaying input from *A Time of War*. Optional rules for roleplaying modifiers are provided in *Optional Rules*, p. 30.

ERA BUDGET MODIFICATION TABLE

Inner Sphere Era	Era Budget Multiplier
2100-2412	x0.75
2412-2570	x1.25
2571-2650	x1.50
2651-2750	x2.00
2751-2820	x2.50
2821-2900	x1.50
2901-3049	x1.00
3050-3067	x1.50
3068-3084	x2.00
3084-3130	x1.00
Clan Eras	
2800-2840	x0.50
2840-3025	x1.25
3025-3072	x1.50
3072-3130	x1.25

FACTION BUDGET MODIFICATION TABLE

Faction Type	Faction Budget Multiplier	Examples or Definitions
Super Power	x1.50	<i>BattleTech</i> has only had three super powers: the Terran Hegemony (2450 – 2780), the First Star League, and the Federated Commonwealth.
Major Power	x1.20	Inner Sphere Great Houses, Republic of the Sphere, Terran Alliance, Second Star League, Inner Sphere Clans (Wolf, Jade Falcon, Ghost Bear), pre-Schism ComStar, and similar large nations
Minor Power	x1.00	Most Clans, Capellan Confederation (3030 – 3060), St. Ives Compact, major Periphery States, Inner Sphere micro-states before 2600 (e.g., Chesterton Trade League, United Hindu Collective), Duchy of Andurien, and similar nations with smaller territories and populations
Independent Worlds, Small States	x0.80	Any independent planet or minor Periphery power, such as the Rim Collection or a Chaos March nation
Independent Mercenary and Pirate Forces	x1.00	Any mercenary or pirate Force that has been independent from a faction for over 5 years
Faction Modifiers		
Wealthy Faction	x1.20	Lyran Commonwealth, Terran Hegemony, First Star League
Poor Faction	x0.80	Capellan Confederation (after 2860), Outworlds Alliance, most independent Periphery planets

Arnold's mathematical skills are challenged by the complications his Force's background imposes on his budget. Playing a 3025-era (x1.0) Force aligned to a major Inner Sphere power (x1.0), his basic budget is unchanged from 50 million CB.

Hannah wants her mercenary Force to be ex-Com Guard troops, and hailing mostly from Terra, just to be different. Since her game is set in the 3068-3084 period, there is a x2.0 multiplier. Since the Force separated from the Com Guards shortly after the Schism (3058) and is starting play in 3071, it has a x1.0 Faction Type modifier. Hannah's 90 million becomes 180 million.

Jason's windfall gets smaller with two consecutive hits: his Force is from an independent world (x0.80) and a poor Periphery world (x0.80). He decides on the origins now: his pirate Force will have its roots in a long-independent mercenary Force (x1.00) that hit a rough patch. That brings his budget to 192 million CB.

STAGE 3: PROCURE EQUIPMENT AND HIRE PERSONNEL

This step is used both in Force creation and for the procurement of new personnel and equipment during game play.

Before diving into purchases, it is recommended that players review Stage 4. As items and personnel are acquired, it will save work later to enter them into a TO&E sheet during Stage 3.

STEP 1: BUY ALL THE STUFF!

This step is straightforward: the controlling player rolls to see if a unit can be acquired, and then spends money from their final budget calculated in Stage 2. The Master Unit List, or MUL, is an online resource for *BattleTech* available at MasterUnitList.info and lists costs for most combat units. That resource should be consulted first when purchasing units. If a cost for desired personnel or equipment is not listed in that database, it may be calculated using the construction rules in *TechManual*, *Tactical Operations*, and *Strategic Operations*, and found in the equipment lists in *A Time of War*. If those sources are not available, or the players do

not feel like calculating the detailed costs, the Equipment Availability & Cost Table includes some generic unit prices and modifiers (which are likely to be more expensive than the exact prices) that may be used instead of the exact values.

To simplify acquisition, the personnel associated with units (for example, MechWarriors) are acquired at the time of purchase. This also affects availability for purposes of these rules. (The actual equipment procurement and Force hiring may happen at different times if the process is roleplayed out.) Green troops are simply worth less than regulars, and Elite troops can be worth their weight in gold—which makes them unfortunately hard to hire. As a result, the availability of a unit is raised or lowered by the Experience Rating of the personnel associated with it. These rules are also based on the assumption of “one unit, one crew.” Hiring multiple crews for one vehicle or allowing one crew to have multiple vehicles is up to the discretion of the players.

In addition to basic availability, modifiers may apply to the availability of equipment and personnel in this step. For the most part, these modifiers are self-explanatory and represent the ease or difficulty of acquiring certain hardware. The modifier for Clan equipment held by a non-Clan Force is simple: whether manufactured, salvaged, stolen or bought, Clan equipment is very expensive for non-Clan factions to purchase in any era. Likewise, old Star League-era technology was very difficult for non-Clan Forces to acquire during much of the Succession Wars, while the Clans had large stockpiles in their Brian Caches that were distributed to second-line Forces.

The cross-faction modifier requires some research on the part of the controlling player, because it reflects a non-Clan faction attempting to acquire proprietary equipment from another faction. The window during which the equipment (be it specific weapons or entire ‘Mechs) is proprietary is often quite small, particularly during the middle of the 31st century.

If the sum of modifiers and the base availability is above 12, the unit is not obtainable in Force Creation (unless using the optional Flexible Force Creation Rule). This tends to occur with elite, powerful units, such as assault ‘Mechs with Elite pilots.

Finally, cost multipliers apply to certain types of equipment when using the generic costs in the Equipment Availability & Cost Table. These represent somewhat above-average costs for (primarily) Third Succession War equipment, such as assuming standard fusion engines in BattleMechs and internal combustion engines in vehicles. Advanced equipment (Tech Rating E or F, per equipment availability codes in *TechManual* and *Tactical Operations*) are also expensive.

Note that these rules do not assign ownership of equipment: the Force might be recruiting a MechWarrior with a personally-owned ‘Mech or hiring a Dispossessed MechWarrior to pilot a House-owned ‘Mech. For purposes of building the Force, the costs are the same. Ownership of the equipment is up to the players to decide.



A mercenary clears out the last resistance to a captured MechBay.

Several notes apply. For Omni-units, the primary configuration is acquired. Additional pods may be purchased with Leftover Funds (see p. 20). If a player is attempting to acquire a homogenous squad or Point of battle armor or ProtoMechs, then only one unmodified availability roll is required for the squad or Point. Cost, of course, is multiplied by the number of battle armor or ProtoMechs acquired.

If the player attempts to acquire a custom-built unit, they may only acquire units addressed by the Custom Vehicle Trait (see p. 112, *AToW*). This also imposes a high availability and cost penalty. The availability is increased by a value equal to the Trait Point value of the Custom Vehicle Trait (e.g., a player-designed Inner Sphere vehicle is 4 Trait Points, so it adds +4 to the availability), and the price is multiplied by the Trait Point value (e.g., a player-designed Clan ‘Mech costs x6 normal.)

With the above in mind, procurement proceeds as follows: the controlling player decides on a unit (or rolls randomly on any era- and faction-appropriate Random Assignment Tables in *BattleTech* products) and the desired experience level, and then rolls 2D6 against the base availability plus any modifiers to see if the unit may be acquired. If the result is equal to or greater than the modified availability, the unit is acquired. The player then subtracts the cost of the unit from the remaining budget. If more than one cost multiplier applies, they are applied in sequence (e.g., an Inner Sphere Force attempting to acquire a player-designed Clan OmniMech will find it costs 30 times normal.)

Only one Availability Roll may be made per unit, and the player cannot go into debt while building the Force. While limited to only one Availability Roll per unit, players may still roll for close variants, or roll for the same unit with a crew of different experience. However, if players are that interested in getting a specific unit, it is recommended they use the Flexible Force Creation rules instead of these rules (see p. 30).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

EQUIPMENT AVAILABILITY & COST TABLE

Example Unit	Availability	Cost
Light BattleMech or Aerospace Fighter, any Satellite	4	3,000,000
Medium BattleMech or Aerospace Fighter	5	6,000,000
Heavy BattleMech or Aerospace Fighter	6	9,000,000
Assault BattleMech, any Small Craft	8	12,000,000
Light Combat Vehicle	3	500,000
Medium Combat Vehicle	4	1,000,000
Heavy Combat Vehicle	5	1,500,000
Assault Combat Vehicle	7	2,000,000
Conventional Fighter	5	1,000,000
Battle Armor, Single*	5	750,000
Conventional Infantry Platoon, Foot	2	1,200,000
Conventional Infantry Platoon, Motorized	3	2,000,000
Conventional Infantry Platoon, Jump or Mechanized	4	2,800,000
ProtoMech, Single*	6	1,000,000
Support Vehicle, Light (<5 tons)	2	250,000
Support Vehicle, Medium (6 to 100 tons)	3	750,000
Support Vehicle, Heavy (101 to 1,000 tons)	5	2,250,000
Support Vehicle, Super Heavy (1,001 to 100,000 tons)	7	20,000,000
Exotic unit (LAM, Super-Heavy 'Mechs, etc.)	10	50,000,000
Availability Modifiers		
Clan equipment for non-Clan Force (after 3070)		+3
Tech E and F Equipment for non-Clan, non-ComStar Force between 2860 and 3040		+5
First Star League equipment for Clan Force		-2
Cross-faction: Acquiring another faction's exclusive equipment (includes Clan acquisition of Inner Sphere equipment)		+2
Green Experience		-2
Regular Experience		0
Veteran Experience		+2
Customized unit		+TP Value
Elite Experience		+5
Cost Modifiers		
Fusion engine in combat vehicle		x2.0
XL engine in any unit		x2.5
Light fusion engine in any unit		x1.5
Clan equipment for non-Clan Force (3049-3070)		x5.0
Clan equipment for non-Clan Force (3070+)		x4.0
Tech E and F Equipment for non-Clan, non-ComStar Force between 2860 and 3040		x5.0
Tech Rating E equipment		x1.1
Tech Rating F equipment		x1.25
Customized unit		xTP Value

After acquiring a unit, it is recommended the player enter it promptly into a TO&E sheet to simplify work in Stage 4.

Also, players should bear in mind that certain combinations of units may work better together. These combinations, called Formations, may bestow special abilities to the constituent units (see *Formation Building*, p. 56).

It is also recommended that mercenary Forces reserve at least 10 percent of their starting budget for operating costs. A contract is not guaranteed immediately at the beginning of a campaign.

It's now time to see if Arnold's idea for a combined arms company will fit his budget. He starts with the fun units—BattleMechs. Since he's only going to have a lance of them, he wants to put some money into solid heavy 'Mechs. He starts by attempting to acquire some Veteran Marauders—Miller's Marauders is an inspiration to Arnold—and sees that the modified Availability is 8 (6 for a heavy 'Mech and 2 for Veteran status.) To his amazement, his 2D6 rolls are 7, 4, 3, and 5. No Marauders, then. His next attempt for a lance is something more versatile: a pair of Regular Thunderbolts and a pair of Regular Grasshoppers. As regulars, the Availability for each is only 6, which Arnold is handily able to roll with a 9, 7, 8, and 7.

After confirming the 'Mechs are available, Arnold has to pay for them. The TDR-55 Thunderbolts are 5,268,560 CB each (per the Master Unit List), and the pair of GHR-5H Grasshoppers are 5,973,574 CB each. That's 22,484,268 CB spent. He enters them into the TO&E sheet and subtracts their cost from his budget.

Arnold next selects the vehicles. He spots the Bulldog, which is an affordable 1,128,800 CB. It has an ammo-independent main gun and effective secondary weapons. Heavy vehicles with a Regular crew are an

easy roll at Availability 5, and Arnold has no trouble getting four Bulldogs. Four of them total 4,515,200 CB. Arnold enters them into the TO&E sheet.

Next, Arnold settles on a platoon of laser foot infantry. The base Availability is an easy 2, which Arnold can't fail to roll, and they're a steal at 1,200,000 CB (though anti-'Mech training would raise their cost unacceptably high). Arnold has no plans to use his infantry on an open battlefield in any case, instead applying them in roleplaying situations like hostage rescues. To transport them, he selects a lance of Regular Packrats (Availability 3, also easily rolled with 6, 7, 5, and 11) at 408,680 CB each, for 1,634,720 CB.

Finally, still anticipating a Union DropShip, he spends 4,587,916 CB on a pair of classic Davion fighters with Regular pilots: CSR-V12 Corsairs.

Arnold's company totals 34,422,104 CB, leaving him with 15,577,896 CB for parts, ammunition, fuel, and other sundries.

Hannah initially considers trying to restrict her mercenaries to Com Guard units, but the premise of the Force is a group of veterans who left ComStar. They would probably need to rebuild with units available on the open market, which seems like a good excuse to open up her choice of 'Mechs to those connected to other factions.

Since the rest of her gaming group isn't handy when she's drafting the Force to choose their own 'Mechs, Hannah selects some period-appropriate but mixed Inner Sphere assault designs to reflect the motley origins of the Force.

She first tries rolling for a Veteran IMP-3E Imp (because if ever there was an assault Urbie, it's the Imp), a FNR-5 Fafnir (because being able to double-tap with heavy Gauss rifles should be mandatory), a SGT-8R Sagittaire (pulse lasers + targeting computer!), and a BLR-2D Warlord (because it was the Rolling Thunder cover art that lured her into her first game, and the Warlord is a solid 3070 implementation of the BattleMaster). Each assault 'Mech has a base Availability of 8, Veteran pilots add 2, requiring a 10: she rolls a 3, 9, 5, and 10, netting only the Warlord.

In the next round of rolls for the remaining three slots, Hannah tries to roll for a Veteran AS7-K Atlas, a HA1-O Hauptmann (Omnis are great on campaigns), and another Warlord. After rolling 7, 4, and 10, her lance is half complete with two Warlords. To complete her lance, she looks through her Technical Readout sourcebooks for some Veteran-piloted assault 'Mechs she hasn't tried to roll for yet. Hannah decides on the Y-H9G Yu Huang and DVS-2 Devastator, but strikes out again. The only thing she's had luck with are Warlords, so on a whim, Hannah rolls for two more Veteran Warlords...and gets both. Well, that'll simplify logistics.

Since she's planning to have a Leopard-class DropShip, there'll be room for an aerospace fighter lance, so Hannah rolls for a couple of Veteran LTN-G15 Lightning medium aerospace fighters (target 8). With an 8 and a 12, the Lightnings are hers.

Subforce	Experience	Ammo
TDR-55 Thunderbolt	Regular	
TDR-55 Thunderbolt	Regular	
GHR-5H Grasshopper	Regular	
GHR-5H Grasshopper	Regular	
Bulldog	Regular	
Bulldog	Regular	
Bulldog	Regular	
Bulldog	Regular	
Foot Laser Platoon	Regular	
Packrat	Regular	
Packrat	Regular	
Packrat	Regular	
Packrat	Regular	
CSR-V12 Corsair	Regular	
CSR-V12 Corsair	Regular	

• ARNOLD'S WORKSHEET •

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

The assault lance costs 35,412,960 (8,853,240 x 4). Hannah doesn't have exact prices for the LGT-G15 Lightnings, so she uses the generic medium aerospace fighter cost of 6,000,000 CB from the Equipment Availability and Cost Table. As purely 3025 designs, there are no cost modifiers, so the lance costs 12,000,000 CB.

Total procurement price: 47,412,960 CB leaving 132,587,040 CB for other expenses. It'd be easy to buy another lance or three, but Hannah's Force (which she dubs "Heavy Metal Thunder") is meant to stay a lance.

Subforce	Experience	Ammo
BLR-2D Warlord	Veteran	
BLR-2D Warlord	Veteran	
BLR-2D Warlord	Veteran	
BLR-2D Warlord	Veteran	
LTN-G15 Lightning	Regular	
LTN-G15 Lightning	Regular	

• HANNAH'S WORKSHEET •

Jason's been thinking about his 2990 pirate Force and decides he wants it to represent former mercenary BattleMechs and some low-budget armored units that have been acquired to bolster the planet's militia. That way he doesn't have to address the numerous, ill-equipped infantry units that provide a modicum of security for the world's scattered, minor settlements. (The players in his group agree that any House pirate-hunting attacks on the planet would focus on the capital, starport, and perhaps some vital industrial installations rather than every little farming hamlet. No need to get into detail about militia that will never be involved in the game.)

Accordingly, he decides to break the armored component of the Force into three parts: inexpensive, disposable tanks to guard important facilities on the planet; fast, high-endurance scouts to patrol its wastes and support the BattleMechs; and some heavier tanks to help protect the capital.

For the first part, he wants three battalions of green Scorpions, because nothing says "bandit kingdom militia" quite like a swarm of Scorpion light tanks. With a modified Availability of 1 (base 3, -2 for Green crews), the Scorpions are automatically acquired. 108 of the standard models (320,834 CB each, using their exact prices rather than the generic prices) cost 34,650,072 CB.

For the second part, Jason picks a company of J. Edgar light hover tanks. They have fusion engines and lasers, making them an inexpensive choice both for long-range patrols on a lightly-inhabited planet and interstellar piracy. He's tempted to pursue Veteran crews since the vehicles

have some importance, but the crews were probably raised from the Periphery planet's populace and haven't seen that much action, so he decides on regulars: Availability 3. In a dozen Availability rolls, Jason dodges every 2 and gets his company of Regular J. Edgars. The standard models are 688,750 CB (exact, rather than generic values from the Equipment Availability & Cost Table), so the scout company totals 8,265,000 CB.

For the third part, a company of standard-model, Regular Manticores seems like something that would inexpensively bolster defenses around the capital while having the endurance granted by fusion engines and PPCs. Heavy, Regular combat vehicles have Availability 5, and after a dozen rolls Jason has eight Regular Manticores. He considers rolling up a lance of Green Manticores or some other potent vehicle (Demolishers?), but leaves the Manticores as a demi-company. At 2,549,600 CB apiece, the eight heavy tanks are 20,396,800 CB. Jason notes that if he'd used the generic heavy vehicle cost from the Equipment Availability and Cost Table they'd have run 3,000,000 CB each (1,500,000 CB for a heavy vehicle, x2 for fusion power).

BattleMechs are the next component of the Force. A quick total shows Jason has spent less than half of his budget and could afford an impressive BattleMech Force, but he wants it to fit entirely in one DropShip and be appropriate to a late thirtieth-century pirate Force. Also, since paydays are going to be few and far between, a large cash reserve may be helpful. Further, examples like the 3025 Black Widow Company suggest the pirate Force should include a lot of the "bug 'Mechs" (Locusts, Stingers, and Wasps) of Regular skill. So Jason first rolls for six light, Regular BattleMechs (Availability 4): two LCT-1V Locusts, two STG-3R Stingers, and two WSP-1A Wasps, getting a 5, 12, 3, 7, 8, and 6. Missing one Stinger, Jason decides to roll for a third Wasp and gets it.

Subforce	Experience	Ammo
B-Scorpion x108	Green	
J. Edgar x12	Regular	
Manticore x8	Regular	
BNC-3M Banshee	Veteran	
GRF-1N Griffin	Regular	
GRF-1N Griffin	Regular	
STG-3R Stinger	Regular	
SHD-2K Shadow Hawk	Veteran	
PHX-1 Phoenix Hawk	Regular	
HER-2S Hermes II	Regular	
LCT-1V Locust	Regular	
LCT-1V Locust	Regular	
WSP-1A Wasp	Regular	
WSP-1A Wasp	Regular	
WSP-1A Wasp	Regular	

• JASON'S WORKSHEET •

For the next five 'Mechs, he decides on some mediums: a SHD-2K Shadow Hawk, two GRF-1N Griffins, a PHX-1 Phoenix Hawk, and a HER-2S Hermes II. Jason tries his luck on a Veteran Shadow Hawk (Availability roll 7), but leaves the other 'Mechs with Regular MechWarriors (Availability 5). With rolls of 8, 6, 7, 10, and 8, he gets them.

Because he figures pirates are the sort of people who are ruled by the guy with the biggest 'Mech rather than the biggest brain, Jason decides to roll for an Elite AS7-D Atlas...no, that would be Availability 13. A Veteran, then, at Availability 10. Jason gets a 9, so no Veteran Atlas. Instead of trying to re-roll at a Regular Skill Rating, he decides to try something more appropriate to pirates, a despised and unwanted assault 'Mech: the BNC-3M Banshee. He rolls a 10 for a Veteran-piloted Banshee, getting it.

The Locusts (1,511,200 CB each), Stinger (1,614,240 CB), Wasps (1,614,240 CB each), Shadow Hawk (4,498,307 CB), Griffins (4,864,107 CB each), PHX-1 Phoenix Hawk (4,066,090 CB), Hermes II (3,159,380 CB), and Banshee (9,824,328 CB) all total 40,755,679 CB.

At the GM's urging, Jason decides not to purchase any aerospace fighters on the basis that they would be too hard for the pirates to maintain. The pirates are going to have enough trouble keeping their JumpShip and DropShip working.

Total procurement costs are 104,067,551 CB, leaving Jason with almost 90 million CB unspent. Maybe he can afford a Force specialization while keeping a large cash reserve.

STEP 2: ACQUIRE LARGE SPACECRAFT

Acquiring a DropShip, JumpShip, space station or WarShip is handled differently than the acquisition of smaller units. As in prior publications addressing mercenary Force creation, large spacecraft are procured with only a 2D6 roll rather than cash expenditures. Because of the vast range of possible spacecraft over the many eras of human history, and different levels of their availability, a formula is used to find the target number for the roll.

The formulas contain several factors. Each one starts with a base equation, usually based on the cost or mass of the spacecraft. After this equation, which is used for every faction and era, other factors apply. Rarity factors will require careful review of *Technical Readout* sourcebooks; some suggestions are provided in the Large Spacecraft Procurement Table. Another modifier is the skill of the vessel's crew.

WarShips are only available to government Forces under these rules. Mercenaries and pirates can only acquire WarShips through gameplay with a generous GM.

Players should keep in mind that pirate Forces are not very viable without a DropShip and JumpShip unless they plan to operate on one planet (though un-ambitious pirates may note that single-planet piracy is millennia older than interstellar piracy).

LARGE SPACECRAFT TABLE

Type	Base Equation
DropShip	(Cost in CB / 50,000,000), round up to the nearest whole number + 5
JumpShip	(Cost in CB / 100,000,000), round up to the nearest whole number + Number of Docking Collars + 3
WarShip	(Square Root of [Tonnage / 5,000]), round up to the nearest whole number + (Square Root of Number of Docking Collars), round up to the nearest whole number
Space Station	(Cost in CB / 50,000,000), round up to the nearest whole number

Miscellaneous	
Unique	+10. Applies if less than 10 of the spacecraft exist in a given era. (Example: most Inner Sphere WarShips in the thirty-first century)
Very Rare	+6. Applies if less than 100 of the spacecraft exist in an era (Example: Monolith DropShips in the thirty-first century, almost all WarShips)
Rare	+3. Applies to less common spacecraft for an era (Example: Scouts, Tramps, Mammoths, Star Lords in the thirty-first century).
Average	+0. Applies to most spacecraft by default.
Common	-1. Applies to particularly prolific spacecraft (Examples: Mules, Invaders, Merchants.)
Lithium-Fusion Battery	+2
Military	+1. Military spacecraft are more controlled and more difficult to acquire than civilian vessels.
Government Force	-2. Government Forces have better access to large spacecraft than others. This only applies to non-Clan factions.
Clan Force	-4. Clans have maintained a large inventory of spacecraft from the Exodus and a high level of technology.
Cross-Faction	+2. Spacecraft built or used primarily by one faction are harder for others to acquire. This includes a Clan Force acquiring Inner Sphere equipment or vice versa.

Inner Sphere/ Periphery era	Modifier	Crew Skill	Modifier
2100-2412	-3	Green	-1
2412-2570	-4	Regular	0
2571-2650	-5	Veteran	+1
2651-2750	-6	Elite	+3
2751-2820	-6		
2821-2900	-2		
2901-3049	+0		
3050-3067	-1		
3068-3084	-2		
3084-3130	+0		

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Forces lacking their own transport rely on their employer—a potentially deadly reliance if the winds of war change abruptly.

Players with older rulebooks and *Technical Readout* sourcebooks should note that *Strategic Operations* increased the cost of KF drive vessels somewhat, so costs published in supplements prior to *Strategic Operations* are unlikely to be correct. Fortunately, the modifier is a fixed cost based on vehicle tonnage and should be simple to include.

For this mobile, independent troubleshooting company, Arnold figures a DropShip and a JumpShip are required. He's been fiddling with the DropShip construction rules in *TechManual* and decides a modified Union would be perfect, but Arnold's GM is resistant to the notion of rebuilding DropShips on a whim (especially in 3025, when bottle rockets are more the speed of Inner Sphere shipyards). They compromise on the Seeker, which is noted for its flexible vehicle bays. Arnold runs up the cost of the Seeker using *Tech Manual*, finding it to be 225,829,968 CB. He puts it through the DropShip equation:

$$[(225,829,968 \text{ CB} / 50,000,000 \text{ CB}) \text{ rounded up}] + 5 = 10$$

The Seeker is not particularly rare or common (at least, *Technical Readout: 3057* does not indicate it is rare), so there is no availability modifier. In 3025, the Inner Sphere / Periphery era modifier is +0. As Arnold is making an Inner Sphere government Force, he has a -2 bonus. On the other hand, the Seeker is definitely a military vessel, so there is a +1 penalty. In total, Arnold needs to roll a 9 or better on 2D6 to get the Seeker. He rolls an 11, so his Force gets the Seeker and he enters that into the Force's TO&E.

Next: a JumpShip. The common military transport is the Invader, so Arnold rolls for that. Figuring he already has a bunch of large lasers in the company, he picks the large

laser variant of the Invader and calculates its cost using *Strategic Operations* as 670,797,750 CB. Running it through the basic JumpShip equation, he gets:

$$[(670,797,750 \text{ CB} / 100,000,000), \text{ round up to the nearest whole number}] + 3 \text{ collars} + 3 = 13$$

On the basic equation alone, Arnold could not acquire an Invader. However, the Invader is distinctly common—DropShips & JumpShips claims it is the most common JumpShip operating in the Inner Sphere in 3025, so that's a -1. Arnold is making a government Force, so that's another -2, and the era modifier is 0, so the current target number is 10. That's not impossible, so Arnold decides to

gamble for a Veteran crew (+1), which takes the target to 11. Arnold rolls exactly an 11 (and makes a mental note to tell the rest of the group that it only took one roll—he wouldn't cheat on this!), acquiring the Invader. That, too, goes into the TO&E. Noting the Invader has a pair of small craft bays, Arnold considers going back to Step 1 to purchase another pair of fighters, but decides to save that for later.

Subforce	Experience	Ammo
TDR-55 Thunderbolt	Regular	
TDR-55 Thunderbolt	Regular	
GHR-57 Grasshopper	Regular	
GHR-57 Grasshopper	Regular	
Bulldog	Regular	
Bulldog	Regular	
Bulldog	Regular	
Bulldog	Regular	
Foot Laser Platoon	Regular	
Packrat	Regular	
Packrat	Regular	
Packrat	Regular	
Packrat	Regular	
CSR-V12 Corsair	Regular	
CSR-V12 Corsair	Regular	
Seeker DropShip	Regular	
Invader JumpShip	Veteran	

Hannah wants to keep Heavy Metal Thunder's baggage light, so the plan is to have a Leopard DropShip, which her quick calculation via TechManual indicates is in the vicinity of 171,300,000 CB (any price between 150,000,001 and 200,000,000 CB will result in the same base Availability of 9, so what's a few digits?) The Leopard is military (+1), but common (-1), so only crew skill will further modify the Availability beyond 9. An Elite crew would be a challenge to get (Availability 12) but after failing four rolls for an Elite Leopard, Veteran (Availability 11), Regular (9), and even Green (8), respectively, the model appears to be entirely out of reach.

So, another DropShip: the classic Union would also be suitable and it gives the Thunder room to grow. Also, it manages militarily-useful VTOL landings much more easily than Leopards. So, Hannah runs the 237,704,200 CB Union through the Availability equation:

$$[(237,704,200 \text{ CB} / 50,000,000 \text{ CB}) \text{ rounded up}] + 5 = 10$$

The "military" and "common" modifiers again cancel out. An Elite crew is out of reach, but a Veteran only needs an 11 and...yes, she makes the roll. Heavy Metal Thunder rides in a Union.

Subforce	Experience	Ammo
BUR-2D Warlord	Veteran	
BUR-2D Warlord	Veteran	
BUR-2D Warlord	Veteran	
BUR-2D Warlord	Veteran	
LTN-GLS Lightning	Regular	
LTN-GLS Lightning	Regular	
Union	Regular	

• HANNAH'S WORKSHEET •

Jason's pirates are not going to get to the grog and booty supplies they need to keep operating and help their adopted planet without JumpShips and DropShips. A Union is an obvious choice for a company of 'Mechs, but it is starved for cargo and combat vehicle space. A Fortress would do, but those are rare, expensive, and challenging to maintain. Plan B: two DropShips, splitting roles. The common Union would handle troop transport while the common Mule would handle the loot. Neither have light vehicle bays for the planned J. Edgar raiders, but Jason's group is open to modifying the Mule during game play using customization rules (see p. 189, SO) during the campaign. Sacrificing a small portion of thousands of tons of cargo space for some vehicle bays (raiders and loot transporters alike) seems reasonable enough.

Jason rolls for a Union with a Regular crew (Availability 10), getting a 10 and the Union. Jason next crunches out the cost of the Mule: 163,312,800 CB. The base availability for that:

$$[(159,734,400 \text{ CB} / 50,000,000 \text{ CB}) \text{ rounded up}] + 5 = 9$$

The Mule is also common (-1), and Jason wants it to have a Regular crew (+0). The era modifier is again +0, and no other modifiers apply. He needs an 8, rolls an 11, and jots down the second DropShip on his TO&E.

Next: a hyperspace conveyance. A Merchant or Invader would be appropriate for pirates due to their commonality, but a Star Lord gives some room for the pirate Force to grow. After glancing at the Availability equation for JumpShips (+6 for 6 docking collars!), it seems distinctly wiser to stick with an Invader or Merchant. Three collars are better than two, so Jason first rolls for a large laser-equipped Invader with a Regular crew, getting a 3. At 690,797,750 CB, 3 collars, and a Regular crew, the Invader has a base Availability of 13. Because it is common, that drops to a 12. Jason's recent undergraduate statistics course is sufficient to confirm that 3 is less than 12.

The next choice is a Merchant.

$$[(548,291,800 \text{ CB} / 100,000,000), \text{ round up to the nearest whole number}] + 2 \text{ collars} + 3 = 11$$

The Merchant is also common, giving a final Availability of 10 for a Regular crew. This time Jason rolls a 12 (that would've been nice on the Invader's Availability Check), and gets the Merchant. Perhaps some piracy on the spacelanes will expand his shipping fleet during the campaign, but for now he can at least transport his troops to the House planets he plans to plunder. Jason annotates his TO&E sheet.

Subforce	Experience	Ammo
Scorpion x108	Green	
J. Edgar x12	Regular	
Martinez x8	Regular	
BAX-3M Banshee	Veteran	
GRF-IV Griffon	Regular	
GRF-IV Griffon	Regular	
STG-3R Stinger	Regular	
SHD-2K Shadow Hawk	Veteran	
PHX-1 Phoenix Hawk	Regular	
HER-2S Hermes II	Regular	
LCT-IV Locust	Regular	
LCT-IV Locust	Regular	
WSP-1A Wasp	Regular	
WSP-1A Wasp	Regular	
WSP-1A Wasp	Regular	
Union DropShip	Regular	
Mule DropShip	Regular	
Merchant JumpShip	Regular	

• JASON'S WORKSHEET •

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



STEP 3: DETERMINE SPECIAL ABILITIES

As noted above, certain combinations of units may qualify as Formations, which bestow Special Pilot Abilities on some or all of those units (see *Formations*, p. 60 and *Special Pilot Abilities*, p. 70). In addition, the overall Experience Rating of the Force may entitle it to Special Command Abilities (see *Special Command Abilities*, p. 83).

If playing with Special Pilot Abilities and Special Command Abilities, players should note any such bonuses during this step.

STEP 4: LEFTOVER FUNDS

After spending funds in Step 1, the controlling player should note leftover funds. These may be used to cover excessive expenses, purchase supplies, and support the Force during lulls in employment. These funds may not be used to purchase units or hire infantry (except to purchase small support vehicles that are presumably utility vehicles), and thus it is recommended that players expend these funds before any profits from operations.

Arnold notes from Step 1 he has 14,793,092 CB left. He's going to determine his operating expenses in Stage 4 before spending these funds on supplies.

Hannah has 132,587,040 CB remaining.

Jason has 87,932,449 CB, which might be inventively used for some teachers, doctors, and supplies for his Periphery planet. But first: figure out the operating expenses of his large Force.

STEP 5: DETERMINE SUPPORT PERSONNEL & OFFICERS

A Force consists of more than frontline soldiers. It also requires administrators for everything from contract negotiation to payroll to procurement to medical services, as well as technicians and logistics personnel. This step addresses the minimum mandatory "behind the scenes" support personnel. Players interested in combat engineers, MASH Forces, and other non-mandatory supporting personnel may acquire them under Step 1.

Support personnel are calculated in two sub-steps: technical support personnel and administrative personnel.

These personnel are not purchased like infantry, but are automatically assigned per the calculations below. Later, in Stage 4, support personnel will require salaries, and they will also require transport along with combatant personnel to new assignments (see *Force Operations*, p. 32). Both of these factors may incline the controlling player to trim the number of support personnel, even at the risk of compromising Force performance and costs.

After determining support personnel, a number of combatant personnel are designated as officers, which impacts salaries.

Technical Personnel

The minimum technical support personnel are outlined in *Support Personnel* (see p. 168, SO). A technician team consisting of a tech and six astechs is required for each unit, and for purposes of Force creation one tech team is rigidly assigned to each of the following:

- 'Mech (BattleMech, OmniMech, IndustrialMech)
- Fighter (Aerospace, Conventional)
- ProtoMech Point (5 ProtoMechs)
- Vehicle
- Battle Armor squad (5 troopers)
- 4 Infantry Platoons (112 troopers)

For ProtoMechs, battle armor and infantry, calculate the number of total units in each force, then divide that sum by the listed number (5 ProtoMechs, 4 battle armor troopers, 112 infantry), rounding normally to the nearest whole number. That figure is the number of tech teams required. For example, a Force with 3 Inner Sphere battle armor squads (4 battle armors each for 12 total battle armor troopers) would require $12 / 5 = 2.4$ tech teams, rounding down to 2 tech teams to meet its battle armor needs. A Force with a single battle armor squad of 4 armors would require $4 / 5 = 0.8$ tech team, rounding up to 1 tech team.

Large support vehicles and large spacecraft do not require separate technical support personnel as this is a function of their crew.

Technical support personnel have, by default, a Skill Rating of Regular. The controlling player may freely alter this to Green to reduce salaries, but raising the skill to Veteran or Elite requires a roll for each tech team seeking these improved skills. Making a tech team Veteran requires a 2D6 roll of 9 or higher, while making the tech team Elite requires a roll of 11 or higher. The controlling player may roll for a higher Skill Rating once for each tech team; a roll to get an Elite tech team cannot be used to get a Veteran tech team, or vice versa.

Technical support personnel teams also address logistics support for their associated combat Forces. No personnel are better for hauling tons of ammunition across a battlefield in thinly armored support vehicles than junior astechs, a fact all MechWarriors and senior techs agree on.

After calculating the basic number of technical personnel required, the controlling player may opt to reduce that number by having combatants pull double duty supplying technical support. For example, it is quite common in some factions and eras for MechWarriors to maintain their own 'Mech, or tank crews to perform basic maintenance on their own vehicles. Combat personnel serving as technical personnel are less efficient because of their doubled work load. Combat personnel pulling double duty as technical personnel act as an astech if they have an appropriate Technician subskill (see p. 157, *AToW*) of 3 or higher, or a full tech if they have an appropriate Technician subskill of 6 or higher. During combat operations a double-duty combatant may only count as an astech (never a full tech) if they possess an appropriate Technician subskill of 3 or higher. If combatant NPCs have not been detailed as *A Time of War* characters and their Technician Skill Rating is thus unknown, only a quarter (round up) of all combat personnel may pull this double duty and may only serve as astechs, because not all combatants are suited or trained for it.

The controlling player selects how many, if any, combat personnel pull double duty, multiplies them appropriately for peacetime or combat operations (rounding up), and subtracts that from the basic number of technical personnel. (It is recommended that double duty personnel be calculated as being in combat operations to avoid overestimating available technical support personnel.) The resulting number is the amount of dedicated technical personnel, which is needed for subsequent salary calculations in Stage 4.



Administrative Personnel

The basic administration requirements are one dedicated administrator per ten non-administrative members of the Force, rounded up. These “administrators” include not just “paper pushers” and “bean counters,” but also doctors, intelligence, communications, quartermasters, lawyers and other supporting noncombatant personnel. To determine the number of non-administrative personnel, add together the following:

- Technical personnel calculated above
- 1 person per 'Mech
- 1 person per fighter
- 1 person per ProtoMech
- 1 person per 15 tons of combat vehicle, round up (calculate each vehicle separately)
- 1 person per crewman required by support vehicle (see appropriate *Technical Readout*)
- 1 person per crewman required by large spacecraft (see appropriate *Technical Readout*)
- 1 person per trooper in a battle armor Force
- 1 person per infantryman in an infantry Force

Combat personnel can supply some administrative work, but combat personnel serving such double duty are less efficient than dedicated administrators. During peacetime (see *Force Operations*, p. 32, for definitions of peacetime and combat conditions), a combatant can act as half a dedicated administrator, or one-third of a dedicated administrator during combat operations. Further, only a quarter (round up) of all combat personnel may pull this double duty (less any combatants pulling technical double duty; see above), as not all combatants are suited or trained for it.

The controlling player selects how many, if any, combatant personnel pull administrative double duty, multiplies them appropriately for peacetime or combat operations (rounding up), and subtracts that from the basic number of administrators. (It is recommended that double duty personnel be calculated as being in combat operations to avoid overestimating available administrative personnel.) The resulting number is the amount of dedicated administrators, which is needed for subsequent salary calculations in Stage 4.

Administrative personnel do not have a Skill Rating (in a manner that affects game play); they are treated as Regular for salary purposes in Stage 4.

Finally, government Forces may reduce their administrative personnel needs by 50 percent (round up to the nearest whole number), reflecting support from the rest of the government.

Officers

The number of officers in a Force impacts salaries, as officers get a larger salary for the heavy burdens they shoulder. (The rank-and-file may have other opinions about the size of that burden.) If the controlling player does not have a preference for the number of officers in the Force, the following guidance is provided:

- 1 officer per 'Mech lance or star
- 1 officer per fighter squadron or star
- 1 officer per ProtoMech point
- 1 officer per Battle Armor squad or point
- 1 officer per combat or support vehicle platoon
- 1 officer per infantry platoon or point

- Mixed-unit small Forces (stars or lances) receive one officer per small Force
- No additional officers for large spacecraft; large spacecraft include officers in their crew calculations

Once the officers are identified (and marked on the unit sheet with an “O”), note their salary is increased per the Salary Table (p. 23).

Arnold has 4 'Mechs, 8 vehicles, 2 fighters, 1 infantry platoon, 1 Seeker-class DropShip, and 1 Invader-class JumpShip. The 14 fighters, 'Mechs, and vehicles each require 1 tech and 6 astechs, for a total of 14 techs and 84 astechs. The infantry platoon is not large enough to require a tech team (28 infantry / 112 = 0.25, rounded to 0). The JumpShip and DropShip do not require separate technical support personnel. Arnold notes the 14 techs and 84 astechs on the TO&E sheet in the support personnel section. He decides to gamble on making the tech teams Elite; Elite techs are worth their weight in gold. He rolls 14 times, getting two successes for the first Grasshopper's tech team and for the second Corsair. The other 12 teams are left as Regular.

Next, he begins filling in the personnel column for the TO&E in preparation for calculating the number of administrative personnel. Each 'Mech and fighter has one MechWarrior or pilot, respectively, while the four 60-ton Bulldogs have four personnel each. The four 20-ton Packrats have two crewmen each, and their associated foot infantry platoon represents 28 infantry. The Seeker has a crew of 20 (not counting the bay personnel, which are the rest of the Force's non-JumpShip personnel). The Invader has a crew of 24, again not counting bay personnel (Arnold hasn't assigned any small craft or fighters to the Invader). That's 102 combatants.

With the 98 technical personnel, Arnold's Davion company thus has a total of 200 personnel so far. According to the rules, a Force requires one administrator per ten non-administrative personnel (rounded up), so the company needs 20 administrative personnel. Being a government Force, this can be cut in half (rounded up) to 10. Arnold enters the number of administrators into the TO&E as well.

Arnold next looks to identify officers. He designates one of the 'Mechs as having an officer; if that individual becomes a PC in A Time of War, he'll have to remember to create the PC with the Rank trait. (With equal Experience Ratings, the officer's salary will be the same regardless of which 'Mech actually has the officer, so he randomly applies the officer to the first Thunderbolt.) The Bulldog and Packrat platoons also require one officer each and, again, they have equal skills throughout the platoons so it doesn't matter vehicles are assigned the officer. The infantry platoon requires one officer. The fighter lance is not large enough to merit a separate officer, and the Seeker and Invader already have their officers (which Arnold notes on the record sheet to simplifying the upcoming accounting).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Next, she fills out the TO&E to calculation of the number of administrative personnel. The combat units have merely 6 crew total. The Union has 3 officers and 11 other crew. With the 42 technical personnel, Hannah's Force has a total of 56 personnel. According to this step, a Force requires one administrator per ten non-administrative personnel (rounded up), the company needs six administrative personnel. This isn't a government Force, so Heavy Metal Thunder needs the full set. Hannah enters the number of administrators into the TO&E.

Next, he begins filling in the personnel column for the TO&E in preparation for calculating the number of administrative personnel. One MechWarrior per 'Mech; two crew for each of the 120 25-ton vehicles; and four crew for each of the 60-ton Manticores: 284 personnel. The Union has 4 officers and 11 crew; the Mule has 4 officers and 16 crew; the Merchant has a crew of four officers and 17 crew. That's 340 combatants.

Jason applies officers evenly throughout the Force, one per lance. There's a little emphasis on the veterans among the 'Mech Force, but that's it.

[illegible]



STAGE 4: DETERMINE OPERATING EXPENSES

STEP 1: COMPLETE THE TO&E

The player now determines the costs (monetary and material) the Force incurs regardless of its actual income.

This is not a difficult step, but it is detailed and, for larger Forces (especially those with complicated compositions), time consuming. However, it provides a detailed and accurate representation of the Force's operating costs and supply consumption.

Each unit should be entered into the TO&E sheet individually (not by lance, platoon, etc.), and each infantry element (conventional or battle armor) should be entered at the squad/Point level. Several calculations follow for each unit's ammunition, spare parts, fuel and salaries.

Ammunition: The peacetime consumption of ammunition by ammunition-using units in the Force is one-quarter of the vehicle's or infantry Force's ammunition capacity. This represents ammunition spent to maintain the skills of the Force. Divide a unit's ammunition tonnage and cost of ammunition by 4 to get the monthly *peacetime* ammunition expenditure. This cost is based on standard ammunition even if the unit normally uses alternate ammunition types (e.g., armor-piercing autocannon ammunition or Artemis IV-compatible LRMs). This represents inexpensive training ammunition being expended.

During combat operations, the controlling player must decide what type of ammunition (if alternates are available) each ammo-expenditure vehicle and infantry Force is utilizing. For example, a player with an ARC-2R *Archer* in a 3067-era Force may select the *Archer* to carry two tons of Thunder LRMs and two tons of semi-guided LRMs. This expenditure must then be tracked.

Ammunition weights for any unit other than conventional infantry may be found in the appropriate *Technical Readout*. Conventional infantry should refer to rules for ammunition costs and weights (see pp. 260-285, *A Time of War*) and are assumed to carry five reloads for their weapons as a standard combat load. If the infantry are armed with non-plasma energy weapons and are often stationed with fission- or fusion-powered vehicles (i.e., they spend a maintenance cycle with such a vehicle after a maintenance cycle involving combat), then the ammunition cost is divided by 10, because their power packs may be recharged for free and only worn or damaged packs need replacing.

Spare Parts: Unlike ammunition, fuel and salaries, peacetime consumption of spare parts is generally abstract (unless an incident during Force operation results in distinct damage). Monthly generic spare part consumption (by tonnage) is 0.1 percent of a 'Mech, fighter, vehicle, DropShip, WarShip, or battle armor unit's mass. Conventional infantry consume 1 percent of a squad infantry compartment's mass (even foot infantry: they have equipment that sees wear and tear). Space stations and JumpShips, which

are lightly stressed vehicles, only use 0.01 percent of their mass in spare parts per month.

The cost of the generic spare parts is 10,000 CB per ton for 'Mechs and infantry, 8,000 CB per ton for vehicles, and 15,000 CB per ton for fighters and large spacecraft. This cost is multiplied by the cost multipliers listed on the Equipment Availability & Cost Table (see p. 14). Players operating more advanced equipment will generally find their spare parts to be more expensive.

Battle damage that results in specific losses (for example, engine damage to a BattleMech) may be debited from this monthly average spare part tonnage and costs before incurring extra costs.

units with the "Easy to Maintain" quirk (see p. 193, *SO*) multiply the cost of their spare parts (per ton) by 0.8. units with the "Difficult to Maintain" quirk (see p. 198, *SO*) multiply the cost of their spare parts by 1.25, and units with the "Non-Standard Parts" quirk (see p. 198, *SO*) multiply the cost of their spare parts by 2.0. These multipliers are applied to the unit's spare cost sequentially. For example, a hypothetical BattleMech (10,000 C-bills per ton of spare parts base) that is both easy to repair (x0.8) and yet uses rare, hard-to-find parts (x2.0) would have a final spare parts cost of $10,000 \times 0.8 \times 2.0 = 16,000$ CB per ton.

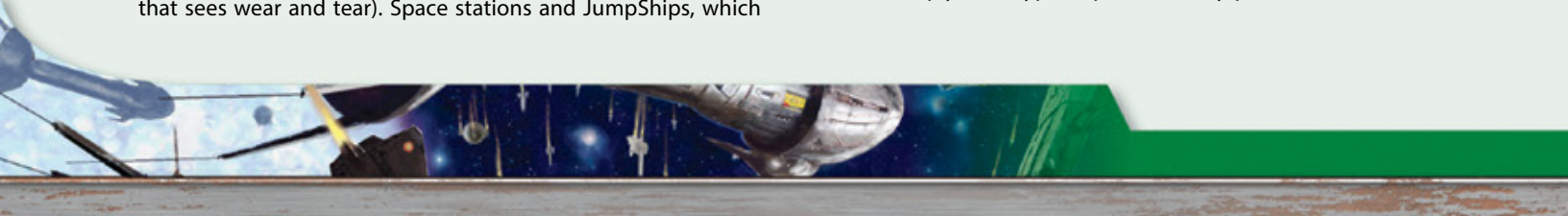
Fuel: Monthly fuel consumption is based on a Force's fuel capacity and usage rate. Fuel capacity is fairly easy to determine, except for jump-capable battle armor and infantry. Fighters, large spacecraft, IndustrialMechs, and support vehicles have clearly established fuel tonnages listed in their respective *Technical Readout*. Combat vehicles (see p. 34, *SO*) have a fuel capacity equal to 10 percent of their engine mass. Jump, mechanized, and motorized conventional infantry use fuel equal to 2 percent of the mass of the infantry compartment able to carry them. Jump-capable battle armor use fuel equal to 2 percent of their mass.

Fuel costs are listed on p. 179, *SO*. Conventional fighters use petrochemicals (turbine) or hydrogen (fusion); combat vehicles use petrochemicals (internal combustion) or hydrogen (fuel cell); support vehicles use fuel as listed in their TRO; and aerospace fighters and large spacecraft use hydrogen. Infantry and battle armor use petrochemicals.

Peacetime fuel usage rates are assumed to be four times the fuel capacity of the 'Mech, vehicle, fighter and infantry Forces, representing the relatively limited operations of combat Forces in training and minimal maneuvering for maintenance. DropShips and WarShips are assumed to use 15 burn-days of fuel per month, while JumpShips and space stations are assumed to use 3 burn-days per month for station-keeping. (This may vary depending on actual operations. For example, a DropShip that is kept running on a side job as a merchant freighter will spend more burn-days of fuel. As another example, a JumpShip that recharges with its fusion engine once in a month will spend 13 burn-days of fuel [10 for recharging, 3 for station-keeping] rather than 3.)

To determine combat operation fuel usage, see pp. 34-35, *SO*, with the controlling player tracking the number of maintenance cycles that the units are in operation.

Salaries: After assigning the peacetime monthly costs to each element in the TO&E sheet, total the number of personnel by type (noting the supporting personnel calculated in Stage 3, Step 5) and multiply each type of personnel (by position and skill as



appropriate) by the salaries listed in the Salary Table. This is the Force's monthly salary requirement.

Note that the Salary Table presented here is a simplification of the Base Salary Table (see p. 335, *A Time of War*), particularly with respect to technicians. Players interested in additional detail may use that table instead of the Salary Table presented here.

Arnold figured that a small Force would be easier to manage, and he was correct, but the mixed bag of vehicles and weaponry makes for some work calculating expenses. The two TDR-55 Thunderbolts each carry 2 tons of LRM ammo, 1 ton of SRM ammo, and 1 ton of MG ammo. Noting that peacetime usage of ammo is one-quarter of a 'Mech's capacity per month, Arnold enters 0.5 tons of LRM ammo, 0.25 tons of SRM ammo, and 0.25 tons of MG ammo for each Thunderbolt. Arnold realizes the decision to make this a 3025-era Force is saving him work because he doesn't have to address the wide range of ammunition introduced after 3050, like Thunder mines or semi-guided missiles, and what mix the Thunderbolts would carry in a given month. The cost for the Thunderbolt ammunition is 30,000 CB per ton of LRM ammunition, 27,000 CB per ton of SRM ammunition, and 1,000 CB per ton of MG ammunition: 22,000 CB per Thunderbolt per month. Arnold enters this into the TO&E sheet for each Thunderbolt.

After practicing with the Thunderbolts, Arnold finds the rest of the Force fills in faster. The Grasshoppers are simple: they carry 1 ton of LRM ammunition each, so Arnold enters 0.25 tons for each into the sheet at 7,500 CB each per month. The Bulldogs have 2 tons of SRM and 1 ton of MG ammunition each, which Arnold quarters as he enters into the TO&E sheet (for 13,750 CB per tank). The Packrats have 3 tons of SRM ammunition each, which becomes 0.75 tons and 20,250 CB in the TO&E sheet. The Corsairs are mercifully ammunition-free, which makes an entry in the TO&E sheet Arnold likes a lot and provides a lesson for the next Force he creates. The Seeker, to Arnold's surprise, only has 2 tons of LRM ammunition; he's used to DropShips with a wide array of ammunition-guzzling weaponry. Arnold notes 0.5 tons of LRM ammunition in the TO&E for the Seeker. The Invader is also a no-brainer, being an energy-only unit.

*Per the example of a motorized laser platoon's construction in TechManual, pp. 145-155, Arnold notes each trooper in his infantry platoon has a standard laser rifle, which may have a range of "ammunition" types (p. 267, *A Time of War*). Consulting the power pack entries (p. 306, *A Time of War*), Arnold figures the Standard Military Power Pack would apply, and each infantryman (per Step 4b) should carry 5 of those heavy packs. Doubling that consumption per month to represent training, Arnold notes that consumption is 400 CB and 40kg per trooper per month: 11,200 CB and 1.12 tons per month for the platoon. Fortunately, Arnold's*

SALARY TABLE

Position	Monthly Salary
MechWarrior	1,500
Aerospace Pilot	1,500
Vehicle/Artillery Crewman	900
Aircraft Pilot	900
Regular Infantry	750
Specialist/Armor Infantry	960
Vessel Crewman (DropShip)	1,000
Vessel Crewman (JumpShip)	750
Vessel Crewman (WarShip)	1,200
Technician	800
Astech	400
Administrator	500
Quality/Expertise	Multiplier
Green	x0.6
Regular	x1.0
Veteran	x1.6
Elite	x3.2
Anti-BattleMech Training (Infantry only)	x1.5
Rank	Multiplier
Officer	x1.2
Rank	(Rank Trait Points/3)+1, minimum 1



A few (very few) warriors have been known to retire to lofty material comfort.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

infantry platoon will be stationed with the fusion-powered Packrats and thus the consumption is divided by 10: 1,120 CB and 0.112 tons per month.

Arnold moves on to spare parts. The BattleMechs, at 65 and 70 tons each, use 0.065 and 0.070 tons of spare parts per month (0.1 percent of their mass), respectively. At 10,000 CB per ton, that's 650 and 700 CB per 'Mech. Arnold enters that into the TO&E sheet. This isn't much, but Arnold notes it only represents replacement of normal "wear parts" in a 'Mech. A pratfall by a 'Mech during training could wreck a ton of armor or cripple an important component, which would be much heavier and more expensive.

The Bulldogs each use 0.060 tons of spares per month, while the Packrats use 0.020 tons. Vehicle spare parts are less expensive than 'Mech parts at 8,000 CB per ton. The infantry platoon would fit in a 3-ton foot infantry compartment, so it uses 0.03 tons of spare parts per month (at 1 percent of the compartment's mass, not 0.1 percent) and costing 10,000 CB per ton. Arnold figures this represents weapon components, broken body armor, and other equipment that an infantry platoon would regularly draw. The 50-ton Corsairs consume 0.050 tons per month at 15,000 CB per ton of the pricey, high-tech aerospace components, while the 6,700-ton Seeker uses 6.7 tons (100,500 CB) per month

and the Invader (at 0.01 percent of its mass) uses 15.2 tons (228,000CB) per month. Arnold enters all these into the TO&E sheet.

Fuel is simple for the 'Mechs, foot infantry and Packrats: Arnold fills in 0 for all of those. The spacecraft and fighters are also easy. The Corsairs each hold 5 tons of fuel and peacetime usage is four times that per month: 20 tons of hydrogen each. The Seeker uses 1.84 tons of fuel per day spent burning at 1 G and thus uses 27.6 tons per month, while the Invader has 19.75 tons per burn-day and uses 59.25 tons per month holding station against the local star's gravity. Hydrogen runs 15,000 CB per ton, making Arnold wince. He consults p. 179, SO, and decides he's definitely going to have to exploit the ability of military Forces to convert local water supplies into hydrogen or keep his DropShip on the landing pad.

The Bulldogs take a little more work, since their fuel isn't specified. Arnold looks up their engine mass (23 tons). Ten percent of that is 2.3 tons each, and the tanks use 4 full fuel loads per month: 9.2 tons per month each. The engines are internal combustion, so the fuel is petrochemicals at 1,000 CB per ton: 9,200 CB. Arnold enters those results into the TO&E.

BATTLETECH

FORCE CREATION WORKSHEET

Force Name:

Subforce	Experience	Ammo Tons	Ammo Cost	Spare Parts Tons	Spare Parts Cost	Fuel Tons	Fuel Cost	Personnel	Salaries
TDR-55 Thunderbolt	Regular	0.5 LRM 0.25 SRM 0.25 MG	22,000	0.065	650	0	0	1 MW (0)	1,800
TDR-55 Thunderbolt	Regular	0.5 LRM 0.25 SRM 0.25 MG	22,000	0.065	650	0	0	1 MW	1,500
GHR-54 Grasshopper	Regular	0.25 LRM	7,500	0.070	700	0	0	1 MW	1,500
GHR-54 Grasshopper	Regular	0.25 LRM	7,500	0.070	700	0	0	1 MW	1,500
Bulldog	Regular	0.5 SRM 0.25 MG	13,750	0.060	480	9.2P	9,200	3 crew, 1 O	3,780
Bulldog	Regular	0.5 SRM 0.25 MG	13,750	0.060	480	9.2P	9,200	4 crew	3,600
Bulldog	Regular	0.5 SRM 0.25 MG	13,750	0.060	480	9.2P	9,200	4 crew	3,600
Bulldog	Regular	0.5 SRM 0.25 MG	13,750	0.060	480	9.2P	9,200	4 crew	3,600
Foot Laser Platoon	Regular	0.112 power packs	1,120	0.030	300	0	0	27 infantry, 1 O	21,150
Packrat	Regular	0.75 SRM	20,250	0.020	160	0	0	1 crew, 1 O	1,980
Packrat	Regular	0.75 SRM	20,250	0.020	160	0	0	2 crew	1,800
Packrat	Regular	0.75 SRM	20,250	0.020	160	0	0	2 crew	1,800
Packrat	Regular	0.75 SRM	20,250	0.020	160	0	0	2 crew	1,800
CSR-V12 Corsair	Regular	0	0	0.050	750	20H	300,000	1 pilot	1,500
CSR-V12 Corsair	Regular	0	0	0.050	750	20H	300,000	1 pilot	1,500
Seeker DropShip	Regular	0.5 LRM	15,000	6.7	100,500	27.6H	414,000	16 crew, 4 O	20,800
Invader JumpShip	Veteran	0	0	15.2	228,000	59.25H	888,750	20 crew, 4 O	29,760
Support Personnel									
12 Tech Teams	Regular	0	0	0	0	0	0	12 Techs, 72 asTechs	38,400
2 Tech Teams	Elite	0	0	0	0	0	0	2 Techs, 12 asTechs	20,480
Administrations	Regular	0	0	0	0	0	0	10 admins	5,000
Totals:		2 LRM 5.5 SRM 0.75 MG, 0.112 PP	211,200	22.62	335,560	36.8P 126.85H	1,989,550	210 total	166,850

NOTES

Finally, salaries. Since a majority of his combatants are Regular, Arnold quickly references the Salary Table. His MechWarriors and fighter pilots earn 1,500 CB per month (1,800 for the one designated officer, and this might change for PCs with the Rank benefit), his vehicle crews earn 900 a month each (1080 for each of the 2 officers), infantry 750 a month (900 for the single officer), DropShip crew 1,000 a month (1,200 for the 4 officers), 12 Regular techs 800 a month, 72 Regular astechs 400 a month, and 10 administrators 500 a month. The JumpShip crew's base salary (750 a month, or 900 for the 4 officers) is multiplied by 1.6 because the crew is Veteran (to 1200 / 1440 a month), and the two Elite tech teams have their pay multiplied by 3.2 (to 2,560 for the techs and 1,280 for the astechs). He totals these values for each unit on the TO&E sheet.

Hannah's accidental lance of Warlords are ammo-independent. The LTN-G15 Lightnings carry two tons of AC/20 each, which means they use 0.5 tons of ammo each per month. Her Union has 5 tons of AC/5 and 12 tons of LRM ammo, so peacetime usage is 1.25 tons of AC/5 ammo and 3 tons of LRM ammo per month. TechManual supplies the costs per ton.

Each of the units in the Force—'Mech to DropShip—uses 0.1 percent of their mass in replacement parts per month. That's easy enough to fill in. BattleMech spare parts cost 10,000 CB per ton, while aerospace Forces' cost 15,000 CB per ton. Hannah fills in those cells in the TO&E.

Fuel. The 'Mechs need none. The Lightnings use four times their fuel capacity (5 tons) per month in peacetime, or 20 tons each. The Union uses 15 burn-days (1.84 tons) of fuel per month, or 27.6 tons per month.

Salaries. The one MechWarrior (1,500 CB base) officer (x1.2) is a Veteran (x1.6) who would like 2,880 CB per month. The others are veterans, paid 2,400 CB per month. The Regular (x1.0) aerospace fighter pilots collect a flat 1,500 CB per month. DropShip crew get 1,000 CB per month, except for the handful of officers (x1.2) who get 1,200 CB per month. Techs collect 800 a month (no modifier for Regular skills), while the numerous astechs pull in 400 a month. Administrators pull in a bit more at 500 a month.

Hannah finishes penciling in the individual cells and then sums them at the bottom of each column.

BATTLETECH

FORCE CREATION WORKSHEET

Force Name:

<u>Subforce</u>	<u>Experience</u>	<u>Ammo Tons</u>	<u>Ammo Cost</u>	<u>Spare Parts Tons</u>	<u>Spare Parts Cost</u>	<u>Fuel Tons</u>	<u>Fuel Cost</u>	<u>Personnel</u>	<u>Salaries</u>
B.R-2D Warbird	Veteran	0	0	0.080	800	0	0	1 MW (O)	2880
B.R-2D Warbird	Veteran	0	0	0.080	800	0	0	1 MW	2400
B.R-2D Warbird	Veteran	0	0	0.080	800	0	0	1 MW	2400
B.R-2D Warbird	Veteran	0	0	0.080	800	0	0	1 MW	2400
L.T.N.G.I.S Lightning	Regular	0.5 AC-20	5,000	0.050	750	20H	300,000	1 pilot	1500
L.T.N.G.I.S Lightning	Regular	0.5 AC-20	5,000	0.050	750	20H	300,000	1 pilot	1500
Union	Regular	1.25 AC-S, 3 LRM	95,625	36	54,000	276H	414,000	11 Crews, 4 O	15,800
Support Personnel									
12 Tech Teams	Regular	0	0	0	0	0		6 Techns, 36 asTechns	19,200
Administrators	Regular	0	0	0	0	0		6 admins	3,000
Totals:	1 AC-20, 1.25 AC-S, 3 LRM		105,625	402	58,700	676H	1,014,000	69	57,080

NOTES

• HANNAH'S WORKSHEET •

FORCE CREATION WORKSHEET

Force Name:

Subforce	Experience	Ammo Tons	Ammo Cost	Spare Parts Tons	Spare Parts Cost	Fuel Tons	Fuel Cost	Personnel	Salaries
Scorpion x108	Green	27 AC-5, 27 MG	175,500	27	21600	2592P	259200	189 crews, 27 O	119,556
J. Edgar x12	Regular	3 SRM	81,000	0.3	2400	O	O	21 crews, 3 O	22,140
Martinez x8	Regular	2 SRM, 2 LRM	114,000	0.48	3840	O	O	30 crews, 2 O	29,160
BUC-3M Banshee	Veteran	O	O	0.045	450	O	O	1 MW (O)	2,880
GRF-IN Griffin	Regular	0.5 LRM	15,000	0.053	550	O	O	1 MW	1,500
GRF-IN Griffin	Regular	0.5 LRM	15,000	0.053	550	O	O	1 MW	1,500
STG-3R Stinger	Regular	0.25 MG	500	0.020	200	O	O	1 MW	1,500
SHD-2K Shadow Hawk	Veteran	0.25 LRM	7500	0.053	550	O	O	1 MW (O)	1,800
PFX-1 Phoenix Hawk	Regular	0.25 MG	500	0.045	450	O	O	1 MW	1,500
HBR-25 Hermes II	Regular	0.25 AC-5	1,125	0.040	400	O	O	1 MW	1,500
LCT-IV Lowest	Regular	0.25 MG	500	0.020	200	O	O	1 MW	1,500
LCT-IV Lowest	Regular	0.25 MG	500	0.020	200	O	O	1 MW (O)	1,500
WSP-IA Wasp	Regular	0.25 SRM	6,750	0.020	200	O	O	1 MW	1,500
WSP-IA Wasp	Regular	0.25 SRM	6,750	0.020	200	O	O	1 MW	1,500
WSP-IA Wasp	Regular	0.25 SRM	6,750	0.020	200	O	O	1 MW	1,500
Uran DropShip	Regular	1.25 AC-5, 3 LRM	95,625	3.6	54,000	276H	414,000	11 Crews, 4 O	15,800
Mule DropShip	Regular	0.5 AC-5, 0.5 SRM	15,750	11.2	168,000	63.3H	949,500	16 Crews, 4 O	20,800
Merchrest JumpShip	Regular	O	O	12	180,000	29625H	443,75	17 Crews, 4 O	21,800
			O	O	O	O	O		O
Support Personnel			O	O	O	O	O		O
140 Tech Teams	Regular	O	O	O	O	O	O	140 Techns	448,000
								850 astechs	
Administrators	Regular	O	O	O	O	O	O	132 admins	66,000
Totals:		29 AC-5, 28 MG, 6.25 SRM, 5.75 LRM	542,750	30.75	484,400	2592P, 120525H	1,667,075	1452	762,936

NOTES

• JASON'S WORKSHEET •

It was so easy to buy that regiment of Scorpions and mixed 'Mech company, but Jason sees where this Force is going to be really expensive.

For ammunition, the Scorpions each carry one ton of AC-5 ammo and one ton of machine gun ammo, needing a quarter of that to stay in fighting form per month. 108 Scorpions need 27 tons of each ammo per month. The J. Edgars carry one ton of SRM ammunition each, and thus need three tons per month. The diverse armament of the eight Manticores calls for two tons each of SRM and LRM ammo. It was easy to handle the large, uniform vehicle Forces, but the 'Mechs are more diverse. The Banshee is energy-only, but the Griffins like their LRM ammo (2 tons each, so 0.5 tons per Griffin per month). The Stinger, Phoenix Hawk, and Locusts need machine gun ammo, the SHD-2K Shadow Hawk needs LRM ammo, the Wasps need SRM ammo, and the Hermes II (odd man out) needs AC/5 ammo. The DropShips need their share, too. Only the Merchant is unarmed.

Spare parts are straightforward. Every unit except the JumpShip simply divides their tonnage by 1,000 for their monthly spare part consumptions. Costs are 10,000 per

ton for 'Mechs, 15,000 per ton for aerospace (fighters to JumpShips), and 8,000 per ton for the vehicles. Jason puts all this into a TO&E spreadsheet and watches the costs swell.

Fuel. Now the fusion-powered ground units shine: they use none, effectively. The Scorpions, though, have 6-ton engines, which means they carry 0.6-ton fuel loads and use four tanks a month: 2.4 tons of petroleum distillates per tank per month. The Union uses 15 burn days per month at 1.84 tons each, which isn't bad compared to the civilian Mule DropShip at 4.22 tons per burn-day (63.3 tons of hydrogen per month). The Merchant uses 1.975 tons for each of its 0.1G burn-days and 15 per month: 29.625 tons per month. The 259.2 tons of petroleum per month will cost (see p. 179, Strategic Operations) 259,200 CB, while the hydrogen will be 1,807,875 CB unless Jason finds a modest water source.

When it comes to salaries, it helps that most of the personnel are Regular. The great mass of Scorpions have Green crews raised from the Periphery planet (x0.6), so they're a bit cheaper than most personnel. The techs prove the most expensive: 140 Regular techs (112,000 CB per month) and 840 astechs (336,000 CB per month.)

STEP 2: CALCULATE PEACETIME OPERATING COSTS

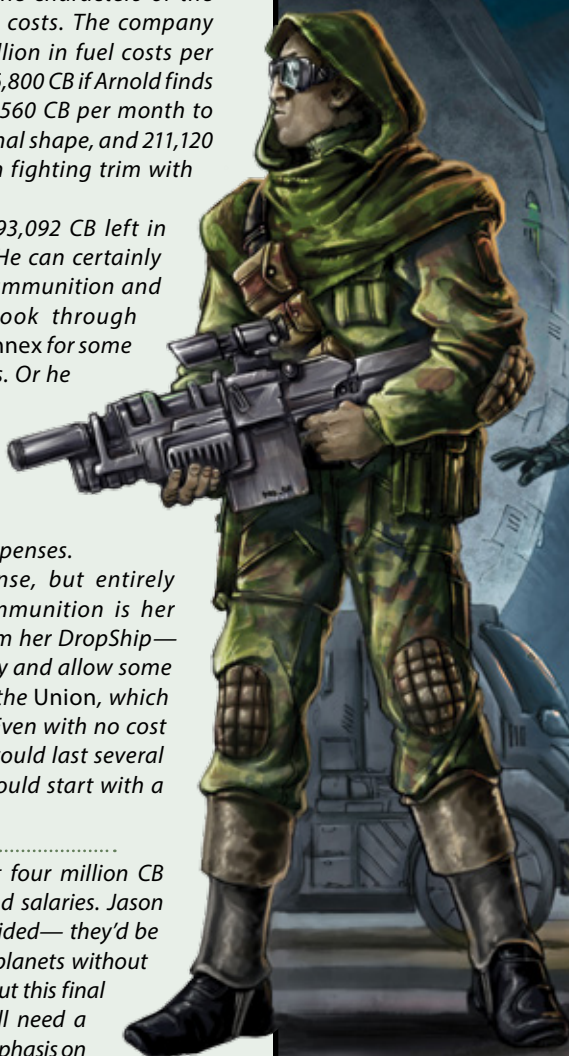
After filling out the TO&E sheet, total the ammunition, spare parts, and fuel costs and salaries. These are the peacetime operating costs of the Force. These costs must be updated for any changes in personnel, ammunition, and vehicles.

Arnold has already done this, as he finished Step 1 when filling out the TO&E sheet. He notes that his Force consumes about 8 tons of mixed ammo a month, almost 23 tons of parts (mostly keeping the vital DropShip and JumpShip operating), and over 130 tons of fuel (though admittedly, a lot of that he can supply given a pond or river near the Force's base). Expenses are eye-opening: as important as salaries (166,850 CB) are to the characters of the Force, they're the least of his costs. The company will be paying nearly two million in fuel costs per month (though that drops to 36,800 CB if Arnold finds a sizable body of water), 335,560 CB per month to keep the equipment in functional shape, and 211,120 CB to keep the Force's skills in fighting trim with ammunition expenditures.

Arnold now gives the 14,793,092 CB left in Stage 3, Step 3 a good look. He can certainly stockpile a good amount of ammunition and spare parts, and perhaps look through Technical Readout: Vehicle Annex for some jeeps and other utility vehicles. Or he can leave it as a cash reserve for the Force's lean times.

Hannah's mercs are not close to denting their unspent cash reserves with monthly expenses. Again, fuel is a large expense, but entirely for hydrogen. Otherwise, ammunition is her greatest cost, and entirely from her DropShip—perhaps the GM will be friendly and allow some energy-only modifications to the Union, which would cut out half her costs. Even with no cost reductions, her cash reserve would last several years. Maybe the campaign could start with a year-long sabbatical on Mizar.

Jason's pirates need almost four million CB per month in supplies, fuel, and salaries. Jason had understood why pirates raided—they'd be stuck as farmers on Periphery planets without their 'Mechs and JumpShips—but this final number brings it home. They'll need a steady stream of loot with an emphasis on spacecraft parts and ammunition (forget grog and bullion) to remain operational, never mind helping their host planet.



INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



OPTIONAL CONSTRUCTION RULES

Players may use the following optional rules at their discretion.

ALTERNATE FLEXIBLE FORCE CONSTRUCTION

The basic Force budget assumes the controlling player does not have a particularly strong opinion about what size and type of Force is being built. A random roll also neatly addresses the difficulty of producing balanced rules for creating Forces ranging from lances to divisions, in eras ranging from the 2300s to 3100s, for multitudes of factions and with widely varying technology.

Other players may have very specific ideas about their personal military Forces. Maybe they're hand-built Forces resulting from years of roleplaying or just a spur-of-the-moment fulfillment of a wish to see a customized regiment of giant, stompy robots marching across a TO&E sheet. In either event, they're not something that can be generated through the restrictions of random availability rolls.

Instead of following Stages 2 and 3 of Force Construction, a controlling player using this rule selects whatever equipment and personnel suits him, making the Force as large or small, rich or poor as desired. Two considerations provide restrictions and guidance on this apparent "blank check":

1. If there is a GM for the campaign, they must approve the Force. If there is no GM, then other players who will be using and facing the Force must approve it.
2. Starting cash is not unlimited. Roll 1D6. If the result is an odd number, treat it as -1. If the result is even, treat it as 1. Multiply that -1 or 1 by 2D6 and then by the Force's peacetime monthly operating costs. The final number is the current amount of money in the bank (or debt, if the result is negative) the Force possesses.

Hanse doesn't like random starting budgets and decides to build a giant government Force of about 100 'Mech regiments, 300 tank regiments, 500 infantry regiments, and scores of DropShips and JumpShips, calling it "the 3020 AFFS." While it's fun to build the Force of your dreams, you might still end up in debt. Per the flexible Force construction rules, Hanse first rolls 1d6 to see if his 3020 AFFS Force is in debt or has a credit. He rolls a 3: an odd numbered result that means he's in debt. He then rolls 2d6 to see how big that balance is (in terms of the 3025 AFFS's peacetime monthly operating costs): an 11. Well, darn. Hanse's dream Force, which he hopes to use to crush the Capellan Confederation, is running in the red to the tune of 11 months of peacetime operating costs. Hanse will probably have to marry some rich banker's daughter or something to keep this munchy "3020 AFFS" Force running.

PLAYER CHARACTER INFLUENCES

Player character traits may influence the starting budget of a Force, adding another multiplier to the budget in Stage 2, Step 2. Only the PC (or NPC) designated as the Force's leader influences the starting budget. To calculate the influence modifier, add together the trait points (see p. 107, *A Time of War*) of each of the following positive or negative traits: Connections, Gregarious, Rank, Property, Reputation, Wealth, Introvert, and Enemy. Add to that sum the leader's Skill Ratings in Administration and Negotiation. Divide the result by 10 and increase the result to 1 if lower than 1. The final result is a multiplier applied to the starting budget after era and faction multipliers.

DEPENDENTS

Some Forces may relocate from garrison to garrison with some or all of their dependents—spouses, children, other family members, war brides, servants, camp followers, and/or slaves as the case may be—and these pose an additional logistical burden.

This optional rule presents guidance on recommended numbers of dependents, and how those numbers affect transport and consumable requirements. Housing, feeding, clothing, and employing dependents are beyond the scope of these rules, though it is suggested that if Force personnel associated with the dependents are making an adequate wage, their pay will provide for their dependents. (Obviously, dependents may hold their own jobs outside the Force, but that does not affect the Force's budget.)

Dependents rarely, if ever, travel with a Force on a combat mission. They only pose a transport issue when the Force is relocating to a new base where it will remain for an extended period of time. Furthermore, many soldiers do not bring dependents with them, understanding that after some months or years the soldier can individually (separate from the Force) return home to a family far from harm's way. Pirates leave their dependents at their pirate's den; government Forces may leave dependents scattered across the many worlds of their realm; and mercenaries, drawn from thousands of settled worlds, may leave their dependents behind. In fact, usually only very large, cohesive, long-lasting military Forces such as Wolf's Dragoons, making a very permanent move, uproot close dependents (spouses, children, and/or servants); in many eras, the commonality of interstellar travel means few Forces bother to budget for such moves.

To reflect this, the number of dependents for any Force is handled somewhat randomly. Roll 1D6, divide the result by 2, round up to the nearest whole number, and multiply that by the number of combatant and support personnel in the unit. The final result is the number of dependents that the Force travels with from base to base.

These dependents are added to the total personnel in the Force for transportation purposes (see Transportation Rating under *Reputation*, p. 33). Furthermore, Forces with limited budgets for consumables (see p. 155, *SO*) also need to consider dependents and the type of quarters in which they are transported.



RANDOM BACKGROUNDS

If players do not have a fully formed idea for their Force's background, or prefer some background that will influence the Force's capabilities, they may make a couple of rolls to see what sort of background results they obtain from the Force Random Background Table.

The first roll to make is $1D6 \div 2$. The result determines how many times the Force may roll on the Force Random Background Table, which uses 3D6 for each roll.

The primary effects of the random background are to modify the Force's Reputation Score (see *Force Operations*, p. 32). It is up to the controlling player (or GM, if present) to fill in the details of the resulting events.

TAKING ON DEBT

If a mercenary or government Force's budget in creation is insufficient, the controlling player may go into debt to buy additional equipment. The limit of starting debt is equal to the Force's final budget determined in Stage 2, Step 2 (noting the influence of Force Specialties in Stage 3). That is, the

controlling player may double the budget. (Pirates cannot take on debt at Force creation, being too disreputable to receive loans.)

Taking on debt has two disadvantages. First, it applies a negative modifier to the Force's starting Reputation Score (see *Force Operations*, p. 32). Second, it must be paid off.

Paying off debt adds to the Force's peacetime operating costs. The simplistic method presented here is that the lender adds 1 percent of the debt to the monthly peacetime operating cost until a value equal to 150 percent of the original debt is paid off. If the Force comes into extra funds, the debt may be paid off earlier, but the payoff must still be equal to 150 percent of the initial debt.

Forces unable to make their debt payments refer to the debt rules in *Force Operations*, page 32.

Players are welcome to use more realistic payment plans, such as continuously compounded interest rates or different repayment schedules, and incorporate the effects of early principal payoffs, so long as a GM (if present) or other players in the group agree.

FORCE RANDOM BACKGROUND TABLE

3D6 Result	Background
3	Atrocity. The Force committed a mass murder of innocents. -50 Reputation.
4	War criminals. The Force committed a serious crime, accidentally killing many civilians; committed rape, or indulged in kidnapping. -25 Reputation.
5	Contract breach. The Force violated a contract (if mercenary) or orders (if government). -25 Reputation. Ignore this result if a pirate Force.
6	Textbook warriors. The Force got into a rut, favoring fighting in certain conditions over others. The Force now suffers a -1 Initiative in a specific terrain type (e.g., woods).
7	Poor discipline. The Force launched an unauthorized raid or indulged in looting. -5 Reputation.
8	Debt. The Force loses any leftover funds from Force creation and starts in debt at an amount equal to 1D6 times its peacetime monthly operating cost. -10 Reputation.
9-12	The Force had a quiet year in a garrison or cadre mission.
13	Profitable year. After completing some missions successfully, the Force's bank account is in the black. Delete any debt from Force creation and give the Force a bonus equal to 1D6 times its monthly operating cost.
14	Out-of-the-box thinkers. After repeated campaigns in unusual terrain, the Force gains a +1 Initiative bonus in a specific terrain type.
15	Hard training and experience pay off. The Force gains a +1 Piloting/Driving Skill bonus in a specific terrain type.
16	The Force has a string of successful missions and gains 1D6 x 5 Reputation points.
17	The Force has a string of successful missions against one foe, learning best how to kill them dead. The Force has a +1 Gunnery Skill bonus against that faction.
18	They came, they saw, they conquered. The Force is almost unbeaten after years of hard combat, gaining 2D6 x 5 Reputation points.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



CSO

Outweighed by 275 tons, light Marik Militia 'Mechs have no choice but to be corralled by a Davion Guards assault lance.

FORCE OPERATIONS

This section details operation issues players may encounter as they take a Force they have created (see *Force Creation*, p. 8) through a campaign. These include:

Reputation: This section supports future hiring and campaign choices. While mercenaries have formal quality rankings for their Forces, these rules allow similar rankings to be applied to government and pirate Forces so players can determine their government support and employability, respectively. Reputation can rise and fall during campaigns.

Hiring and Campaigns: This section settles the terms of employment and generates missions for a Force. It starts with tendering offers, negotiating contracts, and addressing other potential income sources. While government Forces are guaranteed employment, a poor reputation can cost them support; though pirate Forces are almost unemployable, they may find contracts from less discriminating employers. This section also supports play through the mission, wraps up costs and addresses possible changes to a Force's reputation. Additional campaign rules are found in the *Narrative Campaign* section (see p. 134), *Map-Based Campaign* section (see p. 142) and *Chaos Campaign* rules (see p. 156).

Additional Rules: This section covers other rules applicable to running a Force, such as developing specialties.

Terminology: These rules use the same terminology as *Total Warfare*: a "unit" refers to any mobile element that can be fielded in a *BattleTech* game. Meanwhile, a "Force" denotes all units of a "named" organization. For example, Snord's Irregulars circa 3067 consisted of 2 battalions, while the Star League Defense Force Second Army circa 2767 consisted of 4 corps (6 BattleMech divisions, 17 infantry divisions and 9 independent regiments), yet both are considered a "Force." Regardless of type or size, a "Force" denotes all units a player incorporates into the organization they will create and play.

REPUTATION

A Force's Reputation Score plays a role in several aspects of its operations, and will rise and fall over a Force's history. The various *BattleTech* publications on mercenaries have established the value of Force reputation for mercenaries; those with better reputations obviously benefit from better negotiating positions during hiring. The concept is used in a similar way here for government and pirate Forces. Pirates are occasionally hired by unscrupulous employers, though such employers will (usually) only consider pirates capable of some level of discipline. ("Discipline" meaning, "able to fulfill mission objectives," though those

objectives may involve the most despicable terror, destruction, and mayhem wrought on enemies through the deniable medium of pirates.) And government Forces, while not subject to the hiring process for mercenaries, use their Reputation Score to determine access to support (such as equipment upgrades and more plentiful supplies). A government Force with a particularly poor reputation, depending on the reason, may be broken up or even see its personnel jailed.

As a convenience, the Mercenary Review and Bonding Commission-style ratings are used in these rules across all eras of play and Force types, whether or not such reputation systems were used “in-universe” for such Forces or their era.

FINDING THE REPUTATION SCORE

A Force’s Reputation Score is found by adding up its Experience Rating, Command Rating, Combat Record Rating, Transportation Rating, Support Rating, and Crimes against a base score of 0. These components are recalculated every time the Force returns from a mission.

To find the value of each of these ratings, consult the Reputation Score Calculation Table below and add all results that apply to the Force. Any sub-Forces within a command that operate independently (such as an individual company or battalion within a multi-regimental command) should be calculated separately. Sub-Forces hired or assigned to the Force (such as JumpShips assigned to transport a mercenary Force by their government employer) do not contribute to its Reputation Score.

Average Experience Rating: Players find a force’s average Experience Rating from the Experience Ratings of the force’s combatant units (i.e., anything except JumpShips, administrators, and technical personnel; count each infantry or battle armor squad as a single combatant).

To determine a combatant unit’s (WarShip, tank, BattleMech, etc.) Experience Rating from its skills, sum the values of all the combatants’ Piloting and Gunnery Skills (or Gunnery and Anti-Mech Skills for infantry squads, or Driving and Gunnery for vehicles), then divide this sum by the total number of combatants multiplied by 2. (The multiplication by two accounts for each combatant unit having two skills.) Round the result half-down (.5 and below rounds to the next lowest integer, .6 and above rounds to the next highest integer) and cross reference the rounded value against the Skill Average column in the Force Experience Rating Table on p. 34.

REPUTATION SCORE CALCULATION TABLE

Average Experience Rating	Value
Green, Very Green, Wet Behind the Ears	5
Regular	10
Veteran	20
Elite, Heroic, Legendary	40
Commander Rating	Value
Positive Trait (each)	+1
Negative Trait (each)	–1
Leadership Skill	As Skill Rating
Negotiations Skill	As Skill Rating
Strategy Skill	As Skill Rating
Tactics Skill	As Skill Rating
Combat Record	Value
Each Successful Mission	+5
Each Partially Successful Mission	0
Each Failed Mission	–10
Each Contract Breach	–25
Transportation Rating	Value
Excess Transportation Capacity for Combatants (1 – 100% excess)	+5
Excess Transportation Capacity for Combatants (100%+ excess)	+10
Insufficient Transportation Capacity for Combatants (1 – 99%)	–5
Lacks any DropShips	–5
Insufficient Transportation Capacity for Support Personnel	–3
Possesses JumpShips	+10
Possesses WarShips	+10 (+15 after 2800)
Sufficient KF transport capacity for all DropShips	+5
Support Rating	Value
Sufficient Technical Support Personnel	0
Sufficient Administrative Personnel	0
Sufficient Large Spacecraft Crew	0
Insufficient Technical Support Personnel	–5
Insufficient Administrative Personnel	–5
Insufficient Large Spacecraft Crew	–5
Excess Technical Support Personnel (150-175%)	+5
Excess Technical Support Personnel (176-200%)	+10
Excess Technical Support Personnel (201%+)	+15
Financial Rating	Value
Force is in Debt	–10
Crime Rating	Value
Robbery/Looting	–5
Slaughter	–25
Mass Murder	–50
Rape	–25
Kidnapping/Slavery	–25
Unauthorized Mission	–5
Other Crimes	–10 or more
Force is a Pirate Force	–100
Other Reputation Modifiers	Value
Time Spent Without Missions	See text

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

The final average Experience Rating adds 5 points to a Force's reputation score for Wet Behind the Ears, Very Green, and Green; 10 for Regular; 20 for Veteran; and 40 for Elite, Heroic, and Legendary. (At the high and low ends, the differences blur to outsiders trying to rate the Force.)

Since Arnold has purchased entirely regular units, this step is quite easy for him: all his combatants are regulars (everyone but his administrators, techs, and Invader crew). This adds 10 points to his Reputation Score, for a total (thus far) of 10.

However, after an extended campaign with seven successful missions (and, conveniently for this example, no changes to the TO&E), Arnold finds the four MechWarriors have their Gunnery and Piloting Skills drop to 3 and 4, 2 and 5, 4 and 3, and 4 and 4, totaling 29. The Bulldog crews have Skill Ratings of 4 and 4, 4 and 4, 2 and 4, and 4 and 5, totaling 31. The Packrats have hardly changed for lack of combat kills, still having 4/5 Skill Ratings for all four Packrats: a total of 36. The four infantry platoons have Gunnery and Anti-Mech Skill Ratings of 5 and 6, a total of 11. The Corsairs have improved somewhat to 3 and 4 each: 14 total. Finally, the Skill Rating of the Seeker's crew have remained at 4 and 5, totaling 9. Altogether, the Force's Skill Rating total $29 + 31 + 36 + 11 + 14 + 9 = 130$ for the 19 units. $130 / (19 \times 2) = 3.42$. This rounds half-down to 3. Looking at the chart, Arnold finds his unit has improved to Veteran, which adds 20 to his Reputation Score rather than 10.

Hannah's lance has four veteran (Gunnery 3, Piloting 4) MechWarriors and two regular (4/5) pilots. Those Skill Ratings total to 46. Divided by six combatants and then two, the combined Skill Rating average is 3.834, which rounds half-down to 4, which qualifies as Regular. The lance picks up 10 points for its Reputation score.

Jason didn't think his pirates needed to pay attention to a Reputation Score much, but others in his group pointed out there might be a chance to scare off defenders by reputation alone. And Bandit Kingdoms do sometimes get hired by Houses to trouble their rivals.

The green (Gunnery 5, Piloting 6) Scorpion regiment is going to weigh down the results, Jason can see. There are two veteran MechWarriors (3/4), 10 regular (4/5) MechWarriors, 20 regular vehicle crews, and a horde o' green Scorpions. The 1,472 Skill Rating points divided by 140 combat units multiplied by 2 is 5.257, which rounds half-down to 5: Green. Jason notes down the 5 bonus to the pirates' Reputation Score.

FORCE EXPERIENCE RATING TABLE

Average* of All Gunnery/Piloting Skills	Force Experience Rating
7 or more	Wet Behind the Ears
6	Very Green
5	Green
4	Regular
3	Veteran
2	Elite
1	Heroic
0 or less	Legendary

*Round half-down.

Command Rating: To determine a Force's Command Rating, simply add up its commander's Leadership, Tactics, Strategy and Negotiation Skill Ratings. Then add 1 point for each positive Trait the commander possesses, and subtract 1 point for each negative Trait. For purposes of this calculation, positive Traits are: Combat Sense, Connections, a positive Reputation, Wealth 7+, and CHA of 7+. Negative Traits are: a negative Reputation, Combat Paralysis, Unlucky, or CHA of 3 or less. Treat any final results of less than 1 as 1.

If the player has not created a leader using the rules presented in *A Time of War*, the player can designate one of the combatants on his TO&E as the Force's commander. The player then rolls 1D6 each to determine the commander's Leadership, Tactics, Strategy and Negotiations Skills (or Investigation instead of Negotiation, for pirate Forces). Add 1 if the commander has a Regular Skill Rating, 2 for a

Veteran Rating and 4 for Elite. The final result is the commander's Skill Rating in that Skill. Once the player has determined all of his commander's Skill Ratings, they can add them up to find the Force's Command Rating.

Arnold's group has three players, including himself, and since all of them wanted their PC to be the commander, none of them got to play the commander. As a result, the second Grasshopper (which was to be piloted by an NPC) is designated as being the commander's ride. The NPC commander for the group is thus a MechWarrior of Regular experience. Arnold rolls 1D6 and adds 1 (for the character's Regular Rating) for each of Leadership, Tactics, Strategy, and Negotiations, getting totals of 4, 2, 2, and 5. Arnold adds those together to get 13 for the Force's Command Rating. He adds that total to the Force's Reputation Score, for a current total of 23 prior to the campaign's start.

Hannah hasn't been able to talk her group into an ATOW campaign, so her mercenary Force's 'Mechs are all piloted by NPCs. The veteran commander rolls 1d6+2 for each of Leadership, Tactics, Strategy, and Negotiations, getting 4, 7, 8, and 4, for a Command Rating of 23. The Force's Reputation Score climbs to 33.

Jason does have a PC commander for his pirate Force. The idea of a Banshee-jockeying blowhard (who presumably only wears leather briefs and a metal hockey mask) has inspired him to create a PC, tentatively named Gigantus. In addition to an Elemental-like stature, this pirate leader has Leadership, Tactics, Strategy, and Investigation skills of 3, 2, 1, and 3. The total is 9, bringing the Force's Reputation Score to 14.

Combat Record Rating: To calculate the effects of a Force's battle history (after game play starts), use the guidelines below. These rules only apply to government Forces (which receive orders) or merc Forces (which have contracts to complete). Pirates generally get no reputation bonuses for completing a mission, because no one is impressed with their pillaging. However, pirates hired as a merc Force will get the same bonuses as a merc Force.

Simply add 5 points for every mission the command has successfully completed after Force creation. (Past missions the controlling player has written into the Force's history do not count, except for any bonuses under *Optional Random Background* rules, p. 31.)

Subtract 10 points from the reputation for each failed mission and subtract 25 points for any breach of contract/mission orders.

To successfully complete a mission, a merc or government Force must achieve all the primary objectives defined in the mission contract/orders. If the Force achieves none of the primary objectives, the mission has failed. If the Force achieves some—but not all—of the primary objectives, the mission is considered a partial success and does not affect reputation.

Every completed non-garrison/non-retainer contract/order, or every three years of uneventful garrison duty/retainer contract/orders, counts as a single completed mission and is worth a 5-point increase in the Force's Reputation Score regardless of how long the contract actually runs. If a contract or set of orders covers several missions, treat each mission separately for purposes of determining a Force's reputation.

Typically, only the gamemaster (GM) can determine if a Force has committed a breach of contract/orders. If playing without a GM, the players involved should select a neutral judge or panel of judges to decide the matter, present their cases to the judge or panel, and then abide by their decision. In either case, when resolving a contract breach, consult the rules under *Mission Failures and Contract Breaches* (see p. 46).

For mercenaries, a breach of contract on any single mission of a multi-mission contract nullifies the entire contract, and the single contract breach penalty applies in place of any mission completion or failure modifiers. Government Forces that breach orders do not have a contract to nullify, but officers and personnel may be court martialed.

The above rules refer only to conventional contracts. Any accepted contracts or missions that include covert operations, because they are less well known and less overtly advertised by employers and mercenaries alike, bestow only half the standard amount for success, failure or breach of contract. Note that when pirates are hired for missions, the missions tend to be covert because the employer does not want to be associated with the pirates.

Again, at Force creation Arnold's Force has no combat experience. (He's written up a great back story of the Force's epic battles and heroic victories over the years, but that doesn't count.) So, for now, there's nothing to add or subtract to their starting reputation of 23.

After the aforementioned campaign where the Force completed seven successful missions, Arnold is able to add 35 points to the score. With the veteran Experience Rating, that's a total of 68.

Despite the varied, sometimes veteran backstories of their Forces, Hannah and Jason likewise have no combat records to modify their starting Reputation Scores.

Transportation Rating: To determine a Force's Transportation Rating, first determine if the Force's own transports (DropShips, JumpShips, and WarShips) are sufficient to convey the Force, including its noncombatants (technicians, administrators, specialist infantry, etc.).

Determining whether there is enough transport capacity for the combatants is fairly simple: compare the number of 'Mech, fighter, infantry, small craft, and other transport bays listed for the Force's transport assets to the number of units in the Force. The unit's personnel get to ride in the quarters associated with those bays and any spare passenger quarters. If there is excess transport capacity for combatants, add 5 to the Force's Reputation Score, or 10 if the capacity is more than double that required for the combatants. Subtract 5 if the transport capacity is insufficient, or 10 if the Force lacks any DropShips. If the Force has transport capacity for a type of unit that it does not possess (e.g., fighter bays but no aerospace fighters), it does not add or subtract any points, which avoids destroying the universe by dividing by zero.

After assessing transport capacity for combatants, determining whether enough transport capacity exists for support personnel may take a few more steps. A shortcut is to determine the number of bay personnel the Force's transports can carry and compare that to the total number of non-transport personnel (anyone but DropShip, WarShip, and JumpShip crews) in the Force. If this is insufficient to address all non-transport personnel, include passenger quarters (if any). If the Force's transportation assets are capable of transporting its support personnel, add 3 to the Force's Reputation Score. If they cannot transport all support personnel, but the Force has adequate transport for its combatants, subtract 3 from its Reputation Score. If the Force has inadequate transport for its combat units, do not also subtract the 3-point penalty for lacking transport for its non-combatants. The Force has bigger problems to worry about.

It should be noted that most transport bays lack quarters for more than the unit's crew (or the crew plus one technician for BattleMech, aerospace fighter, and small craft bays.) Forces with a full complement of administrators and technicians may need to consider a DropShip designed for infantry transport.

Add 10 points if the Force has any JumpShips or WarShips. This is a one-time bonus regardless of the number of JumpShips and WarShips the Force possesses. Add 5 more if the JumpShip/WarShip docking collar capacity is sufficient for all the Force's DropShips.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



The (Obsolete-model) Seeker is a versatile DropShip. Arnold uses the Seeker's option to trade 12 of the light vehicle bays for 4 'Mech cubicles, and trades 6 more light vehicle slots for the 2 fighters. The 4 Bulldogs occupy 8 more light vehicle bays and 4 Packrats use 4, leaving 10 light vehicle bays. The Seeker has 4 infantry platoon bays; its infantry platoon occupies 1, of course. Arnold notes the Seeker had 312 bay personnel (in its base configuration). His Force, less the 44 DropShip and JumpShip crews, has 166 personnel.

With 10 of 40 light vehicle bays and 3 of 4 infantry bays left, the Seeker has excess capacity, but not enough to carry the Force twice over. This nets 5 points for the Force's reputation. It can carry all the personnel, too (without touching the bay personnel capacity of the Invader), so that's 3 more points. The Force has a JumpShip adequate to carry the Seeker and unused docking collars, for 15 more points. Arnold notes the Force's reputation at creation climbs by 23 points, to 46. Being able to easily deploy a Force to battle is worth a lot to a Force's reputation.

After seven successful missions and no change in Force size or loss of transport, the Force's Reputation Score is 91.

Hannah's Union is not entirely oversized for the Force. True, the four 'Mechs and two fighters have plenty of elbowroom, but the mercs also have 63 support personnel. Less the 15 DropShip crew, there are 48 techs and administrators to carry. The Union's 28 bay personnel cover six combatants and six techs, which leaves 32 support personnel in a lurch. Noting the Union has a long history of modifications, Hannah's group is amiable to converting two 'Mech bays to 40 steerage-class quarters and 100 tons of cargo.

The end result is that the mercs do not quite have twice the capacity necessary to carry the six combatants, so the Force adds 5 to its Reputation Score. No other modifiers apply, so their Reputation Score is now 38.

Jason's large Force is never going to move on its own in one spacelift unless most of it is packed into the Mule as cargo. Even the regular raiding party (12 light vehicles, 12 'Mechs) is only going to make it if the Mule is modified with light vehicle bays, and Jason notes adding some infantry bays or quarters to the Mule might be wise for the required 24 tech teams. Whatever modifications are made, his pirates still get a 5-point penalty for having insufficient transport for all combatants. Since the transport is insufficient for combatants, Jason does not need to apply an extra 3-point penalty for lacking transport space for the support personnel. His Reputation Score is now 9.

Support Rating: To determine a Force's Support Rating, refer to its technical and administrative support needs in terms of number of technicians and administrators, and any JumpShip/DropShip crew requirements. If the Force has sufficient technicians, administrators, and Large Spacecraft crew for its needs, then no modifier applies to the Support Rating. For each category (technician, administrator, crew) that has an insufficient number of personnel, subtract 5 from the Force's Reputation.

If the Force has excess technical support (often a valuable commodity), it may gain a bonus to its Reputation. First, refer to the number of technical personnel required (see *Force Creation*, p. 20). Then divide the number of technical personnel in the Force by the number required and multiply by 100 (to get a percentage), rounding to the nearest whole percent. If the Force has 150 to 175 percent of required technical personnel, it gains 5 points. If it has 176 to 200 percent more technical personnel, it gains 10 points. If it has more than 200 percent of the required technical personnel, it gains 15 points. (These bonuses for excess technical personnel are not cumulative.)

This isn't a hard calculation for Arnold: he has as many technical personnel as required and asked no combatants to pull double duty. He has no modifier here. It's a thought to acquire some extra technician squads to get a bonus, but that'd be 49 more personnel at a minimum—more to squeeze into the DropShip, and more salaries to pay. The Force's starting reputation remains 46 (or 91 after the seven successful missions.)

Hannah and Jason likewise see modifiers at this point. Hannah considered trying to use some of her combatants as support personnel, but it didn't seem worthwhile. Jason does not want to risk crippling his Force so far from civilization due to maintenance or medical problems. Their Reputation Scores remain unchanged at 38 and 9.

Financial Rating: A Force's Financial Rating indicates whether a mercenary command is financially solvent or operating in debt. If a mercenary command's current war chest is below 0 C-bills, the command is considered in debt and loses 10 points from its Rating as a one-time penalty. If a mercenary command pays off all its debts at any point, the 10-point penalty is removed.

*Without any starting Force drawbacks (see *Optional rules* in *Force Creation*, p. 30), and with some leftover funds in Step 3, Arnold's Force has no debt. Its starting reputation remains 46 (or 91 after the seven successful missions.) Likewise, Hannah's and Jason's Forces' reputations are unchanged at 38 and 9.*

Crimes: This is a difficult modifier to apply, and as a matter of simplicity it is generally either 0 (for non-pirate Forces) or -100 (for pirate Forces). Generally, the crimes in a Force's past (before the start of play) do not apply unless the optional rules for a Force's background are used (see *Random Backgrounds*, p. 31). A pirate Force's past misdeeds are factored into the blanket pirate Force penalty.

If there is a GM or the players are agreeable, penalties for crimes may be applied to the Force's Reputation Score. Generally, crimes by individual members do not reflect on the Force. Rather, the crimes below refer to misdeeds performed by some or all of the Force's members working in concert. (A key point is that the crimes must be associated with the Force by ratings agencies and/or governments. Like covert operations, unsolved crimes do not apply to a reputation.)

Another difficulty in applying these scores is the subjectivity of crimes. One nation's atrocity is another nation's legal military order. For that matter, opinions are likely to differ among players as to whether an action constitutes a Reputation-diminishing crime or not. The controlling player of the Force should keep track of claimed offenses and the points associated with them to address such disagreements.

Finally, the penalties of crimes may no longer apply to a Force if the offending member(s) are removed from it. If the offenders re-form a new Force, a GM may rule that the new Force carries the stigma of the old crime. Pirates will find many of the actions they undertake to survive only continue to depress their Reputation Rating.

Conventional military crimes include the following:

Robbery/Looting: The Force has looted a bank, a museum, a military parts depot, or otherwise taken goods outside their salvage rights. Each incident lowers the Force's Reputation by 5 points.

Slaughter: The Force has killed civilians unnecessarily, such as an avoidable battle in a town that was not evacuated. This can be a difficult crime to assess because normal urban combat tends to kill civilians in any case. Generally, this crime applies to deliberately killing civilians in the press of combat when the deaths could have been avoided. The Age of War under the Ares Conventions is particularly strict about this, seeing any civilian deaths as a crime. Each incident of slaughter lowers the Force's Reputation by 10 points.

Mass Murder: The Force has killed unnecessarily and in a pre-planned fashion, such as executing prisoners who had committed no capital crime or deliberately killing civilians outside of combat. Each incident of mass murder lowers the Force's Reputation by 15 points.

Rape: The Force has participated in the rape of one or more victims. Each incident of rape lowers the Force's Reputation by 10 points.

Kidnapping/Slavery: Outside the bounds of a personnel extraction mission, the Force has kidnapped and perhaps enslaved one or more people. This is a 10-point Reputation penalty.

Unauthorized Mission: This applies to a mercenary Force with a current contract or a government Force that launches a mission on their own without approval from their employer/government, such as an unplanned cross-border raid. Each incident lowers the Force's Reputation by 5 points.

Other Crimes: This is a catchall category that usually addresses vandalism and other unnecessary acts of destruction. Examples include terrorizing the populace (in a way not addressed by the above crimes), destroying important resources (water filters, hospitals, religious monuments,) etc. The standard Reputation penalty is 10 points, but particularly egregious crimes (i.e., destroying a water filter that endangers a entire population) might be worth a much higher penalty at the discretion of the GM or other players.

At Force creation, Arnold has nothing to add here. His Force has a spotless record, so its Reputation Rating is still 46. However, during the Force's fourth successful mission,

the group slipped in an A Time of War roleplaying session. The GM had the Force's NPC quartermaster, portrayed as a sleazebag, drop hints that it'd be very profitable for all concerned if their next behind-the-lines raid detoured a few kilometers to a planetary gold repository. The plan for the mission had been to wrap up the campaign and allow the characters to retire to tropical planets with loose dress codes and no extradition treaties, but the GM noticed the player characters were bragging loudly of their exploits in a bar within earshot of other AFFS troops. The next roleplaying session entailed the characters turning over all the gold to the employer (except for some they cleverly hid as reactor shielding on their Invader) and narrowly avoiding joining the NPC quartermaster in jail. Accordingly, their Reputation Score was marked down 5 points. After seven missions, it is now 86 (and the Invader has some of the most expensive engine shielding in human space—though it has become rather radioactive.)

While Hannah is considering saying that her Force got its start by going AWOL from the Com Guards, this is part of the Force's backstory and does not influence the starting Reputation Score. It remains 38.

Jason, on the other hand, is playing a pirate Force and takes an automatic -100 penalty to plummet to a starting Reputation Score of -91. That doesn't really appear to be a hole he can get out of, since the campaign will probably involve a fair amount of "Robbery/Looting." Since the campaign's goal is to improve the lot of a Periphery planet with imported medicines, skilled personnel, industrial equipment, and so on, Jason actually plans on "clean" raids rather than attracting retaliatory House attacks for war crimes, but the repeated robberies (aggravated circumstances: BattleMechs) aren't going to help.

Other Modifiers: Time is also a factor in reputation, as memories of past deeds—good and bad—fade. A Force with a positive Reputation Score that sits idle without a combat mission (any mission other than garrison or cadre) loses 5 points per full year spent idle. Similarly, a Force with a negative Reputation Score that does not commit any further crimes regains 2 points per full year in which it remains crime-free.

Final Reputation Score: Sum up all the different applicable bonuses and penalties to get the final Reputation Score. A related and important value used in contract negotiations is the Reputation Modifier, which is equal to the Reputation Score divided by 10, rounded down to the nearest whole number.

With all the Reputation Score steps complete, Arnold notes his Force has a score of 46 at the campaign's start (with a corresponding reputation modifier of 4). After the aforementioned campaign and looting incident, it will be 86, and the Force will have a Reputation Modifier of 8).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

HIRING AND CAMPAIGNS

Once the Force's reputation is determined, the Force may seek employment. The general process for this is:

Stage 1: Find the number of offers

Stage 2: Determine the employer behind each offer

Stage 3: Determine the type of contract

Stage 4: Negotiate terms

Though pirates do not have employers and government units have guaranteed employment, the above four steps often apply to all Force types.

For groups not incorporating *A Time of War* play into their campaigns, note that the base target number for Negotiation Checks is 8 on 2D6.

STAGE 1: CONTRACT OFFERS

The term “offer” refers to any opportunity for a mission or series of missions, a holdover from Force operation rules generally meant for mercenary Forces. In the case of pirates, the “offer” is actually an opportunity for action identified by the pirates’ own information gathering efforts. Within the game universe, government Forces generally aren’t given options about their assignments but, as a convenience for gaming, the controlling player may still roll up a series of offers to improve their chance of getting an entertaining mission. How offers are generated differs slightly by Force type.

Mercenaries: Mercs (and pirates seeking mercenary-style employment) seek offers on a monthly basis, with each month generating a different number of offers (and sometimes none). Time spent between contracts must be tracked, as Forces have salaries to pay, parts to replace, and ammo to use in training regardless of employment status (see *Peacetime Operating Costs*, p. 29).

Hunting for offers is generally done on hiring worlds (or “Hiring Halls”). The entire Force need not journey to a hiring world, only the Force’s negotiators. However, Forces between contracts generally find hiring worlds more tolerant of large numbers of heavily armed personnel than other planets.

To determine how many Contract Offers are available, make 1 Negotiation Skill Check each month. To this roll, apply the modifiers applicable to the Negotiation Skill, and also those applicable to both the Hiring Hall world (if any) as well as the Force's Reputation Modifier. Then compare the Margin of Success (or Failure) to the Contract Offers Table on p. 39.

The Hiring Hall portion of the table is a generic listing that differs from prior Force creation rules because these rules are meant to address any era of game play, and there has been high turnover in Hiring Halls in the thirty-first century alone. “Questionable” Hiring Halls are the likes of Antallos (Port Krin) and Astrokaszy; minor halls are worlds such as Fletcher, Herotitus, and Solaris VII; standard halls are those like Arc Royal; and great halls are on par with 3025-era Galatea and 3060-era Outreach. In many eras, there are no examples of Hiring Halls, so players will need to improvise.

Pirates: Pirates, as noted above, do not seek offers per se. Instead, they are looking for raiding opportunities to make up any shortfalls of spare parts, ammunition, salaries, even food and water.



The choice of a world to garrison, or attack, can be the deciding factor of a unit's future success.

CONTRACT MODIFIERS TABLE

Hiring Hall	Offers	Employers	Missions
Questionable Hall	0	-2	-2
Minor Hall	+1	0	0
Standard Hall	+2	+1	+1
Great Hall	+3	+2	+2
No Hall	-3	-2	-2

Pirates do not generate these opportunities at Hiring Halls. Instead, they roll in the same way as mercenaries to generate "offers," using the "No Hall" option and their leader's Investigation skill instead of Negotiation. This number of offers is then taken to the next step to determine what sort of raiding opportunities are available that month.

Government: Government Forces also do not generate offers at Hiring Halls. Instead, they roll for opportunities as if using a Great Hall (generally, governments have no trouble finding missions for their militaries).

Within the universe, the characters and their government Force will not actually be given a selection of missions; governments rarely provide their military Forces with a menu of missions in which they might be interested. Instead, this roll for opportunities is strictly "out of character" between the players and, if present, the GM to give players with government Forces a more entertaining range of missions. The mission may even be an opportunistic raid that the government Force's commander has found without input from higher command.

Unlike pirates and mercs, government Forces are not left without income between assignments. By default, a government Force is assigned to garrison duty between other missions.

STAGE 2: DETERMINE EMPLOYER

The next step is to determine the prospective employer for each offer received. This step varies markedly between Force types.

Mercenaries: Mercenaries (and pirates seeking mercenary work) make a 2D6 roll, with modifiers applicable to both the Hiring Hall world (if any), as found on the Contract Modifiers Table, plus the Force's Reputation Modifier. A result of "Independent" requires a second roll on the Independent Employer column, using the same modifiers.

If using *AToW* rules, Connections may also be called upon; the Equip value acts as a modifier to all the Determine Employer rolls for the offers that month.

The result of the 2D6 roll is not necessarily the matching row on the Employer Table. Rather, the player may select one employer on a row with a value equal to or less than the

CONTRACT OFFERS TABLE

Margin	Offers
0 or less	0
1 - 2	1
3 - 5	2
6 - 8	3
9 - 10	4
11 - 12	5
13 or more	6

CONTRACTS EMPLOYERS TABLE

Modified 2D6 Roll	Employer	Independent Employer
2 or less	Independent Worlds or Small State	Noble
3	Independent Worlds or Small State	Noble
4	Independent Worlds or Small State	Planetary Government
5	Independent Worlds or Small State	Planetary Government
6	Minor Power	Mercenary
7	Minor Power	Major Periphery State
8	Major Power	Major Periphery State
9	Major Power	Minor Periphery State
10	Major Power	Minor Periphery State
11	Major Power*	Corporation
12 or more	Major Power*	Corporation

*Or Super Power, if one exists in the era (see Stage 2, Step 2: Modify a Budget under Force Creation, p. 11)

modified roll. For example, if a player made a modified roll of 7, the player could specify that the employer behind the offer was any entry on the Employer Table of 7 or less. A good reputation or good Hiring Hall gives the Force more opportunities to connect with the employer of their choice.

The Employer column in the Employer Table refers to the same factions as on the Faction Budget Modification Table (see *Force Creation*, p. 12)

In the Independent Employer column, the "Corporation" result refers to any Inner Sphere or Periphery corporation. Contracts with them are usually prized as they often result in repeat work if the Force's performance is satisfactory, and because corporations often pay well to ensure deniability (at the expense of making the mission "covert," and thus worth less to improve a reputation score). Not all corporate employers want covert operations, of course. Some seek the deterrence value of posting a reputable military Force at an important installation.

The "Planetary Government" result refers to any planetary government in the Inner Sphere or Periphery that has a problem not being dealt with by their interstellar government.

The "Noble" result refers to missions where a noble or wealthy individual (or family) hires the Force.

The "Mercenary" result refers to a contract in which another mercenary command is hiring the Force as a subcontractor.

Pirates: This step is not so much determining an employer as selecting a victim. Pirates roll in the same manner as a mercenary Force with the "No Hall" modifier. The result is the victim targeted by each raid opportunity.

Government: A government Force's employer is always their chosen government; no roll is necessary or possible.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

STAGE 3: DETERMINE THE MISSION

After determining the employer (or victim) for each opportunity, the next step is to determine the type of mission offered. Again, the details differ by Force type. Note that this negotiation may be handled remotely; a Force commander needn't physically travel to a Hiring Hall if it possesses an A- or B-rated HPG. When a GM is present, the players may agree to use a negotiator other than the Force commander, including an NPC drawn from the Force's administrative staff.

Mercenaries: To determine the mission, make 1 Negotiation Skill Check per offer and apply both the Negotiation Skill modifiers and the Hiring Hall modifiers. Then roll 2D6 again, and add the Margin of Success of the Negotiation Skill Roll. The result determines the Force's mission, consulting the Missions Table below.

If using *AToW* rules, Connections may also be called upon; the Equip value acts as a modifier to all Determine Mission Rolls for offers that month. If they wish, players may apply the Margin of Success from the Negotiation Skill Roll and/or the modifier from the Equip value of any Connections used as a negative modifier to the 2D6 roll for determining the mission. This improves the odds of finding covert assignments.

If the result of the roll is "Covert" and the Force is non-Clan, roll again on the Covert column. If the result is "Special", roll again on the Special column. If the Force is Clan, ignore Special and Covert results and re-roll on the Inner Sphere/Clan column.

For results with two entries (e.g., Cadre/Garrison Duty), the better-paying of the two missions serves as the basis for determining payments. The mission simply entails duties of both entries (e.g., Riot/Garrison duty will involve garrisoning a riotous population.)

Pirates: Pirates roll 2D6 on the Pirate column of the Missions Table. If using *AToW* rules, Connections may also be called upon; the Equip value acts as a modifier to all the Determine Mission Rolls for opportunities that month. Players may apply the Margin of Success from the Negotiation Skill Roll and/or the modifier from the Equip value of any Connections used as a negative modifier to the 2D6 roll. The ability to add or subtract the Connections modifier should aid a pirate Force in finding a better target.

Government: Government Forces roll in the same way mercenary Forces. Use the column appropriate to the government: Inner Sphere/Clan or Independent.

STAGE 4: NEGOTIATE TERMS

After assessing the options, a Force then selects one. Mercenaries must negotiate a contract; pirates settle on a target to raid; and government Forces determine their level of funding and support (rather like mercs) before going on their new mission. See the Campaign section for a description of mission types.

The process for negotiating a contract (or determining support, or determining the target) differs somewhat by Force type.

Mercenaries: Once the employer and Mission Type are known, the specific terms need to be determined. Mercenary contracts (including contracts for pirates operating as mercenaries) address seven payment terms: Base Payment, Length, Operations Tempo, Employer Factor, Reputation Factor, Transport Costs and Final Payment. Most steps produce a number that is added or multiplied together as follows:

Final Payment = (Base Payment x Length of Mission x Operations Tempo x Employer Factor x Reputation Factor) + (Base Payment x Transport Period x Employer Factor x Reputation Factor) + Support Payment + Transport Payment

In addition to the payment terms, Command Rights and Salvage Rights must also be resolved.

Use the Master Contract Terms and Supplemental Contract Terms tables below for reference in the negotiating process, and refer to the description of each contract term (following the tables) for explanations of how to roll each term. In most cases, the default method to determine a contract term is to roll 2D6 against the appropriate column of the Supplemental Contract Terms Table, with the rolls modified by values found on the Master Contract Terms Table.

For example, command rights for a mercenary command with a final Reputation Rating of 6 hired to stage an objective raid for the Draconis

MISSIONS TABLE

Roll	Inner Sphere/Clan	Independent	Corporation	Special	Covert	Pirate
2 or less	Covert	Covert	Covert	Covert	Terrorism	Recon Raid
3	Special	Special	Covert	Guerrilla*	Assassination	Recon Raid
4	Pirate Hunting	Planetary Assault	Special	Guerrilla	Assassination	Recon Raid
5	Planetary Assault	Objective Raid	Objective Raid	Recon Raid*	Espionage	Recon Raid
6	Objective Raid	Extraction Raid	Extraction Raid	Extraction Raid	Sabotage	Objective Raid
7	Objective Raid	Pirate Hunting	Recon Raid	Retainer	Guerrilla	Objective Raid
8	Extraction Raid	Security Duty	Objective Raid	Recon Raid	Recon Raid	Objective Raid
9	Recon Raid	Objective Raid	Security Duty	Relief Duty	Diversiónary	Objective Raid
10	Garrison Duty	Garrison Duty	Garrison Duty	Diversiónary*	Observation	Objective Raid
11	Cadre Duty	Cadre Duty	Cadre/Garrison Duty	Riot/Garrison Duty	Mole Hunting	Objective Raid
12 or more	Special	Special	Special	Cadre/Garrison Duty	Security	Objective Raid

*Offered with Planetary Assault contract, to begin immediately at termination of first contract.

Combine (a major power noted to be stingy and controlling with mercenaries) have a total modifier of -3 (0 for Major Power, -2 for a Controlling Employer, -1 for Reputation 6). If the player then rolls a 6 on the Supplemental Contract Terms Table for command rights, the result becomes 3 ($6 + -3 = 3$), and thus the mercenary Force is offered House command for this mission.

Forces with player characters involved in the negotiating process may modify the dice roll results for several of the terms (Command Rights, Salvage Rights, Support Costs, and Transport Costs) by using a character as a negotiator. After finding the result with the aforementioned 2D6 roll, players should take the following steps:

To negotiate one of those contract terms with PCs, make an Opposed Negotiations Skill Check, modified by all applicable Traits (Attractive, Impatient, Introvert, Patient, Reputation, and Unattractive). Other Traits may also have an impact at the GM's discretion, and circumstances might also require modifiers to be in effect.

Using this PC-negotiated process, a given contract term can be improved by 1 step on the Supplemental Contract Terms Table for every 2 points of Margin of Success, or reduced by 1 per every 2 points of Margin of Failure. For example, if Command Rights had initially been rolled as 5 (House command), a Margin of Success of 6 would be needed for it to adjust upward to 8 (Liaison). If a Margin of Failure of 6 or more occurred, the Command Rights result instead would have become 2 (Integrated).

Most employers take care to staff or hire skilled negotiators, and in most cases a Soldier-level negotiator NPC is appropriate (see pp. 336-339, *AToW*). For those without it, the NPC has a base Negotiation value [6 intelligence +2 Skill Rating] of 8). In some cases, the employer will have gone to the expense of making a negotiator available that qualifies as a Savant or Boss NPC. This is rarely done without some ulterior motive, or else an Enemy has exercised some resources to make life more difficult.

Pirates: The process for arranging a pirate raid is basically the same as setting up a mercenary contract. However, instead of negotiating terms, the rolls made to build the contract represent the pirates' process of locating a target (competing against security and intelligence agencies rather than negotiating), and the value recovered from it.

Pirates automatically retain 100 percent of all salvage and have "independent" Command Rights, but must provide their own transport and cover their own pay and supplies. Pirates must hope that their raids are profitable; no one will reimburse them, regardless of the outcome.

Government: The government process is the same as the mercenary process, differing only in superficial terminology ("determining support" versus "negotiating a contract.") Between other missions, a government Force is automatically assigned to garrison duty at a payment per month equal to 100 percent of their peacetime operating cost.

Base Payment

The Base Payment for a mission is 75 percent of 1 month of the Force's peacetime operating cost, plus 5 percent of the total cost of combat units in the Force that are not Large Spacecraft. This base payment is paid for each month of the contract.

If players do not regularly engage in aerospace battles that endanger their Large Spacecraft, then the cost of the Large Spacecraft is not factored into the Base Payment. If players regularly play out aerospace engagements that would endanger their Large Spacecraft, add 1 percent of the cost of the regularly-threatened Large Spacecraft to the base payment. In most games, this only means DropShip costs are added, but campaigns featuring WarShips or played out in eras where JumpShips and space stations are fair game may add 1 percent of the cost of those vessels, too. This should be approved by the GM or, lacking a GM, all players involved in the campaign.

Furthermore, on some missions the fuel cost component of the peacetime operating cost may be reduced. This occurs in garrison and cadre contracts where the Force is able to generate its own hydrogen, as hydrogen fuel costs are not considered in the peacetime operating cost for contract purposes.

The intent of this payment system is to give Forces reasonable profits while allowing for catastrophic losses, such as the destruction of a DropShip or loss of a majority of their ground combatants in just a few battles. Mercenaries can become quite rich if they avoid disaster, while pirates will be able to survive to terrorize another planet, and government Forces will be secure in the knowledge that their generous government pensions might cover the property taxes on their half-hectare retirement farm (government Force profits, of course, are never redistributed to the soldiers, just retained for the government Force's operations).

Length of Mission

The Master Contract Terms Table reflects the typical base duration of the mission. After determining the base duration, add in the length of time required for the Force to redeploy to the mission site.

Unless the mission is on the same planet, deployment time is calculated as 2 weeks plus 1.1 weeks per jump to reach the site of the mission, and then multiply by 2 (to calculate the round-trip travel time). Divide the number of transit weeks by 4 and round up to the nearest whole number to determine the number of transit months for the mission.

The default number of jumps is calculated by plotting a straight line between the Force's current location and the mission's location on a map of the *BattleTech* universe such as those in the *Handbook* series, then dividing by 30 light-years, multiplying the number of jumps by 1.2 to reflect course deviations to stick to inhabited systems, and rounding up to the nearest whole number. If such a straight course is patently unwise (for example, it requires passing through a hostile nation), the controlling player (and GM, if present) must calculate the course that covers the next least distance.

If players do not have a map covering the necessary regions of space, they may simply roll 2d6 to determine the number of jumps.

The final length of the contract is a major factor in calculating payment (and a Force's expenses), as it is multiplied by the Force's base payment and multipliers discussed below.

Finally, the length of the Mission Period and Transport Period should be noted separately. Some reimbursement calculations only apply to the length of the mission, not the period in which a Force is moving to the mission site.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

MASTER CONTRACT TERMS TABLE

Mission Type	Op. Tempo Multiplier	Base Length	Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
Assassination	1.9	3 months	+2	+1	-1	-3
Cadre Duty	0.8	12 months	0	0	+1	0
Diversitary Raid	1.8	3 months	0	+2	+2	+1
Espionage	2.4	12 months	-1	+4	-3	-2
Extraction Raid	1.6	3 months	-1	-1	+2	+1
Garrison	1.0	18 months	+1	0	+1	0
Guerrilla	2.1	24 months	-2	+3	-2	-1
Mole Hunting	1.2	6 months	-3	0	+2	+1
Objective Raid	1.6	3 months	-1	0	+1	+2
Observation Raid	1.6	3 months	-1	-2	+1	-1
Pirate Hunting	1.0	6 months	+2	+2	-1	-1
Planetary Assault	1.5	9 months	-2	0	+2	+3
Recon	1.6	3 months	-1	-2	+1	-1
Relief Duty	1.4	9 months	-1	+1	+1	+1
Retainer	1.3	12 months	-2	0	+2	+1
Riot Duty	1.0	4 months	-2	+1	+2	0
Sabotage	2.4	24 months	-1	+4	-3	-2
Security Duty	1.2	6 months	-3	0	+2	+1
Terrorism	1.9	3 months	+2	+1	-1	-3
<i>High Risk</i>	+0.5	As mission	-1	-2	+1	0
<i>Covert Operation</i>	+0.3	As mission	+1	+1	-1	-1
Employer Modifiers	Employment Multiplier		Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
Employer						
Super Power	1.3		0	0	+1	+2
Major Power	1.2		0	-1	0	+1
Minor Power	1.1		0	-2	0	0
Independent World	1		0	-1	-1	0
Mercenary/Corporation	1.1		-1	+2	+1	+1
Typical Employer	0		0	0	0	0
Stingy Employer	-0.2		0	-1	-1	-1
Generous Employer	+0.2		0	+1	+2	+1
Controlling Employer	0		-2	-1	0	0
Lenient Employer	0		+1	+1	0	0
Pre-Succession Wars	0		0	-2	0	0
Post-Clan Invasion	0		0	-2	0	0
Unit Reputation Trait	Payment Multiplier		Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
Reputation						
0 (Unrated)			-2	-1	-1	-3
1			-1	-1	-1	-2
2			-1	0	0	-2
3			-1	0	0	-1
4			0	0	0	-1
5			0	0	0	0
6			+1	+1	0	0
7			+1	+1	0	0
8			+1	+1	+1	0
9			+2	+2	+1	+1
10+			+3	+2	+2	+2



SUPPLEMENTAL CONTRACT TERMS TABLE

2D6	Command Rights	Overhead Compensation	Salvage Rights	Support Rights	Transport Terms
1 or less	Integrated	None	None	None	None
2	Integrated	None	Exchange	None	20%
3	House	Half	Exchange	Straight/20%	25%
4	House	Half	10%	Straight/40%	30%
5	House	Half	20%	Straight/60%	35%
6	House	Half	30%	Straight/80%	45%
7	House	Full	40%	Straight/Full	50%
8	Liaison	Full	50%	Battle/10%	55%
9	Liaison	Full	60%	Battle/20%	60%
10	Liaison	Full	70%	Battle/40%	Full
11	Liaison	Full	80%	Battle/60%	Full
12	Independent	Full	90%	Battle/80%	Full
13 or more	Independent	Full	Full	Battle/100%	Full

Operations Tempo

This is a basic multiplier of the peacetime operating cost for the anticipated level of risk and effort a Force must put into a mission. The multiplier is found on the Master Contract Terms Table. There are a couple of modifiers added to the Operations Tempo multiplier: high risk and covert operation.

A high-risk mission is one where the opposing Forces have significantly more firepower than the player's Force (and any NPC Forces it is working with). While the final judgment is up to the GM (if present) or agreement of all players, a rule of thumb is that if the Battle Value of the opposing Force is more than double that of the player Force, then the mission is high risk.

A covert operation is one where the employer is not publicly associated with the player's Force. Rescue, ransom, and aid are not likely, and it is a contract breach (see p. 46) for the Force to reveal its employer. In many cases, this entails keeping the identity of the Force hidden, too.

This cost multiplier is often handy for providing the Force with some additional cash prior to expensive combat operations. Reimbursement for combat expenses is handled separately, and often received at the end of a mission.

Employer Multiplier

Certain employers pay more than others, and some pay less. This generally depends on how wealthy and powerful the nation is, but that varies. Examples of "super power," "major power," "minor power," and "independent world" are found in the Faction Budget Modification Table (see p. 12).

The Employment Factor is also found on the Master Contract Terms Table. At the discretion of the GM or all the players involved, the employer may be considered stingy or generous with the type of Force (mercenary, government, or pirate). For factions commonly in play (that is, the Houses of the thirty-first century), this is usually determined from descriptions of how a faction treats mercenaries or its own troops as detailed in the *Handbook* or *Field*

Manual series of sourcebooks. (The Lyrans, for example, are often considered generous employers.) More obscure factions (for example, the Chesterton Trade League) should leave this value as 1.

Reputation Factor

This is based on the Force's final Reputation Rating. It is equal to 20 percent of the final Reputation Modifier plus 0.5, not rounded. This reflects a bonus to a Force's payment for those with an excellent reputation, and a penalty for those Forces with a poor reputation. Pirates working as mercenaries will find themselves hard-pressed to earn any funds.

Transport Payment

When a Force does not have its own DropShips and JumpShips, employers customarily offer to reimburse the Force for a certain percentage of the cost (which may represent the employer loaning its vessels, or vessels the Force leases on its own.)

When using the Contract Terms tables, the percentages shown on the Supplemental Terms Table reflect the total cost of using DropShips and JumpShips for which the employer will compensate the Force in payment. The number represents the amount paid for chartered transportation, in cases where the mercenary Force does not have its own vessels and the employer does not offer any. Both of these numbers are presented to the Force in the initial contract offer and are generated on a single roll.

The typical transport costs for military Forces are 0.5 percent of a DropShip's purchase price (rounded up to the nearest CB) per month or fraction of a month, and 100,000 CB per docking collar per jump on JumpShips.

Additional prices may apply for this transportation. Skilled DropShip crews are valuable in combat situations and thus command a premium; multiply the rental cost of a DropShip by 1.5 for Veteran crews and by 2 for Elite crews. (Green crews do not offer cost savings, as they still operate an invaluable asset and charge for it.) JumpShips, meanwhile, profit from

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



jumping as often as possible with as many DropShips as possible, and thus will charge a hiring Force for any unused docking collars. JumpShips will also charge for all docking collars at the rate of 100,000 CB per week per docking collar when kept idle, waiting for a military Force to complete its mission.

These charges may also be used as price guidelines for a military Force with excess transportation capacity looking for profit on the side.

Wilma's Wabid Wombats are a company-sized combined arms Force hired on a "short and simple" (so the employer says) raid on a star system one jump from the Wombats' current garrison. Lacking a DropShip or JumpShip, the Wombats have to contract both. The mission is short: a week to reach the JumpShip, the instantaneous jump, a week to the target planet, two weeks of raiding mayhem, then a week back to the JumpShip, and finally a week to the garrison planet. To Wilma's delight, she finds another military Force on her garrison planet (Arnold's Avengers, or something silly like that) who are currently on R&R and are willing to loan the Wombats their idle Seeker and Invader.

The mission requires six weeks of use of the Seeker-class DropShip (crew of average skill) for the round trip, so Arnold bills the Wombats for 1.5 months at 0.5 percent of the Seeker's 225,829,968CB purchase price: 1,693,725 CB. The Wombats are conducting the raid alone and the JumpShip is in use for two jumps over six weeks (from the time the Seeker launches to the time it lands and the Invader is recharged to take on a new client DropShip). Arnold accordingly bills the Wombats for three docking collars on two jumps (1,200,000 CB), plus four weeks of enforced idleness while the Wombats are transiting the target system and raiding the planet (1,200,000 CB). The total transport bill handed to the Wombats is 3,093,725 CB, which Wilma will carry to her employer in negotiations.

Support Payment

Support denotes how much of the Force's combat operations costs the employer will reimburse above and beyond peacetime operating costs. Support costs include the cost of replacement parts and materiel as well as outside technical assistance. Customarily, employers offer either straight support or battle-loss compensation. The level of support is rolled from the Supplemental Contract Terms Table after the negotiation roll.

Under a straight support arrangement, the employer agrees to pay a percentage of the command's monthly peacetime operating expenses as a bonus for the period of the mission (not counting transport time). When combat is expected, a straight support arrangement usually benefits the employer, as the expenses of repairing battle damage can quickly exceed normal maintenance costs. On cadre missions and other light duty, such as garrison posts in "safe" zones, the arrangement usually benefits the mercenary Force.



With a battle-loss compensation arrangement, the employer agrees to cover a percentage of the cost of repairing or replacing the command's battlefield losses and damage. Customarily, the employer is required to compensate the Force within six months of the date of loss. This compensation is cumulative, so if a particular piece of equipment is destroyed and replaced four times over the course of several battles, the employer might owe a percentage of four replacements. Compensation can be paid in C-bills or a combination of C-bills and equipment, but a replacement item must exactly match the destroyed item.

Withholding battle-loss compensation constitutes a breach of contract and exposes an employer to severe fines. Understandably, mercenaries expecting battle will push for battle-loss compensation, while their employers prefer straight-support terms (an employer will gladly agree to pay all of a Force's regular maintenance expenses rather than be responsible for replacing a handful of 'Mechs, which may be worth millions of C-bills each).

Final Payment

Final Payment for a mission by a mercenary or government Force is calculated as stated above:

Final Payment = (Base Payment x Length of Mission x Operations Tempo x Employer Factor x Reputation Factor) + (Base Payment x Transport Period x Employer Factor x Reputation Factor) + Support Payment + Transport Payment

Most of these terms are calculated in advance of the mission, so the Force will know the potential profit or loss from the mission. Support Payment is only determined afterward based on what the employer is required to reimburse for battlefield activities.

Command Rights

Command rights fall into four categories: independent, liaison, House and integrated. Only mercenaries (and pirates under a mercenary contract) roll for command rights. Pirate Forces are otherwise automatically independent commands, while government Forces are automatically integrated commands.

When rolling for command rights, players should first consult the appropriate *Handbook* or *Field Manual* for an employer to determine if the employer has a reputation for being lenient or controlling toward mercenary commands. If that can't be determined, use a typical command per the Master Contract Terms Table.

Independent command allows a Force full battlefield autonomy, with no interference from the employer, the employer's troops or an employer's representatives (though the mercenary Force remains bound to explain any questionable actions to the employer and/or any outside authority or arbitrator after the contract expires). Particularly during covert missions, employers grant independent command rights because doing so shields them from any legal responsibility for the mercenaries' actions under the contract.

Under liaison command, the mercenary Force accepts a liaison that represents the employer and accompanies them during the mission. In exchange, the employer assumes limited legal responsibility for the actions of the mercenary Force during the length of the contract. The liaison—usually a regular officer, or mercenary veteran—monitors all mercenary command decisions and generally watches out for the employer's interests. Depending on the power of the employer and the strength of the contract, a liaison can bring heavy pressure to bear on the mercenary Force and can be a damaging witness in any post-mission hearing. Corporations, most Periphery realms and smaller states favor liaison command. However, most Great Houses will use liaisons if pressed for it, depending on the needs of the mission.

Under House command, the mercenaries are placed under the direct authority of a regular military officer designated by the employer. This designated commander may dictate tactics and strategies to the mercenary group, but the Force otherwise retains command integrity. Under this arrangement, the employer assumes full legal responsibility for the mission and the mercenaries' conduct during the contract, unless the employer can demonstrate that the mercenaries willfully disobeyed the orders of their designated commander. The Successor States prefer House command, and the Lyrn Alliance usually agrees to nothing less unless the mercenary command grants severe concessions elsewhere in the contract. Furthermore, certain closely coordinated raids, garrison and assault duties virtually demand House command to ensure all participating troops are properly deployed.

Under integrated command, the employer assigns regular officers to most of the mercenary Force's command positions, effectively making the mercenaries part of the regular House troops for the duration of the contract. The employer assumes full legal responsibility for the mission and the mercenaries' conduct during the contract, unless the employer can demonstrate that the mercenaries willfully disobeyed the orders of the designated commanders. Generally, employers use this arrangement when hiring mercenaries to bolster regular Forces for large assaults or raids, though most Great Houses grant a mercenary group House command rights in such situations if pressed. Understandably, mercenary leaders shun integrated command because it requires them to give up virtually all control over their troops.

Salvage Rights

Throughout the Succession Wars and especially in the Clan Invasion era, salvage rights were one of the most closely contested contract terms in a mercenary negotiation. Forces have historically preferred to keep whatever they capture, as battlefield salvage can dramatically increase the profit margins for a successful mission. For many mercenaries and pirate Force, salvage is the only way to earn a profit.

Employers, on the other hand, see salvage rights as a way to gain back some of the money they are spending on the Force, to say nothing of the potential to reverse-engineer captured

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



enemy technologies. The method of assigning salvage rights has varied over the centuries, but currently four main levels of salvage rights are recognized by virtually every Force and employer in the business: full, exchange, shared and none.

Salvage rights apply to mercenary and government Forces, not pirates. For mercenaries, the reasons to battle for control of salvage are obvious. Government Forces likewise have issues with salvage: their commanding government may take salvage away from a victorious Force to share with others. Pirates automatically have full salvage rights.

Full salvage rights and no salvage rights are self-explanatory. In the former case, Forces can cart off all equipment captured during the mission, barring any objects or persons specially designated by the contract (such as the targets of an extraction or objective raid). Gaining full salvage rights generally takes some hard bargaining, however.

No salvage rights means the employer is entitled to all salvage the mercenary Force brings back. Employers rarely stipulate “no salvage rights” in the absence of at least liaison command, as the employer knows that a mercenary Force will not likely bring anything home if it isn't entitled to keep anything.

A command with exchange rights must turn over all salvaged items to its employer at the end of the mission, and in exchange receives fair market value for a percentage of the items, paid in C-bills or materiel. Exchange rights came into widespread practice to address salvaged Clan technology, and employers customarily provide an equivalent item of advanced Inner Sphere technology when possible. As an ideal middle ground, most employers are willing to settle for exchange rights when it comes to salvage, as the employer generally gets first pick of the equipment to be exchanged.

Shared rights are an alternative to exchange rights that are more common in the case of missions not directed against the Clans. Under this arrangement, the mercenary command keeps a certain percentage of all salvaged items (figured by tonnage), while the employer receives the rest. Because the mercenaries select the items they keep in this case, most employers prefer exchange rights.

With regard to the Contract Terms tables for salvage rights, the player may need to make two rolls. If the roll result yields a percentage or Full, the mercenary or government command is offered that percentage of what are considered shared salvage rights, meaning that the Force can keep that percentage of the total monetary value of any equipment they capture during the contract. (The remaining percentage goes to the employer.) Full salvage means the mercenary command claims all captured equipment during the contract. On a result of Exchange, the player must make a second roll, throwing out any result that does not yield a percentage or Full. The result kept is the amount of all captured equipment for which a Force may receive fair market value—in C-bills or equipment of equivalent (but generally lower) technology. The remaining equipment goes to the employer.

ADDITIONAL RULES

The following miscellaneous rules cover contract breaches, building bases, and procuring equipment after unit creation.

WARTIME DEFINITION AND COSTS

These rules use a simple, binary definition of peacetime and wartime. A Force is considered to be in peacetime while executing certain types of missions (garrison duty, cadre duty, and security duty), being transported to a new mission, or while unemployed. In other circumstances, the Force is in wartime.

Wartime operating costs start at peacetime costs (for salaries, fuel, ammunition, and spare parts), representing the assumption that peacetime costs are a baseline for the Force's activity on a mission, including regular training outside of actual combat. Additional costs are applied according to actual combat.

Salaries will change as personnel are killed or hired. As a simplification, the dead personnel will still be paid in full for the month in which they die.

Fuel consumption starts at the peacetime baseline. Units that explicitly track fuel points as a function of movement (spacecraft and fighters; see p. 34, *SO*) add fuel expended in combat missions to the peacetime baseline. Other units determine the mass of fuel expended in addition to the peacetime baseline (see p. 35, *SO*).

Maintenance costs add repair and replacement costs above the peacetime baseline. The cost to replace a component in a unit is equal to the price listed on pp. 274-286, *TM*. Component repair costs are one-fifth of the component purchase cost.

Ammunition costs also start at the peacetime baseline. Additional combat costs are simple: track ammunition expended in combat.

CONTRACT BREACHES AND MISSION FAILURES

Sometimes, regardless of the players' best efforts, a military Force fails to complete a mission or perhaps even violates the terms of its contract, resulting in a breach. Players with mercenary Forces should avoid events like these whenever possible, as their outcome can seriously harm a mercenary command's standing (see *Reputation*, p. 35).

Pirates are exempt from contract breaches and mission failures (unless operating under contract to an outside employer). A pirate Force that fails its mission may, at the players' or GM's discretion, face the wrath of its commander or Bandit King.

Finally, government Forces suffer negative results from mission failure and contract breach just like mercenary Forces, though the terms for contract breach are different (dereliction of duty and disobeying orders being common examples). The final results also differ. Whereas a mercenary Force will lose Reputation and may be fined and/or face hiring bans, a government Force usually sees punishment of its personnel (such as court-martials of its officers, who will then likely be removed from the Force).



Mission Failure & Partial Failure

To successfully complete a mission, a mercenary or government Force must achieve all the primary objectives defined in the mission contract/orders. If the Force achieves none of the primary objectives despite a credible effort to do so, the mission has failed (but it is not a Contract Breach, see below). If the Force achieves some—but not all—of the primary objectives, the mission is considered a partial success.

Heavy losses or a Forced withdrawal in the face of overwhelming enemy reinforcements are the most common causes of mission failure. Another frequent cause is a scorched-earth policy by a defender, denying an attacker the objective when a mission calls for capture. In any case where a Force has failed its mission despite putting in a credible effort (meaning the Force did not retreat at the first sight of the enemy or put up only token resistance), the Force suffers a 10-point loss in its Reputation Score.

Government and pirate Forces do not suffer any further penalties for mission failure. Mercenary Forces that suffer mission failure do not receive any remaining payment or support, and their contracts may be considered terminated upon the day of mission failure.

A partial failure does not affect Reputation.

Contract Breach

Forces that do not even try to achieve the mission goals, or Forces that try to flee with an employer's funds, or that deliberately violate the terms of their obligations to the employer, are guilty of breaching their contract. By the same token, employers who misrepresent a mission's parameters, or who lure a command into a compromising position that might force its members to violate the current rules of war (such as the Ares Conventions or Outreach Accords), may also be found guilty of a contract breach. In either case, a contract breach is a serious offense and often requires legal action to resolve to anyone's satisfaction.

In the case of mercenary contracts, charges of contract breach are submitted to a panel of the appropriate mercenary review board of the era (such as the Mercenary Review and Bonding Commission). Disputes without a neutral reviewer are often left unresolved, but have been known to drive mercenary Forces to defection or even piracy against employers they come to perceive as an enemy. To avoid this potential outcome, along with the bad publicity of poor employer-mercenary relations, some non-review board contract disputes are settled through a third-party arbitrator—for example, a ComStar representative—who judges the matter in a formal hearing.

In the case of government Forces, the government usually resolves the matter internally via a court-martial by higher-ranking military personnel or political leadership.

Resolving Mercenary Contract Breaches

Contract breach hearings may be handled by assigning negotiators for both sides, similar to the contract negotiation process. In a non-GMed campaign, the opposing player may decide to invoke contract breach proceedings on behalf of the employer, but only if the mercenary command has failed in its mission or committed some war crime (see *Crimes*, p. 36). To resolve the charge of contract breach, both negotiators must roll 2D6 (adding Negotiation Skill modifiers, if using AToW rules). The GM (if any) must then assess a -3 modifier against the party that violated any terms of the contract. This modifier

does not apply in the absence of a GM, or when fault is unclear. An additional -2 penalty applies to the mercenary negotiator's roll if the contract was not handled through the MRBC (or other recognized mercenary review board appropriate to the era). A +1 bonus applies to the mercenary negotiator's roll if the mercenary command has a Reputation Modifier of 7 or higher, while a -1 applies to mercenary commands with a Reputation Modifier of 3 or lower. Compare the results of each negotiator's roll to determine the outcome of the hearings, based on which side is leveling contract breach charges against the other.

If the employer accused the mercenary command of contract breach, and the employer's roll result (or Margin of Success) exceeds that of the mercenary command, the mercenary Force has been found guilty of contract breach. The Force automatically loses 25 points from its Reputation Score along with all remaining payment under the contract. Furthermore, for every point by which the employer negotiator's roll exceeds that of the mercenary command, the mercenary command must pay a 10,000 C-bill fine, and is placed under a one-month hiring ban.

If the mercenary negotiator's roll succeeds, the mission is considered complete; no Reputation Score loss occurs, and the mercenary command receives all remaining contract pay due. If the mercenary negotiator's roll succeeds by a margin of 5 or more, the employer is found in violation of contract, and the money due the mercenary command is multiplied by half of this Margin of Success. A success by less than 5 means only that the contract is considered null and void and is rated on the command's record as a successfully completed mission.

If the mercenary command levels contract breach charges against an employer, the employer's negotiator must succeed by a margin of 5 in order to declare the mercenary command in breach of contract instead, with all fines and hiring bans (plus the 25-point Reputation Score reduction) occurring per the rules given above. The mercenary negotiator wins full payment multiplied by half his Margin of Success (rounding up) if he succeeds in his contract breach roll.

After a disagreement with an assigned liaison officer who attempts to order his mercenary command into a suicide mission, Damon Kirkpatrick declares the Lyrans Alliance in breach of contract. Both the employer and the mercenary command bring veteran negotiators before the MRBC, which handled the original contract negotiations. Because Kirkpatrick's Invaders have a Reputation Modifier of 7, a +1 bonus applies to the mercenary negotiator's roll, bringing the negotiator's bonus to +6 (+5 for Veteran, +1 for a Reputation Modifier of 7 or higher).

The GM, ruling that the liaison officer overstepped his bounds, applies a -3 modifier to the Lyrans negotiator's roll, leaving the Lyrans negotiator with a +3 bonus (+5 Veteran, +1 Lyrans, -3 employer at fault). The final 2D6 roll results for the Invaders and the Lyrans are 13 and 10, respectively. The Invaders' negotiator has won with a Margin of Success of 3 (13 - 10 = 3), which means the Invaders' mission was declared a success and the remainder of the contract is nullified. If the Invaders' negotiator had rolled a 16, the Margin of Success would have outdone the employer's roll by 6, and the employer would have been found guilty of a contract breach. The employer would then be forced to pay three times the remainder of the money due under the contract (6/2 = 3).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Resolving Government Contract Breaches

Contract breach hearings may be handled by assigning negotiators for both sides, similar to the contract negotiation process. In a non-GMed campaign, the opposing player may decide to invoke contract breach proceedings on behalf of the government, but only if the government Force has failed in its mission or committed some war crime (see *Crimes*, p. 36). To resolve the charge of contract breach, both negotiators must roll 2D6 (adding Negotiation Skill modifiers, if using *AToW* rules). The GM (if any) must then assess a -3 modifier against the party that violated any terms of the contract. This modifier does not apply in the absence of a GM, or when fault is unclear. A +1 bonus applies to the Force negotiator's roll if the government Force has a Reputation Modifier of 7 or higher, while a -1 applies to government commands with a Reputation Modifier of 3 or lower. Compare the results of each negotiator's roll to determine the outcome of the hearings, based on which side is leveling contract breach charges against the other.

If the government employer accused the command of contract breach, and the employer's roll result (or Margin of Success) exceeds that of the command, the Force has been found guilty of contract breach. The Force automatically loses 25 points from its Reputation Score. Furthermore, for every point by which the employer negotiator's roll exceeds that of the command, the command loses 1 of its personnel (starting with the highest ranking) to court-martials, reflecting officers being stripped of command, loss of rank, imprisonment, and/or execution (depending on the government and breach in question).

If the Force negotiator's roll succeeds, the mission is considered complete; no Reputation Score loss occurs. If the Force negotiator's roll succeeds by a margin of 5 or more, the employer is found in violation of contract. However, in most cases this has no measurable impact. (If a high-ranking officer or politician outside the Force is court-martialed or stripped of office, this rarely matters to the government at large or the Force. However, a GM may use this as an opportunity to remove a rival or enemy of the Force.)

If the government Force levels contract breach charges against the government, the government's negotiator must succeed by a margin of 5 in order to declare the Force in breach of contract instead, with all reputation loss and removal of personnel occurring per the rules given above. If the Force's negotiator wins, the result is the same as victory described in the above rules: likely nothing other than sparing the Force a loss of reputation.

CHANGING FORCE TYPE

A Force can change types over the course of its existence. The most common examples are a Force turning to piracy or a mercenary Force becoming a government Force, but other changes are possible.

Turning to piracy is accomplished through actions. A mercenary or government Force simply ceases to obey orders from its employer/government and begins performing pirate missions. After completing the first pirate mission, the Force is considered a pirate Force. Its prior reputation score is erased and the Force recalculates its reputation as a new pirate Force (see page 32). An advantage is that any debt the Force carries is essentially wiped out, though an enterprising GM may make a campaign of a determined lender's efforts to collect collateral from the wayward Force.

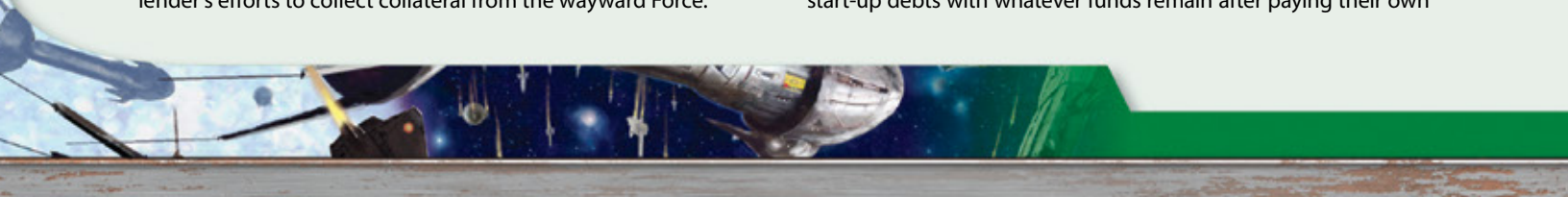
While turning into a pirate Force is simple, shedding the piracy designation is much more difficult. It is usually accomplished by restoring the Force's Reputation Rating through years of good behavior and successful missions without backsliding into more piratical actions. If the Reputation Rating exceeds 0, then the pirate Force may be treated as a mercenary Force under these rules. Due to the difficulty of restoring a reputation, a pirate Force more often has to be liquidated and reconstituted as an all-new Force (likely mercenary) with the most-wanted pirate personnel left out of the new Force. This is not likely to work if the entire pirate Force was often involved in highly objectionable crimes like slavery or mass murder of civilians. A GM, or the agreement of all participating players, is required to determine if such a recreation of the pirate Force works.

Mercenary Forces may transition into permanent government service. This most often happens at the extreme end of "company store" abuse, when the mercenary Force can no longer pay its large debts to a government employer. (This point is usually reached when a Force's potential monthly income from a mission is smaller than its debt payments, and also usually when the Force's military equipment is being used as collateral.) Sometimes mercenary Forces that have served with a specific nation for a long time (typically decades) will also accept a permanent relationship with that government, usually on much better terms than a Force trapped through "company store" practices. Unlike transitioning to piracy, becoming a government Force does not (necessarily) change the Force's Reputation, though it is usually accompanied by elimination of debt, which may modify the Force's Reputation Score. The exact details of the transition into permanent government service are best addressed by roleplaying, though for gamers not using *A Time of War*, the transition may be handled with the agreement of all players involved in the game.

A rare transition of Force types is a government Force becoming a mercenary Force. This is rare because governments seldom allow military Forces to walk away with valuable and dangerous military hardware. Governments usually regard an attempt to do so as desertion and theft, and thus regard the Force as a pirate rather than a mercenary Force. The best known cases of such transitions into mercenary service occurred at the end of the first Star League, when a quarter of the SLDF did not follow Kerensky on the Exodus. With the collapse of the Terran Hegemony, those Forces that did not join one of the Houses became mercenary Forces, some of which remain in operation centuries later. As with mercenary Forces turning into government Forces, there are no hard rules for this sort of transition. A GM, or the agreement of all participating players, is required to mediate the details, including the impact on reputation. A government-turned-mercenary Force may face legitimate charges of theft and breach of contract, lowering its Reputation significantly.

DEBT DURING A CAMPAIGN

Sooner or later, it's likely to happen. Through severe damage, overextended loans or other disasters, financial and otherwise, a military Force may find itself operating constantly beyond its means. Indeed, many new mercenary Forces are often built only by the grace of credit, with founder/commanders forced to pay off the command's start-up debts with whatever funds remain after paying their own



troops. To whom this money is owed often varies wildly. Some commands owe these massive sums to banks, while others may owe them to the noble family that was gracious enough to invest such a hefty sum in the Force's creation. Because debt can occur for many different reasons, how and to whom the debt is owed are questions best handled by a GM.

Debt is largely handled similarly for each type of Force, be it government, mercenary, or pirate. However, there are some nuances in taking on loans and payback between the different Force types.

Loans

Given the nature of their work, most mercenary commands find obtaining loans from financial institutions difficult at best, and often come away with enormous interest rates, strict repayment deadlines or even a forced surrendering of expensive assets. Mercenaries are often transient and easily classified as high-risk, and so many banks require collateral to assure the loan will be repaid eventually. This collateral may include any number of the command's most expensive assets, from BattleMechs to DropShips or even JumpShips.

Pirates are in an even worse situation, as the only lenders available to pirates are usually loan sharks or their meaner cousins (such as Bandit Kings). Such people are typically willing to resort to violence (or tipping off a nearby House's pirate-hunters) to collect on their debts, and so terms for loans to pirate Forces are typically merciless.

Government Forces are usually in a better position than mercenaries or pirates with respect to taking on debt. Government Forces are backed by large, usually stable governments; rarely need to worry about seeing salaries paid even when deep in debt; unlike mercenaries, they have no investors demanding profits from their military operations; and unlike pirates, they usually can depend on sufficient supplies to keep their vital equipment running (such as getting enough food so their personnel don't starve). All together, this usually means government Forces can acquire loans at generous rates, without collateral. Technically, the loans may not even be on the Force's accounts but rather taken by the government, but for convenience the loan is tracked on the government Force's balance sheet.

There are four steps to taking a loan: determining its value, collateral, and annual interest rate, and establishing a payment plan.

Generally, without a GM's agreement, a loan's value cannot be larger than the total value of a Force's equipment (unless personnel in the Force can offer collateral worth more than the entire Force). This original value of the loan becomes the initial principal.

Collateral is a guarantee for the loan—that is, monies or items that will be taken by the creditor if the Force cannot repay the loan. This is typically equipment from the Force, though characters in the Force may be able to offer other collateral, such as personal estates, businesses, or even private cash holdings. Collateral is determined as a percentage of the loan from the Loan Table (see p. 50).

A loan's annual interest rate is a percentage of the principal. Interest is determined by modifying the Base Interest Rate given

in the Loan Table according to the Interest with Reduced Collateral or Interest with Increased Collateral columns, as appropriate. As a simplification, final interest is calculated at the beginning of a year, including the first year in which a loan is taken out.

Establishing a payment plan consists of setting a payback period (the period by which the loan must be fully paid off or collateral is collected), a payment interval (how often the Force makes payments on the loan), and a payment value. The Payback Period column of the Loan Table sets the maximum period to repay debt available to each Force type, and players may select any period from one day to the maximum payback period. Generally, mercenary and pirate Forces have only short lives (mostly under 2 years) and thus lenders set short payback periods. The payment intervals may be biweekly, monthly, or quarterly at the player's preference, though the interval must always be shorter than the payback period. Lenders usually prefer to start getting payments well before the end of the loan to build confidence in their investment.

The payment value of a loan is simple for loans of one year's length or less: it is the principal of the loan plus one year's interest (even if the loan is less than a year), divided by the number of payment intervals within the payback period. For loans over a year in length, the total value must be calculated in advance, and the interest compounds annually. For example, a 2.5-year loan of 1,000 CB with 10 percent interest would calculate its total value as: $1,000 + 1,000 \times 0.1$ (first year's interest) $+ 1,100 \times 0.1$ (second year's interest) $+ 1,210 \times 0.1$ (third year's interest, calculated for a full year) $= 1,331$ CB. Then, as for shorter loans, the payment value is calculated by dividing the total loan value by the number of payment intervals in the payback period.

Players will probably note this interest and payback system is both simpler and harsher than what they encounter in real life. This is to keep the calculations simple and reflect the fact that most lenders view military Forces as risky investments. Players are welcome to set up more realistic payment schemes if they can convince their GM or other players in the group.

Frederic's mercenary Force is between employments and is looking at several months of downtime while the Force relocates to a planet with a Hiring Hall and finds a sufficiently lucrative contract. His peacetime cost is 9,310,080 CB per month. Deciding to be better safe than sorry, Frederic and his fellow players take out a loan for a year of operating costs: 111,720,960 CB, rounded up to 112,500,000 CB. If that's more than they need (hopefully work will come soon), they can return the excess to accelerate loan payoff.

With a Reputation Modifier of 8 after several campaigns, Frederic's Force must come up with collateral at least equal to 40 percent of the value of the principal. After looking through the TO&E and player characters' personal assets, Frederic decides to put up the Force's Seeker-class DropShip as collateral. With a value of 225,829,968 CB, this is 202 percent of the value of the loan and 162 percent more than the minimum collateral. The extra collateral allows the base interest rate of 15 percent to be lowered by 16 percent (162 / 10,

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

LOAN TABLE

Force Type	Base Annual Interest	Base Collateral	Interest with Reduced Collateral	Interest with Increased Collateral	Minimum Interest	Maximum Payback Period
Government	5%	0%	N/A	-1% per +10%	0%	10 years
Mercenary (Reputation 14+)	7%	15%	+1% per -1%	-1% per +10%	4%	5 years
Mercenary (Reputation 10-13)	10%	25%	+1% per -1%	-1% per +10%	5%	3 years
Mercenary (Reputation 5-9)	15%	40%	+1% per -1%	-1% per +10%	5%	2 years
Mercenary (Reputation 1-4)	20%	60%	+2% per -1%	-1% per +15%	10%	1 year
Mercenary (Reputation 0 or less)	35%	80%	+2% per -1%	-1% per +15%	15%	6 months
Pirate	50%	100%	+2% per -1%	-1% per +20%	25%	6 months

rounding down), though at Reputation 8 the lowest annual interest rate Frederic's Force can find is 5 percent.

Having the DropShip be repossessed would be a painful loss, but a mercenary Force with a JumpShip and BattleMechs is still in a good negotiating position with employers, unlike a Force that put its JumpShip or, worse, BattleMechs up as collateral.

With a reputation modifier of 8, Frederic could find a loan with a payback period of up to two years (or as little as one day). Two years gives room for disaster, so he selects that, and a payment interval of a quarter (three months) based on the hope of having secured a sizable contract within three months that will allow him to return most of the loan unspent. With a two-year payment plan, Frederic has to deal with two years' annually compounded interest: 5 percent of 112,500,000 CB on the first year (5,625,000 CB) plus 5 percent of 118,125,000 CB on the second year (5,906,250 CB), for a total payment of 112,500,000 + 5,625,000 + 5,906,250 = 124,031,250 CB. A two-year payment plan and a quarterly payment interval give 8 equal payments on the loan of 15,503,906.25 CB.

Failure to produce the required C-bills on time may result in confiscation of the assets put up as collateral, or legal action (treated as a contract breach, with the lender substituting as the employer, and with the same penalty to the Force's Reputation Score as any other contract breach). Military Forces that rack up truly egregious debts in this fashion may even be hounded by bounty hunters or mercenary groups hired by their creditors, with orders to take the overdue balance from the truant debtors by Force of arms—including the costs of hunting them down.

"Company Store"

Mercenary commands in debt may suddenly find their current employer eager to lend a hand, supplying badly-needed equipment and even support personnel at a substantial discount, possibly even below list prices. The terms of these equipment loans often include a stipulation that extends a mercenary command's retainer or forces it to accept subsequent contracts that may feature less-favorable terms than it would otherwise draw were finances not so low, requiring the mercenary Force to work off its debt. This

particular form of employer-to-mercenary debt is widely known as the "company store" syndrome. While often regarded as despicable, is nonetheless an arrangement that remains common, as it allows floundering mercenaries to tread water until their "next big break."

"Company store" is not applicable to government or pirate Forces.

Repaying Debts by Shorting Salaries

The following rule for reducing salaries to pay debts primarily applies to mercenaries. Pirate Forces do not expect regular salaries, being more concerned with keeping their vital equipment operating and staying fed, and thus are not subject to these rules. Government Forces, meanwhile, rarely have trouble providing regular salaries because of their guaranteed employment, but if the Forces are shortchanged salaries, these rules apply.

Debts are commonly paid off from any profits for missions after all combatants, support staff, travel expenses and any other operating expenses are covered. Some more desperate Forces, however, may sell off equipment to pay back a debt, and in more extreme cases may even cut staff to reduce expenses. Other Forces may try to pay off debt by skimping on expenses, including personnel salaries.

Though certainly risky, in desperate times shortchanging the Force's personnel by a small percentage may be one way to clear just enough C-bills to make a payment. Skimping in this fashion, however, can cause a breakdown in morale if sustained long enough (typically more than one month), resulting in penalties during combat or repair as the troops and staff grow less motivated. If sustained too long, mutinies may even occur, with a band of lesser officers and staff deliberately undermining or usurping the commander's authority (and that of any loyal subordinates). When or whether these events occur should be up to a GM or a neutral third party player. If neither is available, the controlling player may determine the amount of personnel lost to mutinies and defections in the following manner.

For each month that the command's personnel go without pay, the commander must make a Leadership Roll against a Target Number of 6 (3 for government Forces), with a cumulative +1 penalty per month of non-payment. If the roll result falls below the modified target number, a number of personnel are lost to mutiny or resignation equal to the Margin of Failure times the number of lances or platoons employed by the Force. The nature and positions of these lost personnel should be

determined randomly across all unit types and technical support personnel. The number of people lost to this result varies by unit type selected and accounts for one combat unit (infantry squad, vehicle crew, MechWarrior, technician, or administrator). If the initial roll's Margin of Failure exceeds 6 (9 for government Forces), the departing units mutiny as well, with a random number acting against the mercenary command as their last, bitter stab at the commander they feel has wronged them. Mercenary commands that are in debt also suffer from a poorer overall business position than financially solvent Forces, and have trouble recruiting, purchasing new equipment and landing good contracts. Negotiations with potential employers also suffer, as a poverty-stricken Force simply cannot afford to turn down too many offers; this is reflected in the Force's Reputation Score.

PROCURING EQUIPMENT AND PERSONNEL DURING A CAMPAIGN

Equipment procurement during a campaign involves two parts. The first is rolling to see if the equipment can be found and procured (see Stage 3: Procure Equipment and Hire Personnel, *Force Creation*, p. 12). As in Force creation, a Force looking to acquire new personnel and equipment must roll to see if the equipment is available and pay for it. Unlike Stage 3 of Force construction, Large Spacecraft must be purchased with cash in addition to the Availability Roll. The price of Large Spacecraft may be found with *TechManual* and *Strategic Operations* construction rules. Each new unit purchased requires a separate Availability Roll.

The second step is determining how long the procured equipment takes to arrive. Once ordered, equipment and personnel take $[7 - (1D6 + \text{Availability})] \div 4$ months to arrive, as determined by the Availability values in Stage 3 of *Force Creation*. No matter the dice roll result, it takes at least a month to acquire the equipment and personnel.

Ammunition, spare parts, and fuel are handled differently because they are not addressed in Stage 3.

Ammunition has a procurement Availability target number based on the Tech Rating in *TechManual* and *Tactical Operations* equipment lists. If the ammunition is Tech Rating A, the Availability target is 2. Tech Rating B ammunition has an Availability target of 3; Tech Rating C ammunition has an Availability target of 4; Tech Rating D ammunition has an Availability target of 6; Tech Rating E ammunition has an Availability target of 8; and Tech Rating F ammunition has an Availability target of 10. The target for the roll is lowered by 2 if the ammunition is tournament-legal equipment, by 1 if the ammunition is advanced equipment. (Minimum Availability Value is 2 and applies to delivery time.) Each 5 tons (or fraction thereof) of ammunition is procured separately. Arrival time is the same as for other equipment.

Fuel is usually widely available if the Force is not on a combat mission. Any fuel type may be procured with a lead time of 3 days at list price with no Availability rolls if the Force is not on a combat mission. If the Force is on a combat mission, the price is the same and no Availability rolls need be made, but

there is a delivery delay. The delivery time is the same for other equipment, treating fuel as having an Availability of 2.

Spare parts are procured as if the Force were purchasing the original vehicle, but at a -2 Availability modifier. Spare parts must be purchased individually for each unit. Like ammunition, Availability rolls are made for each 5-ton lot (or fraction thereof) for a specific unit.

KEEPING FIT

A Force must perform a certain amount of training time and meet its maintenance labor requirements or its capabilities will begin to suffer.

Training

The base peacetime operating cost of a Force includes a certain amount of ammunition, fuel, and spare parts representing normal training consumption rates used to maintain the Force's fighting skills. The expenditure does not necessarily represent ammunition expenditure—a Force stuck on a DropShip for months continues to use the training supplies—and may, instead, represent other training activities. If this consumption rate is not met for an extended period, the Force's Piloting and Gunnery Skill Ratings (or equivalent) may suffer. The risk of skill loss accrues under two conditions:

First, if the Force goes three consecutive months without paying for 100 percent of its monthly peacetime ammunition costs or engaging in combat, then the Force must make a roll as described below to see if Skill Rating loss occurs. This applies for each three consecutive months the Force goes without meeting its training requirements, though each additional three months in a row adds a +1 modifier to the roll.



INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Second, if the Force skips training for six months or more per year (not consecutive), then a Skill Rating loss roll is made. If the first condition also applies, then this adds a +1 modifier to the roll.

The Skill Rating loss roll is 2D6 against a target of 12 and is made for each combatant (counting infantry and battle armor platoons as one combatant) in the Force whenever one of the above conditions is met. If the roll equals or exceeds the target number, then apply a +1 modifier to one of the unit's Skill Ratings. If the penalized unit has more than one skill (i.e., is not infantry), then the skill that is penalized is determined randomly with a 1D6: on a roll of 1 to 3 the Gunnery Skill Rating increases by one, while on a roll of 4 to 6 the Piloting/Driving Skill Rating increases by one.

The Skill Rating loss roll does not apply to a Force's technicians or other non-combatants. Players with some funds may opt to designate which units in a Force get their training ammunition, thus exempting them from the Skill Rating loss rolls if they want the complication of tracking ammunition payments on a unit-by-unit basis.

Improving Skill Ratings after such a loss is addressed through combat experience (see p. 40, TW.)

After several years of successful campaigning, Arnold's government Force hits a rough patch. Cutbacks in defense spending means his combined arms company is short funded. Arnold and the other players are able to cover salaries and spare parts, meaning the Force remains operational and in good physical shape, but find they have to cut back on training funds (to zero) for three months. At the end of three unbroken months of idleness, the Force needs to make a Skill Rating loss roll. Since it has just been three months, each unit in the Force only needs to roll under 12 on 2D6 (no modifier yet) to avoid skill penalties.

Arnold goes through the TO&E of his Force, glad that the chances of rolling a 12 are so low. He is able to skip rolling for the technicians, administrators, and non-combatant Invader JumpShip. The Seeker DropShip and Corsair fighters breeze through with rolls of 3, 7, and 5, but Arnold feels like this is game of Russian Roulette and skips ahead to the key units, the BattleMechs, thinking (with an erroneous understanding of statistics) that he should roll on them before the dice "go bad." The two Thunderbolts and two Grasshoppers get a 12, a 7, an 8, and a 4. Oh, well.

The first TDR-5S Thunderbolt on the TO&E—the NPC commander's ride—took a Skill Rating loss. Arnold rolls a 1D6 to see which skill is affected and turns up a 5: Gunnery. The commander's Skill Ratings (which were at 3 Gunnery and 4 Piloting after seven successful combat missions) have just decreased to 4 Gunnery and 4 Piloting.

Predictably, the Dice Gods laugh at Arnold as he rolls below 12 for the remainder of the Force, his Bulldogs, Packrats, and four infantry squads.

If the company's streak of short-funding continues another three months, Arnold will have to roll again. This time, though, he will be rolling with a +2 modifier: a +1 for the second quarter in a row without training funds, and a +1 for having at least six months out of the year without training.

Maintenance

The base peacetime operating cost of a Force includes a certain amount of spare parts representing normal maintenance that keeps the Force's units in fighting shape. A Force should also include a certain minimum number of technicians to perform maintenance. Without either or both, a Force's hardware will begin to degrade. This ongoing maintenance is separate from repairing battlefield damage, which has immediate and obvious problems. Rather, failure to perform maintenance tends to result in a gradual degradation of performance interrupted by the occasional spectacular failure.

A Force that is short of spare parts will face breakdown rolls (as described below) after the first month without spare parts. This is handled on a unit-by-unit basis on the Force's TO&E, which both gives the controlling player an opportunity to concentrate spare parts on key units and yet brings to the fore the differences between unit types. As some examples, a BattleMech cannot be maintained with aerospace fighter parts and combat vehicle spare parts do nothing for JumpShips. (And if a unit has the "Non-Standard Parts" quirk (see p. 198, SO), it does not even get to share spare parts with units of its own type, only the same model.) The breakdown roll for inadequate spare parts increases by +1 per additional month without spare parts.

A shortage of technicians (including any combatants assigned to pull double duty) is also cause for breakdown rolls in units other than Large Spacecraft. As with spare parts, tech teams are assigned to each unit (see *Technical Personnel*, p. 20). Units that do not have an assigned tech team face increasing chances of breaking down as they only get desultory support from other tech teams, if any. Again, players have the opportunity to protect core gear if they have some tech support, but an insufficient quantity of tech support. Unlike spare parts, technicians are not specific to a unit type (unless players have fleshed out the technicians' skills with *A Time of War* Technician skill specializations). After the first month with inadequate maintenance, begin making breakdown rolls. Each additional month with inadequate support adds a +1 modifier to a unit's breakdown rolls.

Large spacecraft with insufficient crew and officers (bay personnel do not count) run the risk of breakdown rolls in approximately the same manner as other units lacking tech teams. Add together the ship's current number of crew and officers and divide by the sum of required number of crew and officers, and multiply by 100 to get a percentage of the current crew strength (rounding up to the nearest full percent). If the ship has 90 percent or more of its required crew size, it does not make breakdown rolls. If it has 70 to 89 percent of the required crew size, it must make a breakdown roll once a month. If it has 60 to 69 percent of the required crew size, it must make a breakdown roll once every two weeks. If it has less than 50 percent of the required crew size, it must make a breakdown roll every week (and a GM may rule that the ship cannot operate at all). For each additional interval (month, two weeks, or week) that the ship operates at reduced crewing levels, add a +1 modifier to the breakdown roll.

The modifiers and breakdown rolls for a shortage of spare parts and a shortage of technical support are not cumulative, but rather rolled separately if they both apply in a month. That is, a 'Mech that has gone for a month with both a shortage of spare parts and

inadequate technical support will make two breakdown rolls for that month, one for each shortcoming.

The breakdown roll is a 2D6 roll, modified as noted above. If the final result is 10 or higher, the unit suffers a failure.

For units susceptible to critical hits, this failure is handled as a modified critical hit roll appropriate to the unit's type. First, roll 1D6-3 to determine how many critical hits strike the unit due to a breakdown. Second, for each critical hit, make a normal hit location roll against the rear arc of the unit to determine which location is affected by the critical hit, and then follow critical hit resolution as normal for the unit. (see p. 123, p. 193, p. 206, and p. 238 *TW*, and p. 172, *TO*). For infantry, battle armor, and ProtoMechs, roll 1D6-3: this is the number of infantry, battle armor, or ProtoMechs in the squad/point that are not combat-ready due to equipment failure.

In campaigns with GMs, GMs are encouraged to note any failed rolls and consider saving the effects for the beginning of combat. Machines pushed to full military limits are more likely to fail than units idling in a garage.

Administration

A Force's administration is critical for a number of reasons. As noted in *Force Creation*, administrators are not just file clerks who shuffle human resources forms (though some will do that). They also include the Force's intelligence personnel, communications personnel, negotiators, quartermasters, cooks, and so on. Having a fewer administrators than required by the Force can thus cause all sorts of interesting breakdowns.

If a Force has fewer than the required number of administrators (including combatants pulling double-duty), the Force faces a failed administration roll. The severity of the roll is determined by the degree to which the Force's administration is understaffed. Divide the number of administrators in the Force by the number of administrators

the Force requires, and multiply that by 100 to make it a percentage (rounding up to the nearest whole percentage). If the Force has 90 percent or more of the required administrators, then there is no failed administration roll. If the Force has 70 to 89 percent of the required administrators for a full six months, then it needs to make a failed administration roll at the end of the six-month period. If the Force has 50 to 69 percent of the required administrators for a full three months, then it needs to make a failed administration roll at the end of the quarter. If the Force has less than 50 percent of the required administrators for a full month, then it needs to make a failed administration roll at the end of the month. The failed administration roll applies every interval in which the Force's administration is short-staffed.

The failed administration roll is made by rolling 2D6 against the Failed Administration Table (see below) and taking the corresponding result. Some results on the Failed Administration Table apply at "the next battle." These results accumulate until the next battle actually occurs. If present, a GM may apply those results over several sequential battles rather than one really miserable battle.

CHAOS CAMPAIGN CONVERSIONS

One Chaos Campaign SP converts to 10,000 C-bills.

HOUSING AND BASE BUILDING

For basic housing and shelter, most Forces tend to rely on the provisions of their employers or—if fortunate—the facilities in their own DropShips. Neither option, however, is particularly convenient for larger Forces or those operating between missions. Thus, many Forces have been known to invest in bases—whether temporary or permanent—to house their equipment, personnel, and dependents.

FAILED ADMINISTRATION TABLE

Failed Roll	Result
2-6	No significant event. Combatants make negative jokes about REMF competency, hurting administrators' feelings.
7-8	Poor legal or human resource paperwork handling results in a financial loss as the Force scrambles to cover missed paydays, harassment lawsuits, workplace injuries, etc. The Force loses 1D6 x 10 percent of a month of peacetime operating costs.
9	Lesson planner scrambles training schedule for a quarter before anyone notices how easy training has gotten. All units in the Force make a Skill Rating loss roll as if they had missed a quarter of training, as discussed under <i>Training</i> , p. 51.
10	Understaffed intelligence group means the Force is ill-prepared for the next battle. The Force suffers a -2 Initiative modifier throughout the next battle.
11	Quartermaster gambles spare parts budget on sure-thing investment in recovered Star League myomer lubricant (made with snake oil). All units in the Force must make a breakdown roll as if they had gone without spare parts for a month, per <i>Maintenance</i> , above.
12	Legal officer misreads contract / orders and local laws, resulting in Force being charged with a Mission Failure. Refer to <i>Mission Failure</i> (see p. 47) for reputation and budget penalties. Pirate Forces treat this result as a 10.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Bases vary with their roles, sizes, and other considerations. Outfits working in the field for short durations tend to settle for a simple series of large tents and/or enviro-bubbles with a comm center and a perimeter of hastily strung barbed wire. Forces assigned a more permanent multi-year garrison or those that are simply large and brimming with dependents, on the other hand, need a base that roughly equates to a small city of barracks and administrative buildings, perhaps even including a miniature spaceport, weapon emplacements, and independent power stations. With the above in mind, the process for building bases for a Force (and its dependents) can take as long and cost as much as the Force's needs dictate. The following rules provide a rough guide to the process.

Step 1: Obtain Land

For some Forces, the land area needed for a base may already be within reach if the owner, commander, or other key officer has significant property (see p. 123, *AToW*). For others, a tract of land may be the first stage of the Force's beachhead on a planet they have been sent to conquer. Still others may be given a designated area as part of their garrison contract, an out-of-the-way place provided to park the outfit's equipment and ships in lieu of employer-owned facilities. If none of the above applies and the Force is in friendly or neutral territory, the mercenaries may instead opt to lease or buy a parcel of land for the purpose of base building.

Doing so can be as difficult or as easy as the GM desires. The cost of land can vary based on its area and value. In RPG campaigns, this can be resolved by whatever means the GM wishes. Indeed, acquiring the necessary land may be an adventure in itself. Alternatively, the process may be abstracted into two dice rolls, modified as the GM sees fit. For the first—the roll to locate suitable land—the Force spends a week of searching, at the end of which the Force's controlling player rolls 2D6 against a Base Target Number of 8 (modified as necessary for negotiation skills or employer/landowner conditions, at the GM's discretion). If the result is equal to or higher than the modified target number, the Force has found a suitable tract of land within that week. Failed rolls simply mean that an extra week of searching and negotiations is spent for every point by which the roll misses its modified target. The cost of the land is then determined by rolling 3D6 and subtracting the previous roll's Margin of Success (or adding the Margin of Failure). The result of this second roll, multiplied by 10,000 for every square half-kilometer of land desired (or portion thereof), represents the monthly cost to lease the land, in C-bills. Quadruple this cost result if the Force is buying the land instead of leasing. A square half-kilometer roughly equates to the area of a standard CBT mapsheet (about 250 hexes).

Step 2: Base Construction

Under these rules, base construction is not a hit-or-miss affair but a simple matter of investing the C-bills and time to construct the facilities the Force needs. For full advanced building construction rules, see p. 114-143, *Tactical Operations*.

The Construction Table below provides the basic formulae for each structure that may be constructed on a base, which are then multiplied by any applicable options chosen from the Structural Modifiers Table. Finally, the buildings can be outfitted with any desired equipment and power sources using the Additional Equipment and Power Generators tables, respectively.

For simplicity's sake, these rules use the standard *BattleTech* map scale of 30-meter hexes and 6-meter Levels, as well as Construction Factors (CF) that denote the relative strength and damage capacity of structures. Remember to note the purpose of each structure when constructing a base, as each has its own features and special rules.

The time involved in construction represents the labor that may be performed by the Force's support personnel or (if on a friendly/neutral world) by local hires. Costs listed under *Building and Mobile Structure Costs* (see p. 418, *TO*) are assumed to include a seven-person construction crew (if on a friendly/neutral world). Construction times can be reduced by supplying extra labor per hex of building, either performed by the Force's personnel—meaning they are not available for their normal duties—or (if on a friendly/neutral world) by local hires. Each additional seven-person team comprised of the Force's personnel multiplies the construction time by 0.95, while each additionally hired professional team multiplies the construction time by 0.80, rounded up to the nearest whole day. Regardless of whether they are hired or not, the maximum number of work teams that may be added to construct a given hex of buildings is five. For example, a base constructed using the integral construction team requires 36 days to complete. Hiring one additional construction team reduces the construction time to 29 days. Adding another team reduces the construction time to 23 days. Adding a further two teams comprised of the Force's staff reduces the construction time to 21 days.

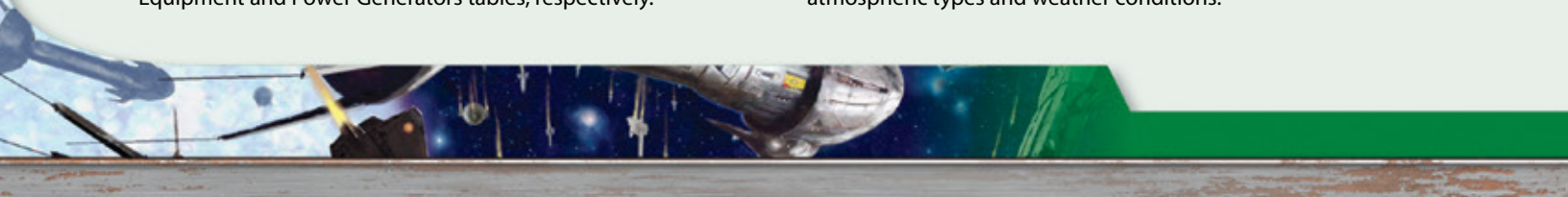
The first additional construction crew hired increases the cost of the project by 5 percent, and each additional crew adds a further 1 percent to this value, reflecting mounting inefficiencies in adding additional crews. For example, the first crew would add 5 percent to a project's cost. A second crew would add 6 percent, a third crew would add 7 percent and the fourth crew would add 8 percent.

The use of appropriate engineering equipment installed on vehicles or IndustrialMechs (such as backhoes, bulldozers, drills, dumpers, hoists, pile drivers, saws, rock cutters, and wrecking balls) can reduce the manpower needed to clear land, build structures, and such. Even standard BattleMechs that have at least one hand actuator can carry loads and support construction processes. Only a single vehicle, BattleMech or IndustrialMech may work on a particular hex of a building project. When in doubt, allow a GM or other neutral party to determine whether a support vehicle or IndustrialMech qualifies as an appropriate engineering unit. The benefits vary: a BattleMech with two hand actuators or an engineering vehicle multiplies construction times for its hex by 0.90; an IndustrialMech multiplies construction times by 0.85, and a BattleMech with one hand actuator multiplies construction times by 0.95.

For example, a base construction project building a 1-hex hardened hangar in a rush uses five hired construction crews and an IndustrialMech. The construction time is 4 days multiplied by 0.8 four times and 0.85 for the IndustrialMech, for a total of 1.39 days, which rounds up to 2 days.

Units operating on a hostile world, and not wanting the expense of carrying trained building teams with them into combat, may construct the base using only their support personnel but suffer modifiers (x1.25) to the time required to construct the base.

Finally, enterprising GMs should feel free to add other modifiers to the construction times based on local conditions such as terrain, atmospheric types and weather conditions.





INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

BASE CONSTRUCTION TABLES

CONSTRUCTION MODIFIERS

Unit	Multiplier
BattleMech (2 hand actuators)*	x0.90
BattleMech (1 hand actuator)*	x0.95
Engineering Vehicle*	x0.90
IndustrialMech*	x0.85
Extra Hired Construction Team†	x0.80
Extra Construction Team††	x0.95
No Trained Construction Team	x1.25

*Maximum of one BattleMech, engineering vehicle or IndustrialMech per hex.

†Maximum of 5 teams per hex

††Combat Engineers count as Hired Crews for time multipliers

ADDITIONAL EQUIPMENT

Item	Day per Item
<i>Weaponry</i>	
Light / Medium	20 weapons / day
Heavy	20 tons of weapons / day
Turret	2 tons of turret / day
Capital	20 tons of weapons / day
Ammo	25 tons ammo / day
Heat Sinks	50 heat sinks / day
Armor	1 / hex
Capital Armor	10 / hex
Large Door	7 doors / day
Industrial Elevator*	5 Levels / day
Other Equipment	10 tons / day

*Per hex

POWER GENERATOR INSTALLATION

Generator Type	Days per Level of building
Steam	1 day per ton of generator
Internal Combustion	1 day per ton of generator
Fuel Cell	1 day per ton of generator
Solar	1 day per ton of generator
Fission	3 day per ton of generator
Fusion	2 day per ton of generator
External Source	0.5 days per ton of generator

STRUCTURAL MODIFIERS

Modifier	Multiplier
Environmental Sealing	x2
Heavy Metal superstructure	x1.25
High/Low Ceilings	x1.1
Open-Space Construction (e.g., Hangar)	x0.8
Subsurface (underwater or underground)	x5

CONSTRUCTION TIME TABLE

Structure Type	Days Per Hex and Per Level	Structure Type	Days Per Hex and Per Level
Road/Pavement/Rail line	5 hexes / day	<i>Bridge</i>	
Tent*	10 hexes / day	Light	4
<i>Hangar†</i>		Medium	11
Light	1	Heavy	18
Medium	2	Hardened	25
Heavy	3	Rail	32
Hardened	4	<i>Gun Emplacement</i>	
<i>Standard Building</i>		Light	7
Light	2	Medium	11
Medium	5	Heavy	18
Heavy	9	Hardened	32
Fence‡	25 hexsides / day	Fortress	
<i>Wall‡</i>		Medium	11
Light	5 hexsides / day	Heavy	18
Medium	3 hexsides / day	Hardened	32
Heavy	1.5 hexsides / day	<i>Castle Brian</i>	
Hardened	1 hexside / day	Heavy	179
		Hardened	321

* Tents are purchased without a construction team, but suffer no penalties for being erected without one.

†Hangars constructed as Tunnels multiply the construction times by 3.

‡Wall and Fence Man Hours are per hexside, rather than per hex/Level.





The Fourth Davion Guards stand ready to assault the highly contested Castle Brian, Glæsisvellir, on the planet Tyrning during the First Succession War.

FORMATION BUILDING

Though the rules in this section can be used in conjunction with those in *Force Creation* (see p. 8), they are primarily focused on building an effective force for a particular scenario. These rules expand on the guidelines for creating a scenario presented in *Total Warfare*—rather than rolling random units, players can identify each unit's Role and learn how to overlap them to create the most effective fighting force possible.

Formation: The term "formation" is used in various ways across the *BattleTech* rulebooks:

- **Force Composition/Force Structure/Formation Structure:** All of these terms are used interchangeably to refer to the military organizations employed by various factions: i.e. four units in an Inner Sphere lance, five units in a Clan Star, six units in a ComStar Level I, and so on.
- **Un-capitalized "formation":** This term is often used when describing a large grouping of units, such as the *Attacks Against Large Infantry Formations* rules (see p. 84, *TO*), or the *Fighter Squadrons* rules (see p. 27, *SO*).
- **Formation:** When capitalized, Formation has slightly different definitions—though all of a theme—based upon the rules set in question:

- **BattleForce:** An organization of units Within a Force.
- **Alpha Strike:** The organization of units within a player's Force; i.e. for an Inner Sphere Force, lances of 4 units, which combine into companies of 3 lances, and so on.
- **Strategic BattleForce/ABS (Inner Sphere at War):** The individual playing pieces of these games represent a Formation made up of one or more units, and are generally regimental size.
- **Formation Type:** As in the *Ground Formation Types* rules presented in the *Alpha Strike Companion* (see p.150, *ASC*), this term is used here to define a basic grouping of units defined by their capabilities and intended combat roles: i.e. a Battle Lance, an Assault Star, and so on.

FORMATION BUILDING BASICS

Units ('Mechs, vehicles, battle armor squads, and others) are organized into Formations (lances, Stars, and Level IIs) that together comprise the player's Force. Each unit has a Role which reflects that unit's battlefield specialization. The player organizes their units into Formations, each with a Formation Type reflecting its specialization. Roles are the easiest guide to placing units into Formation Types, but not the only way. The Formation Type

may bestow Special Pilot Abilities to some or all of the units. Furthermore, the overall Experience Rating of the Force (based on the average Skill Ratings or Piloting and Gunnery Skills of its units, as applicable) may entitle it to Special Command Abilities. Each step is presented below.

STEP 1: SELECT BATTLE VALUE TOTAL

Battle Values (BV) are the balancing system for *BattleTech*. The rules for Battle Value are described in *TechManual* (see *Battle Value*, p. 302, *TM*). Other methods of balancing Forces (C-bills, tonnage, number of units, or a combination of any of these with Battle Values) are acceptable by agreement of all players participating.

STEP 2: BUILD A FORMATION

The Formation Type will describe the general combat mission of the Formation and any Special Pilot Abilities it earns as a result of its Type (see *Formations*, p. 60). Formations must consist of at least three units to receive any Bonus Abilities. The units included in Formations must fulfill the requirements for that Formation Type to receive the Bonus Abilities listed.

STEP 3: SELECT SKILLS AND MODIFY UNIT'S BV

For each unit, either select the pilot's Piloting and Gunnery Skill Rating, use the standard ratings presented on the Average Skills Table (see p. 40, *TW*), or assign an Experience Rating and random skills using the Random Experience Rating Table and Random Skills Table (Expanded) (see p. 273, *TW*). If using BV for Force balance, adjust each unit's BV as described in *Constructing a Battle Force* (see p. 314, *TM*).

STEP 4: MORE FORMATIONS

Repeat Steps 2 and 3, building additional Formations, assigning units to them, selecting pilot skills, and adjusting their BVs for skill and other modifiers until you have reached the BV total (or choose not to add another unit).

STEP 5: SPECIAL PILOT ABILITIES

Up to one unit per company (12 units) may be individually assigned Special Pilot Abilities (see p. 70). The number of Special Pilot Abilities and the total SPA cost is limited by the Experience Rating of that unit.

In addition, Formations usually bestow Bonus Special Pilot Abilities that must be assigned during Force building (with the exception of a handful of Formation Bonus Abilities which specifically state that they are assigned during gameplay).

STEP 6: SPECIAL COMMAND ABILITIES

Special Command Abilities (see p. 83) apply to the overall Force based on its Experience Rating. They reflect the preferred tactics and specialization training of a Combat Command. The better trained a Force, the more Special Command Abilities the Force can select.

The *Combat Manual* series of sourcebooks are designed to add era and factional flavor to a ForceRoles for canon units, as well as their Battle Values, can be found on the online Master unit List (www.MasterunitList.info). If a particular *Combat Manual* is unavailable, or play involves an era or faction not yet covered by that series, Master unit List entries include each unit's availability to a faction in a particular era.

UNIT ROLE

A unit Role is the primary intended use of a unit on a battlefield. While in reality a unit may be able to fulfill many functions, in game terms its Role describes the mission for which it is most "cost effective." An *Atlas* can conduct a scouting mission, but its slow speed and cost to construct and field make it an impractical choice to fill that function. The units best suited for Roles may change over time, especially with advances of technology—a unit that was fast enough for a particular Role in the Succession Wars may not be fast enough for that same Role during the Clan Invasion. The unit Role is assigned based on the Role for which the unit was first intended, or the Role for which it was most used.

GROUND UNIT ROLES

Most ground unit Roles are based on three questions: how fast is the unit, how tough is it, and at what range does it prefer to fight?

Ambusher

Ambushers are typically slow, lightly armored, and prefer short-range engagements. Due to their lighter armor, such units often have to hide behind cover until their enemies are within range. Many infantry units have this role, and a handful of 'Mechs. Ambushers benefit from stealth, being able to take cover, the ability to be easily transported, or just being cheap enough to swarm the enemy. Ambushers are often very successful in urban areas. The SRM Carrier and the *UrbanMech* are examples of Ambushers.

Brawler

Brawlers are line units, commonly deployed among Battle Lances. They are fast enough to keep up with a "standard" line, have at least adequate armor, are usually able to do some damage at longer ranges, and can deliver increasing amounts of damage as they close in. Brawlers should not have to pull out of a line to enter combat, but are able to hold the line if it is charged. The *Warhammer* and Myrmidon Heavy Tank are examples of Brawlers.

Juggernaut

Juggernauts are slow, very tough units that prefer close combat and control their immediate area, but often face difficulty getting where they need to be. Juggernauts are useful for holding or taking territory, but fare poorly in running battles with no clear terrain to control. The *Atlas* and *Hunchback* are examples of Juggernauts.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Missile Boat

Missile Boats are similar to Snipers, but the majority of their long-range damage comes from weapons capable of indirect fire, long-range missiles, mortars or artillery. Missile Boats are often grouped together in order to optimize their ability to fire indirectly without singling out part of the Formation as either incapable of firing, or being the only unit in the Formation left to take all of the return fire. The *Archer* and LRM Carrier are examples of Missile Boats.

Scout

Scouts are fast, with light armor—or none at all—and very little weaponry. They often employ advanced electronics. Scouts are sometimes forced into combat by necessity, but are more commonly spotters or support for other units in the Force. The *Raven* and *Swift Wind Scout Car* are examples of Scouts.

Skirmisher

Skirmishers are fast, with adequate or even heavy armor. Their flexibility to rely on both speed and armor for defense can give Skirmishers the ability to take a great deal of incoming fire, but they usually prefer not to have to sit still to hold an objective or to deliver accurate fire. Skirmishers are often commanders of lighter Strikers, can provide a flanking threat when paired with slower Brawlers or Juggernauts, or are massed with other Skirmishers as a heavy cavalry formation. The *Wolverine* and *Dragon* are examples of Skirmishers.

Sniper

Snipers prefer to find a good “sniper’s nest,” sit still and fire at long range. Some Snipers rely on range, stealth or cover for defense, while others rely on armor. Few rely on speed, as excessive movement is detrimental to their ability to hit at long range, though some Snipers intended to provide fire support to faster units may have enough speed to keep up with them. The *Zeus* and *Schrek PPC Carrier* are examples of Snipers.

Striker

Strikers are fast, with light armor, and usually prefer short- or medium-range engagements. They rely on their speed (or numbers) to survive while threatening the rear or flanks of the enemy. The *Jenner* and *Harasser Missile Platform* are examples of Strikers.

AEROSPACE UNIT ROLES

Even more so than with ground units, speed is often the defining factor in an aerospace unit’s Role. The preferred range of slower units differentiates them into separate Roles.

Attack Fighter

Attack Fighters are usually medium or heavy fighters that mount heavy firepower at the expense of maneuverability and/or armor. These units pack heavier weapons to achieve this punch, which tends to leave them somewhat slower and lacking in long-range power compared to other fighters. These features make them particularly effective in air-to-ground attack missions.

Dogfighter

Dogfighters are medium or heavy fighters equipped for extended toe-to-toe engagements with fighters of comparable performance and payload. Meant for the long haul, many dogfighters typically feature energy-heavy armament and good heat-dissipation.

Fast Dogfighter

Fast Dogfighters are typically light or medium fighters. These units are intended to act as “second shell interceptors,” able to engage anything that gets past the normal Interceptors, or to assist and support dedicated Interceptors once battle is joined.

Fire Support

Fire Support craft are usually medium or heavy fighters equipped with long-range weapons. These units are intended to keep up with dogfighters en route to the battle, and contribute meaningful amounts of firepower at stand-off distances. Because many fire support units are also heavy fighters with bomb-capable hard points, these units are often conscripted for heavy ground support missions as well.

Interceptor

Interceptors are light, fast fighters intended to engage the enemy at the furthest possible distance from friendly assets, cause early attrition, and ideally hold the enemy at that maximum separation for as long as possible.

Transport

Transports are airborne and aerospace units that carry units, troops, or materiel to or from the battlefield. Unlike the other aerospace unit Roles, Transports are generally not fighters, but rather Small Craft, DropShips, and other large airborne units such as Airship and Fixed-Wing support vehicles.

LANCES, STARS AND LEVEL IIS

For the purposes of Force organization, players will want to be familiar with the smallest combat Formations used by the various factions of the *BattleTech* setting. Depending on their general affiliation—Inner Sphere and Periphery, Clan, or ComStar/Word of Blake—these are the lance, the Star, or the Level II, respectively. From the perspective of the factions that employ them, these Formations represent the building blocks of larger Forces.

The various lance, Star, and Level II Formation Types are explained below. A summary of these groups and the larger Formations they build appears in the *Standard Force Organization Schemes Table* on p. 59.

Non-Infantry Ground units: Among the major realms of the Inner Sphere and the Periphery, the lance is smallest ground Formation in use. A lance consists of four BattleMechs or combat vehicles, commanded by a lieutenant. The Clan equivalent of this Formation, the Star, is composed of five ‘Mechs or 10 combat vehicles, led by a Star Commander. Finally, ComStar and the Word of Blake use a six-unit group known as a Level II. These “ComStar lances” are generally commanded by an Adept.





INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS



STANDARD FORCE ORGANIZATION SCHEMES TABLE

GENERAL INNER SPHERE AND PERIPHERY FORCE GROUPS

Organization	Definition	Command Rank
<i>Infantry Formations</i>		
Squad (Battle Armor)	4 troopers	Sergeant*
Squad (Conventional)	2-8 troopers	Corporal
Platoon (Conventional)	3-4 squads	Sergeant*
<i>Aerospace/Conventional Fighter Formations</i>		
Flight	2 fighters	Lieutenant
Squadron	3 flights	Captain
Wing	3-4 squadrons	Major
<i>Ground Formations</i>		
Lance	4 ground units	Lieutenant
Company	3-4 lances	Captain
Battalion	3-4 companies	Major
Regiment	3-4 battalions	Colonel
Brigade	3-6 regiments	General

COMSTAR AND WORD OF BLAKE FORCE GROUPS

Organization	Definition	Command Rank
<i>Infantry Formations</i>		
Level I (Battle Armor)	6 troopers	Acolyte*
Level I (Conventional)	30-36 troopers	Acolyte*
<i>All Other Formations</i>		
Level I	1 unit	Acolyte
Level II (Demi-Company)	6 Level Is	Adept
Level III (Battalion)	6 Level IIs	Adept (Demi-Precentor)
Level IV (Division)	6 Level IIIs	Precentor
Level V (Army)	6 Level IVs	Precentor

GENERAL CLAN FORCE GROUPS

Organization	Definition	Command Rank
<i>Infantry and ProtoMech Formations</i>		
Point (Battle Armor)	5 troopers	Point Commander*
Point (Conventional)	20-25 troopers	Point Commander
Point (ProtoMech)	5 ProtoMechs	Point Commander*
<i>'Mech Formations</i>		
Star	5 'Mechs	Star Commander
Nova	5 'Mechs, 5 infantry Points	Star Commander or Nova Commander
Binary	2 Stars	Star Captain or Nova Commander
Supernova Binary	2 Novas	Star Captain or Nova Captain
Trinary	3 Stars	Star Captain
Supernova Trinary	3 Novas	Star Captain or Nova Captain
Cluster	3-5 Binaries or Trinaries	Star Colonel
Galaxy	3-5 Clusters	Galaxy Commander
<i>Vehicle and Fighter Formations</i>		
Point	2 units	Point Commander
Star	5 Points	Star Commander
Binary	2 Stars	Star Captain
Trinary	3 Stars	Star Captain
Cluster	3-5 Binaries or Trinaries	Star Colonel
Galaxy	3-5 Clusters	Galaxy Commander

*Above this level of organization, these infantry unit types use the 'Mech formation standards appropriate to their faction group (i.e. Lance for Inner Sphere/Periphery, Star for Clan, Level II for ComStar/Word of Blake).

Fighter Equivalents: Among the Inner Sphere realms and Periphery states, two fighters of the same type represent a lance, also known as a flight. Three flights (six fighters) constitute a squadron. The Clans call a pair of fighters a Point; five such pairs make up an aerospace Star. ComStar and the Word of Blake employ their six-unit Level II organization for fighter groups, making an aerospace Level II comparable to the standard Inner Sphere squadron.

Because of the variations in aerospace organization, these Formation Building rules will consider the six-fighter squadron the smallest aerospace Formation in use among Inner Sphere and Periphery factions. The smallest Clan aerospace Formation

will be 10-fighter Stars, and the smallest ComStar/Word of Blake Formation will be the six-unit Level II.

Conventional Infantry Equivalents: Infantry is unique in that their small size on the battlefield means even a single unit already consists of several levels of organization. Conventional infantry units in the Inner Sphere and Periphery consist of platoons made up of three to four squads, which in turn can number from two to seven troopers each, depending on their equipment and motive systems. Thus, infantry units can number between eight and 28 troopers in strength. The Clans use a five-man squad base, which results in conventional infantry units (known to the Clans as Points) that typically number between 20 and 25 troopers. ComStar's and Word of Blake's base-six



system is once more strictly applied to infantry, creating ComStar and Word of Blake platoons (Level I infantry units) that number 30 to 36 troopers strong.

Regardless of whether the conventional infantry is a platoon, a Point, or a Level I, each is still treated as a single battlefield unit. These units are in turn grouped into Formations of lances, Stars, and Level IIs in keeping with their faction's organizational scheme.

Battle Armor Equivalents: Battle armor infantry units, are deployed in squads of four identical battlesuits among Inner Sphere and Periphery states, while the Clans use Points composed of five identical battlesuits, and ComStar/Word of Blake uses Level Is made up of six identical suits. As with conventional infantry platoons, these battle armor groups—squad, Point, and Level I—each represent a single unit, and are in turn arranged into formations of lances, Stars, and Level IIs in keeping with their faction's organizational scheme.

Unusual Formations: A few factions use completely unique organizational schemes, such as the Periphery's Marion Hegemony. Players will need to adjudicate how best to apply these rules to those unusual Formations.

FORMATIONS

A Force's component lances, squadrons, Stars, and Level IIs can be assembled using just the scheme presented above. The various militaries of the *BattleTech* universe, however, often prefer to build their Formations around specific unit Roles to maximize their effectiveness in battle.

To represent this, *Formation Types* (see p. 61-68) outline the mission-based lances, squadrons, Stars, and Level IIs in common use, along with their composition requirements and benefits. These Formation Types draw on the unique capabilities of the various 'Mech, vehicle, and aerospace units available in *BattleTech* play, and incorporate the new unit Roles above (see p. 57-58).

To further encourage their use, lances, squadrons, Stars, and Level IIs built as specific Formation Types will receive Special Pilot Abilities (see *Special Pilot Abilities*, p. 70-82).

FORMATION COMPOSITIONS

For the most part, Inner Sphere lances are homogenous by unit type, and are composed of four 'Mechs, four combat vehicles of the same movement mode, or four groups of infantry of equivalent type (battle armor squads or conventional platoons of the same movement capabilities). Likewise, Inner Sphere squadrons are often composed of three pairs of aerospace fighters or three pairs of conventional fighters.

Clan Formations also generally group by unit and/or motive type, with each Star composed of five 'Mechs, 10 vehicles of the same movement mode, or five pairs of aerospace fighters.

ComStar and Word of Blake Level IIs buck this trend. Favoring combined-arms capability at even the smallest levels of organization, these Formations may be composed of any mix of six 'Mechs, vehicles, infantry or aerospace fighters, though fighters almost always operate in pairs.

Other exceptions to homogeneous lance/Star compositions include specialized Formations such as the Support Lance, or Clan Novas.

FORMATION REQUIREMENTS

Each of the Formation Types presented below have requirements which must be met to earn their bonus abilities, including a specific ratio or number of unit sizes, roles, movement capabilities, and more.

If a Formation Type lists a requirement as a percentage, this refers to the ratio of units in the Formation relative to its total. Because these rules apply equally to Formations from four-unit 'Mech lances to 10-unit Clan vehicle Stars, the number of units represented by this percentage value may need to be rounded up as necessary.

For example, the requirements for a Battle Lance indicate that 50 percent of the Formation must be heavy (Size 3) or larger. In a four-'Mech Inner Sphere lance, that translates to at least two heavy 'Mechs ($4 \times 0.5 = 2$). The Clan equivalent—a Battle Star—increases this to three heavy 'Mechs ($5 \times 0.5 = 2.5$, round up to 3). The same minimum number of heavy units also apply to a Word of Blake Level II seeking these Formation Type benefits ($6 \times 0.5 = 3$).

A Formation must choose a single Type for each scenario, even if its composition fits the criteria for several Types. For instance, the requirements of the Assault Lance also satisfy the less restrictive criteria of the Battle Lance, but the player creating the Force must designate the Formation as one or the other—never both. A Formation Type can, however, be changed between scenarios (provided all criteria are met), with the new designation and associated benefits applying for the next scenario.

IDEAL ROLE

Some Formation Types list an "ideal role" in their descriptions. Ideal roles serve as a special loophole to any other requirements of that Type. If all of a Formation's units possess the same Role indicated by the Formation's ideal role, then the Formation Type's requirements are considered to be met, even if they might otherwise not be.

For example, the ideal role for a Battle Lance is that of the Brawler. As a result, the requirement that at least 50 percent of a Formation must be heavy or larger to qualify as a Battle Lance can be waived if all four units in that lance have the Brawler unit Role.

BONUS ABILITIES

Each Formation Type grants at least one bonus ability, which reflects the cooperative tactics and complementary weapons and equipment present among its units. Bonus abilities remain as long as three of the Formation's units have not been destroyed or routed.

Unlike Special Pilot Abilities (see p. 70), the bonus abilities granted by Formation Type are free. However, units wishing to use the ability must still meet its requisites. For example, a unit in a Fire Support Lance must have indirect fire or artillery capability if it expects to make use of the free Oblique Attacker SPA provided by its Formation.

If the players are combining the standard Special Pilot Abilities rules with the bonus abilities granted by Formation Type, duplicate abilities cannot be stacked unless their rules specifically allow it.

While the bonus abilities provided here are fairly balanced across the various Formation Types, not all abilities work equally well across specific units and unit roles. A unit that might excel in a Fire Lance, for example, may not be as effective in a Striker Lance.



VARIATIONS

Each Formation Type includes a number of optional variations which may carry different requirements and bestow different bonus abilities. Unless otherwise stated, the requirements and bonus abilities listed for these variant Formations replace those described under the basic Formation Type. Furthermore, variant Formations must meet their stated requirements; ideal unit roles do not apply.

NAMING CONVENTIONS

As a final feature, players may wish to name their Formations to give them more character. In the *BattleTech* universe, naming conventions for small Formations tend to vary wildly. They may be named generically, for their role (e.g. "Recon Lance"), after the formation's commander (e.g. "Roscoe's Lance"), identified by simple phonetic alphabet or numeric designators (e.g. "Bravo Second Star"), their weight class (e.g. "Medium Lance"), or by faction-specific nomenclature that can border on the esoteric (e.g. "Alpha Talon 2", or "Level II-Theta").

For the purposes of game play, whatever name is given to a lance is secondary to the Formation Type, which must be recorded during the force-building process. These game-specific names will be clearly identified under appropriate Formation Types, below. Thus, even if the player has named his force's Fast Assault Lance "Schmidt's Savages," they must still identify that the Formation was built as a Fast Assault Lance. For the purposes of fair play, it is recommended that players avoid names that are a misuse of a Formation Type, even in jest. While a lance of Zeus 'Mechs called "Lyrn Recon Lance 1" might be amusing to that player, it could cause undue confusion for other players.

GROUND FORMATION TYPES

The Formation Types described below include their basic description, requirements, and bonus abilities, as well as alternate variations. Formation Types which include the word "lance" in their title may still be claimed by Clan Stars and ComStar/Word of Blake Level IIs which meet the requirements for that Formation.

AIR LANCE

The Air Lance is a special Inner Sphere combined-arms formation composed of a lance of BattleMechs and a pair of aerospace or conventional fighters. Like the Nova, the Air Lance actually just two Formations working in tandem, but are found in many armies as a way of keeping close air support readily available to ground forces.

Composition: A lance of ground units (of any non-infantry type), plus a lance of two aerospace or conventional fighters.

Requirements: In addition to the requirements of the Formation Type chosen by the ground units, the two attached fighters must be identical units.

Bonus Ability: No additional bonus ability is granted by this Formation; the fighters do not benefit from the bonus abilities gained by the ground units' Formation Type, and are not counted towards any of the Air Lance's requirements.

ANTI-'MECH LANCE

Infantry units are common throughout the Inner Sphere as garrison forces, peacekeepers and security and are often overlooked on the battlefield. But trained Anti-'Mech Infantry Formations can wreak havoc on any 'Mech trying to concentrate on a more massive foe. Some Houses assemble elite infantry teams for Anti-'Mech training, while others, such as House Kurita, send hastily-trained "chain gangs" into battle to support their MechWarriors.

Requirements: All units must be infantry.

Bonus Ability: Distracting Swarm—units in an Anti-'Mech Lance swarming an enemy unit (see p. 220, *TW*) cause a -1 To-Hit Modifier to any weapon attacks made by the enemy unit.

ASSAULT LANCE

Assault Lances are the powerhouses of any Force. Making up for their reduced speed with massive firepower and armor, these Formations rely on brute force to smash their way toward the enemy, and demolish all that they find.

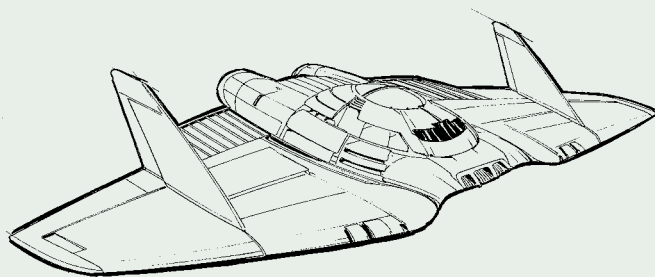
Requirements: At least three units in a basic Assault Lance must be heavy or larger, and the Formation may not include light units. All units in an Assault Lance must have at least 135 armor points, and at least 75 percent of the units in the Formation must be able to do at least 25 points of damage at a range of 7 hexes.

An Assault Lance must contain at least one unit with the Juggernaut Role, or two units with the Sniper Role.

Ideal Role: Juggernaut

Bonus Ability: At the beginning of play, the Assault Lance's controlling player must choose either the Demoralizer or the Multi-Tasker SPAs (see pp. 74 and 78, respectively). At the beginning of each turn, the player may designate up to two units in the Assault Lance to receive the chosen ability for the duration of the turn. The ability can be switched to other units in the Formation each turn, but the SPA chosen at the start of play cannot be changed during the scenario.

Variations: The Assault Lance has three variants: the Anvil Lance, the Fast Assault Lance, and the Hunter Lance



INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Anvil Lance

Hammer and Anvil Lances are trained to work together: the slower and tougher Anvil Lance holds in front of the enemy, stopping their advance and maintaining the enemy's attention.

Requirements: Exclusive to House Marik Forces. All units must be medium or larger, possess at least 40 points of armor, and at least 50 percent of the units must have an autocannon, LRM or SRM.

Ideal Role: Juggernaut

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Sandblaster or Cluster Hitter Special Pilot Ability. The player may assign the same SPA to both units, or one unit Sandblaster and the other unit Cluster Hitter.

Fast Assault Lance

Requirements: In addition to the requirements listed for the basic Assault Lance above, all units must have a minimum ground-based Walk/Cruise speed of 5, or possess jump jets, to qualify as a Fast Assault Lance.

Bonus Ability: In addition to the bonus ability granted for the standard Assault Lance, at the beginning of each turn up to two units per Fast Assault Lance may also receive the Stand Aside SPA each turn (see p. 80). These units need not be the same ones that are granted the Demoralizer or Multi-Tasker abilities.

Hunter Lance

Hunter Lances prefer to fight in heavy woods or urban terrain, where they can ambush and destroy enemy forces.

Requirements: At least 50 percent of the units in this Formation must have the Ambusher or Juggernaut Role.

Ideal Role: Ambusher

Bonus Ability: At the beginning of each turn, 50 percent of the units in the Formation may be granted the Combat Intuition SPA.

BATTLE LANCE

Battle Lances are the line troops of any large Force. Whether holding the center of a combat group, or supporting a reinforced assault, the Battle Lance is meant to close with the enemy, relying on armor and sheer mass to sustain its units while its heavy firepower pummels the enemy.

Common Battle Lance Formations are those that are grouped by their units' weight classes. These weight-specific Battle Lances usually drop the word "Battle" from their nomenclature, and thus are often referred to by generic-sounding terms like "Heavy Lance" or "Medium Star."

Requirements: At least 50 percent of the units in this Formation must be heavy or larger. If the Battle Lance consists of combat vehicles, there must be at least two matched pairs of heavy units.

At least three units in this Formation must have any combination of the Brawler, Sniper and/or Skirmisher unit Roles.

Ideal Role: Brawler

Bonus Ability: The Battle Lance Formation receives the equivalent of a 6-point Lucky Special Pilot Ability (see p. 77), except that it may be used by any unit in the Formation. This ability need not be assigned to a specific unit, and may be used a maximum of six times. As with the Lucky SPA, only one re-roll per failed attack or Piloting/Driving Skill Roll is possible.

This bonus ability may be stacked with a Lucky SPA assigned to one or more of the Battle Lance's member units. However, a Battle Lance unit may not make more than four re-rolls in a single scenario, between both the pilot's ability and this Formation bonus.

Variations: The Battle Lance has four variants: the Light Battle Lance, Medium Battle Lance, Heavy Battle Lance and the Rifle Lance.



House Davion has configured this Crusader Lancers light battle lance, consisting of a Wolfhound, Javelin, Quickdraw, and Jenner for fast reactions on the field.

Light Battle Lance

Requirements: At least 75 percent of the units in this Formation must be light, and no units of assault weight may be included. If the Formation consists of combat vehicles, there must be at least two matched pairs of light units.

At least one of the units in a Light Battle Lance must have the Scout unit Role.

Bonus Ability: As per the standard Battle Lance.

Medium Battle Lance

Requirements: At least 50 percent of the units in this Formation must be medium, and no units of assault weight may be included. If the Formation consists of combat vehicles, there must be at least two matched pairs of medium units.

Bonus Ability: As per the standard Battle Lance.

Heavy Battle Lance

Requirements: At least 50 percent of the units in this Formation must be heavy or larger, and no units of light weight may be included. If the Formation consists of combat vehicles, there must be at least two matched pairs of heavy or larger units.

Bonus Ability: As per the standard Battle Lance.

Rifle Lance

Requirements: Exclusive to House Davion Forces. At least 75 percent of the units in this Formation must be medium or heavy; no units of light weight may be included. At least 50 percent of these units must have an autocannon (including LB-X, Ultra, or Rotary autocannons) and all units must have a minimum Walk/Cruise speed of 4.

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive either the Weapon Specialist or Sandblaster SPA. The player may assign the same SPA to both units, or one unit may receive Weapon Specialist and the other unit Sandblaster.

Berserker/Close Combat Lance

Berserkers are trained to close with the enemy and smash them with the sheer size and strength of their BattleMechs. The Rasalhague Regulars, and later, the KungsArmé, often fielded Formations which specialized in physical attacks. With the Steiner invention of the hatchet, close combat Formations became more common across the Inner Sphere.

Requirements: As Battle Lance.

Bonus Ability: Two units in this Formation receive the Zweihander or Swordsman SPA. The same ability must be assigned to both units.

COMMAND LANCE

As the name suggests, the Command Lance is built around the Force's commander or his key sub-commanders. As such, this Formation typically boasts a diverse group of capabilities intended to both support and protect their leader on the battlefield.

Requirements: At least one unit in the Command Lance must be designated as either the Force commander; if additional Command Lances are included, one unit in each must be designated as a key lieutenant.

At least 50 percent of the units in this Formation must have one of the following unit roles: Sniper, Missile Boat, Skirmisher or Juggernaut. One additional unit in the lance must be a Brawler, Striker or Scout. The unit designated as the Force commander may be any of these prerequisite units.

Ideal Role: None

Bonus Ability: Prior to the beginning of play, two of the non-commander units in this formation receive one of the following Special Pilot Abilities for free (each unit may receive a different SPA): Antagonizer, Combat Intuition, Blood Stalker, Eagle Eyes, Marksman or Multi-Tasker.

In addition to this, the commander's unit receives the Tactical Genius SPA. If the Special Pilot Abilities rules are in effect and the commander already has the Tactical Genius SPA, instead add a +1 modifier to the force's Initiative roll results, including any rerolls made as a result of the Tactical Genius SPA).

Variations: The Command Lance has two variants: the Order Lance, and the Vehicle Command Lance.

Order Lance

The most well-organized of Formations, trained to work as if synchronized.

Requirements: Exclusive to House Kurita Forces. All units must be of the same weight class and model (all *Dragons*, *Grand Dragons*, *Panthers*, etc.).

Bonus Ability: Designate one unit as the Formation's commander; that unit receives the Tactical Genius, Antagonizer or Sniper SPA. All units in the Formation receive the Iron Will or Speed Demon SPA; the entire Formation must select the same ability.

Force Building Special Rules: This Formation may ignore the extra Faction Point (FP) cost for fielding multiples of the same model (see *Combat Manual* series for rules on Faction Points).

Vehicle Command Lance

Requirements: As with the standard Command Lance, one unit in the Vehicle Command Lance must be designated as the Force commander's unit. Apart from this requirement, only one pair of vehicles needs to have the Sniper, Missile Boat, Skirmisher, or Juggernaut unit Roles.

Bonus Ability: As per the Command Lance.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



FIRE LANCE

Fire Lances carry powerful, long-range weaponry which enables them to stay away from enemy forces and rain down devastating fire with less risk of facing an attack themselves.

Requirements: At least 75 percent of the units in this Formation must have either the Missile Boat or Sniper unit Roles.

Ideal Role: Missile Boat

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Sniper Special Pilot Ability (see p. 80), which will affect their weapon attacks during that turn.

Variations: There are five primary variants on the basic Fire Lance: the Anti-Air Lance, Artillery Fire Lance, Direct Fire Lance, Fire Support Lance, and Light Fire Lance.

Anti-Air Lance

Requirements: In addition to the requirements of the standard Fire Lance, at least two units in an Anti-Air Lance must possess an LBX autocannon, a standard autocannon, an artillery weapon, or the Anti-Aircraft Targeting Quirk (see p. 193, *SO*, p. 60, *ASC*).

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Anti-Aircraft Specialist Special Command Ability (see p. 83). This Special Command Ability will affect the weapon attacks made by the designated units during that turn.

Artillery Fire Lance

Requirements: At least two units in this Formation must have an Artillery weapon.

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Oblique Artilleryman Special Pilot Ability (see p. 87), which will affect their artillery weapon attacks made during that turn.

Direct Fire Lance

Requirements: At least two units in this Formation must be heavy or larger, and all units in this Formation must be able to deliver at least 10 points of damage at a range of 18 hexes or more.

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Weapon Specialist SPA (see p. 82). This ability will affect the weapon attacks made by the designated units during that turn.

Fire Support Lance

Requirements: At least three units in this Formation must have a weapon capable of indirect fire.

Bonus Ability: At the beginning of each turn, up to two units in this Formation may receive the Oblique Attacker Special Pilot Ability (see p. 87), which will affect their indirect weapon attacks during that turn.

Light Fire Lance

Light 'Mechs are stereotyped as fast, short-range units, unable to carry enough long-range weaponry to be an effective threat, at least individually. A Light Fire Lance's units train to combine their fire in order to bring down larger targets.

Requirements: No unit of heavy weight or larger may be included.

Bonus Ability: Coordinated Fire Support—If a unit in this Formation hits a target with at least one of its weapons, other units in this Formation making weapon attacks against the same target receive a –1 modifier to their attack rolls. This bonus is cumulative per attacking unit, up to a –3 To-Hit Modifier.

NOVA

Novas are a special Formation Type used only by the Clans. These Formations are composed of a Star of OmniMechs and a Star of battle armor infantry units. While in practice they are often treated as a single Formation, the fact that a Nova is actually two Stars in one grants it an extra degree of tactical flexibility.

Composition: A Clan 'Mech Star (which may be constructed to claim any other applicable Formation Type), plus a Star of Clan battle armor units.

Requirements: All five 'Mechs in the Nova must be OmniMechs (OMNI special ability in *Alpha Strike*), while all five battle armor units must be mechanized battle armor (MEC special ability in *Alpha Strike*).

Bonus Ability: The 'Mech units in this Formation receive the bonus abilities appropriate to their Formation Type. The battle armor units in a Nova do not receive these benefits, nor do they count towards the 'Mech Star's Formation requirements.

Variations (Vehicle and Aerospace Novas): The Clans also occasionally compose Novas using combat vehicle Stars or aerospace fighter Stars in place of the 'Mech Stars. As with their 'Mech-based equals these Vehicle Novas and Aerospace Novas require that the battle armor units are mechanized battle armor, while at least an equal number of units in the Vehicle and Aerospace Stars possess have Omni capability. In all other aspects, these formations are identical to the standard Novas.

NON-CLAN NOVA VERSIONS

The Inner Sphere eventually adopted similar formations to the Clan Nova as they began to develop battle armor units of their own. For the most part, the Inner Sphere, Periphery, and mercenary groups that did so treated such groupings as transient formations, and thus counted the composite 'Mech and battle armor lances as separate formations working close together, with one 4-'Mech lance playing transport for one 4-squad lance of battle armor troops. The Word of Blake did much the same, but with a specialized 6-'Mech Level II formation that combined with a 6-squad battle armor Level II to create what they called a "Choir" formation.

Aside from the different number of 'Mech units (to an equal number of battle armor squads), these non-Clan Nova equivalents differ from the Clan version in that they do not require all of their 'Mechs to be OmniMechs. However, for every 'Mech that lacks the OMNI special, a corresponding number of battle armor units must have the XMEC special instead of the MEC special.

Other than these changes, non-Clan mechanized battle armor combinations follow the same organizational and bonus ability rules as the basic Clan Nova formation.



INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

PURSUIT LANCE

Pursuit Lances are built for a combination of speed and offensive power that can be difficult to ignore. These Formations were originally designed as scout-hunters, intended to chase down recon units with enough firepower to cripple or destroy them. However, they've also come to be used for "recon in force" operations, where mobility is more critical than firepower.

Requirements: All units in this Formation must be light or medium, and 75 percent of the units in this Formation must have a Walk/Cruise speed of 6 or more, regardless of jumping capability. At least one unit in the Pursuit Lance must have a weapon that can deal 5 or more points of damage at a range of 15 hexes or more.

Ideal Role: Skirmisher

Bonus Ability: 75 percent of the units in this Formation receive the Blood Stalker Special Pilot Ability (see p. 73).

Variations: There are two variants on the basic Pursuit Lance: the Probe Lance, and the Sweep Lance.

Probe Lance

Requirements: No units of assault weight or larger may be included, and 75 percent of the units in this Formation must have a Walk/Cruise speed of 6 or more, regardless of jump capability. All units must be able to deliver at least 10 points of damage at a range of 9 hexes or more.

Bonus Ability: As per the standard Pursuit Lance.

Sweep Lance

Requirements: All units in this Formation must be light or medium, and have a Walk/Cruise speed of 5 or more, regardless of jumping capability. All Sweep Lance units must be able to deliver at least 10 points of damage at a range of 6 hexes or more.

Bonus Ability: As per the standard Pursuit Lance.

RECON LANCE

Recon Lances use extremely fast units that can rush ahead of the main force, using their speed to scout objectives, evade enemy fire, and harass or flank their opponents. This Formation Type is particularly useful in campaign settings where intelligence-gathering is important, but can be useful in any scenario.

Requirements: All units in this Formation must possess a minimum Walk/Cruise speed of 5. At least two units in this Formation must have the Scout or Striker unit Roles.

Ideal Role: Scout

Bonus Ability: At the beginning of play, the Recon Lance's controlling player must choose either the Eagle Eyes or Maneuvering Ace SPAs (see pp. 74 and 77, respectively), and apply the chosen ability to up to three units in the Formation. The ability cannot be switched to other units in the Formation during the game, nor can the SPA chosen at the start of play be changed during the scenario.

In addition, all units in this Formation receive the Forward Observer SPA (see p. 75).

Variations: There are two variants on the basic Recon Lance: the Heavy Recon Lance and the Light Recon Lance.

Heavy Recon Lance

Requirements: All units in this Formation must have a Walk/Cruise speed of 4 or more, and at least two must have a Walk/Cruise of 5 or more; both requirements are regardless of jump capability. At least one unit must be heavy or assault weight. At least two units in this Formation must have the Scout unit Role.

Bonus Ability: As per the standard Recon Lance, except that only two units in this Formation may receive the chosen SPA. All units in this Formation still receive the Forward Observer SPA.

Light Recon Lance

Requirements: All units in this Formation must be light, with a minimum Walk/Cruise speed of 6, regardless of jump capability. Furthermore, all units in this Formation must have the Scout unit Role.

Bonus Ability: As per the standard Recon Lance, except all units in this Formation receive the chosen SPA, in addition to the Forward Observer SPA.

SECURITY LANCE

Security Lances are trained for independent operations to defend a military installation, government building, civilian factory or other important locations. They feature a range of abilities focused on knowing the terrain they are defending and chasing down raiders.

Requirements: At least one unit in this Formation must have the Scout or Striker unit Role, and at least one unit must have the Sniper or Missile Boat unit Role. Only one assault unit may be included in the Formation.

Ideal Role: None.

Bonus Ability: If acting as the Defender in a scenario, at the beginning of play 75 percent of the units in this Formation are assigned a Terrain Master or Environmental Specialist SPA of their choice; the same variation of the SPA must be chosen for each unit. If not acting as the Defender, 75 percent of the units in this Formation are assigned the Speed Demon SPA at the beginning of play.



STRIKER/ CAVALRY LANCE

Striker Lance Formations, also known as Cavalry Lances, are made up of fast-moving units that can quickly bring their firepower into combat, while also possessing enough armor to survive an engagement and withdraw—or to hold the line long enough for the main force to arrive.

Requirements: All units in a Striker/Cavalry Lance must have a minimum Walk/Cruise speed of 5, or a Jump movement of 4 or more. No units in a Striker/Cavalry Lance may be of assault weight class or above.

At least 50 percent of the Striker/Cavalry Lance must have the Striker or Skirmisher unit Roles.

Ideal Role: Striker

Bonus Ability: 75 percent of the units in this Formation receive the Speed Demon Special Pilot Ability (see p. 80).

Variations: There are five variants of the basic Striker/Cavalry Lance: the Hammer Lance, the Heavy Striker/Cavalry Lance, the Horde, the Light Striker/Cavalry Lance and the Ranger Lance

Hammer Lance

Hammer and Anvil Lances are trained to work together, the faster Hammer Lance hitting the enemy in the flank or rear while they are distracted by the Anvil Lance.

Requirements: Exclusive to House Marik Forces. All units must have a minimum Walk/Cruise speed of 5.

Ideal Role: Striker

Bonus Ability: At the beginning of each turn, up to two Hammer Lance units may receive either the Jumping Jack or Speed Demon SPA. The player may assign the same SPA to both units, or one unit may receive Jumping Jack and the other unit Speed Demon.

Heavy Striker/Cavalry Lance

Requirements: All units in this Formation must have a minimum Walk/Cruise speed of 4, regardless of jumping capability. At least three units must be heavy or larger; light units may not be included. At least one unit in this Formation must have a weapon that can do at least 5 damage at a range of 18 hexes or more.

At least two units in this Formation must have the Striker or Skirmisher unit Roles.

Bonus Ability: As per the standard Striker/Cavalry Lance.

Horde

Captain Mercer Ravannion was the most well-known proponent of using large numbers of “bug” Mechs, the very lightest and most common Mechs in existence, to swarm and overwhelm their larger brethren. Ravannion himself was defeated trying to prove his theory, but others occasionally try to “fix” his mistakes and prove the effectiveness of swarming.

Requirements: The Formation must consist of five to ten units; all units must be light. No unit may have the ability to do more than 10 damage at a range of 9 hexes or more.

Bonus Ability: Swarm—When any unit in this Formation is targeted by an enemy attack, that unit’s player may switch the target to any other unit in this Formation that is still a legal target (e.g., within line of sight) and at the same range or less from the attacker. This ability can only be used by units which spent Running, Jumping, or Flank movement points that turn.

Force Building Special Rules: This Formation still only generates 4 Faction Points, regardless of the number of units it contains (see the *Combat Manual* series for rules on Faction Points).

Light Striker/Cavalry Lance

Requirements: All units in this Formation must have a minimum Walk/Cruise speed of 5, regardless of jumping capability. No unit may be heavy or larger, and at least two units in this formation must have a weapon that can do at least 5 damage at a range of 18 hexes or more.

At least two members of the Light Striker/Cavalry Lance must have the Striker or Skirmisher unit Roles.

Bonus Ability: As per the standard Striker/Cavalry Lance.

Ranger Lance

Ranger Lances are trained for combat in special terrain, favoring heavy cover or terrain that would hinder other forces’ movement.

Requirements: No unit in this Formation may be assault weight or larger.

Ideal Role: Skirmisher

Bonus Ability: At the beginning of play, 75 percent of the units in this Formation receive one Terrain Master SPA. The same Terrain Master variation must be assigned to these units.

SUPPORT LANCE

Dedicated Support Lances are multi-role Formations that do not excel at any one job, but instead back up other Formations.

Requirements: None

Ideal Role: None

Bonus Ability: Before the start of play, each Support Lance must designate one other Formation Type in the Force to support. For every two units in the supported Formation that make use of a bonus ability provided by its Formation Type, one unit in the Support Lance receives the same ability. This bonus ability is retained as long as the Support Lance still has three or more active units on the field; it is not lost if the supported lance is reduced below its own ability to retain the bonus ability. If the supported Formation can choose from a selection of SPAs, the Support Lance must select which SPAs it receives at the start of play, and may not change the selection during game play.

If the Support Lance is supporting a Command Lance, it receives the two SPAs granted to the Command Lance’s non-commander units, and may assign one SPA each to any Support Lance unit which meets the requirements for that SPA. However, the Support Lance does not receive the commander’s Tactical Genius Special Pilot Ability.





INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

URBAN COMBAT LANCE

The unique requirements of urban combat favor short-range, intensive warfare and jump jets for jumping over and on top of buildings.

Requirements: At least 50 percent of the units in this Formation must have jump movement or be infantry (Conventional or Battle Armor). At least 50 percent of the units in this Formation must have a maximum Walk/Cruise speed of 4.

Ideal Role: Ambusher

Bonus Ability: At the beginning of each turn, up to 75 percent of the units in this Formation may receive the Street Fighter (if Mech or ProtoMech) or Urban Guerrilla (if infantry) SPAs. Vehicles receive the equivalent of 1-point of Luck and a one-time use of the Marksman SPA.

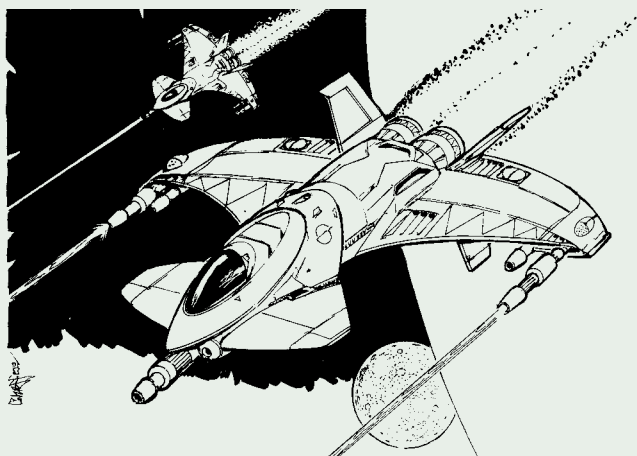
AEROSPACE FORMATION TYPES

Inner Sphere and Periphery squadrons are composed of three pairs of aerospace fighters for a total of six aircraft per squadron. The ComStar and Word of Blake also use six-fighter Formations, which are identified as Level IIs. Among the Clans, an aerospace Star is a formation comprised of 5 pairs of aerospace fighters, for a total of 10 aircraft.

As the capabilities of these particular groupings—squadron, aerospace Level II, and aerospace Star—are roughly on par with each other, any can take advantage of the Formation Types below.

Note that while most aerospace squadrons, Level IIs, and Stars group their fighters in pairs of identical models, many of the requirements listed for these Formation Types will likely produce odd numbers of unit types. If players wish to maintain the tradition of keeping their fighters in identical pairs, they may swap out the unmatched pair of fighters in favor of a match that meets the first listed requirement in the Formation's description.

For example, the Fire Support Squadron calls for 50 percent of its fighters to have the Fire Support unit Role, while the other 50 percent must have the Dogfighter Role. A player building an Inner Sphere squadron could accept having 3 Fire Support fighters and 3 Dogfighters, or could make the squadron with 4 Fire Support fighters and 2 Dogfighters instead.



AEROSPACE SUPERIORITY SQUADRON

The Aerospace Superiority Squadron is the Battle Lance of the skies. Intended primarily to engage and defeat opposing aerospace units, these fighters combine an ideal mix of speed, firepower, and armor.

Requirements: More than 50 percent of the units in this Formation must have the Interceptor or Fast Dogfighter unit Roles.

Bonus Ability: Prior to the start of the scenario, up to two of the following SPAs may be assigned to up to half the units in this Formation, in any combination: Blood Stalker (see p. 73), Ride the Wash (see p. 79), Hot Dog (see p. 68).

ELECTRONIC WARFARE SQUADRON

Electronic Warfare Squadrons are dedicated to supporting a force's efforts to disrupt enemy communications while simultaneously defeating hostile ECM. While the high-speed nature of aerospace units tends to make such benefits transitory at best, the right burst of scrambled signals in combat can severely destabilize an enemy force.

Requirements: Electronic Warfare squadrons do not have a unit Role requirement, but more than 50 percent of the fighters in this Formation must each possess one or more of the following equipment: Beagle Probe, Active Probe, Angel ECM, Guardian ECM, ECM Suite, Bloodhound Probe, Light Probe, Light ECM, TAG, Light TAG, or Watchdog.

Bonus Ability: This squadron type receives the Communications Disruption Special Command Ability (see p. 84), enabling it to disrupt the communications between the units of one randomly-determined enemy lance or squadron on a 1D6 roll of 6. This disruption roll is made at the start of the Electronic Warfare Squadron's turn, and persists for one turn only. If the full Special Command Abilities rules are in use and the Electronic Warfare Squadron is part of a Force that already has the Communications Disruption SCA, the Formation instead gains the ability to decide which enemy lance or squadron is affected by the disruption, rather than determining its victim randomly.

Note that ground units can only suffer Communications Disruption effects if the Electronic Warfare squadron has a unit currently flying over the map on which the ground units are operating.



FIRE SUPPORT SQUADRON

Fire Support Squadrons are the aerospace formations best suited for ground attack operations, but thanks to their emphasis on long-range weapons, they can often double as back up for interceptors and strike fighters as well.

Requirements: At least 50 percent of the units in this Formation must have the Fire Support unit Role. The remainder must have the Dogfighter unit Role.

Bonus Ability: Prior to the start of the scenario, one of the following SPAs may be assigned to each of two pairs of fighters in this Formation: Golden Goose (see p. 75), Ground Hugger (see p. 75), Hot Dog (see p. 76) or Shaky Stick (see p. 79). The two selected fighter pairs may not receive the same SPA (e.g. if one pair of fighters is assigned the Shaky Stick SPA, the second pair may not also receive Shaky Stick SPA.)

INTERCEPTOR SQUADRON

Interceptor Squadrons are fast aerospace combat groups meant to deal with opposing aerospace threats before they get too close. Because more emphasis is placed on speed, these squadrons often do not have the firepower or armor for heavy fighting. Instead, their goal is to deliver the first strike, in an effort to sow chaos in the enemy's ranks or possibly buy time for the heavier fighters to enter the fray.

Requirements: More than 50 percent of the units in this Formation must have the Interceptor unit Role.

Bonus Ability: Any units in this Formation with a Thrust of 9 or less receive the Speed Demon SPA (see p. 80). In addition, up to two fighters in this Formation may receive the Range Master (Long) SPA.

STRIKE SQUADRON

The Strike Squadron is well-suited for close air support and air-to-ground operations alike. Units in these squadrons tend to feature modest speed and maneuverability, combined with potent firepower and reliable armor protection. Because units loaded for ground-attack missions are often at a disadvantage against air-superiority fighters, these squadrons often divide their fighters between ground-support and anti-air duties.

Requirements: More than 50 percent of the units in this Formation must have the Attack or Dogfighter unit Roles.

Bonus Ability: Up to 50 percent of the units in this Formation may receive the Speed Demon SPA (see p. 80). The remaining fighters receive the Golden Goose SPA (see p. 75).

TRANSPORT SQUADRON

Unlike the other squadron types discussed above, Transport Squadrons are aerospace Formations built around large airborne or aerospace units intended to move heavy cargo or serve as troop transports. Fighters operating as part of a Transport Squadron often assume the role of escorts, while the typically-larger aerospace craft are used to move materiel to, from, or through the battle zone.

Because they carry precious cargo, these squadrons often avoid aerospace engagements, relying instead on interceptors and aerospace superiority fighters to clear the skies first.

Requirements: This special Formation is one of the few that may be made up of support aircraft (such as airships and fixed-wing support vehicles), conventional fighters, aerospace fighters, small craft, and/or DropShips. To qualify as a Transport Squadron at least 50 percent of the units in this formation must have the Transport unit Role.

Bonus Ability: Choose one of the following SPAs and apply it to all units in this squadron with the Transport unit Role: Dust-Off (see p. 74), Ride the Wash (see p. 79), or Wind Walker (see p. 82).

COMPANIES, BINARIES AND BEYOND

As shown in the Standard Force Organizational Schemes Table (see p. 59), the various lance-sized Formations described in the preceding pages, and their Clan, ComStar, and Word of Blake equivalents, are the building blocks used to create larger Forces. Lances combine to form companies, which in turn make up battalions, then regiments, then brigades. Clan Stars and Novas combine to create formations called Binaries, Trinaries, and Supernovas, which in turn combine to form Clusters, and then Galaxies. ComStar and Word of Blake Level IIs combine with other Level IIs to form Level IIIs (battalions), Level IVs (divisions), and Level Vs (armies).

Much as the various Formation Types above have their own mission roles, these larger Formations may be specialized toward a given mission type, simply by including a preponderance of the desired Formation Type. Whole companies or Trinaries, for instance, can be built to serve as Fire Support forces by merely having more Fire Lances and Stars in their total force than any other Formation Type. If a little more variety is desired, some of the incorporated Formations may be variants of the same type—so the Fire Support Company may have one standard Fire Lance, and an Anti-Air Lance with a Recon Lance (rather than just two Fire Lances and a Recon Lance).





INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

COMPANY COMPOSITION

Core Ground Force	
0-1	Command Lance
0-2*	Support Lances
1-4	Battle Lances
	Assault Lances
	Striker Lances
	Fire Lances
	Recon Lances
	Pursuit Lances
Detachments	
0-6	Conventional Infantry Platoons
0-4	Battle Armor Squads
0-3	Vehicle Lances**
0-1	Aerospace Squadron

Note: An Inner Sphere or Periphery company is composed of 2-4 lances total, and may be supported by other forces (detachments). Lances listed also include the Air Lance variant.

*Only 1 Support Lance per 1 core non-Support Lance.

**Or BattleMech lances if Core Ground Force is composed of vehicle lances.

BINARY/TRINARY COMPOSITION

Core Ground Force	
0-1	Command Star
0-1	Support Star
1-3	Battle Stars
	Assault Stars
	Striker Stars
	Fire Stars
	Recon Stars
	Pursuit Stars
Detachments	
0-5	Battle Armor Points
0-1	Vehicle Stars
0-1	Aerospace Star

Note: A Clan Binary is composed of 2 stars total; a Clan Trinary is composed of 3 stars total; may be supported by other forces (detachments). Stars listed also include the Nova variant; 2 Novas form a Supernova Binary, 3 Novas a Supernova Trinary.

BATTALION COMPOSITION

Core Ground Force	
0-1	Command Lance
3-4	Ground Force Companies
Detachments	
0-6	Conventional Infantry Companies
0-4	Battle Armor Platoons
0-3	Vehicle Companies*
0-3	Aerospace Squadrons

Note: An Inner Sphere or Periphery battalion is typically 9-13 lances total, and may be supported by other forces (detachments).

*Or BattleMech companies if Core Ground Force is composed of vehicle companies.

CLUSTER COMPOSITION

Core Ground Force	
3-5	Binaries and/or Trinaries
Detachments	
0-2	Battle Armor Stars
0-3	Vehicle Stars
0-3	Aerospace Star

Note: A Clan Cluster is typically 3-5 Binaries and/or Trinaries in total (including Supernova Binaries and Trinaries), and may be supported by other forces (detachments).

LEVEL III COMPOSITION

Core Ground Force	
0-1	Command Level II
0-1	Support Level II
4-6	Battle Level II
	Assault Level II
	Striker Level II
	Fire Level II
	Recon Level II
	Pursuit Level II
Detachments	
0-3	Aerospace Level IIs

Note: A Level III is composed of 6 Level IIs, depending on the chosen Point Value Total and size of the opposing force, it may be necessary to build up to 2 Level IIIs.

SPECIAL PILOT ABILITIES

In the *BattleTech* universe, opposing forces sometimes clash at the size of armies, and troops often share the same combat experiences, but it remains possible for superlative warriors to emerge and set themselves apart from the crowd. The abilities possessed by these special warriors represent a unique combination of experience, talent, and personal traits that can vary from individual to individual.

For this reason, unless otherwise indicated, special pilot abilities (SPAs) are assumed to apply to a single warrior, vehicle crew, or infantry unit as appropriate, rather than to an entire Force. These abilities will augment the warrior or crew's unit, and can "move" with them between machines—a particularly useful feature if the players are involved in a campaign where salvage and unit replacements are common.

ASSIGNING SPECIAL PILOT ABILITIES

If the players are interested in running a *BattleTech* game which includes special pilot abilities, but without any of the notable warriors found in published sources, they may choose to purchase such abilities from the list below, based on the individual unit's Skill Rating, and the type of unit they control.

Not all SPAs are created equal, however, so a point value has also been assigned to these abilities to reflect their complexity and effectiveness in battle. Low-level warriors and crews—those identified as Green, Very Green, or Wet Behind the Ears—should receive no special pilot abilities. Middle-grade units—those with a Regular Skill Rating—may receive one special pilot abilities with a point value of 2 or less. Experienced units—those rated as Veteran or Elite—may receive up to two different special pilot abilities with a combined point value of 4 or less. Truly superior units—those with a Skill Rating of Heroic or Legendary—may receive up to three different special pilot abilities, with a combined point value of 6 or less.

Finally, unless the players are making use of the Formation Types rules and their associated Bonus Special Pilot Abilities (see p. 60-68), the total number of warriors or crews that receive special pilot abilities should also be limited, to avoid over-complicating the game at hand. If not using the Formation Types rules, the rule of thumb is that a player's Force should try to avoid assigning SPAs to more than 1 unit for every 4 units fielded in the scenario. These special pilots may be part of the same Formation, or spread out among several Formations, as the controlling player sees fit.

If the players are using the Formation Types rules, the total number of warriors or crews that receive Special Pilot Abilities should be limited to 1 unit for every 12 units fielded in the scenario.

All SPAs presented below are designed to modify already-existing features of the units that the pilot or crew is operating, but will not fundamentally alter the unit's normal capabilities unless specifically noted otherwise. Thus, they cannot be applied to pilots or crews of unit types other than those listed in their descriptions.

This means that SPAs that modify damage for a specific type of attack—such as the Swordsman SPA's focus on units which possess a physical weapon—require that the unit actually possess that type of attack in order to make use of the pilot's talent. If the unit cannot ordinarily meet that requirement—such as a Swordsman who finds himself operating a 'Mech that lacks any physical weapon—the SPA will simply not apply, as there is nothing for it to modify.

This same principle also applies to special pilot abilities that modify movement, or which do not list the unit in question among the unit types for which the ability applies. Thus, a special pilot ability designated for 'Mech units only cannot be used with a vehicle unit type.

Furthermore, movement modifications that do not apply to the unit, such as abilities that might modify wheeled ground movement on a vehicle unit that has a tracked motive type, cannot be granted, even if the special pilot ability is otherwise compatible with the unit. All terrain restrictions that affect the unit type itself will remain in effect unless the special ability notes otherwise.



B1B

Two desperate MechWarriors have drawn on every ounce of their skill and tenacity to reach the conclusion of this gritty battle.



SPECIAL PILOT ABILITIES

Ability	Cost	Brief Description
Animal Mimicry	2	unit gains mobility bonus and ability to demoralize opponents
Antagonizer	3	unit can enrage an opponent for a brief period
Blood Stalker	2	unit may better focus its attacks on a preferred target
Cluster Hitter	2	unit can deliver extra damage in an attack using missiles or flak weapons
Combat Intuition	3	unit may move and resolve fire before any other unit acts
Cross-Country	2	Ground vehicle unit may enter some illegal terrain types, but at high Move cost
Demoralizer	3	unit can intimidate an opponent for a brief period
Dodge	2	unit can attempt to evade physical attacks
Eagle's Eyes	2	unit gains (or augments) its ability to spot hidden units and avoid mines
Environmental Specialist	2	Reduces movement and combat modifiers in a preferred environment
Fist Fire	2	unit delivers extra damage in physical attacks
Forward Observer	1	unit improves accuracy of indirect fire when used as a spotter
Heavy Lifter	1	Enables increased carrying capacity
Hopper	1	unit may attempt Piloting Skill Roll when leg blown off; may not be reduced below 2 MP
Hot Dog	2	Helps avoid overheating effects
Human TRO	1	Increases likelihood of critical hits
Iron Will	2	unit can resist psychological attacks and receives a bonus during Morale Checks
Jumping Jack	2	Improves accuracy of any attack made when the unit jumps
Lucky	1-4	unit may reroll a limited number of failed attacks and Piloting Skill/Control Rolls per scenario
Maneuvering Ace	2	Enables or improves lateral shift movement
Marksman	2	unit may make an Aimed Shot
Melee Master	2	unit can deliver an additional physical attack
Melee Specialist	1	unit delivers physical attacks with greater accuracy
Multi-Tasker	2	Reduces penalty modifiers for attacks against multiple targets
Natural Grace	3	Reduces MP costs through certain terrain, enables improved movement abilities
Oblique Artilleryman	1	Improves accuracy and reduces scatter for all artillery weapon attacks
Oblique Attacker	1	Improves accuracy for indirect fire, and enables indirect attacks without a spotter
Range Master	2	unit gains bonus to attacks at preferred range
Sandblaster	2	unit improves accuracy and damage when only using AC and missile weapons
Sharpshooter	4	unit may make an Aimed Shot with additional chance for critical hit
Slugger	1	unit may fire weapon while using an improvised club
Sniper	3	unit reduces Medium, Long, and Extreme range modifiers by half
Speed Demon	2	unit can move faster than normal
Stand-Aside	1	unit can pass directly through enemy units with successful roll
Street Fighter	2	unit may pre-empt an attack against it by enemies in base contact
Swordsman	2	unit can deliver an Aimed Shot or improved damage in physical weapon attack
Tactical Genius	3	Enables command unit to reroll Initiatives

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SPECIAL PILOT ABILITIES (CONTINUED)

Ability	Cost	Brief Description
<i>Terrain Master</i>		
Drag Racer	3	Ground vehicle unit gains extra speed on ice or pavement; avoids skidding better
Forest Ranger	3	unit moves more easily through (and gains extra cover from) woods and jungle
Frogman	3	unit moves more easily than others while fully submerged
Mountaineer	3	unit moves more easily through Level changes and rough terrain types
Nightwalker	3	unit ignores modifiers for darkness
Swamp Beast	3	unit moves more easily through mud and swamp terrain; ignores bog down in same
Weapon Specialist	3	unit can deliver a more accurate attack with preferred weapon
Zweihaender	2	'Mech unit delivers more damage in physical attacks
<i>Airborne Only Abilities</i>		
Dust-Off	2	Enables airborne unit types to land or liftoff in non-clear terrain
Golden Goose	3	Improves accuracy for air-to-ground strafing, strike, and bombing attacks
Ground-Hugger	2	Airborne unit may execute a double-strafe or double-strike air-to-ground attack
Ride the Wash	4	unit reduces atmospheric combat modifiers; may execute special air-to-air attack
Shaky Stick	2	Airborne unit is harder to hit from the ground during air-to-ground attacks
Wind Walker	2	unit ignores atmospheric combat modifiers and gains a bonus to landing and liftoff
<i>Infantry Only Abilities</i>		
Light Horseman	2	Beast-mounted infantry unit moves faster, even through difficult terrain
Heavy Horse	2	Beast-mounted infantry unit can inflict extra damage at point-blank range
Foot Cavalry	1	Foot-based infantry unit moves faster, even through difficult terrain
Urban Guerrilla	1	Infantry unit is harder to attack in urban terrain, and may "spawn" support

ANIMAL MIMICRY

"If you think the bark's bad, wait till you feel my bite..."

Unit Type: See below

SPA Cost: 2 points

A pilot with the Animal Mimicry Ability has combined an exceptional understanding of animal behavior with his natural aptitude for 'Mech piloting to give his machine the uncanny—some would even say frighteningly—resemblance to a wild animal. Animal Mimicry is available only to pilots of Quad BattleMechs and ProtoMechs, and of 'Mech and ProtoMech designs that, by agreement of all players, feature an animal look to them—such as beastly Clan totem 'Mechs like the *Kodiak* and the *Mandrill*.

Like Natural Grace (see p. 78), Animal Mimicry is open to interpretation during gameplay, but can grant the following additional capabilities:

- The superior, naturally inspired gait provides a –1 target modifier to all Piloting Skill Rolls required for Quad designs.
- The animal-like flexibility, communicated into the 'Mech's movements, enables it to navigate wooded terrain at a cost of –1 MP per hex of light, heavy, or ultraheavy woods and jungle terrain.

- The disturbingly realistic "animalisms" of the 'Mech's movement adds a +1 modifier to any Morale Checks (see p. 211-213, *TO*)—or a –1 target modifier to the Demoralizer Piloting Skill Roll if using the Demoralizer SPA (see p. 72).



ANTAGONIZER

"Come on, you greasy tinspawn! I thought you puppies could fight!"

Unit Type: Any

SPA Cost: 3 points

The Antagonizer is a MechWarrior, pilot, or vehicle commander who has the uncanny ability to get under an enemy's skin so much that the enemy forgets all other considerations and concentrates solely on defeating the Antagonizer. To use this ability, the Antagonizer must select a single opponent within 10 hexes of his own unit and have line of sight to that opponent. The Antagonizer must then make a special "psychological" attack on the target in place of a normal weapon attack, in the form of a Piloting Skill Roll with a +4 target modifier. If the Antagonizer-controlled unit succeeds in this roll, the target unit becomes enraged at him for a number of turns equal to the margin by which the roll succeeded. The enraged opponent unit must move toward the Antagonizer at its best possible speed, using the most direct, passable route available. The enraged unit may not target any other unit during this period; all weapons and physical attacks executed must be directed at the Antagonizer alone. If the raging unit suffers damage from a weapon or physical attack delivered by another unit, or the Antagonizer moves more than 10 hexes away from the raging unit, the rage will "break," and the raging unit may resume normal activity.

The Antagonizer can attempt to taunt only one unit per turn, but may enrage multiple units in this fashion. Attempting to once again antagonize a unit that has already been enraged in the current scenario results in a +4 target modifier to the Antagonizer's Piloting Skill Roll, reflecting the opposing warrior's realization that they are being toyed with.

BLOOD STALKER

"Oh, no! Oh, no! You are not getting away from me, you son of a branth!"

Unit Type: Any

SPA Cost: 2 points

A questionable, but strangely effective ability in many situations, the Blood Stalker SPA reflects a character's ability to single-mindedly focus on one—and only one—enemy target, whether for reasons of personal honor, rage or simply an intense focus on a single tactical objective. This ability need not be tapped in every scenario in which the character takes part, but if used, it can only be focused on one enemy unit per combat scenario.

When used, the Blood Stalker Ability applies a -1 To-Hit Modifier for all ranged attacks made by the warrior against his designated target. In exchange, however, any attacks directed against targets other than the one the Blood Stalker has designated suffer a +2 To-Hit Modifier. These modifiers last until the End Phase of the first turn after the designated target retreats, or is otherwise defeated or destroyed. Afterwards, the ability deactivates and the Blood Stalker modifiers no longer apply.

CLUSTER HITTER

"Nothing but torso!"

Unit Type: Any

SPA Cost: 2 points

The warrior who has the Cluster Hitter Ability has spent hours mastering the focus of clustering weapons such as missile and rocket launchers, ultra and rotary autocannons, and LB-X style weapons. Able to more tightly group his shots, the Cluster Hitter can make an Aimed Attack with any one of his unit's cluster-type weapons using all of the rules for the Marksman SPA (see p. 77). On a successful hit, this focused attack will deliver all of the shot's clustered rounds to the targeted location. When not attempting this focused attack, the Cluster Hitter receives a +1 roll modifier on the Cluster Hits Table for all applicable weapons.

The Cluster Hitter SPA cannot be used in conjunction with the Oblique Attacker SPA (see p. 78), or the Sandblaster SPA (see p. 79).

COMBAT INTUITION

"I hate it when I'm right..."

Unit Type: Any

SPA Cost: 3 points

A MechWarrior, pilot, or vehicle crew commander with the Combat Intuition SPA can accurately predict an opponent's actions by focusing intently on them. To use this special ability, a player must declare that a pilot with this SPA is focusing on his environment during the End Phase. This action is extremely taxing, and inflicts 1 point of pilot damage to the pilot; no Consciousness Roll is required when this damage is taken. Though Combat Intuition may be used as often as every turn, this damage effect can pose a danger to the warrior if the ability is overused.

In the following turn, the unit whose pilot has Combat Intuition may take all of its actions after all other units have acted (as if the unit with Combat Intuition won Initiative over all other units in the field). Alternatively, the combat intuitive unit may "pre-empt" the actions of any other single unit that turn, and perform all of its movement and combat actions before its chosen target can do so. The effects of damage inflicted by an attack made by Combat Intuition take place immediately.

CROSS-COUNTRY

"Stop crying! It's only a little water..."

Unit Type: Combat Vehicles (but only those that use ground movement types)

SPA Cost: 2 points

A vehicle crew commander with the Cross-Country ability has a knack for reading the terrain right in front of him and finding the nooks, paths, and hidden folds that will enable him to pass through area where most drivers wouldn't dare. A Cross-Country driver can pass through water terrain as though it were 1 depth shallower, and can even move ground vehicles through woods, rubble or rough terrain—even if his vehicle normally could not do so. Passing through any terrain restricted by the vehicle's movement type, such as passing through woods terrain with a hovercraft, costs the Cross-Country driver twice the normal MP a BattleMech would pay under the same conditions.)

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



DEMORALIZER

"Come and face me, little Spheroid—if you dare!"

Unit Type: Any

SPA Cost: 3 points

A MechWarrior, pilot or vehicle crew commander with the Demoralizer Ability can make his unit a holy terror on the battlefield, projecting an intimidating presence that seems to manifest in the way he operates his machine and taunts his enemy (with or without the use of communications equipment).

The Demoralizer Ability can be used against any single opposing battlefield unit to which the Demoralizer's unit has a clear line of sight, at a range no greater than 10 hexes. The Demoralizer must then make a special "psychological" attack on the target in place of a normal weapon attack, in the form of a Piloting Skill Roll with a +4 target modifier. If the Demoralizer-controlled unit succeeds in this roll, the target unit becomes demoralized. During the following turn, the demoralized unit cannot use any movement rate faster than Walking/Cruising/Safe Thrust, and cannot deliberately move closer to the Demoralizer (though factors such as momentum or the Demoralizer's own movement may still narrow the gap between the two units). In addition, the demoralized unit suffers a +1 To-Hit Modifier to all attack rolls made against the Demoralizer's unit, reflecting the fear the demoralizer has managed to instill in their opponent. These effects last for only one turn, during which time the Demoralizer may maneuver and execute attacks of his own as normal. If the demoralizer's psychological attack fails, both units act normally in the following turn, though the Demoralizer may attempt to use his ability again in the following turn.

DODGE

"Missed me again, you idiot!"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

The Dodge SPA allows a pilot to execute a special evasive maneuver when engaged in physical combat. This dodge—effective against physical attacks only—requires the dodging warrior to make a special Piloting Skill Roll when his opponent makes his physical attack roll. All of the usual Piloting modifiers relevant to the unit's condition apply to this roll. If the dodging unit's margin of success on this Piloting Skill Roll is higher than that of the attacking unit's physical attack roll, the physical attack misses.

The dodging unit does not make additional rolls for further physical attacks in the same turn. Instead, margin of success of the Dodge roll for the first attack is compared to that of all physical attacks made against the dodging unit to determine whether each attack hits or misses.

DUST-OFF

"It would probably be best for your ground-pounders not to look where we're going right now..."

Unit Type: VTOLs (combat and support), Fighters (aerospace and conventional), Small Craft, DropShips

SPA Cost: 2 points

An aircraft pilot with the Dust-Off Ability has developed skills ideal for use in emergency medical and rescue evacuations, and can "read" wooded areas to find hidden landing zones just barely large enough for a vertical landing. Using this ability requires an air vehicle capable of vertical landings (including Airships, VTOLs, LAMs in AirMech mode, or fighters with VSTOL equipment). This enables the Dust-Off pilot to take off from, land within, or hover 1 Level above the ground within wooded or jungle terrain—terrain that such vehicles could not otherwise enter.

Accomplishing this action requires a successful Piloting Skill Roll, with a +1 target modifier for Light Woods/Jungle, +2 for Heavy Woods/Jungle, or a +3 for Ultra-Heavy Woods/Jungle. If successful, the craft accomplishes this maneuver without damage. A failure in this roll means that the craft will suffer the effects of a crash—1 Level for every 3 points by which the roll failed.

EAGLE'S EYES

"I din't need no fancy lostech to spot you, mate!"

Unit Type: Any

SPA Cost: 2 points

The Eagle's Eyes ability reflects the capability of a particularly alert and sensor-savvy warrior who can practically detect threats even before his battle computers identify them.

This ability grants the unit the effective benefits of a Beagle Active Probe with a range of 1 hex. If the unit already possesses advanced sensors or other technology that provides active probe capabilities, the Eagle's Eyes ability stacks with this technology, adding 1 hex of range to the probe's radius. In addition to this, a warrior with Eagle's Eyes can quickly discern the presence of any static defense traps in the immediate vicinity—including pit traps and minefields of any kind. This capability adds a +2 target modifier to target numbers for minefields, booby traps or similar attacks from traps. If the unit has the ability to clear minefields or traps, the unit receives a -2 target modifier to do so.

ENVIRONMENTAL SPECIALIST

"What are you complaining about? When you've been on one snowstorm, you've been in them all."

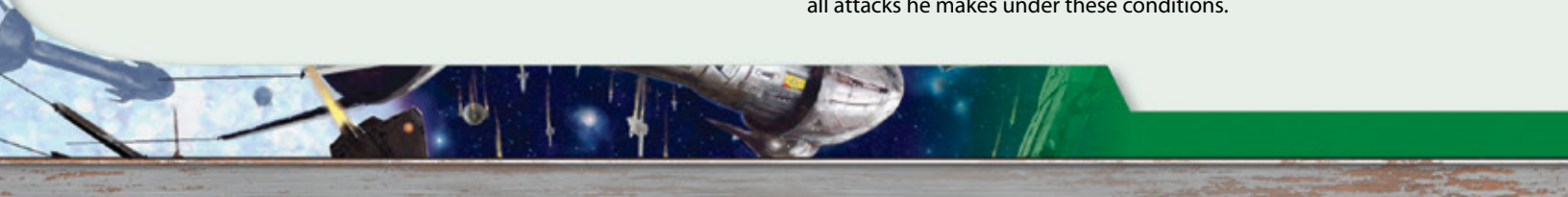
Unit Type: Any

SPA Cost: 2 points

The Environmental Specialist not only has learned to survive in a harsh environment, but can actually thrive in it. Unlike the Terrain Master ability, the Environmental Specialist ability only applies to those weather and atmospheric conditions that would incur modifiers to movement and targeting, such as constantly strong winds, heavy rains, snow and ice conditions, and the like.

An Environmental Specialist reduces by half (rounding down) all movement and Piloting Skill penalties related to the environment they are specialized in, when operating under such conditions.

Furthermore, if the environment affects weapon attacks in any way, the Environmental Specialist receives a -1 target modifier for all attacks he makes under these conditions.



FIST FIRE

"Take that! And that!"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

To use this ability, the 'Mech must have an arm that contains full actuation (a functional shoulder, upper arm, lower arm and hand), as well as at least one direct-fire energy or ballistic weapon located in that arm. (Physical attack weapons may be present as well, but are not required.) A Fist Fire attack may be delivered against any non-infantry unit.

To execute the Fist Fire attack, the aforementioned arm must be used to deliver a punch or physical weapon attack, per standard physical combat rules. If this attack is successful and inflicts damage to the target, the Fist Fire warrior then fires one of the arm-mounted weapons, resolving the attack per the normal rules for the weapon, but with an additional –1 To-Hit Modifier. If the weapon attack succeeds, the target sustains the weapon's damage to the same location as the physical attack.

For example, if an HCT-5S *Hatchetman* makes a successful hatchet attack using its right arm—where it also mounts a medium pulse laser—to a target 'Mech's left torso, it would deliver 9 points of damage from the hatchet, plus an additional 6 points of damage to the same area if its medium pulse laser also hits during a Fist Fire attack.

FORWARD OBSERVER

"Who needs TAG when you have me?"

Unit Type: Any

SPA Cost: 1 point

The Forward Observer is a warrior whose finely-honed direction sense, keen eyesight, and intelligence have made him an invaluable asset for artillery direction. When this character spots for an artillery unit, the artillery unit receives a –1 target modifier on their artillery attack roll. Furthermore, when helping the artillery gunner adjust his fire, the Forward Observer's ability applies an additional –2 target modifier until the artillery gunner strikes his designated target area. The Forward Observer can spot without giving a To-Hit Modifier to the artillery attack for the spotter firing.

FOOT CAVALRY

"Move it, soldiers, or the enemy'll be the least of your worries!"

Unit Type: Infantry (conventional, must be of the foot motive type)

SPA Cost: 1 point

The Foot Cavalry Ability is only effective with infantry squads who are not equipped with vehicles or mounts to ride upon. The Foot Cavalry squad leader has trained himself for endurance running, even in full combat gear, and pushes his men hard to keep them up to his level. Squads led by a Foot Cavalry character gain an additional 15 meters (1 MP) of movement per turn, and reduce by 1 MP the movement penalties for moving through rough terrain, woods, jungle, and even buildings. Additionally, a foot infantry squad with this ability that has a Move-or-Fire rule can move and fire in the same turn.

GOLDEN GOOSE

"Mad Cat, corner pocket!"

Unit Type: VTOLs (combat and support), Fighters (aerospace and conventional), Small Craft

SPA Cost: 3 points

A pilot with the Golden Goose Ability is an intensely dedicated air-to-ground precision attacker. Pilots with this ability receive an additional –1 To-Hit Modifier when executing air-to-ground Strike attacks, and a –2 To-Hit Modifier when Bombing. In addition, if a Bombing attack misses, the Golden Goose ability reduces the bomb's scatter distance by 2 hexes (to a minimum of 0).

GROUND-HUGGER

"One Line of Death coming up!"

Unit Type: VTOLs (combat and support), Fighters (aerospace and conventional), Small Craft

SPA Cost: 2 points

A pilot with the Ground Hugger Ability is an air-to-ground attacker every bit as brave as they are good. In addition to receiving a –1 To-Hit Modifier for all air-to-ground Strafing and Striking attacks (but not Bombing attacks), the Ground Hugger gains the following additional capabilities:

Strafing: When executing an air-to-ground Strafing attack, instead of the normal, single attack run of 1 to 5 continuous hexes per pass over the battlefield, the Ground Hugger can make up to two 1 to 3 continuous-hex Strafing runs in one turn. Both strafing runs must lie along the craft's flight line, and can even be taken contiguously to produce a solid attack line of 6 hexes in length. This added capability does not affect the heat generated by the Strafe.

Striking: When executing an air-to-ground Strike attack, the Ground Hugger can deliver two such attacks in one turn. As with Strafing, the targets for both Strike attacks must be along the aircraft's flight path over the battlefield. If any non-energy weapons are used while performing this action, each Strike must use a different weapon (energy weapons may be fired twice—one for each Strike—but generate heat as if delivering a single Strafe).

HEAVY HORSE

"Holy crap! Is that branth wearing a PPC!?"

Unit Type: Infantry (conventional, must be beast-mounted)

SPA Cost: 2 points

Like the Light Horseman, the Heavy Horse Ability is only effective when using Beast-Mounted Infantry (see p. 294-295, TO). The Heavy Horseman has studied the use of riding animals in combat for years, and has developed a few ways to maximize their abilities. Heavy Horse warriors leading a beast-mounted squad enable the unit to carry additional support weaponry; the unit deals 50 percent more damage (rounded down), but loses 1 MP.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



HEAVY LIFTER

"Why, lookie here! I done caught me a Locust! Hey, Marcus! Go long!"

Unit Type: 'Mechs

SPA Cost: 1 point

The Heavy Lifter SPA reflects a mastery of fine balance unique among MechWarriors of any stripe. Where the lifting capabilities of most BattleMechs and IndustrialMechs are derived from a combination of the machine's own mass and special equipment, the Heavy Lifter has learned how to enhance these "rated maximums" through creative balancing techniques and sheer determination.

The Heavy Lifter SPA allows a 'Mech pilot to lift, carry, drag and even throw objects (including basic cargo and even hostile units) weighing up to 50 percent more than the machine's normal limit. This affects not only a 'Mech's maximum lifting weights defined in *'Mech Lifting Capacity* (see p. 261, *TW*), but also the maximum weight allowance and throwing distances defined in *Picking Up and Throwing Objects* (see p. 92-99, *TO*).

HOPPER

"That's right, you Clanner scum! Still standing! That all ya got!?"

Unit Type: 'Mechs

SPA Cost: 1 point

When a 'Mech loses a leg, it normally surrenders instantly to gravity and crashes to the ground—often injuring its pilot in the process. A MechWarrior with the Hopper Ability possesses an extremely fine sense of innate balance and is so skilled in handling their machine that they can actually try and prevent this fall.

To accomplish this, the warrior must make all necessary Piloting Skill Rolls required for his unit in the turn that the leg is severed, including the +5 target modifier for a missing leg. If these rolls are successful, the 'Mech remains standing—but even if the roll to remain standing fails, the warrior receives a -2 target modifier to the subsequent Piloting Skill Roll required to avoid pilot damage in the resulting fall.

A Hopper that remains standing can also use 2 MP of movement per turn with a 'Mech that has been reduced to one leg. This "hopping" movement is treated as Running MP, however, and cannot be performed in reverse (nor may the Hopper's 'Mech use Sprinting movement once reduced to a single leg).

HOT DOG

"If you can't stand the heat, get out of the BattleMech!"

Unit Type: 'Mechs, Aerospace Fighters

SPA Cost: 2 points

Heat, a unique danger to 'Mechs and aerospace fighters, has long been a personal bane to the pilots of such units.

Some pilots, however, have developed a knack for riding their machines' unique "heat envelopes," and pushing their fighters and 'Mechs to the limits of shutdown and even explosion just to squeeze out every last gram of performance. A character with the Hot Dog SPA is one such individual, and can apply a -1 target modifier to any roll made to avoid overheating effects (including Shutdown and Ammo Explosion checks, as well as Pilot Damage and Random Movement checks from overheating).

HUMAN TRO

"Sir, the warbook says there's twenty different Marauders out there, and I know of thirty; who do you want to believe?"

Unit Type: Any

SPA Cost: 1 point

The Human TRO has studied the makes, models, and capabilities of so many units of a given type ('Mech, combat vehicle, aerospace fighter, battle armor, and so forth) that they can immediately recognize the specific variant and rattle off the stats for that design on sight. To perform this feat, the Human TRO must be versed in the specific type of unit he is looking at, declared at the beginning of a scenario. A warrior focused on BattleMechs cannot use this ability to identify the configuration of an aerospace fighter, for example.

The Human TRO receives a +1 modifier to rolls on the Determining Critical Hits Table (see p. 124, *TW*).

IRON WILL

"No, you move."

Unit Type: Any

SPA Cost: 1 point

This warrior knows no fear. A unit with this ability is resistant to "psychological attacks" by opposing units, and can even overcome the natural impulse to flee when all hope seems lost. When an opponent uses the Animal Mimicry, Antagonizer, or Demoralizer SPAs against a unit with Iron Will, apply a +2 target modifier to the Piloting Skill Roll required to activate the ability.

Furthermore, if *Morale* rules are in play (see p. 212, *TO*), a unit controlled by a pilot or crew with this ability adds a -2 modifier to avoid being routed or when recovering its nerve.

JUMPING JACK

"These legs exist purely as a suspension system..."

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

Jump jet-equipped 'Mechs and ProtoMechs are among the most agile battlefield combatants, but to call them graceful is an utter fabrication. However, while most 'Mech jumps demonstrate the brute-force-over-physics approach with every earth-shuddering leap, some pilots have become astonishingly adept at such maneuvers. The Jumping Jack SPA reduces the normal +3 to-hit attacker movement modifier for using Jumping movement with a +1 modifier.

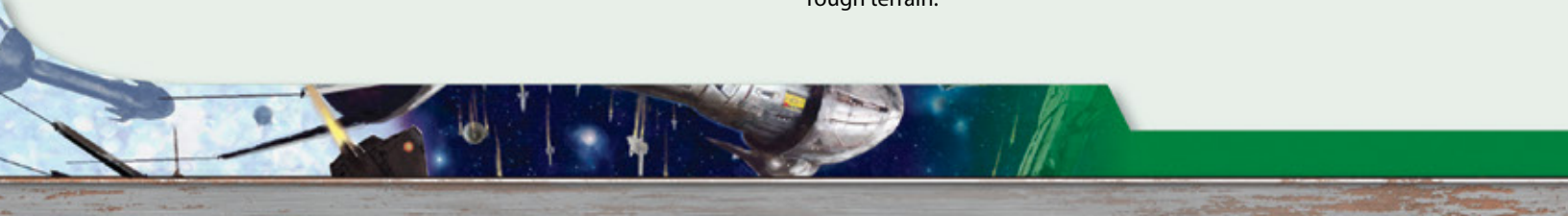
LIGHT HORSEMAN

"Giddyap!"

Unit Type: Infantry (conventional, must be beast-mounted)

SPA Cost: 2 points

The Light Horseman Ability is only effective when using Beast-Mounted Infantry (see p. 294-295, *TO*). An infantry squad leader with the Light Horseman Ability has combined his natural talent for working with animals with his skills as an infantry leader to create an infantry team capable of pushing its mounts to their limit. Characters leading a Beast-Mounted unit can coax an additional 1 MP of movement per turn from their beasts, and can reduce by 1 MP the movement penalties for moving through wooded and rough terrain.





LUCKY

"Tell me somebody got a vid of that shot?"

Unit Type: Any

SPA Cost: 1-4 points

It's not really skill that's placing this pilot's shots, but nobody cares as long as they get the job done. For every point spent on this SPA, the unit may reroll 1 failed Attack Roll or 1 failed Piloting Skill Roll per scenario. The second roll result stands, even if it fails or is worse than the first; the Lucky SPA may not be used again for that particular roll. This ability may not be used to change the outcome of other roll types, such as critical hit checks, hull breach checks, Initiative, or Morale rolls.

MANEUVERING ACE

"My call sign isn't Drifter because I wander from place to place..."

Unit Type: Any non-infantry

SPA Cost: 2 points

MechWarriors and crews with the Maneuvering Ace SPA are especially good at executing quick turns and maneuvering in tight confines. Bipedal 'Mech units and VTOL units at Cruising speed whose pilots possess this ability can perform the lateral shift maneuver normally available only to four-legged 'Mechs (see p. 50, *TW*), while four-legged 'Mechs can perform the same action for 1 less MP than usual. Vehicle crews receive a +1 target modifier on any Piloting Skill Rolls required if the vehicle fails to fulfill the requirements for a turn mode (see p. 25, *TO*), while aerospace units reduce the Thrust Point costs for any special maneuvers by 1.

In addition to the above, all units piloted by a Maneuvering Ace receive a -1 target modifier for any Piloting Skill Rolls needed to avoid skidding, sideslipping or, in the case of aerospace units, out-of-control effects.

MARKSMAN

"Bam! Bullseye!"

Unit Type: Any

SPA Cost: 2 points

The Marksman Ability enables a MechWarrior, ProtoMech pilot, fighter pilot, or vehicular crew gunner to potentially hit any desired location on a target. A pilot or gunner with the Marksman SPA can make a special Aimed Shot attack as if using a targeting computer (see p. 143, *TW*). The pilot's unit must remain stationary and make no physical attacks during the round in which he uses this ability. In addition, only one of the unit's weapons may be used; no other weapon may be fired in the same turn.

The Marksman Ability may be combined with a targeting computer or enhanced-imaging technology; if the warrior's unit is equipped with such items and they are active when this ability is used, the Aimed Shot attack receives a -2 To-Hit Modifier.

MELEE MASTER

"I'll bet you didn't see that one coming, did ya?"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

A MechWarrior with the Melee Master Ability has elevated physical combat to blinding new levels, achieving physical combat speeds other warriors can only dream of. When executing a physical attack, a MechWarrior with this ability can deliver one extra punch, kick, club, or hatchet attack during the physical attack phase (so long as all other restrictions are met, such as not firing weapons in the attacking limb). This attack may even be combined with a Charge or Death from Above attack.

For ProtoMechs, use of this Ability doubles the ProtoMech's total damage in a Frenzy attack.

MELEE SPECIALIST

"Awww, did you catch my fist with your face?"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 1 point

A MechWarrior with the Melee Specialist Ability has perfected the difficult art of melee combat using the arms, legs, fists and feet of his BattleMech or ProtoMech, and is a master of physical attacks of all kinds. Given the Clans' preferred fighting style, this ability is less common among Clan MechWarriors than among their Inner Sphere counterparts, but some ProtoMech warriors—who are trained to make the most of their machines' smaller stature—have been known to embrace these "barbarian tactics."

When executing a physical attack, the warrior with this ability receives a -1 To-Hit Modifier to the attack roll, and increases by 1 point any damage dealt by a successful physical attack.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

MULTI-TASKER

"Everyone deserves some love."

Unit Type: Any

SPA Cost: 2 points

While well-trained pilots and crews can perform multiple tasks simultaneously, accurately targeting multiple foes isn't something many gunners can do with ease, resulting in the application of a modifier for any secondary targets within the unit's firing arcs. The Multi-Tasker Ability reduces the penalty modifiers for attacks against multiple targets (see p. 109-110, *TW*) by 1. Attacks against secondary targets in the unit's forward arc receive a +0 roll modifier, while attacks against secondary targets in the unit's rear and side arcs receive a +1 To-Hit Modifier.

In addition, crewed vehicles with multiple weapons can reduce their recommended number of gunners by 1 for every 2 Ratings (or fraction thereof) that the Multi-Tasker gunner has in his Gunnery Skill. A vehicle cannot be reduced to less than 1 gunner in this fashion, however.

NATURAL GRACE

"Cut that out, Derek! This is a battle arena, not a disco!"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 3 points

A MechWarrior or ProtoMech pilot with natural grace has combined hundreds (if not thousands) of man-hours of programming with their own knack for piloting his machine. As a result, they have developed and perfected dozens of special maneuvers and combinations that give an incredibly lifelike quality to the way their BattleMech or ProtoMech moves.

The special maneuvers a warrior with the Natural Grace Ability can perform are limited primarily by the player's imagination and the gamemaster or opponent's agreement, but may include the ability to execute complex gestures, handle delicate objects, perform a dance maneuver or execute an unusual acrobatic maneuver. While these maneuvers have the effect of possibly amusing or annoying one's fellow players, the talent and grace involved do grant the following bonus capabilities:

- An additional -1 target modifier to any roll that involves avoiding falls, damage from moving through buildings, pilot damage from falls or setting off minefields.
- An additional hexside of torso twisting range beyond the 'Mech's current abilities (regardless of chassis configuration). This will allow most bipedal/humanoid 'Mechs to rotate their torsos through 300 degrees (covering all facings except directly to the rear), while four-legged 'Mechs can "twist" to the left or right like humanoids.
- The ability to perform an "arm flip" with only one arm, or with an arm that also has lower arm and/or hand actuators.
- Reducing the movement cost to pass through ultra-heavy woods, ultra-heavy jungle, and buildings by 1 MP per hex traveled.
- Reducing by 1 point the damage inflicted by a hostile physical attack if the character also possesses the Dodge or Melee Specialist SPAs.
- The ability to use Running MP to move backward, if the character has the Maneuvering Ace or Speed Demon SPAs.

OBLIQUE ARTILLERYMAN

"They're pulling back! How cute!"

Unit Type: Any

SPA Cost: 1 point

The Oblique Artilleryman Ability grants the operator of any artillery piece the ability to direct strikes against targets farther away than the weapon is normally rated to reach. Able to quickly sense the optimum trajectory and take weather conditions into account, a gunner with this ability increases the range of his artillery weapon by 10 percent (rounded up) in meters. (For reference: the artillery weapon ranges given in *Tactical Operations* represent the weapon's range in *BattleTech* mapsheets, each of which represents an area roughly 500 meters across. To find an artillery weapon's range in meters, simply multiply its *Tactical Operations* range by 500. Thus, the Inner Sphere Arrow IV Missile, with a range of 8, can reach targets up to 4,000 meters away. This is extended to 4,400 meters by the Oblique Artilleryman Ability.)

In addition to extending the weapon's range, if an artillery attack misses, the Oblique Artilleryman ability reduces the shot's scatter distance by 2 hexes (to a minimum of 0).

OBLIQUE ATTACKER

"I don't have to see 'em to hurt 'em!"

Unit Type: Any

SPA Cost: 1 point

A MechWarrior or gunner with the Oblique Attacker Ability is well versed at executing indirect-fire attacks using LRMs and artillery (see p. 111, *TW*, and p. 179-186, *TO*). In addition to receiving a -1 To-Hit Modifier to their attack when firing indirectly, this warrior can identify the target's location without the benefit of a spotter.

RANGE MASTER

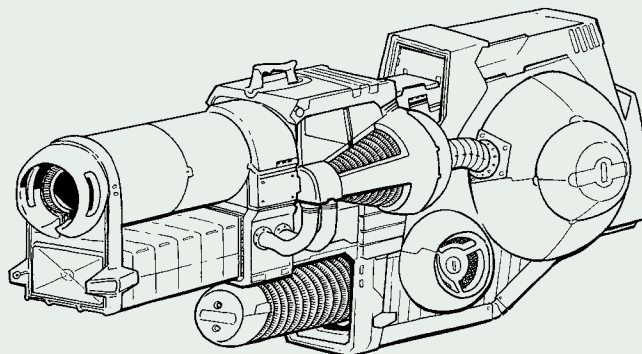
"Too close... Too far... Ah! Just right! Eat nickel, Clanner!"

Unit Type: Any

SPA Cost: 2 points

The Range Master Ability grants the warrior mastery over any range band except Short (Medium, Long and so forth). Any weapon attacks made in the selected range band may swap range modifiers between that range band and the Short range band.

For example, a Range Master may select the Long range band as their area of mastery (normally a +4 To-Hit Modifier), and would receive a +0 modifier at that range, but would now suffer a +4 To-Hit Modifier for attack rolls made at Short Range.



RIDE THE WASH

"Ladies and gentlemen, we're expecting some turbulence!"

Unit Type: Any airborne unit except airships

SPA Cost: 4 points

A pilot with the Ride the Wash Ability has logged hundreds of flight hours with his aerospace fighter, aircraft, VTOL, or WiGE vehicle, and has learned to use the craft's "wash" (wake turbulence) to enhance his maneuverability, or even throw off opposing aircraft that pass too close. Aside from airships (which cannot make use of this ability) all aerospace, aircraft or air vehicle types may only attempt to "Ride the Wash" at Altitude 20 or less. Furthermore, to generate sufficient turbulence, these craft must use Flanking movement (or Maximum Thrust) when doing so. The exact benefits of "Riding the Wash" vary with the unit type, as described below.

VTOLs and WiGE units: For VTOLs and WiGE vehicle units, Riding the Wash allows the pilot to perform a 30-degree (1-hexside) facing change per turn at no cost in MP. The pilot may also use this ability to increase the aircraft's flight elevation by 1 at no MP cost, even if the craft is in the midst of an accidental sideslip.

Aerospace Fighters, Aircraft: For aerospace fighters and aircraft, Riding the Wash reduces the Thrust Point cost for any special maneuvers by 1. In addition, the warrior can use his aerospace unit's turbulence to try and send other airborne units out of control—as long as the targeted units are located along their path, and operating within 0 to 10 elevations below it. Any airborne units—friend or foe—that meet these conditions are subjected to the Riding the Wash user's turbulence, and must make an immediate Piloting Skill Roll with a +3 target modifier to maintain control. A failed roll results in an immediate loss of 1 elevation of altitude times the roll's margin of failure. If this would drop the unit to or below Elevation 1, treat the outcome as a crash.

Because this latter use of the "wash" requires the fighter or aircraft to execute precision flying at top speeds, any unit that uses the Ride the Wash ability in this manner may not execute weapon attacks while doing so, and must also make a Piloting Skill Roll at the end of the movement phase in which this action is taken. If the roll fails, the pilot's unit will lose 1 elevation times half the roll's margin of failure (rounding up). If this would drop the unit to or below Elevation 1, treat the outcome as a crash.

SANDBLASTER

"Let's rock!"

Unit Type: Any

SPA Cost: 2 points

Similar to the Cluster Hitter, the gunner with the Sandblaster Ability has spent hours mastering the unique properties of one type of clustering weapon, be it a missile or rocket launcher, an ultra or rotary autocannon, or an LB-X style weapon, selected at the beginning of a scenario. While the Cluster Hitter focuses their shots for tighter grouping, the Sandblaster favors quantity over quality. When using this ability with their favored weapon, the Sandblaster receives a +2 roll modifier on the Cluster Hits Table for any attack that hits at long or extreme range; a +3 modifier if the hit occurs at medium range; and a +4 modifier if hitting a target at short range.

SHAKY STICK

"Don't mind me; I'm just a really big bird, is all!"

Unit Type: Any airborne unit

SPA Cost: 2 points

A pilot with the Shaky Stick Ability is an expert at performing evasive maneuvers while conducting air-to-ground attacks. This ability bestows a +1 To-Hit Modifier on any attacks made against the pilot's craft by units firing from the ground, but does not affect the targeting ability of any airborne opponents.

This ability may be used in conjunction with Golden Goose or Ground Hugger Abilities.

SHARPSHOOTER

"See? That armor plate isn't 110mm proof anymore!"

Unit Type: Any

SPA Cost: 4 points

The Sharpshooter is a master marksman who can strike the weakest spot on a 'Mech or vehicle by aiming for known weak points or exploiting pre-existing damage. The Sharpshooter Ability enables a MechWarrior, ProtoMech pilot, fighter pilot or vehicular crew gunner to potentially hit any desired location on a target. A pilot or gunner with the Sharpshooter SPA can make a special Aimed Shot attack as if using a targeting computer (see p. 143, *TW*). The pilot's unit must remain stationary and make no physical attacks during the round in which they use this ability. In addition, only one of the unit's weapons may be used; no other weapon may be fired in the same turn.

The Sharpshooter Ability may be combined with a targeting computer or enhanced-imaging technology. If the warrior's unit is equipped with such items and they are active when this ability is used, the Aimed Shot attack receives a -2 To-Hit Modifier.

A pilot or gunner with the Sharpshooter Special Ability is granted an additional chance for a critical hit on any successful Aimed Shot attack performed with this attack, even if the targeted unit still has armor in the struck area. This additional roll is made using the standard rules for determining critical hits (see p. 123-124, *TW*), and occurs in addition to any other Critical Hit checks the target unit would normally suffer from armor loss, location of the hit, or the penetrating critical hit rule (see p. 206, *TW*).

For example, a Sharpshooter's Aimed Shot attack is delivered by their BattleMech's PPC against a Support Vehicle with a BAR of 7, and the attack destroys the last of that armor to hit the internal structure below. The attacker makes three rolls on the target's Determining Critical Hits Table—once for the penetrating critical attack damage that exceeds the Support Vehicle's BAR, a second roll for the damage that breached the armor to hit the internal structure, and the third for the Sharpshooter SPA.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



SLUGGER

"Walk softly, but carry a big tree!"

Unit Type: 'Mechs

SPA Cost: 1 point

A pilot with the Slugger Ability has further refined their mastery over their machine's heavy lifting potential to the point where they can find, lift, and wield improvised clubs one-handed. Aside from reducing the required number of working hand actuators to one when using an improvised club, this enables the Slugger to use any weapons mounted in his 'Mech's torso and free arm when wielding an improvised club.

This ability may not be used in conjunction with the Zweihander Ability.

SNIPER

"I can ruin a trachazoi's sex life at a quarter-klick."

Unit Type: Any

SPA Cost: 3 points

The Sniper Special Pilot Ability reduces all range attack modifiers by half, so an attack delivered at Medium, Long or Extreme ranges applies a +1 To-Hit Modifier at Medium Range (rather than +2), a +2 To-Hit Modifier at Long Range (rather than +4) and a +3 modifier at Extreme Range (rather than +6).

SPEED DEMON

"Speed is life... and fun!"

Unit Type: Any

SPA Cost: 2 points

A pilot with the Speed Demon SPA can really pour it on! As long as his unit makes no weapon or physical attacks during a turn, a vehicle piloted/driven by a character with the Speed Demon ability adds 1 MP to the unit's Running/Flanking movement and 2 MPs to its Sprinting movement.

STAND-ASIDE

"It's going to take more than a hundred tons of ugly to stop me, FedRat!"

Unit Type: Any

SPA Cost: 1 point

A character with the Stand-Aside Ability uses skill and determination to force their way through occupied terrain. Instead of finding a hex impassable due to the presence of an opposing unit, the Stand-Aside pilot may make a Piloting Skill Roll with a +2 target modifier.

For every weight class by which the opposing pilot's machine outweighs his own, the Stand-Aside pilot applies a +1 modifier to this roll. If the Stand-Aside pilot's machine is heavier, they receive a -2 modifier to the roll for every weight class of difference instead.

If the check succeeds, the pilot using the Stand-Aside Ability passes through the enemy-occupied space at a cost of 1 additional MP. Otherwise, the Stand-Aside pilot's unit loses half of its remaining MP (rounding down) and must move around the contested area.

Regardless of the outcome, no damage is applied to either unit for the use of this ability.

STREET FIGHTER

"Hyaaaah!!"

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

A pilot with the Street Fighter ability can conduct physical attacks in the same space of time they fire ranged weapons, combining all of these actions together to execute any punches, kicks, and other melee combat actions before the end of the Weapon Attack Phase. These physical attack maneuvers retain the same restrictions as normal attacks of that type; weapons mounted in the limbs used for physical attacks may not be fired, and weapon attacks may not be attempted during movement-based physical attacks, such as Death from Above and Charging.

A Street Fighter who uses this ability may not execute a physical attack in the same turn's Physical Attack Phase after having already used Street Fighter to deliver one in the Weapon Attack Phase.

SWORDSMAN

"The sword is still a sword, no matter the size—or how it is used."

Unit Type: 'Mechs, ProtoMechs

SPA Cost: 2 points

The pilot with the Swordsman SPA has taken their own advanced understanding of melee weapons of outside the cockpit and fused it with their mastery of the physical combat capabilities of their BattleMech or ProtoMech. Swordsman are capable of delivering ultra-precise attacks using any melee weapons mounted on their machines—be they hatchets, swords, retractable blades, or even the variety of ProtoMech-scale melee weapons. If the 'Mech or ProtoMech lacks such weaponry, the Swordsman cannot use this ability in combat.

The Swordsman can use his machine's melee weapons to deliver either an Aimed Shot attack or an armor-piercing strike. These two special attacks may not be combined in the same action.

Aimed Shot: When using melee weapons to deliver an Aimed Shot attack, the Swordsman uses the rules for a targeting computer (see p. 143, *TW*) as if the melee weapon were a standard, direct-fire energy weapon. Any modifiers associated with the melee weapon (such as the -1 To-Hit Modifier for BattleMech swords, or the +1 To-Hit Modifier for BattleMech maces) also apply to this attack. Any special Piloting Skill Rolls for missed strikes and other requirements also apply.

Piercing Strike: When using melee weapons to deliver a piercing strike, the Swordsman applies a +2 To-Hit Modifier to their attack roll. If the attack hits, the Swordsman makes an additional Critical Hit check for the area struck after assessing the weapon's normal damage. Apply a -1 roll modifier to this bonus Critical Hit check if the location is still protected by any armor.

TACTICAL GENIUS

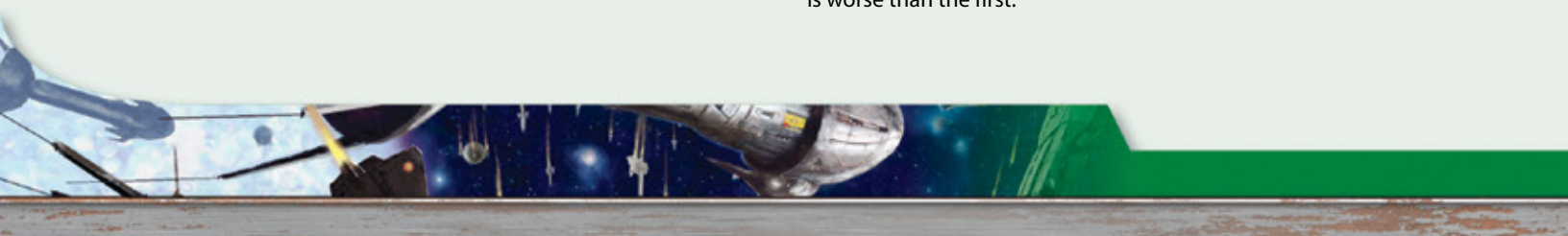
"Trust me! It'll work! They're not going to see this one coming."

Unit Type: Any

SPA Cost: 3 points

A Force commander with the Tactical Genius SPA has a superior grasp of the battlefield situation over and above his own innate combat sense, and can tap into this ability to maintain control in even the most chaotic firefights. This ability has no effect, however, if the character is not the field commander for his Force.

A commander with the Tactical Genius ability may re-roll his force's Initiative. However, this second roll stands, even if the result is worse than the first.



TERRAIN MASTER

"Harsh terrain conditions?" Shoot! Back home, we just called that the evening drive!"

Unit Type: Per Terrain specialty, see below

SPA Cost: 3 points

The Terrain Master ability is unique in that it represents a broad range of "sub-abilities" tailored to the specific environments or terrains a pilot might encounter. A character may purchase the Terrain Master ability multiple times, but must select a specialty at the time of each purchase. As choosing a specialty is mandatory, Terrain Mastery grants no "universal" capability to the character. Thus, the gameplay rules for each Terrain Master specialty are also found in the sub-ability's description.

Unless otherwise noted in the specific sub-ability, Terrain Mastery does not enable the pilot to enter terrain types his vehicle would ordinarily find restricted, such as taking a hovercraft into wooded terrain. However, other abilities and conditions—such as the Cross-Country SPA, or the presence of special vehicle features like amphibious modifications—can work in concert with the Terrain Master ability.

Terrain Master (Drag Racer)

Unit Type: Combat Vehicle (only if the unit has the tracked or wheeled motive types)

Can only be used by Tracked and Wheeled Vehicles. Drag Racer Terrain Masters are the terror of urban environments. This ability provides an extra +1 MP to the Drag Racer's Cruise MP, +2 to the unit's Flank MP, and +3 to its Sprint MP as long as the road surface is Paved, Ice, or even Black Ice. These modifiers are cumulative with the effects of the Speed Demon SPA—see p. 80. In addition, the Drag Racer receives a –2 target modifier to all Driving Skill Rolls made while on such smooth surfaces, including rolls made to avoid skidding. As a special maneuver, Drag Racers moving at Flank speed or faster can also execute a forward-only Lateral Shift maneuver, similar to four-legged 'Mechs (see p. 50, TW).

Terrain Master (Forest Ranger)

Unit Type: Any non-airborne unit

Forest Ranger Terrain Masters are skilled at making good choices when moving their vehicles through light or heavy foliage. This ability subtracts 1 MP from all movement costs the Forest Ranger's unit incurs when crossing through all woods and jungle terrain, and applies a –1 target modifier to any Piloting Skill Rolls required when crossing through jungle terrain. Furthermore, if the Forest Ranger uses Walking or Cruising movement rates, they can use the trees, brush, and uneven ground for better cover than most, imposing an additional +1 To-Hit Modifier against any attacks directed against the unit while it is within wooded or jungle terrain.

Terrain Master (Frogman)

Unit Type: 'Mechs, ProtoMechs

Can only be used by 'Mechs and ProtoMechs. Frogman Terrain Masters are skilled at moving through water. This ability subtracts 1 MP from all movement costs the 'Mech or ProtoMech incurs when maneuvering through water terrain deeper than Depth 1, and applies a –1 target modifier to any Piloting Skill Rolls required when submerged, including those used for physical attacks.

Furthermore, if using the *Extreme Depth* rules (see p. 42-43, TO), the Frogman applies a +2 target modifier for any Crush Depth Checks.

Terrain Master (Mountaineer)

Unit Type: Any non-airborne unit

The Mountaineer Terrain Master has extensive experience navigating the rocky features and steep slopes common to mountainous regions. The Mountaineer subtracts 1 MP from all movement costs their unit incurs when crossing through gravel piles, rough/ultra-rough, or rubble/ultra-rubble terrain, and for any level changes, including those that involve sheer cliffs. In addition, the Mountaineer Terrain Master applies a –1 target modifier to any Piloting Skill Rolls required when crossing through such terrain.

Terrain Master (Nightwalker)

Unit Type: Any non-airborne unit

The Nightwalker Terrain Master can ignore all night- or darkness-based MP modifiers imposed by unusual light conditions, including Dawn, Dusk, Glare, Full Moon, Night, Moonless Night, Pitch Black, or Solar Flare, as long as the unit maintains a Walk or Cruise movement rate. If the unit spends Flank, Jumping, Running, or Sprinting MPs, the Nightwalker may only reduce the MP costs imposed by these conditions by 1 MP (to a minimum of 0). This ability does not affect the Nightwalker's Gunnery Skill.

Terrain Master (Swamp Beast)

Unit Type: Any non-airborne unit

Swamp Beast Terrain Masters are used to the hindering effects of muddy or swampy terrain. This ability subtracts 1 MP from all movement costs the Swamp Beast's unit incurs when crossing through mud or swamp land, and applies a –1 target modifier to any Piloting Skill Rolls required when crossing such surfaces—including checks needed to avoid bogging down.

In addition to this, if the Swamp Beast uses Running or Flank movement rates, they can spend one extra MP per hex to throw up a cloud of mud, muck, and loose brush around their unit, the result of which imposes an additional +1 target modifier against any attacks directed against the unit while it remains within muddy or swampy terrain.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

URBAN GUERRILLA

"Looks like we got some pigeons in the 'hood!"

Unit Type: Infantry (conventional, battle armor)

SPA Cost: 1 point

The Urban Guerrilla ability is effective with infantry squads that use any motive type, as long as they can function within an urban environment and enter buildings. Urban Guerrilla squad leaders have trained their troops to use the ambient cover of any urban or suburban setting, from buildings and statues to parked vehicles and street lamps, to maximum effect, enabling them to claim cover even when out in the open. This ability applies a -1 roll modifier for all weapon attacks made against members of an infantry squad led by an Urban Guerrilla. It also reduces the damage from vehicular weapons targeting infantry by eliminating the double-damage effect for attacking infantry in the open.

Offensively, an Urban Guerrilla can call upon "local support" within an urban area once per scenario—typically made up of armed residents ranging from the neighborhood watch to local street thugs. When called up, this "support" will take the form of a new Rifle (Ballistic) Foot Platoon with a Skill Rating of Green.

This "supporting infantry" will attack a target of the Urban Guerrilla's choice from any structure within 3 hexes of the Urban Guerrilla's position, but will scatter as soon as their numbers are reduced to half or less.

WEAPON SPECIALIST

"Yeah, I see him. So how many particles do you want me to stitch across him from my PPC?"

Unit Type: Any

SPA Cost: 3 points

A MechWarrior, ProtoMech pilot, fighter pilot or gunner with the Weapon Specialist ability is exceptionally proficient with a single type of weapon system. When acquiring this ability, the warrior must identify a specific weapon as their ultimate "weapon of choice" in battle. For example, a MechWarrior can choose the medium laser, while a vehicle gunner might choose the LRM 10. When making attacks using their chosen weapon, the Weapon Specialist applies a -2 To-Hit Modifier.

WIND WALKER

"Soaring like a leaf on the wind..."

Unit Type: Any airborne unit

SPA Cost: 2 points

The Wind Walker ability is most often used by aerospace, aircraft, and WiGE vehicle pilots, but can also be employed by Land-Air 'Mechs, and Glider ProtoMechs. Wind Walkers have the knack for riding thermals and wind currents to produce a smoother ride. This ability also translates to an additional -1 target modifier for all Piloting Skill Rolls required to pass through the Space/Atmosphere Interface (aerospace fighters only), or execute landings of any kind—including crash landings.



The Axman BattleMech is perfectly suited for a Stone's Revenants pilot with the Zweihander ability.

ZWEIHANDER

"SMASH!"

Unit Type: 'Mechs

SPA Cost: 2 points

A MechWarrior with the Zweihander Ability has mastered the ability to use his 'Mech's muscles, melee weapons, and mass to their most devastating effect in close combat.

Rather than focusing on speed like the Melee Master, the Zweihander focuses on power attacks, especially when using melee weapons such as clubs, swords, and hatchets. Though the brute force they employ can potentially damage the attacker's weapon, the sheer force can easily cripple opponents in one blow.

The Zweihander ability grants the MechWarrior the ability to punch or use any one-handed physical attack weapons with both of his BattleMech's arms, as long as the warrior's 'Mech is equipped with hand actuators on both arms. A two-handed attack can only be delivered to targets in the Zweihander's front arc, and applies all To-Hit Modifiers for any damage to actuators in both arms, in addition to the normal modifiers for movement and terrain. If this attack succeeds, it delivers additional damage equal to 1 point per 10 full tons of the attacker's weight (2 if the attacker's 'Mech has Triple-Strength Myomer active). However, the attacker must then make an immediate Critical Hit check against his own unit on the arm where the attacking weapon is mounted (or on both arms, if the Zweihander attack is delivered unarmed).

Any critical hit effects that occur will apply in the End Phase of the current turn, and will not affect the damage delivered by the Zweihander attack itself.

If a Zweihander attack fails, the MechWarrior must make an immediate Piloting Skill Roll to avoid falling, as if the attacker failed at a kick attack.

This ability can be used with improvised clubs (see p. 145-146, TW), but automatically destroys such clubs on a successful attack, regardless of the club's construction.

SPECIAL COMMAND ABILITIES

A Force is more than just the skills and abilities of its individual units. Special Command Abilities, or SCAs, are the training and specialization that a Force can call upon as a collection of units all working together.

The Force receives a number of Special Command Abilities based on the Force's Experience Rating. Low-rated forces—those identified as Green, Very Green, or Wet Behind the Ears—should receive no Special Command Abilities (or may select one of the environmental, tactical, or enemy specializations). Middle-grade forces—those with a Regular Experience Rating—may receive one Special Command Ability. Experienced forces—those rated as Veteran or Elite—may receive up to two different Special Command Abilities. Truly superior forces—those with an Experience Rating of Heroic or Legendary—may receive up to three different Special Command Abilities.

DETERMINING EXPERIENCE RATING

The Experience Rating of a Force is determined by adding up the Skill Ratings for all of the units in the force, then dividing by the number of units in the force, then rounding that result normally to the nearest whole number and subtracting 1. Compare the result to the table at right.

FORCE EXPERIENCE RATING TABLE

Average of All Gunnery/ Piloting Skills	Force Experience Rating
7 or more	Wet Behind the Ears
6	Very Green
5	Green
4	Regular
3	Veteran
2	Elite
1	Heroic
0 or less	Legendary

COMMANDERS AND COMMAND ABILITIES

Because they actually reflect an interaction of training, experience, and—most importantly—leadership, the Special Command Abilities assigned to a player's Force are tied to the presence of one or more field commanders. These officers must be operating from the immediate vicinity, in order to provide direction and inspiration to their troops. Because Special Command Abilities are tied to the officers in this fashion, the loss of these officers—be it from destruction, capture, or withdrawal—also costs their Force the special abilities they provide.

When assigning Special Command Abilities to their forces, players must designate a key officer for every 6 units in their total force (or fraction thereof). Of these officers, one must be

designated as the Force's overall commander, while the other designated officers serve as sub-commanders. If the Force has one or more Command Lances, the commander of each Command Lance must be designated as the overall commander or sub-commander before any other units are designated as commander or sub-commanders.

In game play, the loss of the Force's senior commanding officer will apply a -2 Initiative modifier to that Force for the remainder of the scenario. In addition, if the commanding officer and all of his sub-commanders are lost, the player's Force will lose all of its Special Command Abilities.

ANTI-AIRCRAFT SPECIALISTS

A portion of the Force specializes in attacks against airborne units. Any number of units in the Force may be designated as Anti-Aircraft Specialists. All weapon attacks against airborne units from Anti-Aircraft Specialists receive a -2 To-Hit Modifier. Against all ground targets (including grounded aerospace units), apply a +1 To-Hit Modifier. This ability can only be taken by non-aerospace units; any aerospace units in a Force with this ability do not gain its benefits.

BANKING INITIATIVE

Before either player makes their Initiative roll, the controlling player of a Force with this SCA can choose to give the Initiative to his opponent. For each two turns the controlling player elects to lose Initiative in this manner, they may—at the start of a later turn, and before making their Initiative roll—choose to take the Initiative. The controlling player may only "bank" up to two Initiative rolls (thus giving up four beforehand) in this way. For purposes of any other special abilities, consider the opponent to have won or lost the Initiative (as appropriate) by a margin of 1.

BERSERKERS

At the start of any turn, a Force with this ability may elect to go berserk for the rest of the game. The Force gets a -1 To-Hit Modifier for all attacks, but their Target Movement Modifier against enemy attacks is reduced by 1, to a minimum of 0.

BRAWLERS

A portion of the Force specializes in short range attacks over long range. A third of the force, rounded down, may be designated as Brawlers and uses the following range modifiers in place of the standard range modifiers: Short -1, Medium +2, Long +5, Extreme +10. If used in conjunction with another ability that alters their range modifiers, Brawlers receive a -1 To-Hit Modifier at Short range, a +1 To-Hit Modifier at Long range, and a +4 To-Hit Modifier at Extreme range.

CAMOUFLAGE

Ground units that are part of a Force with this ability and use the Stand Still movement option receive a -2 Target Movement Modifier, in place of the usual +0. Regardless of the scenario, the Force may place half its starting units as Hidden units, even if it is the Attacker. A Force with this ability may place Hidden units even in terrain where 'Mechs cannot usually hide.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



COMBAT DROP SPECIALISTS

Units in a Force with this ability always succeed on all Landing rolls (see *Dropping Troops*, p. 23, SO). The Force receives a +2 Initiative Modifier the turn after making a Combat Drop of at least half its units.

COMMUNICATIONS DISRUPTION

Before play begins, the player controlling a Force with this SCA assigns numerical values to a number of lances in the opposing force equal to the number of lances controlled by their Force commander. For example, a lance commander could only assign a numerical value to a single opposing lance, a company commander could assign a numerical value to 3 different opposing lances, a battalion commander could assign a numerical value to 9 different opposing lances, and so on. The specific lances chosen are completely at the discretion of the player controlling a Force with this SCA.

At the beginning of each turn, the controlling player rolls 1D6. On a result of 6, the player randomly determines the numerical value corresponding to one of the lances in the opposing force; this can be done with a die roll, pulling a number out of a hat, or any other random method on which the players agree before the start of the game. That unit may only expend Walking/Cruising/Safe Thrust during the Movement Phase of that turn. Units only expending Jumping, VTOL or UMW MP are not affected.

ENEMY SPECIALIZATION

A Force with the Enemy Specialization Special Command Ability has one enemy faction or group that it favors fighting above all others, and makes a point to train heavily in dealing with the common tactics and equipment found among that particular enemy. Before game play begins, the specific focus of this specialization must be identified. This can be either an entire faction (e.g. a specific House, a specific Clan, or a specific Periphery state), or a particular Combat Command (e.g. the Davion Heavy Guards or the Wolf's Dragoons).

As with Environmental Specializations (see p. 84) and Tactical Specializations (see p. 87), the benefits and drawbacks of Enemy Specialization increase with the Force's Experience Rating. A Force rated Green, Very Green, or Wet Behind the Ears receives no benefits from Enemy Specialization, but will still suffer a -1 Initiative modifier if the focus of its specialization does not apply to the scenario (reflecting the inexperienced Force's focus on honing its skills to one particular opponent).

If the force is rated Regular, it will receive a +1 Initiative modifier when facing its selected enemy, but will suffer a -1 Initiative modifier when facing any other opposing Force. If the Force is rated Veteran, it may either gain a +2 Initiative modifier when facing its selected enemy while suffering a -2 Initiative modifier against opponents of other affiliations, or it may select a second preferred enemy against which it also receives a +1 Initiative modifier. If the latter option is chosen, the negative modifiers will not stack, so the specialized force will receive a +1 Initiative modifier when facing either of its two chosen enemies, but will only suffer a -1 Initiative roll modifier against all other Forces.

If the Force is rated Elite, in addition to the Initiative modifiers described above, it may add the ability to negate one of its preferred

enemy Force's Special Command Abilities at the beginning of a scenario. If the Force is rated Heroic or Legendary, in addition to the Initiative modifiers described above, it may negate two of the preferred enemy Force's Special Command Abilities, or may select a Special Command Ability it may only use when facing its enemy of choice.

ENVIRONMENTAL SPECIALIZATION

A Force with this Special Command Ability has mastered or prefers combat in certain, specific types of terrain or environments. Before game play begins, the specific nature of the Force's Environmental Specialization must be identified. The terrain types chosen for this specialization may be any type except for clear, and any other environmental conditions (including atmospheric density, darkness, gravity, and other conditions described on p. 28-62, TO and p. 92-95, AS) must be of a nonstandard nature (e.g. vacuum, night, high gravity, and so on).

A Force's Environmental Specialization must not include more than one terrain type or environmental condition at a time.

Once the specific terrain and/or environment is determined, the player must then choose a number of rules that apply from the Environmental Specialist Benefits List (p. 85), based on the Force's Experience Rating.

If the Force's Experience Rating is Green, Very Green, or Wet Behind the Ears, it will not receive any benefits for Environmental Specialization, but will suffer a -1 Initiative modifier if the focus of its specialization does not apply to the scenario, reflecting the inexperienced Force's focus on honing its skills to one particular tactical area. If its Experience Rating is Regular, it receives one of the listed benefits. If its Rating is Veteran or Elite, two different benefits may be applied. If the average Skill Rating is Heroic or Legendary, all three benefits may be applied, or two benefits may be selected and one of them may be applied twice.

In addition to applying any benefits for Environmental Specialization, a Force with this Special Command Ability will also suffer a -1 Initiative modifier when forced to play in a scenario under which the environmental condition they specialized in is not present.

ESPRIT DE CORPS

A Force with this ability is never subject to Forced Withdrawal or Morale Checks.

FALSE FLAG

This Force must also have the Off-Map Movement Special Command Ability. It may designate up to one-third of its units in a scenario as operating under a False Flag. These designated units are kept off-map until they enter the map on the third turn or later. On the turn the controlling player declares the False Flag units are entering the map, before initiative is rolled, roll 2d6. On a result of 8+, the unit has not been discovered as false, and may enter on any map edge, including the opposing player's home edge. In addition, the controlling player receives +2 to their Initiative rolls on the turn the False Flag Forces enter the map. On a result of 7 or less, the ruse was discovered and the units must enter from an edge on the half of the map containing their home edge.



ENVIRONMENTAL SPECIALIST BENEFITS LIST

Benefit	Rules
Improved Mobility	Reduce the MP cost for passing through any terrain of specialization by 1. However, this reduction may never lower movement costs below 1 MP.
Improved Combat	Apply a –1 To-Hit Modifier for all attacks made into and/or through the terrain or environmental condition of specialization (to a minimum modifier of +0).
Improved Initiative	Receive a +1 Initiative roll modifier if the selected terrain or environment type covers at least half of the map area.

FORCING THE INITIATIVE

The player controlling a Force with this SCA can “force the initiative” and gain bonuses to their Initiative rolls; the controlling player announces at the start of every turn, before the dice are rolled, whether they will use this ability or not. The bonus is equal to the number of enemy units they destroyed in the previous turn, reduced by the number of their own destroyed units.

For example, a Force with this capability receives a +2 Initiative bonus if it destroyed four enemy units and lost two of its own during the previous turn.

GROUND ATTACK SPECIALISTS

A portion of the Force specializes in air-to-ground attacks. Up to a third of the Force may be designated as Ground Attack Specialists. All weapon attacks from Ground Attack Specialists against non-airborne units receive a –2 To-Hit Modifier. Against all airborne targets (including airborne ground units, such as VTOLs and WiGEs), Ground Attack Specialists apply a +1 To-Hit Modifier. This ability can only be taken by aerospace units; any non-aerospace units in a Force with this ability do not gain its benefits.

HIGHLANDER BURIAL

Units in a Force with this ability receive a –1 To-Hit Modifier and deal an additional point of damage when making Death From Above attacks.

HIT AND RUN

At the start of any turn that a Force with the Hit and Run ability is outnumbered, its units can ignore the To-Hit Modifier for jumping, or receive a –1 To-Hit Modifier if not standing still or immobile.

OFF-MAP MOVEMENT

A player may only use this ability if the scenario allows for it. For example, an offensive force may not use this ability in breakthrough scenarios; in a hold-the-line scenario, the defending force cannot use off-map movement.

To use this ability, the controlling player writes down the exit hex and mapsheet of each unit moving off-map, these are the unit’s “written orders.” The player then writes down the hex, mapsheet and turn at which each unit will re-enter.

Before re-entering the map, an existing unit must remain off the map for the amount of time it would take to travel from its exit hex to its entrance hex. To calculate this travel time, count the number of blank half hexes along the map edges between the entrance and exit hexes. Then divide this number by the unit’s Running/Flanking MP (rounding fractions up). The result is the minimum number of turns the unit must remain off the map. The controlling player can delay the unit’s re-entry beyond this period if he desires, but must select the turn on which the unit will re-enter at the time it leaves the map.

Each returning unit re-enters the map in the End Phase of the turn noted on its “written orders.” At that time, the opposing player can check the unit’s orders to make sure the move was legal. If the move was illegal, the unit is considered destroyed and removed from play. (A move is illegal if the unit does not remain off the map for the required travel time or does not enter at the location and turn noted on its written orders.) In a campaign, these “destroyed” units may be brought back into play for a later battle, since they were actually lost rather than destroyed.

If a returning unit would re-enter the map in a hex containing an enemy unit, or containing a friendly unit that would violate the stacking limits of the hex, the returning unit is placed in a hex of the opposing player’s choice adjacent to the intended entry hex.

Once the returning unit has re-entered the map, any enemy unit adjacent to it may immediately attack it using the rules for *Point Blank Shots from Hidden units* (see p. 260, TW). This attack does not restrict the attacking unit’s ability to make attacks in the following turn.

Units off the map cannot engage in combat. If the opposing force destroys all the units remaining on the map before off-map units return, the battle is lost.

Initiative: Off-map units are not counted when determining how many units each side must move or fire when alternating turns during the Movement and Weapon Attack phases.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

OVERRUN COMBAT

When rolling Initiative for Overrun-capable forces, the controlling player of a Force with this SCA notes the die roll result's margin of success. Divide this margin by 2, rounding fractions down. The result equals the number of individual units that may move, designate their targets and fire before any other units move and fire. "Extra" successes, which occur when the player's divided margin of success exceeds the number of units available to move, do not carry over to later turns. For example, an Overrun-capable force makes an Initiative roll of 11, while its opponent rolls a 6. That gives the Overrun-capable force a margin of success of 5, allowing two units to move and fire before any opposing units may move (5 divided by 2 is 2.5, rounded down to 2).

Units employing Overrun Combat do not take part in the normal move/fire sequence and so do not count when determining how many units each side must move or fire when alternating turns during the Movement and Weapon Attack phases. Overrunning units make physical attacks as normal during the Physical Attack Phase.

RAPID STRIKE

In any scenario in which a Force with this ability is the Attacker, its units move onto the map as normal, but only half of the opposing Force may deploy at the start of the game. The remaining enemy units are divided into two groups of equal number that move onto the map from their home edge on Turns 2 and 3. The group which moves onto the map is chosen at random. The opposing force's player chooses the specific units that do not deploy in the first turn, as well as the composition of the two undeployed groups.



SAVAGES

All units in a Force with this Special Command Ability get the Blood Stalker SPA. No enemy unit may be targeted by the Blood Stalker ability by more than one unit in the Force. If there are not enough enemy units to target, the remaining units with this ability suffer the Blood Stalker SPA penalty for attacking another enemy unit. When a unit without a Blood Stalker target declares its fire during the Weapon Attack Phase, and there is an enemy no longer targeted by a Blood Stalker ability, that unit may then declare a new target for its Blood Stalker SPA.

SPECIAL PILOT ABILITY SPECIALIZATION

A Force with this Special Command Ability trains its units in the use of special tactics, represented by assigning Special Pilot Abilities to individual units. A player selecting the Special Pilot Ability Specialization must choose a single Special Pilot Ability in which to specialize.

The number of units which may be assigned the SPA to depends on the cost of the ability. The Special Pilot Ability Assignment Table shows how many units may be assigned the SPA based on its cost and the number of units in the Force. For example, the Lucky (1) SPA has a cost of 1, and may be assigned to one unit for every two units in the Force.

The SPA Specialization ability may be taken multiple times. If the same SPA is selected again, it may be assigned to units which do not already possess it, in accordance with the table above. If a different SPA is selected, it may be assigned using the table above, but cannot be given to a unit already assigned an SPA through this Special Command Ability.

SPECIAL PILOT ABILITY ASSIGNMENT TABLE

SP Cost of SPA	SPA Assigned Per X Number of units
1	2
2	3
3	4
4	6

SHARP SHOOTERS

A portion of the Force with this SCA specializes in long-range attacks at the expense of short-range accuracy. A third of the Force, rounded down, may be designated as Sharp Shooters and uses the following range modifiers in place of the standard range modifiers: Short +1, Medium +2, Long +3, Extreme +4. If used in conjunction with another ability that alters their range modifiers, Sharp Shooters receive a +1 To-Hit Modifier at Short range and a -1 modifier at Long and Extreme range.

TACTICAL ADJUSTMENTS

After Turn 3, enemy Forces do not gain any bonuses to their Initiative rolls from Special Command Abilities or Special Pilot Abilities.

TACTICAL EXPERTS (ENGINEERS)

During setup, this player controlling a Force with this ability may place two light buildings on the table per full company. These may be used for cover (as a fortification) or as a bridge.

TACTICAL EXPERTS (HIDDEN UNITS)

In any scenario that allows Hidden units, the player controlling a Force with this ability may place twice as many Hidden units (to a maximum of four extra units). If the scenario does not provide for Hidden units, this Force may place up to four Hidden units on their half of the map, at least 6 hexes away from any enemy units.

TACTICAL EXPERTS (PHYSICAL)

The player controlling a Force with this ability may choose to have all its units receive a +1 To-Hit Modifier for weapon attacks in exchange for a -1 To-Hit Modifier for physical and melee attacks. This choice is made in at the beginning of the Weapon Attack Phase, before making any attacks.

TACTICAL SPECIALIZATION

A Force with this Special Command Ability has mastered or prefers combat under certain, specific mission parameters, with predefined roles and options. Before game play begins, the specific nature of this tactical specialization must be identified. This can be either a preference for attacking over defending (or vice versa), or a preference for specific scenario types. As with the Enemy Specialization and Environmental Specialization, the specific nature and extent of these specializations is limited by the Force's Experience Rating.

If the Force's Experience Rating is Green, Very Green, or Wet Behind the Ears, it may not select any benefits for Tactical Specialization, but will still suffer a -1 Initiative modifier if the focus of its specialization does not apply to the scenario (reflecting the inexperienced Force's focus on honing its skills to one particular tactical area). If its Experience Rating is Regular, it may select only one of the benefits listed under the Tactical Specialist Benefits List (see below). If the Force's Experience Rating is Veteran or Elite, two benefits may be applied. If the Force's Experience Rating is Heroic or Legendary, all three benefits may be applied, or two benefits may be selected and one of them may be applied twice.

Note that the Attack and Defense Specialization benefits may both be taken at the same time, but will cancel each other out when taken together. However, this only occurs when each is taken once; if a Force of Heroic or Legendary Experience Rating selects the Attack Specialization benefits twice, and Defense Specialization benefits once, the result will be the equivalent of taking one "level" of Attack Specialization.

ZONE OF CONTROL

To create a "Zone of Control," any unit in a Force with this ability may enter an adjacent hex to an enemy unit that has not moved yet this turn, must have at least 1 unused MP remaining at the end of the Movement Phase, and must be directly facing the enemy unit. If these conditions are met, the enemy unit cannot enter either of the two hexes adjacent to its own and the one occupied by the enemy unit exerting the Zone of Control; this only applies to the current Movement Phase. Additionally, this only applies to ground movement; a unit expending Jumping or VTOL MPs can enter those hexes, though it cannot end the Movement Phase in those hexes.

Infantry: Infantry can only exert a zone of control against another infantry unit.

TACTICAL SPECIALIST BENEFITS LIST

Benefit	Rules
Attack Specialization	The force receives a +1 Initiative roll modifier when acting as the Attacker in a scenario of any type, but suffers a -1 Initiative roll modifier when acting as the Defender.
Defense Specialization	The force receives a +1 Initiative roll modifier when acting as the Defender in a scenario of any type, but suffers a -1 Initiative roll modifier when acting as the Attacker.
Scenario Specialization	Receive a +1 Initiative roll modifier if the force is taking part in a specified scenario type. For all other scenario types, the force suffers a -1 Initiative roll modifier.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

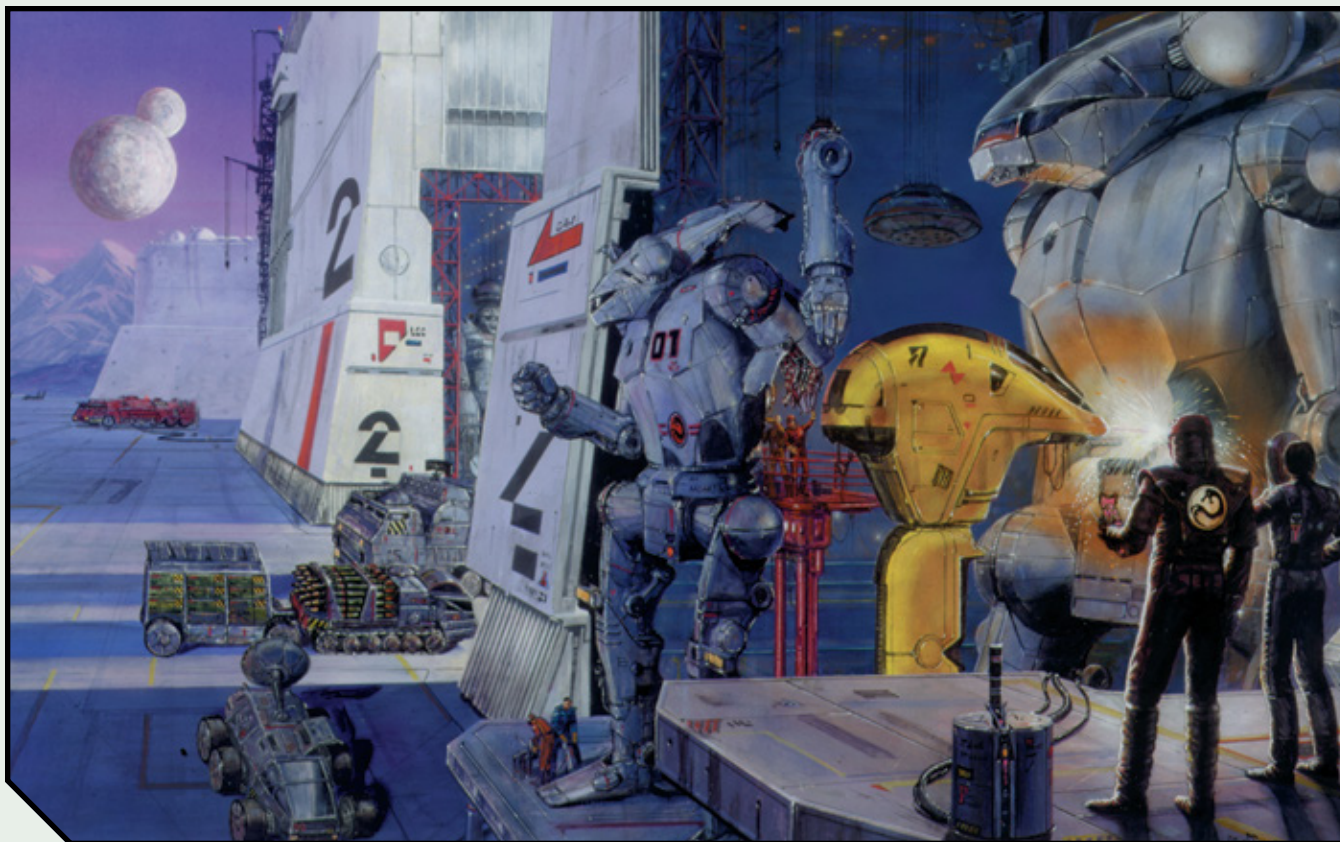
SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Draconis Combine technicians work to retrofit captured HCT-3F Hatchetman 'Mechs at a well-equipped firebase.

INNER SPHERE AT WAR CONVERSIONS

The following rules detail how to convert ISW Combat Commands into playable units in the *Abstract Combat System*, *Strategic BattleForce*, *BattleForce*, *Total Warfare* and *Alpha Strike*.

Converting ISW Combat Commands to ACS Formations, Combat Units and Combat Teams: Combat in ISW requires taking Combat Commands—either from a detailed army list or created during ISW game play—and converting them into ACS forces.

Converting ACS Combat Teams to SBF Formations and Units: ISW campaigns can be expanded by narrowing the scope and “zooming in” by transferring ACS forces to SBF game play.

Converting SBF Units to BattleForce, Alpha Strike and Total Warfare Elements: Players can drill down even farther by taking their ISW campaigns to familiar tactical levels in which every Element is represented.

The conversions tables provided at the end of this chapter cover the Late/Third Succession War Era (“3025”). Conversion tables for other Eras will appear in future supplements.

CONVERTING ISW COMBAT COMMANDS TO ACS FORMATIONS, COMBAT UNITS AND TEAMS

Abstract Combat System Formations

The first step in converting Combat Commands to *Abstract Combat System* play is to select the Combat Command to be converted. This Combat Command is the equivalent of the ACS Formation. Place all Aerospace wings into an Aerospace Formation and the rest of the components into a Ground Formation (see *Type*, p. 305, IO). To determine the Formation’s Combat Units, the Combat Command needs to be broken up into its constituent components. If using a Combat Command from a detailed army list (such as the Deployment Tables found in the Field Manuals), use the Standard Combat Command Compositions Table (p. 348, IO) to break up the BattleMech, Aerospace and conventional forces within the Combat Command. If the Combat Command was created during gameplay (see *Creating Combat Commands*, p. 353, IO), then the component forces have already been determined.

The Formation’s Skill Rating is equal to the Combat Command’s Experience Value (see *Experience Skill Value Table*, p. 328, IO). To determine the Formation’s Movement, Tactics and Morale values, follow Steps 4C through 4E under *Create ACS Formations* (see p. 330, IO) after creating its component Combat Units (see *Determine ACS Combat Units*, next page).

Determine ACS Combat Units

In order to assign stat blocks to Combat Units, their individual Weight stats must be derived.

BattleMech and Armor regiments: BattleMech and armor regiments need to be broken down further into their component battalions. Roll 1d6 and consult the Random Battalion Composition Table below, cross-referencing the roll result with the Weight of the overall Combat Command (or the Weight of the regiment if it was created during gameplay, see *Creating Combat Commands*, p. 353, IO). The result provides the Weights of the component battalions. Note each battalion as a separate Combat Unit. If a Combat Command is listed at 133% Strength on a TO&E or Deployment Table, add one extra 'Mech battalion (Combat Unit) with a Weight equal to that of the Combat Command.

Aerospace wings: For each Aerospace wing, roll 1d6; on a result of 6, the player may choose the Weight, while on a 1-5 the Weight is equal to the Combat Command Weight. If the Combat Command was created during gameplay (see *Creating Combat Commands*, p. 353, IO), then the Weight of each wing should have already been determined. Note each wing as a separate Combat Unit.

Infantry regiments and artillery battalions: Note each Infantry regiment and each artillery battalion as a separate Combat Unit. These units do not use a Weight statistic.

Once each Combat Unit is noted and its Weight has been derived, stat blocks can be assigned. For each Combat Unit, check the ISW Combat Command Conversion Tables for the appropriate faction (pp. 92-97) and go to the ACS Combat Unit sub-table. Using the type and Weight of the Combat Unit, find the corresponding row and use the listed stats for the Combat Unit.

The Combat Unit's Skill Rating is equal to the Combat Command's Skill Rating. To determine the Combat Unit's Tactics and Morale values, follow Steps 3G through 3H under *Create ACS Combat Units* (see p. 330, IO). If a final PV is required by the gamemaster, it is determined by multiplying it by the skill value modifier. A Unit with a skill value of 4 does not modify its PV.

Less Experienced Units: For each point that the Unit's Skill value is higher than 4, multiply the Unit's PV by 1 - (0.1 per Skill value above 4). Round normally; a Unit's highest possible Skill value is 7.

More Experienced Units: For each point that the Unit's Skill value is lower than 4, multiply the Unit's PV by 1 + (0.2 per Skill value below 4). Round normally; the minimum PV increase is 1 point per point of Skill value improvement. A Unit's lowest possible Skill value is 0.

RANDOM BATTALION COMPOSITION TABLE

Roll	Light	Medium	Heavy	Assault
1	3 light	1 light, 2 medium	1 medium, 2 heavy	1 heavy, 2 assault
2-3	3 light	3 medium	1 medium, 1 heavy, 1 assault	1 heavy, 2 assault
4-5	2 light, 1 medium	1 light, 1 medium, 1 heavy	3 heavy	3 assault
6	2 light, 1 medium	2 medium, 1 heavy	2 heavy, 1 assault	3 assault

Takashi is converting his *First Sword of Light* for ACS play. Looking at the Draconis Combine row of the Standard Combat Command Compositions Table (see p. 348, IO), Takashi finds he has an ACS Ground Formation containing 1 'Mech regiment, 3 armor regiments, 5 infantry regiments, 1 artillery battalion and an ACS Aerospace Formation containing 3 aerospace wings. The Combat Command's Experience Rating is Elite, thus the Formation's Skill Rating (for both the Ground and Aerospace Formations) is 2. The Formations' Move, Tactics and Morale Values will be determined after the Combat Units are assigned.

Takashi's 'Mech and armor regiments need to be broken down further into battalions before they can be assigned Combat Unit stats. Takashi consults the Random Battalion Composition Table (see below) and rolls 1D6 for his 'Mech regiment. He gets a 2, and since the *First Sword of Light*'s Weight is Heavy, that means its 'Mech regiment is comprised of a medium, a heavy and an assault battalion (Combat Units). Since the *First Sword of Light* is usually listed at 133% Strength on Deployment Tables, another heavy battalion is added (as it is the same Weight as the Combat Command). Takashi rolls again for each of his armor regiments and records the results. For his aerospace wings, he rolls 1D6 for each, resulting in a 3, 6 and a 1. The first and third wings are recorded as heavy (the same as the parent Combat Command), but since he rolled a 6 for the second wing, he can choose its Weight, and decides on a light wing. Takashi's infantry regiments and artillery battalion do not need any further breakdown or Weight designations. All Combat Units are assigned a Skill Rating of 2 (the same as the Formations).

With all his Combat Units recorded, Takashi can now assign them stat blocks. Looking at the Draconis Combine ISW Combat Command Conversion Tables (pp. 92-97), and the Combat Units sub-table, he finds each of his Combat Units and assigns them stats. His first Combat Unit is his medium 'Mech battalion, so he finds that on the table and records its stats as Size 2, Move 5, TMM 4, ARM 36, Short 9, Medium 9, Long 3, no special abilities, PV 102. If Julian (the gamemaster) needs the final PVs for any reason, Takashi will have to calculate them—in the case of his medium 'Mech battalion, it is PV 143 (102 x 1.4).

Next Takashi determines Tactics and Morale values for each Combat Unit. For his medium 'Mech battalion, Tactics is 3 (10, - 5 for Move, - 2 for Skill) and Morale is 5 (3 + 2 for Skill Rating). The medium 'Mech battalion Morale Triggers are 9, 6 and 3 (ARM of 12 at 75%, 50% and 25%).

With all his Combat Units statted, Takashi can calculate the parent Formation's Movement, Tactics and Morale values (using the rules found in *Create ACS Formations*, p. 330, IO). For the Ground Formation, the Move value is equal to its slowest Combat Unit, which is the artillery battalion with a 3. Tactics is a 5 (10, - 3 for Move, - 2 for Skill). Morale is 5 (3 + 2 for Skill Rating). The Aerospace Formation values are calculated the same way, which results in a Move of 6, Tactics 2 and Morale of 5.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Determine ACS Combat Teams

After the stat block for each Combat Unit is entered, its component Combat Teams can be determined. Each Combat Unit stat block listed in the ISW Combat Command Conversion Tables (see pp. 92-97) includes a "Composition" column which lists the Weights of its constituent Combat Teams. For each Combat Team listed in the composition column, consult the ACS Combat Team/SBF Formation sub-table and use the corresponding stat block.

The Combat Team's Skill Rating is equal to the Combat Command's Skill Rating. The Combat Team's PV does not need to be modified for skill, as the Combat Unit's final PV has already been determined above.

In order to use his medium 'Mech battalion Combat Unit in ACS play, Takashi needs to create stat blocks for its constituent Combat Teams (companies). He checks the "components" column for the medium 'Mech battalion on the Draconis Combine ISW Combat Command Conversion Tables (see p. 93), and sees that it is comprised of 3 medium 'Mech companies. Takashi notes the 3 Combat Teams on this Combat Unit's record sheet (see p. 383, IO). For their stat blocks, he copies the entry from the medium 'Mech company row of the Combat Team sub-table—Size 2, Move 5, Jump 2, TMM 2, ARM 12, Short 3, Medium 3, Long 1, no special abilities, PV 34. The Skill Rating for each Combat Team is 2.

CONVERTING ACS COMBAT TEAMS TO SBF FORMATIONS AND UNITS

Determine SBF Formations

Converting forces to *Strategic BattleForce* gameplay from ACS is a simple process. Each converted Combat Team directly corresponds to an SBF formation and uses the stats as-is from ACS, with the exception of PV and the addition of Tactics and Morale values. To determine the Formation's Tactics and Morale values, follow Steps 2H through 2I under *Create SBF Formations or ACS Combat Teams* (see p. 329, IO). The initial Formation PV is listed in the ACS Combat Team/SBF Formation sub-tables (see pp. 92-97) in parenthesis. If a final PV is required by the gamemaster, it is determined by multiplying it by the Skill value modifier. A Unit with a Skill value of 4 does not modify its PV.

Less Experienced Units: For each point that the Unit's Skill value is higher than 4, multiply the Unit's PV by 1 - (0.1 per Skill value above 4). Round normally; a Unit's highest possible Skill value is 7.

More Experienced Units: For each point that the Unit's Skill value is lower than 4, multiply the Unit's PV by 1 + (0.2 per Skill value below 4). Round normally; the minimum PV increase is 1 point per point of Skill value improvement. A Unit's lowest possible Skill value is 0.

Hanse is converting a Twenty-Second Avalon Hussars heavy 'Mech company from ACS for use as a Formation in Strategic BattleForce. He uses the same stats as in ACS, except for the base PV (he uses the PV in parenthesis instead, 114 in this case). The SBF Formation has a Skill Rating of 4 (Regular), and so would not have to adjust PV due to skill).

RANDOM SKILLS TABLE

1D6 (Wet Behind the Ears)	1D6 (Really Green)	1D6 (Green)	1D6 (Regular)	1D6 (Veteran)	1D6 (Elite)	1D6 (Heroic)	1D6 (Legendary)	Skill Rating
1-3	1	0	—	—	—	—	—	7
4-5	2-3	1	—	—	—	—	—	6
6	4-5	2-3	—	—	—	—	—	5
—	6	4-6	1-4	—	—	—	—	4
—	—	—	5-6	1-4	1-2	1	—	3
—	—	—	—	5-6	3-4	2-3	1-2	2
—	—	—	—	—	5-6	4-5	3-4	1
—	—	—	—	—	—	6	5-6	0

The Formation's Tactics is 6 (10 - 4 for Move and - 0 for Skill) and Morale is 7 (3 + 4 for Skill Rating). Hanse fills in the top box of the Strategic BattleForce Formation Record Sheet (see p. 382, IO) with the stat block.

Determine SBF Units

After the stat block for each Formation is finalized, its component Units can be determined as well. Each Formation stat block listed in the ISW Combat Command Conversion Tables (see pp. 92-97) lists the Weights of its constituent Units in the "Composition" column. For each Unit listed in the composition column, consult the SBF Unit sub-table and use the corresponding stat block.

The Unit's Skill Rating is equal to the Formation's Skill Rating. The Unit's PV does not need to be modified for skill as the Formation's final PV has already been determined above.

Optional—Random Skill Ratings: If players wish to add more variety to the Experience/Skill Ratings of their SBF Formations and Units, they may roll randomly for their Unit Ratings. Roll 1D6 for each Unit, based on the Experience Rating of the Combat Command; the result on the Random Skills Table above is the Unit's Skill Rating. Once new Skill Ratings for the Formation's Units are determined, average them together (round normally) and apply that Skill Rating to the Formation. The Formation's PV may need to be recalculated from its initial PV (see *Determine SBF Formations*, at right).

Next, Hanse needs stat blocks for the lances (Units) that make up his Twenty-Second Avalon Hussars heavy 'Mech company (Formation). He checks the "components" column for a heavy 'Mech company on the Federated Suns ISW Combat Command Conversion Tables (see p. 94), and sees that it is comprised of 1 medium 'Mech lance and 2 heavy 'Mech lances. Hanse creates an entry for each Unit. He uses the stats of the medium and heavy 'Mech lances from the SBF Unit sub-table. While Hanse can simply apply a Skill Rating of 4 (Regular) to each of these lances (the same Rating as the parent Formation), he decides he wants to mix things up a bit. He rolls a 6, 5 and a 3, so one medium and one heavy lance are assigned a 3 (Veteran) Skill Rating and one heavy lance retains the 4 Skill Rating. A side effect of these results is that the Unit's parent Formation, the heavy 'Mech company, is also upgraded to a Veteran Experience Rating with a Skill Rating of 3, and Tactics and Morale for the Formation are each lowered by 1.

CONVERTING SBF UNITS TO BATTLEFORCE, ALPHA STRIKE AND TOTAL WARFARE ELEMENTS

Players may wish to zoom in on their campaign even further, to *BattleForce*, *Alpha Strike* or *Total Warfare* levels. There are two methods to do so: randomly or by using Point Values (PV). All players must agree which method to use before the beginning of the *BF*-, *AS*- or *TW*-scale game.

Random Method

The random method makes use of any era-appropriate Random Unit Assignment Table for the campaign, as well as several tables from *Total Warfare*. First, note the Weight of the SBF Unit (lance) to be converted, and roll 1D6 on the Lance Weight Composition Table (see p. 265, *TW*) to determine the composition of the lance. Next, for each Element, roll on the appropriate Faction RAT's sub-table for the corresponding weight class (including any applicable Combat Command modifiers).

Skill Ratings: Once all Elements are chosen, Skill Ratings need to be assigned. For Elements to be used in *Total Warfare* games, roll 1D6 twice on the Random Skills Table—Expanded (see p. 273, *TW*) for each Element, cross-referencing the Unit's Experience Rating in order to determine the Element's Gunnery and Piloting Skills. Wet behind the Ears-rated Elements subtract 2 from each roll, and Really Green Elements subtract 1 from each roll. Heroic Elements add 1 to each roll and Legendary Elements add 2. Elements to be used in *BattleForce* or *Alpha Strike* play roll 1D6 only once and consult the Random Skills Table (see p. 90). Repeat for every SBF Unit being converted.

PV Method

This method allows the most flexibility for players to fine-tune their Force as they see fit. Take the SBF Unit's PV and multiply by 4. This is the total PV allowed for the lance in *TW/AS/BF* scale. The player may choose any Element of appropriate type and Era, as long as the standard number of Elements does not exceed the limit per Unit (typically four per lance, five per star, etc.) and the total PV is not exceeded.

Skill Ratings: Each Element may have any Skill Rating assigned, as long as it is within one step in either direction of the SBF Unit's Skill Rating; For example, an Element from a Regular-rated SBF Unit can be Green, Regular or Veteran. The PV for each Element must be modified by its Experience Rating (see *Adjusting for Skill*, p. 24, *AS*), and the combined PV of all the Elements still cannot the total PV allowed for the lance. If the Elements are being used for *Total Warfare* play, once the Experience Ratings are finalized, assign the Elements the average Gunnery and Piloting Ratings for that Experience Rating (eg. A Veteran-rated MechWarrior would be assigned a 3 Gunnery and 4 Piloting).

Battle Value (BV): Note that Battle Value is not used in these conversions. BV is used for balancing forces in *Total Warfare* scenarios, and while PV is similarly used for *BattleForce* scale and above, balancing forces in an *ISW* campaign is only achieved through the supervision of the gamemaster. PV is used in these conversion rules as a means to keep consistency between the different scales of play.

*Max is converting an SBF Unit for use in a Total Warfare-scale scenario. He feels more comfortable rolling the dice and seeing what he gets, as opposed to fiddling around with PVs. He has a Veteran Capellan assault 'Mech lance from the Chesterton Reserves, so first he rolls 1D6 on the Lance Weight Composition Table (p. 265, *TW*), resulting in a 5. Cross-referenced with the assault lance sub-table, he finds he has 1 heavy and 3 assault 'Mechs in the lance. For each 'Mech, he rolls 2D6, and consults the appropriate weight class table on the Capellan Confederation Random Unit Assignment Table (using Brush Wars, p. 132). The rolls yield him a CRD-3L Crusader, BLR-1G Battlemaster, STC-2C Striker and an AWS-8Q Awesome.*

*Max can assign each 'Mech a Veteran Skill Rating (Gunnery 3/Piloting 4) and complete the process, or he can roll randomly for the skills as well. He decides he would rather have variety and rolls 1D6 for each on the Random Skills Table—Expanded (see p. 273, *TW*) against the Veteran column, and garners a 2, 3, 1, and 4. The Crusader and Battlemaster receive a 4 Gunnery/5 Piloting and the Striker and Awesome receive a 3 Gunnery/4 Piloting.*

Katrina has an SBF Unit—a Donegal Guards Regular heavy 'Mech lance—that she wishes to convert into Alpha Strike Elements. She decides to use the PV method to choose her Elements, so she multiplies the Unit's PV of 44 by 4 for a total of 176 PV as her limit. She chooses a MAD-3R Marauder (35 PV), ARC-2S Archer (36 PV), TDR-5S Thunderbolt (43 PV) and a ZEU-6T Zeus (40 PV) for a total PV of 154. She still has PV to spend, allowing her to assign all the Elements a Veteran Skill Rating (3)—just one Rating away from the original Regular Rating—for a new PV total of 176, exactly the allowable PV total.

CONVERTING BACK FROM BATTLEFORCE, ALPHA STRIKE AND TOTAL WARFARE TO SBF AND ACS

At the strategic scales of *SBF* and *ACS*, players will find lot of simplicity and homogeny in the stat blocks. However, once forces are converted to the tactical scales of *BF*, *AS* and *TW*, a whole world of detail unfolds. If the GM agrees, players may use the *SBF* and *ACS* conversion rules found in *Interstellar Operations* (pp. 326-339) to bring any forces converted down to the tactical scale during the campaign back “upward” to *SBF* and *ACS* scale.

The Marik is pleased with how his Sixth Orloff Grenadiers have performed in the battles they've fought in the Total Warfare scenarios of Operation DAGGER, and feels that 'Mech for 'Mech and tank for tank, the Grenadiers are an interesting Combat Command. He would like to convert this Total Warfare force back into SBF and ACS scale, replacing their default stat blocks as shown in the ISW Combat Command Conversion Tables. He asks the gamemaster, Julian, for permission to do so; Julian denies his request, and places the Free Worlds League under interdiction as a show of caprice.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

ISW COMBAT COMMAND CONVERSION TABLE: CAPELLAN CONFEDERATION (3025)

ACS COMBAT UNIT CONVERSION TABLE												
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
Light Mech	1	6	NA	4	24	6	6	0	—	72	RCN	3LM
Medium Mech	2	5	NA	4	34	7	7	5	—	97		1HM2MM
Heavy Mech	3	4	NA	2	42	9	10	8	—	116		1AM1HM1MM
Assault Mech	3	4	NA	2	46	10	11	10	—	126		1AM2HM
Light Vehicle	1	8	NA	3	18	9	9	0	—	60	IT9,RCN	3LV
Medium Vehicle	2	7	NA	3	21	9	9	3	—	63	IT21	3MV
Heavy Vehicle	3	6	NA	2	30	12	12	3	—	81	IT15	3HV
Assault Vehicle	3	5	NA	2	31	13	13	4	—	86	IT11	1AV2HV
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art (SP)
Light Aerospace	1	6	NA	3	19	4	4	0	0	43	BOMB3, FUEL20	1MA2LA
Medium Aerospace	2	6	NA	2	21	6	6	1	0	50	BOMB4, FUEL20	1HA1MA1LA
Heavy Aerospace	3	6	NA	2	23	8	8	2	0	57	BOMB5, FUEL20	2HA1MA
DropShips	2	4	NA	1	36	9	12	9	0	75	AT24,IT132,MT108,VT300	3 DS
Infantry Regiment	1	1	6w	1	18	6	3	0	—	48	CAR54,IT54	3 Inf

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE													
Company	Size	Move	Transport			PV					Special	Composition	
			MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)			(PV SBF)
Light Mech	1	6	NA	2	2	8	2	2	0	—	24 (72)	RCN	3L
Medium Mech	2	5	NA	2	2	10	2	2	1	—	29 (88)		1L2M
Heavy Mech	3	4	NA	1	1	14	3	3	3	—	39 (118)		1M2H
Assault Mech	4	4	NA	1	1	18	4	5	4	—	48 (144)	FLK1	3A
Light Vehicle	1	8	NA	NA	3	6	3	3	0	—	20 (60)	IT3,RCN	3L
Medium Vehicle	2	7	NA	NA	3	7	3	3	1	—	21 (64)	FLK1,IT7	1L2M
Heavy Vehicle	3	6	NA	NA	2	10	4	4	1	—	27 (80)	FLK1,IT5	1M2H
Assault Vehicle	4	4	NA	NA	1	11	5	5	2	—	32 (95)	FLK1,IT1	1H2A
Artillery	2	3	NA	NA	1	10	1	0	0	--	33 (99)	ART-S4	3 Art (SP)
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13 (39)	BOMB1, FUEL20	3 LA
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17 (51)	BOMB1, FUEL20	3 MA
Heavy Aerospace	3	6	NA	NA	2	8	3	3	1	0	20 (60)	BOMB2, FUEL20	3 HA
DropShips	2	4	NA	NA	1	12	3	4	3	0	25 (76)	AT8,IT44,MT36,VT100	4 DS
Infantry Battalion	1	1f	6w	NA	1	6	2	1	0	—	16 (47)	CAR18, IT18	3TL, 2 Inf

SBF UNIT CONVERSION TABLE												
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special
Light Mech	1	6	NA	2	2	8	2	2	0	—	24	RCN
Medium Mech	2	5	NA	2	2	11	2	2	1	—	32	
Heavy Mech	3	4	NA	1	1	16	3	4	3	—	43	IF1
Assault Mech	4	4	NA	1	1	18	4	5	3	—	48	FLK1/0,IF1
Light Vehicle	1	8h	NA	NA	3	6	3	3	0	—	20	IT1,RCN
Medium Vehicle	2	7w	NA	NA	3	8	3	3	1	—	22	FLK1/0,IT3
Heavy Vehicle	3	5t	NA	NA	2	11	4	4	1	—	29	FLK1/0,IT1
Assault Vehicle	4	4t	NA	NA	1	11	5	5	2	—	33	FLK1/0
Artillery	2	3t	NA	NA	1	10	1	0	0	—	33	ART-S4
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13	BOMB1, FUEL20
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17	BOMB1, FUEL20
Heavy Aerospace	3	6	NA	NA	2	8	3	3	1	0	20	BOMB2, FUEL20
DropShip	2	4	NA	NA	1	9	1 1 1	2 1 1	1 1 0	0	19	AT2, IT11, MT9, VT25
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6

ISW COMBAT COMMAND CONVERSION TABLE: DRACONIS COMBINE (3025)

ACS COMBAT UNIT CONVERSION TABLE												
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
Light Mech	1	6	NA	4	27	9	6	0	—	78	RCN	3LM
Medium Mech	2	5	NA	4	36	9	9	3	—	102		3MM
Heavy Mech	3	4	NA	2	42	9	9	9	—	120		3HM
Assault Mech	4	4	NA	2	50	11	13	11	—	136		2AM1HM
Light Vehicle	1	8	NA	3	18	6	9	0	—	63	IT9,RCN	3LV
Medium Vehicle	2	7	NA	3	21	6	9	3	—	66	IT21	3MV
Heavy Vehicle	3	6	NA	2	27	9	12	6	—	81	IT15	3HV
Assault Vehicle	3	5	NA	2	31	11	13	7	—	87	IT11	1AV2HV
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art
Light Aerospace	1	6	NA	3	20	4	4	1	0	43	BOMB3, FUEL19	1MA2LA
Medium Aerospace	2	6	NA	2	21	6	6	2	0	52	BOMB4, FUEL19	1HA1MA1LA
Heavy Aerospace	3	6	NA	2	23	8	8	3	0	61	BOMB5, FUEL19	2HA1MA
DropShips	2	4	NA	1	36	9	12	9	0	75	AT60,IT96,MT84,VT156	3 DS
Infantry Regiment	1	1	6w	1	18	6	3	0	—	48	CAR54,IT54	3 Inf

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE														
Company	Size	Move	Transport			TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
			MP	Jump								(PV SBF)		
Light Mech	1	6	NA	2	2	9	3	2	0	—	26 (78)	RCN		3L
Medium Mech	2	5	NA	2	2	12	3	3	1	—	34 (103)			1H1M1L
Heavy Mech	3	4	NA	1	1	14	3	3	3	—	40 (120)			1M2H
Assault Mech	4	4	NA	1	1	18	4	5	4	—	48 (143)	FLK1		2A1H
Light Vehicle	1	8	NA	NA	3	6	2	3	0	—	21 (63)	IT3,RCN		3L
Medium Vehicle	2	7	NA	NA	3	7	2	3	1	—	22 (67)	FLK1,IT7		1L2M
Heavy Vehicle	3	6	NA	NA	2	9	3	4	2	—	27 (81)	FLK1,IT5		1M2H
Assault Vehicle	4	4	NA	NA	1	11	5	5	3	—	33 (99)	FLK1,IT1		1H2A
Artillery	2	3	NA	NA	1	10	1	0	0	--	33 (99)	ART-S4		3 Art
Light Aerospace	1	10	NA	NA	4	6	1	1	0	0	13 (39)	BOMB1, FUEL20		3 LA
Medium Aerospace	2	6	NA	NA	2	7	2	2	1	0	17 (51)	BOMB1, FUEL19		3 MA
Heavy Aerospace	3	6	NA	NA	2	8	3	3	1	0	22 (66)	BOMB2, FUEL28		3 HA
DropShips	2	4	NA	NA	1	12	3	4	3	0	25 (76)	AT20,IT32,MT28,VT52		4 DS
Infantry Battalion	1	1f	6w	NA	1	6	2	1	0	—	16 (47)	CAR18, IT18		3TL, 2Inf

SBF UNIT CONVERSION TABLE												
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special
Light Mech	1	6	NA	2	2	9	3	2	0	—	26	RCN
Medium Mech	2	5	NA	2	2	11	3	2	1	—	34	
Heavy Mech	3	4	NA	1	1	16	3	4	3	—	43	IF1
Assault Mech	4	4	NA	1	1	19	4	5	3	—	50	FLK1/0,IF1
Light Vehicle	1	8h	NA	NA	3	6	2	3	0	—	21	IT1,RCN
Medium Vehicle	2	7w	NA	NA	3	8	2	3	1	—	23	FLK1/0,IT3
Heavy Vehicle	3	5t	NA	NA	2	10	4	4	1	—	29	IF1,IT1
Assault Vehicle	4	4t	NA	NA	1	11	5	5	2	—	35	FLK1/0,IF1
Artillery	2	3t	NA	NA	1	10	1	0	0	—	33	ART-S4
Light Aerospace	1	10	NA	NA	4	6	1	1	0	0	13	BOMB1, FUEL20
Medium Aerospace	2	6	NA	NA	2	7	2	2	1	0	17	BOMB1, FUEL19
Heavy Aerospace	3	6	NA	NA	2	8	3	3	1	0	22	BOMB2, FUEL28
DropShip	2	4	NA	NA	1	9	1 1 1	2 1 2	1 1 0	0	19	AT5, IT8, MT7, VT13
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

ISW COMBAT COMMAND CONVERSION TABLE: FEDERATED SUNS (3025)

ACS COMBAT UNIT CONVERSION TABLE												
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
Light Mech	1	6	NA	4	26	9	9	1	—	85	RCN	1MM2LM
Medium Mech	2	5	NA	4	30	9	9	3	—	99		3MM
Heavy Mech	3	4	NA	2	38	12	12	8	—	117		1AM1HM1MM
Assault Mech	3	4	NA	2	40	13	13	10	—	122		1AM2HM
Light Vehicle	1	7	NA	3	21	6	9	3	—	60	IT9	3LV
Medium Vehicle	2	7	NA	3	24	6	9	3	—	66	IT21	3MV
Heavy Vehicle	3	6	NA	2	30	9	12	3	—	84	IT15	3HV
Assault Vehicle	3	5	NA	2	32	11	13	4	—	90	IT11	1AV2HV
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art
Light Aerospace	1	11	NA	4	18	3	3	0	0	39	BOMB3, FUEL18	3LA
Medium Aerospace	2	6	NA	2	21	6	6	0	0	54	BOMB3, FUEL20	3MA
Heavy Aerospace	3	5	NA	2	27	9	9	3	0	69	BOMB6, FUEL20	3HA
DropShips	2	4	NA	1	36	9	12	9	0	120	AT24,IT36,MT84,VT96	3 DS
Infantry Regiment	1	1f	6w	3	18	6	3	0	—	48	CAR54, IT54	3 Inf

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE													
Company	Transport									PV		Special	Composition
	Size	Move	MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	(PV SBF)		
Light Mech	1	6	NA	2	2	8	3	3	0	—	26 (78)	RCN	3L
Medium Mech	2	5	NA	2	2	10	3	3	1	—	33 (99)		1H1M1L
Heavy Mech	3	4	NA	1	1	12	4	4	3	—	38 (114)		1M2H
Assault Mech	4	4	NA	0	1	16	5	5	4	—	46 (139)	FLK1	2A1H
Light Vehicle	1	7	NA	NA	3	7	2	3	1	—	20 (60)	IT3	3L
Medium Vehicle	2	7	NA	NA	3	8	2	3	1	—	22 (66)	IT7	1L2M
Heavy Vehicle	3	6	NA	NA	2	10	3	4	1	—	28 (85)	FLK1,IT5	1M2H
Assault Vehicle	4	4	NA	NA	1	12	5	5	2	—	34 (101)	FLK2,IT1	1H2A
Artillery	2	3	NA	NA	1	10	1	0	0	--	33 (99)	ART-S4	3 Art
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13 (39)	BOMB1, FUEL18	3 LA
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	18 (54)	BOMB1, FUEL20	3 MA
Heavy Aerospace	3	5	NA	NA	2	9	3	3	1	0	23 (69)	BOMB2, FUEL20	3 HA
DropShips	2	4	NA	NA	1	12	3	4	3	0	40 (120)	AT8,IT12,MT28,VT32	4 DS
Infantry Battalion	1	1f	6w	0	2	6	2	1	0	—	16 (47)	CAR18, IT18	2 Inf, 3 Transport

SBF UNIT CONVERSION TABLE												
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special
Light Mech	1	6	NA	2	2	8	3	3	0	—	26	RCN
Medium Mech	2	5	NA	2	2	10	3	3	0	—	32	
Heavy Mech	3	4	NA	1	1	13	4	4	3	—	41	IF1
Assault Mech	4	4	NA	0	1	17	5	5	3	—	49	FLK1/0,IF1
Light Vehicle	1	7h	NA	NA	3	7	2	3	1	—	20	IT1
Medium Vehicle	2	7w	NA	NA	3	8	2	3	1	—	23	IT3
Heavy Vehicle	3	5t	NA	NA	2	11	4	4	1	—	31	FLK1/0,IT1
Assault Vehicle	4	4t	NA	NA	1	12	5	5	2	—	35	FLK2/0
Artillery	2	3t	NA	NA	1	10	1	0	0	—	33	ART-S4
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13	BOMB1, FUEL18
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	18	BOMB1, FUEL20
Heavy Aerospace	3	5	NA	NA	2	9	3	3	1	0	23	BOMB2, FUEL20
DropShip	2	4	NA	NA	1	9	1 1 1	2 1 1	1 1 0	0	30	AT2, IT3, MT7, VT8
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6



ISW COMBAT COMMAND CONVERSION TABLE: FREE WORLDS LEAGUE (3025)

ACS COMBAT UNIT CONVERSION TABLE													
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition	
Light Mech	1	6	NA	4	25	9	6	1	—	79	RCN	1MM2LM	
Medium Mech	2	6	NA	4	27	9	6	3	—	87		3MM	
Heavy Mech	3	5	NA	3	41	11	10	7	—	121		2HM1MM	
Assault Mech	3	5	NA	3	43	12	11	8	—	125		1AM1HM1MM	
Light Vehicle	1	9	NA	3	21	6	6	0	—	66	IT9, RCN	3LV	
Medium Vehicle	2	7	NA	3	21	9	9	3	—	69	IT21	3MV	
Heavy Vehicle	3	5	NA	2	27	12	12	6	—	81	IT15	3HV	
Assault Vehicle	4	4	NA	1	31	14	14	8	—	91	IT7	2AV1HV	
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art	
Light Aerospace	1	6	NA	3	19	4	4	0	0	43	BOMB3, FUEL17	1MA2LA	
Medium Aerospace	2	6	NA	2	20	5	5	0	0	47	BOMB3, FUEL17	2MA1LA	
Heavy Aerospace	3	5	NA	2	25	10	10	2	0	63	BOMB5, FUEL20	2HA1MA	
DropShips	2	4	NA	1	33	9	9	3	0	72	AT48, IT84, MT60, VT60	3 DS	
Infantry Regiment	1	1f	6w	3	18	6	3	0	—	48	CAR54, ITS4	3 Inf	

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE													
Company	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV (PV SBF)	Special	Composition
Light Mech	1	6	NA	2	2	8	3	2	0	—	25 (75)	RCN	3L
Medium Mech	2	6	NA	2	2	9	3	2	1	—	29 (87)		1L2M
Heavy Mech	3	5	NA	1	2	16	4	4	3	—	46 (138)		1A2H
Assault Mech	4	4	NA	1	1	18	5	5	4	—	50 (150)	FLK1	3A
Light Vehicle	1	8	NA	NA	3	6	3	3	0	—	22 (66)	IT3, RCN	3L
Medium Vehicle	2	7	NA	NA	3	7	3	3	1	—	23 (68)	FLK1, IT7	1L2M
Heavy Vehicle	3	5	NA	NA	2	9	4	4	2	—	27 (81)	IT5	1M2H
Assault Vehicle	4	3	NA	NA	1	11	5	5	3	—	32 (95)	FLK1, IT1	1H2A
Artillery	2	3	NA	NA	1	10	1	0	0	—	33 (99)	ART-S4	3 Art
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13 (39)	BOMB1, FUEL17	3 LA
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17 (51)	BOMB1, FUEL20	3 MA
Heavy Aerospace	3	5	NA	NA	2	9	4	4	1	0	23 (69)	BOMB2, FUEL20	3 HA
DropShips	2	4	NA	NA	1	11	3	3	1	0	24 (72)	AT16, IT28, MT20, VT20	4 DS
Infantry Battalion	1	1f	6w	0	2	6	2	1	0	—	16 (47)	CAR18, IT18	2 Inf, 3 Transport

SBF UNIT CONVERSION TABLE													
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	
Light Mech	1	6	NA	2	2	8	3	2	0	—	25	RCN	
Medium Mech	2	6	NA	2	2	10	3	2	1	—	31		
Heavy Mech	3	5	NA	1	2	15	4	4	2	—	44	IF1	
Assault Mech	4	4	NA	1	1	18	5	5	3	—	50	FLK1/0, IF1	
Light Vehicle	1	8h	NA	NA	3	6	3	3	0	—	22	IT1, RCN	
Medium Vehicle	2	7w	NA	NA	3	8	3	3	1	—	23	FLK1/0, IT3	
Heavy Vehicle	3	4t	NA	NA	1	10	4	4	1	—	29	IF1, IT1	
Assault Vehicle	4	3t	NA	NA	1	11	5	5	2	—	33	FLK1/0, IF1	
Artillery	2	3t	NA	NA	1	10	1	0	0	—	33	ART-S4	
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13	BOMB1, FUEL17	
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17	BOMB1, FUEL20	
Heavy Aerospace	3	5	NA	NA	2	9	4	4	1	0	23	BOMB2, FUEL20	
DropShip	2	4	NA	NA	1	8	1 1 1	1 1 1	1 0 0	0	18	AT4, IT7, MT5, VT5	
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9	
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6	

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

ISW COMBAT COMMAND CONVERSION TABLE: LYRAN COMMONWEALTH (3025)

ACS COMBAT UNIT CONVERSION TABLE												
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
Light Mech	1	6	NA	4	21	6	6	0	—	75	RCN	3LM
Medium Mech	2	5	NA	4	33	7	7	2	—	104		1HM2MM
Heavy Mech	3	4	NA	2	43	11	11	8	—	129		1AM2HM
Assault Mech	4	4	NA	1	51	15	15	12	—	147		3AM
Light Vehicle	1	7	NA	3	19	6	9	3	—	63	IT13	1MV2LV
Medium Vehicle	2	7	NA	3	24	7	9	4	—	75	IT19	1HV2MV
Heavy Vehicle	3	5	NA	2	32	10	12	6	—	93	IT12	1AV2HV
Assault Vehicle	4	4	NA	1	36	12	12	6	—	105	IT6	3AV
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art
Light Aerospace	1	11	NA	4	18	3	3	0	0	39	BOMB3, FUEL15	3LA
Medium Aerospace	2	6	NA	2	27	6	6	0	0	57	BOMB3, FUEL20	3MA
Heavy Aerospace	3	5	NA	2	24	9	12	6	0	69	BOMB6, FUEL22	3HA
DropShips	2	4	NA	1	36	9	12	9	0	75	AT24,IT96,MT96,VT180	3 DS
Infantry Regiment	1	1f	6w	3	18	6	3	0	—	48	CAR54, IT54	3 Inf

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE														
Company	Size	Move	Transport			TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
			MP	Jump								(PV SBF)		
Light Mech	1	6	NA	2	2	7	2	2	0	—	25 (75)	RCN		3L
Medium Mech	2	5	NA	2	2	10	2	2	0	—	32 (96)			3MM
Heavy Mech	3	4	NA	1	1	13	3	3	2	—	40 (120)			1M2H
Assault Mech	4	4	NA	0	1	17	5	5	4	—	49 (146)	FLK1		2A1H
Light Vehicle	1	7	NA	NA	3	6	2	3	1	—	20 (60)	IT3		3L
Medium Vehicle	2	7	NA	NA	3	7	2	3	1	—	23 (68)	IT7		1L2M
Heavy Vehicle	3	6	NA	NA	2	10	3	4	2	—	29 (88)	FLK1,IT5		1M2H
Assault Vehicle	4	4	NA	NA	1	12	4	4	2	—	35 (104)	FLK1,IT2		1H2A
Artillery	2	3	NA	NA	1	10	1	0	0	--	33 (99)	ART-S4		3 Art
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13 (39)	BOMB1, FUEL15		3 LA
Medium Aerospace	2	6	NA	NA	2	9	2	2	0	0	19 (57)	BOMB1, FUEL20		3 MA
Heavy Aerospace	3	5	NA	NA	2	8	3	4	2	0	23 (69)	BOMB2, FUEL22		3 HA
DropShips	2	4	NA	NA	1	12	3	4	3	0	25 (76)	AT8,IT32,MT32,VT60		4 DS
Infantry Battalion	1	1f	6w	0	2	6	2	1	0	—	16 (47)	CAR18, IT18		2 Inf, 3 Transport

SBF UNIT CONVERSION TABLE												
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special
Light Mech	1	6	NA	2	2	7	2	2	0	—	25	RCN
Medium Mech	2	5	NA	2	2	10	2	2	0	—	32	
Heavy Mech	3	4	NA	1	1	15	4	4	3	—	44	IF1
Assault Mech	4	4	NA	0	1	18	5	5	3	—	51	FLK1/0,IF1
Light Vehicle	1	7h	NA	NA	3	6	2	3	1	—	20	IT1
Medium Vehicle	2	7w	NA	NA	3	8	2	3	1	—	24	IT3
Heavy Vehicle	3	5t	NA	NA	2	11	4	4	1	—	32	FLK1/0,IF1,IT1
Assault Vehicle	4	4t	NA	NA	1	12	4	4	1	—	36	FLK1/0,IF1
Artillery	2	3t	NA	NA	1	10	1	0	0	--	33	ART-S4
Light Aerospace	1	11	NA	NA	4	6	1	1	0	0	13	BOMB1, FUEL15
Medium Aerospace	2	6	NA	NA	2	8	2	2	0	0	19	BOMB1, FUEL20,PNT1
Heavy Aerospace	3	5	NA	NA	2	8	3	4	2	0	23	BOMB2, FUEL22
DropShip	2	4	NA	NA	1	9	1 1 1	2 1 1	1 1 0	0	19	AT2, IT8, MT8, VT15
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6



ISW COMBAT COMMAND CONVERSION TABLE: PERIPHERY (3025)

ACS COMBAT UNIT CONVERSION TABLE												
Battalion	Size	Move	Transport MP	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special	Composition
Light Mech	1	6	NA	4	21	6	6	0	—	72	RCN	3LM
Medium Mech	2	5	NA	4	27	6	6	3	—	87		3MM
Heavy Mech	3	4	NA	2	36	9	9	9	—	114		3HM
Assault Mech	3	4	NA	2	40	10	10	10	—	120		1AM2HM
Light Vehicle	1	7	NA	3	18	6	6	3	—	57	IT9	3LV
Medium Vehicle	2	6	NA	2	21	6	6	3	—	63	IT21	3MV
Heavy Vehicle	3	5	NA	1	25	8	8	5	—	77	IT17	2HV1MV
Assault Vehicle	3	4	NA	1	29	11	11	6	—	90	IT11	1AV2HV
Artillery	2	3	NA	1	30	3	0	0	—	99	ART-S12	3 Art
Light Aerospace	1	6	NA	3	21	4	4	0	0	43	BOMB3, FUEL19	1MA2LA
Medium Aerospace	2	6	NA	3	21	5	5	0	0	47	BOMB3, FUEL19	2MA1LA
Heavy Aerospace	2	5	NA	2	23	7	7	2	0	57	BOMB4, FUEL20	1HA2MA
DropShips	1	4	NA	1	63	15	21	9	0	147	AT48, IT120, MT96, VT48	3 DS
Infantry Regiment	1	1f	6w	3	18	6	3	0	—	48	CAR54, IT54	3 Inf

ACS COMBAT TEAM/SBF FORMATION CONVERSION TABLE														
Company	Transport										PV		Special	Composition
	Size	Move	MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	(PV SBF)			
Light Mech	1	6	NA	2	2	7	2	2	0	—	24 (72)	RCN	3L	
Medium Mech	2	5	NA	2	2	9	2	2	1	—	29 (86)		1L2M	
Heavy Mech	3	4	NA	1	1	12	3	3	3	—	38 (115)		1M2H	
Assault Mech	4	4	NA	1	1	16	4	4	4	—	44 (132)		3A	
Light Vehicle	1	7	NA	NA	3	6	2	2	1	—	19 (57)	IT3	3L	
Medium Vehicle	2	6	NA	NA	2	7	2	2	1	—	21 (63)	IT7	1L2M	
Heavy Vehicle	3	4	NA	NA	1	9	3	3	2	—	28 (84)	FLK1,IT5	1M2H	
Assault Vehicle	4	3	NA	NA	1	11	5	5	2	—	34 (103)	FLK2,IT1	1H2A	
Artillery	2	3	NA	NA	1	10	1	0	0	--	33 (99)	ART-S4	3 Art	
Light Aerospace	1	11	NA	NA	4	7	1	1	0	0	13 (39)	BOMB1, FUEL19	3 LA	
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17 (51)	BOMB1, FUEL20	3 MA	
Heavy Aerospace	3	5	NA	NA	2	9	3	3	2	0	23 (69)	BOMB2, FUEL21	3 HA	
DropShips	1	4	NA	NA	1	21	5	7	3	0	49 (148)	AT16,IT40,MT32,VT16	4 DS	
Infantry Battalion	1	1f	6w	0	2	6	2	1	0	—	16 (47)	CAR18, IT18	2 Inf, 3 Transport	

SBF UNIT CONVERSION TABLE												
Lance	Size	Move	Transport MP	Jump	TMM	ARM	Short	Medium	Long	E (Aero)	PV	Special
Light Mech	1	6	NA	2	2	7	2	2	0	—	24	RCN
Medium Mech	2	5	NA	2	2	10	2	2	1	—	31	
Heavy Mech	3	4	NA	1	1	13	3	4	3	—	42	IF1
Assault Mech	4	4	NA	1	1	17	4	4	3	—	45	IF1
Light Vehicle	1	7h	NA	NA	3	6	2	2	1	—	19	IT1
Medium Vehicle	2	6w	NA	NA	2	8	2	2	1	—	22	IT3
Heavy Vehicle	3	4t	NA	NA	1	10	4	4	1	—	31	FLK1/0, IF1, IT1
Assault Vehicle	4	3t	NA	NA	1	11	5	5	1	—	36	FLK2/0, IF1
Artillery	2	3t	NA	NA	1	10	1	0	0	—	33	ART-S4
Light Aerospace	1	11	NA	NA	4	7	1	1	0	0	13	BOMB1, FUEL19
Medium Aerospace	2	6	NA	NA	2	7	2	2	0	0	17	BOMB1, FUEL20
Heavy Aerospace	3	5	NA	NA	2	9	3	3	2	0	23	BOMB2, FUEL21
DropShips (2)	1	4	NA	NA	1	16	2 2 1	3 2 2	2 1 0	0	37	AT4, IT10, MT8, VT4
Infantry Company	1	1f	NA	0	1	3	2	1	0	—	7	CAR9
Infantry Transport Lance	1	6w	NA	0	2	4	1	0	0	—	11	IT6

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

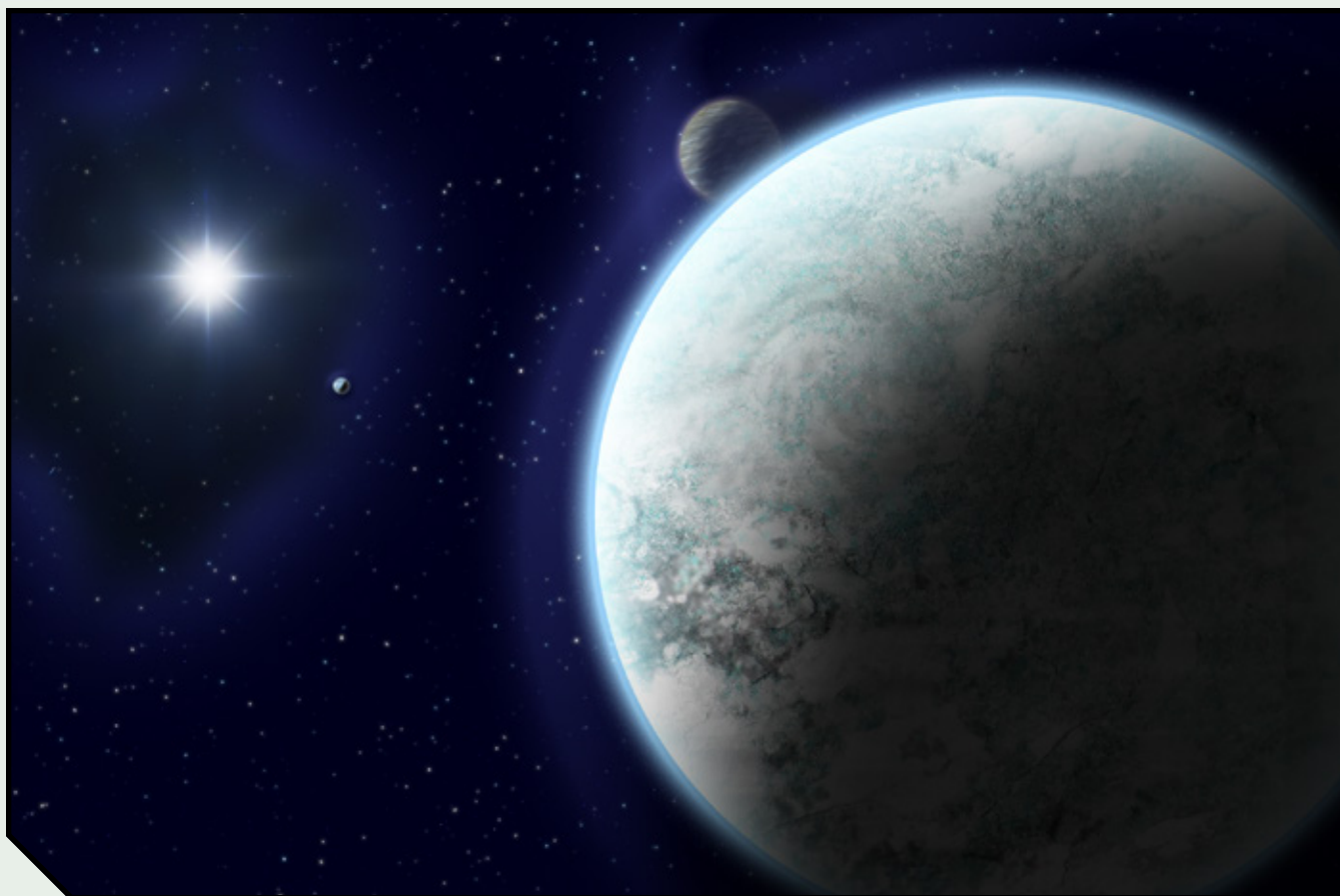
SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



The Great Houses attempt to exploit planets for whatever resources they have even when scraping the edge of a star's outer life zone.

SOLAR SYSTEM GENERATION

The following charts and rules provide gamemasters (GMs) with guidelines for producing detailed star systems, planets, and even inhabited worlds. They are not meant as firm rules, but simply guidelines for GMs and players who do not feel like creating systems purely from their own imagination.

These guidelines are distinctly unrealistic in some ways to support fun gaming, though care has been taken to include current astronomical theory where possible. Notes in each step generally explain where deviations from realism take place so that players interested in a more realistic—or less realistic—approach to system and planetary generation can modify the results or create their own system from scratch. In particular, the provided dice rolling methods tend to produce star systems lacking habitable planets, so players should feel free to override the dice rolls if they want a habitable planet or specific star system layout.

In the following guidelines, references to “current knowledge,” “modern astronomers” or the like refer to circa 2016 astronomy and astrophysics.

A blank star system and a blank planet construction sheet at the end of the book (pp. 184-185) may be used as a template for filling out important details.

Finally, there is a fair amount of math in this chapter, but it is intended as a guideline only. The math is presented for players who want the detail it offers. Unlike an algebra or calculus test, this chapter will not ask you to extract any variables from even the worst of its equations. Players will find everything they need for the equations and, in most cases, will have the option of bypassing the math by using a real-world example or making an arbitrary selection.

Quick-Start Rules: For the quick-start version of these rules, see *Basic World Building*, p. 140, *A Time of War Companion*.

THE PRIMARY

The defining feature of a star system is the star, also known as the system primary. This star affects planetary formation and determines the system's possibility of having habitable planets. Players should therefore determine the system primary first.

ALL THE PRETTY COLORS



The rules for generating the system primary are based on standard stellar classifications, as used by modern astronomers. The basic stellar classification is a quick way of describing a star's key characteristics: surface temperature and color (which is based on temperature), and size. From left to right, a stellar classification (for example, G2V) consists of a letter roughly describing the star's temperature, a number serving as a "decimal place" for the letter that more precisely defines the temperature, and a Roman numeral defining the star's size. A full treatment of stellar classifications can be found in astronomical reference books or on the Internet.

The stellar classes used in these guidelines are O, B, A, F, G, K, and M. Specialty designations like D, L, T, and Y classes are a level of detail beyond the scope of these rules. In order of temperature and their appearance on the Primary Stats Table, M represents the "reddest," coolest normal stars; Ks are warmer orange-ish stars; Gs are yellow stars; Fs are yellow-white stars; As are white or bluish-white; Bs are blue; and Os are deep blue (with most of their output actually in the ultraviolet range). The colors are related to temperature: cool stars are a deep red. As stars become hotter, their color shifts through orange, yellow, white, and eventually to blue shades.

After selecting the basic type, the other part of stellar classification widely used in *BattleTech* (especially the JumpShip recharging and system transit rules) is a suffix of 0-9 applied to O, B, A, F, G, K and M-type stars. This is a "decimal place" for the notation that helps gauge where a star is within its color classification. This is used because not all stars of a given type are created equal. For example, Tau Ceti (known as "New Earth" in *BattleTech*) is a yellow, G-type star, but it is noticeably cooler and dimmer than Earth's G-type star, Sol. To make these distinctions, 0 is set at the hot end of a spectral class while 9 is the cool end.

Sol is a G2 star, meaning it verges on the whitish F-class, while Tau Ceti is a G8 star, almost an orange-ish K-type star.

BattleTech has mostly overlooked a third element of stellar classification, a Roman numeral that describes the size of a star (and, roughly, its stage in the stellar lifecycle). This value is important because, for example, Betelgeuse and GJ 1046 are both (approximately) M2 stars, but Betelgeuse is a super giant while GJ 1046 is a dwarf star. These Roman numerals, those used in these rules, range from V (sub-dwarf) to I (super giant stars). In between those values, V refers to the common main sequent dwarfs (the longest phase of a star's lifecycle) and IV, III, and II refer to increasingly large giant stars that have left the main sequence of the stellar life-cycle. (Several other classes are used by astronomers, but are outside the scope of these rules.) While planetary atlases in various *BattleTech* publications do occasionally provide the size of the star, the system transit and recharge rules overlook this aspect. By default, the transit and recharge rules refer to a class V main sequence star, and thus these guidelines refer only to class V stars as well. Players should feel free to use non-main sequence stars for their systems, but this will alter transit and recharge times to values outside of the scope of existing transit and recharge rules. The effect of larger luminosity classes is discussed under *Hot, Hot, Hot!* (see p. 116).

Combined, these guidelines provide three-value stellar classifications. Betelgeuse's full classification is M2Ia while GJ 1046 is M2V, Sol is G2V and Tau Ceti is G8V.

Players should also note that some variation still exists within specific classifications. For example, Sol and Alpha Centauri-A (the brightest of the three Alpha Centauri stars) are both G2V, but Alpha Centauri A is somewhat more massive and brighter than Sol.

Star Type

Roll 2D6 and consult the desired Star Type column: Realistic, Life-Friendly, or Hot Stars.

The Realistic column is weighted to approximate the real distribution of stars in the galaxy, which heavily favors M-type stars (76 percent of stars). Type A, B and O stars, representing about 1 in 160, 1 in 800 and 1 in 3,000,000 of all stars, respectively, are too rare to be generated randomly from this column and so are left to players' arbitrary decisions or the use of the Hot Stars column.

The Life-Friendly column generates stars currently thought to favor terrestrial-type life and planets.

The Hot Stars column generates very rare hot stars, such as class A and class B stars, though these may not be suitable for hosting a star system. Because class O stars are so rare and are not supported by existing system transit and JumpShip rules, they are left as a special option (see *Options*, p. 115.)

All stars generated in this table are, by default, class V (main sequence) stars, as described in *All the Pretty Colors* (see above).

Once selected, details of the star can be found in the Primary Stats Table (see pp. 100-101).

PRIMARY GENERATION TABLE

Roll 2D6	Star Type (Realistic)	Star Type (Life-Friendly)	Star Type (Hot Stars)	Stellar Subtype	
				Roll 1D6	Subtype
2	F	M	B	1	1
3	M	M	B	2	2
4	G	M	A	3	4
5	K	K	A	4	6
6	M	K	A	5	8
7	M	G	A	6	0
8	M	G	A		
9	M	F	A		
10	M	F	A		
11	M	F	B		
12	F*	F	F		

*Or roll on the Hot Stars column, at the player's option.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

PRIMARY SOLAR STATS TABLE

Spectral Class	Charge Time (hrs)	Transit Time (days)	Safe Jump Distance (km)	Mass Mstar/Msun	Luminosity Lstar/Lsun	Radius Rstar/Rsun	Temp (K)	Lifetime (Million Years)	Habitability Modifier
M9V Red	210	1.96	75,004,186	0.10	0.00415	0.20	2,000.00	5,524,271.73	-3
M8V	209	2.09	82,196,817	0.10	0.00353	0.24	2,167.00	1,641,124.84	-3
M7V	208	2.22	90,202,821	0.10	0.00369	0.28	2,333.00	839,223.62	-3
M6V	207	2.34	99,120,198	0.20	0.0045	0.32	2,500.00	494,825.15	-2
M5V	206	2.45	109,082,750	0.20	0.00624	0.36	2,667.00	290,112.63	-2
M4V	205	2.56	120,212,270	0.30	0.0106	0.39	2,833.00	202,860.21	-2
M3V	204	2.67	132,669,349	0.30	0.0178	0.41	3,000.00	148,355.18	-2
M2V	203	2.86	146,630,886	0.40	0.0321	0.47	3,167.00	112,341.70	-1
M1V	202	2.96	162,304,787	0.50	0.0618	0.51	3,333.00	87,473.55	-1
M0V	201	3.14	179,917,035	0.50	0.125	0.55	3,500.00	69,679.56	-1
K9V Orange	200	3.31	199,737,005	0.50	0.144	0.55	3,640.00	56,568.54	-2
K8V	199	3.47	222,081,144	0.60	0.155	0.55	3,780.00	48,900.17	-2
K7V	198	3.70	247,343,861	0.60	0.187	0.55	3,920.00	42,611.81	-3
K6V	197	3.91	275,861,999	0.60	0.211	0.56	4,060.00	35,860.96	-2
K5V	196	4.12	308,167,706	0.70	0.266	0.57	4,200.00	31,743.05	-2
K4V	195	4.31	344,841,863	0.70	0.31	0.60	4,340.00	27,215.29	-1
K3V	194	4.62	386,486,041	0.70	0.335	0.65	4,480.00	24,392.42	0
K2V	193	4.85	433,890,326	0.70	0.401	0.71	4,620.00	21,963.06	0
K1V	192	5.18	487,899,662	0.80	0.443	0.80	4,760.00	19,859.40	0
K0V	191	5.48	549,564,113	0.80	0.543	0.91	4,900.00	18,027.37	0
G9V Yellow	190	5.82	620,061,930	0.80	0.57	0.92	5,010.00	16,423.49	0
G8V	189	6.19	700,990,216	0.80	0.65	0.93	5,120.00	15,012.49	0
G7V	188	6.57	793,654,769	0.90	0.68	0.94	5,230.00	13,765.54	0
G6V	187	7.01	900,260,278	0.90	0.79	0.95	5,340.00	13,013.49	0
G5V	186	7.47	1,023,057,406	0.90	0.84	0.96	5,450.00	11,989.27	0
G4V	185	7.96	1,164,589,626	0.90	0.98	0.97	5,560.00	11,074.44	0
G3V	184	8.53	1,328,301,833	1.00	1.15	0.99	5,670.00	10,518.04	0
G2V	183	9.12	1,517,879,732	1.00	1.23	1.02	5,780.00	10,000.00	0
G1V	182	9.75	1,737,804,380	1.00	1.46	1.19	5,890.00	9,287.67	0
G0V	181	10.43	1,993,326,049	1.10	1.72	1.25	6,000.00	8,851.70	0
F9V Yellow-White	180	11.19	2,290,901,666	1.10	2.03	1.30	6,140.00	8,443.85	0
F8V	179	12.01	2,638,513,835	1.20	2.41	1.35	6,280.00	6,753.60	0
F7V	178	12.89	3,044,526,612	1.30	2.62	1.35	6,420.00	5,394.80	-1
F6V	177	13.87	3,520,358,039	1.30	3.13	1.41	6,560.00	4,469.95	-1
F5V	176	14.94	4,079,039,960	1.40	3.75	1.48	6,700.00	3,752.72	-1
F4V	175	16.10	4,736,187,040	1.40	4.50	1.56	6,840.00	3,136.95	-2
F3V	174	17.36	5,510,895,632	1.50	4.94	1.57	6,980.00	2,693.29	-2
F2V	173	18.75	6,426,026,992	1.50	5.95	1.65	7,120.00	2,332.75	-3
F1V	172	20.26	7,509,968,038	1.60	6.56	1.67	7,260.00	2,009.63	-3
F0V	171	21.94	8,782,563,721	1.60	7.94	1.77	7,400.00	1,767.77	-4
A9V White	170	23.75	10,324,169,238	1.70	8.85	1.75	7,650.00	1,510.26	-4
A8V	169	25.77	12,147,011,068	1.80	10.90	1.81	7,900.00	1,288.06	-5
A7V	168	27.98	14,324,662,716	1.80	12.20	1.81	8,150.00	1,097.64	-5
A6V	167	32.76	16,931,308,504	1.80	15.10	1.89	8,400.00	944.42	-6
A5V	166	33.12	20,061,644,606	1.90	17.00	1.89	8,650.00	804.68	-6
A4V	165	36.09	23,844,066,419	2.10	23.20	2.09	8,900.00	686.35	-6
A3V	164	39.38	28,381,605,649	2.40	28.90	2.20	9,150.00	586.27	-7
A2V	163	43.02	33,849,108,637	2.50	39.40	2.44	9,400.00	501.68	-7
A1V	162	47.06	40,498,150,645	2.70	49.20	2.59	9,650.00	427.13	-7
A0V	161	51.54	48,582,277,772	2.90	67.40	2.88	9,900.00	364.78	-8
B9V Blue-White	160	56.53	58,430,461,862	3.40	119.00	2.73	11,710.00	312.5	-8
B8V	159	62.07	70,474,451,635	3.80	211.00	2.73	13,520.00	178.89	-8
B7V	158	68.25	85,203,218,902	4.50	404.00	2.94	15,330.00	113.4	-8
B6V	157	75.15	103,286,041,300	5.20	692.00	3.07	17,140.00	77.14	-9
B5V	156	82.86	125,563,499,718	5.90	1,160.00	3.26	18,950.00	55.24	-9
B4V	155	91.48	153,067,686,150	6.70	2,290.00	3.82	20,760.00	31.62	-9
B3V	154	101.15	187,115,967,958	7.60	4,890.00	4.71	22,570.00	20.05	-9
B2V	153	112.00	229,405,969,325	10.90	9,360.00	5.59	24,380.00	13.64	-10
B1V	152	124.19	282,066,836,091	14.20	19,400.00	6.97	26,190.00	8.39	-10
B0V	151	137.91	347,840,984,769	17.5	36,200.00	8.34	28,000.00	5.59	-10

PRIMARY SOLAR STATS TABLE (CONTINUED)

Spectral Class	Inner Life Zone Edge		Outer Life Zone Edge	
	Distance from star (km/AU)	Avg Temp (K)	Distance from star (km/AU)	Avg Temp (K)
M9V Red	2,319,138	0.016	306.22	275.40
M8V	3,208,345	0.022	309.01	274.13
M7V	4,373,667	0.029	307.77	273.95
M6V	5,735,514	0.038	307.88	273.32
M5V	7,346,411	0.049	307.81	273.55
M4V	8,957,198	0.060	308.21	273.67
M3V	10,606,623	0.071	307.52	274.00
M2V	13,437,355	0.090	308.81	273.66
M1V	16,407,340	0.110	306.37	273.99
M0V	19,622,213	0.132	305.51	274.76
K9V Orange	21,060,769	0.141	306.69	273.98
K8V	22,440,922	0.151	308.54	273.90
K7V	24,000,141	0.161	309.39	274.57
K6V	26,182,800	0.176	309.57	274.83
K5V	28,624,229	0.192	309.01	274.23
K4V	32,571,422	0.219	307.11	274.45
K3V	37,332,074	0.251	308.21	274.02
K2V	43,693,947	0.293	307.05	273.20
K1V	51,915,431	0.348	308.07	274.44
K0V	63,003,696	0.423	307.03	273.74
G9V Yellow	66,581,180	0.447	307.05	273.84
G8V	70,141,642	0.471	307.38	274.09
G7V	74,433,863	0.50	306.43	274.45
G6V	77,425,112	0.52	308.40	273.84
G5V	82,535,447	0.55	306.45	273.34
G4V	86,213,444	0.58	307.49	274.19
G3V	91,688,535	0.62	307.18	273.87
G2V	98,151,248	0.66	307.21	273.98
G1V	119,622,155	0.80	306.29	273.40
G0V	129,837,283	0.87	306.94	273.98
F9V Yellow-White	141,053,288	0.95	307.33	274.33
F8V	153,689,329	1.03	306.87	273.92
F7V	160,245,499	1.08	307.23	274.24
F6V	175,148,880	1.18	306.88	273.92
F5V	191,712,676	1.29	306.92	273.97
F4V	210,010,714	1.41	307.36	274.36
F3V	220,038,497	1.48	307.40	274.39
F2V	241,486,956	1.62	306.85	273.90
F1V	253,563,720	1.70	307.19	274.20
F0V	278,962,256	1.87	307.32	274.33
A9V White	294,514,601	1.98	307.45	274.44
A8V	326,849,966	2.19	306.51	273.60
A7V	345,792,134	2.32	307.43	274.42
A6V	384,701,313	2.58	306.97	274.01
A5V	408,187,457	2.74	306.88	273.93
A4V	476,847,145	3.20	307.20	274.22
A3V	532,211,330	3.57	306.72	273.79
A2V	621,417,251	4.2	307.10	274.13
A1V	694,412,846	4.7	307.27	274.28
A0V	812,765,280	5.5	307.26	274.26
B9V Blue-White	1,079,962,499	7.2	306.96	274.00
B8V	1,438,058,066	9.7	307.13	274.15
B7V	1,989,875,373	13.4	307.22	274.24
B6V	2,604,283,395	17.5	306.82	273.88
B5V	3,371,818,500	22.6	307.21	274.22
B4V	4,737,540,501	31.8	307.35	274.35
B3V	6,922,924,960	46.5	306.94	273.98
B2V	9,577,962,205	64.3	307.08	274.11
B1V	13,789,104,394	92.5	307.00	274.03
B0V	18,836,034,615	126.4	307.18	274.20

Legend

Spectral Class: Spectral class (all main sequence); an Internet search on "stellar classification" will explain these codes.

Charge Time (hrs): Length of time in hours required for a JumpShip to recharge by solar sail at the proximity limit (including standard jump points) of the star system.

Transit Time (days): Length of time in days required for a vessel to transit from the standard jump points to the middle of the life zone using the standard flight profile of 1G acceleration to midpoint, followed by 1G braking to the destination. For most stars, flight times to the inner and outer edges of the life zone will vary only minimally. (See *Transit Times*, pp. 258-259, SO).

Safe Jump Distance (km): This marks the proximity limit of the star, as measured in kilometers from the star's core. The standard (zenith/nadir) jump points are at the north and south "poles" of the proximity limit sphere.

Temperature of Star (K): The surface temperature of the star in degrees Kelvin. (Kelvin uses the same degrees as Celsius, but sets 0 K at absolute zero, which is about -273°C.)

Mass (Sol=1): Mass of the star as a multiple of Sol's mass.

Luminosity (Sol=1): Overall luminosity of the star (all frequencies: visible, UV, IR, and others) as a multiple of Sol's luminosity.

Radius: Radius of the star as a multiple of Sol's radius.

Lifespan: How long the star will survive on the main sequence. This figure has a significant impact on the habitability modifier for planets, as it generally takes billions of years for a planet to reach a stage suitable for terrestrial-style life (without artificial intervention). A star that leaves the main sequence rapidly (less than 2-3 billion years) is unsuited for a naturally habitable planet, and giant phases are too turbulent to sustain even terraformed planets for long.

Habitability Modifier: This modifier is used in the dice rolls to determine if a planet in the star's life zone can support Terra-type life. If the star's lifespan is over 200 million years, it may have planets that can be terraformed, but stars with lifespans of less than 6 billion years are less likely to be naturally habitable. The unusual "spike" in Habitability Modifier penalties in the cooler K-type stars is due to high UV levels at the ground resulting from increasing UV-A/B light output compared to cooler stars but low UV-C output (UV-C creates UV-shielding ozone in habitable atmospheres).

Life Zone Inner Edge: This is the innermost distance from the star that could host a habitable planet, given certain assumptions about Bond Albedo (0.4) and a low greenhouse factor, and acceptance of a high average surface temperature.

Life Zone Maximum: This is the outermost distance from the star that could host a habitable planet. It assumes a relatively dark planet with a strong greenhouse effect (possibly requiring toxic levels of CO₂), and temperatures below even the worst Ice Ages of Terra.

Distance from star (km): The distance from the star for the edge of the life zone (minimum or maximum).

Avg. Temp (K): Average temperature of the planet in degrees Kelvin. This is averaged from the poles to the equator. For comparison, Terra's average is currently about 287 K (14°C). Terra's noted peak during the Paleocene-Eocene Thermal Maximum, when the Arctic Ocean saw tropical conditions, had a planetary average of about 294 K (21°C). During the most recent Terra Ice Age, the global average was about 279 K (6°C).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Stellar Subtype

As discussed in *All the Pretty Colors* (p. 99), there are additional components to the stellar classification after the letter. To generate the subtype from a selection of subtypes between 0 and 8, roll 1D6 and refer to the Subtype column of the Primary Generation Table. Players should note that it is easy to substitute other types of dice to generate a full range of subtypes between 0 and 9, such as a D10 or D20. Also note that simple summations of dice (e.g., 2D4 or 2D6) do not generate an even distribution of results. For example, 2D6 is six times as likely to give a 7 as a 2.

Chuck just finished reading Edgar Rice Burroughs' Venus series, so he wants a star system where he can put an Amtor Mk II. (He'd be happy to use Venus in the Sol system, which was terraformed by the Terran Alliance, but ComStar's neglect has ruined the planet and the whole system is infested with Blakists. Chuck feels it's better to make his own star system than bother with Sol.) While Chuck has firm ideas about Amtor Mk II, he's less picky about the rest of the system and decides to roll randomly. To improve the chances of Amtor Mk II ending up in a habitable star system, Chuck uses the Life-Friendly column. He rolls 2D6 and gets a 10: an F-class star.

He then moves to figure out the subtype of Amtor Mk II's star. Since Chuck has his gaming dice on hand, he throws a D10, getting a 3. Amtor Mk II's star is an F3.

Chuck doesn't want the headache of putting Amtor Mk II around a giant star, so he's happy to accept the default size classification of main sequence dwarf. He notes the star is an F3V, a hot, short-lived star that just might last long enough to produce a habitable planet. Maybe. If it doesn't work out, Chuck can arbitrarily change the star to something that suits his needs.

THE PLANETS

The following steps provide guidance on populating a star system with planets, asteroids, and other objects.

Step 1: Generating Number of Orbits

To determine how many orbital slots a system has, roll 2D6 and add 3. The result is the system's number of orbital slots. The slots are not necessarily occupied by planets; see Step 3, Filling Orbital Slots.

Chuck hadn't thought much about the rest of the star system occupied by Amtor Mk II, so he is content to use the guidelines' suggestion of rolling 2D6+3 to find out how many orbits are in the system. He rolls a 5, meaning there are 8 orbits he needs to concern himself with (5 + 3 = 8).

This is an arbitrary value for the number of orbital slots. Modern astronomy cannot say if 5 to 15 is a realistic range, but it should produce systems suitable for gaming purposes.

Step 2: Placing Orbits

Distribution of the orbits of objects around a star can be an enormously complicated process, and a system's layout may change over time (millions of years) due to a variety of reasons. Some of these issues are discussed under *Realistic Planetary Placement* (see

ORBITAL PLACEMENT TABLE

Slot #	Base Location (AU)	Slot #	Base Location (AU)
1	0.4	9	38.8
2	0.7	10	77.2
3	1.0	11	154
4	1.6	12	307.6
5	2.8	13	614.8
6	5.2	14	1229.2
7	10	15	2458
8	19.6		

p. 118), and the topic is evolving rapidly as observations of extra-solar planets improve and increase. In the absence of a succinct and realistic guideline for distributing planets, these rules use an arbitrary method based on a modified Titius-Bode relationship.

To find the location of an orbital slot around a star (in terms of AU from the star) multiply the value in the Orbital Placement Table by the mass of the star (in multiples of Sol's mass). Slot 1 is the innermost orbit; slot 2 is the next orbit out, and so on. Continue outward for as many orbits as were calculated in Step 1. It is worth noting at this stage which orbits fall within the life zone of the star, as defined on the Primary Stats Table (see pp. 100-101.)

These orbits are assumed to be circular or nearly so ("low eccentricity"). For more elliptical planetary orbits, see *Options*, p. 115.

Chuck quickly jots down the positions of the 8 orbital slots. Since the radii of the orbital slots are multiplied by the mass of the primary (he'll need to name the star soon...), he checks the Primary Stats Table and finds that an F3V is 1.5 times as massive as Sol. Slot 1 is thus an orbit 0.4AU x 1.5 = 0.6AU in radius. Slot 2 is 1.05AU, slot 3 is 1.5AU, slot 4 is 2.4AU, slot 5 is 4.2AU, slot 6 is 7.8AU, slot 7 is 15AU, and slot 8 is 29.4AU.

Chuck notes from the Primary Stats Table that the star's life zone ranges from about 220 to 446 million kilometers, or 1.48 to 3 AU. Orbits 3 and 4 are inside the life zone.

Transit Times: Once the orbital slots for a system are determined in terms of AU, it is relatively simple to convert these values to kilometers or meters to estimate transit times from the standard jump points to any planet, or between any two planets. The equations and supporting explanations players will need are found in the *System Transit* rules. (see p. 259, SO).

Transits from a zenith or nadir point to a planet in the life zone may use the Transit Time column of the Primary Stats Table (see p. 100). Transit times for planets outside the life zone (or players who want a very accurate value for transit to a planet in the life zone) need to use a little geometry, specifically the Pythagorean Theorem ($A^2+B^2=C^2$). The transit distance from a zenith or nadir point to the planet is the hypotenuse of a right triangle formed by the jump point, star, and planet. The Safe Jump Distance column of the Primary Stats Table gives the distance from the jump point

to the star (distance A). Step 2: Placing Orbits above, will determine distance from the star to the planet's orbit (distance B). Distances A and B must be converted to meters (multiplying distances in kilometers by 1,000 and multiplying distances in AU by 149,597,871,000). Then the distance from the jump point to the planet is calculated using the following equation:

$$\text{Transit Distance} = \sqrt{[(\text{Distance A})^2 + (\text{Distance B})^2]}$$

Transit times may then be found using the Time equation (see p. 259, SO). This process assumes the orbits are fairly circular, but elliptical orbits are easy to handle. Players who have created planets with elliptical orbits should simply use the actual distance from the star to the destination planet at the time the transiting vessel(s) would arrive there, rather than an average distance value, for Distance B in the Transit Distance Equation.

Transits between two planets are a bit trickier because planets move with respect to each other, but it is convenient to approximate planet separation as the average between maximum and minimum. This average separation is approximately the distance from the outer of the two planets to the star. Players need only use the distance of the outer planet's orbital slot from its primary and convert that to meters, which may then be used in the Time equation. Minimum separation flights are also easy to calculate; the transit distance is simply the difference between the inner planet's and outer planet's distances from the primary. Maximum separation flights start by adding the distances of the inner and outer planet from the primary, and multiply that value by 20 percent to represent a "dogleg" around the sun (a straight flight between planets at maximum separation would otherwise involve a flight through the star, which is challenging for most life support systems).

Finally, transits from a planet to the nearest edge of the Proximity Limit are relatively easy to calculate. Subtract the planet's orbital slot distance from the star from the distance given in the Safe Jump Distance column of the Primary Stats Table. (If the value is negative, then the planet is outside the Proximity Limit of the system and a vessel only needs minutes or hours to clear the planet's own small Proximity Limit.) Examples for the Sol System are found on p. 133, SO.

Step 3: Filling Orbital Slots

Beginning with the innermost orbital slot, roll 2D6 and refer to the corresponding row of the Object Type Table. If the orbital slot is in the life zone or closer to the primary, use the "inner system" column to find which row is appropriate. If the orbital is beyond the life zone, use the "outer system" column. Then follow the guidelines below the Object Type Table to work out the details of each object. Day Length is addressed under Step 4.

In addition to empty slots, a number of objects can appear in the primary orbital slots of a system:

- An asteroid belt is a ring of debris circling the star and includes rocky inner system belts and icy outer system belts (i.e., Kuiper Belts and inner Oort Clouds).
- Dwarf terrestrial planets (in this document) are individual small bodies of rock or ice separate from an asteroid belt, but large enough to form a sphere due to their own gravity (for example, Pluto or PSR B1257+12's companion A). Note that asteroid belts may come with dwarf terrestrials (see Step 3a).
- Terrestrial planets should not be confused with habitable planets—the term "terrestrial planet" herein refers to any sizable rocky or icy body larger than a dwarf terrestrial (for example, Mercury, Mars, Venus, and Earth; Ganymede would be an icy example if it were a planet and not a moon).
- Giant terrestrials ("Super Earths") cover the unusual, large extra-solar planets recently discovered (as of 2016). They do not seem to be gas giants or ice giants, but may straddle the divide between terrestrial planets and their larger, fluid brethren. As such, a habitable surface is improbable (though not entirely out of the question); giant terrestrials may possess very dense atmospheres and "oceans" of water hundreds of kilometers deep, in addition to crushing gravity. (Probable real examples include Gliese 581c and 581d.)
- Gas giants address planets that are mostly hydrogen and helium by mass and typically very large; Saturn and Jupiter are examples.
- Ice giants might be called "gas midgets." They are large planets with massive hydrogen/helium atmospheres making up less than half their mass and thick mantles of "ice" (actually super-heated stews of water and other light compounds); Neptune and Uranus are two examples.

OBJECT TYPE TABLE

Type	Inner System 2d6	Outer System 2d6	Base Diameter (km)	Diameter Modifier (km)	Density (g/cm ³)	Day Length (hours)
Empty	2-3	2-3	N/A	N/A	N/A	N/A
Asteroid belt	4	4	See below	See below	1D6 ^{1.15}	2D6
Dwarf terrestrial	5	5	400	+100 x 3D6	1D6	3D6+12
Terrestrial	6-7	9	2,500	+1,000 x 2D6	2.5 + 1D6 ^{0.75}	3D6+12
Giant terrestrial	8	10	12,500	+1,000 x 1D6	2 + 1D6	4D6
Gas giant	9-10	6-7	50,000	+10,000 x 2D6	0.5 + 2D6÷10	4D6
Ice giant	11+	11+	25,000	+5,000 x 1D6	1 + 2D6÷10	4D6

Note: Do not round density values.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Chuck has already decided Amtor-2 will be in Slot 4 (placing it in the life zone of the star), but that leaves 7 other orbital slots. He notes that orbit slots 5 to 8 are beyond the life zone, so their rolls will have a +2 modifier. Chuck quickly rolls up the other slots just to see what's in the system. He rolls 2D6 repeatedly to get: 4, 8, and 7 for the inner orbital slots, and modified (+2) rolls of 7, 10, 9, and 13. So Slot 1 is an asteroid belt, Slot 2 is a giant terrestrial, Slot 3 is a terrestrial planet, Slot 5 (beyond the life zone) is another terrestrial planet, Slot 6 is a gas giant, Slot 7 is another gas giant, and Slot 8 is an ice giant.

For his own amusement, Chuck calculates the details on the giant terrestrial in Slot 2, the terrestrial planet in Slot 3, and the gas giant in Slot 6.

Rolling the specified 1D6 and obtaining a 5 for the diameter of the giant terrestrial, Chuck finds its diameter to be 12,500 kilometers + 5 x 1,000 kilometers = 17,500 kilometers. The density calls for another 1D6 roll, which gives a 3, so the planet's density is 2 + 3 = 5 grams per cubic centimeter.

Chuck rolls 2D6 for the terrestrial planet's diameter and gets a 3, meaning it is 2,500 kilometers + 3 x 1,000 = 5,500 kilometers—pretty small, like Mars or Mercury. For its density, Chuck rolls 1D6, getting a 4, and raises that to the 0.75 power. On a handy scientific calculator, $4^{0.75}$ comes to 2.83. The planet's density is $2.5 + 2.83 = 5.33$. The planet turns out to be quite similar to Mercury in size and density.

Finally, Chuck rolls up the gas giant. He rolls 7 for the diameter and 9 for the density. The diameter is thus 50,000 kilometers + 7 x 10,000 = 120,000 kilometers, very similar to Saturn. The density is $0.5 + 9 \div 10 = 1.4 \text{ g/cm}^3$, a very dense gas giant that probably has a large, rocky core.

Step 4: Planetary Details

Now determine the finer details of the objects in the system's orbital slots: number of moons, habitability, gravity, and so forth.

Common Details

Several features, like gravity, apply to any object in a system. Other objects, like asteroid belts, have details that are handled separately.

Surface Gravity: The gravity of a planet (or other spherical object) in Gs may be calculated with the following equation:

$$\text{Gravity} = (\text{Diameter} \div 12742) \times (\text{Density} \div 5.5153)$$

Diameter is in kilometers (km) and Density is in grams per cubic centimeter (g/cm^3). The equation is a simple ratio with Terra's equivalent diameter (12,742 kilometers) and density (5.5153 g/cm^3). To find the surface gravity in meters per second squared, multiply the value in Gs by 9.8 m/s^2 . In the case of ice and gas giants, the diameter represents gravity at an altitude where atmospheric pressure is 1 bar.

This equation for gravity assumes the object is spherical and has a relatively slow spin (i.e., its spin will not lower equatorial gravity by more than 1-2 percent). If the object is not spherical (like a lumpy asteroid) but still has a relatively slow spin, then the resulting value can be taken as an average, overall value for gravity. Specific

values at different locations on an asteroid may be calculated using Newton's Law of Universal Gravitation. (Gravitic acceleration in $\text{m/s}^2 = G \times m / r^2$, where G is the universal gravitational constant, m is the mass of the asteroid, and r is the radius from a given location on the asteroid to its center of mass. The mass of an asteroid may be calculated from the density of the asteroid and a volume based on its average diameter.)

The effect of high spins is also beyond the scope of these rules, but is a straightforward subtraction of centripetal acceleration from local gravity. (Note that should the value ever be negative, the object will probably fly apart, so keep the spin slow enough for the object to stay in one piece.)

Chuck is shamelessly copying Venus's statistics for Amtor-2, so he already knows the surface gravity (0.904 G). However, were he to calculate the gravity of Amtor-2, the calculation would use Amtor-2's density of 5.204 g/cm^3 and diameter of 12,103.6 kilometers. Putting those into the equation, Chuck would find:

$$\text{Gravity} = (12,103.6 \div 12,742) \times (5.204 \div 5.5153) = 0.896 \text{ G, or pretty close to reality.}$$

Escape Velocity and Orbital Velocity: Though rarely an issue due to the powerful, efficient fusion rockets found in the *BattleTech* universe, these quick calculations can easily be performed once the diameter and density of a planet are known. Escape Velocity affects atmospheric density and is used in later calculations, while Orbital Velocity is "nice to know" information.

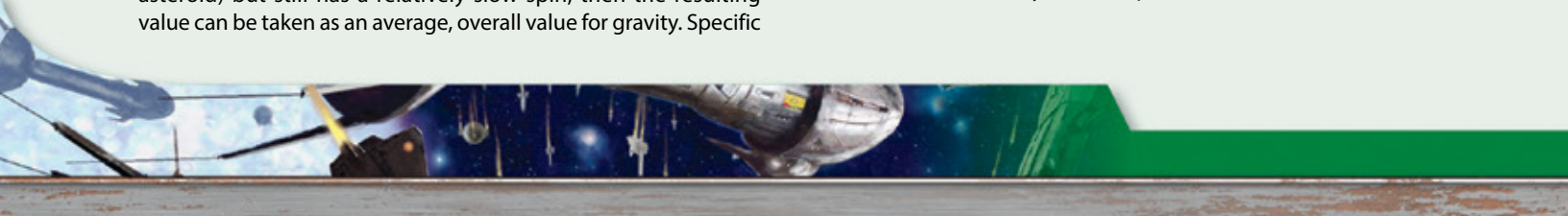
The Escape Velocity of a planet (the minimum velocity at which a coasting spacecraft will fly away from the planet, no longer tethered by the planet's gravity), in meters per second, may be calculated with the following equation:

$$V_e = 11,186 \text{ m/s} \times (\text{Diameter} \div 12,742) \times \sqrt{(\text{Density} \div 5.5153)}$$

In this equation, Diameter is the diameter of the planet in kilometers and Density is the density of the planet in g/cm^3 . Again, this is a ratio with respect to Terra's diameter (12,742 kilometers), density, and escape velocity (11,186 m/s). To convert escape velocity to hexes per turn, divide V_e by 300. To convert to kph, multiply V_e by 3.6.

The velocity of a circular, low-altitude orbit (within a few hundred kilometers of the surface) may be found by dividing V_e by the square root of 2 (1.414 as a quick approximation). While not related to Solar System Generation, it is a useful value to begin determining how long a spacecraft lingers near a given point over an object (such as to determine how many turns may be spent orbitally bombarding a map) or how long a coasting spacecraft takes to circle an object for additional opportunities to de-orbit and attack ground targets.

Since Amtor-2 is a copy of Venus in many ways, Chuck could check handy online resources to find Venus's escape velocity, but not every planet he makes is going to copy something on the Internet so he decides practice can't hurt. He plugs the diameter and density into the equation and obtains:



$$V_e = 11,186 \text{ m/s} \times (12,103.6 \div 12,742) \times \sqrt{(5.204 \div 5.5153)} = 10,321 \text{ m/s}$$

When the Internet is accessible again, Chuck finds the calculation was extremely close to the real value of 10,460 m/s. For his notes, he divides his answer by 1.414 to find the velocity of a low altitude orbit around Amtor-2: 7,300 m/s. (As one hex per turn on the high altitude map is 300 m/s, this is a bit over 24 hexes per turn.)

Chuck is also curious about the giant terrestrial planet in Slot 2, which has a diameter of 17,500 kilometers and a density of 5 g/cm³. The result isn't as high as he was anticipating, but it's still high enough to hold onto a lot of atmosphere and challenge pre-fusion rocketry:

$$V_e = (17,500 \div 12,742) \times \sqrt{(5 \div 5.5153)} \times 11,186 \text{ m/s} = 14,628 \text{ m/s}$$

Year Length: The time it takes a planet to circle its primary is:

$$T = 769,107 \times \sqrt{[R^3 \div (G \times M)]}$$

In this equation, T is the time in seconds (1 Earth year = 31,536,000 seconds), R is the orbital radius in meters (1 AU = 149,597,871,000 meters), and M is the mass of the star in kilograms. (Sol's mass is 2×10^{30} kg; use the multipliers on the Primary Stats Table to find the local star's mass.) Those numbers involve some rounding; players may find more exact values online or in a handy encyclopedia.

The equation is versatile and will work for calculating the orbits of moons and manmade satellites around objects other than stars, assuming R and M are replaced with the appropriate orbital radii and mass of the orbited object. It will also work for elliptical orbits if R is replaced with the semi-major axis of the orbit.

The above equation is a simplification of the full orbital period equation, condensing several constants. The detailed equation, for interested players, is: $T = 2 \times \pi \times \sqrt{[R^3 \div (G \times M)]}$, where G is the universal gravitational constant of $6.674 \times 10^{-11} \text{ m}^3 / (\text{kg} \times \text{s})$.

Chuck considers calculating the years for every planet in the system since he can plug the equation into a spreadsheet pretty quickly, but he's still got to write a lot of history behind Amtor-2 (as he's shortened the name) before the game starts. So he only calculates the year length of Amtor-2. Jumping ahead a bit, he's checked the Primary Stats Table and finds that the

fourth orbital slot, which is 2.4AU in radius, is in the life zone of the star and suited to be warm Amtor-2.

Chuck notes Amtor-2's star is 1.5 times Sol's mass (totaling 3×10^{30} kg), and 2.704AU is 3.6×10^{11} m. He plugs these into the equation:

$$2 \times 3.14159 \times \sqrt{[(3.6 \times 10^{11})^3 \div (6.674 \times 10^{-11} \times 3 \times 10^{30})]} = 95,913,533 \text{ seconds}$$

96 million seconds is not a convenient number for the length of a year, so Chuck converts that to Terran years by dividing with 31,536,000. Amtor-2's year is 3.04 Terran years long.

Year Length, Alternate: A quicker conversion from orbital distance to year length is the following equation:

$$T_y = \sqrt{[R_a^3 \div M_s]}$$

In this equation, Ty is the planet's orbital period in terrestrial years, Ra is the orbital radius in AU, and Ms is the mass of the local star in multiples of Sol's mass (taken from the Primary Stats Table). The number resulting from this equation for year length will vary slightly from the first equation due to small approximations in this one.

Day Length: Use the roll listed in the Object Type Table (see p. 103) with the below notes and exceptions to determine Day Length.

Asteroids: Small and medium asteroids (see *Asteroid Belts*, p. 106) generally have 2- to 12-hour rotations, with averages of about 4-6 hours. Some asteroids have very long rotations, with examples of up to 1,200 hours observed. Very slow and very fast rotations may be implemented at players' discretion.



INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Because each asteroid in a belt will have a different rotational period, it is recommended that rotational periods for asteroids are only calculated as they are visited, thus protecting player's sanities from calculating millions of day lengths.

Dwarf terrestrials (including those in asteroid belts) and terrestrial planets likewise include some known extreme variations from these guidelines. In fact, there are as many exceptions (Mercury and pre-terraforming Venus) as examples (Terra, Mars), so players are encouraged to consider alternate rotations. Planets close to a star will tend to have rotations similar to their year length (like Mercury), while habitable planets should have day lengths similar to Terra to moderate day and night temperatures.

Giant terrestrials, ice giants, gas giants: Unlike lesser planets, these behemoths tend to keep the rotation imparted to them during their formation, which seems to fall into the 8- to 16-hour range (based on the limited sample of Jupiter, Saturn, Uranus, and Neptune).

Chuck was going to pick 24 hours for Amtor-2, but decides to roll. As a terrestrial planet, Amtor-2 has a day of 3D6+12 hours. Rolling, Chuck gets 16 for a 28-hour day, which allows him to keep a Terran-standard week (with 6 rather than 7 days, and who couldn't use an extra 4 hours per day?).

Asteroid Belts

Asteroid belts are generated through several steps. First, a belt's basic population multiplier is calculated compared to Sol's asteroid belt. Second, the number of significant asteroids is calculated based on the belt's density and its distance from the primary. These steps are repeated for each asteroid belt in the system. The belt's basic population multiplier is calculated as follows:

$$\text{Asteroid Population Multiplier} = (\text{Belt's Orbit} \div 2.8) \times [1D6 \div 3]^2$$

In this equation, the belt's orbit is the orbital distance from the primary in AU. Do not round at any step in the calculation.

This value of asteroid population multiplier is then used to multiply the following values to determine the number of these classes of asteroids in the belt (rounding normally):

- Dwarf terrestrials (500 kilometers+ diameter): 4
- Medium Asteroids (100-500 kilometers diameter): 200
- Small Asteroids (1-100 kilometers diameter): 1,200,000

Since he wants a fairly advanced society that has nosed around the system and might have some off-planet bases, Chuck decides to work out the details of the asteroid belt in Amtor-2's system. He already knows that the belt is 0.6AU from the star. He rolls [1D6÷3]² and gets a 5, then divides 5 by 3 to get 1.667, and squares it to 2.778. The asteroid population multiplier is [0.6 AU ÷ 2.8 AU] x 2.778 = 0.595. Applying the multiplier, Chuck finds there are 2 dwarf terrestrials (4 x 0.595, rounded), 119 medium asteroids (200 x 0.595, rounded), and 714,000 small asteroids (1,200,000 x 0.595, rounded). Chuck notes that this belt will have about 60 percent as many asteroids as Sol's asteroid belt despite being about one-fifth the diameter, indicating the density is quite a bit higher than

Sol's belt. Keen-eyed observers on Amtor-2 will see fairly bright zodiacal light near dusk and dawn.

Chuck also takes time to note the location of the belt (0.6AU around an F3V star). It will be scorching hot. If he rolls densities for any asteroid of interest, he'll have to take care to avoid asteroids with low densities due to the presence of ice or other volatile compounds (see Density in Options, p. 119).

Once the numbers of each class of asteroid are generated, players may calculate individual asteroid diameters and densities, but this should be reserved for asteroids that characters will actually visit or that serve a significant plot point. After all, there are going to be a lot of asteroids in any belt.

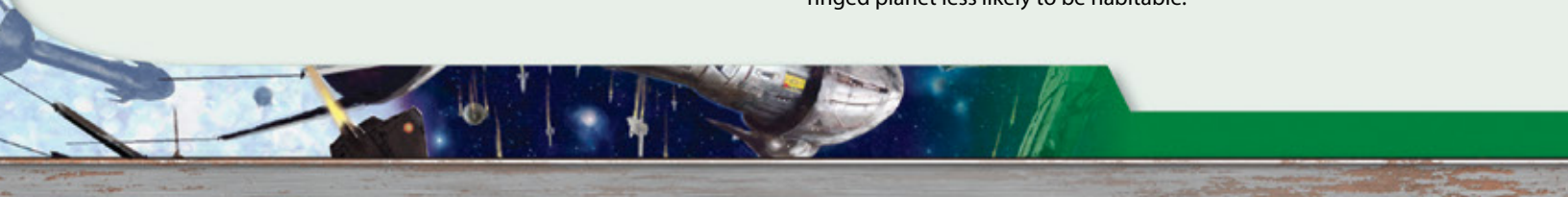
- Asteroids of dwarf terrestrial size use the dwarf terrestrial row on the Object Type Table for generating density and diameter.
- Medium asteroid diameters may be generated randomly as (1D6) x 100 kilometers.
- Small asteroid diameter may be generated by rolling 2D6. For results of 2-10, subtract 1 from the roll and use the result as the diameter of the asteroid in kilometers. For an 11, reroll (ignoring results of 11 and 12) and multiply by 3 kilometers for the diameter. For a 12, reroll (ignoring results of 11 and 12) and multiply by 10 kilometers for the diameter.
- To calculate the density of a specific medium or small asteroid, use the roll on the Asteroid Belt row of the Object Type Table. As belts often represent mixed leftovers from the birth of a star system, the composition of an asteroid belt will not be uniform, so density should be rolled for each individual asteroid.

Moons and Rings

Larger objects tend to acquire natural satellites (moons) either during planetary creation or in subsequent events (asteroid capture or massive grazing impacts). Gas giants are particularly noteworthy collectors of moons, with the known examples of Saturn and Jupiter both possessing sixty or more moons at the writing of these rules.

In reality, retention of moons depends on a number of factors and can make large, far-flung collections of moons a difficult proposition due to various issues. Large neighboring planets are one such problem; for example, Jupiter periodically flips Mars on its ear, prevented the formation of a planet between Mars and Jupiter, and prevents Saturn and Uranus from retaining many "Trojan" asteroids. A close gas giant will likewise make a widespread moon system difficult to retain for its neighbors. A nearby primary can present a similar problem for inner planets. Further, a small planet (like Earth) with a large moon (like Luna) is unlikely to keep other moons for long (on time scales of mere centuries and millennia) because the large moon ends up scattering other moons, usually driving them into collisions with the planet or the larger moon. Planets may also collect and lose moons over their lives, as might be the case with the Martian moons and many of the outer moons of Sol's giant planets. Players should keep those factors in mind when using the random moon generation rolls or when selecting moons without random rolls—it might be appropriate to reduce the number or size of moons around a planet.

It should also be noted that planetary rings, while possibly quite pretty, send a constant rain of debris onto a planet. This makes a ringed planet less likely to be habitable.



MOON GENERATION TABLE

Planet Type	1-2	3-4	5-6
Dwarf terrestrial	1D6 – 5 Medium and 1D6 – 3 Small	1D6 – 2 Small	No Moons
Terrestrial planet	1D6 – 5 Large	1D6 – 3 Medium, 1D6 – 3 Small	2D6 – 4 Small, 1 in 6 chance of rings
Giant terrestrial	1D6 – 5 Giant, 1D6 – 3 Small	1D6 – 4 Large, 1D6 – 3 Medium, 1D6 – 2 Small	1D6 – 3 Medium, 2D6 Small, 2 in 6 chance of rings
Gas giant	1D6 – 4 Giant, 1D6 – 1 Large, 1D6 – 2 Medium, 5D6 Small, 3 in 6 chance of rings	1D6 – 3 Large, 1D6 – 2 Medium, 5D6 Small, 4 in 6 chance of rings	1D6 – 4 Large, 1D6 – 3 Medium, 5D6 Small, 4 in 6 chance of rings
Ice giant	1D6 – 4 Giant, 1D6 – 3 Large, 2D6 Small	1D6 – 3 Large, 1D6 – 2 Medium, 2D6 Small, 3 in 6 chance of rings	1D6 – 4 Large, 1D6 – 3 Medium, 2D6 Small, 3 in 6 chance of rings

To determine the number of moons a planet possesses, refer to the row of the Moon Generation Table appropriate to the planet's class (dwarf terrestrial, giant terrestrial, etc.). Then roll 1D6 and refer to the corresponding column of that row, where the table will indicate the roll to determine how many moons a planet possesses. When rolling to determine the number of moons, any result of less than 1 is treated as 0. Rings are handled as a one-time roll. Each column holds the 1D6 chance of rolling a ring system, if any.

For example, if a 3 is rolled for a terrestrial planet, the player selects the 3-4 column. The planet will have 1D6 – 3 Medium moons and 1D6 – 3 Small moons. A roll is then made for each class of moon: 1D6 – 3 for Medium moons produces a 1, and 1D6 – 3 for Small moons produces a 2. The terrestrial planet has 1 Medium and 2 Small moons.

Size of Moons

The density and diameter of moons are calculated as follows:

- Giant moons are generated using the terrestrial planet line of the Object Type Table (see p. 103). By default, such a moon is uninhabitable (just big), but players may refer to *Options* (see p. 115) if they are interested in making a habitable moon (around a gas giant in or near the life zone).
- Large moons are generated using the dwarf terrestrial line of the Object Type Table (see p. 103). These moons, including the likes of Luna and the Galilean moons, are too small to be naturally inhabitable.
- Medium moons are generated in the same way as medium asteroids (see *Asteroid Belts*, p. 106).
- Small moons (such as Phobos and Deimos) are generated in the same way as small asteroids (see *Asteroid Belts*, p. 106).

Calculations for gravity and other physical qualities are performed as for planets.

Distribution of Moons and Rings

Like distributing planets around a star, moon distribution is a complicated process with many considerations. For example, placing a sizable moon in the wrong spot would, in reality, make a lot of orbital positions untenable for other moons. As another example, an orbit too close to a planet may result in the moon breaking up ("Roche's Limit"). In the absence of a succinct version of satellite distribution, the following guidelines are suggested:

- For each size class of moon, there are orbital slots numbered 1 to N, where N is the number of moons of that size class. For example, if a planet has 3 medium moons, then it has 3

medium moon orbital slots. Slot 1 is closest to the planet, and slots are placed sequentially outward from the planet.

- The spacing of the slots depends on the size class of the moon. Small moons may be placed at 10,000-kilometer intervals from the planet (in terms of distance above the surface); medium moons use a 50,000-kilometer spacing; large moons use a 250,000-kilometer spacing; and giant moons use a 500,000-kilometer spacing.
- Moon placement ignores moons of differing size classes unless orbital slots overlap, in which case the smaller moon's slot is moved outward by a spacing equal to the smaller moon's interval.
- A ring is treated as being the first two medium moon slots, filling the area between those slots and displacing any actual medium moons outward as discussed above. Small moons may overlap the rings, carving a gap through the rings.

Chuck hadn't really intended to give Amtor-2 any moons, since by the time the Venus series was written it was known that Venus had no moons. However, when detailing the giant terrestrial planet (he should name that soon...) in Orbital Slot 2, Chuck rolls 2 medium and 5 small moons for it. The 5 small moons would be placed at 10,000 kilometers, 20,000 kilometers, 30,000 kilometers, 40,000 kilometers, and 50,000 kilometers. The medium moons would be placed at 50,000 kilometers and 100,000 kilometers in altitude. Because of the overlap at 50,000 kilometers, the fifth of the small moons would be bumped outward by a medium moon's orbit (by 50,000 kilometers to 100,000 kilometers). In this case, the small moon ends up overlapping the orbit of the second medium moon, so it again gets bumped outward to 150,000 kilometers.

As an alternative to that arbitrary placement, players may place moons as they like (with or without independent research on realistic distributions). A suggestion is to refer to real-world moon systems like those of Sol's gas giants and liberally plagiarize those distributions. (The gas giants have yet to retain counsel to defend their intellectual property.)

As another alternative, players can simply skip this step. The exact distribution of moons around a planet in *BattleTech* rarely matters, especially in randomly created star systems that will be visited for the length of one gaming session.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Atmospheric Pressure and Composition

The atmosphere of a planet depends to some extent on its size class, which generally indicates how much atmosphere it might retain. Dwarf terrestrials, for example, are too small to retain atmospheres, while terrestrial planets are usually unable to retain hydrogen/helium atmospheres.

Dwarf terrestrials: Dwarf terrestrials will not have atmospheres in the conventional sense. To be scientifically precise, they might have some individual gas molecules flitting around them (as is the case with Mercury's and Luna's "exospheres"), but this would constitute a vacuum in *BattleTech*. Some ultra-cold, icy dwarf terrestrials like Pluto may retain a slightly more detectable atmosphere, but this is also a vacuum under *BattleTech* rules. Moons of this size may retain atmospheres if they orbit a gas giant (see *Options*, p. 115).

Gas and Ice Giants: Ice giants and gas giants have lots of hydrogen and helium, plus traces of water, methane, etc. Giants closer to the star than the life zone may exhibit extremely hot atmospheres with unusual trace additions, like silicate and metal gases. In any case, these are very high and toxic atmospheres (and no solid surface to stand on, at least no surface that human technology can reach).

Giant terrestrials: These large planets are likely to have a considerable atmosphere by the standards of human-habitable planets, but they are atmospheric (and "ice mantle") lightweights by the standards of ice and gas giants. To determine giant terrestrial atmospheric composition, roll 1D6. On a result of 1-5, the giant terrestrial has an atmosphere like a gas giant of hydrogen, helium, and trace gases (see Gas Giant above), though the atmosphere is "only" 1-5 percent of the planet's mass (for comparison, Venus's super-dense pre-terraforming atmosphere was 0.01 percent of Venus's mass). On a result of 6, the planet has an atmosphere like a terrestrial planet, and thus uses the terrestrial planet section on atmospheres.

Chuck has some curiosity about the giant terrestrial in Amtor-2's system, since he's been seeing them appear in the news as astronomers spot more and more of these odd giants. So he rolls 1D6 to find out its atmospheric composition. He gets a 6, meaning the planet does not have a gas giant-like atmosphere. Instead, the details of its atmosphere will be like those of a smaller terrestrial planet.

Terrestrial Planets: This section details how to determine the pressure of the atmosphere and whether the planet is habitable or not. Habitable planet atmospheric characteristics

are determined in a following section, while uninhabitable atmosphere composition is detailed below.

In this step of planet creation, even more than the others, players should remember these rolls and tables are merely guidelines. If a GM needs a new habitable planet for a campaign, they shouldn't keep rolling up new star systems until they get a habitable planet. Instead, make a planet in the life zone habitable, and forget the dice. These guidelines are to help players create a random star system that is typical of the *BattleTech* universe (in which most star systems are uninhabitable).

It should also be noted that the incidence of habitable planets using this chart is far above the norm for *BattleTech*, which is about 1 habitable planet per 1,000 systems in the Inner Sphere—let alone reality. This is done for playability. For the same reason, players should also feel free to declare a planet uninhabitable rather than depending on dice rolls to create vast numbers of habitable worlds in their explorations.

For terrestrial planet atmospheres, two rolls are made using the Terrestrial Planet Atmospheric Pressure and Habitability Table. One roll, Atmospheric Pressure, is for all terrestrial planets in the star system. The second roll, Habitability, is only for terrestrial planets in the system's life zones. (Atmospheres outside the life zone are automatically treated as Toxic.)

The Atmospheric Pressure Roll is 2D6, modified by two factors. First, if the planet is closer to the star than the life zone, subtract 2 from the roll to reflect the fact hot planets tend to lose atmospheres. Second, because escape velocity determines how well a planet retains an atmosphere, divide the escape velocity of the planet (in m/s) by 11,186 m/s (without rounding), multiply the result by the (modified) die roll, and then round the final answer to the nearest integer normally. Consult the Atmospheric Pressure Column of the table to determine the planet's atmosphere. The resulting atmospheric pressure and its role in a *BattleTech* game are described on pp. 54-55, *TO*.

The Habitability roll is also based on 2D6, with the planet being habitable if the result is 9 or higher and the planet has a low, normal or high atmospheric pressure. No roll is required if this condition is not met. The 2D6 roll is modified according to the Planet Features listed in the Atmospheric Pressure & Habitability Table, while the star's habitability modifier is found on the Primary Stats Table. The extreme penalties for brighter stars reflect the short lives of those stars—sometimes too short for planets to even form, let alone ecosystems to develop.

ATMOSPHERIC PRESSURE AND HABITABILITY TABLE

Pressure Roll	Atmospheric Pressure
3 or less	Vacuum
4	Trace
5-6	Low
7-8	Normal
9-10	High
11 or more	Very High

Habitable: 9 or better on 2D6	
Planet Feature	Modifier
Vacuum, Trace, Very High Pressures	<i>Not Habitable</i>
Low, High Pressure	-1
Giant Terrestrial	-2
Star's Habitability Modifier	See Primary Stats Table

Chuck intended to make Amtor-2 habitable with a normal atmospheric pressure. But on a lark, he rolls.

Starting with the atmosphere pressure, Chuck notes the modifiers. Amtor-2 is in the life zone, so it does not have a -2 modifier for being a hot world. Second, its escape velocity modifier is $10,321 \div 11,186 = 0.923$. Finally, he rolls 2D6 and gets an 11. Multiplied by 0.923, the result is 10.153, which rounds to 10. This is a High atmospheric pressure. That actually sounds interesting to Chuck, so he keeps it.

Next, Chuck sees if this randomly generated Amtor-2 is habitable. The modifier for an F3 star is -2, since these short-lived, hot stars are not friendly to habitable planets. The high atmospheric pressure would add another -1 penalty. Amtor-2 isn't a giant terrestrial, so the -2 modifier for that type of planet does not apply. The total modifier, though, is -3. Looking across the High Pressure row, Chuck would need to roll a 12 on 2D6 for Amtor-2 to be habitable. However, since he already wants this planet to be habitable to fit his campaign, he waves his hand and makes it so.

While he's trying out the guidelines for Amtor-2, Chuck also wants to experiment on Amtor-2's giant inner sibling (which he still needs to name). The giant terrestrial is closer to the star than the life zone, so it has a -2 modifier for being a hot world. The escape velocity of 14,628 m/s becomes a multiplier of 1.31. Rolling 2D6, Chuck gets a 9, which the -2 modifier reduces to 7, and is then multiplied by 1.31 to 9.17 and finally rounded to 9: high pressure. That's actually not bad—Chuck may have to host a few 'Mech battles on the planet to experiment with the exotic environment.

If the planet is not habitable, it still might be useful to know the composition of the atmosphere. The atmospheres of uninhabitable terrestrial planets are generated with the Uninhabitable Atmosphere Composition Table. (The atmospheres

of habitable planets are generated under Habitable Planet Details.) The Uninhabitable Atmosphere Composition Table is also used for giant terrestrials that have atmospheres like terrestrial planets (otherwise they have the Atmospheric Composition described under *Atmospheric Pressure and Composition*, p. 108), and for any moons with atmospheres. These atmospheres assume a fairly mature planet which is at least 200 million years old, at point at which the planet, primary and atmosphere have stabilized.

Roll 2D6 for each of the Base, Secondary, and Trace columns of the Uninhabitable Atmosphere Composition Table. For each roll on the Base and Secondary columns, apply the following modifiers: -2 if the planet or moon is cold (further from the star than the life zone), +2 if the planet or moon is hot (closer to the star than the life zone), -1 if the planet is large (escape velocity over 12,000 m/s), or +1 if the planet is small (escape velocity under 7,000 m/s).

To determine the percentage of each atmospheric component, use the following rolls: 1D6 $\div$ 2 percent for each trace or special trace component (do not round) and 5D6 for the percentage of the secondary component. The percentage of the primary component is found by subtracting the percentages of the secondary and trace components from 100. It is possible to have the same base and secondary components (pre-terraforming Venus would be a good example of a planet with carbon dioxide primary and secondary components, while Saturn's moon Titan is an example of a moon with base and secondary nitrogen, plus traces of methane and simple hydrocarbons).

All of these uninhabitable atmospheres count as Toxic (p. 56, TO). By default, such toxic atmospheres are of the poisonous subtype. However, some trace compounds may make the atmosphere caustic instead. While a number of atmospheric trace compounds may make the atmosphere seemingly flammable, these uninhabitable atmospheres lack the oxidizers necessary to support combustion and thus will not be of the flammable subtype no matter what percentage of hydrocarbons or other flammable substance is present.

UNINHABITABLE ATMOSPHERE COMPOSITION TABLE

Roll	Base	Secondary	Trace	Special Traces
2 or less	Methane	Methane	Chlorine [†]	Helium
3	Methane	Ammonia	None	Complex Hydrocarbons
4	Ammonia	Ammonia	Sulfur Dioxide [†]	Nitric Acid [†]
5	Ammonia	Ammonia	Carbon Dioxide	Phosphine
6	Nitrogen	Ammonia	Argon	Hydrogen Peroxide [†]
7	Nitrogen	Carbon Dioxide	Methane	Hydrochloric Acid [†]
8	Nitrogen	Carbon Dioxide	Water Vapor	Hydrogen Sulfide
9	Nitrogen	Carbon Dioxide	Argon	Simple Hydrocarbons
10	Carbon Dioxide	Nitrogen	Nitrous Oxide	Sulfuric Acid [†]
11	Carbon Dioxide	Nitrogen	*	Carbonyl Sulfide
12 or higher	Carbon Dioxide	Nitrogen	**	Hydrofluoric Acid [†]

*Roll again twice on this column, ignoring results of 11 or 12

**Roll again once on this column (ignoring 11 or 12) and once on the Special Traces Table

[†]Chemical makes the atmosphere Caustic (p. 56, TO).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



While Chuck will handle Amtor-2's atmosphere (that of a habitable planet) in a following step, during this stage he determines the composition of the giant terrestrial's atmosphere. It is a large (-1), hot (-2) planet for a net of -3 on the base and secondary components. Chuck rolls 2D6 three times, once each for the base component, the secondary component, and the trace component. He gets 9, 10, and 12, respectively, which are modified to 6 and 7 while the 12 remains unchanged.

The giant terrestrial's atmosphere is thus mostly composed of nitrogen (base component roll of 6) with a good amount of carbon dioxide (secondary roll of 7) and Chuck needs to reroll twice (trace component roll of 12), once on the Trace column and once for special traces.

Rolling again (no modifiers for the Trace and Special Trace columns), Chuck gets a 12 (why can't he roll 12s this often with his Gauss rifles?) and an 8. The 12 has to be ignored and replaced with another roll: 8 this time. The giant terrestrial has traces of water vapor and hydrogen sulfide in the atmosphere. So this planet is a baking, uninhabitable greenhouse hellhole that smells of rotten eggs and is a bit toxic atop every other problem. Chuck makes a note to have his MechWarrior PCs bring cockpit air fresheners and use the excuse of "leaky seals" to cover any embarrassing bodily fumes.

Finally, Chuck checks the percentages. He rolls 1D6 ÷ 2 for the percentage of each trace component, getting 2.5 percent and 1 percent for water and hydrogen sulfide, respectively. 5D6 for the carbon dioxide results in a rather low 11 percent. The balance of the atmosphere (100 - 2.5% - 1% - 11%) is 85.5 percent nitrogen.

Players may also be tempted to create worlds with exotic atmospheres like pure chlorine, xenon, or sulfur hexafluoride, but should keep several things in mind. First, the details of nucleosynthesis in stars make lighter elements more common than any element with more protons (a higher atomic number) than iron. These details also make elements with odd atomic numbers, with the exception of hydrogen, rarer than those with an even number. Thus, halogens (fluorine, chlorine, etc.) tend to be rarer than elements like oxygen and sulfur. The rarity of halogens is also increased by their chemical aggressiveness, which makes them more likely to be bound in minerals. Other chemical behaviors of the elements and planetary evolution tend to limit the range of gases in atmospheres. Oxygen, for example, prefers to form water, carbon dioxide and rocks over existing as a free gas. In the absence of other observations, the atmospheric gases found in the Sol system can be taken as representative of gases elsewhere—the differences will be relative quantity (percentages), not types of gas. An interesting and realistic example of the range of terrestrial planet atmospheres can be found by researching the evolution of Earth's atmosphere from its primary, to secondary, and finally modern compositions.

Planetary Temperatures

While the calculations for planetary surface temperatures are relatively straightforward for airless planets (assuming the player knows the planet's albedo and solar illumination), planets with atmospheres become quite complicated. Exact temperatures are rarely important for most planets, and therefore the following guidelines apply:

- The temperatures of habitable planets are found in the Habitable Planet Details section.
- The temperatures of giant terrestrials with very high atmospheric pressures, ice giants, and gas giants are moot; only aerospace vehicles can operate in their upper fringes, and there is no surface for BattleMechs to operate on (and so no need to worry about the multi-thousand degree heat of what passes for the planet's surface).
- The temperatures of giant terrestrials, terrestrial planets, dwarf terrestrials, asteroids, and moons with vacuum or trace atmospheres use the following airless world temperature calculation:

$$T = 277 \times (\text{Luminosity})^{0.25} \times \sqrt{(1 \div R)}$$

In this equation the planet's temperature T is in Kelvin, R is the planet's orbital distance from the primary in AU, and Luminosity is a multiplier taken from the Primary Stats Table. (Kelvin converts to Celsius simply by adding 273 to the Celsius value.) Night-side temperatures will generally drop to about 50 to 100 K on an airless world, especially if rotation is slow enough to shed heat from the sun-warmed ground.

- As a simple expedient, planets with low atmospheric pressures may use the airless world temperature calculation, but first multiply their R value by 0.95 (without rounding); worlds with normal atmospheric pressure multiply R by 0.9; high atmospheric pressures by 0.8; very high atmospheres by 0.5. Night-side temperatures on planets with atmospheres will be relatively close to day-side temperatures (within 20-30 degrees) except under relatively extreme circumstances.

The calculation is simplistic, inaccurate, and ignores albedo and atmospheric composition. However, it will give a quick value for a *BattleTech* board game using extreme environment rules. Players are encouraged to research real-world examples (like Mercury, Venus, Luna, Titan, and Earth) for ideas of appropriate surface temperatures. The Primary Stats Table has information sufficient for more detailed calculations of surface temperatures.

Since Amtor-2 is a habitable planet, it is handled in a later step. However, Chuck continues his fascination with the giant terrestrial in the system (Bob? No, Bob's getting a bit clichéd as a planetary name). Noting its orbital radius is 1.05AU, Atmospheric Pressure is High, and the star has a luminosity 4.94 times that of Sol, Chuck runs the calculation:

$$T = 277 \times (4.94)^{0.25} \times \sqrt{1 \div (1.05 \times 0.8)} = 450.6 \text{ K}$$

The average surface temperature would be 451 K (178°C), which would stress any BattleMech's heat system and tone down even a battle fought with double heat sinks. Chuck can't wait to try.

Habitable Planet Details

If a planet turns out to be habitable (per the roll under *Atmospheric Pressure and Composition*, p. 108), several additional details should be determined with rolls on the following table. All rolls are based on 2D6, with modifiers given in each step. The table below assumes relatively short day lengths and axial tilts of 0 to 30 degrees; more extreme conditions are addressed under *Options* (see p. 115).

A common modifier used in the following rolls is the Life Zone Position Modifier. This modifier is found by dividing a habitable planet's distance from its primary in AU by the difference in the outer and inner edges of the life zone in AU (per the Primary Stats Table); do not round this modifier.

$$\text{Life Zone Position Modifier} = (\text{Planet Orbit} - \text{Life Zone Inner Edge}) \div \text{Life Zone Width}$$

Amtor-2 is a habitable planet around a bright F3V star. Looking at the Primary Stats Table, Chuck finds the life zone, which has an inner edge at 220 million kilometers (1.467AU), and an outer edge of 447 million kilometers (2.98AU), making it 227,000,000 kilometers (1.51AU) wide. Amtor-2's orbital slot is 2.4AU from the star (relatively close to the outer edge of the life zone). This makes the planet's Life Zone Position Modifier = (2.4 - 1.467) ÷ 1.51 = 0.618.

Percent Surface Water: Three modifiers apply to this 2D6 roll: the Life Zone Position Modifier, an Escape Velocity Modifier, and a giant terrestrial bonus.

Water coverage, like atmosphere, is partly dependent on the escape velocity of the object. This modifier is equal to the object's escape velocity (in m/s) divided by 11,186 m/s, and is not rounded.

The Giant Terrestrial Modifier adds +3 to the roll because giant terrestrials tend to retain lots of light elements like hydrogen and oxygen, and may be covered in a watery shell averaging dozens of kilometers deep (and uninhabitable giant terrestrials may have much more water).

After making the 2D6 roll, multiply the roll by the Life Zone Position Modifier and the Escape Velocity Modifier, then round to the nearest integer and (if applicable) add the Giant Terrestrial Modifier.

HABITABLE PLANET FEATURES TABLE

Modified Roll	Percent Surface Water	Atmospheric Composition	Temperature	Highest Life Form
<0	0	Toxic	Very High	Microbes
0	5	Toxic	Very High	Microbes
1	10	Toxic	High	Plants
2	20	Tainted	High	Insects
3	30	Tainted	High	Fish
4	40	Tainted	High	Fish
5	40	Tainted	Medium	Amphibians
6	50	Tainted	Medium	Amphibians
7	50	Breathable	Medium	Reptiles
8	60	Breathable	Medium	Reptiles
9	70	Breathable	Medium	Birds
10	80	Breathable	Low	Birds
11	90	Breathable	Low	Mammals
12+	100	Breathable	Low	Mammals

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Amtor-2's escape velocity is 10,321 m/s (per Chuck's calculation, rather than slavishly duplicating Venus's 10,460 m/s) so the escape velocity modifier is 0.923. The planet is not a giant terrestrial, so that modifier does not apply. With the modifiers ready, Chuck rolls 2D6 and gets 5, which is multiplied by 0.618 and then 0.923, for 2.85. That rounds normally to 3, giving the planet 30 percent water coverage. This is not quite the ocean-covered Amtor Chuck was after, but vast, burning deserts give more room for BattleMech conflicts anyway.

Atmospheric Composition: The only modifier to the 2D6 roll for this aspect of habitable planets is for giant terrestrials. Giant terrestrial planets add -2 to this roll, reflecting their higher volcanism and other factors that might lead to a less-habitable atmosphere. The atmospheres of habitable planets will be largely nitrogen with some oxygen and trace gases, like that of Terra.

A toxic atmosphere on a habitable planet indicates that the atmosphere is of generally tolerable temperature and pressure, and the gases are not immediately damaging to exposed human skin—the atmosphere is simply not breathable and requires breathing aids (either heavy filters or completely self-contained oxygen supplies). Tainted atmospheres are breathable, but need filtration to remove some pollutant—carbon dioxide is the most common, but extremely low oxygen levels or high pressures can also make an atmosphere tainted.

Tainted and toxic atmospheres of habitable planets (see p. 56, TO) will be of the poisonous subtype if the pollutant is naturally occurring. Flammable conditions will only last briefly in an oxidizing habitable atmosphere and are likely to be the result of human intervention (for example, the rupture of large hydrogen storage tanks at a spaceport). Similarly, caustic chemicals only last a short time in an oxidizing atmosphere. While *BattleTech* has a long history of generating nuclear wastelands, radiological atmospheres will actually only last a short time—most lingering radiation from nuclear weapons is from fallout (local soil and water irradiated into radioactive isotopes by a nuclear explosion), and that fallout largely decays to a harmless state in mere weeks. Even “salted” bombs produce fallout that is only a threat for several decades, not centuries.

Chuck rolls 2D6 again to find out what sort of atmosphere Amtor-2 will possess. Again, the planet is not a giant terrestrial so the -2 modifier does not apply. A natural 12 (...never happens with his heavy PPCs...) gives Amtor-2 a completely breathable atmosphere.

Temperature and Terrain: There are two modifiers to the 2D6 roll: the Life Zone Position Modifier and atmospheric pressure. Multiply the 2D6 roll by the Life Zone Position Modifier and round to the nearest integer, then add +1 for a Low atmospheric pressure or -1 for a High atmospheric pressure.

The resulting temperature hints at planetary albedo, atmospheric composition, and other details beyond the scope of these rules but that may be of interest to players. For example, a hot planet at the outer edge of the life zone probably has nearly toxic levels of greenhouse gases. As another example, a cold planet at the inner edge of the life zone probably has a thin atmosphere, low surface water coverage, and a high albedo.

The resulting base temperature (low, medium, high, very high) normally applies to the equator of the planet (see Options, High Axial Tilts, p. 116). A low base temperature indicates an equatorial average of 287 K; a medium base temperature has an equatorial temperature of 297 K; a high base temperature indicates an equatorial average of 307 K; and a very high base temperature indicates an equatorial average of 317 K.

Chuck is tempted to pick a High or Very High temperature for his steamy jungle world, but decides to roll just to see how the table works out. Amtor-2 has a high atmospheric pressure, so that's a -1 modifier to the roll, and the Life Zone Position Modifier is 0.618. Rolling a 6, Chuck applies the Life Zone Position Modifier to get 3.702, rounding to 4. The atmospheric pressure modifier then lowers the roll to 3: a planet with a High average temperature.

Each planet is divided into climatic zones 1 to 6, with 6 being at the equator and 1 at the poles. Each zone represents about 15 degrees of latitude. Generally, each zone numbered lower than the equator (zones 1 to 5) decreases in temperature by 5 K per zone.

TERRAIN TABLE

Climate Zone Average Temperature	Terrain Suggestions (Terrain examples)	Associated Weather Modifiers (see pp. 57-62, TO)
267 K or less	Snow field, glacier, arctic desert	Fog, Hail, Snow, Wind, Extreme Temperatures (cold)
268-277 K	Tundra, steppe, evergreen forest, swamp, arctic desert	Fog, Hail, Rain, Snow, Wind, Extreme Temperatures (cold), Blowing Sand
278-287 K	Plains, evergreen and deciduous forests, cloud forest, swamp, desert	Fog, Rain, Wind, Blowing Sand
288-297 K	Plains, forests, temperate rain forests, swamp, desert	Rain, Wind, Blowing Sand
298-307 K	Savannah, forest, jungle, swamp, desert	Rain, Wind, Blowing Sand
308-317 K	Savannah, jungle, swamp, desert	Rain, Wind, Extreme Temperatures (Hot), Blowing Sand
318 K+	Savannah, jungle, desert	Rain, Wind, Extreme Temperatures (Hot), Blowing
318 K+ and 80%+ native life	All non-cold terrain above	Wind, Extreme Temperatures (Hot), Blowing

These temperatures are gross averages. Ocean currents, altitude, axial tilt, and other factors can heavily modify temperature. For example, the British Isles usually stay above freezing thanks to the Gulf Stream, particularly on their western coasts, despite being at the same latitude as portions of Siberia and Alaska. The equatorial Kenyan highlands are also much more temperate than the lowlands around them, thanks to their altitude. For some possible terrains in each climate zone, refer to the *Terrain Table* on the previous page.

Some guidelines for selecting terrains for a climate zone:

- If the planet's average equatorial temperature is below 298 K and water coverage is below 60 percent, much of the planet's terrain will be cool and arid in some way: tundra, plains, arctic desert, etc. will be the norm (though far from universal).
- If the planet's average equatorial temperature is above 298 K and water coverage is below 60 percent, the planet will also tend to be arid, but the terrains will lean toward warmer options: plains, savannah, desert, etc. (Again, this will not be universal.)
- Worlds with less than 40 percent water coverage of any temperature will be hyper-arid and likely have globe-spanning super-continents marked by vast sand and arctic deserts, as the water coverage is not usually sufficient to completely separate continents.
- Worlds with equatorial temperatures below 287 K will be understandably cold in most regions, though cold climates do not greatly limit terrain possibilities: swamps, forests, arctic deserts, tundra, and many more possibilities exist. Just bring your long underwear, and note that increasing water coverage will *tend* to produce more glaciers and larger ice caps.
- Worlds with average temperatures substantially above 318 K (for example, Hesperus II) would tend to have desert-like terrain regardless of water coverage if populated with an Earth-like ecosystem, but if the planet has a high percentage of native life (80 percent plus) it may have non-arid terrains like jungles, forests, plains, and swamps. These terrains would be filled with native plant and animal life that could survive temperatures that are lethal (or nearly so) to humans.
- Other combinations of temperature and water coverage will produce more varied terrain.

A good start for describing the terrain of the planet is to determine the number of continents. The number of continents on a world depends on several factors. Smaller worlds are more likely to have cooled and had their plate tectonics come to a halt (for example, Mars and Mercury) so that they have few continents, while planets with substantial hydrospheres are likely to have more continents thanks to the complex effect of water on plate movement. Larger, wet planets are thus likely to have more continents than small, dry ones. To calculate the number of continents on a planet, roll 1D6 and apply the following modifiers:

- If the planet is less than 9,000 kilometers in diameter, divide the number by 2.
- If the planet has less than 30 percent water coverage, divide the number by 2.
- If the planet is over 15,000 kilometers in diameter, multiply the number by 1.5.

- If the planet has over 60 percent water coverage, multiple the number by 1.5.

After applying all appropriate modifiers to the roll, round up to the nearest whole number.

Further, if players are ever tempted to make "an ice planet" or "desert planet" or "jungle planet," please take a moment to note Earth's endlessly varied terrain. Almost any planet will have a vast and diverse array of environments despite some average temperature trends. Even "icy" Tharkad has tropical islands, warm seas, and large temperate regions, while the driest world may have lush jungles and rain forests around its small bodies of water. A planet (especially a habitable planet) that is dominated by just a handful of terrains is improbable, even if it makes a quick way to describe one.

Chuck quickly notes the average temperatures of the 11 climate zones. As a hot planet, Amtor-2 has a 307 K equator (Zone 6), 302 K Zone 5, 297 K Zone 4, 292 K Zone 3, 287 K Zone 2, and 282 K Zone 1. With an average temperature of 11°C in the Arctic and Antarctic circles, he notes the poles are unlikely to have permanent ice caps.

While he won't fill in the details of the terrain in each climate zone until the players venture beyond Amtor-2's starport, he is mildly curious about the number of continents. Burroughs discussed this about Amtor, but Chuck wants to see the random results for Amtor-2. He notes that Amtor-2 would not have a size modifier to the number of continents (being between 9,000 and 15,000 kilometers diameter), but with 30 percent water coverage Amtor-2's number of continents will be halved. Chuck rolls 1D6, getting a 3. Halved, that's 2 after rounding—the same as Burroughs' Amtor, actually.

Highest Life Form: This 2D6 roll is only modified by the habitability modifier of the star (see Primary Stats Table, p. 100), because the habitability modifier represents (partially) the lifespan of the system and thus its opportunity to evolve advanced life. The resulting categories (insect, mammal, etc.) are approximations representing the depth and sophistication of local biology; a planet that has evolved "mammals" may have something completely bizarre and, well, *alien* of equivalent intelligence and physiological sophistication to terrestrial mammals, though the critters are not in the least bit mammalian.

Despite a thousand years of interstellar exploration, no sapient life has been found—the most intelligent animals yet encountered have been somewhat in advance of Terra's great apes. Very frequently, humans have imported large quantities of other plants and animals while shaping a planet to their needs, resulting in native life being squeezed into niches. (In *BattleTech*, terraforming is a broader industry than just turning uninhabitable planets into habitable ones; the frequent re-engineering of ecosystems also counts as terraforming.) It is left to player discretion how much native life remains; the *House* sourcebooks and *Handbook* series offer a large selection of planets which have anywhere from 0 percent (all imported) to 100 percent (all native) ecosystems.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Amtor-2's roll for highest native life form is a 4: it has fish in the sea (and probably insects on the land), a raw planet like Devonian-era Terra. Chuck decides that native life will remain extensive (about 90 percent or so), and most of the 10 percent losses will be due to imported Terran life running wild amid the relatively defenseless, primitive native ecosystem.

If a planet is habitable, it will almost certainly have life unless some natural disaster has occurred or humans recently destroyed the ecosystem. (Note that mature ecosystem such as Terra's extends some kilometers into the crust and ocean floor—it takes some effort to completely destroy an ecosystem). This is because atmospheres with enough oxygen to support human life do not last without artificial or biological intervention—oxygen is a chemically aggressive element that will quickly bind itself into rocks, depleting the world's oxygen somewhere between millennia and a few million years. Therefore, a habitable planet will have either native or imported (terraformed) life able to support the habitable environment.

Special Features and Occupancy

The following additional rules apply to Special Features and Occupancy.

Features: The following table generates unusual planetary features and is applied to any planet. Some results may be inappropriate for an object (a native disease is unlikely on an airless moon) and others require interpretation to apply correctly to the planet. (For example, a Star League observation facility on a high-gravity gas giant is most likely actually an orbiting space station.)

Results on the table are generated by rolling 2D6. If the result is 8 or higher, then roll 2D6 on the Special Features Table, modified as follows by the Habitability Modifier from the Primary Stats Table: -4 for ice giants, gas giants, and giant terrestrials with gas giant-type atmospheres; -3 for giant terrestrials with terrestrial but uninhabitable atmospheres; and -2 for dwarf terrestrials.

- **Natural Disaster:** A pending or recent large-scale disaster on the planet, like an asteroid strike or super hurricane. Players may refer to Terrain Conditions (see p. 54, *TO*) and Weather Conditions (see p. 57, *TO*) for ideas.
- **Intense Volcanic Activity:** The planet is experiencing high levels of volcanism compared to Terra. This does not mean there is an erupting volcano in every area of play, but somewhere on the planet there are at least a few active volcanoes affecting the climate and atmosphere. (If the planet had a breathable atmosphere, this result may shift it to tainted.) A planet with an ongoing traps-style eruption would be an example of this trait. And, contrary to some portrayals of traps volcanoes, this does not necessarily mean there are thousands of square kilometers of open magma seas, but rather a region with many, possibly small, volcanic vents active over millions of years. Players interested in portraying volcanic effects on a battlefield should refer to rules on magma terrain and eruptions (see pp. 36-37, *TO*).
- **Intense Seismic Activity:** A particularly common feature of giant terrestrials (which have a lot of internal heat and thin crusts), the planet (or the region players plan to visit) sees more

seismic activity than Terra. This doesn't mean earthquakes are an everyday occurrence, but many regions are akin to Terra's earthquake-prone zones, such as Los Angeles—big earthquakes happen every few years or decades, and small ones are more frequent. If players are interested in having one of those earthquakes strike a battlefield, they should consult the relevant rules (see p. 55, *TO*).

- **Disease/Virus:** A native or imported microbe or virus has found humans to be fertile ground despite humanity's advanced medicine. This pesky disease may be fatal or just debilitating; examples of both can be found in prior *BattleTech* publications (the Brisbane Virus, Cusset Crud, Fenris Flu, Laen's Regret, Eltanin Brain Fever, Black Marsh Fever, Waimalu Fever, Skokie Shivers, etc.). This is primarily a roleplaying concern that will not manifest in a *BattleTech* board game.
- **Incompatible Biochemistry:** Quite frequently, humans have found that native life forms are not edible and the ecosystem may even resist human crops and animal imports. The problem rarely lasts long if the planet is targeted for colonization—humans in *BattleTech* have a long history of replacing (annihilating) local ecologies with those more favorable to humans. (In fact, this ecological replacement is the most frequent form of terraforming in *BattleTech*.) This is primarily a roleplaying concern that will not manifest in a *BattleTech* board game.
- **Hostile Life Form:** This may range from human-devouring bug swarms to pseudo-dinosaurs that can threaten a BattleMech, to acid-blooded monsters that mostly come out at night, to anything in between. Either way, the life forms are a problem for human visitors. Except for 'Mech-eating dinosaurs, most of these creatures will only affect roleplaying rather than *BattleTech* board games, though there are exceptions such as Bug Storms (see p. 41, *TO*).
- **Star League Facility:** A scientific, military, mining, or pre-colony base, this relatively small facility may still possess items of interest (or resale value)—and may host inhabitants.

SPECIAL FEATURES TABLE

Modified Dice Roll	Feature
2 or less	Nothing
3	Natural Disaster (e.g., asteroid strike)
4	Intense Volcanic Activity
5	Intense Seismic Activity
6	Disease/Virus (hostile to humans)
7	Incompatible Biochemistry (for humans)
8	Hostile Life Form
9	Star League facility (abandoned)
10	Star League facility (occupied)
11	Colony (1-3, occupied; 4-6, abandoned)
12+	Lost Colony (occupied)



INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS



115

- **Colony:** The planet has been settled by humans who are in contact (infrequently, at least) with the outside universe. Refer to *Colony Creation*, p. 122 for guidelines on populating the planet.
- **Lost Colony:** The planet has been settled by humans who have lost contact with the Inner Sphere and “mainstream” humanity. In the near Periphery, this usually occurs due to the loss of space travel and being insufficiently interesting for pirates and traders to visit. In the Deep Periphery, this may be due to the loss of space travel or sheer distance (Nueva Castile, for example, retained a few JumpShips but never knew of the founding or collapse of the first Star League until the thirty-first century). Also, the colony may not be occupied at all, but may have failed or been abandoned. Again, refer to *Colony Creation* p. 122 for guidelines on populating the planet.

OPTIONS

The following options may be invoked by a player at-will, rather than randomly rolling for them. They provide guidelines for creating more exotic, but at least moderately realistic, star systems.

Brown Dwarfs

Brown dwarfs are a middle class of objects between the largest planets and the smallest stars. They are (roughly) defined as objects that were large enough to fuse deuterium (heavy hydrogen) in their cores in the first few million years after their formation, but not large enough to fuse normal hydrogen. This means brown dwarfs fit into a mass range of about 13 to 75 times the mass of Jupiter; anything smaller is a planet (or moon, or dwarf terrestrial, or asteroid, or dust), while anything larger is a star (neglecting black holes and other strange super-stellar objects).

A number of classifications for brown dwarfs are extensions of the stellar classes given in *All the Pretty Colors* (p. 99), but the differences are primarily academic. It is generally enough to understand that brown dwarfs only give a dim red visible light glow (if any), somewhat more infrared light, and that older brown dwarfs (those beyond their brief deuterium-burning phases) will be dimmer. Their limited heat and light makes them unsuited to be primaries for human-habitable planets.

Players may place a brown dwarf in a star system as a gas giant, or may make one an independent “star.” A brown dwarf cannot recharge a JumpShip via its solar sail, and transit times for independent brown dwarfs are treated like that of an M9V star.

While not suited to be primaries for habitable planets, brown dwarfs can generate enough heat to make one or more of a planet’s moons habitable beyond the outer limits of a star’s life zone (about a 33 percent extension of the life zone’s outer edge). For terrestrial-type ecologies, the limit to this life zone extension is where sunlight drops too low to support sufficient photosynthesis and when even the brown dwarf’s heat cannot sufficiently warm the planet.

On the other hand, finding a brown dwarf close to a star (inside the life zone) likely means that the system will not have habitable planets, since the brown dwarf would disrupt the orbits of other planets as it settled into a close orbit around the primary (see *Realistic Planetary Placement*, p. 118).

Exotic Moons

A number of unusual moons exist beyond the scope of the random rolls provided earlier. These include dual planets, habitable moons, and asteroids that possess moons.

Dual Planets: Dual planets are planets with a moon of the same size class as the planet, typically at least 4 percent of the planet’s mass. Four percent might seem small, but Terra’s “giant” moon Luna is only one eighty-first of Terra’s mass, and even the planet Mars is only 10 percent of Terra’s mass. Four percent is quite sizable and is the point at which the L4 and L5 Lagrange points no longer host stable orbits, so it seems like a reasonable point to call a moon and its planet “dual planets.”

A dual planet is created by skipping the usual moon creation step—and, in fact, the super-sized moon is likely to prevent the formation or accumulation of other moons). The players designing the planet simply designate it as a dual planet.

The moon (the slightly smaller of the dual planets) is created by rolling randomly on the Object Creation Table for an object the same size as the planet. If the resulting moon is larger and/or denser than the planet, reduce the moon’s diameter until it is at least 5 percent smaller than the planet and lower the density until it is equal to or denser than the planet.

The moon is placed normally in orbit around the planet, though players should feel free to move it out further. Players should avoid moving the objects closer than 3 to 5 times that planet’s diameter from the planet, to avoid breaking up one or both objects. It is fairly important to calculate the length of time that the moon orbits its planet (the detailed year length equation in *The Planets*, Step 4, p. 102 will suffice) because the dual planets will almost certainly be tidally locked to face each other, so the time it takes for them to circle their barycenter is the length of the dual planets’ day. This could result in day-night cycles of several weeks.

Players may be interested in Klemperer Rosettes, a circular arrangement of multiple planets (3 or more) in the same orbit. These are unstable, however; they will not exist in nature and moving planets is beyond the capability of *BattleTech*’s technology, so these rules do not address them.

Habitable Moons: A moon of at least terrestrial planet size (a giant-class moon) may be habitable if the moon is in the life zone. If the planet is a gas giant of at least Jupiter’s mass, it may radiate enough heat to allow the moon to be habitable further from the star than the life zone. This life zone extension should be limited to about 20 percent further from the star than the life zone’s outer edge, as gas giants are poor substitutes for a stellar heat source and the rapidly dropping light levels will make human-compatible ecologies difficult to sustain.

Moons with Atmospheres: Because atmospheric retention is significantly related to escape velocity, few moons can hold onto an atmosphere. One exception is a giant-class moon more than 5,000 kilometers in diameter, which may have a typical terrestrial planet atmosphere. (Obviously, habitable moons have habitable atmospheres by default.)

Likewise, a moon of dwarf terrestrial or smallish terrestrial planet size (less than 3,000 kilometers in diameter) may have a trace atmosphere if its density is less than 2.5 g/cm³, and thus likely contains a large amount of volatiles (ice, hydrocarbons, etc.) to constantly replenish atmospheric losses. An example is Neptune’s moon Triton.



Third, if a moon is 2,000 to 5,000 kilometers in diameter, less than 3 g/cm³ density, and orbits fairly close to a large gas giant (Saturnian mass or larger, and within 10 planetary diameters), the atmosphere may be of any density. In this circumstance, the moon loses atmosphere but the stray gases cannot escape the planet's orbit and form a gas torus that constantly replenishes the atmosphere. Saturn's moon Titan is a prime example of this phenomenon.

Asteroid Moons: Asteroids are, by default, generated without moons. However, asteroids have been observed to possess moons on occasion (Gaspra and Ida, for example). An asteroid's moon (or moons) will be at least one size class smaller than the asteroid. If the asteroid is small to begin with, the moon(s) should be no more than one-tenth the diameter of the asteroid.

If players want an asteroid to have moons, the suggested limits are 1D6 ÷ 3 moons of one size smaller or 1D6 moons of two sizes smaller.

Eccentric Planetary Orbits

By default, planets have a relatively circular orbit. However, greater eccentricities are possible. In these rules, an eccentric planetary orbit is defined as one that crosses more than one orbital slot around the star, thus preventing planets from occupying those other orbits (except in peculiar situations like Neptune and Pluto).

A second effect applies to habitable planets. A habitable planet with an eccentric orbit will have sharply varying temperatures throughout its year. Seasonal variation is usually a result of axial tilt, not orbital eccentricity, but for sufficiently large eccentricities the effect may not be ignored. Calculating the degree of variation is beyond the scope of these rules, but the rule of thumb is simple: further from the star = cold, closer to the star = hot. Players should note that orbits are slowest when furthest from the primary and fastest when closest. This means that a planet with an eccentric orbit will not only have cold winters, but it will have a much longer winter than summer.

High Axial Tilts

So far, these guidelines have assumed planetary tilts between 0 and 30 degrees. This is a fairly academic point for uninhabitable planets, while for habitable planets (in circular orbits) it means seasonal temperature variations range from nothing (0 tilt) to Terran-like (low 20s) to vigorous (30 degrees), assuming orbital eccentricity is not very high.

More extreme axial tilts in a planet produce very odd circumstances that deviate from this pattern. First, for half the year one of the poles will be pointed at the star; for the other half of the year, the other pole will be pointed at the star. For tilts between 40 and 60 degrees, this results in oddities like an equatorial ice-belt and ice-free poles. At more extreme tilts, one hemisphere will be shaded half the year and thus locked in snowy darkness until switching roles with the other half. Adapting to this can be difficult for Terran-derived plants and animals.

While external influences can pull a planet into extreme tilts (as Jupiter does to Mars) and endanger its habitability to humans, external influences can also discourage such tilts. It is currently thought that Luna's tidal influence on Terra's equatorial bulge helps stabilize Terra's tilt to about 20-25 degrees. This means that a planet with a small moon (a moon less than 10 percent of the planet's diameter) is more likely to have an extreme axial tilt than a planet with a sizable moon. Players should also consider a planet with an extreme axial tilt to have a -1 Habitability Modifier (see p. 100).

Hot, Hot, Hot!

Type B and O stars, and giant stars of any luminosity class (-V, IV, III, II, Ia, and Ib), are largely beyond the scope of these rules. (The Primary Stats Table, pp. 100-101, does address BxV stars.) If players wish, they may build a system around a giant star, a B star or an O star, but the details (beyond main-sequence B stars) are left to independent research. Some suggestions are provided below:

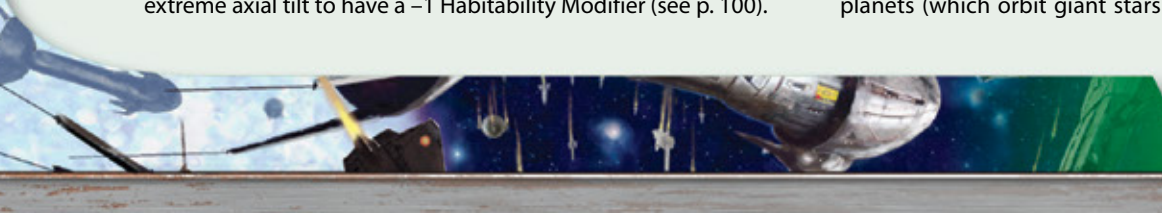
O-Class Stars: These stars are too short-lived, too hot, and too violent to have planets. By the time hypothetical protoplanets started looking like planets, the star would be in its death throes and ready to explode as a supernova. However, it is unlikely protoplanets would even begin to form around an O-class star because the furious heat and solar winds would blast away any material in the system that could form planets. Indeed, O-class stars are noted for evaporating and clearing away material in nebulae up to several light years away that might form nearby star systems. The system of an O-class star is thus likely to resemble a particularly raw and ill-formed asteroid belt at distances from the star where one would normally find an Oort cloud.

B-Class Stars: The systems of B-class stars are little better than those of O-class stars. The dimmer main sequence B-class stars can last long enough for planets to form, but the terrestrial planets are unlikely to solidify significantly before the star dies, usually in a supernova.

Giant Stars: Giant stars are the aged form of what were once main sequence stars that have largely exhausted hydrogen in their cores and thus are going through a destructive sequence of burning consecutively heavier elements in faster and faster cycles of fuel exhaustion. Any human-habitable planets these stars may have likely exist through artificial intervention (terraforming) because the star will only briefly be in a giant form. Even giant stars with seemingly long lifespans (for example, Sol should be a giant star for more than 1 billion years) will go through drastic changes in illumination (by factors of hundreds and thousands) on time scales of mere millions or thousands of years as they turn into giants and enter their death throes, seeing only a relatively brief period of stability (about 100 million years as a true red giant in the case of Sol). This is a faster rate of change than biological evolution can cope with, even if the life zone was stationary and illumination shifts were minor. But the changing stellar radius and illumination means the life zones will move in and out from the star by huge distances, stranding planets beyond the life zone (and perhaps even inside the star itself). It is quite possible for a giant star to greatly change in brightness during the course of a few centuries, which would turn even a terraformed planet into a frozen lump or scorched ball of lava.

Because of this, stars under these rules are assumed to be main sequence stars by default. However, *BattleTech* has placed habitable worlds around stars of different sizes, particularly giant stars (size class IV to Ia). A star system built around a giant star multiplies the Luminosity by a factor of 4 over the value listed in the Primary Stats Table, doubles the inner and outer radii of the life zone, and reduces the habitability modifier by 2.

Transit and recharge times are not affected by giant stars, though this is an unrealistic and arbitrary rule intended to prevent retroactive continuity changes to many published *BattleTech* planets (which orbit giant stars almost as often as not). In fact,



this may mean (particularly in the case of M-class giants) that the habitable planet and zenith/nadir jump points are inside the bloated star, a detail that is deliberately overlooked when keeping transit times fixed.

“It’s Life, But Not As We Know It”

Only human-habitable planets have an opportunity to determine a highest life form. If players prefer, they can roll on the Habitable Planet Features Table (see p. 111) to determine the level of life on worlds with uninhabitable atmospheres. In addition to the normal modifiers on the Highest Life Form roll, a modifier of -4 applies to the roll.

The probability of life in exotic environments is hard to estimate; there are fair arguments for life in gas giant atmospheres, and if the players embrace the science fiction cliché of “silicon-based life,” you might argue reasonably for life on pre-terraforming Venus, Mercury, or other hell-worlds. The versatility of water and carbon-based combinations compared to other chemical and environmental systems argues that life elsewhere may not be as sophisticated as life on terrestrial planets, hence the -4 modifier. If invoking this option, then—as with all of these guidelines—players should feel free to simply pick the type of highest life form on the planet. After all, they’re the one who has to describe this truly alien life.

Players using this option may also want to refer to the option *Water, Water Everywhere* (see p. 119).

Multi-Star Systems

The Primary Stats Table only deals with single stars, not binary or multiple star systems. Though binary stars represent a slight majority of the stellar population, they complicate the generation of star systems and thus are left to player discretion. The following are some pertinent points for adapting binaries to *BattleTech*:

System Layout: Except in stellar clusters, combinations of more than two stars tend to group into binaries. For example, the real-life star system Capella consists of four stars. However, this is not a system of four stars swirling around an area the size of a star system. Rather, Capella consists of a pair of giant yellow stars orbiting each other at about 100 million kilometers and then a pair of close-orbiting red dwarf stars about a light-year from the yellow giants.

Distant Binaries Only: This system generation option also “takes the easy way out” by only providing guidelines for “distant” binaries, which in the context of these rules refers to stars separated by sufficient distance to not significantly influence the position of standard jump points or habitable zones.

As a rule of thumb, the stars need to be about four times as far apart as the proximity jump limit of the larger star at the closest point of their orbit. For example, a system consisting of a G2V and a K2V star (such as Alpha Centauri or, as it’s known in *BattleTech*, Rigil Kentarus from its Arabic name) would need the stars to be separated by at least 40 AU to qualify, or else players will be left trying to recalculate the position of the standard jump points of both stars.



Stellar navigators often seem like the practitioners of mathematical wizardry to their fellow crew members.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Planet Spacing and Numbers: Players considering a binary or multiple star system should note that planetary orbits are disrupted if they are beyond one-third of the separation between stars. For example, a pair of stars circling each other at 60 astronomical units would each be able to support planets out to about 20 AU around each star, and the gravity of the stars would prevent stable planetary orbits in the central 20 AU region. (This varies depending on the orientation of the planets with respect to the other star, but one-third is a reasonable rule of thumb.) Therefore, ignore any objects that would be placed in orbital slots beyond this distance.

Another handy rule of thumb relates to the thermal effects of one star on another. If the stars qualify as distant binaries, the separation will prevent any climate disruptions from the other star's illumination. The inverse square effect quickly reduces the level of illumination from other stars. The level of illumination from another star (the secondary or tertiary of a system) can be quickly confirmed using the following calculation:

$$\text{Illumination} = \text{Luminosity} \div \text{Distance}^2$$

In this equation, luminosity is found on the Primary Stats Table and distance is the closest separation between the other star and the planet in AU. If the illumination is 0.05 or less, heating effects of the other star(s) will be minor and, if below 0.001, negligible. However, a secondary star might be quite bright—an illumination of 0.005 is like a moderately bright, artificially lit room. Light on a Terran night from a full Luna is equivalent to (approximately) an illumination of 0.000001.

A good example of a “life zone-compatible” binary star on which to model multi-star systems is Alpha Centauri, a system of two sun-like stars with elliptical orbits and (probably) safe life zones. Details of the two stars can be found at length on the Internet. The third star of the system, Proxima Centauri (or Alpha Centauri-C), is about one-fifth of a light-year from the other two stars and is an example of a very distant “binary” that is virtually a single star unto itself.

Realistic Planetary Placement

The following paragraphs provide realistic planetary placement guidelines.

Asteroid Belts: Asteroid belts are usually the result of debris that did not coalesce into a planet. This, of course, means something has to prevent the system from coalescing, typically a nearby gas giant. Therefore, an asteroid belt is likely to be adjacent to a gas giant or brown dwarf (not counting any intervening empty orbital slots). If a gas giant is not next to the asteroid belt (ignoring empty orbits), players may wish to place a gas giant there instead of accepting random rolls for filling that orbital slot.

Migrating Gas Giants: Current models of star system formation suggest it is improbable for gas giants to form close to a star because the tantrums thrown by newborn stars tend to blast away the gases needed for the giant planets. Gas giants are thus thought only to form in colder regions of the system beyond the life zone. However, astronomers have found gas giants, some very large, orbiting close to stars. With new models of system formation, it seems possible for interactions between protoplanetary disks and proto-gas giants to rob the gas giants of momentum and send them spiraling into the inner system.

This phenomenon applies to realistic planetary placement. A wandering gas giant is a bull in a china shop, scattering or colliding with smaller planets. By the time it settles into a close orbit around the star, it is unlikely any terrestrial planets will be left between the gas giant's final orbit and the outer edge of the star's life zone.

Therefore, if a gas giant is placed in the life zone or closer to the star, the only terrestrial planets or dwarf terrestrials will be either in closer orbits to the star than the gas giant, or will be further from the star than the life zone. The only possible occupants of orbits in the “swept zone” are giant terrestrials, ice giants, or gas giants (which might have followed the first gas giant's migration) or asteroid belts (lingering debris from the birth of the system or from the trauma of the gas giant's passage).

Gas Giant Exclusion: Because of the strong influence of gas giants, a gas giant should not be in an orbit next to a habitable planet. It is recommended that the gas giant be moved to a more distant orbit and replaced by either an empty orbit or an orbit containing an asteroid belt, terrestrial planet, or dwarf terrestrial.

No Titius-Bode Law: The default spacing of orbital slots in these rules is based on a system that only addresses some of Sol's brood and does not work at smaller scales or in other observed star systems (at least, not yet). Rather, planetary spacing seems to be a result of original instabilities in the protoplanetary disk and subsequent gravitational interactions between the forming planets, the disk, and other influences. Players with a lot of time on their hands are welcome to try to model likely spacings of gas giants, terrestrial planets, and other objects in a system.

Variable Stars

Stars are not all steadily-burning fusion reactors. Some stars have a variable output, falling into two categories: flare stars and long-term variables. Players that want a star to be variable may select whether the star is a flare star or long-term variable, and apply the following guidelines to the star.

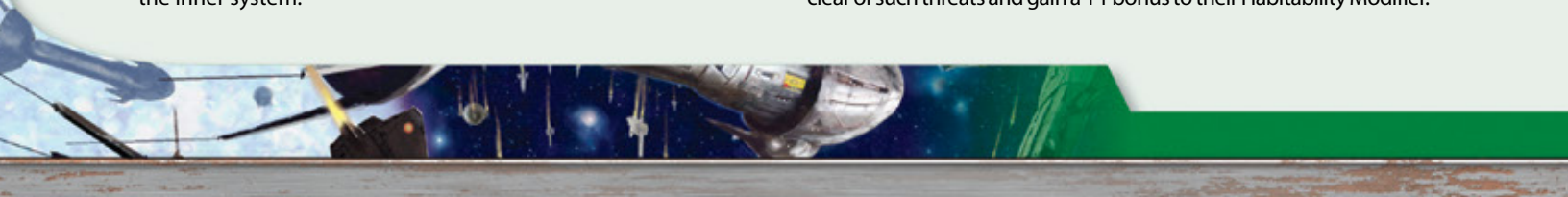
Long-term variable stars alter their luminosity over a period of 1D6 x 1D6 x 1D6 months (do not cube 1D6; multiply together the results of three separate 1D6 rolls). During this period, the star will increase its luminosity from the value on the Primary Stats Table by [(4D6) ÷ 2] %. Temperatures of planets should be recalculated (see p. 112). As a matter of simplicity, the luminosity of a variable star increases linearly over the rolled period, and then decreases back to the value on the Primary Stats Table in the same period, at the same linear rate.

Flare stars alter their luminosity in brief spurts lasting days. Every 1D6 months, roll a second 1D6: on a result of 1-3, the star flares. During a flare, the star's luminosity increases by 100 percent for 1D6 days (in a matter of minutes), increasing temperatures appropriately (see p. 112), and then cools off just as suddenly.

Very Young and Very Old Systems

For main sequence stars of stellar classes M, K, and G, age can offer an advantage or disadvantage in determining habitability.

Very young systems of these types (under 1 billion years old) reduce their Habitability Modifier by 1 for all planets in the life zone, reflecting the higher quantity of debris, unsettled star, and other issues. On the other hand, very old systems (those over 8 billion years) are generally clear of such threats and gain a +1 bonus to their Habitability Modifier.



Water, Water Everywhere

Water on uninhabitable worlds is ignored by default, but uninhabitable giant terrestrial planets with non-gas giant atmospheres and terrestrial planets may have some water coverage. This option refers to thin (1 to 5 kilometers deep) oceans that do not completely cover a planet's surface, like those of Terra, not the thick water mantles of ice moons and giant planets.

Planets with surface gravities below 0.5 G, atmospheric pressures of vacuum or trace, and temperatures above 323 K/50°C are not eligible for water coverage, as they generally will not retain open water for significant periods. (Astute players may note that higher atmospheric pressures allow water to remain liquid above 100°C, but the 50°C limit represents a rule of thumb point where water—a powerful greenhouse gas—is likely to evaporate rapidly in a runaway greenhouse effect under a variety of atmospheric pressures.) Planets with average equatorial temperatures below 14°C will have significant ice coverage on their oceans.

If such conditions are met, then players should feel free to roll on the Habitable Planet Details Table to determine water coverage despite the planet being otherwise uninhabitable.

Planetary Location Versus Density and Exotic Densities

Players may wish to consider the following when creating various objects in space.

Density says a lot about objects in space: their possible origin, their composition, where they can appear in a system, and more. While the random rolls in the Planet Generation Table should give realistic results, very low or very high results—or players interested in arbitrarily selecting densities for their planets—should consider the following information.

A quick selection of densities to give a baseline: Liquid water has a density of 1 gram per cubic centimeter (1 kilogram per liter, 1 metric ton per cubic meter). Many rocks (silicates) range from 2 to 4 g/cm³. Objects with increasing metal content will push toward the density of iron (roughly 8 g/cm³). Because denser materials (like lead, gold, and platinum) are very rare, non-stellar objects denser than iron are unlikely. (Very massive gas giants, brown dwarfs, red dwarfs, white dwarfs, neutron stars, and black holes are exempt from this general rule—gravity compresses these objects to densities beyond those normally found in their constituent materials.)

Location matters. Low density objects are unlikely to be found inside the life zone or closer to the star, and so players should reroll if such a result occurs. The reason is that low density materials are generally volatile; they evaporate easily, like the ices that make up comets. There are exceptions, however. Planets large enough to retain an atmosphere may be low in density, such as ice giants and gas giants. Asteroids made of rock and metal may also have low density deep in a star system if they are “rubble piles” (a common form of asteroid, see below): piles of shattered gravel and rubble with a significant amount of space between each nugget.

Terrestrial (rocky) planets generally range from about 3 g/cm³ to 6 g/cm³, depending on their percentages of siliceous (rock-like) materials versus metallic (primarily iron) materials. Earth (5.51 g/cm³), Mercury (5.43 g/cm³) and Venus (5.2 g/cm³)

are at the high end of this range, while Mars (3.93 g/cm³) and Luna (3.35 g/cm³) are at the low end.

The only non-stellar objects that might regularly be found in the 6 to 8 g/cm³ range would be giant terrestrial planets and metallic asteroids. Giant terrestrial planets can be large enough to actually compress their solid cores, while metallic asteroids are usually the cores (or parts of cores) of large, primordial asteroids that were big enough to melt during their formation and differentiate (dense materials sank to the core, light material floated to the surface), and were small enough to be subsequently blown apart by collisions.

While asteroids might be as dense as solid iron, they generally follow the density trends of terrestrial planets (if in the life zone or closer to the star) when measuring their solid portions (3 to 6 g/cm³). Many asteroids are “rubble piles,” flying mounds of gravel broken up by repeated impacts but lacking the gravity to compress back into a solid form, and thus are less dense than solid rock (perhaps 1-3 g/cm³). Asteroids further from the star than the life zone will have increasing quantities of ice and low-density carbonaceous materials, falling into the range of 1 g/cm³ to 4 g/cm³, depending on their specific mix of metals, rocks, and ices. Further from the inner system, asteroids blur into comets—the latter (generally 0.9-2 g/cm³) can be considered very icy asteroids (or asteroids could be very dry comets).

Ice giants cover a type of smallish gas giant (like Uranus and Neptune) that are actually mostly water by mass, with a relatively shallow hydrogen/helium shell (10-30 percent of the planet by mass) covering a massive mantle of what astronomers call ice (but that may actually be heated to thousands of degrees). Densities of 1.1 to 2 g/cm³ are reasonable for ice giants.

Gas giants cover a range of densities. Sol's gas giants range from 0.687 g/cm³ (Saturn) to 1.64 g/cm³ (Neptune); a reasonable range is 0.6 to 1.5 g/cm³. Small and medium gas giants may be quite low in density, less than water (as in the case of Saturn), while larger gas giants tend to compress under their own weight.

The largest gas giants handled by the Planet Generation Table are about 2.5 times Jupiter's mass. More massive gas giants begin behaving oddly: they cease growing in diameter despite increasing mass. After some initial growth beyond Jupiter's diameter, gas giants then *shrink* as their mass increases. For example, it is currently estimated that 14 Andromedae b is about 4.8 times Jupiter's mass and 99.5 percent of Jupiter's radius (about as dense as Earth, despite being mostly made of hydrogen), while 18 Delphini b is about 10.3 times as massive as Jupiter and only has about 75 percent of Jupiter's diameter—the planet is denser than iron.

Brown dwarfs are only slightly larger than Jupiter, and might be more compact, exhibiting great densities due to gravitational compression. It is only with fusion heating that stars begin to swell. (The smallest, dimmest red dwarfs are about 80 times as massive as Jupiter, but only 30 percent larger in diameter.)

These guidelines are not inclusive of all the oddities astronomers have spotted in the heavens, but they cover the majority. Players may select dramatically different densities or diameters of planets to suit themselves, but should understand that the result may be quite implausible. Of course, if “quite implausible” means “quite fun,” go for it.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

MATH GUIDANCE

A number of calculations in the Solar System Generation rules involve more complicated math than usually found in *BattleTech*. However, the most intimidating calculations consist only of unusual exponents and long, but simple equations. If players remember mathematical parentheses and the order of operations (or take a moment to look up mathematical order of operations on the Internet), they should encounter few problems.

The Object Type Table is a good example, as it includes raising numbers to 1.15 and 0.75. Either exponent can be applied with a typical scientific calculator or the calculator accessory program commonly found on personal computers. The function is usually displayed on common scientific calculators as " $\wedge$," " x^y ," or " y^x ."

In fact, the other significant math in this chapter is square roots, which are a special case of exponents: applying a square root to a number is the same as raising the number to the 0.5th power.

Example problems for the larger equations used in these rules are provided below.

Transit Times

BattleTech only supplies the pre-calculated transit times from standard jump points to habitable planets in habitable orbits. These rules allow the calculation of flights between standard jump points to any planet in a system using the following equation:

$$\text{Transit Distance} = \sqrt{[(\text{Distance A})^2 + (\text{Distance B})^2]}$$

Sources for distances A and B are suggested under Transit Times, p. 102. In this case, consider a flight between Sol's zenith (or nadir) point and Mars (Terra IV, to Spheroids not familiar with the Terran system's layout). The safe jump distance of a G2V star, per the Primary Stats Table, is 1,517,879,732 km. The average distance between Mars and Sol is, from an Internet search, 227,939,100 km. These plug into the equation as follows:

$$\text{Transit Distance} = \sqrt{[(1,517,879,732 \text{ km})^2 + (227,939,100 \text{ km})^2]}$$

The squaring of A and B is worked first to become:

$$\text{Transit Distance} = \sqrt{[2,303,958,880,816,391,824 \text{ km}^2 + 51,956,233,308,810,000 \text{ km}^2]}$$

And then the remaining math operator (addition) inside the parentheses is performed:

$$\text{Transit Distance} = \sqrt{[2,355,915,114,125,201,824 \text{ km}^2]}$$

And finally the operator outside the parentheses is applied:

$$\text{Transit Distance} = 1,534,899,057 \text{ km} \\ (\text{rounded up to the nearest kilometer})$$

Density Calculations

Some of the random rolls for object density listed in the Object Type Table (see p. 103) use some unusual exponents on a random roll to get a distribution of object densities that gave the author indecent frissons of scientific stimulation, but might be simply

annoying to others. Since D6 rolls fall outside the normal order of mathematical operations, use the following procedure: first, make the specified D6 roll (typically 1D6). Second, apply the exponent to the D6 result. Third, add the specified value (if any).

For asteroid belts, the roll is: $1D6^{1.15}$. As an example, if the D6 roll is 2, then the result is $2^{1.15} = 2.219$. If the D6 roll is a 6, then the density is $6^{1.15} = 7.850$.

For terrestrial planets, the roll is $2.5 + 1D6^{0.75}$. First roll D6. As an example, assume the result is a 3. Apply the exponent: $3^{0.75} = 2.2795$. Then add 2.5: 4.7795.

Surface Gravity Calculations

This equation is relatively straightforward if the order of operations is observed. Applying the divisors in the wrong place is the most likely cause of a problem:

$$\text{Gravity} = (\text{Diameter} \div 12742) \times (\text{Density} \div 5.5153)$$

As an example, calculate Luna's surface gravity. Luna has an average diameter of 3,474.2 km, while it has an average density of 3.3464 g/cm³. Inserting these values into the calculation gives:

$$\text{Gravity} = (3,474.2 \div 12742) \times (3.3464 \div 5.5153)$$

Per the order of operations, perform the operations in parentheses first:

$$\text{Gravity} = (0.27266) \times (0.60675)$$

And then complete the equation:

$$\text{Gravity} = 0.16544 \text{ G} \\ (\text{Which is quite close to the real value of } 0.1654 \text{ G}).$$

Escape Velocity Calculation

Escape velocity figures into some of the habitable planet features, and is "nice to know" for the more aerospace-minded players. The equation isn't particularly complicated—no need to resolve a differential equation—but it does have a number of steps.

$$Ve = 11,186 \text{ m/s} \times (\text{Diameter} \div 12,742) \times \sqrt{(\text{Density} \div 5.5153)}$$

Continuing to work with the example of Luna, first fill out the equation with values for diameter and density:

$$Ve = 11,186 \text{ m/s} \times (3,474.2 \div 12,742) \times \sqrt{(3.3464 \div 5.5153)}$$

Perform math in parentheses first:

$$Ve = 11,186 \text{ m/s} \times (0.27266) \times \sqrt{(0.60675)}$$

The square root is handled before other remaining operators:

$$Ve = 11,186 \text{ m/s} \times (0.27266) \times (0.77894)$$

And then apply all the multiplications:

$$Ve = 2,376 \text{ m/s (rounded up)}, \\ \text{which is quite close to the real value of } 2,380 \text{ m/s}.$$

Planetary Year Length

The second method of calculating year length (p. 105) is the fastest, but it still puts a modest order-of-operations challenge in a square root:

$$Ty = \sqrt{[Ra^3 \div Ms]}$$

A hypothetical planet orbiting a bright, hot A8V star (1.8 times the mass of Sol, per the Primary Stats Table) at a distance of 4 AU (near the outer edge of the life zone, per the Primary Stats Table) has a year length of:

$$Ty = \sqrt{[(4^3) \div 1.8]}$$

The parenthetical operators are handled first, starting with the exponent:

$$Ty = \sqrt{[64 \div 1.8]}$$

And then the divisor:

$$Ty = \sqrt{[35.556]}$$

And finally the square root:

$$Ty = 5.963 \text{ years}$$

Planetary Temperatures

The calculation for planetary temperatures has an unusual exponent (effectively, a fourth root expressed as an exponent to simplify calculation with scientific calculators) and an order of operations question:

$$T = 277 \times (\text{Luminosity})^{0.25} \times \sqrt{(1 \div R)}$$

Continuing the example with a planet in a 4 AU orbit around an A8V star (luminosity 10.90 times that of Sol, per the Primary Stats Table), calculating the average temperature of the planet would start by filling out the equation:

$$T = 277 \times (10.90)^{0.25} \times \sqrt{(1 \div 4)}$$

And then handling the parenthetical math inside the square root (since the square root would be performed first):

$$T = 277 \times (10.90)^{0.25} \times \sqrt{(0.25)}$$

And then the square root:

$$T = 277 \times (10.90)^{0.25} \times 0.50$$

And then the exponent:

$$T = 277 \times 1.8170 \times 0.50$$

And then the multiplication:

$T = 252 \text{ K}$, rounding up—
a cold planet in the absence of an atmosphere.



INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

COLONY CREATION

These guidelines are intended to help players describe populated planets such as those found in the *BattleTech* universe. The process involves several steps, beginning with determination of the population, which will influence a number of subsequent steps.

The second step provides guidelines to determine a planet's Universal Socio-Industrial Level Rating, or USILR. The USILR code uses an A through F grading system to represent (in order): a settled world's level of technological sophistication; industrial development; dependence on imported raw materials; industrial output; and agricultural dependence (both of the latter relative to population).

The third step is to determine the planet's style of government. In cases where the planet is a member of an interstellar, multi-system faction, the planetary government is sometimes different than the interstellar government (many of which function as alliances or confederacies and thus are tolerant of differences in member-planet governance).

Finally, a number of secondary planetary characteristics such as the presence of recharge stations and HPGs are determined.

STEP 1: POPULATION

Determining a planet's population is a straightforward set of three rolls. The results determine when the colony was settled and by whom, and the population itself.

Step 1A: History of Occupancy

If the player does not have a preference for who settled the colony (non-Clan or Clan) and when it was settled (Star League era, earlier, or more recently), a 1D6 roll on the Occupancy History Table will determine those aspects. Alternatively, players may use a date and settling faction of their own choosing. The date and settlement are then used in Step 1B.

OCCUPANCY HISTORY TABLE

Die Roll	Occupants
1	Colonists who settled before the founding of the Star League
2	Colonists who arrived during the Star League's heyday
3	Colonists who settled during the Succession Wars, fleeing the Inner Sphere
4	Recently established colony/occupation force from the Periphery
5	Recently established colony/occupation force from the Inner Sphere
6	Recently established colony/occupation force from the Clans

Population

The Planetary Population Table below captures the general diffusion and growth of humanity beyond the confines of Terra. Until the fall of the Star League, the "borders" of the Inner Sphere were porous. Coupled with habitable planets in the Periphery being no less common than in the Inner Sphere, this led to humanity continuing to spread away from Terra in ever-thinning density. However, the Succession Wars sharply curtailed the number of JumpShips available to the bulk of humankind, either by destroying the ships outright or destroying their shipyards, which the Star League had concentrated in the Inner Sphere. The Clans, on the other hand, have a very restricted population to work with, which limits the size of their colonies.

The first row of the Planetary Population Table addresses a special circumstance: an Inner Sphere world depopulated by the Succession Wars and subsequently removed from the maps by ComStar, who judged it uninhabited. More than 200 planets experienced that fate after they were directly attacked by weapons of mass destruction or suffered from collapsing technology, and there are a rare few failed colonies from before the Succession Wars that were likewise marked off the maps. However, humans are hard to completely exterminate and some of those worlds may still host small populations. Other worlds in the Inner Sphere would use the second row of the Planetary Population Table.

To determine a colony's population, the Planetary Population Table first requires players to select, either from the results of Step 1A or by their own choice, who settled the colony, when, and how far the colony is from Terra in light-years. Once the founding culture, era and distance is known, the player cross-references the Distance row with the Founding Era column to find what dice rolls are required to determine the population.

The Planetary Population Table has two numbers for a given combination of distance, era, and founding culture. The number to the left of the colon is the result of a 1D6 roll that determines whether the colony falls into a low or high population category; the number to the right of the colon is the second roll that specifies the population. For example, a planet inside the Inner Sphere settled during the Star League lists 1-5: 50 million x 4D6, and 6: 500 million x 4D6. This means a 1D6 roll of 1-5 requires a second roll of 4D6 multiplied by 50 million to determine the population, while a 1D6 result of 6 requires a second roll of 4D6 multiplied by 500 million. (This reflects the tendency of most *BattleTech* planets to be modestly populated, while some thrive. The average Inner Sphere planet has a population of several hundred million, but a sizable minority boasts populations in the billions.)

The population result may be multiplied with the Planet Condition Modifiers listed on the Planetary Population Table. Each modifier that applies to a planet is applied in sequence. For example, a planet that initially rolled a population of 500 million but had 20 percent water coverage and a tainted atmosphere would multiply the population by 0.8 for both conditions, giving a final population of 320 million.

The Planetary Population Table provides guidelines, not hard rules for populations. It is meant to approximate population distribution trends in *BattleTech*, but there are anomalies that it does not capture and, of course, players may always feel free to assign populations to their colonies as best suits their game. For players interested in plotting out colonial histories with respect to the populations, growth rates of 1 to 2% per year (averaged over the colony's history) are recommended. Rates much higher than 2% are improbable unless the colony is particularly primitive.



PLANETARY POPULATION TABLE

Distance from Terra	Founded in the Star League and Earlier	Founded More Recently	Comments
Inside Inner Sphere (<500LY from Terra)	1-5: 10,000 x 2D6 6: 100,000 x 2D6	N/A	A Lost Colony destroyed by the Succession Wars
Inside Inner Sphere (<500LY from Terra)	1-5: 50 million x 4D6 6: 500 million x 4D6	1-5: 10,000 x 2D6 6: 100,000 x 2D6	New colonies in the Inner Sphere are likely on barely habitable planets, because few habitable planets are left in the Inner Sphere for new settlement
500 to 600LY	1-5: 10 million x 4D6 6: 100 million x 4D6	1-5: 2 million x 2D6 6: 20 million x 2D6	—
601 to 750LY	1-5: 2.5 million x 4D6 6: 25 million x 4D6	1-5: 50,000 x 2D6 6: 1 million x 2D6	—
751 to 1000LY	1-5: 500,000 x 4D6 6: 5 million x 4D6	1-5: 20,000 x 2D6 6: 200,000 x 2D6	Few modern colonies are founded this far from the Inner Sphere
1001 to 1250LY	1-5: 100,000 x 4D6 6: 1 million x 4D6	1-5: 5,000 x 2D6 6: 50,000 x 2D6	—
1251 to 2000LY	1-5: 10,000 x 4D6 6: 200,000 x 4D6	1-5: 500 x 2D6 6: 10,000 x 2D6	—
2000LY+	1-5: 2,500 x 4D6 6: 50,000 x 4D6	1-5: 100 x 2D6 6: 2,500 x 2D6	—
Clan Colony, any distance from Terra	N/A	1-4: 1,000 x 3D6 5-6: 50,000 x 3D6	—
Outpost, any faction, any distance from Terra	1-4: 100 x 4D6 5-6: 1,000 x 4D6	1-4: 50 x 2D6 5-6: 1,000 x 2D6	—
Planet Condition	Modifier	Modifier Description	
Uninhabitable	x0.05	Planet has a toxic, very thick, vacuum, and/or trace atmosphere; gravity is over 1.5Gs	
Tainted Atmosphere	x0.8	—	
Very High Temperature	x0.8	—	
Gravity below 0.8 G or above 1.2G	x0.8	—	
Water coverage 40% or less	x0.8	—	

Continuing from the *System Generation* chapter, Chuck had a sketch of a background story for Amtor-2. It was in the Periphery, once part of the Outworlds Alliance but one of the 75 percent of the Outworlds' pre-Succession Wars planets that seceded during those dark centuries. Amtor-2 was a place of several warring ideologies, none of them anti-technological pacifism like the Outworlds' norm (hence the secession in disgust when the Alliance could not protect Amtor-2 from pirates during the Succession Wars). It would be on the far fringes of the Alliance, which once spanned an area nearly the size of the Combine, and is thus some 600 light-years from Terra. While Chuck isn't certain which year Amtor-2 was settled (something else to figure out in addition to planetary names), he knows it predates the Succession Wars.

Looking at the line addressing 600 light-years (500 to 600) and the column "Founded in the Star League or Earlier," Chuck sees Amtor-2 might have a population

of either 10,000,000 x 4D6 (on a first roll of 1-5) or 100 million x 4D6 (on a first roll of 6).

Chuck rolls a 1D6 and gets a 3. With a 3, the population formula he'll use is 4D6 x 10 million, so Chuck rolls 4D6 and gets 15 for a base population of 150 million. Looking through the modifiers, Chuck notes that the only applicable modifier is for low water coverage, 0.8. That lowers the population to 120 million.

He's not sure that's populous enough for his needs, but if he doesn't like the roll he can always fudge it later and adjust the planet's history to explain the higher population.

STEP 2: USILR CODES

The following guidelines for generating a planet's USILR code are primarily intended for independent planets with limited interstellar commerce—in other words, a typical Periphery planet, not typical Inner Sphere planets. Inner Sphere planets tend to have higher Industrial Development and Output than is suggested herein.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Players should not take the results of these guidelines as ironclad, particularly for planets with references in other *BattleTech* publications. A degree of judgment and reference to other *BattleTech* publications may be called for. If the Agricultural Output result seems too high compared to prior descriptions of the “barren” planet, feel free to lower it. If the Technological Sophistication generated here seems too primitive for prior descriptions of an industrialized planet, raise the Technological Sophistication. If the planet is a generic Inner Sphere world and ends up more industrialized and advanced than New Avalon, lowering the scores is probably warranted.

Of course, it is a good idea to note the justifications. It’s one thing to make a core Inner Sphere planet more industrialized than initially suggested by these guidelines (because the core of the Inner Sphere is heavily developed and industrialized), and another to create a Deep Periphery planet with a score of A/A/A/A/A just because you didn’t like the original D/D/C/C/B score. (Unless, of course, you’re creating the 200-world, super-advanced Shadow Wolverine Empire in the Deep Periphery. Fun comes first—this is a game.)

Technological Sophistication: The first part of the 5-letter USILR code, Technological Sophistication, marks the level of advancement a planet can locally sustain. (Much more advanced technology may be found on the planet, but the code indicates the technology that local facilities could produce when mostly bereft of outside support.)

A key element of maintaining advanced technology is a large, educated, prosperous population. Technology exhibits an exponentially increasing demand for population, at least to be independently and economically sustainable. In certain conditions (extreme automation or hand-built, cottage industries) high technology can be more sustainable (Niops being a notable example of the latter). However, the capability to truly comprehend and be able to improve technology requires vast numbers of educated citizens—early 21st-century Terra being a prime example of a situation where the ability to build the most advanced technologies is found in far fewer nations than actually use (and support) those technologies. Likewise, the Terran Alliance had to bankrupt its poorer member-nations to develop and support some portions of Tech Levels C and D (notably JumpShips and fusion power). The Clans found an interesting middle position by simply duplicating Star League technology in most areas (with no innovation or diversification) while using the 1.15 billion residents of the Clan homeworlds to sustain an advanced military industry for a limited warrior caste. The shortcoming is not in factory labor either, so automation is a limited fix—there must be enough warm bodies to provide sufficient consumers, thinkers and taxpayers to support the technology, not necessarily enough just to staff the factories and supporting industries.

Note that isolated planets settled before 2450, even if possessing advanced technology, may not necessarily possess BattleMechs and battle armor. If they do, the units are likely independent developments with odd characteristics.

Once the population and founding faction is known, players can determine the planet’s technology from the USILR Table. To use the Technological Sophistication section of the table, note the starting

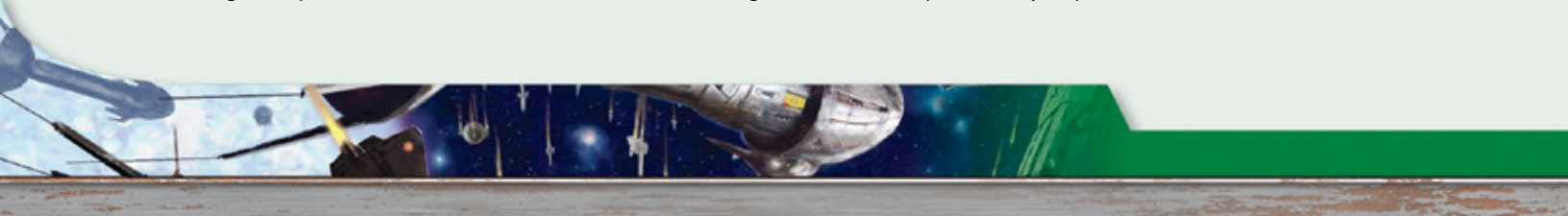
technology base (C). Add together all applicable modifiers, then apply the result to adjust the score. Each –1 modifier raises the technology level by one letter up the alphabet (for example, D to C). Each +1 modifier similarly reduces the Technological Sophistication by one letter (for example, B to C). Modifiers are cumulative; a colony of 100,000 would apply both +1 for a population under 100 million and +1 for a population under 1 million. As an example, a planet with –3 in bonuses and +2 in penalties would have a final modifier of –1, and so the Technological Sophistication would improve from the base of C to B.

While A and F officially mark the highest and lowest technology levels available, it is possible to exceed either. The highest nominal Technological Sophistication is A, but this score covers a broad range of technologies from the peak of the Star League (equivalent to Terra and advanced worlds of the Inner Sphere after 3050) and the hyper-advanced aspects of Clan technology (Tech Ratings of E and F). If the sum of modifiers would raise the Technological Sophistication above A, and if the planet may reasonably be said to host a center of Clan or Inner Sphere ultra-advanced research (like New Avalon or a Clan homeworld capital), then its Technological Sophistication code may be marked “Advanced” rather than A. However, it is extremely unlikely to find such advanced technology elsewhere. Players should note that few human planets have more than Technological Sophistication B, so even if the modifiers suggest an isolated Deep Periphery planet has Tech Level A, it should probably be limited to B or C.

It is also possible for a planet to regress below Technological Sophistication F (a score of F corresponds to the early twentieth century). If the modifiers would lower the Technological Sophistication Level below F, do not use a letter. Instead, note “Regressed” for the Technological Sophistication portion of the USILR code. The specific level of technology on a Regressed planet is open to player interpretation, but it is likely that the planet is at a pre-steam or even a Stone Age level of technology.

The USILR Technological Sophistication code is easy to convert to the *Total Warfare* Tech Rating. A USILR score of A corresponds to Tech Rating E, USILR B to Tech Rating D, USILR C to Tech Rating C, USILR D to Tech Rating B, and USILR F to Tech Rating A. A Regressed world remains regressed by any scale, while Advanced corresponds to Tech Rating F.

Special Note: Players may bypass the Technological Sophistication calculation for previously published *BattleTech* planets. Instead, if the planet produces a known unit (battle armor, BattleMech, fighter, etc.) with a known availability code, the Tech Rating in the availability code may be assumed to represent the planet’s Technological Sophistication. According to the conversion given above, the Technological Sophistication derives from the Tech Rating. For example, in 3025 the Taurian planet New Vandenberg built Tech Rating D BattleMechs almost entirely from on-planet factories. Tech Rating D is equivalent to a Technological Sophistication of B, and thus New Vandenberg may be given a USILR Technological Sophistication score of B regardless of its other attributes. Likewise, GM of modern Kathil produces Tech Rating E BattleMechs and other war machines of many models, allowing Kathil’s Technological Sophistication to be designated as A without using the USILR Table. On the other hand, some planets may require a more nuanced assessment: an



Outworlds Alliance planet that recently received a Clan Snow Raven OmniMech factory does not automatically rate an A (Advanced) score, but instead should reflect the technological sophistication possessed by most of the population.

Industrial Development: This represents less a gauge of how much the world produces and more the sophistication and depth of its industry. During the Star League, some Periphery colonies were so extremely specialized (such as in the production of shoes) that they would score very low in this USILR code, but would have very high Industrial Output (producing shoes for many planets but little else, they likely starved and collapsed when the Star League fell). The age of such interstellar specialization disappeared along with most of humanity's JumpShips, but planets may still have very backward levels of Industrial Development. As a result, scores ranging from D to B are typical on developed worlds.

This score is only weakly linked to the military complex, which for the most part is an extremely specialized industry in *BattleTech*—the production of medium lasers and BattleMech chassis are not indicative of a planet's ability to build home computers, bicycles, bedpans, and modern medical scanners. Rather, Industrial Development marks how likely a planet is to support the full range of technologies for a specific Technological Sophistication score. A planet of Technological Sophistication A and Industrial Development D probably only builds a few advanced technologies and may be deficient in whole sectors of industry, like transportation or medicine. This can result in typical Succession Wars technological incongruities, such as a planet able to put advanced telecommunications in every home while the majority of residents make do with animal-drawn conveyances and hand-operated home water pumps.

Despite the weak link, some connection does exist between a planet's Industrial Development rating and military production. A higher Industrial Development rating indicates an ability to produce increasingly complicated war machines, which draw on greater numbers of industries. While a score of F or D might be sufficient for simple items like infantry weapons and simple armored vehicles, scores of C, B, and A indicate the ability to support more complicated units, like battle armor, BattleMechs, aerospace fighters, and Large Spacecraft (in approximately that order, as allowed by the Technological Sophistication of the planet). A high Industrial Development score does not guarantee military production is present, it only indicates what the planet might accomplish if it possessed military factories.

Like Technological Sophistication, the degree of Industrial Development is highly sensitive to population. More consumers, engineers, and taxpayers support a deeper, broader industrial base than can a smaller population. Advanced technology also helps, of course.

Industrial Development is calculated in the same manner as Technological Sophistication. The score starts at D and moves toward A as each -1 modifier is applied, and decreases toward F for each +1 modifier applied. Add together all modifiers before applying them. Unlike Technological Sophistication, there is no way to progress above A or below F.

Special Note: When writing up a *BattleTech* planet with known military factories, players can use established factories to roughly judge the Industrial Development of a planet without consulting the USILR table. A planet that builds aerospace fighters probably has an Industrial Development of at least B, while a planet building many different unit types (battle armor, BattleMechs, and combat vehicles) probably has a score of A, and a planet that can barely equip an infantry unit might have an Industrial Development score of D or F (or is an advanced, pacifist world).

Raw Material Dependence: This rating indicates how dependent the world is on off-world materials, which may come from other planets and asteroids in the system or from other star systems. However, the vast majority of planets have a large amount of easily-accessed materials when first settled (comparable to Earth before 2,000 BC), the placer deposits and rich ores having never been pillaged by a rapacious sapient species like humans. The degree of raw material dependence also mostly refers to rare and heavy elements; some elements (hydrogen, carbon, oxygen, silicon, iron, aluminum, etc.) are simply too widespread in the universe to ever really be deficient on a planet. As a result, most planets are fairly resource independent (typically possessing a rating ranging C to A).

In *BattleTech*, humankind has grown jaded by this abundance of materials on habitable planets. While humanity explored the boundless mineral wealth of Terra's asteroid belt in the 21st century (a resource which is still hardly tapped by the 31st century), it soon found habitable worlds almost always preferable (meaning less expensive) sources of raw materials than asteroids, deep mines, or other costly extraction techniques. Hence, a score of A or B represents a wealth of easily extracted resources on the planet, akin to those rarely seen on Terra after the mid-twentieth century, not the overall abundance of materials in the star system. This focus on habitable planets reached the point that it was economically worthwhile for Terra to import common ores from planets in the Outworlds Alliance during the Star League, and the Lyrans entered the Federated-Commonwealth treaty in 3020 at least partly for the untapped planetary resources of the Federated Suns despite already having vast resources of their own among asteroid belts and uninhabitable systems within the Commonwealth.

In the modern era, civilizations must be largely independent of off-world resources. JumpShips and DropShips are few and far between, and they haul only small quantities of materials (mere kilotons) compared to the needs of a well-developed planet. Terra, for example, was consuming over a *billion* tons each of iron, coal, and oil *per year* in the late 20th century. This means that, one way or another, most planets in *BattleTech* must be self-sufficient for common materials, reinforcing the relatively high (independent) starting Resource Dependence score. The planets that truly needed off-world resources largely died in the Succession Wars.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

USILR TABLE

TECHNOLOGICAL SOPHISTICATION

Base Technological Sophistication: C
Technological Sophistication Modifiers:
–1 (i.e., C to B) for Star League or Earlier Settlement
–1 for a population over 1 billion
–1 for Clan settlement
+1 if the planet is not part of an Inner Sphere House, Clan, or major Periphery nation
+1 (i.e., C to D) for a population under 100 million
+1 for a population under 1 million
Technological Sophistication Ratings:
Advanced: Ultra-Tech world. Hosts the most advanced research centers and universities in human space, equivalent to New Avalon or Strana Mechty.
A: High-tech world. Advanced research centers and universities; best medical care; cutting-edge microelectronics industry
B: Advanced world. Access to many new technologies; hosts universities; good medical care available (though lacking in most cutting-edge medical tech); basic microelectronics industry.
C: Moderately advanced world. Average local education and medical care; minimal microelectronics industry.
D: Lower-tech world. Poor educational system; medical care equivalent to 21st- to 22nd-century levels; nonexistent microelectronics industry (excepting possible isolated regions run by private concerns).
F: Primitive world. Inhabitants live without dependence on technology; no advanced education; medical care equivalent to twentieth-century level (at best).
Regressed: Pre-twentieth century technology, maybe Stone Age.

INDUSTRIAL OUTPUT

Base Industrial Output: C
Industrial Output Modifiers:
–1: Population over 1 billion
–1: Technological Sophistication Advanced or A
–1: Industrial Development A or B
+1: Technological Sophistication D or F
+1: Technological Sophistication Regressed
+1: Industrial Development D or F
Industrial Output Ratings:
A: High output. World has wide industrial and commercial base capable of exporting most of its excess output, if sufficient space transport is available.
B: Good output. World's industrial and commercial base sufficient for modest product export.
C: Limited output. World has a small industrial base which limits exports; imported goods common.
D: Negligible output. World's industrial base insufficient for major exports; reliant on imported goods.
F: No output. World must import most—if not all—of its heavy industrial and high-tech needs.

INDUSTRIAL DEVELOPMENT

Base Industrial Development: D
Industrial Development Modifiers:
–1 for a population over 1 billion
–1 for a population over 4 billion
–1 for a Technological Sophistication of Advanced, A or B
+1 for a population under 100 million
+1 for a population under 1 million
+1 for a Technological Sophistication of F or Regressed
Industrial Development Ratings
A: Heavily industrialized. Capable of manufacturing any and all complex products.
B: Moderately industrialized. May produce a limited quantity and range of complex products.
C: Basic heavy industry. Equivalent to roughly 22nd-century tech; fusion technology possible, but no complex products (including BattleMechs).
D: Low industrialization. Roughly equivalent to mid-twentieth century level; fusion technology must be imported.
F: No industrialization.

AGRICULTURAL DEPENDENCE

Base Agricultural Dependence: C
Agricultural Dependence Modifiers:
–1 for a Technological Sophistication of Advanced, A, or B
–1 for a Technological Sophistication of C
–1 for an Industrial Development of A, B, or C
+1 for a Technological Sophistication of F or Regressed
+1 for a population over 1 billion
+1 for a population over 5 billion
+1 for a Surface Water Percentage under 50%
+1 for Tainted atmosphere or high pollution
+2 for Toxic atmosphere
Agricultural Dependence Ratings:
A: Breadbasket. Planetary agro industries meet all local needs and sustain a thriving export trade, as allowed by available space transport.
B: Abundant world. Rich agricultural environment sustains local needs and permits limited exports.
C: Modest agriculture. Most food locally produced, though some agricultural needs rely on imports.
D: Poor agriculture. Minimal agricultural output forces heavy reliance on off-world imports to sustain the local population.
F: Barren world. World's agricultural output cannot sustain the local population without continuous off-world imports.

RAW MATERIAL DEPENDENCE

Base Raw Material Dependence: B
Raw Material Dependence Modifiers:
–1: Technological Sophistication Advanced
–1: Technological Sophistication A, B, or C
–1: World's density over 5.5 g/cm ³
+1: Population over 3 billion
+1: Industrial Output Rating A or B
+1: Settled over 250 years ago
+1: World's density under 4 g/cm ³
Raw Material Dependence Modifiers:
A: Fully self-sufficient. System produces all needed raw materials and may export in large quantities.
B: Mostly self-sufficient. System produces all needed raw materials and may export a small surplus.
C: Self-sustaining. System produces some of its needed raw materials and imports the rest.
D: Dependent. System is poor in raw materials and must import most of its material needs.
F: Heavy dependent. System utterly reliant on imported materials to maintain industry and population.

In turn, a planet that ends with a low score (D or F) probably depends on imports of rarer, small-quantity materials—rhenium, gallium, tungsten, platinum-group metals, germanium, and so on—that can reasonably be delivered by JumpShips and DropShips. If such a resource-starved planet is also deficient in common substances (iron, petroleum, aluminum), it is unlikely to actually import its needs. Rather, the low score means that the planet is resorting to difficult and expensive mining techniques: mines more than several hundred meters deep, ocean floor mining, asteroid mining, chemical synthesis of fuels, and so on, which make resources more expensive than on neighboring planets that have not tapped out their easily accessed reserves.

Such resource-starved planets may occasionally import common materials (iron ore and petroleum being published examples), but this is mostly a case of individual merchants exploiting local JumpShip availability and ore prices to get a few kilotons at cut rates while their competitors get their megatons at the usual prices. All the JumpShips in the Inner Sphere could not actually transport enough iron or aluminum to meet the demands of more than a few average Inner Sphere planets.

Obviously, worlds that have been settled longer and have higher populations will have a higher Raw Material Dependence. Less dense worlds usually have lower percentages of rare, heavy elements, while denser worlds have greater mineral wealth in their crusts. Further, advanced technology allows improved resource extraction and recycling, while lower levels of technology hinder access to resources.

Raw Material Dependence is calculated in the same manner as Technological Sophistication. The score starts at B and moves toward A as each –1 modifier is applied, and decreases toward F for each +1 modifier applied. Add together all modifiers before applying them. Unlike Technological Sophistication, there is no way to progress above A or below F.

Industrial Output: Simply put, this is how much a world can produce from its non-agricultural, non-service industries. Industrial Output is not particularly representative of military production (unless the population is very small, as on Hesperus II), but rather how well the world's industry can sustain its population, because military production on an average Inner Sphere planet is much, much smaller than civilian industry. Industrial Output is also not representative of Technological Sophistication; primitive nations (like the “developed” Terran nations of the late 20th century) can produce staggering quantities of goods.

This score is proportional to population: a planet of 100 million people with an Industrial Output of A does not produce as many goods as a planet of 5 billion people with an Industrial Output of A (or B, or C, or D, for that matter). Finally, even worlds that are allegedly covered in factories and heavily industrialized (terms involving a great deal of artistic license) are unlikely to involve more than 10 percent of their populations in industry unless their Technological Sophistication is F or Regressed. Those who build goods for others are rarely a large percentage of the population of even moderately advanced worlds; most of the rest of the population is in the service industry.



Combining nations capable of interplanetary trade and worlds devoid of resources yields vibrant marketplaces trading in all manner of goods.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



In the modern era, many planets start off fairly independent of outside industrial support unless relatively primitive or low in population. The era of worlds supported by their neighbors mostly ended at the dawn of the Succession Wars; today, there are too few JumpShips to export all but the most critical of goods between star systems. Even a planet with an Industrial Output of A in the center of a Successor State will likely only devote a tiny percentage of its industrial output to interstellar trade due to the lack of transport (though it might be a critical percentage for the economy if, for example, a dozen nearby worlds depend on ultra-advanced microchips only available from that single planet). As a result, scores of C or B are typical in the Inner Sphere, and D or C are the norm elsewhere.

Industrial Output is calculated in the same manner as Technological Sophistication. The score starts at C and moves toward A as each -1 modifier is applied, and decreases toward F for each +1 modifier applied. Add together all modifiers before applying them. Unlike Technological Sophistication, there is no way to progress above A or below F.

Agricultural Dependence: This rating is a measure of how much food the world needs to import to support its population. In the modern era, the dearth of JumpShips has made virtually all planets self-sustaining. (The Inner Sphere planets that could not feed themselves died in the early Succession Wars.) Hence, scores of C or B are the norm.

Generally, only the smallest worlds, those possessing thousands of inhabitants, can effectively be sustained by interstellar or even interplanetary imports, though a few populous worlds of the Inner Sphere that are extremely wealthy and powerful, such as Galax and Irian, are able to survive on interstellar or at least interplanetary imports. This is because feeding hundreds of millions of people (the average planetary population of the Inner Sphere) calls for millions of tons of daily food imports, which the JumpShips and DropShips of *BattleTech* cannot easily deliver. If more than a few average Inner Sphere planets had Agricultural Dependence scores of D or F, most of the JumpShips and DropShips in the Inner Sphere would be monopolized to keep them fed. The other side of this transportation bottleneck is that even abundant worlds (with scores of A or B) can only export a fraction of their food production (most often luxury foods, seeds, and other compact, light agricultural products).

Finally, even "breadbasket" worlds with huge surpluses of food are unlikely to involve more than 1 percent of the population in agriculture (and perhaps quite a bit less) unless their Technological Sophistication is F or Regressed. Likewise, agricultural regions rarely cover more than a small percentage of land area on a planet, despite dramatic fictional descriptions to the contrary. As with Industrial Output, the Agricultural Dependence Rating of a planet is related to its population. A planet with a population of 100 million and an Agricultural Dependence of A produces far less total food than a planet with a population of 5 billion and an Agricultural Dependence of C.

Technological Sophistication has an enormous impact on Agricultural Dependence, with dependence dropping rapidly as Technological Sophistication improves. A world's population has an opposite impact, as does a water-poor environment.

Agricultural Dependence is calculated in the same manner as Technological Sophistication. The score starts at C and moves toward A as each -1 modifier is applied, and decreases toward F for each +1 modifier applied. Add together all modifiers before applying them. Unlike Technological Sophistication, there is no way to progress above A or below F.

Chuck had some ideas for the various warring factions on Amtor-2, but he hadn't put a lot of thought into the planet's overall state of development. The USILR Table is as good a start as any for filling out the USILR code of Amtor-2.

For Technological Sophistication, Chuck notes the base code of C. Amtor-2's first modifier is a -1 for having been settled during or before the Star League, which would make the score B. However, Amtor-2 is not part of a House, major Periphery nation, or Clan (+1 modifier), so the final modifier is 0: Amtor-2's Technological Sophistication is thus C. That gives Chuck a lot of the advanced technology he wanted, like large fusion power systems, spacecraft and computers, but he's not sure he likes the absence of a domestic BattleMech industry. Then again, it is a Periphery world that seceded from the weakest of the major Periphery states—Chuck thinks he might be able to live with a Technological Sophistication of C. After all, the need to import 'Mechs gives him an excuse to have interstellar traders visit distant Amtor-2.

Industrial Development of Amtor-2 starts at a base of D, rather sparse and backward, and no modifiers apply. Amtor-2 does not have high enough technology or population to really support a complicated industrial base. Chuck's not entirely happy with that, but the planet is supposed to host a lot of illiterate peasants toiling under intellectual and political elites, which doesn't encourage a complicated industry. (And it is in the Periphery.) He might revisit this code later.

Raw Material Dependence starts at B. Chuck notes the Technological Sophistication of Amtor-2 is sufficient to improve resource extraction, but Amtor-2 has definitely been settled over 250 years (since it predates the Star League). The net result is B: a fairly independent planet that has enough spare raw materials to trade a bit with visiting merchants, probably funding those BattleMech imports.

Chuck next looks over Industrial Output. It starts at a modest level, C, enough to sustain Amtor-2's basic needs, but Amtor-2 does not have enough population or technology to improve it (though the planet has enough technology and population to prevent it from sliding). Thus, Industrial Output remains at C.

Finally, Chuck calculates Agricultural Dependence. Like most post-Succession War worlds, Amtor-2 starts quite independent at C. Agricultural output responds sharply to technology, so Amtor-2's Technological Sophistication raises the Agricultural Dependence to B, which is plenty for Chuck's plans. He figures the water-sparse Amtor-2 will have a number of heavily-defended breadbasket, water-rich regions around which each faction clusters.

The USILR code of Amtor-2 is thus C/D/B/C/B.

Chuck is rethinking the population of Amtor-2. A population of over 1 billion would definitely improve a number of the USILR codes, even though the population would be hard to justify so far from Terra. Looking at some of the planned factions (plagiarized from the Venus series), Chuck can imagine they were founded by a large, dedicated colonial program, probably fleeing the Inner Sphere for their detestable eugenicist theories. A few million people in the mid-2600s could grow to over 1 billion by 3050, and Amtor-2 is a quite habitable planet that could support such growth.

If Chuck raised the population to a bit over 1 billion, the world's USILR codes would change in several ways. Technological Sophistication would improve to B; Industrial Development would improve to C for the population and then B because of the improved technology; Raw Material Dependence would be unchanged; Industrial Output would climb to B; and Agricultural Dependence would lower to C for the population, then improve to B for the improved technology, and then improve to A for the improved industrial development. The more populous Amtor-2 would thus have a code of B/B/B/B/A. Chuck will have to sleep on it before deciding if he wants an over-the-top Deep Periphery world like that.

BASE GOVERNMENT TABLE

2D6 Roll	Inner Sphere	Periphery
2 or less	Democracy (Athenian or Representative)	Anarchy
3 – 6	Democracy (Representative)	Democracy (Athenian or Representative)
7 – 8	Democracy (Limited)	Democracy (Representative)
9 – 10	Autocracy/Oligarchy	Democracy (Limited)
11+	Dictatorship	Autocracy/Oligarchy
Modifiers	+/-	Modifier Example
Very Liberal Faction	-3	Outworlds Alliance, Free Rasalhague Republic
Liberal Faction	-2	Free Worlds League, Magistracy of Canopus
Typical Faction	0	Lyran Commonwealth, Federated Suns, Taurian Concordat
Authoritarian Faction	+2	Capellan Confederation, Draconis Combine
Very Authoritarian Faction	+3	Clans

Exceptions

As always, the above are guidelines, not cast-in-stone rules. The Clans have produced a knot of 30-odd worlds about 1,500LY from Terra with an average planetary population of over 30 million, at high levels of Technological Sophistication and Industrial Development. On the other hand, quite a few notable worlds closer to the Inner Sphere (or in it) have very small populations and low technology, though the Inner Sphere average is several hundred million per planet. The Hanseatic League also bucks the trend for a Deep Periphery, post-Star League settlement (though it might be a case of Lyran Hansa founders forming a nation out of existing, pre-Star League colonies).

On the gripping hand, the noteworthy Deep Periphery nations have already been detailed in previous *BattleTech* publications, so finding an unknown colony or multi-system nation capable of constructing JumpShips and BattleMechs is a stretch at best.

STEP 3: GOVERNMENTS

This section only applies to planetary governments, which may vary from the style of their nation's government.

Examples and suggestions for planetary governments are provided on p. 362, *AToW*. Independent Periphery and Deep Periphery planets are likely to have representative democracies or oligarchies more often than feudal systems; feudal governments are an Inner Sphere development meant to hold together far-flung interstellar nations amid the stresses of slow communications and long travel times. In addition to *A Time of War*, players may consult the *Handbook* series, especially *Handbook: Major Periphery States*, for suggestions on planetary government types appropriate to an existing faction.

DETAILED GOVERNMENT TABLE

Base Government	Acceptable Qualifiers
Anarchy	Constitutional, Socialist, Communist
Democracy	Athenian/Cyberdemocracy, Communist, Confederacy/Alliance, Constitutional, Corporate, Delegated Democracy, Demarchic, Federal, Feudal, Limited Democracy/Hybrid Regime, Monarchy, Parliamentary, Republic/Representative Democracy, Socialist, Theocracy, Unitary
Autocracy/Oligarchy	Communist, Constitutional, Corporate, Federal, Feudal, Monarchy, Parliamentary, Socialist, Theocracy, Unitary
Dictatorship	Communist, Constitutional, Corporate, Feudal, Monarchy, Socialist, Theocracy, Unitary
Clan	Confederacy, Federation

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Planets with clear governments based on published data do not roll on the Base Government Table. The Clan homeworlds, for example, automatically fall under Clan-style government (a caste-driven, warrior-dominant hierarchy). Planets in the Capellan Confederation and Draconis Combine are automatically oligarchies or autocracies. Planets in most other existing multi-world factions tend to allow some diversity in their planetary governments.

Players determine a planet's government by rolling 2D6 on the Base Government Table. The roll may be modified using the modifiers listed in the Base Government Table, depending on the faction to which the planet belongs, though that may require a judgment call based on limited data. For example, determining whether ancient factions like the Chesterton Trade League were liberal or authoritarian is difficult, and in such situations the player should use a modifier of 0.

The Base Government Table provides a handful of broad government classes (base governments, sometimes with preliminary qualifiers) listed roughly in order of the level of control and freedom. After generating a result from the roll on the Base Government Table, players may apply additional qualifiers. This is done by looking at the base government's row on the Detailed Government Table and selecting modifiers (if any) that suit the player's concept of the colony's government.

Definitions of the base government types and government qualifiers follow the Base and Detailed Government Tables.

Government Definitions

The following definitions are supplied in an absolute form. That is, they are stripped of political stylings of their members. They describe a planet's government as it actually exists, not as the government describes itself. (Many dictatorial governments have described themselves as liberal democracies, but these rules would call such governments dictatorships. Similarly, the name of a major faction, like the Outworlds Alliance or Lyran Commonwealth, says little about the actual form of government.)

Base Governments: The definitions below form the basis for most governments in human space. These base types may be complemented by the modifiers listed in the Government Table.

Anarchy: Not so much a government as a lack of one, these "governments" rarely cover more area than a province, though the post-Civil War Terran Hegemony was an interstellar anarchy until conquered by the Houses. Anarchies rarely last long, generally only surviving while potential leaders or power groups have no advantage over each other.

At the player's discretion, anarchies may also represent a situation where the planet has multiple governments (each rolled up and detailed separately per the steps above), but no overarching planetary government. If the player does not have a preference, roll 1D6. If a 1 or 2 results, then roll 1D6 again to determine the number of governments. If this result is 3-5, then roll 2D6 x 10 to determine the number of governments; if the result is a 6, roll 3D6 x 100 to determine the number of governments.

Autocracy/Oligarchy: These are highly authoritarian governments with little input from the common citizen/subject. Autocracies are ruled by one person (an absolute monarchy, a hereditary dictatorship), while oligarchies are ruled by small groups (a military junta, a religious council, a corporate board, feudal lords).

Clan: Clan governments are an unusual form of oligarchy. Overall Clan government consists of five castes (warriors, scientists, merchants, technicians, laborers), each with their own ruling councils and ranks. The civilian castes handle most minutia of running Clan society, with the warrior caste rubber-stamping most civilian decisions except the overall direction of the Clan. Clan government also comes with a peculiar Communist-style economic system where the state controls all means of production, and economic activities outside the bare necessities are suppressed. Most invading Clans learned to rule their conquests with a light hand, leaving planetary governments and economies untouched due to significant disparity in populations, thus forming *de facto* confederacies with a Clan central government and differing planetary governments.

Democracy: These governments grant electoral or even legislative authority in varying levels to the citizenry. The variations are vast: federal republics, confederations, constitutional monarchies, and many more.

Dictatorship: These highly authoritarian governments are ruled by a single individual. Long-lived dictatorships tend to evolve into autocracies or oligarchies.

Government Modifiers: The following terms further refine the type of government.

Athenian/Cyberdemocracy: An Athenian democracy directly engages every member of the electorate in legislative and sometimes executive decisions. The electorate may be extremely small (for a historical example, this may be "all free male wealthy landowners"), but each member of it participates in legislative decisions. A cyberdemocracy is a minor variation on an Athenian democracy where polling is handled electronically. This modifier only applies to Democratic and Oligarchic governments.

Communist: An ideal Communist society would be classless, moneyless, and stateless. In practice (and for these rules), Communism refers to governments where almost all businesses are owned by the state. It is not a comment on how authoritarian the government might be; after the twentieth century, humanity did manage to create a few liberal Communist governments on its many far-flung worlds.

Confederacy/Alliance: Confederacies and commonwealths are unions of smaller provincial governments that grant substantial powers to those member-governments. Alliances are even looser associations of governments. This contrasts with federations, which tend to grant greater authority to the central government. Confederacies and alliances may be applied to almost any type of government.



Constitutional: A constitutional government imposes a fundamental set of laws around which the government is organized. This is a staple of most governments and thus does not need to be stated, but some governments—like autocracies, dictatorships, and monarchies—are not necessarily run to constitutional standards, and thus it is worth noting when such governments adhere to a constitution.

Corporate: This type of government is overtly run by corporations, with the government contracting out most services to corporate entities. This definition specifically applies to governments where corporations supply most services, not to other types of governments that are simply heavily influenced or informally ruled by corporate/business interests (which are better classified as oligarchies or autocracies). Corporate qualifiers apply to almost any type of government, though most commonly democracies.

Delegated Democracy: A hybrid of Athenian and representative democracies, this sort of government uses representatives for the electorates (like a representative democracy) but ties the representatives' votes rigidly to the preferences of the electorate. Like Athenian democracies, it has rarely succeeded well on a large scale.

Demarchic: Based on the premise that the best rulers do not aspire to the throne, demarchic governments randomly select citizens to serve as leaders, or (in more extreme forms) treat time in government service as a tax. (The time in government for such "tax"-type demarchies is typically scaled in response to something the founders think should be cause for giving back to society, such as large amounts of wealth or amount of government services used.)

Federal: Federal governments are unions of smaller governments (provinces, states, planets, etc.) where a separation of powers exists between the central government and sub-governments, but the central government has sovereignty. This differs from confederacy/alliances where the sub-governments retain greater powers.

Feudal: Feudal governments in *BattleTech* are unions of smaller states linked by personal, often hereditary ties between leaders of member-states (rather than constitutional hierarchies). Such governments are suited for decentralized interstellar states where round-trip communications and passenger (that is, military) transits may be weeks or months, but are less common on planetary scales. The Lyrans Alliance/Commonwealth, Free Worlds League, and Federated Suns often have representative democracies on the planetary level that use feudal ties to the central government.

Limited Democracy/Hybrid Regime: These governments include partial democracies, pseudo-democracies, hybrid regimes, and related governments that are nominally democratic but legally or unofficially limit actual public input

into governance. Civil rights are restricted and elections may be frequently rigged. In some cases, this stems from corruption. In others, it derives from a very limited electorate (for example, only nobles or major landowners or corporate shareholders may participate). Despite their limitations, these governments have broader participation and more civil rights than autocracies and oligarchies.

Monarchy: These governments consolidate their sovereignty into one person. The difference between an autocracy (absolute monarchy) and representative democracy (constitutional monarchy, parliamentary democracy) depends on the level of authority granted to the monarch. Long-lived monarchies tend to be less authoritative (if not necessarily less powerful) than younger monarchies because, as an ancient monarch once said, "The buck stops here." In other words, the more a monarch is associated with unpopular legislation and executive decisions, the shorter their term in office (and the greater the frequency of regicide).

Parliamentary: Parliamentary governments include some executive powers (head of government) in their legislative bodies, compared to governments that assign both head of state (e.g., monarch, premier, president) and head of government (e.g., president, prime minister) duties to personnel outside the legislative body. Most commonly, parliamentary systems are used in monarchies and representative democracies.

Republic/Representative Democracy: These governments delegate the will of the electorate to representatives. When the electorate is sufficiently small, such governments are better described as oligarchies.

Socialist: Socialist economic systems assign significant (but not total) ownership of the means of production to the state; socialist systems span a spectrum from near-complete capitalism to Communism. Socialist economic systems are applied to almost any form of government, from authoritarian to Athenian democracies.

Theocracy: While many governments incorporate some level of religious or philosophical authority (e.g., state churches), a theocracy is specifically governed (to a large extent) by a church, or possibly multiple religions. Theocracies lean toward autocracies or oligarchies, but more liberal and democratic theocracies are possible.

Unitary: Unitary governments are those of multiple provinces (or planets) where governmental sovereignty is fully vested in the central government, forming the far end of the spectrum of federal, feudal, confederacy, and alliance governments. Provinces simply serve as convenient regional administrative districts for the central government. The unitary nature of governments is by default; most often it is a non-unitary element (federal, feudal, confederacy, etc.) that is stated.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

Chuck already knows what sort of a government he wants on Amtor-2. His world is based on the Carson Napier of Venus series by Edgar Rice Burroughs. The known governments include the Havatoo (a technocratic oligarchy), Kormor (zombies), Thorists (Communists), and Zani (fascists). Some groups on Burroughs' Amtor do not translate into fixed nations (the displaced Vepajans, the Cloud People, and pirates), so Chuck makes them footnotes as potential tormentors for his players. So how does this translate into the rules?

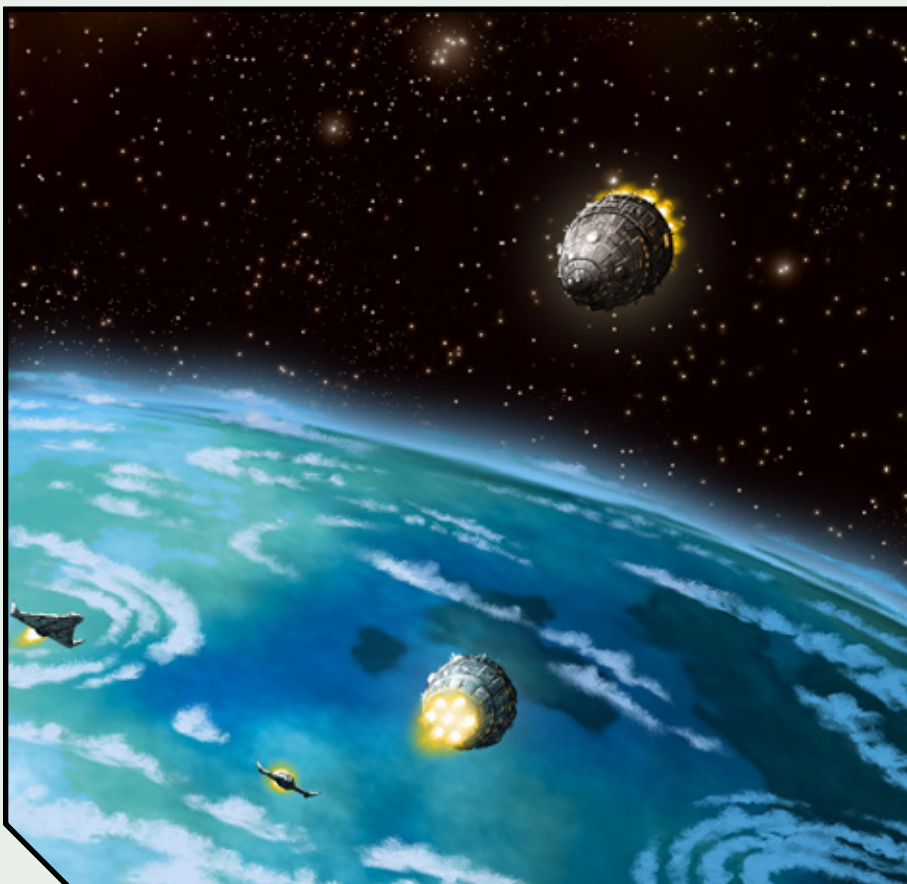
With no central government, Chuck notes Amtor-2 as an anarchy (4 regional governments) on the planet construction sheet.

The Havatoo are a technocracy led by a council of five eugenicist super-scientists. The technocracy aspect has no bearing (there are many forms of oligarchies: by engineers in the case of a technocracy, by Communist party leaders, by colonial first families, by a feudal court, etc.). The key feature of such a government, Chuck sees, is that the Havatoo are ruled by a small clique: this means the base government is an oligarchy. No qualifiers seem to apply, so Chuck notes Havatoo as simply an oligarchy.

Chuck has no idea how to approach a zombie nation, since zombies are (lamentably) not a part of the BattleTech universe. He decides to replace them with the Vepajans. The Vepajans are ruled by a monarch held in near-divine reverence. The base government is thus an autocracy (a long-lived government dominated by one person), with the Monarchy qualifier. Chuck notes the Vepajans as a monarchy (autocracy).

The Thorists were modeled on Communists as seen by an American writer in the 1930s. Chuck glances over some reference material on the Soviet Union for the time and decides that a base government of oligarchy (a small group of party leaders autocratically ruling the population) is appropriate, as is the Communist qualifier, so he notes the Thorists as a Communist oligarchy.

The Zani were modeled on mid-twentieth century fascist governments near the outbreak of World War II. The Zanis were ruled by a single dictator and were violently racist. The base government is simple: dictatorship. Chuck sees no qualifiers appropriate to the Zani, so he notes the government as a dictatorship.



Historically a nexus of manufacturing, the orbital space over the Lyran world of Alarion once bustled with interstellar traffic.

STEP 4: OTHER FEATURES

Finally, players may want to add other features to their colony worlds such as hyperpulse generators (HPGs) and recharge stations.

Hyperpulse Generators: Introduced in 2630, the HPG substantially cut communication times previously bottlenecked by JumpShip transit. The two types of HPGs available for star systems are A-rated and B-rated. Both classes of HPGs have a 50-light-year range. Serving as communication hubs for B-rated HPGs, an A-rated HPG transmits to each B-rated HPG in range sequentially every 12 to 24 hours (sooner for priority messages and during the Star League). B-rated HPGs transmit less frequently than A-rated HPGs (every 12 hours during the Star League, or every few days after the fall of the Star League).

ComStar also sometimes offers C- and D-rated services for Periphery planets near the Inner Sphere (within 550 light-years of Terra), which are not HPGs but rather courier JumpShips that provided scheduled message deliveries (visits every 3 months in the case of C-rated service, or annually for D-rated service), plus offering subsidized collars to traders' DropShips.

Determining whether an inhabited planet has an HPG is simple for a majority of settled planets. If the colony is Clan, it has an A-rated HPG. No roll on the HPG Table below is required.

In the Inner Sphere, a majority of planets have a B-rated HPG while the remainder (varying by era) have A-rated HPGs (about 200 in the Star League, about 50 for most of the Succession Wars, and about 100 in the late 31st century).

Planets in Major Periphery nations usually have B-rated HPGs, with A-rated HPGs reserved for capitals; a handful resorted to C- and D-rated non-HPG service. Some independent Periphery worlds within about 550 light-years of Terra have B-rated HPGs or non-HPG communication services, while most Periphery worlds have no regular service except for what is passed along by the occasional visiting trader JumpShip.

In cases where a planet is already cited in a *BattleTech* publication as having an HPG, this step is not necessary; simply give the planet its published HPG.

To determine whether a colony has an HPG, first review the above discussion and determine if the planet automatically has a specific type of HPG. Otherwise, roll 2D6, apply the modifiers on the HPG Table, and compare the modified roll to the appropriate column of the HPG Table.

Recharge Stations: These space stations are deployed at the zenith and nadir jump points of star systems to accelerate and standardize recharge times (see p. 87, *SO*). They can reduce the minimum safe recharge time of a JumpShip from 175 hours to 100 hours, and are even more useful at dim K- and M-class stars.

Recharge stations proliferated from the 2200s through the Star League era, but the Succession Wars found them easy targets. After 2820, less than one in four Inner Sphere systems has a recharge station, and even fewer have stations at both their zenith and nadir points. Recharge stations are even rarer in the Periphery during the Succession Wars, and scarce in the Deep Periphery (outside of Clan systems), but are not dependent on ComStar and the Word of Blake like HPGs.

HPG TABLE

2D6 Roll	Inner Sphere	Major Periphery State	Other Periphery
1 or less	C-rated Service	D-rated Service	None
2	B-rated HPG	C-rated Service	None
3-10	B-rated HPG	B-rated HPG	None
11	A-rated HPG	B-rated HPG	C-rated Service
12	A-rated HPG	A-rated HPG	B-rated HPG
Modifiers			
-1 per 100LY from Terra			
-1 if population under 1 billion			
-1 if Technological Sophistication of D or less			
-1 if Industrial Development of D or less			
+2 if the year is before 2800			
+1 if population over 2 billion			
+3 if national capital			

RECHARGE STATION TABLE

2D6 Roll	Inner Sphere	Major Periphery State	Other Periphery	Clan
2 or less	None	None	None	None
3-9	None	None	None	1 station
10-11	1 station	1 station	None	2 stations
12	2 stations	1 station	1 station	2 stations
Modifiers				
-1 if population under 1 billion				
-1 if Technology Sophistication of D or less				
-1 if Industrial Development of D or less				
+2 if the year is before 2800				
+1 if population over 2 billion				
+1 if national capital				

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Jaime Wolf, unshakable in his Archer, has weathered the fire of countless battles and will do so for decades to come.

NARRATIVE CAMPAIGNS

In this chapter, gamemasters (GMs) will learn how to create interlinked scenarios to form an overarching campaign. This system is intended to guide GMs and players in telling a story, focuses less on number crunching, and is more of a structured set of guidelines than a detailed, strict rule set. GMs looking for a more numbers-oriented campaign system may prefer the *Chaos Campaign* section of this book (see p. 156), the *Linked Scenarios* rules (see p. 47, SO) or the *Alpha Strike Campaign Rules* (see p. 114, AS).

The two critical resources when crafting a narrative campaign, above any others, are imagination and ingenuity—the most important tools in any GM's arsenal. A GM will need to plan out in advance the paths the campaign may follow, and will need to think about how to progress events. Players will be encouraged to make their best guess on how to proceed with the information the GM provides, which may vary in detail and could even be made purposefully inaccurate, depending on the campaign!

CAMPAIGN BACKGROUND

Similar to the *Campaign Scale* and *Campaign Setup* sections of the *Map-Based Campaign* chapter (p. 142), it is important to first determine the type of story the GM wants to craft for the players. This obviously will greatly influence what the objectives and opponents will look like. Are the players House troops defending a border world against a rival Successor State's invasion attempt? Pirates performing a smash-and-grab operation? Clan forces declaring a Trial of Possession for assets from a rival Clan? Who they are is as important as their goals for their unit.

Next, the GM should determine what the players' mission will be, and how long it will take to perform. A pirate raid is likely going to be a relatively brief campaign. Taking too long during such a raid could result in defenses being mobilized, so the focus will likely be to simply get the job done and leave with as few distractions as possible. However, a planetary invasion could take place over multiple scenarios spanning all corners of the globe. This chapter will be most useful in detailing these longer, interlaced campaigns.

A good GM will weave the outcomes and impacts of these scenarios together to form a campaign that is reactive to the players' actions in both positive and negative ways.

After determining the scope of the campaign, the GM should determine the planet(s) on which the campaign will occur. A world can have wildly varying terrain (as with Terra), but if a GM wishes to have planetary attributes in place such as an unusually hot or cold climate (for example, Mars) or high/low gravity, those attributes should be selected at this time; see *Planetary Conditions* (p. 28, TO), *Advanced Options* (p. 62, AS) and *Solar System Generation* (p. 98). These conditions should be adhered to for all scenarios on the planet, and players should be aware of these decisions before the campaign begins. Unless there has been a recent, drastic climate change (a possible plot idea), a competent Force won't invade a world without knowing in advance that it has a toxic atmosphere!

Next, the GM crafts the opposition Forces, keeping in mind the overall tale he or she wishes to tell in the campaign. The *Force Building* section of the *Map-Based Campaign* chapter (p. 142) contains simplified guidelines for constructing a non-player Force, if the GM doesn't already have one in mind. Unlike in map-based campaigns, it is not necessary to construct all of the GM's Force ahead of time. Sometimes the player Force will be more successful than expected, eliminating the GM's Force too quickly for the story. In such a situation a GM must adapt to the needs of the campaign, either by crafting a creative explanation for the arrival of more GM-controlled troops, or adjusting the story progression to account for fewer opponents.

Finally, the GM creates the initial mission and outlines the desired course of the campaign—and that's where the fun really begins. This step takes planning and forethought, however—assembling campaign missions and guiding players off the cuff can be very difficult. Before each mission of a campaign, it is recommended that the GM plan out at least one to four follow-up missions based on the potential outcomes of that mission. This involves more than just imagining the outlines of future battles; a GM should consider how each potential mission might impact the overall progression of the campaign.

Player unit Rosters

One method for generating the players' roster of units is simply for the GM to create it. Another is that the lineup may consist of a roster carried over from previous campaigns. In other situations, the roster can be assembled using Random Assignment Tables found in sourcebooks. The unit roster can be selected by the players using the Master unit List's faction availability lists (masterunitlist.info) and the *Force Creation* rules (see p. 8).

Whichever method is used, the GM and player(s) may want to select units that stand out among those their chosen Faction usually fields. Placing a *No-Dachi* in the ranks of a mercenary force formed in Marik space creates an opportunity to spice up the background of the Force and break up the otherwise predictable array of units. Where did it come from? Past operations, salvage, a shrewd card game on Galatea—who knows, but it does make for a richer and more interesting unit. By and large, however, players should consider the Force they're building and its intended battlefield role—after all, the Fourth Deneb Light Cavalry wouldn't field a large number of heavyweight units such as *Stalkers* and *Awesomes*.

Another thing to remember: there's more to *BattleTech* than BattleMechs. Having armor, infantry, etc. can help flesh out a Force, and provide assets and abilities that the players may not otherwise have.

Keep in mind that the Force's full roster is likely never going to all be on the field at once. While the recommended overall Force size is a battalion, few missions will see more than a company's worth in play at any one time. Putting all of a Force's eggs in one basket can be a quick way to end a campaign.

WEBBING THE CAMPAIGN

In physics, every action has an equal and opposite reaction. In a well-designed, well-planned campaign, the same rule applies. Every action taken by the players could have positive and negative effects on future operations. That means each objective achieved and failed affects future games. At first glance, this may seem like a lot to track and consider. But step by step, it is not as bad as it sounds.

Tying together these positive and negative results is known as "webbing" together missions of a campaign. Webbing together a campaign is the most challenging portion of creating the campaign, but it can also be the most rewarding. There is no right or wrong way to web scenarios—trial-and-error is often the best way to learn. The important thing is to try new things, and learn from both good and bad results. Above all else: be transparent and consistent. If something in the structure of the campaign doesn't work and needs changing, make sure that the players are aware of the change (and unless absolutely necessary, don't make that change mid-game!).

Webbing the campaign begins with devising several objectives for the players to complete across a total of four to eight operations. Inspiration for campaign objectives can come from many places, such as history, other *BattleTech* campaigns, or even storylines from other fictional universes. The goal in this search for inspiration is the kind of objectives that are often seen in warfare.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

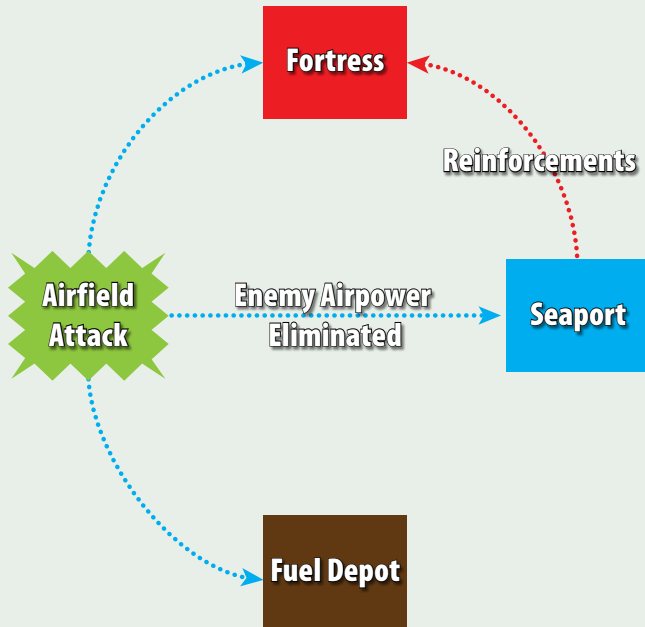
NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

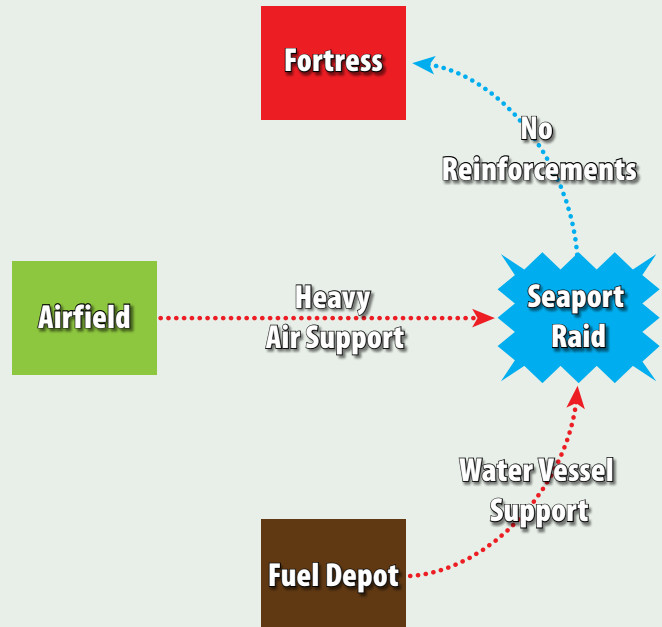
CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

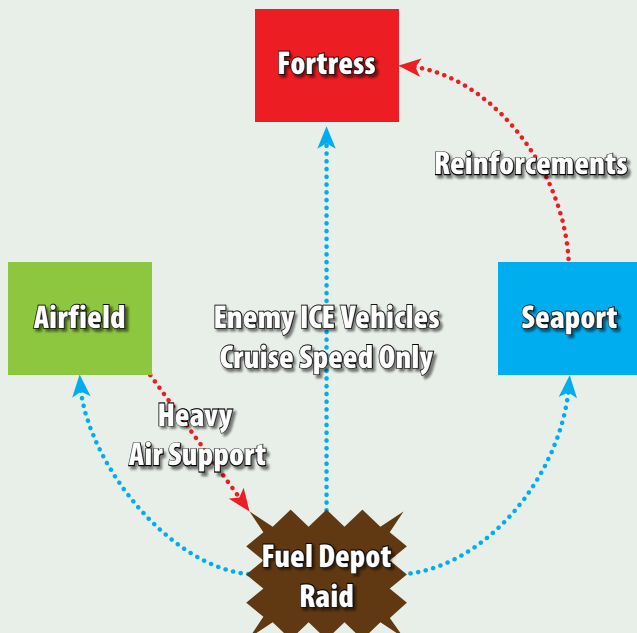
SAMPLE CAMPAIGN WEBBING BREAKDOWN



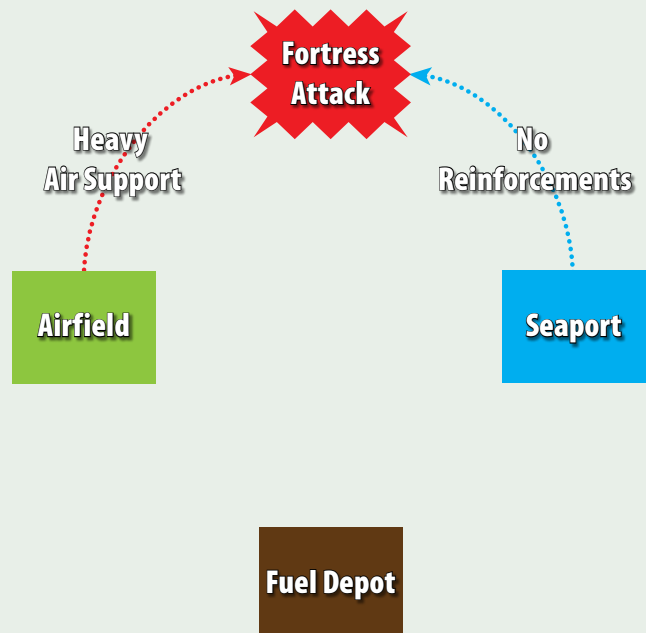
• CAMPAIGN EFFECTS: AIRFIELD ATTACK •



• CAMPAIGN EFFECTS: SEAPORT RAID •



• CAMPAIGN EFFECTS: FUELD DEPOT RAID •



• CAMPAIGN EFFECTS: FORTRESS ATTACK •

Anna is serving as GM for a campaign she devised, and her players are weighing whether to attack an enemy airfield, or bypass the airfield and attack a hilltop fortress immediately. A successful airfield attack may cause fewer opposing aircraft to be sent on bombing runs in the future. But there are potential negatives as well. By hitting the airfield instead of attacking the fortress, a reinforcement convoy has a chance to arrive at the fortress, and the enemies at that location will be tougher when the players do turn their attention to it.

Brian's players are considering an assault on an enemy fuel depot. Again, the positives are clear—by denying fuel to the enemy, units that rely on that type of fuel may suffer. If the players are successful, Brian plans to impose a penalty to all opposing units that are not powered by fusion engines: for the rest of the campaign, these units will not be able to use flank movement and are capped at their max cruise speed. That represents a big advantage for the players in situations where they're up against tough vehicles like Demolishers! But Brian's campaign also includes a seaport raid. If his players succeed in their attack on the depot, Brian knows that the lack of available fuel means the enemy's blue-water warship will be unable to go out on patrol. The warship might have been out to sea if the players had gone to the seaport first; instead, she's tied to the docks and able to provide fire support to the defenders at the port.

It's up to the GM to decide how much of these "web-effects" the players should know. Some effects may be evident to the players, some may be revealed prior to a battle by roleplaying intelligence gathering efforts, and others may serve as total surprises, unknown to all but the GM. The GM will have to devise explanations for what the players know or find out through gameplay—perhaps the players succeed in capturing a command center and discovering the enemy's operations schedule, and the GM allows them to learn about some of these web-effects as a reward.

Anna concedes that her group's grasp of basic battlefield strategy makes it clear to them that bypassing the airfield attack would expose them to bombing runs during their assault on the hilltop fortress. However, she decides that they have no way to know that an immediate assault on the fortress would prevent the reinforcement convoy from arriving.

Brian isn't feeling particularly generous, and decides that his group simply has no way to know the exact whereabouts of the enemy's blue-water warship, as their aerospace forces took unnecessarily heavy losses ensuring their safe transit to the ground. However, he includes an optional objective in the fuel depot attack scenario: if the players can capture the enemy commander alive, they can glean intelligence which would let them know that the dangerous vessel will be dockside due to a lack of fuel.

Not all objectives go according to plan, of course, and failure can put the GM in a tough spot: the players' inability to achieve mission objectives usually entails consequences. The obvious choice is to simply impose the negative web-effect rather than the positive, but fair consideration is required.

At the GM's discretion, some scenario objectives may be re-attempted. This depends on the situation, and some objectives may not be available for a second try. A botched assassination job may result in the target going to ground somewhere that the players can't reach; on the other hand, a fortress which withstood the players' first attack isn't going to get up and move elsewhere. Before allowing players to reattempt a scenario, GMs are encouraged to look at the scenario and determine what went wrong. Was it too hard? Did the players not have enough resources to perform the task? Did the players just have bad luck?

If mission failure frequently occurs, the GM needs to re-evaluate the structure and parameters of their campaign. Not every battle is a perfectly fair fight—in fact, very few ever are—but the players shouldn't be routinely placed in impossible situations. A good GM should be fair to the players, and avoid unnecessarily frustrating them.

Anna's players fail to knock out the airfield. By a strict reading of her campaign plan, enemy planes continue to control the skies, and the reinforcement convoy gets through to the fortress. Anna realizes that this now makes the hilltop fortress assault scenario virtually impossible to win. She elects to allow her players a second crack at the airfield—but if they can't take care of business this time, they'll have to move forward as best they can.

Brian's players couldn't seem to roll anything but snake eyes during their attack on the fuel depot, and the mission fails largely due to bad luck. By failing to destroy the depot, the players miss out on the benefit of enemy vehicles suffering restricted movement options. However, they won't have to contend with the blue-water warship during the seaport raid. Brian decides not to allow the group a second shot at the depot, and moves forward with the seaport raid scenario.

SCENARIO HOOKS

A few scenario hooks are provided below to inspire individual missions. Each scenario is presented from one angle or one side of a mission, but GMs should feel free to flip the roles as described if players prefer to play the other side. Instead of trying to capture or destroy an enemy airfield, the player's Force may be tasked with protecting and defending their own airfield from the GM's Force. Also, GMs may choose to use two or more hooks together on a single mission. Sometimes the only way to get a high value target out in public for an assassination attempt is to allow the target an opportunity to capture a key location.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SCENARIO HOOKS

RIOT CONTROL

A civilian population has been incited to riot, and an urban or industrial area is being torn apart as a result. The rioters may or may not (at the GM's discretion) have been coerced or even actively assisted by an opposing irregular Force (such as Death Commandos or ROM operatives). The players will be tasked with assisting law enforcement in getting things under control, and inflicting minimal casualties if possible. Alternatively, the players could have been hired by the irregulars to provide added muscle to the rioters in their attempts to push back law enforcement.

SECURE THE SEAPORT

The capture of a small seaport area offers some unusual opportunities. Water will play a big role, which can make things difficult for some unit types, and easier for others (hovercraft, for example, are in heaven). Watercraft, rarely seen in many *BattleTech* games, become a handy thing as well. This includes blue-water naval support-size units if the GM desires. The scope of such units can range from cargo-type vessels like freighters or tankers to massive oceangoing warships. Perhaps one objective is to capture the port intact. If a blue-water naval vessel is firing at the players with artillery weapons, they'll be forced to find a way to kill the ship before they can complete their objective.

LOCATION CAPTURE

A location the player Force wants is held by the enemy and needs to be captured. The objective could be a standing building, such as a 'Mech depot, or simply a key terrain feature, such as a hilly region. Whatever it is, the players need to capture it from the enemy guarding it—and inflict as little damage as possible. What use is a captured 'Mech depot if it's razed in the process? The GM may also throw a counterattack at the players, sending in a fast-moving Force as reinforcements to beat back, or even set a trap.

AIRFIELD ATTACK

Denying control of the skies to the enemy is important, but not always feasible for an attacking Force's fighters. In this scenario, the players assault an enemy airfield trying to knock out fighters and facilities on the ground in an effort to limit their opponents' airpower. Wrinkles to this scenario could include aircraft taking off to attack the players if they don't move quickly enough, turreted defenses, perhaps even a grounded Dropship if the GM is particularly creative.

LOCATION DENIAL

Conversely, the players must prevent the enemy from capturing a strategic point. This can take place as an expanded portion of the latter part of a capture, with the enemy counterattacking to retake the objective. The GM should consider letting the players have a few extra "treats" in this situation. A prepared defense may include hidden units, mines, pre-sited artillery, and the like.

FUEL DEPOT FIREFIGHT

Whether a refinery, storage site, refueling depot, or something else, the important thing is that it needs to be destroyed. The mission is straightforward, and the GM needs to carefully plan it out, lest a single Thumper shell or LRM salvo end the game on the first turn of play. Perhaps the players start amongst some of the fuel tanks, meaning that destroying the base too soon would destroy them in the process! Another twist might be the presence of underground tunnels under the depot to give both Force places to go to escape the hellfire topside—and a chance to encounter each other in the tunnels. This can be a very chaotic game, and one players will talk about for a long time to come!

PROTOTYPE TESTING GROUNDS

In this offbeat scenario, a testing site for a prototype unit needs to be hit and the prototype destroyed. Perhaps the players need to capture as much intel as possible on it as well. This allows for experimental, cutting-edge gear to be used in very limited quantities outside the particular historic era of play. Although the Thunderbolt missile isn't commonly seen on the battlefield until midway through the Jihad, perhaps a *Dervish* modified to act as a testbed is being put through its paces on a Federated Suns world. The first and only *Jade Hawk* is undergoing live-fire trials on Sudeten, and a nearby Republic force is sent to "acquire" it. House Kurita has captured a *Hatchetman* in 3024, and a Steiner unit goes in to make sure that Luthien Armor Works technicians don't have a chance to reverse-engineer it. Creativity is key in this scenario, even more so than usual, so GMs should have fun. Oddball units are welcome, as well—not every prototype is successful enough to earn a full production run. Units like the famed Arrow IV *UrbanMech* can be used to memorable effect.

ASSASSINATION

This can take a number of forms, but the simple fact is one target has to be destroyed, and all others are secondary at best. The target may be a politician in a hoverlimo, a high-ranking military officer in an assault 'Mech, or a home in an affluent neighborhood. Whatever the specifics, the players need to kill the target and get past a series of defenses to do it. In the reverse, defending the target from assassins can be fun, too. For added difficulty, have a third party run the assassination target, so that neither side can gain an advantage by having the target do what they want. A foolhardy Lyran general's best chance to survive the Jade Falcon headhunter Star would be to retreat behind the players' bodyguard Force, but he insists on wading into the midst of the battle in his *Zeus*, and refuses to hear cowardly advice from mere bodyguards. Or perhaps a hoverlimo driver refuses to have his passenger late for a dinner ball, and insists on continuing down the roadway despite the players holding the bridge across.

MISSION BALANCING

Balancing opposing Forces can be accomplished any number of ways. Possibilities include Battle Value, *Alpha Strike* Point Values, simple tonnage (Size in *Alpha Strike* or *BattleForce*), or even the number of drop bays available on the transport. As long as the method chosen is consistent and the players are aware of the rules in this regard, it really is up to the GM.

If balancing Forces based on Size or tonnage, players may want to add modifiers based on the unit's tech base to compensate for the simple fact that some units are more capable than others within a weight class. At 75 tons (Size 3) there's little comparison between a *Marauder* MAD-3M and a *Mad Cat* A, so perhaps Clan units cost an additional 25 percent of their weight (or +1 Size) rounded up to the nearest five-ton allotment, making that Timber Wolf actually 95 tons (Size 4) for selection purposes.

The Forces in a given scenario can vary wildly in size. A small operation to infiltrate and scout an industrial park likely won't have a huge Force involved, simply because they will more easily be discovered. Likewise, a massive assault on a 'Mech production facility's main gates likely won't succeed with only a small special-ops team. Take time to think about not only the scope of the operation planned, but about the players at the table. If there are only three or four people, a huge operation consisting of dozens of units on each side might bog down. At the same time, a scenario wouldn't be much fun if a player runs a single unit and gets knocked out two turns in, becoming a spectator the rest of the day. As with anything good in life, success often comes from trial and error. Things can and likely will go wrong sometimes; the GM has to simply shrug it off and learn lessons for the future.

Defending forces are the fun part for the GM. As with the players' roster, the GM must think about the Force being built and what its job is. A fuel depot in the mountains of a backwater world in the Capellan Confederation is unlikely to field Clan OmniMechs, while a fast recon Star from Clan Ice Hellion likely will leave the *Masakaris* at home. Have a real plan in mind for the Force, not just in terms of which units are fielded, but how they will be used. Units guarding a political prison on Skye are probably not equipped with top-of-the-line equipment, and likely aren't the best-trained troops either. The troops' Gunnery and Piloting Skills may suffer as a result, and Morale Checks could be tougher to succeed in the face of determined player opposition. On the other hand, facing down Clan Jade Falcon's Turkina Keshik in ritual combat likely means cutting-edge, perhaps even experimental, Clan technology for the era, and the best warriors the Clan can field. A good GM will make sure to run those Forces accordingly and to make sure the players aren't balanced too far one direction or the other. Sometimes a rout happens, on one side of the game or the other, but in general, players want to be challenged to win without it being boringly easy or impossibly difficult.

MISSION CREATION & WEBBING

The initial missions should be simple static scenarios outside the campaign webbing. Perhaps the players make a landing, a simple job in which jump-jet capable units land and clear out the enemy from the LZ. After that, the players are given two

mission options, for example, clearing out a nearby military depot or capturing a communication facility, just enough to get the players used to selecting their units for each mission. Then it's time to move into the webbing.

Give the players their list of scenario options. It is not necessary to go into enormous amounts of detail here, but offer the basics; the mission objective, some general information about the defenders (omitting any special surprises, obviously), the likely terrain, the units that the players can field (for example, 400 tons of gear if that's the chosen balancing method) and any details about the effects on other missions (however, the GM may wish to keep this completely secret). The players will select a scenario, work out their Force, and the GM will do the same.

After each scenario, figure out salvage, let the players know the positive and negative effects of their actions, and make sure to keep those effects in play for future scenarios. Sticky notes stored with gaming materials are a great way to keep track of this. Then, the players are ready to move on to their next scenario. Along the way, feel free to experiment a bit: maybe some of the Force's techs got captured as a result of a mission gone wrong, and now they need to be rescued. Perhaps an enemy depot was abandoned due to the players' successes and the defenders were forced to consolidate; that depot no longer needs to be dealt with, thus deleting a mission.

When approaching the close of a campaign, finish with a few final missions that aren't webbed, but are the result of the previous scenarios. For instance, enemy remnants that survived the players' missions have retreated into the capital city and need to be rooted out. Perhaps the spaceport needs to be captured, or it's a race against the clock to capture an HPG before it is destroyed by vengeful fanatics. These final missions can either be easy if the players did well and have a lot of good bonuses in their favor, or nightmares if things didn't go so well earlier.

At the conclusion of the campaign, GMs should ask for feedback from all players, and use what they learn in the future. Ask what each person liked, what was disliked, and what everyone might have changed, and use that to form the next campaign—whether a continuation of the same characters' adventures or a totally different setup.

MISSION WRAP UP

SALVAGE

With all the time and effort put into planning a webbed campaign, adding a lot of repair rolls, component tracking, and time management may not be something a GM looks forward to after a mission. In general, providing a way for player Forces to salvage enemy units helps better draw players into a campaign and makes the story more than just a series of battles.

First, the obvious: a failed mission means the players likely don't control the battlefield at the end of the scenario. As a result, any failed mission means no salvage. If players aren't happy about that, they will hopefully be motivated to fight that much harder next time!

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

REPAIR COST AND TIME

Not everyone enjoys doing excessive paperwork between missions, and keeping things simple can help a GM better enjoy the fruits of their labors. The following table can be a handy way to let the players determine repairs based on the costs. An even easier method can be to simply have the GM declare how long it will take for the players' units to be repaired. While this can cause some strife for players, as long as the GM is consistent and not cruel, it is manageable.

A 'Mech that survives a mission and sustains only armor damage, with no internal components destroyed, would likely be available for the next mission. Modest internal damage, such as small weapons being damaged, actuators, or an engine hit might cause a unit to miss a mission. Bigger problems, such as the destruction of a head or limb, damage to a major system such as multiple hits to its engine or gyro, a ruined larger weapon like an autocannon, etc., could cause a 'Mech to miss two or even three missions. This method may seem overly simplistic, but it allows the GM to justify repair times without having to keep a whole spreadsheet of notes handy. It is recommended that the GM keep a record of the number of missions required to repair damaged units and to provide this information to players before they choose the next mission.

This simplified method works just as well for salvaged units, and allows for the players to gain reinforcements or replacements for lost units. The GM should be challenging the players, after all, so if they lose a *Wolverine* but can gain a *Clint*, they're at least keeping up with their losses. They may even capture pristine or only lightly-damaged gear as well. For instance, the successful capture of a 'Mech base from Clan Nova Cat might yield a couple of OmniMechs that weren't able to mobilize before the fighting ended. Such considerations should be a part of the GM's webbing of the campaign.

Non-'Mech units are simpler to handle due to their less robust construction. A fighter shot down in the atmosphere is unlikely to provide salvage, unless the GM can explain how it ended up in salvageable condition. Infantry, armored or otherwise, aren't really salvageable at all. Combat vehicles such as tanks may very well be

repairable, particularly in instances where the vehicle's crew were killed, or motive hits forced its abandonment. The GM will have to use their discretion: would this unit be able to be repaired realistically in a brief amount of time between missions? As with 'Mechs, determine what seems reasonable based on the damage the unit suffered. If the vehicle only needs some armor patched up, and maybe a thrown tread or flat tire fixed, it might be available immediately. Further damage might require more time. As one can imagine, any unit destroyed by an ammunition explosion or engine destruction should be considered unsalvageable no matter the situation.

RESULTS AND FOLLOW UP

Once salvage has been claimed and repair times have been determined, the GM must apply the results of the mission to their webbed campaign plans, and note any effects. Once these impacts are resolved, the GM presents the next set of missions for the players to choose from.

There are a few options when it comes to the next mission, depending on the storyline the GM wishes to tell. In some circumstances, the player Force must successfully complete (or at least attempt) all of the missions the GM plans out. In other cases, the GM will devise separate branches of follow-up missions based on the results of the current mission. For instance, if an assassination attempt is successful, missions A, B, and C are available for the players to choose, while a failure results in missions D and E as the only options. In some circumstances, a GM may decide that a particular scenario must come next, and the results of the current mission will only determine force sizes or other particular conditions.

Jan wants to run an attempted invasion of a Capellan Confederation planet by the Free Worlds League in the years just after the Fourth Succession War. As a fan of the Capellan Confederation, he will be playing the defenders, and desiring to inspire his forces, Jan chooses the world Repulse as the site of the campaign.

Because there is no known data about the planet from previously published materials (such as the Touring the Stars or Turning Points series), Jan is free to create the planetary data as he sees fit. He could choose to have wildly varying terrain (as with Terra), or have generally fixed planetary attributes such as an unusually hot or cold climate (as with Mars). Jan can even choose high, normal, or low gravity (see Terrain Conditions, p. 54, TO or Environmental Conditions, p. 92, AS). Since these planetary conditions will be used for all scenarios on the planet, Jan considers his choices carefully and consults with his players before the campaign setup is completed. After all, no respectable force would invade a world without knowing it has only 80 percent standard gravity!

Next, Jan needs a roster for the players to use. Jan can create this starting Force if he desires, or he can allow the players to craft their own, so long as the players keep it reasonable for the campaign background. The size of the Force in terms of raw numbers depends on the size of the campaign and the players' and Jan's comfort level. For this campaign, everyone agrees a battalion is a good starting size and decide to determine forces using Random Assignment Tables. The proper Random Assignment Table for this faction/era is Free Worlds League 3039 (War of 3039, p. 150), but Jan wants to allow the players

REPAIR AND REFIT TABLE

Repair Type	Cost*
Armor Repairs Ammo Reloads*	Free
Full Repairs: Mech is not crippled or destroyed	20%
Full Repairs: Mech is crippled	30%
Full Repairs: Mech is destroyed	40%
Spot Repair: Internal Structure (instead of Full Repairs)	10% Per Location. This includes replacing an entire limb or Torso
Spot Repair: Critical Hit (instead of Full Repairs)	\$20,000 Per each Weapon Critical 3% Per each Actuator Critical 5% Per Engine or Gyro Critical \$5,000 Any other Critical (each)
Ejected from a Mech	+5% (Does not apply to Crippled or Destroyed Mechs)
MechWarrior healing	\$50,000 Per wound

*Percentages are determined from a unit's base cost.

to branch out and have fun. So he decides this particular Marik unit has seen tough fighting along the Lyran border, and one unit in every lance can be rolled on the Federated Commonwealth (Lyran Commonwealth) 3039 Random Assignment Table (War of 3039, p. 151). Jan reminds the players a good mix of units is best, and can confer additional special abilities (see Formation Building, p. 56).

The next step will take Jan a bit of time, so he sits down to plan one to four initial missions from which his players may choose. Setting up the background, the players' Force will be landing on Repulse using an Overlord DropShip and a couple of support vessels. Jan decides on three different missions, each with a different landing zone. The first option is a combat drop at a spaceport in a major city. The second option is a landing point midway between two major cities. The third option is a stealth approach to a small area in a mountain valley.

Jan begins to build the webbing of his campaign, deciding that each landing zone option has pluses and minuses. The combat drop will face stiff resistance (an extra lance) from the Liao defenders, but taking such a large city will have big morale impact on the defenders and will allow the players to launch attacks more quickly. The second option will face a moderate attack (equal Force size) from the Liao defenders, but the separation will allow the players to deploy as much of their Force as they wish. However, if their DropShips take too much damage, they may lose repair facilities and ammo supplies, hampering future operations. The mountain landing zone offers minimal resistance (defenders totaling one-third the size of the player Force), but it places the players far from the enemy, meaning there will be few opportunities for surprise attacks later in the campaign.

Once the players choose a landing zone mission, Jan must plan future missions to occur once the players are on the ground. Rather than throw away the unused landing zone missions, Jan saves them just in case conditions later in the campaign force the players to relocate their ships and supplies, essentially trading one set of benefits and consequences for another set.

The next set of missions Jan plans involve sending units on a defensive patrol (securing the landing zone and searching enemy scouts), sending out a scouting patrol (attempting to locate the enemy base and supplies), and a harassment mission (attempting to destroy or chase off the enemy survivors of the landing mission).

Units engaging in the harassment mission will face damaged opponents totaling two-thirds of the player Force, but if they aren't destroyed quickly enough, enemy reinforcements totaling one-half the player Force will arrive. The defensive patrol will (unbeknownst to the players) encounter lightweight enemy units that will attempt to escape through the players' home edge. Finally, the scouting patrol must send units to scan a number of pre-selected areas and escape alive. The player Force must attempt each mission before they will be provided with new ones, but if the harassment

mission is chosen second or third, the planned reinforcements will be present at the start of the battle.

Jan and his players continue the campaign for a while. Missions are attempted, many are completed, some are failed, and some are reattempted. Some of the missions that Jan created are not initially selected by the players, and instead are redesigned and used later in the campaign.

NARRATIVE AND MAP-BASED CAMPAIGNS

The rules and guidelines in this chapter can be combined with the *Map Based Campaign* rules, p. 142. In a webbed, map-based campaign, the GM must both run the opposing Forces, and present the missions for the players to direct their movements on the campaign map. The GM essentially serves as the players' higher headquarters, giving orders that direct the overall structure of the campaign (conquer this planet, take that city). In addition, the GM fulfills some roles of command staff, presenting the players with potential options and missions to get the job done (such as defending certain territory, destroying enemy supplies, or assassinating the enemy commander).

During a webbed, map-based campaign, the GM prepares the missions in the same way described above. The players then choose and announce which Formations (see *Map Based Campaign*, p. 142) are assigned to which missions. Using the campaign turns, the players and GM move their units toward the completion of those missions and advancement of the campaign storyline.

The extra work comes in the mission writing stage. Rather than the mission objectives being "go on patrol," the mission objectives would instead be to "patrol these specific sections of the map for (some number) of campaign turns." Or, rather than receiving a general order to attack the enemy, that Formation is ordered to attack the enemy in a certain section of the map.

Integrating the two types of campaigns will likely take more coordination for the GM, but this style of campaign play can create a more realistic, more visual story as the players track their progress in missions completed and movement across the campaign map.

FINAL TIPS & TRICKS

Above all else, experiment! Try tying in *A Time Of War* scenarios to fill in time between operations! Perhaps larger-scale battles can be conducted via the *Abstract Combat System*, *BattleForce* or *Strategic BattleForce* instead of *Total Warfare* or *Alpha Strike*. While the fight continues on the ground, up in orbit the players' transport units face problems of their own! There's no shortage of ways to play, and that's what makes *BattleTech* so much fun. These rules are not meant to be written in stone; they are all intended to be easily modified, built up, and turned into what the players and GM want them to be.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



Many feel that their fate is to be a pawn in the ploys and gambits of the greater powers of the Inner Sphere.

MAP-BASED CAMPAIGN

In days of old, army commanders often kept a large map in their headquarters, on which they tracked the movement of their forces and the progress of the campaign. It was on this map that generals, warlords, and kings planned out their strategy and issued orders to their subordinates.

These map-based campaign rules allow players and gamemasters (GMs) to similarly use a large-scale map to track the progress of their campaign, direct the movement of their forces, and attempt to win control of key locations. In this section, players will learn how to how to run a campaign of any scale using a map to direct the course of the campaign.

CAMPAIGN SCALE

The first step in crafting a map-based campaign is to determine the scale of the campaign. A campaign can be as large as total war

in a section of known space, such as the Amaris Civil War or the Wars of Reaving, or consist of a single Clan fighting in the battle of Tukayyid. The size and scope of the campaign is only bound by the size and scale of the map used.

Maps can come in many different sizes and formats. A single mapsheet could be used to represent a section of a planet to be fought over. At this scale, each hex would itself represent a single *Total Warfare-* or *Alpha Strike-scale* game area with key sites and objectives placed on the map during planning stages. Going up in scale, the planetary scale maps used in the Abstract Combat System (see p. 324, *IO*) and found in the digital *Turning Points* series products would apply to a planetary invasion or a series of raids on a planet to grab key supplies. Taking another step up in scale, the force deployment maps found in the *Field Manual* series can be used to play out a House or Clan attempting to conquer their neighbor. Using the largest scale maps of the entire Inner Sphere or Clan Homeworlds allows multiple players to compete in a campaign to control all of known space.

Large or small, there are maps available to allow players and GMs to run a campaign of any scale. The rules that follow will work at any scale, and can even allow for campaigns within a campaign for those that want to explore a battle over a key location in more detail.

Ben wants to run a campaign set after the end of the Wars of Reaving. His players want to play as Clan Stone Lion and see if they can build up this new Clan into the most powerful Clan. Flipping through *The Wars of Reaving*, Ben finds a map of the Clan Homeworlds that he will use as the campaign map.

Chris will be creating his own story, running a Star League planetary invasion on the world of New Dallas. Chris recently purchased *Historical Turning Points: New Dallas*, which includes the planetary map for New Dallas with hexes marked on it.

Brian wants to replay the Battle of Tukayyid, and see if Clan Jade Falcon can earn a victory with some better leadership at the helm. Since this takes place on a portion of the planet, he simply selects an existing mapsheet he will use as the campaign map.

RULES COMPLEXITY

After deciding the scale at which the campaign will be fought, the next step is determining the complexity of rules the campaign will employ. For some players and GMs, the campaign is merely a tool to craft an epic story, and allows them to play through a series of games while crafting that tale. These players prefer a more flexible, less complex set of rules that won't get in the way of the storytelling. Other players and GMs want to make use of as many rules from the *BattleTech* core rulebooks (*Total Warfare*, *TechManual*, *Tactical Operations*, *Strategic Operations*, *A Time of War*, and *Interstellar Operations*). These players want their campaign to stick as closely to the various rulesets as possible. Still others find some middle ground, picking and choosing the rules they want to use. The rules included in this chapter will provide a basic framework for the campaign, and note where more detailed rules can be found for those who wish to incorporate them.

The rules for map-based campaigns can be applied with any level of game complexity, but before beginning a campaign, it is best for all involved to discuss and agree upon which rules will and will not be used. Map-Based campaigns can be easily adjusted to fit any rules complexity which the players and GM agree upon.

Ben and his players have decided to only use some of the rules throughout the various core rulebooks. After group discussion they agree which particular rules the campaign will use.

Chris wants to use as many rules as he can fit into a single campaign. He realizes this might take extra work, but part of the enjoyment of running a campaign for him is found in the details and the realism.

Brian is a storyteller at heart. He already has an idea of how he wants his campaign to progress, so he decides to use as few extra rules as possible, to prevent them from getting in the way of his epic tale.

CAMPAIGN SETUP

DETERMINING CAMPAIGN OBJECTIVES

Much like setting the victory conditions for a single battle, before beginning a map-based campaign, the campaign objectives must be determined. In other board games that feature map-based gameplay, victory is typically achieved either through total control of the map, or through the exhaustion of a player's resources. In the *BattleTech* universe, the populations and main industries of most planets or regions of space are located in a few key locations. Many planets feature wide open terrain that is great for hosting military training or battles away from collateral damage. However, these open spaces are of little value to the planetary rulers or invaders.

The objective of most *BattleTech* map-based campaigns is to capture or control key locations on the campaign map while simultaneously destroying as much of the enemy Force as possible. For some campaigns, such as a border raid, the objective focuses on successfully raiding those key sites to deny resources to the enemy and keep them off guard. In other situations, players may be the defender in a campaign, attempting to hold off the GM's attacking hordes. The GM, in conjunction with the players, determine the main objectives of the campaign based on what type of campaign they wish to run or what kind of story they wish to create.

The GM and players may also score the campaign using an objective point system (see *Valuing Map Objectives*, p. 147).

Becoming the most powerful Clan requires territory, factories, and defeating your enemies. For his campaign, Ben has determined his players must not only control the largest territory, but also control the most factories.

A planetary invasion seems simple enough to Chris; he decides that a victory can only be achieved through controlling every city. Realizing this might result in a longer campaign does not bother Chris, it just assures him plenty of battles in the future.

Brian's goal is to win a battle that previously resulted in a draw. To win his campaign, he must capture the cities of Olalla and Humtulips.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

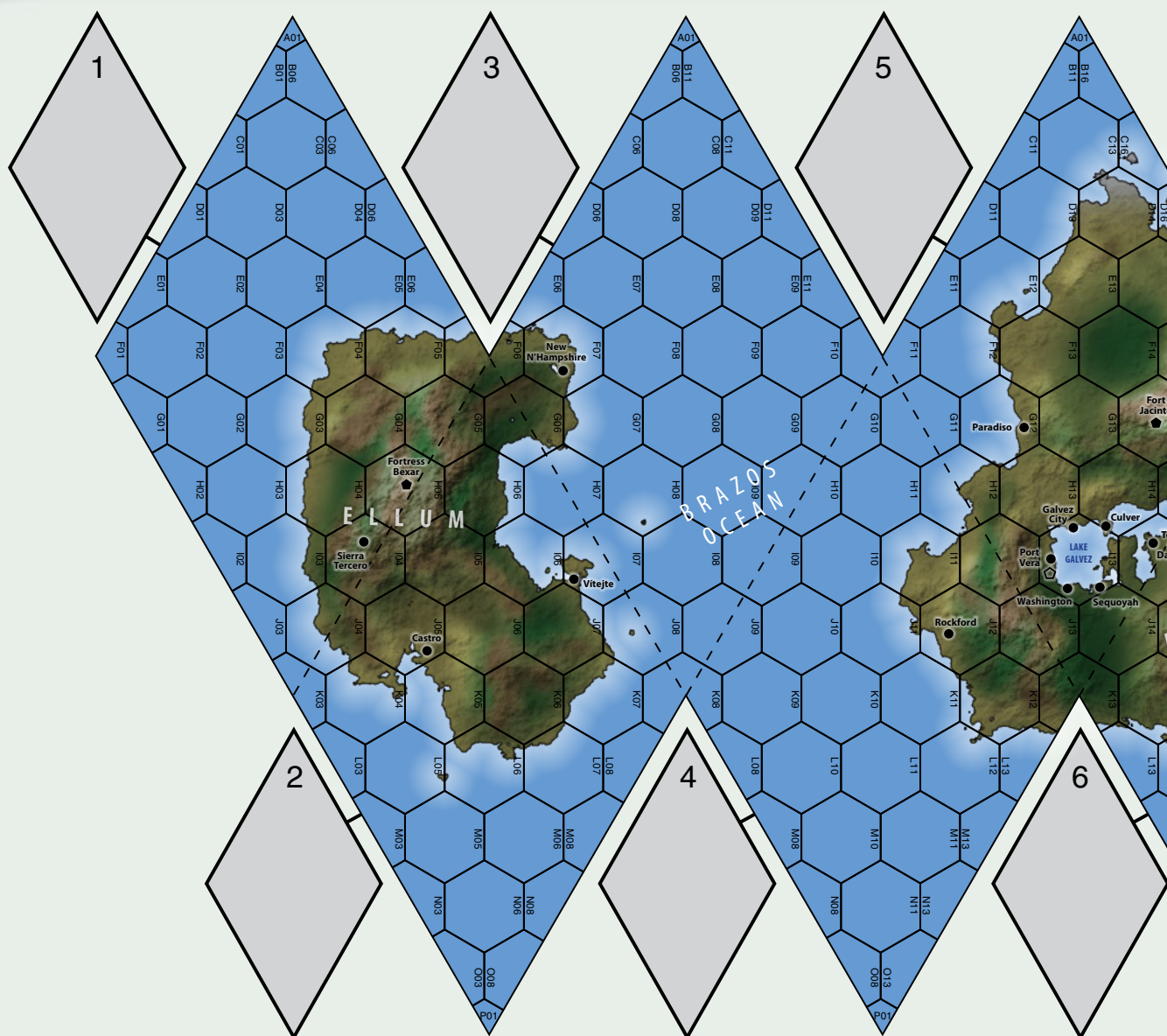
SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



• CHRIS' CAMPAIGN MAP •

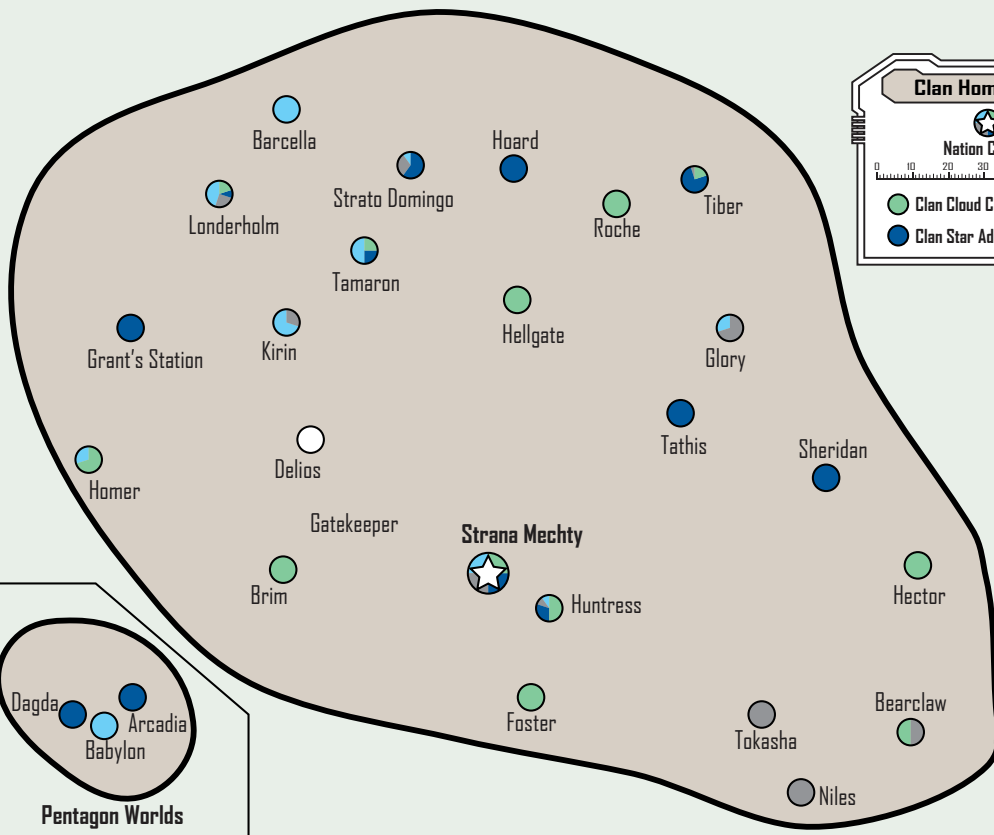
DETERMINING MAP OBJECTIVES

Most non-gameboard maps found in *BattleTech* products highlight key locations and are identified in the map key. On maps of a single planet, typically the capital, major cities, minor cities, DropPorts, and other notable locations are shown using a specific symbol. These maps give players and GMs a great start at identifying the sites and areas that will feature prominently in their campaign.

On larger scale maps that cover a House or Clan's entire realm, the capital planet, regional capitals, and regional boundaries are shown. While these maps give some key locations, they do not highlight other key planets that players might want to use in their

campaign. Using the *Technical Readout* series, players and GMs can identify the locations of factories and other crucial locations that may be used in the campaign. From the *Field Manual* series, players and GMs can sometimes find the location of large military bases or headquarters that could be target sites in a campaign.

Using a *BattleTech* mapsheet to represent a section of a planet requires a bit of extra work if it is to be used as a campaign map. Typical mapsheets have lots of terrain features, but don't have many obvious key hexes to fight over. In this situation, players and GMs must create the key sites that will determine the course of the campaign. For instance, a road crossing a water hex might be a key bridge that must be captured to control a river crossing. A road through lots of woods hexes might be the only easy method of



• BEN'S CAMPAIGN MAP •



• BRIAN'S CAMPAIGN MAP •

- ① Landing Zone ② Supply Depot ③ Bridge ④ Objective City

VALUING MAP OBJECTIVES

When it comes to winning a campaign, in some cases each objective on a map will be valued equally, with victory simply a matter of capturing them all. In other campaigns, different key locations will have different values, sometimes even different values depending on who controls the objective. When determining the value of each objective on the map, the overall objective of the campaign must be kept in mind. For a border raiding campaign, each objective might be of equal value. In a campaign of planetary conquest, capturing the capital or controlling all the DropPorts would likely have more value than holding a few small cities.

Returning to the planetary control table on p. 249 of The Wars of Reaving, Ben sees that the smallest enclave of control is 5 percent of a planet. Therefore, he decides each 5 percent control of a planet will be worth 1 campaign point, making full control of a planet worth 20 points. In order to simplify things Ben and his players agree that controlling a factory is equivalent to 10 percent control of a planet or 2 campaign points. After reviewing various Technical Readouts, he finds that on Glory, the Stone Lions control 70 percent of the planet, making it worth 14 campaign points. There aren't any 'Mech factories on Glory, however, so no points for that. Tokasha is a planet that the Stone Lions control 100 percent, making it worth 20 campaign points. It also has 4 active 'Mech factories, together worth an additional 8 campaign points. This process is repeated for the rest of the surviving planets in Clan space.

Totaling everything up, Chris finds 12 hexes with a city, 4 hexes with a fort, 1 hex with a city and a DropPort, 1 hex for the planetary capital, and 1 hex with 4 cities and a DropPort in it centered around Lake Galvez. Even though his objective is total planetary dominance, Chris decides to give every objective on the map a point value so he can judge his progress along the way. Chris decides that each city will be worth 1 campaign point, a city with a DropPort worth 2 points, and each fort (which includes a DropPort) will be worth 3 points. This makes the megalopolis around Lake Galvez worth 5 points. Lastly is the capital (which also includes a DropPort), which will be worth 10 points. The total value of all the objectives on New Dallas works out to 41 points.

Like Chris, Brian's objectives are fairly straightforward, capture both cities. He also wants to improve on the previous performance of the Jade Falcons, a draw. With this in mind he gives each of the 4 supply depots a value of 1 campaign point. He also gives the bridge over the Prezno River a value of 1 campaign point. Each city is given a value of 10 points for a maximum possible campaign score of 25 points.

FORCE BUILDING

Building a starting Force for a campaign takes more planning than for a single battle. For most campaigns, a good rule of thumb is to first decide the size of the Force that will be used in a typical battle (lance, company, battalion). The size of a campaign Force will typically be one Force size larger. This method works best for player Forces, as it allows the player to lose some Formations in a battle without the casualties drastically affecting the campaign.

Determining any non-player Forces (such as a GM's Force) is a bit trickier. In-depth guidance can be found in *Force Creation* (see p. 8). A quick and easy method is to take the Force size for a typical battle (lance, company, etc.) and create one for each map objective. In this manner, a basic campaign can have one defending Force for each objective.

*Ben begins by assisting his players in constructing the Clan Stone Lion touman. Using the Military Commands listing on page 171 of The Wars of Reaving, they have 7 Clusters of various size to construct. Since they want gameplay to move quickly, Ben and his players decide to play the campaign using the Alpha Strike ruleset. The Master Unit List (MasterUnitList.info) is used as a guide for creating a few basic Stars that are converted into Trinaries using the Strategic BattleForce and Abstract Combat System conversion rules in *Interstellar Operations*.*

Then, using the Random Assignment tables found in the The Wars of Reaving: Supplemental, Ben creates a few typical Trinaries for the other three Clans and uses these Trinaries to fill out the other Clans' toumans.

Seeing the number of sites he will have to control in his quest to conquer New Dallas, Chris decides he will need a full combined arms regiment at his command. Carefully, Chris constructs the lances, companies, and battalions that will form his regiment. At the end, he is proud of his accomplishment and the details that went into each decision. Like Ben, Chris uses the SBF and ACS conversion rules to generate stats for his companies, even though he plans to fight each battle under Total Warfare rules.

In an effort to simplify things, Brian decides that his campaign will be a scaled-down version of the battle for Tukayyid, with the Falcon forces represented by only 4 Trinaries. He plans to use Alpha Strike rules in each battle and he will use the generic movement rates for his Formations, so he skips the SBF and ACS conversions.

DEPLOYMENT

Deployment of the attacker's Force begins with the opening story of the campaign. A daring planetary invasion might begin with a hot-drop of troops and DropShips landing directly at a DropPort under fire. A more cautious attacker might instead land his forces out away from the map objectives in order to avoid taking damage from the planetary defenders. A border raiding campaign would start with the raider's force making a jump across the border to a target planet. In a campaign that

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



takes place on a smaller section of a planet, the attacker would simply start at one map edge like a typical battle.

Defending forces can begin wherever the defender desires. Some locations could be more lightly defended than others, in favor of tough defenses at key locations. In other situations, a defender's forces would be equally divided to defend each objective. Each option has different merits and risks, and depends on the value of each map objective and the overall campaign objective. The defender can even deploy part of all of their Force as *Hidden Units* (see p. 256, TW), writing down their deployment locations on a piece of paper.

With so many enclaves and Formations, Ben and his players decide to deploy at least one Trinary to each enclave a Clan controls. The rest of the available Formations are deployed at random to simplify the process.

Chris's GM uses the point value of each location as a guide when deploying his defending Force. He deploys a lance per point value for each location. A single city gets a lance of defenders, while the capital gets a battalion of three companies and a command lance, or 10 lances total. With a campaign value of 41 for the planet, this gives the defenders a regiment of 4 battalions, each with a command lance, and a regimental command lance for the planet.

Needing to establish a solid beachhead on the planet, Chris opts to send his entire Force to the continent of Ellum, landing in hex K06. This places him outside of contact with any city, allowing his forces time to deploy from their DropShips before encountering the defenders.

Brian has his DropShips land in Zones next to each other on the opposite end of the map from his target cities. The ComStar Force is deployed in Level II Formations in and around the cities and supply depots.

PLAYING/RUNNING THE CAMPAIGN

The *Creating Scenarios* rules (see p. 256, TW) and the *Linked Scenarios* rules (see p. 47, SO) provide several scenarios that players may use as the basis of their map-based campaign games. This section expands on those rules, going beyond individual scenarios to provide a mechanism by which those scenarios can be used in a map-based campaign. The system also gives the players the opportunity to achieve strategic goals that affect the campaign, in addition to simply destroying their opponent's Force. The rules in this section define an Element as the smallest individual combat unit ('Mech, tank, lance, company, etc) based on the scale of the campaign. A Formation is defined as a grouping of Elements as shown on the *Standard Force Organization Schemes Table* (see p. 233, IO). During play, Formations may be reorganized between Strategic Turns at will as long as the new Formations are specified before declaring any Formation orders for that turn. For those using a more rigid set of rules, all units being reorganized must be at the same location.

MAP-SCALE TURNS

Battles take place within the framework of a Strategic Turn, which encompasses one of a number of actions (including combat) within a discrete period of time. This is usually a day, but if players agree, the period of time may be increased (for example, to a week) or shortened (perhaps to 6 hours) to reflect different tempos of combat and different scales of campaign play. The main impact of changing this timing is for players and GMs that wish to specify the amount of time available when incorporating time-related mechanics, such as maintenance, repairs, fatigue, and so on (see *Maintenance, Repairs, Customization and Salvage*, p. 166, SO). Within each Strategic Turn, the players take one or more actions that are notionally simultaneous. Each player gives one action to each Formation (usually a company or Trinary for planetary campaigns, though players may, if they all agree, use lances and Stars instead) in his or her Force. No Element ('Mech, vehicle, infantry platoon and so on) may be given more than one order in a Strategic Turn. The potential actions fall into two categories: combat orders and non-combat orders. If the campaign is Player vs. Player (see p. 154), then orders should be written down by each player and revealed simultaneously.

Formation Orders

Combat orders come in three forms: Attack, Scout, and Defend. Whenever multiple Formations in the same location are given the same combat order, that player must specify if the Formations are working together as one larger Formation or acting independently.

Attack: A Formation with an Attack order actively seeks enemy forces to engage in combat.

Scout: The Formation attempts to determine the size, composition, and location of the enemy Force while avoiding full-scale combat.

Defend: When given a Defend order, a Formation is prepared for battle, but not seeking out the enemy to engage in combat and receives a +1 initiative bonus in any battle that occurs.

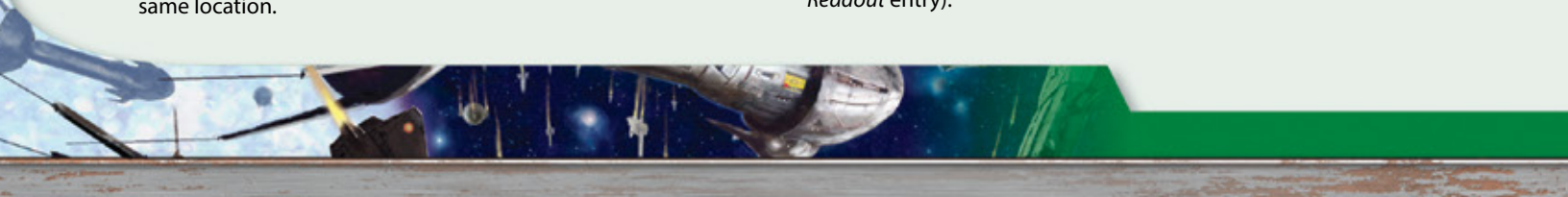
Non-combat orders come in the form of Repair, Move, Fast Move, and DropShip Move orders.

Repair: The Repair order allows units to be repaired using the *Maintenance, Repairs, Customization and Salvage* rules (see p. 166, SO). If players wish to use simplified repair rules, a Repair order will repair all damage to all units in a Formation and all damage to all pilots and crews in the Formation. Unfortunately, a simplified Repair order will not revive warriors or crews that have been killed in combat. However, a simplified Repair order will recruit Green Skill Rating warriors and crew to fill any vacant units.

Move: Allows the units in a Formation to move at a rate of 1 x the Formation's Strategic Move Rate (see sidebar on p. 149).

Aerospace Formations may move to any friendly hex or Zone on a planetary or sub-planetary map as long as the destination hex or Zone has an airfield or friendly DropShip. Aerospace Formations may move as part of an Attack or Scout order into any hex or Zone, and then must return to their original location or any other friendly hex or Zone with an airfield or DropShip.

Fast Move: Allows a Formation to move at 1.5 x its Strategic Move Rate (rounded up). A Formation moving between planets can only make a Fast Move order if the WarShip or JumpShip transporting it has a Lithium Fusion Battery (per the corresponding *Technical Readout* entry).



Formations given a Fast Move order may not be given a Move order the following Strategic Turn.

DropShip Move: The last order type only applies for planetary scale campaigns. A formation given this order will spend two Strategic Turns to load into a DropShip, transport to any other location on the map, and unload. When a DropShip is travelling to or from a DropPort location, the facilities at the DropPort assist in the rapid loading and unloading of the Formation, reducing the total transit time to a single Strategic Turn.

Due to the large size of hexes or Zones, any number of Formations, friendly or enemy, can stack in a single location on a campaign map. Similarly, Formations can only engage in combat with another Formation in the same location.

Ben's players begin by giving Attack orders to elite Trinaries on Bearclaw, Glory, and Kirin in hopes of winning control of planets where the Stone Lions already have enclaves. The rest of the Stone Lion forces are given Defend orders, to prepare for any similar assaults by other Clans.

When revealing their Formation orders, the players find out that Ben had given some Formations on Huntress, Londerholm, and Tamaron Attack orders, while the rest of the Formations were given Defend orders. Ben wants to keep things simple, but honest, stating that more than one Clan is usually engaged in combat. This also lets Ben's players gain more experience in campaign play without it impacting their own units.

Chris gives Move orders to two company-sized Formations, each with a Strategic Move Rate of 2 hexes, one to move to hex J05, and the other to hex I07. The rest of his Formations are given Defend orders to protect the DropShips, and defend the territory he currently holds.

The GM issues Move orders to the Formations in the cities of Castro and Sierra Tercero, and a Fast Move order to the Formation in Vitejte, to move them all to Fortress Bexar in hex H05. Each Formation has enough movement speed to reach the Fortress. The rest of the Formations are given Defend orders.

Having no fear and operating under the rules of honorable Clan combat, Brian issues Move orders to his formations, moving them the 1 Zone closer towards the Prezno River bridge.

Battles

As Formations move around a map, they will eventually encounter an opposing Force and a battle will ensue. In a campaign with a flexible rules set, the GM (with player involvement if so desired) will determine the type of battle that occurs. For those wishing to use a highly structured set of rules, the *Linked Scenarios* rules (see p. 47, SO) provides guidance for determining which type of scenario will occur. A middle group between those two rules sets is the Scenario Type table (p. 150). If any of the Formations involved were given the Scout order, use the Scout column. Otherwise, use the Battle column.

STRATEGIC MOVE RATE

The Strategic Move Rate of a ground Formation varies based on the scale of the map used and the complexity of rules used. When conducting a campaign on a map of interstellar scale, a Move order is limited to 30 light-years, the maximum jump range of a Warship or JumpShip. In campaigns for which a planetary-scale map is used, players may use a simplified Strategic Move Rate of 2 map hexes per strategic move. For sub-planetary maps, a Strategic Move Rate of 1 Zone or hex is sufficient.

General Map Scale	Strategic Move Rate
Interstellar	1 Jump (30 LY)
Planetary	2
Sub-planetary	1

If players desire a more detailed Strategic Move Rate on a planetary map, they may use their ground Formations' Move rating from *BattleForce*, *Strategic BattleForce* or the *Abstract Combat System* (depending on campaign scale). To determine Strategic Move Rate on sub-planetary maps, divide those rates by 3 (round normally).

The Attacker and Defender for a scenario are determined based on the order given to each Formation. A Formation given an Attack order is the attacker for the scenario. A Formation given a Defend order is the defender for the scenario. If one Formation is given a Scout order and the other is given a Defend or non-combat order, the Formation given the Scout order is the attacker for the scenario. In any other pairing, randomly determine which Formation is the attacker for that scenario. If multiple Formations working independently (see Formation Orders, p. 148) are within a hex or Zone, randomly determine opposing Formations for the battle, with the remaining Formations serving as reserves or reinforcements, at the GM's discretion.

While two or more Forces engage in a battle, in the interest of balanced play, the following scenarios will use some (if not all) of the Forces committed to a battle. If the Force Composition for a scenario uses unequal numbers of units, the side with the smaller number of units must reduce the size of their Force for that battle only. When a player must reduce the size of their Force for a battle, that player chooses which units to use in the battle, following any guidance found in the Force Composition of that particular scenario.

The method of balancing the Forces is up to the GM and player(s), and all are acceptable. Some players use Battle Value or Alpha Strike Point Value for Force balancing. Others use unit tonnage or simply the number of units to balance Forces for a battle.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

On Tamaron, two Trinaries of Coyotes have engaged a single Trinary of Star Adder defenders. Ben and his players are eager to try out one of the campaign scenarios. Rolling a d6 results in the Hide And Seek scenario, perfect for this battle since the attacking Coyotes have twice the number of units as the defending Star Adders.

Later in the campaign comes the battle for the Fortress Bexar. Chris is using the Linked Scenarios rules from Strategic Operations for his campaign battles. Since this is the first battle of the campaign, a Standup Fight will be the battle scenario. Chris sets his attacking Formations against an equal number of defending Formations within the Fortress.

A Trinary of Brian's Jade Falcons has encountered a Level II of ComStar units on patrol. The Jade Falcons were given an Attack order, while the ComStar forces were given a Scout order. Instead of a straight battle or a pre-made scenario, Brian creates his own scenario in which a Star of Jade Falcons attempt to locate and destroy the larger Level II ComStar Force.

Choosing Mapsheets or Terrain

The terrain chosen for the battlefield should be influenced by information available on the campaign map. Look at the hex or Zone on which the battle will occur, and those surrounding it. Using that as a guide, use the Mapsheet Tables (see p. 263, *TW*), to determine which mapsheets to use in the battle. If using a planetary scale hex map, only look at the hex in which the battle is occurring for guidance on which mapsheet table to use. When running a campaign on multiple planets, the planetary conditions are typically less specified. Unless a particular planet has been a part of a *Turning Points* product or otherwise has specific mapsheet tables, use Mapsheet Tables (see p. 263, *TW*), to determine the mapsheets for the battle.

If playing with 3d terrain, use terrain appropriate to the hex or Zone in which the battle occurs, and place the terrain as per the scenario guidelines.

Starting with the non-Stone Lion battles, Ben's players look up the planetary info for Tamaron (see p. 263, *The Wars of Reaving*). Under map tables it says Flatlands, Badlands, Hill, Heavy Urban. This gives the players a choice of any of those four tables, of which they decide on the Badlands table. Since they will be playing under Alpha Strike rules, they use the six maps of the Badlands table as inspirations when crafting their battlefield terrain.

After a few turns of movement, Chris' enemy has retreated into a stronger defensive stand in Fortress Bexar. The hex containing the fortress is mountainous, so Chris uses a mix of the Prairie and Urban/Ruins tables to better reflect the mix of terrain on both sides of the fortress walls. Wanting to add more to the environmental background to his campaign story, Chris chooses to use the Storm, Low Gravity, and High Atmosphere optional rules (see p. 4, *Historical Turning Points: New Dallas*).

One of Brian's Trinaries eventually encounters the ComStar Level II, with the Level II retreating into a heavily forested Zone on the campaign map to reduce the range advantage of the Clan forces. Based on the underlying terrain, Brian sets up his Alpha Strike terrain as mostly wooded, with some trails and sections of open terrain. He doesn't want the location of his forces to overly restrict the battle, so he chooses the terrain with an eye towards creating an even, and interesting battle.

SCENARIOS

The following wed the *Map-Based Campaign* rules to the scenarios presented in *Total Warfare* (see p. 258, *TW*).

SCENARIO TYPE TABLE

1D6	Battle	Scout
1	EX	BK
2	EX	BK
3	HTL	PB
4	HTL	PB
5	SU	HS
6	SU	HS
7	HS	RR
8	BK	RR
9	BK	RR

BK = Breakthrough
HS = Hide and Seek
PB = Probe
SU = Stand Up Fight
EX = Extraction
HTL = Hold the Line
RR = Recon Raid

SCENARIO TYPE ROLL MODIFIERS

Modifier	Orders
+3 Battle	One Formation is given an Attack order and the other is given a non-combat order (Repair, Move, or Fast Move)
+1 Battle	Both Formations are given Attack orders
Modifier	Orders
+3 Scout	One Formation is given a Scout order and the other is given a non-combat order (Repair, Move, or Fast Move)
+1 Scout	Both Formations are given Scout orders
-3 Scout	One Formation is given Attack orders



INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS



151

STANDUP FIGHT

In a stand-up fight, the simplest and most common scenario, two Forces of roughly equal size square off against each other. Only one leaves the field alive.

Terrain: Players should take turns laying out an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy.

Force Composition

Both Forces should have the same number of units.

Victory Conditions

The scenario ends when all units of one Force have been destroyed or retreated off the map. The surviving Force at the end of the scenario wins.

HIDE AND SEEK

In the hide-and-seek scenario, the Defender is “it”—his Force hides, and the Attacker attempts to find and destroy it.

Use half the number of mapsheets (rounded up) recommended in the *Selecting Mapsheets* rules (see p. 262, TW). If possible, avoid using the Wetland or Coastal Terrain mapsheets are ideal, but only if the Defender's units can hide in buildings. Otherwise, avoid these mapsheets as well, because they provide few hiding places for the Defender's units.

After the Attacker selects a home map edge, the Defender sets up his units using the *Hidden Units* rules (see p. 259, TW). Defending units may be placed anywhere on the map, except for clear and paved hexes.

Terrain: Players should take turns laying out an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy. At least two buildings should be placed for every Formation of ground units in play—on both sides. No two buildings may be placed closer together than 2 inches. No Attacker unit may begin play within 6 inches of a building.

Defending units may be placed within any terrain feature on the map, using the *Hidden Units* rules (see p. 102, AS).

Force Composition

The Attacker's Force should be twice the size of the Defender's Force. For example, if the defending Force fields four units, the attacking Force should field eight units. Players should also attempt to make the total tonnage of the Attacker roughly double that of the Defender.

Victory Conditions

The scenario ends when at least half of one player's units have been destroyed or retreated off the map. The player more active units on the map at the end wins the scenario.

HOLD THE LINE

In a hold-the-line scenario, the Defender must fend off a larger attacking Force. The defending units may only leave the boundaries of the playing area under *Forced Withdraw* conditions.

Terrain: Players should take turns placing an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy. Additional terrain should be added along whichever sides of the table are *not* selected to act as the players' home edges.

Force Composition

The Attacker's Force should be twice the size of the Defender's Force. If possible, the Experience Ratings of the Defender's Force should be one Rating higher than those of the Attacker. For example, if the attacking Force consists primarily of regular units, the Defender uses veteran units. If this is not possible, the player(s) and GM should agree on some other bonus for the Defender, such as increasing the size of the defending force by 25 percent.

Victory Conditions

The scenario ends when all units of one Force have been destroyed or retreated off the map. If the Defender destroys a number of opposing units equal to or greater than the number of defending units that started the scenario, the defending player wins. For example, if the defending player begins with a single lance (four units), they can claim victory if they manage to destroy four or more attacking units. In all other cases, the player whose Force survives or controls the map at the scenario's end wins.





EXTRACTION

In an extraction scenario, the Attacker attempts to extract a target, such as a secret weapon, an important diplomat or a computer memory core, from behind the defender's lines.

After the players roll dice and select their home map edges, the Attacker secretly chooses a target hex for the extraction. The target hex must be within four hex rows of the Defender's home edge and cannot be within four hexes of any other map edge. The Attacker then writes down the target hex's number and mapsheet name on a slip of paper, which he folds and gives to a neutral party for safekeeping (or the Defender can simply put the paper in their pocket without looking at it).

The Attacker can reveal the target hex to the Defender during any End Phase, but must reveal the target hex if an attacking unit ends the turn in the target hex. Any attacking unit can pick up the extraction target by occupying the target hex during an End Phase. In addition, a unit that retrieves the target can pass it to any friendly unit in the same hex or an adjacent hex during any End Phase.

If a unit carrying the extraction target is destroyed, place the slip of paper as a marker in the hex previously occupied by the unit. Any unit in play can retrieve the target by occupying the target hex during any End Phase.

Terrain: Players should take turns laying out an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy. The Attacker secretly chooses a terrain piece for the extraction. The target terrain piece must be within twelve inches of the Defender's home edge and cannot be within four inches of any other map edge.

The Attacker can reveal the target location to the Defender during any End Phase, but must reveal it if an attacking unit ends the turn adjacent or within the location. Any attacking unit can pick up the extraction target by occupying the target terrain during an End Phase. In addition, a unit that retrieves the target can pass it to any friendly adjacent unit during any End Phase.

Force Composition

Both Forces start with an equal number of units.

Victory Conditions

The Attacker can only win the scenario by moving a unit carrying the extraction target off their home map edge. If the Defender can move a unit carrying the extraction target off his home map edge, or the Attacker otherwise fails to move the extraction target off his home map edge, the Defender wins.

BREAKTHROUGH

In a breakthrough scenario, the attacking Forces have become trapped behind enemy lines. To reach safety, the units must cross the map and break through the Defender's Force.

Use one more mapsheet than the standard single map for every four units (see *Selecting Mapsheets*, p. 262, TW). For example, if eight units will be in play, use three mapsheets rather than two. If players possess fewer than the needed number of mapsheets, simply use all available mapsheets. Place the mapsheets in a single, long row with their short edges touching.

The Attacker then chooses one of the narrow edges of the joined map as the place from which their Force will enter. The Attacker's Force enters opposite their home edge. The Attacker's objective is to exit from their home map edge.

The Defender may set up their Force in any hexes on the map, and may position up to half of their units (round down) using the *Hidden Units* rules (see p. 259, TW).

Terrain: Home edges should be the shorter edges of the designated play area. Players should take turns placing an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy. Additional terrain should be added along the long edges of the play area (the non-home edges).

Alternate Rules

In a chase scenario, the Attacker's Force must race across the map to reach their DropShip before a larger force of pursuing defenders can reach them. Chase scenarios use the same rules and victory conditions as breakthrough scenarios, with the following exceptions.

The Defender does not deploy his forces until Turn 2. During Turn 1, attacking units may enter and move unopposed per standard rules. The defending units enter during the Movement Phase of Turn 2, from the same map edge as the attacking units.

Force Composition

Both sides should have the same number of units.

Victory Conditions

The scenario ends when all defending units have been destroyed or retreated off the map, or when all attacking units have retreated, been destroyed or been crippled. For this scenario, units become crippled when they lose one or more legs, or their gyros are destroyed. Attacking units may intentionally exit the map only at their home edge; a unit exiting from any other edge has retreated.

Alternative Victory Condition

A key warrior or commander has been trapped behind enemy lines alongside the attacking Force, and must be extracted at all costs. The Attacker marks which unit represents the extraction target on a piece of paper and keeps it hidden. If this unit escapes across the Attacker's home edge, the Attacker wins. If not, the Defender wins.



PROBE

In a probe, small Forces clash on the battlefield. While not shirking from battle, neither Force wishes to sustain substantial damage that they will be forced to repair.

Terrain: Players should take turns laying out an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy.

Force Composition

Both Force should consist of a lance, Star or Level II Formation (as appropriate to their faction and scale of the campaign).

Victory Conditions

The scenario ends when all units of one Force have been destroyed or retreated off the map. Each side gains 1 Victory Point for each enemy Element destroyed and half a point for every non-destroyed enemy Element that sustained crippling damage (see p. 258, *TW*). However, each side loses 1 Victory Point for every friendly Element destroyed and one-half of a Victory Point for each friendly Element that sustained crippling damage. The side with the higher score wins.

RECON RAID

In a recon raid, the Attacker is more concerned with completing their mission than damaging the enemy Force, though if they can do both, they will. In such missions, the Attacker is a small Force sent to identify the composition of a larger enemy group.

Mapsheets with hills and trees are ideal for recon raids, as are urban maps if units can hide in buildings, because both provide the Defender with concealment from the Attacker's sight. After the Attacker selects an entry edge, the Defender sets up his Elements, as many as half of which can be concealed using the *Hidden Units* rules (see p. 259, *TW*). No defending Elements may withdraw from the map until at least a quarter of the defending Force has been destroyed.

Terrain: Players should take turns laying out an equal number of terrain features, leaving sufficient room for their units to maneuver and deploy. At least two terrain features should be placed for every Formation of ground units in play—on both sides. Up to half of the Defending units may be placed within any terrain feature on the map, using the *Hidden Units* rules (see p. 102, *AS*). No defending Elements may withdraw from the map until at least a quarter of the defending Force has been destroyed.

Force Composition

The attacking Force should be half the size of the defending Force. For example, if the Defender is a company-strength unit, the Attacker should field 6 units.

Victory Conditions

The scenario ends when all units of one Force have been destroyed or retreated off the map. The attacker gains 1 Victory Point for each defending unit he spots. To spot a defending unit, an attacking unit must have LOS to it and be within 10 hexes (20 inches). Hidden units may be spotted if an attacking unit moves adjacent to them or if they fall within the operational range of an attacking unit's active probe. Each unit that is not spotted by the end of the scenario gives 1 Victory Point to the Defender. The side with the higher score is the winner.

BATTLE WRAP-UP

The victor of a battle, in most situations, is the one who controls the battlefield afterwards. If desired, the victor can claim salvage, friendly warriors, and captured enemy warriors from the battlefield. Salvaged units and warriors can be added to any Formation, or may be added to a new Formation. Those units and warriors could then be repaired/healed on a subsequent campaign turn by the Formation being given a Repair order. Likewise, surviving player units may change Formations and be repaired/healed on a subsequent Strategic Turn. Reorganizing formations in this fashion is a free action (i.e. it doesn't require an order on a Strategic Turn), but it must be completed prior to using Formation orders.

After a Recon Raid, Breakthrough or Extraction scenario, if the Attacker is the victorious, the victor cannot claim salvage or enemy warriors. The victor in this situation may only recover friendly warriors whose unit was destroyed. However, the Defender in these scenarios may claim salvage even if lost the scenario.

A Formation that was given a Scout order and won a battle may look at the record sheets for all Formations included in the Force at that location, whether the Formation participated in the battle or not.

Ben's players have learned a lot from the battles on Huntress, Londerholm, and Tamaron, and are ready to fight Clan Stone Lion's battles. After fighting their own battles, they have won on Bearclaw and Glory, but lost on Kirin. From their sourcebook reading, the Stone Lion players know the Lions don't have a lot of resources, so they claim all the salvage and warriors they can. Since their victories earned them total control of those planets, they can dedicate a Strategic Turn to repairing those machines and warriors without fear of immediate reprisal attacks.

*The battle for Fortress Bexar complete, Chris takes stock of his potential salvage. He even makes use of the Destroyed vs. Truly Destroyed rules (see p. 175, *SO*) to salvage some equipment that might not have been repaired in a more simplified ruleset.*

Victory for the Jade Falcons cost Brian most of his Star, but he was able to salvage two ComStar 'Mechs, one with an unconscious pilot, and the other which fell when its MechWarrior was killed. Since it would make for great story-telling, he decides that two of the pilots of the destroyed Jade Falcon 'Mechs will take over the captured ComStar 'Mechs. This allows him to keep his Formation close to its starting size, and enhance his tale.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

KEY LOCATIONS

Players who capture a key location will gain game benefits and other resources from that site. For example, if the site is a factory (or a planet with a factory), that player receives some of that factory's output, equivalent to one size smaller than the player's Formation—in a campaign where a company was the standard Formation size, capturing a factory would give a Lance to the capturing player. When a player captures a city (or a planet), the Formation that captured the city (or planet) receives a free Strategic Turn of Repair. When a player captures a DropPort, that player gains the ability to make a DropShip Move more quickly as described in *Formation Orders* (p. 148). A DropPort also allows a player to bring in new Formations from outside the campaign, if the player and GM have previously agreed to it. Some examples are listed in the Key Locations Benefits Table. GMs and players are encouraged to add their own Key locations and benefits to their campaigns.

The victory on Bearclaw repaired the surviving Stone Lion forces and won control of the Summoner factory for the Stone Lions. Since Ben's campaign uses Trinaries as the base Formation size, the Stone Lions have added a Star of Summoners to their forces on Bearclaw.

Chris decides to use the DropPort in Fortress Bexar to send two of his Battalions to hex C23 on the continent of Trinity while his remaining forces finish the cleanup operations on Ellum. This allows him to speed up his conquest of New Dallas, using the DropPort to transport and deploy his Formations in the same turn.

Brian's Jade Falcons captured a second supply depot in their campaign. He decides that the supplies allow him to repair the armor damage to his Force (but not any structure or critical damage). If he had been playing under Total Warfare rules, which also track ammunition usage, the depot's capture would have allowed his Force to refill their ammunition bins as well.

SAMPLE KEY LOCATIONS BENEFITS TABLE

Key Location	Benefit to Controlling Players
Airfield	AeroSpace may take off and land here.
City	Free Repair order.
DropPort	DropShip Move requires only one Turn.
Factory	Receive free unit one organizational level below standard campaign Formation. Usuable once per player per campaign. Free Repair order.
Fortress	+1 initiative bonus for any battle within this, or adjacent, hexes or Zones. Free Repair order.
Seaport	Formation may move from here across water hexes or Zones to any other Seaport at standard Strategic Move Rate.
Supply Depot	Free Repair order (armor and ammunition only).

WINNING THE CAMPAIGN

A campaign is complete and a victor is declared once a player has completed the campaign objectives as determined by the player(s) and the GM. If using objective points, 80% of the total possible points by the end of the campaign results in a victory. Sometimes, the campaign may turn into a stalemate, with neither side willing to admit defeat, but neither side able to defeat the other. In the *BattleTech* universe these situations have occurred—and sometimes remained this way for a long time. Historically, such stalemates are usually broken by the arrival of additional troops from outside the campaign area, a cunning surprise attack by one side, or a duel between Force commanders. There aren't any strict guidelines for resolving such a stalemate, other than to keep in mind the enjoyment of all involved in the campaign when doing so.

Through a long campaign Ben's players have craftily increased the size of the Stone Lion touman and the territory it controls. They haven't conquered all of Clan space, but they have helped drive the Cloud Cobras to the brink of annihilation and, together with their allies in Clan Coyote, they have beaten the Star Adders down to a smaller size. All involved have enjoyed the campaign and felt it was a good learning experience. With a new stalemate achieved, Ben and the players decide to end the campaign, calling it a victory since the Stone Lions succeeded in expanding.

Chris has battled through New Dallas, conquering city after city, fortress after fortress, even forcing the defending Formations to abandon the capital of Caddo City and retreat into the nearby Fort Resolute. His forces have been whittled down and, while they are not enough to conquer Fort Resolute and its defenders, they are enough to hold the rest of the planet. Rather than use roleplaying to decide which side gets to call in reinforcements or an orbital strike, Chris counts up his objective points (32—exactly 80% of the 41 total objective points) and declares the campaign a victory.

With the last of the ComStar Formations fortified in the city of Olalla and his remaining Formations outside, Brian has reached a stalemate (with a total of 13 objective points). Not satisfied with that ending to his story (and a similar result to the historical events on Tukayyid), Brian invokes roleplay, challenging the ComStar commander to a one-on-one duel to decide the fate of the campaign. Whoever wins the battle will win the whole campaign. His commander, fighting in a Hellbringer, emerges victorious—a fitting ending for a truly epic story.

OPTIONAL RULES

The rules provided in this section have laid out the basics of map-based campaigns, but players may wish to add other options to vary their gameplay. Nearly any type of rules or special features can be added as long as everyone involved in the campaign agrees. Included below are a few optional rules for map-based campaigns.

MULTI-FORCE CAMPAIGNS

The basic map-based campaign is presented as a GM and a single Force run by one or more players. This allows a GM to setup the basics of the campaign story while the player(s) fill in the details. However, the system plays just as well with player vs player or multiple player Forces. Both types of campaigns play similarly to the basic format and can lead to epic campaign stories. Examples of these types of campaigns in the *BattleTech* universe can be found on a planetary scale in *Turning Points: Irian*, on a larger scale in the initial Clan invasion, and on a smaller scale in the Dark Age era battles between Clan Wolf, Clan Jade Falcon and the Lyran Commonwealth for Tharkad and Hesperus II, or the five-way battle for the planet Tyrning during the First Succession War.

Double-Blind Rules

Players familiar with the *Double-Blind Rules* from Tactical Operations (see p. 220, *TO*) may wish to engage in similar rules for map-based campaign play. Double-blind campaign play begins with all Formations deploying as normal, but instead of placing units on the map, the location of the units is recorded and kept secret. A neutral third party is required to check when opposing Formations have entered the same location on a map. In this instance both sides reveal to each other the size of their Formation in that location. If one or both Formations leave the location, they both return to a hidden state. The exception is units that have been identified as a result of a successful Scout mission; those units remain visible as long as they are in the same hex or adjacent hex to the unit that completed the successful Scout mission.



DYNAMIC CAMPAIGN SCALING

The ultimate campaign is one that starts with a House ruler or Clan Khan directing the movements of regiments and Galaxies and can scale down to any level, even that of a one-on-one 'Mech duel, or any scale in between. As designed, the Map-Based Campaign rules can function at any level with most any size map or Formation. Using the unit conversion rules in the *Alpha Strike Companion* (see p. 91, *ASC*), the *Strategic BattleForce* and *Abstract Combat System* conversion rules in *Interstellar Operations* (see p. 326, *IO*) and the *Inner Sphere at War Conversions* rules (see p. 88), players can create Formations as small as a Lance or Star and as large as a House army or Clan touman.

As play progresses at a high scale, sometimes a player might desire to play out a particular battle in more detail. Instead of a simplified regiment versus regiment battle for control of a planet using the ACS scale, the player and GM create a campaign-within-a-campaign, turning that one battle into a planetary invasion campaign at *SBF* or *BattleForce* scale. Then when it comes time for the final key battle of the planetary invasion campaign, the player and GM once again desire more detail. The final battle is turned into a campaign of company-on-company battles for control of the planetary capital using *Total Warfare* or *Alpha Strike* rules. When playing Clan forces using *zellbrigen*, the scale can be taken one step further, turning a Trinary versus Trinary battle into a campaign of individual duels within a single battle.

Ben and his players so enjoyed their campaign that they wish to replay it, but this time each of the Clans will be controlled by a different player. The players have decided that Ben will act as the Loremaster of their Grand Council, the neutral arbiter of right and wrong in the campaign.

Chris has chosen to play a new planetary invasion campaign on a different planet, this time using Double-Blind Rules. He knows this will further add to the complexity of the campaign, but adding details and nuances has never deterred him from enjoying a game.

*To play the one-on-one duel to decide the ending of his campaign, Brian wants more detail for this final battle. He chooses to zoom in a level and use *Total Warfare* rules instead of the more simplified *Alpha Strike* ruleset.*

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

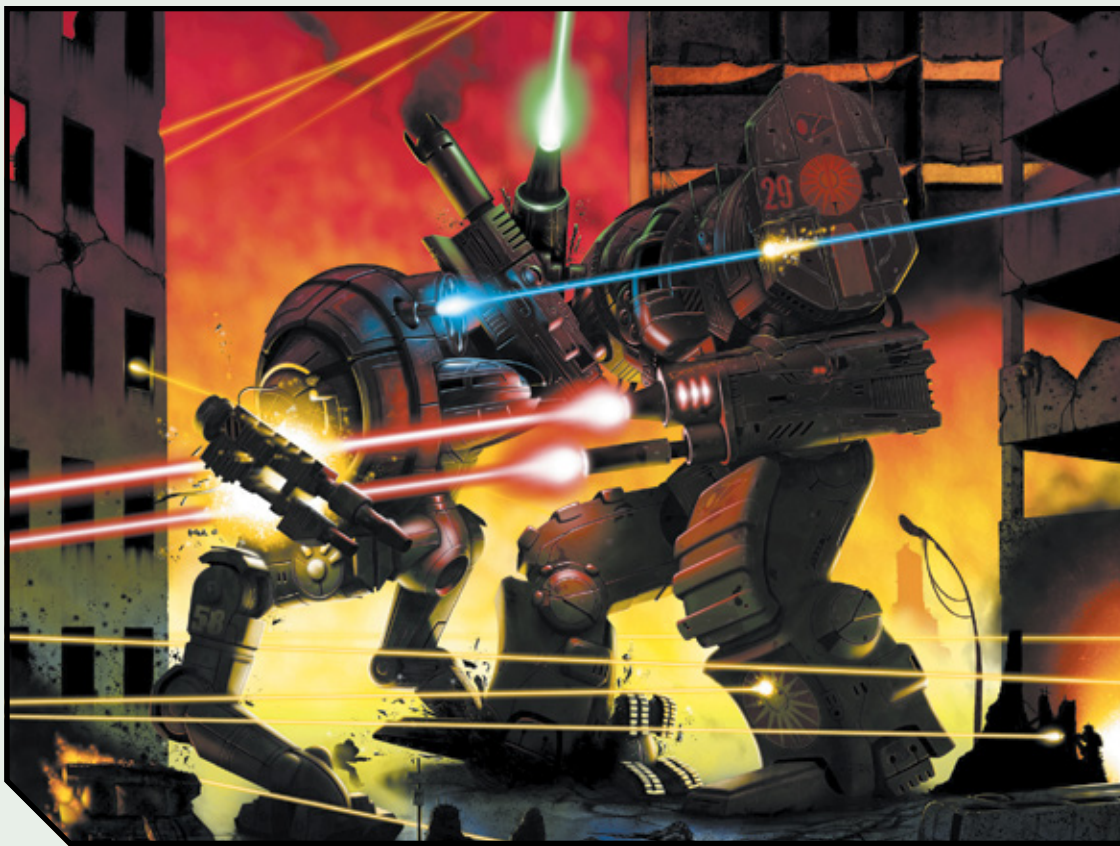
SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



The FedCom Civil War raged across an enormous swath of the Inner Sphere engulfing scores of units and worlds.

CUSTOM CHAOS: CAMPAIGN CREATION

This section is broken into two parts: the *Chaos Campaign* rules, which are considered the default ruleset for any official product that utilizes this campaign style, such as the PDF *Turning Points* series; and the *Custom Chaos* rules allowing players to create their own customized track campaigns.

The information presented in *Custom Chaos* can be used to create specialized tracks for a specific gaming table and for *BattleTech* games set during any era. Ultimately, there are no “required” sourcebooks needed to create or play a track, though it is recommended that Gamemasters (GMs) pick a ruleset and stay with it through the entirety of their constructed track. Most players use the *Total Warfare*, *A Time of War*, or *Alpha Strike* rules, though tracks can also be constructed using the out-of-print *BattleTech Master Rules*, *BattleTech Maximum Tech*, *BattleSpace*, and any of the older *BattleTech Box Set* or *Mechwarrior RPG* editions. Players who wish to use those older products can work them in with minimal adjustment.

Complete record sheets for all BattleMechs, vehicles, and aerospace craft are available in the ready-to-play Record Sheet PDFs for purchase at www.battlecorps.com/catalog, including any of the previously published Record Sheet compilations by FASA and FanPro. Illustrations and game statistics for most of these units appear in the various *BattleTech Technical Readouts* published by Catalyst Game Labs, FASA, or FanPro.

Custom Chaos campaigns and rules can supersede previously printed rules; this is ultimately determined by the GM—who, for the purpose of this section, is considered both the creator and conductor of the campaign. Any custom (or “house”) rules should add variety to and enhance game play but should not give unfair advantages. It is considered a best practice that GMs and players agree on any supplemental rules before using them in play. All of these rules are considered Advanced and should not be used in official tournament play.

If there is no rule for a particular situation, the GM should feel free to come up with their own; all players must agree to its use. As a last resort, roll a D6 to resolve any issues.

Mapsheet Terrain: When a terrain type such as Urban, Wooded, or Mountain is mentioned in these rules, the reference is to the Terrain-Specific Mapsheet Tables in *Total Warfare* (see p. 263, *TW*). If a rule specifies Light Urban Terrain, for example, it specifically means the maps in Table 7: Light Urban Terrain Table (see p. 263,

TW). Unless specifically stated otherwise in a track, the number of maps used in play is up to the players involved. However, in general it is recommended that players use a ratio of 1 map per 4 units.

The *Total Chaos (TC)* campaign book also introduces several other terrain type tables: Ruins, Dense Urban, Industrial Zone, Training Grounds, and Prairie.

Miniatures Rules: While *BattleTech* is a board game that utilizes mapsheets, it is possible to play the game as a 3-D miniatures game with miniatures mounted on hex bases from Iron Wind Metals. Use the *Miniatures Rules* (see p. 386, *SO*) as appropriate, with all of the players consenting. The GM and players will have to make accommodations to set up similar terrain to that found on the mapsheets mentioned in the track. Accommodations should also be made to define and declare how any special rules mentioned in the track will be handled before the game.

Terminology: The following rules use the term *unit* as it is used in *Total Warfare*, referring to a single battlefield unit such as a 'Mech or vehicle. *Force* denotes a large combat formation such as a regiment. A player's *total Force* refers to all of the units ('Mechs, vehicles, infantry, aerospace fighters, etc.) that the player brings to the whole campaign. A player's *deployed Force* refers to all of the player's units brought to use in a track.

When a third party (often listed as an accompanying neutral or allied Force) is indicated, opponents calculate the size of opposing Forces using the player's deployed Force, never the total Force the players have at hand (such as the player's units + allied units).

Exceptions can be noted in the *Game Setup* description, or within the *Options* or *Special Rules* sections.

WHAT'S WITH ALL THE VERSIONS? ⓘ

Ever since the introduction of the *Chaos Campaign* rules in *Dawn of the Jihad*, there have been several different "versions" presented in various products. Because the *Chaos Campaign* rules are at their core a flexible track system, each version is tailored to a particular product in order to bring about a unique and replayable campaign for players. For example, the rules as presented in *Starterbook: Sword and Dragon* reflect the two particular Factions and the era the campaign is set in, utilizing special rules, equipment, and other variables that fit within the particular setting.

This is important to keep in mind because as players create their own track campaign, they will *also* tailor its offerings and options to **their** setting, players, and playing style. They'll use whatever rules work best for them and their group, which will create a unique and (hopefully) replayable experience for their group. This may mean that various Track costs, Support Points, and Warchest Points may vary even within a campaign, reflecting player growth, play style, and other difficulties specific to the campaign arc.

HOW TO USE THE CHAOS CAMPAIGN RULESET

This updated version of the *Chaos Campaign* rules provides an open-ended campaign framework that allows GMs and players to use a variety of published tracks to create their own unique gaming experiences using Forces of their own creation. Each track is set up as a general framework to assist players and GMs in creating the opposing Forces and adding other battlefield effects specific to that track. In addition, using the Warchest Points system (WP), player groups may choose what direction the campaign takes.

Because the player decides which route to take between tracks, this campaign can be replayed often with different tracks, Forces, and even outcomes. GMs and players decide how much detail they wish to go into and may create further scenarios to create sub-campaigns within the track framework. Ultimately, the route, gameplay, and depth of detail are up to the player.

TRACKS

Each track centers on a plot line focused on a single event. Many of these tracks can be found in previously published sourcebooks and digital products. Note that tracks can be used from any previously published rulesets (including out-of-print versions) with minor adjustments.

Each track is broken into several sections: *Situation*, *Game Setup*, *Warchest*, *Objectives*, *Special Rules*, *Aftermath*, and *Next Track*.

SITUATION AND GAME SETUP

Situation provides the where and when of the track, including a short fiction entry to provide some context. *Game Setup* indicates which Terrain Tables should be used in selecting mapsheets for the track. If miniatures rules (such as hex-less *Alpha Strike* game play) and terrain are being used instead, the player should still roll on these tables and use the results to craft a battlefield that gives the same sense of terrain as those detailed on the maps.

Each track defines the Force opposing the player, based on a percentage of the side that contains the player's deployed Force. This percentage must be applied to whatever system is used to balance the Forces. Players should feel free to use any system they prefer, such as *Battle Value* (see p. 302, *TM*), total tonnage, C-bill cost, and so on.

The specific makes and models of most units a given Force may field—whether supplemental Forces provided by the scenario or the opposing Force—may be determined using the appropriate Random Assignment Tables (RAT) published in various sourcebooks to assist in designating Forces, though no player should feel restricted to that medium. More detailed recommendations and guidelines on Force selection may be

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

MAPSHEET TABLES

Unless otherwise described in a track, it is suggested to use 1 mapsheet for every 4 units used in the track, though this can be adjusted to better suit the track's needs or to better fit with whatever size playing field is normal for the players involved. Some tracks may need bigger maps so that players can go around objectives or opposing units for a better approach, while some tracks would be better served with the opposing Force within LRM range of the players. Careful consideration of the number of maps used could help make the game enhanced or different from previous games.

Flatlands Terrain	
1D6	Mapsheet
1	Open Terrain #1 (MS5, MSC1)
2	Open Terrain #2 (BT, MS5, MSC1)
3	Desert Hills (MS2, MSC1)
4	City Ruins (MS2, MSC1)
5	CityTech Map (MS2, MSC1)
6	Scattered Woods (MS2, MSC1)

Badlands Terrain	
1D6	Mapsheet
1	Desert Sinkhole #1 (MS3, MSC1)
2	Desert Sinkhole #2 (MS3, MSC1)
3	Moonscape #1 (MS5, MSC1)
4	Moonscape #2 (MS5, MSC1)
5	Desert Mountain #1 (MS3, MSC1)
6	Desert Mountain #2 (MS3, MSC1)

Light Urban Terrain	
1D6	Mapsheet
1	City (Residential) (MS6, MSC2)
2	City (Suburbs) (MS6, MSC2)
3	City (Hills/Residential) #1 (MS3, SC1)
4	City (Hills/Residential) #2 (BT, MS3, MSC1)
5	City Street Grid/Park #1 (MS4, MSC1)
6	City Street Grid/Park #2 (MS4, MSC1)

Hill Terrain	
1D6	Mapsheet
1	Desert Hills (MS2, MSC1)
2	Rolling Hills #1 (MS3, MSC1)
3	Rolling Hills #2 (MS3, MSC1)
4	Woodland (MS6, MSC2)
5	Box Canyon (MS6, MSC2)
6	BattleForce (MS6, MSC2)

Wetlands Terrain	
1D6	Mapsheet
1	Wide River (BT, MS6, MSC2)
2	Lake Area (BT, MS2, MSC1)
3	Large Lakes #1 (MS4, MSC1)
4	Large Lakes #2 (MS4, MSC1)
5	River Delta/Drainage Basin #1 (MS4, MSC1)
6	River Delta/Drainage Basin #2 (MS4, MSC1)

Heavy Urban Terrain	
1D6	Mapsheet
1	Military Base #1 (MS7)
2	Military Base #2 (MS7)
3	Drop Port #1 (MS7)
4	Drop Port #2 (MS7)
5	City (Skyscraper) (MS6, MSC2)
6	City (Downtown) (MS6, MSC2)

Mountain Terrain	
1D6	Mapsheet
1	Mountain Lake (MS2, MSC1)
2	River Valley (MS2, MSC1)
3	Desert Mountain #1 (MS3, MSC1)
4	Desert Mountain #2 (MS3, MSC1)
5	Large Mountain #1 (MS5, MSC1)
6	Large Mountain #2 (MS5, MSC1)

Wooded Terrain	
1D6	Mapsheet
1	Scattered Woods (MS2, MSC2)
2	BattleTech (BT, MS2, MSC1)
3	Woodland (MS6, MSC2)
4	Rolling Hills #1 (MS3, MSC1)
5	Heavy Forest #1 (MS4, MSC1)
6	Heavy Forest #2 (MS4, MSC1)

Coastal Terrain	
1D6	Mapsheet
1	Archipelago #1 (MS7)
2	Archipelago #2 (MS7)
3	Coast #1 (MS7)
4	Coast #2 (MS7)
5	Seaport (MS7)
6	River Delta/Drainage Basin #1 (MS4, MSC1)

included in each track. Other RATs that appear in current and older publications, or even custom-built ones by the GM, are also valid as long as all players agree to their use.

For Forces that are not specific to the player, roll the Tech level bonus to use when rolling on the appropriate RAT by referring to the Tech Level Table on p. 160. Alternatively, a player may simply choose their Tech level, provided all players are in agreement.

Player Force Size

Though the *Chaos Campaign* ruleset is designed primarily with company-sized or smaller Forces in mind, any size and composition should find it equally challenging. The *Chaos Campaign* rules are scalable for a total Force of any size. Any type of Force—be it House,

Clan, pirate, corporate, or customized player unit—can participate in track campaigns.

Ultimately, GMs and players decide the details. Once the player has determined their Force's origins, the GM needs only spend a little time adjusting various elements to tailor each track to their players' needs, such as the setting, the identity of the opposing Forces, and even the time frame.

Opposing Forces

Most tracks list the player's Force and the opposition in terms of percentages of the player's deployed Force, as opposed to a specific roster. This allows individual campaign flexibility and keeps each track fair and balanced within the storyline.

MAPSHEET TABLES (CONTINUED)

2D6	Dense Urban Mapsheet
2	Military Base #1 (MS7)
3	Drop Port #1 (MS7)
4	City, Skyscraper (MS6, MC2)
5	City, Downtown (MS6, MC2)
6	City, Residential (MS6, MC2)
7	Seaport (MS7)
8	City, Suburbs (MS6, MC2)
9	Lake Area (MS2, MC1)
10	Heavy Forest #1 (MS4, MC1)
11	Drop Port #2 (MS7)
12	Military Base #2 (MS7)

2D6	Industrial Zone Mapsheet
2	City (Hills/Residential)* #1 (MS3, MSC1)
3	City Street Grid/Park* #1 (MS4, MSC1)
4	City, Downtown (MS6, MC2)
5	Military Base #1 (MS7)
6	Drop Port #1 (MS7)
7	City, Suburbs (MS6, MC2)
8	Drop Port #2 (MS7)
9	Military Base #2 (MS7)
10	City Street Grid/Park* #2 (MS4, MSC1)
11	City (Hills/Residential)* #2 (MS3, MSC1)
12	Seaport (MS7)

*Place Heavy and Hardened buildings of varying heights in each non-paved hex

2D6	Training Grounds Mapsheet
2	BattleTech (MS2, MC1)
3	Open Terrain #2 (MS5, MC2)
4	Desert Hills (MS2, MC1)
5	Rolling Hills #1 (MS3, MSC1)
6	Scattered Woods (MS2, MSC2)
7	Open Terrain #1 (MS5, MC2)
8	Open Terrain #2 (MS5, MC2)
9	Rolling Hills #2 (MS3, MSC1)
10	BattleTech (MS2, MC1)
11	Open Terrain #1 (MS5, MC2)
12	Desert Hills (MS2, MC1)

2D6	Prairie Mapsheet
2	City Street Grid/Park* #2 (MS4, MSC1)
3	Open Terrain #2 (MS5, MC2)
4	Scattered Woods (MS2, MSC2)
5	Rolling Hills #1 (MS3, MSC1)
6	Open Terrain #1 (MS5, MC2)
7	BattleTech (MS2, MC1)
8	Open Terrain #2 (MS5, MC2)
9	Rolling Hills #2 (MS3, MSC1)
10	Battleforce 2 (MS6, MC2)
11	Open Terrain #1 (MS5, MC2)
12	Desert Hills (MS2, MC1)

*Place Light buildings of 1D6-2 (minimum 1) heights in each non-paved hex.

2D6	Ruins Mapsheet
2	Military Base* #1 (MS7)
3	City Street Grid/Park* #1 (MS4, MSC1)
4	City, Downtown (MS6, MSC2)
5	City, Residential (MS6, MSC2)
6	City (Hills/Residential)* #1 (MS3, MSC1)
7	CityTech Map* (MS2, MSC1)
8	City (Hills/Residential)* #2 (MS3, MSC1)
9	City, Suburbs (MS6, MSC2)
10	City, Skyscraper* (MS6, MSC2)
11	City Street Grid/Park* #2 (MS4, MSC1)
12	Military Base* #2 (MS7)

*Place Medium and Heavy buildings of varying heights in each non-paved hex. Roll 2D6 for every hex containing a building. On a result of 6+, that hex is reduced to Rubble.

Abbreviations

MS = Map Set

MSC = Map Set Compilation

BT = BattleTech Introductory Box Set.

TECH LEVEL TABLE

2D6	Opposing Tech Level
2	Player's choice
3	F
4	A
5	B
6	D
7	C
8	C
9	D
10	B
11	A
12	Player's choice

The player's *total Force* encompasses all units at the player's disposal, whether 'Mechs, vehicles, aircraft, battle armor, or infantry platoons; supplemental Forces assigned by or granted in the track rules do not count towards this number unless specifically stated otherwise.

The player's *deployed Force* represents the percentage of their total Force that will be used in the current track. The percentage listed in a given track is the maximum percentage of the player's total Force that can be used in that track. A player may elect to take fewer units at their own discretion, however.

Opponents should always calculate the size of opposing Forces using the player's deployed Force, never the total Force the players have at hand.

In setting up Forces for the track Another Day, Another C-Bill (p. 41, TC), the player determines their total Force comprises 12 'Mechs totaling 20,000 BV2 (not counting Gunnery/Piloting Skills) and worth 10 million C-bills. All participants decide to use BV2 as the standard for building all Forces. This means the player's deployed Force (25 percent) may not exceed 5,000 BV2 in selecting units. Alternatively, if the group had decided to use a numerical standard, then the player would select up to 3 units from their total Force. If the group instead used C-bills

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS



as the standard, then the total value of the player's deployed Force cannot exceed 2.5 million C-bills.

Once the player's deployed Force is determined, the opponent figures out the attacking Force's composition. The track states that the Attacker must not exceed 75 percent of the Defender (player's deployed Force), and so the Attacker's deployed Force cannot exceed 3,750 BV2 (or as close as can be made). Because the group opted to not account for Gunnery/Piloting Skills, those skills do not factor into the composition of either Force. The opponent sees that the Fifty-first Panzers are a Veteran unit and so assigns each attacking unit a Veteran Skill set using the Average Skills Table found on p. 271, TW.

WARCHEST AND OBJECTIVES

The *Warchest* section of a track describes in detail how many Warchest Points (WP) a track costs and additional bonus options that may be used to add difficulty, and as a result, earn the player more WP upon track completion. The track cost is an abstract number that reflects the combination of travel, distance, time, reputation, and other intangibles considered at the time of the track's occurrence. The player must have enough WP to pay the cost at the beginning of the track. If the player does not have enough WP, they may either go into *Warchest Debt* (at right) or select a different track.

The player is not required to use the *Option(s)* listed and may run the track as normal. However, if a player chooses to use an Option in order to achieve a greater WP payout, that Option's effects are applied to the track. Multiple Options may be in effect during a track, and all payouts for chosen Options are cumulative.

Option bonuses are applied at the end of the track after Objectives are calculated. The player receives the listed WP payout if at least one Objective is reached, unless otherwise noted. If a player chooses multiple Options for a track, only one Objective needs to be achieved in order to receive all Option WP payouts in play.

Objectives indicate the track goals the player must achieve. The player receives the listed WP for each Objective reached. These rewards are cumulative unless otherwise indicated. Note that some Objectives have a negative reward, indicating that it is in the player's best interest to avoid "achieving" that objective.

SPECIAL RULES

The *Special Rules* section indicates which special rules, if any, apply in that track.

AFTERMATH AND NEXT TRACK

The *Aftermath* section shows additional goings-on at the end of a track through the eyes of unit affected by the track events. GMs use this information, combined with other era sourcebook data, to create their own campaign flavor.

The *Next Track* section indicates what track paths the player may choose to follow. The player must have enough WP to move onward to the selected track. Conversely, a player may choose to play any designated *Mission* tracks, if available. The player may then rejoin the campaign at a track after the one previously played; while selecting one from the previous track's *Next Track* section is recommended, it is not required.

WARCHEST POINT SYSTEM

The Warchest Point System is an abstraction of the rewards and opportunities that arise out of combat. More than merely a monetary concept, the Warchest also represents factors such as renown, contacts, and being at the right place at the right time. It represents opportunities, whether to participate in a particular battle, fight under certain environmental modifiers, or acquire a BattleMech.

Getting started

Regardless of how the group comes to the table, the player begins their campaign with their chosen Force and a set number of Warchest Points (WP), as determined by the GM. This starting balance of WP is used only for purchasing the ability to play tracks and make other Warchest purchases, not to purchase the player's beginning Force.

Between tracks, a player may use their WP to increase personnel experience, repair and rearm, and purchase other group abilities or equipment. All WP expenditures must occur before the beginning of the next track. The player may not spend WP during a track, even if it is split into a mini-campaign. Keep in mind that the next track must also be paid for from the Warchest.

Warchest Debt

If the player lacks enough WP to purchase any tracks available to them, they may go into Warchest debt in order to participate in the next track. The player may NOT purchase services and equipment on Warchest debt.

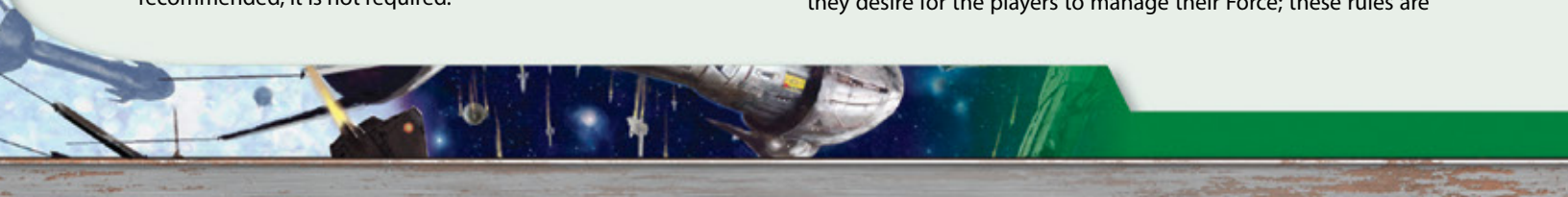
As the player gains WP during the track, they can use these points to pay off the debt until the Warchest rises to a positive number. If debt still exists after that track, the player must sell off assets until the Force can purchase its next track. The player may not go into Warchest debt for two successive tracks.

If a Force is so far in debt that it cannot pay for a new track, the player has two options. He may decide that the Force is too damaged to maintain fighting cohesiveness. That Force is then "retired" for the remainder of the story arc, but may be brought back in the future arcs, as determined by player agreement.

Conversely, the player may opt to spend a large amount of time repairing and refitting by skipping an entire track in order to carry out the necessary repairs. If the player decides on this course of action, he may re-enter the current campaign arc at a point beyond the skipped track where he was initially stuck. To do this, choose a track from the options presented under the *Next Track* guidelines for the track the player would have carried out. When ready to play the next track, the player selects the most expensive bonus (if more than one, choose randomly) listed in the Options section and applies it to the track, but the player does not receive the bonus WP. If the player selects additional Options, however, he will receive WP for them as normal. In addition, all Objective rewards are halved for this track.

WARCHEST POINTS BETWEEN TRACKS

Because the Warchest system is meant to be an abstract method of accounting and Force management, spending WP between tracks is simple. The GM is welcome to add however much detail they desire for the players to manage their Force; these rules are



AVERAGE UNIT COST (WP)*

unit Type	WP Cost
BattleMech	Tonnage x2
Vehicle	Tonnage x1
Aerospace Fighter	Tonnage x1
Infantry unit	10
Battle Armor unit	35

*NOTE: double all costs of Clan Technology units.

SUPPLY TABLE COST (WP)

Ammunition*	WP Cost
Ballistic, per ton	4
Missile, per ton	6
Recruitment	WP Cost
Green (Piloting 6, Gunnery 5)	15
Regular (Piloting 5, Gunnery 4)	30
Veteran (Piloting 4, Gunnery 3)	60
Elite (Piloting 3, Gunnery 2)	100
unit Being Sold	WP Gain
BattleMech	Tonnage x1
Vehicle	Tonnage/0.5
Aerospace Fighter	Tonnage x1
Battle Armor (squad only)	12

*Reloads an ammo critical slot to full capacity.

provided for those players who wish to run a custom Force through a campaign with minimal time in attending to Force management detail. Note that the Support Point tables and rules that follow are suggested guidelines; the GM should feel free to adjust costs, rules, limitations, etc. as needed to best fit their particular campaign and player group.

A simplistic way to use WP between tracks is to assign basic WP costs to various activities that players may opt to take. These include activities such as repairing or purchasing new units, hiring or training new crew, and acquiring additional perks, traits, or skills. The GM can use the following WP tables as a guideline. Note that the WP tables are not compatible with the Optional Support Point rules and should not be combined.

Optional Rule: Support Points

For a richer level of detail, a player may choose to fine-tune their Support Point levels to account for unit growth and experience throughout their campaign. Once a WP is converted into SP, it cannot be converted back to WP but may be saved for future logistical needs. A maximum of 100 WP can be converted for each month of campaign time the unit spends not participating in a track.

REPAIR COST TABLE (WP)

unit Weight Class	Damage Type	
	Less Than Crippled	Crippled
Light	15	25
Medium	30	45
Heavy	60	75
Assault	80	100
Battle Armor	5/unit	10/unit

NOTE: Cost includes full armor, internal structure, and critical component repair. Destroyed units (see p. 128, *TW* or *Salvage*, p. 119 AS) are not repairable.

If desired, players can then convert these points to C-bills for use with more detailed systems of record keeping and support. The Warchest system is intended as a quick and easy way for players to track their logistics, rather than attempting to encompass all logistical and accounting possibilities in the *BattleTech* universe.

Players interested in using units or possibilities not covered by the Warchest system are encouraged to convert Support Points to C-bills and use the various rule sets (or custom house-made rules) to provide the level of detail they desire. When converting Support Points to C-bills, multiply the Support Point total by 10,000. Likewise, C-bills can be converted to Support Points (divide the total C-bills by 10,000).

To convert WP to SP, first determine the Base Force Size Modifier. This modifier is determined at unit creation and remains constant throughout the campaign, even as the player's Force expands or decreases in number. To find the modifier, a player calculates how many sub-Forces they can make using their preferred organization method (lances, Stars, or Level IIs). Round fractions up.

A player Force contains thirteen 'Mechs and prefers to organize in Stars. Its Base Force Size Modifier is 3 (5 units per Star, 2.6 Stars in the Force, rounded up). A player Force of thirteen 'Mechs and twelve battle armor Points, organized into Stars, would have a Base Force Size Modifier of 5.

Next, determine the Force's Technology Rating Modifier as shown in the Technology Rating Modifier Table. Round fractions to the nearest whole number. The Technology Rating (TR) is the percentage of a Force's 'Mech, vehicle, and fighter tonnage constructed with advanced technology (Inner Sphere or Clan Standard Rules equipment; i.e. weapons and equipment found in *TechManual*). A unit is considered to fall under Standard Rules (or Advanced/Experimental; i.e. weapons and equipment found in *Tactical Operations*) if its equipment includes anything not shown on the Introductory Rules Equipment Table, below. (While Introductory Rules weapons and equipment are included in the *TechManual*—as those rules are folded into the Standard Rules—Introductory Rules specifically refers to weapons and equipment found in the *BattleTech Introductory Box Set*.)

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

To calculate a Force's TR, determine the percentage of the Force's total number of combat units (excluding conventional infantry) that use advanced technologies. Units that use Clan technology are worth double their TR percentage value, so after computing the percentage of units that carry Clan-made advanced technologies, double that result, and add it to the percentage of non-Clan advanced technologies units to find the Force's overall Technology Rating. Whether units employ Clan or Inner Sphere Standard Rules technology, however, the maximum technology percentage cannot exceed 100.

Equipment Ratings sum up the level of technology in a similar fashion to the TR formula. To find a Force's Equipment Rating, simply cross-reference the total percentage of Standard Rules units within the Force against the Equipment Rating Table below.

A mercenary command has four Introductory Rules 'Mechs, six Standard Rules Inner Sphere 'Mechs and two Standard Rules Clan 'Mechs.

The percentages of these units in the Force are computed as follows:

Inner Sphere Standard Rules units = $(6 / 12) \times 100 \times 1.5 = 75$ percent

Clan Standard Rules units = $(2 / 12) \times 100 = 16.67 \times 2.2 = 36.67$ percent

Added together, the total percentage of units with Standard Rules Inner Sphere/Clan technology is thus 111.67 percent (rounding down to 111 percent). This exceeds 30 percent by 81.67 percent, or eight full 10 percent increments.

The unit therefore has a 40-point Technology Rating. Comparing the 40 points against the Equipment Rating Table results in a D Equipment Rating.

If players do not wish to spend the time to determine a Force's specific Equipment Rating, they can simply assume a D Rating for purposes of determining Support Points.

Finally, multiply the available WP by the Base Force Size Modifier and then by the Technology Rating Modifier Table to determine how many Support Points the players have available.

Kim's B-rated mercenary Force has a Base Force Size Modifier of 5. She wishes to convert 100 WP into Support Points; her GM multiplies 100 by 5 and then by 1.5, which equals 750 Support Points. Kim now has 750 SP to spend on whatever upgrades, purchases, and other activities during this period between tracks. Any unused SPs are set aside and can be used at a later time, and even added to additional WP conversions.

Purchase/Repair

Players can use SP to make repairs and to purchase new units or personnel. When repairing or purchasing units, use the SP Activity unit Cost Table. For personnel, use SP Activity Personnel Cost Table. All new personnel are considered Green unless the player spends double or triple the cost as indicated in the table footnote.

While a player generally has access to any RAT, for better playability the following options are recommended when selecting purchased units. The GM ultimately determines what RATs are

available at what time for purchasing new units, or can construct their own custom RAT that addresses their specific campaign needs.

Localized RAT: Use a RAT that is specific to the region of space where the last track occurred. [Example: A player purchasing new units after recently completing a track on Northwind in the Jihad era would select a unit off of the Word of Blake RAT, as the track takes place in the time period of the Word of Blake Protectorate.]

Origin RAT: The player uses a RAT that is specific to the region of space from where the unit originates. [Example: A player using the First FedSuns Lancers would use a House Davion/Federated Suns RAT.]

For-hire RAT: The player uses only Mercenary, Militia, or Periphery RATs to purchase units at the listed SP cost; selecting any other RAT would be double (or triple) the SP cost.

SP can also be converted to C-bills to allow for the purchase of other components not expressly covered by these rules, such as DropShips, JumpShips, support vehicles, and their attendant crews.



Refreshed after a long deployment, a LMT-2R Lament steps away from a field repair gantry.

TECHNOLOGY RATING MODIFIER TABLE

Equipment Rating	Technology Rating Modifier
A	2.0
B	1.5
C	1.25
D	1.0
F	0.5
Clan Society	3.0
Clan Front-line	2.0
Clan Second-line	1.5

INTRODUCTORY RULES EQUIPMENT TABLE

Equipment
AC/2, AC/5, AC/10, AC/20
Armor (standard)
Cockpit (standard)
Engine (standard)
Flamer, Flamer (vehicle)
Gyro (standard)
Hatchet
Heat Sink (standard)
Internal Structure (standard)
Jump Jet (standard)
Large Laser, Medium Laser, Small Laser
LRM 5, LRM 10, LRM 15, LRM 20
Machine Gun
PPC
SRM 2, SRM 4, SRM 6

EQUIPMENT RATING TABLE

Equipment Rating	Technology Rating Modifier
15 or less	F
16 to 45	D
46 to 65	C
66 to 85	B
86 and up	A

SUPPORT POINT ACTIVITY COST TABLE

unit Activity	SP Cost*
Repair armor on 'Mech or Aerospace Fighter	Tonnage
Repair armor on Vehicle	Tonnage/2
Repair ProtoMech	Tonnage x 5
Repair Battle Armor	No. of suits x 2.5
Repair armor on DropShip or JumpShip	Tonnage x 2
Repair internal structure on 'Mech or Aerospace Fighter	Tonnage x 2
Repair internal structure on Vehicle	Tonnage
Repair internal structure/SI on DropShip or JumpShip	Tonnage x 5
Reconfigure OmniMech, OmniVehicle, or OmniFighter	Tonnage/4
Purchase 'Mech/Aerospace unit (Introductory Rules) [†]	Tonnage x 10
Purchase 'Mech/Aerospace unit (Standard Rules) [†]	Tonnage x 20
Purchase ProtoMech Point (Clan Force only) [†]	Tonnage x 5
Purchase Vehicle (Introductory Rules) [†]	Tonnage x 5
Purchase Vehicle (Standard Rules) [†]	Tonnage x 10
Purchase Battle Armor [†]	No. of suits x 50
Rearm unit (Introductory Rules ammo)	5
Rearm unit (Standard Rules ammo)	10
Rearm unit (Advanced/Experimental Rules ammo)	50
Personnel Activity	SP Cost**
Hire new MechWarrior [‡]	100
Hire new Aerospace pilot [‡]	50
Hire new Vehicle crew [‡]	200
Acquire new ProtoMech pilot (Clan Force only)	500
Hire new Battle Armor squad/Point [‡]	25
Hire new Foot Infantry platoon	100
Hire new Motorized Infantry platoon	200
Hire new Jump Infantry platoon	300
Heal MechWarrior	30 per Wound box; 1 per month
Heal Vehicle Crew (Commander hit or Driver hit results)	60
Heal Aerospace pilot	30 per Wound box; 1 per month
Heal DropShip/Jumpship/WarShip crew	100 per member beneath vessel's crew complement
Heal Infantry squad [§]	20 per individual box
Upgrade any pilot/crew/squad to Manei Domini	100,000; maximum of 1 upgraded unit in entire Force at any one time
Change Special Command Ability	20 per ability
Change Formation Type	5 per surviving unit in Formation
Organizing a new formation [†]	10 per unit in Formation

Note: Player can only repair units that have not been *Truly Destroyed* (see p. 175, *SO* or *Destroyed Salvage*, p. 173 ASC).

*Double all costs for units with Clan technology base.

[†]unit does not come with pilot/crew; must be hired/acquired separately.

**Double all costs for Clan personnel.

[‡]Does not come equipped with weaponry, vehicles, or equipment (purchased separately). New personnel begin with a Green Skill Rating; double the cost for Regular Skill Rating and triple the cost for Veteran Skill Rating. Elite Skill Rating is not available for purchased personnel.

[§]This is to refill a damaged infantry unit back to maximum personnel

[†]Applies to units pulled from other Formations and/or newly purchased units that form a new, additional Formation to the group.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SKILL ADVANCEMENT TABLE

Skill Advancement	SP Cost
MechWarrior Gunnery Skill	200
ProtoMech Gunnery Skill	400
MechWarrior Piloting Skill	150
ProtoMech Piloting Skill	400
Aerospace/Aircraft Pilot Gunnery Skill	200
Aerospace/Aircraft Pilot Piloting Skill	150
Vehicle/Support Vehicle Crew Gunnery Skill	100
Vehicle/Support Vehicle Crew Driving Skill	50
DropShip/JumpShip Crew Gunnery Skill	1,000
DropShip/JumpShip Crew Piloting Skill	1,500
Battle Armor Squad/Point Gunnery Skill	800
Infantry Platoon Gunnery Skill	500
New pilot Special Ability	100 per ability; max 1 per 3 game months and a change in Skill Rating

NOTE: Pilot/crew must have actively participated in prior track to receive advancement. For those who were idle or just hired, triple the Support Point Cost. Double cost for Clan personnel *unless* player Force is Clan in origin.

SKILL ADVANCEMENT

Between tracks, personnel that participated in the last track may advance their Skill Ratings. Those that did not participate in the last track may also advance their Skill Ratings, but at three times the listed Support Point cost. This represents that while personnel can advance their Skill Ratings outside of combat through training, it is a more time consuming and financially expensive proposition.

Personnel may only advance each Skill Rating one at a time. For example, a MechWarrior can improve his Gunnery or Piloting Rating by one, or improve both his Gunnery and Piloting Rating by one, but he may not advance either Skill Ratings by two or more. For skill advancement between tracks, use the Skill Advancement Table.

Optional rule: If using the Pilot Special Abilities (see p. 70), these can be purchased with the following restrictions. A pilot must have received an advancement of one Skill Rating and not had a special ability purchased in the previous 3 months of game time. The 100 SP cost is in addition to any other advancement costs applied at the time.

CHANGING FORCE COMMANDS AND FORMATION TYPES

A successful combat unit must be flexible in order to survive on the battlefield. If using the Special Command Abilities or Formation Types (see Formation Building, p. 56), these can be reassigned or changed during the between-track period. The listed cost in the SP Activity Cost Table 2 covers the changing of radio codes, unit protocols, and training needs to help pilots and crews adjust to their new roles before the next mission.

Joshua is running a company from the Pollux Regiment of the Dioscuri mercenary command. The Force's average Skill is Regular, so it assigns two Special Command Abilities from the Pollux list (Overrun Combat, Tac Spec (Defense), Tac Experts (Hidden units), or Off-Map Movement. Joshua selects Off-Map Movement and, based

on the description of the contract/missions they may be running, Tactical Specialization (Defense).

He then assigns the three Lances of the Company as Striker, Pursuit, and Fire.

After the first track, the Pursuit Lance isn't working like Joshua expected. He wants another Striker Lance instead. He pays 20 SP (5 SP x 4 surviving units = 20 SP) to change the Formation type from Pursuit Lance to Striker Lance.

Joshua then does well on several tracks and fixes three salvaged 'Mechs. He then buys a new 'Mech and decides to build a new formation using those units. He pays 40 SP to create a new formation (10 SP x 4 new units = 40 SP), assigning it as a Pursuit formation.

He then finishes the contract and moves to a new campaign where the unit is no longer on defense. He wants to change one of his Force's Special Command Abilities from TacSpec (defense) to Overrun Combat. Joshua pays the 20 SP to change an SCA.

After finishing that contract, the average Skill Rating of the entire Force is now Veteran, granting a new Special Command Ability to choose from the Pollux list (or roll randomly if Pollux has no options left). Because the unit is eligible for a new SCA, he gets to assign the new ability at no extra cost.

WARCHEST CAMPAIGN RECORD SHEET

While players can track their campaigns in whatever form they find most useful, the Campaign Record Sheet can be used to track exactly what optional rules are in effect during a given track. The sheet also allows for players to track the damage received in a track, objectives achieved, salvage taken, and so on.

BATTLETECH

WARCHEST CAMPAIGN RECORD SHEET

Track Title:
Date/Duration:
Force Name:
Faction:
Options Used:

Starting WP:
Track Cost:

Objectives Gained/WP Earned:

Downtime Costs:

Final WP:

Track Title:
Date/Duration:
Force Name:
Faction:
Options Used:

Starting WP:
Track Cost:

Objectives Gained/WP Earned:

Downtime Costs:

Final WP:

Track Title:
Date/Duration:
Force Name:
Faction:
Options Used:

Starting WP:
Track Cost:

Objectives Gained/WP Earned:

Downtime Costs:

Final WP:

Track Title:
Date/Duration:
Force Name:
Faction:
Options Used:

Starting WP:
Track Cost:

Objectives Gained/WP Earned:

Downtime Costs:

Final WP:

CAMPAIGN NOTES

CARTOONIST

© 2016 The Topps Company, Inc. Classic BattleTech, BattleTech, Mech and BattleMech are trademarks of The Topps Company, Inc. All rights reserved. Galaxy Game Logo and the Galaxy Game Logo are trademarks of Infinite Production, LLC. Permission to photocopy for personal use.

• WARCHEST CAMPAIGN RECORD SHEET •



INTRODUCTION

FORCE
CREATIONFORCE
OPERATIONSFORMATION
BUILDINGINNER SPHERE
AT WAR
CONVERSIONSSOLAR SYSTEM
GENERATIONNARRATIVE
CAMPAIGNSMAP-BASED
CAMPAIGNSCHAOS
CAMPAIGN
CREATION

RECORD SHEETS

CUSTOM CHAOS: BUILDING YOUR OWN CAMPAIGN

The following rules are meant as a guide, and not a hard-and-fast ruleset for campaign construction. As always, players should use whatever fits their particular group's style of gameplay and should feel free to adjust other material as needed.

The best way to build your own *Custom Chaos* campaign is to first construct your campaign arc using the *Map-Based Campaign* or the *Narrative Campaign* rules presented elsewhere in this book. This gives you a starting framework, which can then be used to build your core track progression and work out additional pathways, if needed.

The guiding principle of *Custom Chaos* is to provide players with a series of games that have a "choose your own adventure" feel to them, giving options at various points both inside and outside of the track. This customizes the experience for each player group, and can also help allot for available time, Skill Rating, and other factors that often impact overall gameplay. Because this principle emphasizes "choice," it is important that players are presented with a minimum of two choices for various track sections.

If desired, a GM can add generic mission tracks such as those found in *Total Chaos* (pp. 30-38) or the *Starterbook* series as part of the campaign. These provide a twofold benefit: providing small skirmishes that can provide extra salvage and WP opportunities, and offering more varied detail for the player campaign.

A *Custom Chaos* track typically contains the following sections: *Situation*, *Game Setup*, *Warchest*, *Options*, *Objectives*, *Special Rules*, *Aftermath*, and *Next Track*. Some track variants also include *Victory Conditions*.

However, when building a track, the GM should proceed in the following order: *Game Setup*, *Objectives*, *Options*, *Warchest*, *Special Rules*, *Situation*, *Aftermath*, and *Next Track*. While not a hard-and-fast rule, this progression will help a GM.

ATTACKER/DEFENDER ASSIGNMENT TABLE

If the primary Force is...	Then they should be assigned as the...
Assaulting a base or position	Attacker
Performing a covert operation	Attacker
An escort	Defender
Transporting an object or person of note	Defender
Ambushing a target	Attacker
Stealing or destroying a target	Attacker
Preventing theft or destruction of a vital target	Defender
Protecting a position or base	Defender

BUILDING MISSION TRACKS

If building a Mission-style track, there are a few changes to the process that the GM should keep in mind to streamline these more basic tracks. To start, eliminate the *Situation* and *Aftermath* sections.

Options should be restricted to one. In some cases, if the GM feels it is needed due to the needs of the group or the plot, one additional Option can be added.

Keep *Objectives* simple, and often to no more than two.

There should ideally be no more than one *Special Rule* in play, not counting any "blanket" rules set for the entire campaign.

Lastly, the *Next Track* section should provide only one or two track directions, often to get the players back into the flow of the main plot of the campaign.

GAME SETUP

The next section is one of the most important, as this is where both sides of the conflict are defined and the battlefield constructed.

Unless the GM has a particular battlefield setup in mind, it is suggested that the players be allowed to randomly determine the playing area. That area can be tailored to a specific terrain table, such as woods, mountains, or desert. Terrain tables provide map selections from the older *BattleTech* Map Sets; if these products are not available, the tables can instead provide inspiration as to how the battlefield may be constructed using standard terrain pieces or through custom map making software.

Next, set up the Attacker and Defender selections. If the group is running a Force through the campaign, assign them to the side that works within the context of the mission. For some examples, see the Attacker/Defender Assignment Table. The opposite side will most likely be run by the GM or players who do not have a vested interest in the success or failure of the campaign Force.

Note that the table is by no means a definitive list, but one to provide direction and inspiration if the GM is unable to determine to which side the campaign Forceunit should be assigned.

For tracks that do not have a campaign Force, the GM can assign players to either side, or let them choose.

ADDITIONAL FORCES

After assigning the campaign Force to Attacker or Defender positions, determine what the percentage of the Force will be used to define the opposing side. This is done within the context of the track story. For example, a mercenary Force run by the player is about to be betrayed by their employer; the track is being built as an ambush. The GM has determined the campaign Force will be the Defender, so the Attacker will consist of the employer's units. The GM's complete storyline is about the

mercenary unit's fight through tough odds to escape the planet, so the Attacker is determined to be bigger than the defending players' Force. As such, the GM makes note that the Attacker will be 25 percent larger than the Defender, using the agreed-upon measurement of Battle Value.

OBJECTIVES

While Options are usually listed before the Objectives, it's important to sort out the track's end goals first. Often, the more Objectives in place, the fewer Options should be allotted due to a magnification of difficulty and the risk of overly-high rewards if the group is successful.

A good rule of thumb is to have at least two Objectives for each track, though three gives a lot more tactical variances to fit all kinds of group dynamics.

Objectives are the goal of the track; what is it that you want the players to accomplish to help move the story forward? Are they on guard duty when an attack hits? Then their objectives could be to protect a particular asset—a prototype machine, a building, a person, a particular hex. Are they joining a planetary invasion Force and assigned a particular assault corridor? Then their objectives might include seizing and holding a bridge, a depot, or an airfield. Or they may be assigned a headhunter mission, where their objective is to destroy a command and control center, or assassinate an enemy commander. The potential is endless.

The Sample Objectives Table provides a list of more common objectives that are found in several *BattleTech* products, but it is by no means exhaustive. Players should use these examples as ideas or a quick way to fill in additional objectives that fit their current track and campaign.

SAMPLE OBJECTIVES

Objective Title	WP Reward (approx.)	Details
Advance Attack	300	Destroy/Cripple at least half of the opposing Force.
Annihilate	500	Cripple/destroy all of the opposing Force.
Asset Denial	200	Retain control of a designated unit, building, person, or other asset at the end of the track.
Being Difficult	400	At least two-thirds of the player's Force must be operational at the end of the track.
Blitzkrieg!	250	Destroy/Cripple a certain number of opposing units (half or more) by a defined time limit.
Boom!	500	Force the enemy to withdraw completely.
Boxed In	400	Allow no more than half of the enemy Force to exit off their home edge. (Best when used with the setup of the Force in question on the opposite side from their home edge.)
Breakthrough	200	The players exit at least 25% of their Force through the opponent's home edge.
Bring the Pain	600	Destroy/Cripple at least 75% of the enemy Force.
Bullet Time	100	The players must complete the track without a friendly pilot death caused by any means. For example: A cockpit critical hit, MechWarrior damage through failed Piloting Skill Rolls, ammo explosions, falling, and so forth.
Burn the Flag	500	Locate and destroy the enemy Force's headquarters unit/building/location.
Cherry Picker	400	Pre-select no less than 30% of the opposing Force's units before setup. Cripple or Destroy all of these units. These units do not have to be revealed to the opposing player.
Clean House	500	Destroy all of the enemy Force's specific unit types (BattleMechs, vehicles, battle armor, etc.) and hold a specific building/location at the end of the track.
Clear the Zone	100	Destroy all the buildings on the battlefield.
Close the Door	300	Destroy, Cripple, or Force Withdrawal at least 75% of the enemy Force.
Command and Conquer	100	Destroy the opposing command post and retain a friendly command post by the end of the track.
Containment	*	Stop as many vehicles as possible from exiting the battlefield. Points are given on a per-unit basis, often +10, +25, or +50 depending on the track's overall story goal.
Cover Me!	200	The players must not have any units destroyed through attacks into the unit's rear arc. In other words, do not die from getting shot in the back!
Cut Off the Head	100	Destroy/Cripple the enemy commander.
Dead...with Prejudice	1000	Destroy/Cripple all of the enemy Force before a specified time limit.
Delaying Tactics	500	Destroy/Cripple two or more commanders or officers, as designated by the GM, before a specified time limit.
Denial	400	Keep the enemy Force from destroying a set number of buildings or CF before a set time limit or the end of the track.
Discourage Pursuit	*	Destroy/Cripple the opposing Force's fastest units; one unit per four fielded is an average number. WP awarded per unit, often +50, +75, or +100.
Drive the Nail	300	Destroy/Cripple at least half of the enemy Force.

SAMPLE OBJECTIVES (CONTINUED)

Objective Title	WP Reward (approx.)	Details
End the Rivalry	200	The players' commander defeats the enemy Force commander; typically, by either landing the killing blow or through single combat.
Escape	200	At least one-third of the players must survive and withdraw from the battlefield after a specific time limit has expired.
Even the Odds	*	Award a number of WP for each enemy Force's unit destroyed. Awards can be +50, +100, or even designated per unit type.
Fast Recon	150	Exit one of the players' units off the enemy Force's home edge; a higher award can be given if a specified time limit is indicated.
Ferocity	300	The players must destroy 50% of the enemy Force with less than 50% losses.
Fight Another Day	300	The players suffer less than 50% losses.
Fight On	1000	More than half of the players must survive by the end of the track, or by a specified time limit. Units exiting the home edge under <i>Forced Withdrawal</i> count towards this objective.
Forced March	200	The players' commander exits through the enemy Force's home or starting edge.
Frugal is the Word	300	The players limit their destroyed units to 10% or less.
Gauntlet	400	Exit at least half of the players' Force through the enemy's home edge.
Get Physical	*	The player must perform a set number of successful charges, pushes, or Death from Above attacks by the end of the track. WP awards can also be given for each instance, rather than a complete total.
Get the Intel	300	The players must scan a set number (or designated) of buildings, objective hexes, or specific unit types; scanning rules should be detailed in the Special Rules section.
Hammer	400	Destroy/Cripple at least two-thirds of the opposing Force.
Headhunter	500	Destroy the enemy Force's commander (not Cripple).
Hearts and Minds	600	The players must not destroy or damage any buildings (or designated buildings) during the course of the track.
Hit and Run	150	One of the players' units enters (or moves adjacent) to a designated hex, and then exits from its home edge.
Hold	200	Retain control of a designated battlefield edge, with no more than one functional enemy unit within two hexes of that edge during the End Phase (or other designated time).
Hold the Line	300	Destroy/Cripple at least half of all designated unit types on the opposing Force.
Honorable Combat	500	Cripple (do not destroy) at least half of the enemy's Force.
I Like These Odds	*	A set number of WP is awarded for every enemy unit destroyed without losing a friendly unit.
I Spy...	100	Move at least one unit to within a specified number of hexes from the enemy's home edge to verify there are no hostile reinforcements coming.
Identify and Destroy	100	Locate (using Scanning, which should be detailed in Special Rules) and destroy a headquarters, an enemy commander, specific unit types, buildings, or other objective. Multiple WP can be awarded if multiple targets are in play during the track.
Identify the Opposition	200	Successfully scan at least half of the enemy Force. Scanning rules should be defined in the Special Rules section. Higher WP can be awarded if the percentage of enemy Forces to be identified is increased (i.e. two-thirds, 75%, etc.).
Information	250	Capture or Cripple a GM-designated unit among the enemy Force.
Interception	700	A third-party unit makes it across the players' home or starting edge before or after a specified time.
Interdiction	500	Destroy a third-party unit before it crosses the enemy's home or starting edge before or after a specified time.
Justice	*	Destroy/Cripple secretly designated units or unit types; WP can be awarded as a blanket total, or per unit. The units or unit types can be revealed through scanning, intelligence, or GM-designated turns or other trigger events during the track.
Last Man Standing	100	At the end of a designated time, the players have more tonnage (or other predetermined value) than the enemy on the battlefield. This should only include units in functioning order and not under <i>Forced Withdrawal</i> or Crippled status.
Leave No Man Behind	700	At least two-thirds of the players' Force survives the track or is able to exit their home edge after a certain time limit.
Live to Kill Later	*	WP awarded per player unit that exits a designated battlefield edge, often before or after a time limit, and not under <i>Forced Withdrawal</i> or Crippled status.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SAMPLE OBJECTIVES (CONTINUED)

Objective Title	WP Reward (approx.)	Details
Master the Bid	*	WP awarded per unit that does not fire any weapon during the course of the track.
New Toys	50	Capture a designated unit by Crippling (and not Destroying) it.
No Witnesses	400	Destroy (not Cripple) all of the enemy's Force.
Pick Up	300	Capture a designated amount of cargo tonnage, typically within a building or cargo carrier. Rules for capturing should be detailed in the Special Rules section.
POW	100	Capture (not Destroy) the enemy commander by Crippling the unit and having a unit within two hexes of it at the end of the track.
Pre-emptive Strike	100	Destroy/Cripple at least 25% of the enemy Force by a predetermined time limit, often close to the start of the battle.
Preserve Your Force	350	Destroy/Cripple at least 50% of the enemy's Force without losing more than 25% of the player's Force.
Professionals	200	Destroy/Cripple more than 75% of the enemy's Force before reinforcements arrive at a designated time.
Reduce Effectiveness	150	Damage at least 75% of the enemy's Force before a specified time limit.
Research Junkies	150	Cripple a GM-designated unit and keep it from exiting the battlefield so it can be salvaged.
Run Them Down	*	Award WP for every enemy unit Destroyed. A higher WP can be given if a designated time limit is also imposed.
Secure the Zone	500	Occupy at least 3 GM-designated locations by a designated time limit.
Selective Destruction	*	Before the start of the track, the enemy must secretly write down which of the player's units they must destroy. The enemy must declare at least half of the player's Force (rounded down). For each unit destroyed, the player loses a number of WP from their total. WP can also be awarded for each of the listed targets survive the track.
Shatter	800	Destroy/Cripple at least 80% of the enemy's Force.
Shatter Their Will	400	Destroy a building/object secretly designated by the opponent. Building/object is selected before the start of the game and is revealed at the end of the track.
Stand Your Ground	250	At least half of the player's Force survives the end of the track.
Stop Them Cold	*	WP are lost for every enemy unit that exits via their home edge that are not under <i>Forced Withdrawal</i> rules.
Superior Firepower	200	Destroy/Cripple the units of the two best enemy pilots or crews as determined by skill. If there are more than two, the enemy may select which two pilots for the objective.
Sustainability	100	At least 25% of a third party Force assisting the players survives the track.
Symbolic Victory	200	At least one player unit occupies a GM designated hex at the end of the track or by a certain time limit.
Take the Hill!	350	The player must seize an enemy-designated objective hex and occupy it for a set number of Turns (can be consecutive or non-sequential and be the same unit or a combination of units, as determined by the GM according to those that best fit the track story). Multiple objectives can be awarded WP per completion, or a minimum number of objectives set before a blanket award is given.
Target Acquired	100	Destroy a set number of buildings/locations by a set time limit.
The Road to Paradise	500	Destroy, drive off, or capture a set percentage of the opposing Force by a set time limit.
Total Victory	200	Complete all other Objectives. Add +100 if done while a track Option is in effect.
Training Day	300	At least one third-party Force that is allied with the player must suffer no more than 25% casualties.
Turkey Shoot	*	Destroy as much of the enemy Force as possible. WP offered per unit Destroyed, typically +50, +100, +200 depending on needs of the campaign.
Undercut	300	Destroy/Cripple 100% of all third party Forces allied with the opponent.
Vengeance	500	Destroy/Cripple 100% of the enemy Force while taking less than a certain percentage of damage, often 25% or 50%.
World of Hurt	500	Destroy/Cripple at least two-thirds of the enemy Force.



VICTORY CONDITIONS (OPTIONAL)

One variation to the Warchest Objectives is to assign the WP reward to the number of Objectives completed, rather than giving set WP for each. This is a simpler system that allows players who are not playing the campaign for tactical exercise, but more in the “just have fun” dynamic. By having a few tiers in place, players can mix and match Objective completion on the fly, adjusting for the vagaries that often happen on the tabletop battlefield.

The GM assigns between three and five Objectives to the track without a listed WP award. Next, build the Victory Condition hierarchy. Select each level of hierarchy that matches the number of Objectives assigned to the track.

VICTORY CONDITIONS HIERARCHY

Condition	Definition
Total Victory	Complete all Objectives.
Clear Victory	Complete all but one Objective.
Partial Victory	Complete only half of the Objectives (rounding up)
Pyrrhic Victory	Complete less than half of the Objectives, but more than one.
Partial Defeat	Complete only one Objective.
Total Defeat	No objectives completed.

Assign WP to each condition. As with Objectives, the WP cost is ultimately determined by the GM to fit within the campaign framework. Ideally, the Total Victory condition should be a sum total of each individual Objective’s presumed WP award, and break down from there. Players can only achieve one victory condition; it is not a sum total of all conditions reached.

OPTIONS

While the final track setup has these listed before the Objectives, it is good practice for a GM to wait until they have most of the track completed before deciding on what Options they wish to offer. This is because Options will have an overall impact on the entire track, and may skew the difficulty against the players. Rewards should be scaled with the challenge; Option WP rewards are given if just one of the player Objectives is met.

The Options Table presents a small sampling of the Options that can be applied to a track. WP cited are a suggested range; the GM is encouraged to change them to a reward that fits their group, the track, and the overall story campaign. Additionally, the GM should feel free to create customized Options that fit the story their track is telling, adding atmosphere, difficulty, or even new story elements.

Note that a GM should not just randomly assign Options to their track. Options are meant to enhance the story atmosphere of the track, adding variables and challenges that make sense to the particular situation. Examine each Option against the “spirit” of the track—does it fit the story goals the GM seeks? Does it add more detail to the player experience? If all of the Options, or any combination thereof, are used and the players achieve their Objectives, are the rewards balanced? Nothing is more overbalanced than offering an Option that has no bearing or effect on the actual track, such as applying “High Speed Interception” to a ground-based game.

Options can easily be applied instead as a Special Rule; these affect the track regardless and cannot be chosen, unlike standard Options.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

OPTIONS TABLE

Option Title	WP Reward (approx.)	Details
A Cut Above	75-200	The opponent's units are exceptionally well trained and suited for the battle that lies ahead of them. The Defender may improve the Piloting and Gunnery Ratings of all of their units by 1 point.
Acid Water	75-200	Any water hexes use <i>Hazardous Liquid</i> rules (see p. 49, TO, p.65 AS). The water is considered Class 1: Slightly Hazardous.
Aerospace Incoming	125-300	The opponent adds a number of aerospace fighters to conduct strafing, striking, or bombing runs twice during the track. Fighters may be of any weight class. Piloting Skill Ratings are equal to the Skill Rating of the opponent's Force.
Airless	125-300	There are 1D6x10 turns of air left. The battle must be completed in this time, or all non-battle armor units will suffocate. (Best used on a battlefield with a breached dome or leaking atmosphere and has a greater weight on using infantry and support Forces.)
Air Support	25-100	Add one aerospace fighter of predetermined weight to the opponent's Force to conduct a strafing, striking, or bombing run one time during the track. This Option can be selected multiple times, to a maximum payout determined by the GM.
Artillery	*	The opponent can call upon 1-4 barrages. (The GM may select the artillery vehicle, distance, and number of rounds; the reward should be scaled appropriately to the units, rounds, etc.)
Ash Fall	25-100	This uses the same rules as <i>Blowing Sand</i> : All Direct and Pulse energy weapon attacks gain a penalty of 1 to hit (see p. 62, TO). (<i>Alpha Strike</i> , penalty of 2 to hit. See pp. 89 and 95, AS.)
Asteroids	100-250	(Space only.) Use the <i>Asteroids</i> rules (see pp. 44-45, SO).
Backs Against the Wall	200-450	All units will fight to the death; at least 80% of the opponent's Force must be destroyed (not crippled) and one Objective attained before this bonus may be applied.
Bad Intel	75-200	Add one additional unit to the opponent's Force. This unit has Veteran experience.
Bad Weather	75-200	Player rolls on the General Weather Table (see p. 69, TO) and applies the result to the battlefield. If the weather is a duplicate of one already in effect, reroll the result.
Best of the Best	150-350	Add to the opponent's Force a commanding officer and escorts; the commander possesses a higher Skill Rating than that of the opponent's Force at setup.
Black Gold	100-250	Treat all terrain, including any Water hex, as <i>Flammable (Tainted) Atmosphere</i> (see p. 56, TO).
Black Ice	75-200	Use the <i>Black Ice</i> rules (see p. 40, TO).
Blizzard	75-200	Use either <i>Ice Storm</i> (see p. 60, TO) or <i>Blowing Sand</i> rules (see p. 62, TO). (See pp. 89 and 95, AS.)
Blowing Sand	25-100	All Direct and Pulse energy weapon attacks gain a penalty of 1 to hit (see p. 62, TO). (<i>Alpha Strike</i> , penalty of 2 to hit. See pp. 89 and 95, AS.)
Booby Trapped	75-150	The opponent secretly chooses up to four buildings prior to the start of the game to be rigged for explosions. These building traps are command-detonated and explode as a 30-point minefield. Damage is resolved as an artillery attack on that hex. Once detonated, the building is reduced to rubble.
Brute Force	150-350	Add a number of mercenaries equal to 50% of the player's total deployed Force. These units enter the track at a time and battlefield edge determined by the GM.
Bug Swarm	100-250	Swirling bug swarms in the wilderness are an unusual event—but not a wholly uncommon one. Randomly place 1D6 bug storms (1 central hex and all adjacent hexes) for every mapsheet used. Multiple storms may not share the same center hex. During the End Phase of each turn, each Bug Storm will move 1 hex in a random direction. The bug storms extend up to four Levels above the underlying terrain in every hex covered. All non-energy ranged weapons that fire into or through a Bug Storm hex suffer a +1 to-hit modifier (regardless of the number of hexes), while all energy weapons suffer a +2 to-hit modifier.
Bullrush	300-450	Any player unit which declines to perform attacks during one fire phase gains 1 Running MP extra the next turn. They are free to fire during the turn with the bonus MP, but lose that bonus until they again go one turn without firing weapons.
Caution-Flammable	200-450	Use the <i>Fire and Smoke</i> rules (see pp. 43-48, TO or pp. 100-101, AS). Energy weapons that miss a target situated in a Woods hex roll 2D6; on a 5+, the hex ignites from the brittle timber.
Chain Reaction	200-450	There are a series of mysterious underground explosions. In addition to the <i>Unsteady Ground</i> Special Rules (see p.179), falling damage does an additional 10 points of damage.
City Ruins	25-75	Mark half of the buildings present as destroyed. Each destroyed hex is converted into an <i>Ultra Rubble</i> terrain hex (see TO, p. 39 or AS, p. 67).
Civilians Amok	300-450	For every 2 units present, add a civilian vehicle or a crowd of civilians. Treat a crowd as a platoon of infantry (28 men) with no weapons. The civilians are panicked and move in a random direction each turn. If any civilians are killed, assess a 600-point penalty to the player.
Commanders	100-250	One of the units on each side is a field commander. Select one unit and assign it either a Gunnery Skill of 2 or Piloting Skill of 1, rolling the other skill randomly on the Elite column. If the unit containing the commander is destroyed, that player must apply a -2 modifier to all subsequent Initiative rolls.

OPTIONS TABLE (CONTINUED)

Option Title	WP Reward (approx.)	Details
Complicated Weather	300-450	Roll twice on the General Weather Table (see p. 69, <i>TO</i>) and apply both results to the battlefield; modifiers may stack.
Concrete Maze	100-250	Treat all buildings as hardened structures with a CF of (10 x 1D6) + 100; determine each building's CF separately.
Could Have Sworn There Were More	100-250	Up to a third of the opponent's Force may be deployed at the start of the game using <i>Hidden units</i> rules (see p. 259, <i>TW</i> or p. 102, <i>AS</i>).
Cover Fire	25-100	The opponent has 6 rounds of artillery smoke land in Turn 1. Each round is treated as a standard Artillery attack (see p. 179, <i>TO</i> or p. 73, <i>AS</i>). The target hex and all adjacent hexes are filled with Light Smoke (see p. 47, <i>TO</i> or p. 101, <i>AS</i>).
Debris	100-250	(Space only.) Add 2d6-2 (to a minimum of 2) DropShip wrecks to the board; use the Debris rules (see <i>SO</i> , p. 45).
Desperation	50-125	Use the <i>Extreme Range</i> rules (see p. 85, <i>TO</i> or p. 99, <i>AS</i>).
Don't Slip	25-75	Convert all Woods and Water hexes to <i>Ice</i> (see p. 50, <i>TO</i> or p. 65, <i>AS</i>). Water hexes are covered in ice, not frozen solid.
Dusk/Dawn	75-200	All units suffer a +1 modifier to hit to all weapons fire (see p. 58, <i>TO</i> , p. 89, <i>AS</i>).
Earthquake	125-300	Use the <i>Earthquake</i> rules with a strength rating determined by the GM (see p. 55, <i>TO</i> or p. 92, <i>AS</i>). The earthquake strikes on turn 1d6+2.
Electrical Storm	100-175	Add a +1 modifier to all rolls involving electronic systems (including all Piloting, Gunnery, Sensor Operations, bioware and so on).
Elites	125-300	Assign half or more of the opponent's Force with Elite Skill Ratings.
Endgame	125-300	Use the <i>Advance Firing</i> rules (see pp. 84-87, <i>TO</i>).
Excessive Force	75-200	The opponent sets 2D6 hexes of minefields (see p. 207, <i>TO</i> or p. 102, <i>AS</i>). GMs can select or randomly determine the type of mines available.
Expert Marksmen	125-300	Use the <i>Bracing</i> and <i>Careful Aim</i> rules (see p. 84, <i>TO</i>).
Fanatics	200-350	All units will fight to the death; all opponents must be destroyed either through head or center torso destruction. A 'Mech is not considered destroyed unless it is finished in this fashion.
Fanatical Opponents	100-250	Increase the Experience Rating of the opposing Force by one.
Faulty Preparation	200-400	All of a player's ammunition bays contain half its normal rounds. Roll 2d6 for each weapon not requiring ammunition; on a 9 or higher, the weapon is considered nonfunctional until a time determined by the GM. (<i>Alpha Strike</i> : Roll 2D6 for each unit; 10 or higher it begins play with a Weapons Critical Hit. Units with ART-, AC, BOMB, LRM or SRM add +2 to the roll.)
Firestorm	200-450	Prior to the track start, aerospace bombing started more fires in the city. Randomly determine if any buildings are alight, and automatically assign all wooded hexes as burning. Deal with smoke as normal.
Flankers	100-250	The opponent's units gain the Off-Board Movement Special Ability (see pp. 192-193, <i>TO</i> or p. 45, <i>AS</i>).
Fuel Lines	250-500	Designate 20 hexes per mapsheet as <i>Heavy Industrialized</i> (see p. 31, <i>TO</i> or p. 65, <i>AS</i>). Whenever a ballistic weapon misses its target in that hex, roll 2D6. On a roll of 11+, the ballistic shot hits an exposed fuel line, which explodes in the hex for 5 points of damage. Apply all damage as if the unit had set off a 5 point minefield (see p. 207, <i>TO</i> ; <i>Alpha Strike</i> , Density 2 Minefield, p. 102, <i>AS</i>). Make this roll for every missed ballistic attack to the hex.
Hard Hitters	25-75	Use the <i>Glancing Blows/Direct Blows</i> rules (see pp. 80-81, <i>TO</i> or pp. 22, <i>AS</i>).
Harsh Conditions	150-450	All equipment may malfunction because of lax technical crews and brutal weather. For any weapon system that fails the to-hit roll (or has a Margin of Failure) by more than 3, roll 1D6. On a result of 5 or 6, consider that weapon jammed/misaligned and unable to fire for the rest of the track (<i>AS</i> : unit receives a Weapon Critical Hit).
Heavy Fog	125-300	As per the <i>Heavy Fog</i> rule (see p. 57, <i>TO</i> or pp. 89, 95, <i>AS</i>).
Heavy Industry	125-300	Designate up to 16 hexes as <i>Heavy Industrialized</i> prior to play (see p. 31, <i>TO</i> or p. 65, <i>AS</i>).
Heavy Rainfall	100-250	Apply a +1 modifier to hit to all weapons fire and a +1 Piloting/Driving Skill modifier (see p. 59, <i>TO</i>). <i>Mud</i> (see p. 50, <i>TO</i> or p. 66, <i>AS</i>) is as indicated.
High Speed Interception	25-100	(Space or Aerospace only.) The players' units enter the battlefield at a minimum Velocity of 7 and receives a +2 Initiative modifier for the first turn.
High Winds	75-200	Apply a +2 To-hit modifier to all ballistic and missile weapons fire, as well as a +2 modifier to all Piloting Skills Rolls. When rolling on the Missile Hits Table, subtract 4 from the die roll; on a modified result of less than 2, the missile attack misses the target. (<i>Alpha Strike</i> : Wind Force 3. See p. 94, <i>AS</i>)
Hot Drop	25-75	The player may choose to enter the battle as per the <i>Dropping Troops</i> (see <i>SO</i> , p. 22 or <i>AS</i> , p.90).
Incoming	*	The opponent pre-designates 5 hexes for artillery fire. The GM decides the number of rounds, distance, and which artillery units are available. The more power, rounds, etc., the higher the reward should be.
Instant Upgrade	800-1,000	The Defender upgrades all pilots/ troops/crews using the Manei Domini creation rules (see pp. 76-85, <i>IO</i> or 27, <i>ASC</i>).
It's Been a Long Battle	150-250	2D6 units from both sides receive 1D6-1 5-point clusters of damage, rolled on the front hit column. Reroll any result that calls for a critical hit.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

OPTIONS TABLE (CONTINUED)

Option Title	WP Reward (approx.)	Details
It's a Frog Strangler	125-300	Use the <i>Torrential Downpour</i> rules (see p. 59, <i>TO</i> or pp. 89, 95, <i>AS</i>).
It's Quiet. Too Quiet	150-250	Deploy up to two-thirds of the opponent's Force as <i>Hidden units</i> (see p. 259, <i>TW</i> or p. 102, <i>AS</i>) anywhere on the battlefield.
Known Unknowns	75-200	The opposing player publicly designates two units as the Force commander, secretly recording the identity of which one is the actual commander.
Kudzu	25-75	Thick vines cover all forested areas. All woods hexes are considered Jungle Hexes of equal density (i.e. Light Woods are considered Light Jungle and heavy Woods are considered Heavy Jungle) as described on p. 32, <i>TO</i> (p. 65, <i>AS</i>). If no woods hexes are present (playing in space or in desert-like terrain), each player may choose one hex for each two units they control. These hexes are considered Light Jungle, or obstacles in the way in space (use the asteroid rules on pp. 44-45, <i>SO</i>).
Labyrinth	300-450	Use the <i>Tunnel</i> rules (see <i>TO</i> , p. 141) combined with <i>Rolling Maps</i> (see <i>TO</i> , p. 214). GM should designate tunnel entry/exit hexes.
Light Fog	25-100	All hexes cost an extra 1 MP to enter (see p. 57, <i>TO</i>).
Light Rainfall	25-100	Use the <i>Light Rain</i> rules (see p. 57, <i>TO</i> or pp. 89, 95, <i>AS</i>).
Lightfoot	25-75	Use the <i>Low Gravity</i> rules (see p. 55, <i>TO</i> or p. 93, <i>AS</i>). The gravity is determined by the GM.
Lousy Weather	25-100	Use rules for <i>Gusting Rain</i> (see <i>TO</i> , p. 59). (<i>Alpha Strike</i> : Wind Force 3, p. 94 and <i>Heavy Rain</i> pp. 89, 95, <i>AS</i>)
MegaFauna	100-250	Local fauna is attracted to 'Mechs on the battlefield. Randomly place 1D6–2 megafauna packs on the battlefield. Each pack occupies one entire hex and is treated as a BattleMech unit for stacking purposes. Every odd turn, the player controls each pack; every even turn, the opponent controls them; the packs always move after all other units have moved. Megafauna packs may move one hex in any direction, block LOS, and cannot be destroyed for game purposes.
Meteor Shower	150-300	(Space only.) Prepare 2D6 asteroids to use as meteors. To determine when the meteor shower hits, roll 2D6 after Turn 4. The shower occurs on a result of 8 or greater. When the shower happens, divide the number of meteors in half. Each side picks a map edge and then enters a meteor at Velocity 6, alternating between the two sides until all the meteors have entered. Treat the meteors as asteroids under the optional <i>Asteroid</i> rules (see p. 44-45, <i>SO</i>).
Missed Shots	100-250	Use the Missed Shots rule (see p. 81, <i>TO</i>).
Moderate Rainfall	75-200	Apply a +1 modifier to hit to all weapons fire (see p. 59, <i>TO</i> or p. 95, <i>AS</i>). <i>Mud</i> (see p. 50, <i>TO</i> or p. 66, <i>AS</i>) is as indicated. Each player may choose 1 hex per unit deployed to designate as <i>Mud</i> .
Moderate Snowfall	75-200	All units suffer a +1 modifier to hit to all weapons fire. This automatically includes the effects of a temperature of –50C (see pp. 60 and 62, <i>TO</i> or p. 94, <i>AS</i>).
Muck	75-200	All Clear terrain hexes are composed of thick, viscous mud and will <i>Bog Down</i> any unit heavier than 40 tons (see p. 62, <i>TO</i> or p. 70, <i>AS</i>). Hovercraft and WiGE units of any weight are unaffected by this terrain.
Mud	25-100	Convert all Clear hexes to <i>Mud</i> (see p. 50, <i>TO</i> or p. 66, <i>AS</i>).
Mushy Ground	25-100	Apply a +1 modifier to all Piloting Skill Rolls.
Nest of Vipers	150-300	Add an additional 25% to the opponent's Force; these units are of Elite Skill Rating. At least two objectives need to be completed in order to gain this reward.
Night Combat	75-200	A lack of ambient light degrades the ability of BattleMechs to target and hit an opposing unit. Apply a +2 To-hit modifier to all weapon attacks.
Nightfall	75-200	Use the <i>Moonless Night</i> and <i>Night/Pitch Black</i> rules (see p. 58, <i>TO</i> or p. 92, <i>AS</i>)
No Cover	75-200	Convert all Woods hexes to <i>Level 1 Foliage</i> (see p. 37, <i>TO</i>) or <i>Mud</i> (see p. 50, <i>TO</i> or p. 66, <i>AS</i>).
Opportunity Knocks	75-200	Use <i>Opportunity Fire</i> and <i>Opportunity Fire: Firing on the Move</i> rules (see p. 86, <i>TO</i>).
Orbital Defense	300-500	(Space only.) The GM places at least one space station (GM-determined size) at least three hexes "above" the space-atmosphere interface. The station's gun crews are Veteran and operated by the opponent.
Overdrive	75-200	Use the <i>Advanced Movement Rules</i> (see pp. 18-22, <i>TO</i> or pp. 62-63, <i>AS</i>).
Prior Service	200-450	The player begins the track with only half of their normal ammunition load (round up) and 3D6 damage, randomly assigned. Reroll any damage that would destroy or cripple a unit. (<i>Alpha Strike</i> : Apply 1D6 damage to each Element, and those with ART-, AC, BOMB, LRM or SRM specials take a Weapon Critical Hit.)
Reinforcements	125-300	The opponent has an additional number of units that enter at a predetermined time from a predetermined side. Typically, this is equal to 10% or 20% of the player's Force. A higher percentage should yield a larger WP reward for the Option.
Riots	25-100	Place two mob units (standard rifle infantry, Gunnery Skill of 6) per map sheet between the Attacker and Defender Forces. Move them randomly before either side moves. They will attack any unit within range; if both Forces are in range, they will attack the easier target.

OPTIONS TABLE (CONTINUED)

Option Title	WP Reward (approx.)	Details
Rough Ground	25-75	All rubble, rock, and mountain hexes are considered to be Rough (Ultra) hexes (see p. 39, <i>TO</i> or p. 67, <i>AS</i>).
Sand	25-100	All hexes cost an extra 1 MP to enter. All Piloting Skill Rolls are given a penalty of 1 due to bad footing with the shifting sand (see p. 39, <i>TO</i> or p. 67, <i>AS</i>).
Sensor Interference	25-75	Use the Electromagnetic Interference rules (see p. 55, <i>TO</i> or p. 93, <i>AS</i>).
Sinkholes	200-450	Roll 2D6 for the first clear hex each 'Mech enters during a turn while using Running MP. If the roll is a 10 or greater, a sub-Level 1 sinkhole opens beneath the unit. If the clear hex is next to an existing sinkhole, a new sinkhole will open on a roll of 8 or greater. The player must then make a Piloting Skill Roll with a +1 modifier for that unit to avoid falling into the hole. Players should mark that hex for future reference.
Strong Gale	600-750	Apply a +2 to-hit modifier to all missile weapon attacks and a +1 to-hit modifier to all direct-fire ballistic weapon attacks. Apply a +1 modifier to all Piloting Skill Rolls. The following restrictions also apply: Airships: Apply a -1 modifier to Safe Thrust and a +3 modifier to all Control Rolls. Hover, WiGE and VTOLs: Apply a +2 modifier to all Piloting Skill Rolls. Aerospace units (except for Airships): Apply a +1 modifier to all Control Rolls. Battle Armor: Apply -1 Ground MP to all battle armor, to a minimum of 0; any such units can either move or make a weapon attack in a turn, but not both (see p. 213, <i>TW</i>). Conventional Infantry: Apply -2 Ground MP to all conventional infantry, to a minimum of 0; any units reduced to 0 MP can either move or make a weapon attack in a turn, but not both. No jumping movement allowed. (<i>Alpha Strike</i> : Use Wind Force 3, p. 94, <i>AS</i>)
Stubborn Pride	100-250	No unit may withdraw from the battlefield under its own volition. Units exiting the battlefield under <i>Forced Withdrawal</i> are considered destroyed for the purposes of this track, but may be repaired and used later in the campaign as normal.
Surprised	25-75	The player rolls Initiative with a -4 modifier for the first 10 turns.
Sweltering	25-100	Use the <i>Extreme Temperature</i> rules (see p. 55, <i>TO</i> or p. 94, <i>AS</i>). The temperature is set by the GM.
Tangled Forest	25-100	Hexes with Heavy Woods terrain are considered impassable and block line of sight due to the tangled roots and branches of the trees.
Tangled Woods	100-250	All hexes with Light Woods are considered Heavy Woods, and all Heavy Woods terrain is considered Ultra-Heavy Woods (see p. 40, <i>TO</i> or p. 70, <i>AS</i>). If there are less than 8 Woods hexes on the battlefield, this option cannot be selected.
Terrible Day	200-350	Increase all opponent Skill Ratings to Elite
These Aren't Amateurs	75-200	Half of the opponent's units are increased to Gunnery Skill 3 and Piloting Skill 4. If the opponents already possess these Skill Ratings, award them a permanent +1 Initiative modifier instead.
This Is It	100-250	Use the <i>Self-Destruct</i> and <i>Called Shot</i> rules (see p. 78, <i>TO</i>).
Time to Fly	175	Use <i>Hurried Movement</i> rules (see p. 20, <i>TO</i>).
To the Death	75-200	The opponent does not follow <i>Forced Withdrawal</i> rules.
Traitor	75-200	One player unit turns traitor at some point in the battle. Beginning on Turn 2, roll 2D6 for each functional unit; on a result of 10+, that unit switches sides. Once a unit has switched sides, no more rolls are to be made. Continue this search during each Initiative Phase until a unit has switched sides.
Transport Glitch	125-300	Part of the player's transportation gets separated from the main group or develops mechanical problems; reduce the player's Force build to a lower percentage, as determined by the GM.
Traps	150-275	One-third of the buildings are set with traps. When a player unit comes in contact with the building or its rubble, they explode, inflicting 20 damage in the building's hex and 10 damage in all adjacent hexes.
Triangulation	75-200	The opponent may have any portion of their Forces enter from any edge of the maps, not just their home edge. Units enter as determined by the GM.
Treacherous Terrain	25-100	Roll once on the <i>General Terrain Table</i> (see p. 69, <i>TO</i>) and apply the result to the battlefield.
Under the Full Moon	100-250	Use the <i>Full Moon</i> rules (see p. 58, <i>TO</i> or <i>Night</i> rules p. 95, <i>AS</i>).
Weapon Malfunction	50-150	On any failed to-hit roll result of 2, 3 or 4 (or a Margin of Failure of 4 or more), consider that weapon jammed/damaged for the rest of the track (<i>Alpha Strike</i> : Element takes a Weapon Critical Hit).
Whiteout	100-250	Use <i>Heavy Snowfall</i> (see p. 60, <i>TO</i> or pp. 89, 95, <i>AS</i>) without the <i>Extreme Temperature</i> condition. All water hexes are <i>Ice</i> (see p. 50, <i>TO</i> or p. 65, <i>AS</i>).
Worn Down	125-300	Each player unit receives 3d6 damage (<i>AS</i> : 1D6 damage) prior to the start of the battle, distributed normally in 5-point groups. Re-roll any damage that would result in a crippled or destroyed unit.
You're Dead	25-100	The opponent may designate one unit to receive the Blood Stalker SPA (see p. 73) before the start of play.
Zellbrigen	75-200	Both sides fight the track adhering to <i>Level 1 Honor</i> rules (see p. 273, <i>TW</i> or <i>Zellbrigen</i> , p. 133, <i>AS</i>).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

WP AWARDS

There is no hard-and-fast rule for determining Warchest Point awards for Options or Objectives. Ultimately it is the GM's decision and should factor in a number of variables:

- How difficult is the objective to complete?
- How difficult does the Option make the battlefield for units to function?
- How many points is acceptable as a reward, assuming the player selects all Options and wins all Objectives?
- How crucial is the track to the overall campaign? More points should be awarded if the track is a lynchpin or key mission; "side trip" tracks should award less, but still enough to provide the player a buffer or extra in case of need—assuming they can complete some or all of the Objectives.
- Where is the track located in the overall campaign structure? Typically, fewer points are awarded for tracks that occur in the first half of the campaign, with larger payouts towards the end. This is in part to help the players recover after a brutal campaign, reinforcing and/or repairing equipment and setting up for their next campaign.

Successfully addressing these questions gives the GM a better idea on how to assign WP awards.

SALVAGE

Salvage is the taking of destroyed or crippled equipment remaining on the battlefield at the end of a track. In linked scenarios, salvage may not occur until the end of the mini-campaign unless the players' total Force includes units noted for salvage operations and/or has lift hoists, at the agreement of all players involved.

For *Chaos Campaign* tracks, and unless a track's Special Rules state otherwise, players who achieve at least one Objective in a track may claim all battlefield salvage in any area where their units participated. Players may not claim salvage after battles in which their Forces did not participate.

Salvage may be sold at half the unit's normal list price using the GM's determined tables or resources for Support Points. Alternatively, vehicles, 'Mechs, and other salvaged units may be repaired either by using the Warchest system or by converting Support Points to C-bills and using an appropriate rule set to spend C-bills for repairing or replacing equipment.

Players interested in more detailed *Salvage* rules can find them beginning on p. 191 of *Strategic Operations*.

In some instances, the GM can determine that salvage is unavailable, due to time constraints within the campaign or between tracks. If the *Salvage* rule is in overall effect (where it is automatically awarded between tracks), the GM should state in a track's Special Rules if it is unavailable at that time, or if other limitations are in play.

WARCHEST

Once the Objectives and Options have been decided, it's time to sort out the "cost" of the track and what its rewards will be. An easy method is to simply add up all of the Objectives and Options rewards as if the players would succeed at all of them, and then make the track cost 75 percent of that total. The main downside to this method is that if the players succeed, but don't achieve all of the offered Objectives and Options, the players' victory may not cover the cost of the track. This is usually acceptable for tracks in the first half of the campaign, or if it fits the overall mood of the story the GM is trying to tell. However, later tracks should have larger rewards over the track cost, to account for more intense combat situations as the climax of the campaign unwinds.

One of the key points to proper rewards is to balance the payoff versus where the player group is in the campaign, how much material and technology they have, and how much fun the group is experiencing. Lower payouts at the start of the campaign limits the risk of a "Monty Haul" situation. Nothing is more painful for a GM—and boring for a player—than having too much power, skills, and gear early on so that they plow through the rest of the campaign with no sense of danger or difficulty.

Conversely, if a difficult track is crafted—often found in the middle or near the end of the campaign—the GM is encouraged to make the payout larger than normal, to give players a sense of victory. The WP reward is one of the best ways to help control the flow and type of campaign. Consistent, low-paying rewards gives the group a sense of "on the edge of bankruptcy," where one bad mission could sink a unit. This often fits a group prone to over-preparation and caution, who plan as much as possible for every event. Conversely, consistently high-paying rewards can provide a group that is more interested in playing with new technology or strategies, and don't mind burning through equipment and material in order to claim victory. GMs who know their groups can tailor WP accordingly.

For the purposes of these guidelines, it's assumed that the GM is constructing tracks for a typical wargaming group. Therefore, rewards will be in the 10-25 percent range for normal difficulty.

SPECIAL RULES

After Options and Objectives are determined and the cost of the track is decided, the Special Rules that will govern the track are put into place. Note that tracks are not required to have Special Rules; for simplistic tracks that contain standard Objectives and Options, they are often not needed.

As a rule of thumb, Special Rules are designed to add atmosphere, a unique twist, or flavor to the track; often, these rules will affect only one side or the other. If a particular side is not indicated in the description, then it is applied to all units participating in the track, regardless of side.

A GM should examine the Objectives and Options they have put into place; most of the time, these will determine what, if any, Special Rules are applicable. For example, if one of the Objectives calls for successful scanning, then rules for this should be defined in the Special Rules section. If there are particular rules from *Tactical Operations*, *Strategic Operations*, or *Interstellar Operations* that are required to run the track, those should be referenced in this section as well.

There are two fundamental Special Rules that are often considered in play when it comes to *Chaos Campaign* tracks: *Forced Withdrawal* and *Salvage*. The *Forced Withdrawal* rules are found in *Total Warfare* as optional rules. GMs who wish to have this rule in effect can lay out which units must operate by it; this can be all units, just the player or opponent, or defined even further by stipulating exact Formations or specific units.

Salvage is a rule that is usually defined at the start of the campaign and considered active for every track. However, GMs can also stipulate only certain tracks that are subject to it, and can even predetermine the amount of salvage available, if desired.

GMs can put as many Special Rules into play as they desire, though it is recommended to limit them to only those necessary to complete any Objectives or Options that may be selected. A GM can also include special unit rules, if either the player or the opponent (or both) are using a canon unit that has such rules published.

The Special Rules Table highlights only a small sample of various rules that could be utilized in a campaign track. If the GM sees a Special Rule they would like to use, it is best if they formulate an Option or Objective that is reliant on the rule for completion. Special Rules can also be adapted and modified into Options or even Objectives, at the GM's discretion.

SPECIAL RULES TABLE

Rule Title	Description
AA Guns	Place one AA gun for each aerospace unit fielded by the Attacker. Each emplacement is a Level 2 building with a CF of 30 and contains one LB 5-X autocannon on a 360-degree swivel mount. Each gun has 10 rounds of ammunition. AA guns can also fire on ground targets with a +2 To-Hit modifier.
Aerospace Bomb Racks	Aerospace units on both sides have access to time-delayed bombs, which function as bombs for purposes of rules and damages, with the option of how deep the bomb may go underwater before exploding. Depth times may be changed during the End Phase. If carrying split loads of ordinance, players should note which racks carry which bombs on their record sheets.
Ambush	Hidden units may make indirect attacks without a spotter with an additional +1 to-hit penalty and do not reveal themselves when making an indirect attack
Asteroids/Debris	(Space only.) Add 2D6-2 asteroids or large debris in the battlefield (see p. 44, <i>SO</i>). Roll 1D6; a result of 6 indicates a large piece of debris instead of an asteroid. For each object, roll 1D6. On a result of 3-6, the object is mobile.
Backs to the Wall	With nowhere left to run the opponents are capable of fighting with greater levels of desperation and fervor. All BattleMech physical attacks are made with a +1 to-hit modifier and all Defender MechWarriors add +1 to their Consciousness Checks. However, no defending unit may voluntarily leave the map.
Battlefield Morale	If using multiple tracks for the assault, every track that is successfully completed grants the player a +1 Initiative modifier.
Betrayal	Up to half of the player's Force may betray their fellow warriors during a track. At the End Phase of Turn 5, roll 2D6 for each unit. If the result is 10+, that unit switches to the opponent's side with the Initiative Phase of the next turn. The roll can be modified using a GM-created modifier table.
Biohazard Alert	All Infantry units and unsealed Vehicles suffer -1 MP due to the biohazard protocols requiring chemical suits.
Blow the Bridges	The attack comes just before the bridges are rigged to blow. To determine when the explosives are ready, the Defender rolls 2D6+5; during the End Phase of this and subsequent turns, the Defender may detonate one non-tower bridge hex for each combat engineer unit surviving, to a maximum of two per turn. Units on a detonating hex suffer a strike similar to a 20-point conventional minefield (see p. 207, <i>TO</i> or Density 3 Minefield p. 102, <i>AS</i>) then a one-Level fall into the water below.
Booby-trap Buildings	The buildings are booby-trapped to explode if a unit gets too close or lingers too long near it. During the End Phase, determine the number of enemy units within a two-hex radius of a building. If there is at least one unit, roll 2D6; on a result of 11-12, the building explodes, causing 20 points of damage to units in the same hex, 10 points of damage to adjacent units, and 5 points of damage to units 2 hexes away. Damage is applied in 5-point Damage Value groupings. For every unit above two within proximity, add a +1 modifier to the roll. (<i>Alpha Strike</i> damage is as per an HE Bomb, p. 57, <i>AS</i> .)
Capturing Goods	In order to capture goods from a target hex, the player must spend a full round with a unit in that hex (not counting the round the unit enters or exits the hex). While a unit is spending the round "capturing goods", it may not make any weapon attacks, but is not considered immobile. Once the full round is complete, the unit is considered to have somehow lashed or stolen the goods. Once a unit has captured goods, it must immediately withdraw per the normal <i>Forced Withdrawal</i> rules. If they are destroyed while leaving, another unit must enter the destroyed unit's hex to pick up the goods as before.
Castle Brian	Use the <i>Castles Brian Complexes</i> rules (see p. 141, <i>TO</i>) when constructing the Castles Brian. It may contain structures up to 4 Levels above or below the map surface, and no more than 12 fixed weapon emplacements. At least 3 turrets must be dedicated AA platforms.
Civilian Vehicles	In order to get a vehicle to stop, an attacking unit must move within one hex (or 50 meters) of a civilian unit and call for that unit's surrender. During the End Phase, roll 1D6 for that civilian vehicle. On a result of 1 to 4, the unit ignores the command. On a 5 or 6, the unit surrenders. The player may modify the roll by hitting the vehicle with a non-lethal attack (any attack that causes damage of 3 points or less), which adds a +1 modifier. For each successive attempt, add +1 to the roll. Civilian vehicles may be any unit that has a motive system of Airship, VTOL, Hover, Wheeled, Tracked, or Fixed Wing. If in space, then vehicles can be any DropShip, Small Craft, or Aerospace fighter. Units may only demand the surrender of one civilian unit per turn. Civilian vehicles that exit the battlefield are considered escaped.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SPECIAL RULES TABLE (CONTINUED)

Rule Title	Description
Clan Honor	If a player is using a Clan Force, it must follow <i>Clan Honor</i> rules (see p. 273, <i>TW</i> or p. 132, <i>AS</i>). Forces that are not Clan in nature begin the track with every unit receiving 2 dezgra points. Players may choose to maintain a record of dezgra points for their unit throughout the campaign, but it is not required. If dezgra points are not tracked for a campaign, they are reset to zero at the start of each track. Opponents using a Clan Force must also follow Clan Honor rules and keep record of dezgra points for the track.
Command Center	A Command Center confers bonuses to the Force that controls them. Each building is considered to have an inherit Guardian ECM and allows the controller to move two units at the end of the Movement Phase, after all other Forces on the battlefield have moved. If a Center is lost through destruction, the controlling player at the time automatically loses Initiative for the next three turns. If both sides lose a Command Center, determine Initiative as normal. In order to take control of a command center, an operational unit (including units that are Crippled but not Destroyed) must remain in an adjacent hex (infantry may occupy the hex) for at least 3 uncontested turns. If an enemy unit is adjacent to the building, the turn does not count towards the 3 turns needed to seize control. Once controlled, the Center's bonus transfers to its new owner at the start of the next turn. The track starts with the Command Center under the Defender's control.
Command Officers	Both the Attacker and Defender have the opportunity to use both a Command Officer and a Company Command Officer. Both of these Officers have a Piloting and Gunnery Skill Rating 1 better than the Force of which they are a part. In addition, if a player has both Officers fielded due to having enough units, then the Command Officer gains a random Special Pilot Ability (see pp. 71-72).
Command Posts	Treat the locations of these posts as normal Hidden units (non-infantry) for purposes of discovery. Once discovered, each location has a CF of 60 for the purposes of destruction, though it is not considered a building. (Buildings placed/ designated as such are actually artificial facades and will collapse with any weight on them.)
Commander	One of the units on each side is a field commander. Select one unit and assign it a Skill Rating one better than the Force's average. If the unit containing the commander is destroyed, that player must apply a -2 modifier to all subsequent Initiative rolls.
Crops	The opponent selects one map; the chosen map will have modified hexes. All Clear hexes that do not have another terrain feature on the chosen map are considered Planted Fields (see p. 38, <i>TO</i> or p. 66, <i>AS</i>).
Disable Pursuit	Any chance of pursuit must be destroyed. In order to accomplish this, the Attacker must do the following: - All opposing units capable of jump movement must be disabled or destroyed. - All opposing VTOL units must be disabled or destroyed. - All opposing units capable of faster movement than the Force's current fastest unit must be disabled or destroyed.
Duel	If both players agree, the Attacker should roll 1D6; on a result of 4 or higher, both players may choose one champion each from the Forces selected for battle to fight a duel. Whichever player destroys the other's unit first wins and receives the Rewards for the track's Objectives.
Fanatical Devotion	If a Force is reduced to a point at which a <i>Forced Withdrawal</i> is called for, that unit instead applies a -1 modifier to all Gunnery and Piloting Skills and will fight until destroyed or unable to function; that Force does not follow the normal <i>Forced Withdrawal</i> rules at any time thereafter.
Firebase	The Defender builds a mid-sized defensive fortification on the battlefield using the <i>Advanced Building Construction</i> rules (see p. 128, <i>TO</i>), and sets up the fortification after Force selection but before the start of the track.
Floodwaters	A nearby dam has broken due to excessive nearby combat and is flooding the plains around it. Beginning in Turn 3, expand all rivers present by two hexes on each bank (so a one-hex river becomes a five-hex river); the new hexes are at Depth 1. Every odd turn thereafter, increase the river size by two hexes, with the new hexes at Depth 1 and all prior water hexes increasing in depth by one. All terrain Level 1 and higher remains above water; the water is spreading, not rising, due to the soil erosion occurring underneath the surface of the water. All woods hexes that are covered by water are cleared. All water hexes are affected by the Torrent rules (see p. 52, <i>TO</i>). The direction of water flow is determined by the Defender at the beginning of Turn 3.
Forced Withdrawal	The <i>Forced Withdrawal</i> rules (see p. 258, <i>TW</i> or p. 27, <i>AS</i>) are in effect.
Free-fire Zone	Up to half the units on each side may turn traitor at some point in the battle. Beginning on Turn 2, roll 2d6 for each functional unit; on a result of 10+, that unit switches sides. Once a unit has switched sides, that unit makes no more rolls. Continue this search during each Initiative phase until half of a player's units have switched sides, or Turn 5 is reached. This effect lasts through the end of the battle.
Frequency Overload	Radio frequency jamming by the opponent prevents communications until Turn 6, during which time the players suffer a -1 modifier to all Initiative rolls.
Gun Emplacements	The static fortifications are considered single-hex, Level 1 Medium Buildings with a CF of 40 and an Armor Factor of 40. Each building can have a turret-mounted Large Laser, a turret mounted LRM 20 with two tons of ammo, an LB 10-X AC with two tons of ammo, or any other mix of weapons as determined by the GM. The gunnery crews have a Gunnery Skill Rating also determined by the GM.

SPECIAL RULES TABLE (CONTINUED)

Rule Title	Description
Hand of God	The opponents (or all sides) may use Orbit-to-Surface Fire (see pp. 103-104, <i>SO</i> or p. 84, <i>ASC</i>) using a GM-determined WarShip or DropShip; the GM should place a limit on the number of salvos available.
Industrial Nightmare	Treat 3 hexes around each Hardened Building as a <i>Heavy Industrial Zone</i> (see p. 31, <i>TO</i> or p. 65, <i>AS</i>).
Irradiated Terrain	Excluding conventional infantry, units may pass through Irradiated hexes without penalty. Any unit ending its movement in an Irradiated terrain hex suffers the following effects: Add a +1 to-hit modifier for any weapon attacks due to lingering electromagnetic interference and radiation. Add 5 heat during the Heat Phase (if applicable). 'Mechs: For every two consecutive turns spent in Irradiated terrain, the unit's MechWarrior takes one point of pilot damage during the End Phase of the second turn. Ground vehicles: For every two consecutive turns spent in Irradiated terrain, the unit suffers the following critical hit during the End Phase of the indicated turn (see p. 194, <i>TW</i>): Crew Stunned (2nd turn), Commander Hit (4th turn), Crew Killed (6th turn). Battle armor: For every two consecutive turns spent in Irradiated terrain, the unit loses 1 randomly selected trooper during the End Phase of the second turn. Conventional infantry: Conventional infantry units may neither move through nor end their movement in an Irradiated hex. If a conventional infantry unit is forced into an Irradiated hex, it is considered destroyed.
Isorla	A Clan Force may claim all non-destroyed enemy units remaining on the battlefield at the end of the track as <i>isorla</i>. Players claiming <i>isorla</i> must have successfully completed at least two Objectives and used at least one Option in the track. A pilot claimed as <i>isorla</i> is a bondsman and may be utilized by the Clan player in a future battle. A bondsman fights as if his Skill Rating is one less than listed. A bondsman must earn their way back to warrior status with their new Clan; for these rules, this is achieved by winning three duels as a bondsman. [NOTE: Clan Blood Spirit and Clan Steel Viper warriors taken as bondsmen must win five duels before they can be accepted.] A bondsman who succeeds may join the Clan as abtakha and regains their previous Skill Rating. Kills and other points towards advancement, if used, are not counted during the warrior's time as a bondsman. Players are not required to take enemy pilots as <i>isorla</i>; those not claimed are considered executed. If the track is played by two competing players, the winner is determined by the highest WP reward total and denies the other side <i>isorla</i> or salvage. Equipment taken as <i>isorla</i> may be repaired using the Repair and Replacement rules.
Lack of Discipline	Each side is made up of untried warriors. Unless within 5 hexes of a Lance or Star CO, normal units will act as follows: Inner Sphere: Inner Sphere units that destroy or cripple an enemy unit will continue to target and fire upon that unit until its Head or Center Torso Location Internal Structure is completely destroyed. Clan: Add a +1 To-hit modifier to all targets that use a minimum of 1 MP in the turn being targeted. Alpha Strike: Unless within 6" of their Formation or Force CO, units will act as if one Experience/Skill Rating worse.
Live Fire Training	The buildings are considered to be part of a C ³ network; three turrets have fire control computers that function exactly like a C ³ Slave Module; the master control tower functions exactly like a C ³ Master Computer. When attacking, each turret is considered to have a Gunnery of 5. The turrets are part of an automated network and automatically attack the closest unit (Attacker or Defender) within range and LOS of each turret. When multiple targets are present, the turret attacks the heaviest target; in the case of ties, roll randomly to determine which unit to attack.
Makeshift Minefield	Out of conventional mines, the Defenders resort to unused missiles and artillery shells to create their minefields, making their power and sensitivity an unknown quantity. When a minefield explodes, it does 3D6 damage (<i>AS</i> : 1D6 divided by 2) in that hex, and half the amount of rolled damage to units in the adjacent hex. Location is determined normally.
Monorail	Set up the monorail line as a 1-hex-wide row of Rail terrain type (see p. 51, <i>TO</i> or p. 66, <i>AS</i>) from one edge of the map to the opposite edge. The rail can follow terrain features as necessary and cannot bridge sublevel hexes. The rail line itself is fortified and slightly elevated; treat those hexes as half-levels (see p. 31, <i>TO</i>) and as having a CF of 60 rather than the standard CF 20 for Rail terrain. Any hex of the rail line that is destroyed becomes Ultra Rubble (see p. 39, <i>TO</i> or p. 67, <i>AS</i>). This Special Rule can be combined with Pipelines, below.
Morale	Both sides use the in-game Morale rules (see p. 211, <i>TO</i> or pp. 32-34, <i>ASC</i>).
No Holds Barred	As long as the designated command unit is present, no friendly unit may be forced to withdraw.
Off-Map Movement	Both Forces may assign up to half its Force with <i>Off-Map Movement</i> orders (see p. 85). This may only occur once during the track.
Operational Timeline	Some missions require objectives to be completed within a short amount of time. This special rule helps reflect that battlefield condition. The player establishes a set number of turns to accomplish each Objective and write these down before the start of the track. They do not need to be shared with the player's opponent. If the Objective is completed in the time estimated, the player receives the reward listed. For each turn under the established limit, the reward is increased by 25%. For each turn past the established limit, the reward is diminished by 25%.

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SPECIAL RULES TABLE (CONTINUED)

Rule Title	Description
Pipelines	Commonplace in most industrialized areas or across vast expanses of open terrain, the GM designates one or more hexrows as containing a pipeline; these have no effect on unit Movement. Any missed shot within a hex containing a pipeline has a chance to rupture the line. A result of 9 or higher on a 2D6 roll indicates a pipeline was struck. The pipelines have CF 30 and contain a variety of interesting liquids. If a pipeline takes damage equivalent to its CF, it ruptures and spews its contents onto the battlefield. Roll 1D6 to determine those contents: on a result of 1-3, the pipeline contains water; on a 4-5, it contains oil; and on a result of 6, it contains hazardous chemicals. For ease of gameplay, each hex of the line can only have a single breach at a time. Once a pipeline has ruptured, liquid begins pouring out onto the ground. Any BattleMech unit in the hex immediately in front of the rupture must make a successful Piloting Skill Roll to avoid being knocked down by the pressurized stream of liquid and displaced one hex. Vehicle units must make a successful Driving Skill Roll to avoid being displaced one hex. Infantry units are automatically displaced one hex by the torrent of liquid. All units receive 20 points of damage, divided into 5-point groups and randomly distributed. Starting with the hex immediately in front of the rupture, all affected hexes receive the Mud terrain modification (see p. 50, <i>TO</i> or p. 64, <i>AS</i>) for the remainder of the track. In addition, oil and hazardous chemical spills also have the following effects: Oil: Apply a -3 modifier to rolls made to determine if a fire starts in an affected hex. Hazardous chemicals: Use the <i>Hazardous Liquid Pools</i> rules (see p. 49, <i>TO</i> or p. 65, <i>AS</i>). If a hex contains a spill of two or more types (if, for instance, two breaches spread into contact), the later spill's effects supersede the prior. If both spills spread into the hex at the same time, determine randomly which one takes precedence. Each turn that a pipeline spews out liquid, expand the spill one ring of hexes. A pipeline will continue to spill for 5 Turns before safety measures kick in and seal the breach. Once this happens, the breached hex is eligible for further breaches as per the above rules. If an infantry unit is present on the rail line in the same hex and spends 2 Turns without moving or attacking, the spill will end after those two Turns as they manage to manually activate the shutoff mechanisms.
Prepared Defenses	The opponent can place a GM-determined number of prepared defenses on the battlefield, represented by a counter. These defenses function as Heavy Buildings with CF 25; attacks against defending units in these hexes must target the Prepared Defense, just as targeting infantry in a building must target the building. However, reduce the damage passed on to the target by half the normal amount.
Prior Damage	Prior to the start of the battle, each unit on both sides receives 3d6 damage (<i>Alpha Strike</i>: 1D6), distributed normally in 5-point groups. Reroll any damage that would result in a Crippled or Destroyed unit.
Radio Emissions	Any attacking BattleMech unit with undamaged Sensors can make a dedicated radio band scan once every two turns. Scans are declared and resolved in the End Phase. When scanning, roll 2d6; on a result of 11 or 12, the location of a targeted or objective unit is revealed.
Relief Forces	In a battle deemed so important, both sides find themselves being reinforced by various independent Forces as commanders desperately try to sway the outcome. Starting on a turn designated by the GM, each side rolls 2d6 before the Initiative Phase. On a 10+, that side receives reinforcements equal to 25% of their original Force. These reinforcements may be banked for future entrance into the battle. Once reinforcements are rolled as available, no more rolls are made. For every turn after Turn 3, add +1 to the rolled result. Units may enter one at a time, in small groups or all at once; when a player wishes to use their reinforcements, they must declare it during an End Phase when reinforcements are available. Declared units will then enter the battlefield during the End Phase of the following turn either through the player's home edge or via a combat drop (see p. 22, <i>SO</i> or p. 90, <i>AS</i>).
Rockslides	If a firing unit is adjacent to a hex that is at least one level higher than the unit's occupying hex and it fires a large ballistic or missile weapon (one that does a possible 15 or more damage), there is a chance to trigger a rockslide. During the end phase, roll 2D6; a rockslide occurs on a result of a 9 or better. The rockslide does 10 points of damage (1 point in <i>AS</i>) for every level difference between the target and originating hex. Apply damage in 5-point groups to the unit's front facing.
Running Silent	(Space or Aerospace only.) All units that are not small craft must enter the board with a starting Velocity of 4 or less and are considered "running silent." These craft may use up to half of its Thrust rating for maneuvering; if the unit uses more than half of its Thrust, its Maximum Thrust rating, accelerates or decelerates, the unit is no longer considered silent and is immediately detected by the opposing units and may be targeted and fired on as normal.
Scanning	Buildings may be scanned by units without an Active Probe; such units must end their movement within 2 hexes of the target building and may not fire that turn. Units with an Active Probe must end their movement within 4 hexes of the target building and may fire during the same turn as scanning. A scan is declared during the Fire Phase and takes place during the End Phase of the same turn, provided the unit remains functioning and does not have any sensor critical hits. Only BattleMechs and vehicles may perform a sensor scan. Battle armor and infantry may conduct an interior search instead, using the Infantry in Building rules (see pp. 167-170, <i>TW</i>). The unit must begin and end their turn in the same building hex in order to conduct a proper search.
Scouting	In order to consider an objective scouted, a unit must spend a full round in that objectives' hex, in other words, the round in which the unit enters the hex does not count. While a unit is spending the round "scouting", the unit may otherwise act normally and is not considered immobile.

SPECIAL RULES TABLE (CONTINUED)

Rule Title	Description
Seizing Buildings	In order to take control of a building, an operational unit (including units that are Crippled but not Destroyed) must remain in an adjacent hex for at least 5 turns. If any enemy units are adjacent to the same building during the End Phase of a turn, that turn will not count towards the total. Units do not need to be in contact the entire time, but the player's Force must maintain uncontested contact for a total of 5 full turns. Destroying a building has no effect on seizing the location for Objective purposes.
Selective Reinforcements	Each side has a pool of reinforcements it can call upon in an attempt to sway the battle in their favor. During the Initiative Phase of every fifth turn, each side may choose to call in one of their support options; these units will arrive at the start of the following turn. Reinforcements may only be called in once during the battle. These Forces are selected independently of the player's starting Force; it is recommended that players select and set aside their reinforcements before beginning play. The player calling in reinforcements may choose two of the following three options. Ground: Ground Forces equal to 25% of their starting deployed Force enters their home edge at the start of the next turn. Artillery: One off-board Sniper tube for every four units the controlling player has initially deployed (round down) is available to fire at the start of the next turn. Each tube has one ton of ammunition and is considered eight boards away from the centermost mapboard. The Sniper's crew has a Gunnery Skill of 4. (Clan crews are considered to have a Gunnery Skill of 5 and are only three boards away from the centermost mapboard.) Air: A combination of Aerospace Fighters, Conventional Fighters, and/or Small Craft equal to 20% of the starting deployed Force enters the battlefield from the controlling player's home edge starting the next turn at a Velocity of 6 or less (if applicable).
Shielding	Both sides are using the Shielding rules (see p. 19, <i>SO</i> or p.12, <i>AS</i>) when an enemy unit targets the Command unit.
Time Limit	The GM predetermines which Turn the track ends; this can be announced to one side, both sides, or remain hidden from all Forces. The GM announces before the Initiative Phase of the penultimate Turn; the track finishes at the conclusion of the following Turn's End Phase.
Tinderbox	Grasslands can easily become a flaming inferno. Any missed weapons fire has a chance of igniting the grass and starting a fire. Use the rules for Accidental Fires (see p. 43, <i>TO</i> or p. 100, <i>AS</i>).
Traps	The Defender receives 1 Trap per tunnel intersection, to a maximum of 12. The traps are of specific types, and the defending player must record the location of Traps prior to the start of the track. The total number of traps must be agreed to by both players before any are determined. The Defender can place the traps in any hex as desired. Traps are set off when an attacking unit enters the hex, except in cases when the trap was successfully detected. The type of traps should be randomly determined from the following by rolling 1D6: 1-2: Tunnel Collapse. A Tunnel Collapse brings down the roof in the hex, permanently blocking the tunnel. Any infantry unit in the hex is completely buried and its members killed. These traps are automatic. 3-4: Pitfalls. Pitfalls drop any unit in the hex three levels onto something unpleasant. This can be spikes, explosives, or some corrosive substance. Apply 1D6 damage to all members of an affected unit. Surviving units take three turns to climb out from the pit or expend Jump Movement to exit in the next turn. 5-6: Firetraps. Firetraps are incendiary devices that cover all members of a unit in the hex with Inferno gel. Treat the unit as though covered in the gel except that it lasts only until the End Phase on the next turn after the trap was activated. Otherwise the effects are the same as for being struck by an Inferno missile. When entering a hex, an Attacking unit may attempt to detect a trap. The Attacking player rolls 2D6. On a result of 9+, any trap present was detected, and the Defending player must disclose the type of trap. Trap Detection rolls are made immediately prior to entering the hex during the Movement Phase. Any unit that detects a trap may attempt to disarm it per the rules for Clearing Minefields (see p. 210, <i>TO</i>). Disarming a trap requires occupying an adjacent hex and making no weapon attacks. A disarming attempt can begin the same turn in which the trap was detected.
Unsteady Ground	Huge explosions have left large pockets of hollow ground and hidden sinkholes. Whenever a unit fails a Piloting/Driving Skill roll while occupying a paved or rubble hex, roll 2d6 for a Sinkhole check. On a result of 8 or more, the pavement weakens and a hole opens up (Sublevel 1) in the hex in which the failed Piloting Skill roll occurs. Because the unit already failed its Piloting Skill Roll, the unit automatically falls; roll Falling Damage as normal. If the unit is a ground vehicle skidding or sideslipping, it falls in the hex rather than skidding or sideslipping normally.
Wages of War	Use the Battlefield Wreckage rules (see p. 187, <i>TO</i>).
Zellbrigen	<i>Clan Honor</i> rules are considered to be in effect for this track at Honor Level 1 (see p. 273, <i>TW</i> or <i>Zellbrigen</i> , p. 133, <i>AS</i>).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

SITUATION

While not required, the Situation section can help lay out the atmosphere and setting of the game. Here is where a GM provides extraneous details such as the planetary system in which the battle is taking place, or what the context is—perhaps it's a localized political feud, or the leading edge of a full-on faction assault—and sets the “window dressing” of the coming conflict. It can also be a way for a GM to link the previous track to the current one, giving an update of the universe around the players' unit and addressing any lingering effects or fallout from the prior mission.

These fictional interludes can take form in a number of ways. They can be a simple, short narrative read aloud to the players, or a longer piece that is provided to each side for context. Or perhaps they take the form of a series of news articles showcasing events or information that is relevant to the track's primary objectives. Some more imaginative GMs may work up mock screenshots or video to introduce the next section of the story. However done, the primary purpose of the Situation section is to set the tone and introduce the urgency of the mission that is about to be presented.

AFTERMATH

Again, this is not a required section for a track, but one that can help continue the GM's story for the campaign. This section often details what happens after the events that occur in the track. GMs can prepare one or more versions, based on if the players are successful or not; more common is a general summary that looks more at the overall picture occurring within the system, region, or area that the events took place. These summaries can be the form of a journal, news articles, a short vignette or story, or other method.

NEXT TRACK

Finally, the GM determines what the next track in the campaign should be. If the GM has mapped out the campaign arc, this can be a fairly simple process. While only one track can be provided, the GM should try to provide two or more tracks as alternatives. To add variety, the GM can include generic tracks as possible avenues, such as select Mission tracks like those found in *Total Chaos* (see pp. 30-38) or any of the *Starterbook* publications.

BUILDING A TRACK

Ben is creating a campaign for his local players, who have decided to play a Periphery campaign as Clan Coyote warriors. After some research, he decides to insert the players into the 3103 invasion of Navarre in the Escorpión Imperio. Using other rules in this book, he creates the Navarre system and sketches out a map of the world, designating six locations that will define the crux of the campaign.

Once the locations are selected, Ben decides on what kinds of battles would occur at each location. He makes notes for each one, as these will be helpful later in constructing the six tracks of the campaign. In addition, he chooses several generic Missions from Total Chaos that will help enhance the invasion campaign.

Ben then settles down to construct one of the tracks, the initial assault on Navarre's main DropPort and warehouse sector. The selected location is partially urban and partially open, so he creates two appropriate tables for the players to randomly determine the maps to be used.

Because the players' campaign unit is assaulting a position, they are the Attacker. He determines that the Imperio is aware of the impending assault but did not have enough time to prepare an adequate defense. Therefore, the Defender will comprise only 75 percent of the campaign Force; Ben figures that can be adjusted with some selective Options to give the players a challenge.

As the players will have their own custom-built Coyote Force, he doesn't designate Force RATs or builds for the Attacker. He could designate particular Era RATs or custom-build a RAT specifically for this track (or campaign) for the Defender; he opts to select one from source material and assigns it in the Game Setup section.



GAME SETUP

Randomly determine two maps from each table.

MAPS TABLE

Roll	Flatlands Map	Roll	DropPort Map
1-2	Open Terrain #1	1-2	DropPort #2
3-4	Scattered Woods	3-4	Military Base #2
5-6	Open Terrain #2	5-6	DropPort #1

The Defender sets up all units first on the battlefield; no more than half are set up as Hidden units. All edges are considered the Defender's home edge. The Defender is 75 percent of the Attacker's deployed Force and uses the Escorpión Imperio RAT from *Interstellar Expeditions*, p. 107.

The Attacker designates their home edge; all units will enter the battlefield during Turn 1 from that edge. The Attacker's deployed Force can be no more than 30 percent of their total Force.

Now that the game is set up, Ben looks to decide on the players' Objectives. Because the opponent is not running a concurrent campaign, the Objectives can be singularly targeted towards the players' aims. Looking over the Objectives Table, he decides to assign three to the players: *Frugal Is the Word*; *Hearts and Minds*; and *Turkey Shoot*. He knows that they face a smaller opponent, so he wants to make the players work for the victory by imposing some restrictions. Because these restrictions mesh well with Clan Coyote's factional preferences—reduce loss, preserve strategic resources, and crush the opposition—he makes a note to address this in the construction of the Situation and Aftermath.

With his Objectives selected, he assigns WP rewards to each, keeping in mind that because this is the first track of the campaign, the WP reward will be lower. He discards the suggested WP from the table and makes some adjustments. Ben decides that *Frugal* is the most important Objective, and makes that worth the most, scaling down the other two.

Now he looks to add a couple of Options to the track. Because the terrain is pretty open and the opponent potentially weaker than the players, he decides to add a weather condition and a slight boost to the opponent's units: *Light Rainfall* and *Expert Marksmen*. Ben also assigns a modest reward to both.

If the players achieve all objectives (assuming they defeat a projected two lances worth of opposition), they could garner a total reward of 280 points; only doing the objectives would get them 205 WP. Therefore, Ben assigns a track cost of 150. Even if they only net two objectives, they will still clear the cost of the track. This result is in line with the story he envisions for his campaign, in which the overall Coyote assault meets little resistance at the start of their invasion.

WARCHEST

Track cost: 150

Options:

Expert Marksmen. Use the *Bracing* and *Careful Aim* rules (see p. 84, TO). [25]

Light Rainfall. Use the *Light Rain* rules (see p. 57, TO). [50]

Objectives:

Frugal Is the Word. The players keep their destroyed units to 10 percent or less of their deployed Force. [100]

Hearts and Minds. The players must not destroy or damage any buildings during the course of the track. [25]

Turkey Shoot. Destroy as much of the enemy Force as possible. [+10 WP per enemy unit destroyed]

As a courtesy to the players running the Imperio's Forces, Ben writes down Objectives for that Force as well, which are opposite of the ones set for the players. These are not assigned points or are of any value other than to provide direction for the Imperio players, so they can construct tactics and strategy and make an appealing fight for the Coyote players.

The Imperio's unofficial directive is thus, "Destroy as much of the invading Force as possible, using buildings as shields and impromptu defenses, while avoiding wholesale unit destruction."

The essential parts of the track now completed, Ben turns to the Special Rules that will govern all Forces during the battle. He established with his players ahead of time that Salvage is considered "on" during the entire campaign, unless otherwise noted. He also determines that because this is the initial stages of the invasion, the two sides are not willing to sacrifice units just for the sake of damage and thus will require pragmatism from both commanders.

As such, Ben puts the Forced Withdrawal rule into play for both the Attacker and Defender. He also notices that the terrain is open around the DropPort, which could be interpreted as wide open grassland prairie. To give the track a little bit of atmosphere, he adds the Tinderbox special rule, giving a small chance for fires to ignite from missed shots.

SPECIAL RULES

The following rules are in effect for this track:

Forced Withdrawal

The *Forced Withdrawal* rules (see p. 258, TW) are in effect.

Tinderbox

Grasslands can easily become a flaming inferno. Any missed weapons fire has a chance of igniting the grass and starting a fire. Use the rules for *Accidental Fires* (see p. 43, TO).

INTRODUCTION

FORCE
CREATION

FORCE
OPERATIONS

FORMATION
BUILDING

INNER SPHERE
AT WAR
CONVERSIONS

SOLAR SYSTEM
GENERATION

NARRATIVE
CAMPAIGNS

MAP-BASED
CAMPAIGNS

CHAOS
CAMPAIGN
CREATION

RECORD SHEETS

With the track essentials complete, Ben spends a little time providing a fictional Situation, writing up the Galaxy Commander's briefing for all Coyote Forces participating in the invasion. He also works up two brief news articles for the Aftermath; both from the Imperio's point of view: one for if the players are successful, and an alternate version in case the players fail the track. He then jots down two options for the Next Track section, providing the players a choice between a standard Assault Mission for a nearby warehouse target, or the next campaign objective: the Imperio's command firebase outside the capital.

With the track complete, Ben moves on to the next in the campaign arc.

SITUATION

"Today is the day the Coyote stalks forward and carves our own path. Today, we begin our quest to end that of the repugnant Imperio. This Galaxy has won the honor of being the vanguard, carrying forward our Khan's vision of a new life, establishing ourselves away from the shadow of the Adder Collective.

"Take your objectives, seize them with the speed of our Founders. But be warned; excessive casualties are not to be tolerated—both within and without. We will establish our new home with care, in a manner that outshines the paltry efforts of the once-mighty Scorpions.

"Seize the day, Coyote. And may our howls carry forth across space and time to our distant blood, lost in the arrogance of their own Taint."

—Beta Galaxy Commander Petr Winson; 15 March, 3103

GAME SETUP

Randomly determine two maps from each table.

MAPS TABLE

Flatlands Map		DropPort Map	
Roll	Map	Roll	Map
1-2	Open Terrain #1	1-2	DropPort #2
3-4	Scattered Woods	3-4	Military Base #2
5-6	Open Terrain #2	5-6	DropPort #1

Attacker

The Attacker designates their home edge; all units will enter the battlefield during Turn 1 from that edge. The Attacker's deployed Force can be no more than 30 percent of their total Force.

Defender

The Defender sets up all units first on the battlefield; no more than half are set up as Hidden units. All edges are considered the Defender's home edge. The Defender is 75 percent of the Attacker's deployed Force and uses the Escorpión Imperio RAT from *Interstellar Expeditions*, p. 107.

WARCHEST

Track cost: 150

Options:

Expert Marksmen. Use the *Bracing* and *Careful Aim* rules (see p. 84, TO). [25]

Light Rainfall. Use the *Light Rain* rules (see p. 57, TO). [50]

Objectives:

Frugal Is the Word. The players keep their destroyed units to 10% or less of their deployed Force. [100]

Hearts and Minds. The players must not destroy or damage any buildings during the course of the track. [25]

Turkey Shoot. Destroy as much of the enemy Force as possible. [+10 WP per enemy unit destroyed]

SPECIAL RULES

The following rules are in effect for this track:

Forced Withdrawal

The *Forced Withdrawal* rules (see p. 258, TW) are in effect for both sides.

Tinderbox

Grasslands easily become a flaming inferno during a battle. Any missed weapons fire has a chance of igniting the grass and starting a fire. Use the rules for *Accidental Fires* (see p. 43, TO).

AFTERMATH

Victory

A stunning daylight assault on the Navarre Interstellar Transport yards ended in tragedy for local defense Forces. Enemy Forces, identified as those of Clan Coyote, landed near the yards and quickly overwhelmed the understaffed garrison Force. Less than half of the garrison unit managed to withdraw, pulling back towards Basepoint Ecola, though they did manage to evacuate several outlying towns before being overrun.

The assault is one of several reported around the planet today; citizens are to report to their nearest emergency station for further orders. All garrison and duty officers are to turn to channel zeta-four for further instructions.

Failure

A stunning daylight assault on the Navarre Interstellar Transport yards was repulsed earlier today by valiant garrison Forces. Though severely outmatched, the heroic warriors managed to inflict maximum casualties on the invasion Force in short order, forcing the Clan Coyote troops to withdraw back to their landing zone. Unfortunately, other assault across the planet were more successful, with several hundred casualties being reported.

Citizens are to report to their nearest emergency station for further orders. All garrison and duty officers are to turn to channel zeta-four for further instructions.

NEXT TRACKS

Mission: Assault; Basepoint Ecola

TN

Force Name:

Salaries

NOTES

CATALYST
game labs™

STAR SYSTEM OVERVIEW SHEET

STAR SYSTEM DATA

System Name:

Star Name:

Star Type:

Recharge Time:

Proximity Limit:

Number of Planets:

Noble Ruler:

Political Ruler:

Recharge Stations:

HPGs:

Notable Military Units:

Notable Military Units: _____

NOTES

SYSTEM LAYOUT

ORBIT 1:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 2:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 3:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 4:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 5:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 6:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 7:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 8:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 9:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 10:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 11:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 12:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 13:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 14:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

ORBIT 15:

Object Type:

Orbit (km):

Gravity:

Diameter:

No. of Moons/Objects:

Notes:

CATALYST

game labs

No. of Moons/Objects: _____

Notes: _____



BATTLETECH

PLANETARY DETAILS RECORD SHEET

STAR SYSTEM DATA

System Name: _____

Star Name: _____

Star Type: _____

PLANETARY DATA

Planet Name: _____

Position in System: _____

Moons & Rings (Number, Names, Orbit): _____

Diameter: _____

Surface Gravity: _____

Day Length: _____

Habitable: ☐ Yes ☐ No

Atmospheric Density: _____

Surface Temperature: _____

Percent Surface Water: _____

Highest Life Form: _____

Inhabited Planet Details

Noble Ruler: _____

Political Ruler: _____

HPG Class: _____

Recharge Stations: _____

Population: _____

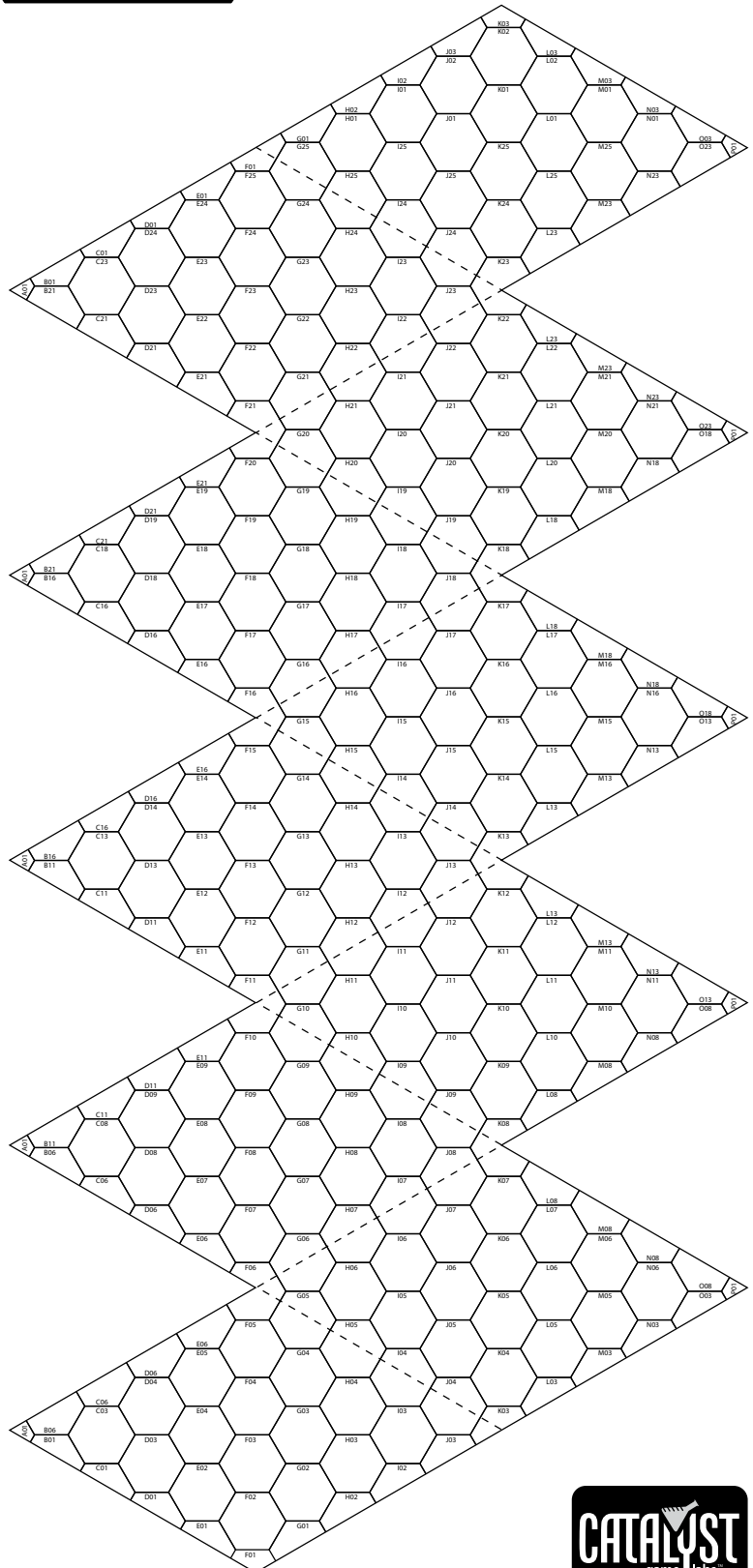
USILR Code: _____

Notable Military Units: _____

Major Industries: _____

Notes: _____

PLANETARY MAP



BATTLETECH™

WARCHEST CAMPAIGN RECORD SHEET

Track Title: _____

Date/Duration: _____

Force Name: _____

Starting WP: _____

Faction: _____

Track Cost: _____

Options Used

+/-

Objectives Gained/WP Earned

+/-

Downtime Costs

+/-

Final WP: _____

Track Title: _____

Date/Duration: _____

Force Name: _____

Starting WP: _____

Faction: _____

Track Cost: _____

Options Used

+/-

Objectives Gained/WP Earned

+/-

Downtime Costs

+/-

Final WP: _____

Track Title: _____

Date/Duration: _____

Force Name: _____

Starting WP: _____

Faction: _____

Track Cost: _____

Options Used

+/-

Objectives Gained/WP Earned

+/-

Downtime Costs

+/-

Final WP: _____

Track Title: _____

Date/Duration: _____

Force Name: _____

Starting WP: _____

Faction: _____

Track Cost: _____

Options Used

+/-

Objectives Gained/WP Earned

+/-

Downtime Costs

+/-

Final WP: _____

CAMPAIGN NOTES



FORCE CREATION ERA TABLE

P. 10

Inner Sphere / Periphery Eras	Description
2100-2412	Early Interstellar States and unrestricted Age of War, marked by small and novice militaries
2412-2570	Age of War under the Ares Conventions, an era of growing prosperity and industrial capacity
2571-2650	Reunification War and Early Star League
2651-2750	High Star League, an era of stability and ever-growing technology and military strength.
2751-2820	Fall of the Star League, First Succession War. Despite the grim period, this is, in fact, the peak of human military strength, technology, and prosperity.
2821-2900	Second Succession War and early Third Succession War, where population, industrial, and technological declines really take hold. The average wealth and technology are higher than the Third Succession War until the end of this period.
2901-3049	Third and Fourth Succession Wars. The great malaise of the Succession Wars defines most of the era; the technological revolution seen at the end of this period truly takes hold in the next.
3050-3067	Clan Invasion. Technological recovery sweeps the Inner Sphere, increasing standards of living—and military firepower—dramatically.
3068-3085	Jihad. The impact of the Helm Memory Core reaches its peak in this period before the Jihad wipes the progress away.
3085-3130	Late Jihad and Brush Wars. While civilians recover through this period, militaries remain much-reduced in size.
Clan Eras	
2800-2840	Exodus Civil War, Pentagon Campaign. The SLDF batters itself into warring fragments and then “reunites” into the balkanized Clans. In this era, the Clans are at their smallest and weakest.
2840-3025	Golden Century and beyond. The Clans’ population grows from a few million refugees and thus is militarily and industrially smaller than the Clans of the Invasion period.
3025-3072	Invasion-era Clans. The Clans reach the peak of their strength.
3072-3130	Post-Wars of Reaving. This era only applies to Homeworld Clans; Clans in the Inner Sphere and Periphery use the Inner Sphere/Periphery eras.

BASIC BUDGET TABLE

P. 11

Roll	Funds	Equivalent Force (Approximate)
3	10,000,000 CB	3025-era light BattleMech lance
4	20,000,000 CB	3025-era medium BattleMech lance
5	30,000,000 CB	3025-era heavy / mixed BattleMech lance
6	40,000,000 CB	3025-era well-funded assault BattleMech lance
7	50,000,000 CB	
8	60,000,000 CB	3025-era mixed BattleMech company
9	75,000,000 CB	3025-era assault BattleMech company
10	90,000,000 CB	
11	105,000,000 CB	
12	120,000,000 CB	
13	140,000,000 CB	
14	160,000,000 CB	
15	180,000,000 CB	3025-era mixed BattleMech battalion
16	210,000,000 CB	
17	240,000,000 CB	3025-era assault BattleMech battalion
18	300,000,000 CB	

ERA BUDGET MODIFICATION TABLE

P. 12

Inner Sphere Era	Era Budget Multiplier
2100-2412	x0.75
2412-2570	x1.25
2571-2650	x1.50
2651-2750	x2.00
2751-2820	x2.50
2821-2900	x1.50
2901-3049	x1.00
3050-3067	x1.50
3068-3084	x2.00
3084-3130	x1.00
Clan Eras	
2800-2840	x0.50
2840-3025	x1.25
3025-3072	x1.50
3072-3130	x1.25

FACTION BUDGET MODIFICATION TABLE

P. 12

Faction Type	Faction Budget Multiplier	Examples or Definitions
Super Power	x1.50	<i>BattleTech</i> has only had three super powers: the Terran Hegemony (2450 – 2780), the First Star League, and the Federated Commonwealth.
Major Power	x1.20	Inner Sphere Great Houses, Republic of the Sphere, Terran Alliance, Second Star League, Inner Sphere Clans (Wolf, Jade Falcon, Ghost Bear), pre-Schism ComStar, and similar large nations
Minor Power	x1.00	Most Clans, Capellan Confederation (3030 – 3060), St. Ives Compact, major Periphery States, Inner Sphere micro-states before 2600 (e.g., Chesterton Trade League, United Hindu Collective), Duchy of Andurien, and similar nations with smaller territories and populations
Independent Worlds, Small States	x0.80	Any independent planet or minor Periphery power, such as the Rim Collection or a Chaos March nation
Independent Mercenary and Pirate Forces	x1.00	Any mercenary or pirate Force that has been independent from a faction for over 5 years
Faction Modifiers		
Wealthy Faction	x1.20	Lyran Commonwealth, Terran Hegemony, First Star League
Poor Faction	x0.80	Capellan Confederation (after 2860), Outworlds Alliance, most independent Periphery planets

SALARY TABLE

P. 25

Position	Monthly Salary
MechWarrior	1,500
Aerospace Pilot	1,500
Vehicle/Artillery Crewman	900
Aircraft Pilot	900
Regular Infantry	750
Specialist/Armor Infantry	960
Vessel Crewman (DropShip)	1,000
Vessel Crewman (JumpShip)	750
Vessel Crewman (WarShip)	1,200
Technician	800
Astech	400
Administrator	500
Quality/Expertise	Multiplier
Green	x0.6
Regular	x1.0
Veteran	x1.6
Elite	x3.2
Anti-BattleMech Training (Infantry only)	x1.5
Rank	Multiplier
Officer	x1.2
Rank	(Rank Trait Points/3)+1, minimum 1

EQUIPMENT AVAILABILITY & COST TABLE

P. 14

Example Unit	Availability	Cost
Light BattleMech or Aerospace Fighter, any Satellite	4	3,000,000
Medium BattleMech or Aerospace Fighter	5	6,000,000
Heavy BattleMech or Aerospace Fighter	6	9,000,000
Assault BattleMech, any Small Craft	8	12,000,000
Light Combat Vehicle	3	500,000
Medium Combat Vehicle	4	1,000,000
Heavy Combat Vehicle	5	1,500,000
Assault Combat Vehicle	7	2,000,000
Conventional Fighter	5	1,000,000
Battle Armor, Single*	5	750,000
Conventional Infantry Platoon, Foot	2	1,200,000
Conventional Infantry Platoon, Motorized	3	2,000,000
Conventional Infantry Platoon, Jump or Mechanized	4	2,800,000
ProtoMech, Single*	6	1,000,000
Support Vehicle, Light (<5 tons)	2	250,000
Support Vehicle, Medium (6 to 100 tons)	3	750,000
Support Vehicle, Heavy (101 to 1,000 tons)	5	2,250,000
Support Vehicle, Super Heavy (1,001 to 100,000 tons)	7	20,000,000
Exotic unit (LAM, Super-Heavy 'Mechs, etc.)	10	50,000,000

Availability Modifiers	Modifier
Clan equipment for non-Clan Force (after 3070)	+3
Tech E and F Equipment for non-Clan, non-ComStar Force between 2860 and 3040	+5
First Star League equipment for Clan Force	-2
Cross-faction: Acquiring another faction's exclusive equipment (includes Clan acquisition of IS.. equipment)	+2
Green Experience	-2
Regular Experience	0
Veteran Experience	+2
Customized unit	+TP Value
Elite Experience	+5
Cost Modifiers	Modifier
Fusion engine in combat vehicle	x2.0
XL engine in any unit	x2.5
Light fusion engine in any unit	x1.5
Clan equipment for non-Clan Force (3049-3070)	x5.0
Clan equipment for non-Clan Force (3070+)	x4.0
Tech E and F Equipment for non-Clan, non-ComStar Force between 2860 and 3040	x5.0
Tech Rating E equipment	x1.1
Tech Rating F equipment	x1.25
Customized unit	xTP Value

LARGE SPACECRAFT TABLE

P. 17

Type	Base Equation		
DropShip	(Cost in CB / 50,000,000), round up to the nearest whole number + 5		
JumpShip	(Cost in CB / 100,000,000), round up to the nearest whole number + Number of Docking Collars + 3		
WarShip	(Square Root of [Tonnage / 5,000]), round up to the nearest whole number + (Square Root of Number of Docking Collars), round up to the nearest whole number		
Space Station	(Cost in CB / 50,000,000), round up to thr nearest whole number		
Miscellaneous			
Unique	+10. Applies if less than 10 of the spacecraft exist in an given era. (Example: most Inner Sphere WarShips in the thirty-first century)		
Very Rare	+6. Applies is less than 100 of the spacecraft exist in an era (Example: Monolith DropShips in the thirty-first century, almost all WarShips)		
Rare	+3. Applies to less common spacecraft for an era (Example: Scouts, Tramps, Mammoths, Star Lords in the thirty-first century).		
Average	+0. Applies to most spacecraft by default.		
Common	−1. Applies to particularly prolific spacecraft (Examples: Mules, Invaders, Merchants.)		
Lithium-Fusion Battery	+2		
Military	+1. Military spacecraft are more controlled and more difficult to acquire than civilian vessels.		
Government Force	−2. Government Forces have better access to large spacecraft than others. This only applies to non-Clan factions.		
Clan Force	−4. Clans have maintained a large inventory of spacecraft from the Exodus and a high level of technology.		
Cross-Faction	+2. Spacecraft built or used primarily by one faction are harder for others to acquire. This includes a Clan Force acquiring Inner Sphere equipment or vice versa.		
Inner Sphere/ Periphery era	Modifier	Crew Skill	Modifier
2100-2412	−3	Green	−1
2412-2570	−4	Regular	0
2571-2650	−5	Veteran	+1
2651-2750	−6	Elite	+3
2751-2820	−6		
2821-2900	−2		
2901-3049	+0		
3050-3067	−1		
3068-3084	−2		
3084-3130	+0		

FORCE RANDOM BACKGROUND TABLE

P. 31

3D6 Result	Background
3	Atrocity. The Force committed a mass murder of innocents. -50 Reputation.
4	War criminals. The Force committed a serious crime, accidentally killing many civilians; committed rape, or indulged in kidnapping. -25 Reputation.
5	Contract breach. The Force violated a contract (if mercenary) or orders (if government). -25 Reputation. Ignore this result if a pirate Force.
6	Textbook warriors. The Force got into a rut, favoring fighting in certain conditions over others. The Force now suffers a -1 Initiative in a specific terrain type (e.g., woods).
7	Poor discipline. The Force launched an unauthorized raid or indulged in looting. -5 Reputation.
8	Debt. The Force loses any leftover funds from Force creation and starts in debt at an amount equal to 1D6 times its peacetime monthly operating cost. -10 Reputation.
9-12	The Force had a quiet year in a garrison or cadre mission.
13	Profitable year. After completing some missions successfully, the Force's bank account is in the black. Delete any debt from Force creation and give the Force a bonus equal to 1D6 times its monthly operating cost.
14	Out-of-the-box thinkers. After repeated campaigns in unusual terrain, the Force gains a +1 Initiative bonus in a specific terrain type.
15	Hard training and experience pay off. The Force gains a +1 Piloting/Driving Skill bonus in a specific terrain type.
16	The Force has a string of successful missions and gains 1D6 x 5 Reputation points.
17	The Force has a string of successful missions against one foe, learning best how to kill them dead. The Force has a +1 Gunnery Skill bonus against that faction.
18	They came, they saw, they conquered. The Force is almost unbeaten after years of hard combat, gaining 2D6 x 5 Reputation points.

FORCE EXPERIENCE RATING TABLE

P. 34

Average of All Gunnery/Piloting Skills	Force Experience Rating
7 or more	Wet Behind the Ears
6	Very Green
5	Green
4	Regular
3	Veteran
2	Elite
1	Heroic
0 or less	Legendary

REPUTATION SCORE CALCULATION TABLE

P. 33

Average Experience Rating	Value
Green, Very Green, Wet Behind the Ears	5
Regular	10
Veteran	20
Elite, Heroic, Legendary	40
Commander Rating	Value
Positive Trait (each)	+1
Negative Trait (each)	-1
Leadership Skill	As Skill Rating
Negotiations Skill	As Skill Rating
Strategy Skill	As Skill Rating
Tactics Skill	As Skill Rating
Combat Record	Value
Each Successful Mission	+5
Each Partially Successful Mission	0
Each Failed Mission	-10
Each Contract Breach	-25
Transportation Rating	Value
Excess Transportation Capacity for Combatants (1 – 100% excess)	+5
Excess Transportation Capacity for Combatants (100%+ excess)	+10
Insufficient Transportation Capacity for Combatants (1 – 99%)	-5
Lacks any DropShips	-5
Insufficient Transportation Capacity for Support Personnel	-3
Possesses JumpShips	+10
Possesses WarShips	+10 (+15 after 2800)
Sufficient KF transport capacity for all DropShips	+5
Support Rating	Value
Sufficient Technical Support Personnel	0
Sufficient Administrative Personnel	0
Sufficient Large Spacecraft Crew	0
Insufficient Technical Support Personnel	-5
Insufficient Administrative Personnel	-5
Insufficient Large Spacecraft Crew	-5
Excess Technical Support Personnel (150-175%)	+5
Excess Technical Support Personnel (176-200%)	+10
Excess Technical Support Personnel (201%+)	+15
Financial Rating	Value
Force is in Debt	-10
Crime Rating	Value
Robbery/Looting	-5
Slaughter	-25
Mass Murder	-50
Rape	-25
Kidnapping/Slavery	-25
Unauthorized Mission	-5
Other Crimes	-10 or more
Force is a Pirate Force	-100
Other Reputation Modifiers	Value
Time Spent Without Missions	See text

CONTRACT OFFERS TABLE

P. 39

Margin	Offers
0 or less	0
1 – 2	1
3 – 5	2
6 – 8	3
9 – 10	4
11 – 12	5
13 or more	6

CONTRACT MODIFIERS TABLE

P. 39

Hiring Hall	Offers	Employers	Missions
Questionable Hall	0	-2	-2
Minor Hall	+1	0	0
Standard Hall	+2	+1	+1
Great Hall	+3	+2	+2
No Hall	-3	-2	-2

CONTRACTS EMPLOYERS TABLE

P. 39

Modified 2D6 Roll	Employer	Independent Employer
2 or less	Independent Worlds or Small State	Noble
3	Independent Worlds or Small State	Noble
4	Independent Worlds or Small State	Planetary Government
5	Independent Worlds or Small State	Planetary Government
6	Minor Power	Mercenary
7	Minor Power	Major Periphery State
8	Major Power	Major Periphery State
9	Major Power	Minor Periphery State
10	Major Power	Minor Periphery State
11	Major Power*	Corporation
12 or more	Major Power*	Corporation

*Or Super Power, if one exists in the era (see Stage 2, Step 2: Modify a Budget under Creating a Force, p. 11)

MASTER CONTRACT TERMS TABLE

Mission Type	Op. Tempo Multiplier	Base Length	Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
Assassination	1.9	3 months	+2	+1	-1	-3
Cadre Duty	0.8	12 months	0	0	+1	0
Diversionary Raid	1.8	3 months	0	+2	+2	+1
Espionage	2.4	12 months	-1	+4	-3	-2
Extraction Raid	1.6	3 months	-1	-1	+2	+1
Garrison	1.0	18 months	+1	0	+1	0
Guerrilla	2.1	24 months	-2	+3	-2	-1
Mole Hunting	1.2	6 months	-3	0	+2	+1
Objective Raid	1.6	3 months	-1	0	+1	+2
Observation Raid	1.6	3 months	-1	-2	+1	-1
Pirate Hunting	1.0	6 months	+2	+2	-1	-1
Planetary Assault	1.5	9 months	-2	0	+2	+3
Recon	1.6	3 months	-1	-2	+1	-1
Relief Duty	1.4	9 months	-1	+1	+1	+1
Retainer	1.3	12 months	-2	0	+2	+1
Riot Duty	1.0	4 months	-2	+1	+2	0
Sabotage	2.4	24 months	-1	+4	-3	-2
Security Duty	1.2	6 months	-3	0	+2	+1
Terrorism	1.9	3 months	+2	+1	-1	-3
High Risk	+0.5	As mission	-1	-2	+1	0
Covert Operation	+0.3	As mission	+1	+1	-1	-1
Employer Modifiers	Employment Multiplier		Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
Super Power	1.3		0	0	+1	+2
Major Power	1.2		0	-1	0	+1
Minor Power	1.1		0	-2	0	0
Independent World	1		0	-1	-1	0
Mercenary/Corporation	1.1		-1	+2	+1	+1
Typical Employer	0		0	0	0	0
Stingy Employer	-0.2		0	-1	-1	-1
Generous Employer	+0.2		0	+1	+2	+1
Controlling Employer	0		-2	-1	0	0
Lenient Employer	0		+1	+1	0	0
Pre-Succession Wars	0		0	-2	0	0
Post-Clan Invasion	0		0	-2	0	0
Unit Reputation Trait	Payment Multiplier		Command Modifier	Salvage Modifier	Support Modifier	Transport Modifier
0 (Unrated)			-2	-1	-1	-3
1			-1	-1	-1	-2
2			-1	0	0	-2
3			-1	0	0	-1
4			0	0	0	-1
5			0	0	0	0
6			+1	+1	0	0
7			+1	+1	0	0
8			+1	+1	+1	0
9			+2	+2	+1	+1
10+			+3	+2	+2	+2

MISSIONS TABLE

P. 40

Roll	Inner Sphere/Clan	Independent	Corporation	Special	Covert	Pirate
2 or less	Covert	Covert	Covert	Covert	Terrorism	Recon Raid
3	Special	Special	Covert	Guerrilla*	Assassination	Recon Raid
4	Pirate Hunting	Planetary Assault	Special	Guerrilla	Assassination	Recon Raid
5	Planetary Assault	Objective Raid	Objective Raid	Recon Raid*	Espionage	Recon Raid
6	Objective Raid	Extraction Raid	Extraction Raid	Extraction Raid	Sabotage	Objective Raid
7	Objective Raid	Pirate Hunting	Recon Raid	Retainer	Guerrilla	Objective Raid
8	Extraction Raid	Security Duty	Objective Raid	Recon Raid	Recon Raid	Objective Raid
9	Recon Raid	Objective Raid	Security Duty	Relief Duty	Diversionsary	Objective Raid
10	Garrison Duty	Garrison Duty	Garrison Duty	Diversionsary*	Observation	Objective Raid
11	Cadre Duty	Cadre Duty	Cadre/Garrison Duty	Riot/Garrison Duty	Mole Hunting	Objective Raid
12 or more	Special	Special	Special	Cadre/Garrison Duty	Security	Objective Raid

*Offered with Planetary Assault contract, to begin immediately at termination of first contract.

SUPPLEMENTAL CONTRACT TERMS TABLE

P. 43

2D6	Command Rights	Overhead Compensation	Salvage Rights	Support Rights	Transport Terms
1 or less	Integrated	None	None	None	None
2	Integrated	None	Exchange	None	20%
3	House	Half	Exchange	Straight/20%	25%
4	House	Half	10%	Straight/40%	30%
5	House	Half	20%	Straight/60%	35%
6	House	Half	30%	Straight/80%	45%
7	House	Full	40%	Straight/Full	50%
8	Liaison	Full	50%	Battle/10%	55%
9	Liaison	Full	60%	Battle/20%	60%
10	Liaison	Full	70%	Battle/40%	Full
11	Liaison	Full	80%	Battle/60%	Full
12	Independent	Full	90%	Battle/80%	Full
13 or more	Independent	Full	Full	Battle/100%	Full

FAILED ADMINISTRATION TABLE

P. 53

Failed Roll	Result
2-6	No significant event. Combatants make negative jokes about REMF competency, hurting administrators' feelings.
7-8	Poor legal or human resource paperwork handling results in a financial loss as the Force scrambles to cover missed paydays, harassment lawsuits, workplace injuries, etc. The Force loses 1D6 x 10 percent of a month of peacetime operating costs.
9	Lesson planner scrambles training schedule for a quarter before anyone notices how easy training has gotten. All units in the Force make a Skill Rating loss roll as if they had missed a quarter of training, as discussed under <i>Training</i> , p. 51.
10	Understaffed intelligence group means the Force is ill-prepared for the next battle. The Force suffers a -2 Initiative modifier throughout the next battle.
11	Quartermaster gambles spare parts budget on sure-thing investment in recovered Star League myomer lubricant (made with snake oil). All units in the Force must make a breakdown roll as if they had gone without spare parts for a month, per Maintenance, above.
12	Legal officer misreads contract / orders and local laws, resulting in Force being charged with a Mission Failure. Refer to <i>Mission Failure</i> (see p. 47) for reputation and budget penalties. Pirate Forces treat this result as a 10.