

TACTICAL MINIATURES RULES

DP9-106

# HEAVY GEAR



THE WAR GOES ON

# MINIATURES

THE SCIENCE FICTION TACTICAL GAME

COME TO TERRA NOVA •  
STATINGS, SKILLS AND SK  
M SKILLS • WEAPONS •  
TERS • TURNING • TERR  
ECTS • STEALTH EFFECT  
ALLED SHOTS • INDIRE  
ANTRY RULES • INFANTRY

IONS OF TERRA NOVA • A HISTORY OF WARFARE • HEAVY GEARS • DICE AND DIE ROLLING  
SS/FAILURE • COMBAT UNITS AND COMBAT GROUPS • MAPBOARDS • VEHICLE RECORD SHEET •  
OF ACTIONS • MOVEMENT AND TERRAIN • COMBAT SPEED • TOP SPEED • MULTIPLE MOVEMENT  
S & OBSCUREMENT • CONCEALMENT • DETECTION RATING • ACTIVE SENSOR LOSS • ECM AND ECCM  
• ATTACKER MODIFIERS • DEFENDER MODIFIERS • PHYSICAL ATTACKS • EVASIVE MANEUVERS  
REA EFFECT WEAPONS • DAMAGE • SYSTEMS DAMAGE • DAMAGE TO ARMOR • DAMAGE TO ARMS •  
NT • SENSORS • INFANTRY ACTIONS • ATTACKS VS INFANTRY • INFANTRY T.V.I. • PERKS • FLAWS



DREAM POD 9





# THE WAR GOES ON

## TACTICAL MINIATURES RULES

# HEAVY GEAR™

The HUD came to life, screaming warnings of incoming fire. Duncan gripped the controls, spinning his war machine to face his opponent. The Gear dropped to one knee, hoping to dodge the blast. It worked, but even through the thick armor, Duncan felt the shockwave from the rockets' near miss. He pushed his vehicle to its feet and began running for the cover of the nearby trees. His fire control system pinpointed the approaching opponent and plotted a firing solution. Duncan squeezed the trigger, and the massive autocannon roared, hurling forth blazing metal rounds. The burst caught the target Gear square in the chest. The metal warrior erupted in a ball of white fire, the burning hulk skidding across the valley floor.

"Overnight, this is Bravo 1 — Bandit is neutralized, I'm coming home."

Terra Nova is a land full of beauty and mystery: rolling grasslands, rocky precipices, misty jungles, thick forests and harsh deserts. Through them all, the military forces of Terra Nova wage their deadly contests in the hopes of besting one another. The Heavy Gear Tactical Miniatures Rulebook now allows players to experience this struggle in miniature play format. This rulebook includes:

- Quick Start Rules to allow you to get a game up and running in no time, whether in Tactical, Skirmish or Toy modes.
- Advanced rules, such as Hull Down, Burst Fire and Detailed Damage to spark up gameplay.
- Instructions and techniques on building and painting miniatures and terrain, presented in glorious color.
- Basic listings for the Northern Guard, Southern MILICIA and Earth CEF armies.
- Rules for building your own combat regiment or Rover band and upgrading your vehicles with extra equipment.
- Six ready-to-play scenarios plus a detailed generator to construct your own.

A few six-sided dice, miniatures, pen and paper are required to play the game.

1941

Produced and Published by Dream Pod 9, Inc.  
5000 Iberville, #332, Montreal, Quebec, Canada, H2H 2S6  
All artwork and designs © 1994-2001 Dream Pod 9, Inc.  
TACTICAL MINIATURES RULES™, HEAVY GEAR™, TERRA NOVA™ and  
SILHOUETTE™ are trademarks of Dream Pod 9, Inc. All rights reserved.



Printed in Canada

DP9-106

ISBN: 1-896776-98-1



9 781896 776989

www.dp9.com

# TACTICAL MINIATURES RULES

## HEAVY GEAR<sup>®</sup>



### Tactical Miniatures Rules - Behind the Scenes

When we first created Heavy Gear, we knew from the start that we wanted it to cover all the variants of gaming. We designed a rule system that allowed players to roleplay a character in the Heavy Gear universe, and then take this character and use it as the pilot of a combat vehicle in a tactical wargame. At the same time, we were careful to make sure that each aspect of the game — roleplaying and hex-based tactical combat — could be played and enjoyed individually.

When miniatures first became available for Heavy Gear, a lot of people asked us for rules to use them on the tabletop. Although there were tabletop conversion rules in the tactical section of the core rulebook, the players felt they weren't precise enough for their needs. So we went back to the drawing board.

This book features the original Heavy Gear tactical rules, adapted and streamlined for tabletop miniature combat. We moved some rule sections around to make the game easier to learn, and we revised a few elements for clarity and better enjoyment. As per the players' requests, we kept the dual scale features that many enjoy: you can play large tactical engagements, using a scale of 1-50 meters, or scaled-down brutal Gear-sized skirmishes to allow you to exercise your tabletop modeling abilities to the maximum. All the while, we were careful not to tinker with any of the core concepts of the game, so that it remains compatible with the entire Heavy Gear library.

It's time to mash some metal — both literally and figuratively. Do you have what it takes?

NO  
FOR  
GOES  
ON  
THE  
WAR  
GEAR  
THI



DREAM POD 9



# TABLE OF CONTENTS

0



## WRITING

MARC-ALEXANDRE VÉZINA	SENIOR EDITOR
MANUEL RAMÍREZ	ADDITIONAL TEXTS
JARED BREHLEN	ADDITIONAL TEXTS
CHRISTIAN SCHALLER	EDITOR
HILARY DODD	COPY EDITOR
PIERRE OUELLETTE	CREATIVE DIRECTOR

## MODELING TEAM

ALAIN GABOIS	MINIATURES AND SCENERY MODELER/ PHOTOGRAPHER
MARCEL BASTIEN	MINIATURES AND SCENERY MODELER
DIMITRI HALVIOTIS	MINIATURES AND SCENERY MODELER/ PHOTOGRAPHER
DAVID PAQUIN	MINIATURES AND SCENERY MODELER

## PRODUCTION

PIERRE OUELLETTE	ART DIRECTOR/DESIGNER
JEAN-FRANÇOIS FORTIER	LAYOUT ARTIST
GHISLAIN GABE	ILLUSTRATOR/COLORIST
MARC OUELLETTE	COMPUTER ILLUSTRATOR

## ADMINISTRATION

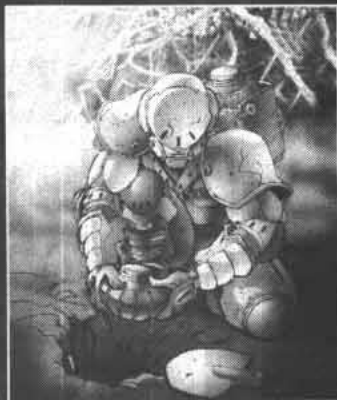
ROBERT DUBOIS	SALES & MARKETING MANAGER
---------------	---------------------------

## SILHOUETTE

GENE MARCIL	SYSTEM DESIGNER
STÉPHANE L. MATIS	SYSTEM DESIGNER
MARC-ALEXANDRE VÉZINA	SYSTEM DEVELOPER

## SPECIAL THANKS

TO ALL THE PEOPLE THAT HAVE PLAYER HEAVY GEAR OVER THE YEARS AND GIVEN US SOLID FEEDBACK ABOUT THE GAME. WE CAN'T NAME YOU ALL, BUT WE'RE THANKING YOU!



<b>CHAPTER 1: INTRODUCTION</b>	<b>4</b>
1.1 INTRODUCTION	5
1.2 WELCOME TO TERRA NOVA	5
1.2.1 EARTH AND HER COLONIES	5
1.2.2 HISTORY OF WARFARE	6
1.2.3 REGIONS OF TERRA NOVA	7
1.3 HEAVY GEARS	8
1.3.1 COCKPITS AND CONTROLS	8
1.3.2 CENTRAL PROCESSING UNIT	8
1.3.3 SENSOR SYSTEM	8
1.3.4 POWERPLANT	9
1.3.5 TRANSMISSION	9
1.3.6 SECONDARY MOVEMENT SYSTEMS	9
1.3.7 WEAPONS	9
1.3.8 ARMOR	9
<b>CHAPTER 2: QUICK START RULES</b>	<b>10</b>
2.1 RULES INTRODUCTION	11
2.1.1 DESCRIPTION	11
2.1.2 BOOK CONTENT	11
2.1.3 WHAT YOU NEED TO PLAY	12
2.2 SILHOUETTE BASICS	13
2.2.1 DICE AND DIE ROLLING	13
2.2.2 SKILLS, LEVELS, AND ATTRIBUTES	13
2.2.3 MARGIN OF SUCCESS/FAILURE	13
DATACARDS	14-15
2.3 THE PLAYING FIELD	16
<b>COLOR SECTION: BATTLE SCENES AND MINIATURES</b>	<b>17-20</b>
2.4 SET-UP	21
2.4.1 COMBAT GROUPS	21
2.4.2 SELECTING A SCENARIO	21
2.5 COMBAT RULES	22
2.5.1 MEASURE AND SCALE	22
2.5.2 THE COMBAT ROUND	22
2.5.3 ACTIONS	24
2.5.4 COMMAND POINTS	24
2.5.5 MOVEMENT	25
2.5.6 LINE OF SIGHT AND DETECTION	27
2.5.7 RANGED COMBAT	28
2.5.8 MELEE COMBAT	30
2.5.9 EVASIVE MANEUVERS	31
2.5.10 DAMAGE	32
2.5.11 COMBAT EXAMPLE	33
<b>CHAPTER 3: ADVANCED RULES</b>	<b>34</b>
3.1 INTRODUCTION	35
3.2 MOVEMENT OPTIONS	35
3.2.1 HULL-DOWN POSITIONS	36
3.2.2 MINEFIELDS	37
3.2.3 TOWING	37
3.2.4 STRUCTURES	38
3.3 DETECTION OPTIONS	39
3.3.1 ECM AND ECCM EFFECTS	39
3.3.2 STEALTH	39
3.4 COMBAT OPTIONS	40
3.4.1 AREA EFFECT WEAPONS	40
3.4.2 CALLED SHOTS	40
3.4.3 INDIRECT FIRE	41
3.4.4 INCENDIARY EFFECTS	41
3.4.5 BURST FIRE WEAPONS	42
3.4.6 DETAILED DAMAGE	44





# TABLE OF CONTENTS

0

3.4.7 INFANTRY RULES	47
3.4.8 WEATHER CONDITIONS	51
3.5 SHIRMISH RULES	52
3.5.1 ACTIONS	52
3.5.2 LOS	52
3.5.2 ROF WEAPONS	53
3.5.3 AREA EFFECT WEAPONS	53
3.6 HEAVY GEAR TOY COMBAT	54
3.6.1 INTRODUCTION	54
3.6.2 SETUP	54
3.6.3 MOVEMENT	54
3.6.4 COMBAT	55
3.6.5 DAMAGE	55
<b>CHAPTER 4: SCENARIOS</b>	<b>56</b>
4.1 SCENARIO GENERATOR	57
4.1.1 PREPARING THE SCENARIO	
4.1.2 MISSION DESIGN	
4.1.3 ASSIGN PRIORITIES	
4.1.4 SUBPLOTS	63
4.2 THE CAMPAIGN GAME	64
4.2.1 VICTORY POINTS	64
4.2.2 REPAIRS	64
4.3 SAMPLE SCENARIOS	65
4.3.1 TITLE	65
4.3.2 TITLE	65
4.3.3 TITLE	66
4.3.4 TITLE	66
4.3.5 TITLE	67
4.3.6 TITLE	67
<b>CHAPTER 5: PAINTING AND MODELING</b>	<b>68</b>
5.1 INTRODUCTION	68
5.2 TOOLS AND SUPPLIES	68
<b>COLOR SECTION: PAINTING MINIATURES, MAKING SCENERY</b>	<b>69-76</b>
5.3 ADVANCED MODELING TECHNIQUES	77
<b>CHAPTER 6: ARMY LISTS</b>	<b>78</b>
6.1 STRUCTURE OF MILITARY FORMATIONS	78
6.1.1 SQUADS AND COMBAT GROUPS	78
6.1.2 ARMY BUILDER SHEET	79
6.2 NORTHERN GUARD	80
6.2.1 BUILDING A NORTHERN FORCE	82
6.3 SOUTHERN MILICIA	83
6.3.1 BUILDING A SOUTHERN FORCE	85
6.4 COLONIAL EXPEDITIONARY FORCE	86
6.4.1 BUILDING A CEF FORCE	86
6.5 ROVERS	87
6.5.1 BUILDING A ROVERS FORCE	87
<b>CHAPTER 7: VEHICLES AND COMBAT UNITS</b>	<b>88</b>
7.1 INTRODUCTION	89
7.2 PERKS	90
7.3 FLAWS	91
7.4 WEAPON CHARACTERISTICS	92
<b>APPENDIX</b>	
VEHICLES AND INFANTRY DATACARDS	93-103
REFERENCE SHEETS (QUICK START)	104
REFERENCE SHEETS (ADVANCED RULES)	105
INDEX	
106-107	
UPCOMING MINIS AD	108



Produced and Published by



**DREAM POD 9**

5000 Iberville, Suite 332  
Montréal, Québec, Canada H2H 2S6

All artwork (c)1995-2001 Dream Pod 9, Inc.  
Heavy Gear, Heavy Gear Tactical Miniatures Rules, Terra Nova, Caprice,  
Heavy Gear, Silhouette and all other names, logos and specific game  
terms are (c) Dream Pod 9, Inc. All Rights Reserved  
Silhouette is a trademark of Dream Pod 9, Inc.  
Heavy Gear is a registered trademark of Dream Pod 9, Inc.

No part of this book may be reproduced without written permission  
from the publisher, except for short excerpts for review purposes. Any  
similarities to characters, situations, institutions, corporations, etc.  
(without salacious intent) are strictly coincidental. The use of the male  
gender throughout this manual should in no way imply the exclusion  
of the female gender or suggest that the game is intended exclusively  
for a male audience. It is our hope that the female gamers will find  
this book just as interesting as their male counterparts.  
Warning! Heavy Gear is a work of fiction intended to be used in a  
game context only. It contains elements which may be deemed  
inappropriate for younger readers. Dream Pod 9, Inc. does not  
condone or encourage the use of violence or weapons. Parental  
discretion is advised.

Dream Pod 9 can also be reached through the internet. Check the  
rec.games.mech.soc conference for support and information about  
Heavy Gear. You can also visit our World Wide Web page at <http://www.dpg.com/>  
Stock: DPG-106

Legal Deposit: February 2001  
Bibliothèque Nationale du Québec  
National Library of Canada

ISBN 1-996776-98-1  
Printed in Canada





## ASH AND YOU SHALL RECEIVE



Timothy's Headhunter plodded along, making its way through the thick undergrowth. As his V-engine churned away, a monotonous voice droned on in his ear; it was the voice of one of his subordinates, Dylan.

"So I'm saying, man, we're just the unluckiest bunch of thugs this side of the Maglev." Dylan had been going on in that vein for some time. Timothy really had to start cracking down on the radio protocols. He couldn't really blame Dylan, though, for his lax state. The Loaded Guns had seen barely a hint of action in their entire two-cycle-plus existence, and most of it had been training wargames.

"We probably wouldn't even see any action if we were dropped right onto Port Oasis," Dylan continued to rant. "Guess it's just our lot in life. War's humming along fine for two seasons and then they have to pluck all of us right on out of our productive, fulfilling careers. Careers I remind you that were helping the war effort. Don't get me wrong; I don't mind wearing the uniform. I'm proud of it, well maybe not as much as those Westerners, those folks are just strange, I'm tellin' you." He paused for breath — or effect.

"But my job was helping the war effort. Keeping our economy humming along and pumping in revenues, I tell you. But noooo, the ol' Mercantile Army has to decide that all reservists need to be called up. So, what do we get called up to do? First we sit on our own border picking the dirt out of our actuators for two whole cycles, and now we get to cut the grass for our Southern comrades. I'm tellin' you, don't get me wrong and all — I don't like the idea of getting shot at any more'n the next guy, but come on! What are we here for?"

"How many times does the Ranger have to tell you, speathead?" Timothy smiled at the sound of Wyk's voice. He might have been Mercantile like everyone else, but he wasn't of the same cut. Born in a small homestead on the border of the Badlands, he always stood out like a grassrunner in a pack of hoppers when he spoke. "We're here to help the meds help the folks with that Theban Blight."

"Well there you go!" Dylan droned on. It amazed Timothy how even when Dylan had excitement in his voice he was still as boring as watching a duel between two Anolises. "There's my point exactly! We're a trained military unit and what have they got us doing?! Running medical supplies like some overnight shipping company. What? They really think the Snakes are going to attack us for treating their own people?! Snakes might be fools but they have enough Dominionites in their ranks to know that would be the last thing you do when the enemy's footing the bill. We're just a waste out here when we could be doing some real fighting with the rest of the boys or, my personal preference, pursuing our careers back home! I'm telling you, I'm getting to the point where combat is looking like a nice change of pace."

Just then Timothy's comm set caught his eye. An incoming priority message on a secure channel, one he hadn't used in weeks. He flipped a few switches and gave the voice authentication. The message began to drill in his ear.

"Dylan..." Timothy opened up to his men for the first time that day. "Be careful what you ask for in the future."





## INTRODUCTION - 1.1

**Heavy Gear** is the first science fiction setting designed as both a roleplaying game and a tactical game from the get-go. It is an expansive story on a large scale. Although much of the story is told through the roleplaying element — such as the setting books, the **Life on...** series, and the storyline books — many of the most dramatic, unsettling and heroic events take place on the battlefield between opposing forces. A battle may be as small as a five-man squadron of Gears defending a village from bandit rovers in the Badlands, or it might be the incomprehensibly massive war between Earth's invading 8th Colonial Expeditionary Fleet and the defenders of Terra Nova.

The **Heavy Gear Tactical Miniatures Rulebook** focuses exclusively on the tactical game component of the **Heavy Gear** setting. Within this manual, you will find all the rules and vehicle stats you will need to play the tactical game. The book is divided into seven chapters. The first introduces the setting of **Heavy Gear** and helps players understand *why* their battles are being fought. The next two chapters provide the core and advanced rules for **Heavy Gear** tactical combat. Chapter Four focuses on tactical scenarios. Chapter Five presents painting and modeling hints for novice and skilled miniatures modelers alike. Chapter Six describes how to design forces from four major factions in the **Heavy Gear** universe. The final chapter and the appendix present stats for some of the most common vehicles. Additional tactical supplements such as the **Tactical Support** series and the **Vehicle Compendium** series expand on these rules and stats.



## WELCOME TO TERRA NOVA - 1.2

**Heavy Gear** takes place in the year AD 6137 — TN 1941 in the local calendar — on a distant planet called Terra Nova, a world colonized during the 52nd century by Earth. Terra Nova is one of the nine inhabitable planets discovered by Mankind outside the solar system during its dynamic renaissance after a terrible ice age. While the new world resembles Earth in many respects, it features indigenous life forms (of no more than animal intelligence) that represent an all-too-real threat to the unprepared colonist. Still, much of the Terranovan flora and fauna are edible and make survival of the human race in this inhospitable world possible. After so many centuries on this world, part of humanity has indeed found a new home.

Despite its similarities to Earth, the former colony has a very different calendar. Days last 36 hours, not 24, and a complete year (called a "cycle" on Terra Nova) is around 168 Terranovan days. One Terran year is equal to roughly 1.4 cycles. Tougher living conditions have slightly shortened the average Terranovan lifespan and forced people to mature much faster than on Earth. The term teenager, while referring to someone younger on Terra Nova than on Earth, is still someone between 12 and 18, but in cycles rather than in years. An young adult is still someone between 20 and 30. An elderly person is still someone above 70.

## Earth and its Colonies - 1.2.1

It began on Earth during the 47th century. After recovering from a terrible ice age and under the guidance of a global government, the Human Concordat, Earth discovered the existence of so-called "Tannhauser Anomalies," which paved the way to the Tannhauser Gate technology and opened the doors to distant worlds. Earth slowly explored a web of gates connecting a series of inhabitable planets. The first was Caprice; only marginally inhabitable, it became known as the "Gate World" because of the numerous space-time anomalies in its star system. In the 48th century, Terra Nova — a rich planet just waiting for colonization — was discovered. Settlement began in earnest.

Various corporations and government agencies set up shop on Terra Nova, staking claims on continent sized regions of the new planet. Terra Nova was more arid than Earth — its equator was a harsh desert and most of its water flowed underground — but the temperate and polar regions were teeming with life and the whole planet was rich in minerals. As colonization continued, settlers decided to stay beyond their corporate mandates and independent communities emerged. Some corporations even sold lands to their workers. Over the centuries, a thriving native population developed, made up of independent-minded settlers.

Terra Nova was not the only colony, however. Seven other planets were discovered and settled. Atlantis was a rich water world. Eden was a lush garden planet. Home became the corporate headquarters of its settlers and developed a strong economy. New Jerusalem became the new home of the Catholic Church. Utopia was the most successful colony, even challenging Earth's status. The insular Jotenheim and the prison planet of Botany Bay were less successful. All these worlds had inhabitants and all were thrown into chaos in A.D. 5790 (or TN 1454), when an anti-colonial movement swept Earth and the global political-economic structure collapsed.

Isolationists rose to power and the Concordat unexpectedly cut off its colonies. Millions fled back to Earth, but many more were stranded (or chose to stay) and forced to begin a new life without contact with the home world. On Terra Nova, the rugged spirit of independence would serve the people well and build a thriving and diverse world — but one that knew far too much bloodshed.



# INTRODUCTION

1



## 1.2.2 - Regions of Terra Nova

Because Terra Nova is so arid, there are no seas to separate nations. Rather the planet is divided into three regions: the mountainous and temperate northern hemisphere, the luxuriant and tropical southern hemisphere; and the Badlands, which stretch out as a thick desert band about 1000 kilometers north and south of the equator. While Terranovans first grouped into city-states and then into leagues, each hemisphere is now dominated by a super confederacy. The Badlands is the battlefield between them.

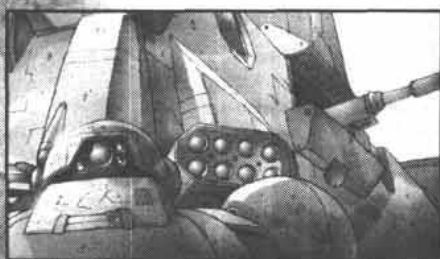
### ◆ The North



The northern hemisphere is united under the Confederated Northern City-States (CNCS), a relatively equal partnership between three nations: the Northern Lights Confederacy (NLC), United Mercantile Federation (UMF), and Western Frontier Protectorate (WFP). Although conflicts between these nations do occur, they generally cooperate. They are bonded by a mutual dislike (and fear) of the aggressive South and by an undercurrent of religious sentiment. Indeed, most Northerners are members of the Revisionist Church — a faith born on Terra Nova right after Earth abandoned the planet. In TN 1941, these sentiments still run high. Although the Interpolar War has ended, the South still appears dangerous, though Earth appears more dangerous still.

The military interests of the North are defended by the Northern Guard, a professional army with recruits from all three leagues.

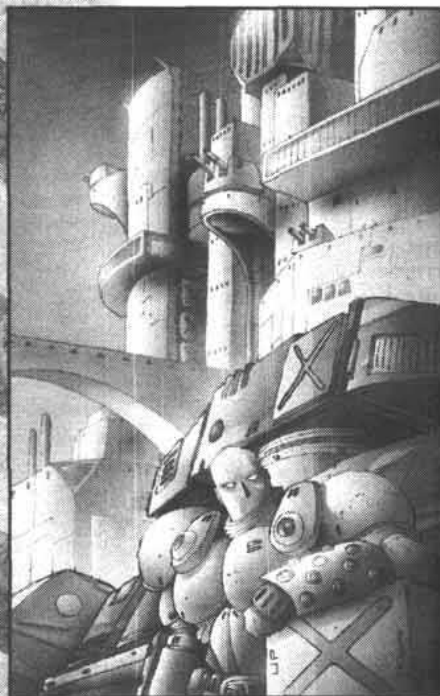
### ◆ The South



The southern hemisphere is ruled by the Allied Southern Territories (AST), but this is nothing but a puppet regime for the powerful Southern Republic (SR). Through the AST, the Republic dominates the various city-states of the Mekong Dominion (MD), Eastern Sun Emirates (ESE) and former Humanist Alliance (HA). In TN 1941, this domination is less than certain. Several cities are in open revolt and Republican troops are busy keeping the peace in many others. Though the Southern Republic managed to subdue the Humanist Alliance by engineering a plague designed to kill its ruling class, remnants of the now-annexed nation continue to struggle to liberate it.

The military interests of the South are currently in the hands of the Southern MILICIA, a conscript army drawn from all Southern leagues.

### ◆ The Badlands



The Badlands, unlike the polar confederations, are fractious and form no political entities to speak of. This equatorial wasteland is home mostly to nomadic traders, Rovers, hard-boiled homesteaders and small city-states and settlements. Until TN 1939, only one city-state in the Badlands rivaled the polar confederations with its power and prestige: Peace River, a city built around Paxton Arms, the planet's most important weapons manufacturer. Paxton Arms remained neutral in the North-South conflicts, providing equipment to everyone indiscriminately. Peace River's neutrality was shattered on the second day of Summer, TN 1939. On that terrible day, when it was to have served as the site of negotiations to bring an end to the Interpolar War, unknown agents detonated an antimatter bomb in the heart of the city, destroying it and more than 200,000 lives. The War ground to a halt a week later; the planet was too stunned to continue fighting. Although Peace River is gone, Paxton Arms survives. The corporation is in the process of rebuilding, starting with the construction of a new city-state in the Badlands. The fragmentary remains of the Peace River Defense Force now patrol the new construction site, keeping Rovers away from the work crews.

Almost on the other side of the planet, around the equator, a new coalition (NuCoal) of small city-states has recently been formed around Port Arthur and Prince Gable, the seat of the NuCoal Council of Trade. While NuCoal does not have a military component, the Arthurian Korps ensures that it comes to no harm and that its territory is respected by the polar confederations. Following the destruction of Peace River, NuCoal quickly began to fill in the power gap and is fast becoming a major power.

There are several other city-states in the Badlands, most of which serve as refuge for renegade soldiers or simple civilians fleeing the constraints of life in the hemispheres. Notorious among those cities, Khayr ad-Din — often referred to as the "City of Trash" because it was built in the middle of a trash dumping area in the Badlands — is where ex-Gear pilots go to become Duelists in the arenas. During the Interpolar War, even the Duelists of Khayr ad-Din took action, forming their own force, the Khayr ad-Din Army. During the War, KADA, along with the Arthurian Korps, kept a major swath of the Badlands relatively safe from the predations of the polar confederations and the various Rover bands.



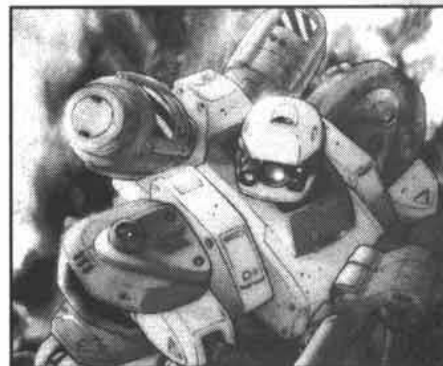
# INTRODUCTION

1

## A Short History of Warfare - 1.2.3

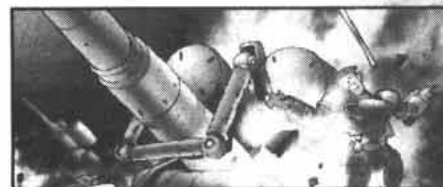
With only rare exceptions, Terranovans have been busy warring with each other ever since Earth abandoned them. In the cycles following Earth's departure, desperation led many Terranovans to raid their neighbors. Bands of roving bandits (simply called "Rovers") turned into outlaw armies led by vicious warlords. Communities became fortified city-states to defend themselves against these attackers. Powerful city-states went to war against lesser city-states, often conquering and subsuming them into their own political structure, forming leagues of allied powers. In the polar regions of the planet, leagues joined forces (sometimes against their will) to form the two great polar meta-nations.

Folklore has it that one day, a now-forgotten Badlander had had enough of the pillaging and constant harassment of the Rovers, and he welded some armor plates and machine guns to a construction walker vehicle. When the Rovers returned to harass his family and take over his homestead, he taught them a lesson in survival and they never came back. Thus was presumably born the first Gear. Over the centuries that followed, it became a recognized tool of war and was perfected by several militaries to eventually take its rightful place on the battlefield.



As the city-states grew, they came into conflict with each other and warfare began on a greater scale. Soon enough, cities began to conquer each other. In the South, the city-state of Marabou conquered its neighbors and founded the Southern Republic. In the North, cities allied by religious outlook conquered those afraid of the new Revisionist faith. Other cities entered alliances peacefully, often to defend themselves against aggressive neighbors. During the late 16th century-early 17th century, North and South respectively formed the Confederated Northern City-States and the Allied Southern Territories.

### Wars of Unification ◆



Ever since the founding of the AST, the two hemispheres have been in a state of near-constant conflict. The Badlands have become an endless battlefield, site of countless skirmishes for mineral wealth and tactical positions. The TN 1720s saw St. Vincent's War, the worst global conflict yet. A Badlands skirmish released a deadly biological agent that killed millions of children across the globe and maimed many others. Polar governments dealt with the tragedy by blaming their enemies and the public called for blood. For six cycles, the planet was caught in an all-out war that ended only when the global economy collapsed under the strain. After a period of reconstruction, however, the old skirmishes of the "cold war" began anew.

### Interpolar Warfare ◆



It took the sudden reappearance of Earth to bring North and South together. In TN 1913, Terra Nova was again on the verge of war when the Colonial Expeditionary Force (CEF) arrived, an invasion force from a newly imperialist Earth. Faced with an enemy wielding 400,000 highly trained men and supersoldiers (the GREs) and cutting edge technology, Terranovans rallied together and fought a desperate battle for freedom. The CEF thought the defenders would buckle rapidly, little realizing that they had been training for war for generations. It was a hard-fought battle that cost many lives and saw much territory in enemy hands, but in TN 1917 the CEF was kicked off Terra Nova. The unified planetary forces celebrated; they had defeated a powerful enemy and put aside their own differences — or so they thought.

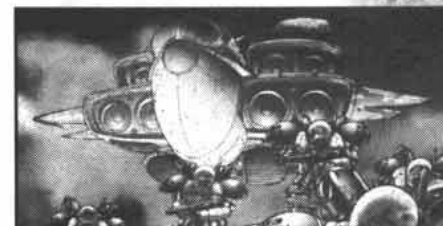
### The War of the Alliance ●



The post-War period was supposed to rebuild Terra Nova, but old tensions rapidly ground away all hopes for peace. In TN 1936, the Northern city-states declared war on the Southern Republic after the assassination of the North's greatest religious leader, Thor Hutchinson. The Interpolar War nearly tore apart the planet, and covert agents of the Earth used the opportunity to worsen the situation.

The war ended three cycles later with the destruction of Peace River. The only force holding the planet together now is the very real threat of the return of the CEF. The Westphalia Cabinet, an organization of political and military figures who are disgusted with the actions of their kin, has formed special forces strike teams, the Black Talons, to probe the CEF and determine its next move.

### The Interpolar War ◆



7



# INTRODUCTION

1



## 1.3 - HEAVY GEARS

Heavy Gears are one of the most significant advances in the field of military technology in the past millennium. Although combat walkers were used as far back as the early third millennium, they were always cumbersome and too easily targetted enough to survive the high-tech battlefield, relegating them to support and engineering duties. This changed with the development of the Heavy Gear.

The Battle of Pioneer of TN 1669, during which the Northern Lights Confederacy and Western Frontier Protectorate tried to put an end to expansionism on the part of the United Mercantile Federation, saw the birth of the combat walker on Terra Nova. Heavy Gears (often called Gears or HGs for short) have participated in every major conflict on the planet since then. They played an especially critical role in the War of the Alliance, when combined Terranovan forces defeated the invading Colonial Expeditionary Force from Earth. Tacticians point out, however, that Gears still depend on support from infantry, heavy armor, artillery and air support — they are not invincible super-weapons.

The Gear is actually a compromise between an infantryman's flexibility and an armored vehicle's resilience and firepower. It is, in effect, a one-man IFV (Infantry Fighting Vehicle) which protects the soldier and allows him to carry far more payload and armor than an ordinary trooper. Mass-produced, Gears are cheap enough to form a major part of the modern army. They are extensively covered in the first volumes of the **Vehicle Compendiums** series (DP9-025 and 026) and in the **Technical Manual, 2nd edition** (DP9-104).

### 1.3.1 - Cockpit and Controls

All Gears can carry one man in a cockpit located in the torso. Because of the space required by the machine's internal mechanisms, all Gear cockpits are cramped, some even limiting the size of the pilot. A sturdy seat occupies the center of the torso. Most of the spare space is used for electronic systems, leaving little to no room for an ejection mechanism.

The configuration of the instruments depends on the designers of the machine. All are equipped with two joysticks and two foot pedals, but buttons and readouts vary immensely, even between variants of the same model. The joysticks are fairly complex, sporting several thumb switches as well as finger-activated triggers. Combinations of switch, trigger and stick movements are converted into body motion routines called Macromoves (or simply "Macros") by the CPU, much like a combat video game.

Early Gear designs had holographic screens and HUD to display battle information. Newer models use Virtual Reality technology instead. With special laser-crystal screens mounted inside a slightly enlarged helmet, the VR system relays information treated by the CPU and its visual sub-processor to the pilot. For all intents and purposes, the trooper can see as if the cockpit were open to the outside. Relevant tactical and battle readouts are superimposed over the landscape by order of priority. Small movement indicators and ID tags enable the pilot to keep track of many targets and can even identify mission objectives and navigation waypoints.

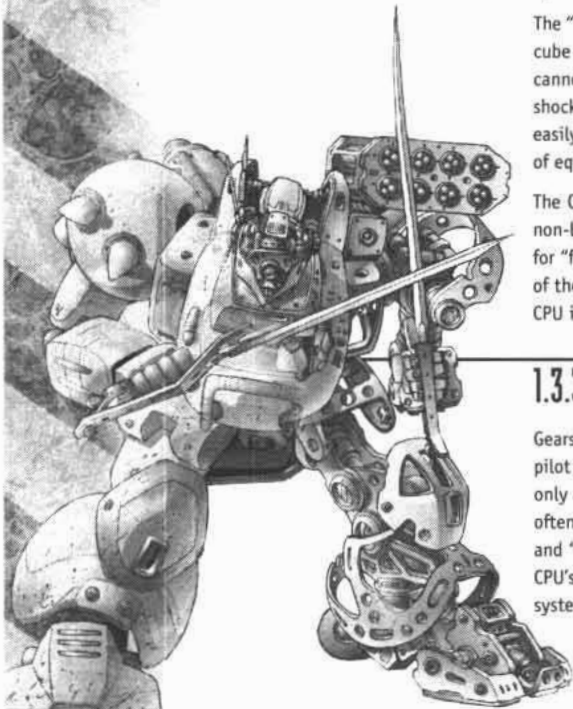
### 1.3.2 - Central Processing Unit

The "brain" of the Gear is the Central Processing Unit, or CPU for short. It is a small, semi-transparent cube (15 cm<sup>3</sup>) filled with an intricate molecule-sized neural network. This network is so complex it cannot be repaired if damaged and must be replaced by a new unit. It is encased in a special shockproof polymer or composite case which is normally installed under the pilot seat. It can be easily removed by reaching under the seat and releasing the connections and is always the first piece of equipment salvaged when a Gear is destroyed or damaged beyond repair.

The CPU's neural network is able to learn and establish new connections within itself. This allows non-linear logic processing, as new parallel paths are created to handle computing tasks. This ability for "fuzzy," or open-ended, logic makes the CPU much better at handling the complex body motions of the humanoid Gear it controls than other "standard" neural network/computers. A standard Gear CPU is not self-aware, although it often gives the illusion that it is.

### 1.3.3 - Sensor System

Gears carry a variety of sensor systems to allow the CPU to relate to its environment and help the pilot in battle. Since Gears are supposed to be inexpensive and easy to maintain, most designs have only a minimal sensor package. The primary sensor system is a small cluster of digital omniscameras, often placed in the Gear's head. Most models use only one main camera, relying on laser rangefinders and "dumb" stereoscopic cameras for range and depth measurements. The data is processed by the CPU's visual sub-processor, then the CPU combines this information with that from the other sensory systems and uses it all to maintain the Gear's balance and perform the action required by the pilot.



8



## Powerplant - 1.3.4

Most Gears use a very compact, internal combustion engine called a V-engine. So named because of its shape, it is a twin drive, air-cooled, highly efficient powerplant with minimal moving parts. The core of the V-engine is a support axle made out of high-strength alloy steel. It is in fact only a bent bar of metal and is the strongest part of the engine. Two combustion chambers are slipped over this support axle. These chambers, thanks to their peculiar internal shape, serve as piston housing, distributor cap, lubrication system, and cooling fan — all in one. The engine configuration thus provides two drive shafts, each delivering equal horsepower. The end result is a fairly compact engine which is rugged, easy to manufacture, and easy to repair. The V-engine's ability to run on a variety of fuels and its small number of moving parts make it perfectly suited for Gears.

A few rare Gears models are powered by electrical engines fed by a bank of ambient-temperature superconductive coils. However, the high cost of such a system and its inherent limitations makes it unpopular except in specialized stealth units or as a backup system. The short operation range is also a problem which has yet to be solved.

## Transmission - 1.3.5

Transmission is a catch-all term covering the various pistons and motors that move the machine around. All Gears use a combination of hydraulic and electrical power to move their limbs. They also use two types of actuators, hydraulic pistons and rotors. The hydraulic system is fed by one main pump connected to the engine through a computer-controlled gearbox to maximize efficiency. The second drive shaft of the engine is used for an electrical generator that powers booster pumps placed in the lower body. Since the pump and the generator extend above the shoulders of the Gear, they are heavily armored. Valves, overflow reservoirs and heat exchangers are also part of the circuit and are attached to the basic frame of the Gear. The fluid used to transmit the motive power is a highly advanced polymer compound which is much better than oil for transmitting load. It is distributed throughout the Gear's body by feed lines made of duraplast, a composite plastic that can contain high pressures.

## Secondary Movement System - 1.3.6

Many Gears have more than one transmission system. This Secondary Movement System, or SMS for short, usually takes the form of wheels or treads placed under the feet of the machine. Although the basic concept may sound ridiculous, one cannot deny the immense increase in mobility, speed and efficiency — not to mention versatility — this brings to the Heavy Gear weapon system.

Most often, the wheels (or treads) use small electric motors powered by a generator attached to one of the V-engine's drive shafts. Special software built into the CPU changes the equilibrium equations to handle high speed "skating" motions. This function can be retrofitted, but is usually less efficient than a built-in software. Because of the low ground clearance of the wheels, the SMS is only useful on flat, hard ground like packed sand or concrete. Some SMS have larger wheels which can be used over broken terrain, but the price of this increased versatility is a bigger, thus more vulnerable, movement system.

## Weapons - 1.3.7

Gears are rarely designed with built-in weaponry. Its humanoid shape, complete with grasping manipulators, makes the Gear a very versatile tool which can support a variety of offensive systems. Nonetheless, it is an accepted practice to standardize a Gear's armament for ease of maintenance, going as far as altering the unit's identification code to reflect its current payload.

The typical Gear armament consists of one main weapon, usually hand-held in a rifle or pistol-like form. Rapid-firing, self-loading projectile weapons are preferred. All Gears possess hardpoints on various parts of their body to accept additional equipment and armament. This often takes the form of either support items (smoke launchers, ECM generators, etc.) or a limited use, hard hitting weapon for a one-shot-kill capacity such as an unguided rocket pack. This equipment can be simply bolted on, with control and power wiring being routed either through the armor or alongside it.

## Armor - 1.3.8

The average Gear carries several centimeters of composite armor. This affords them the same general level of protection as an armored infantry fighting vehicle, which is more or less what the Gear is: a one-man Infantry Fighting Vehicle.

Gears use the same composite armor as all other war vehicles in the 62nd Century. Unfortunately, their humanoid shape, so versatile and maneuverable, here plays against them. Because the limbs of the Gear must have flexibility, mobile armor plates are unavoidable. Some clearance is necessary, meaning that one cannot just heap on plates or simply add on thickness. All this reduces the potential stopping power of the material used for the armor, leaving weak points which can be exploited by a skilled gunner.





## ANGEL ROCKS

The rough re-entry had torn the ship apart, but surprisingly large sections had survived both the best efforts of the Terranovan space defenses and the fiery crash. Now the partial remains of what had once been a sturdy orbital transport bearing the insignias of the Colonial Expeditionary Forces lay dead in the sands of the Badlands, slowly decaying under the merciless rays of the sun.

From the open cockpit of his Kodiak, Ranger Slovak looked upon the wreck with satisfaction. This was much, much better than he originally hoped for. The intelligence reports had grossly underestimated the resilience of CEF technology, it seemed.

"The dust must have cushioned the impact. Guess we got lucky."

From where he was sitting near the foot of the war machine, Sergeant Idomenez piped up: "You sure this' the right one? It looks damned good for a thirty cycles-old wreck."

"Don't let the lack of external damage fool you, Sergeant. Ceramite doesn't rust, and there's no moisture here anyway for it to do so." His words brought his parched throat back at the forefront of his mind, and he took a sip from his canteen.

Idomenez looked away. He had long ago exhausted his own water reserve. "Whatever. Them space things aren't my specialty. All that interest me are the rocks."

"Of course," replied Slovak, slightly annoyed. Idomenez had many qualities — discretion and a total lack of scruples chief among them — but also showed an annoying lack of culture and education. He would never, for example, had the contacts and the smarts to connect the ranting of the old, wizened man sitting in the Wounded Knee bar with the hulk now lying in front of him. He would probably have ignored the story about the cache of natural diamonds, too.

Slovak sighted. Without Idomenez and his band of thugs, he would not have been able to pull this operation off, anyway. Might as well accept their presence and move on.

"Did they find anything yet? HQ's going to wonder what we're doing so far off the patrol route." It had taken Slovak weeks (and several cases of strong alcohol) to bribe the duty officer into giving him this assignment — would he stay bought? Well, the alleys of Wounded Knee were never too safe at night to start with, and one of Idomenez's troopers *was* talented with a knife...

"Sir! They found it!" One of the troopers had emerged from the shadow of the wreck, a medium-sized metal box under the arm. The group cheered but no one left his post. Slovak smiled: so far, so good. He had honestly expected someone to make a play for the diamonds. He slowly took his hand off his pistol.

A sound on the horizon made him look up. Dust clouds rose above the desert floor, loudly proclaiming the arrival of another group. Whether they were after them or the diamonds mattered little — they were obviously out for blood.

So much for so far, so good.





# QUICK START RULES

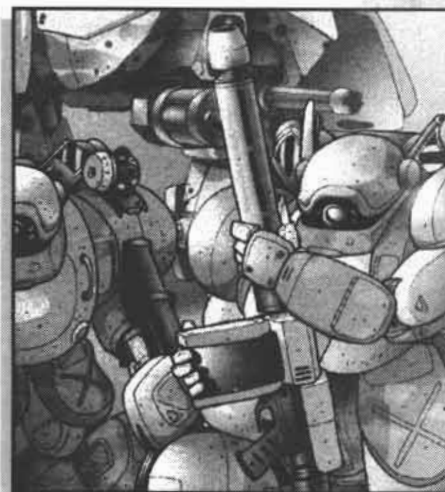
2

## QUICK START RULES - 2.1

The tactical component of **Heavy Gear** is a game of mechanized combined arms combat in the far future. Tanks, infantrymen and walking vehicles battle each other for supremacy on the battlefield and to fulfill the complex machinations of their political masters. Players take on the role of commanders for small — or sometimes quite large — mechanized armies, controlling the movement and actions of the units under their command.

This chapter presents a set of “quick start” rules designed to familiarize new players with the Silhouette game engine. Their main purpose is to get a game up and running in virtually no time at all, so that players can set up and enjoy miniatures battles almost as soon as they open this book.

These quick start rules are the core of the tactical game engine; additional rules (found in Chapter 3) add detail and complexity to the game, but this core set is streamlined to make learning simpler. As players become better acquainted with **Heavy Gear**, they can add whichever advanced rules they choose to bring the game to a level of detail with which they are comfortable. To start out, however, these core rules introduce the basic game mechanic (section 2.3) and examine the vehicle datacards in detail. They explain the concept of “combat groups” to help units operate as organized forces. They introduce round-based combat and how the system handles it (section 2.6). Players become familiar with “Command Points” that help mitigate the effects of pure chance. The quick start rules introduce movement, combat activity and a simple damage-resolution system that speeds play along.



## Game Overview - 2.1.1

**Heavy Gear** miniatures battles generally take place on battlefields that represent planetary surfaces — particularly planetary surfaces with atmospheres. Space colonies and bases on airless worlds are few and far between in the **Heavy Gear** universe; the ability to travel interstellar distances in the blink of an eye means most of humanity's scattered civilizations are on planets that appear at least cursorily similar to Earth. As a result, most of humanity's battles take place on such worlds as well.

On Terra Nova, these battles generally feature quite prominently the **Heavy Gear** armored walkers (see section 1.3 *Heavy Gears*, on pages 8-9). Other civilizations in the **Heavy Gear** universe use similar walkers: the CEF, for example, recently began fielding their own derivative of the Gear, the deadly Battle Frame that uses Earth's advanced technology (controlled thrust hover systems and particle accelerator weaponry) combined with the rugged durability and adaptability of a walker. The settlers of Caprice have used Urban Combat Mounts for centuries, developed independently of the Gear along a parallel “evolutionary” track; these vehicles are somewhat smaller than Gears and feature simpler electronic control systems — as a result, they are somewhat more awkward in military combat than Gears or Frames. The humanoid walking vehicle started out as a rugged tool for colonization; it is likely that other worlds have made use of this technology as well.

Humanoid walkers are far from the sole participants in battles within the **Heavy Gear** setting, however. Battles that are “realistic” to the setting involve a wide variety of units. Larger walking combat machines — “Striders” on Terra Nova and Combat Mounts on Caprice — play vital roles as fire support and assault units. Tanks — conventional as well as the CEF's hovertanks — pound targets with seemingly endless barrages of firepower. Artillery pieces provide fire support from over the horizon, their munitions often guided to their destinations by forward observers in small scout cars. Squads of infantrymen still participate in humanity's great struggles, too, and they still excel at taking and holding territory. (Most players never forget the first time an enemy infantry unit dashes their careful plans to dust as it wipes out a much larger, more heavily armored unit.) Armored fortifications, levitating battleships, sea-going destroyers, deep-sea submarines, nimble jet fighters, ponderous bombers, titanic space ships, remote-controlled battle drones — the Silhouette game engine can handle them all (and more). For the purpose of this game set, however, they will be ignored for the time being.

### Roleplaying and Hex-Based Wargaming

This book provides rules to play **Heavy Gear** as a tactical tabletop miniatures game, but other options for gameplay in the **Heavy Gear** universe exist. Players can take on the role of a character living adventures on Terra Nova and the other colony worlds with the roleplaying game. The roleplaying rules share the same core system as these miniatures rules, and players can thus create their own characters and bring them to fight on the tabletop as pilots and other technical crew of the vehicles.

Though it is visually spectacular, a full-fledged miniature battlefield requires a major investment in both time and material that may not be suited to all gamers. It is possible to play **Heavy Gear** on a standard wargaming hexagon-covered map using simple cardboard counters — and, indeed, this is how the game got started. The same rules apply, though there are a few exceptions; most of these exceptions are related to movement and line of sight. The **Second Edition Heavy Gear Rulebook** (DP9-101) covers both the roleplaying game and the hex-based tactical game.





# QUICK START RULES

2



## 2.2 - WHAT YOU NEED TO PLAY



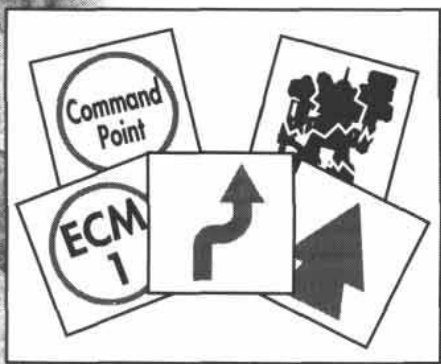
**Miniatures:** this version of Heavy Gear is meant to be played as a tabletop miniatures game. Dream Pod 9 produce a full line of vehicle miniatures and other combat units, as well as model terrain kits. You can use generic science fiction miniatures if need be; it is quite possible to play the game with nothing more than labeled counters or scraps of paper. See page 70 for pictures of the miniatures.

**Ruler:** a ruler or tape measure will be required to play the game. The units used in this rulebook are in inches, but Players may use centimeters if they so desire (using centimeters will give more table space, but makes crowded close-range combat somewhat more difficult). An arc ruler, to measure firing arcs and turn radii, will also come in handy.

**Dice:** each player will need between two to four six-sided dice for making combat rolls, Skill rolls and other random tests.

**Playing Field:** Heavy Gear is a tabletop game, and thus has no actual mapboard upon which to move the playing pieces. All that is really needed is a large open surface and a tape measure or ruler, although many enhancements may be added to spruce up the field. For example, hills may be represented by pieces of foam, Styrofoam or by actual rocks. Small boxes or other containers can represent structures, or purpose-built miniatures can also be used. Cotton can be used for dust or other particulate clouds, like smoke. Minefields can be represented by cardboard disks of the appropriate diameter. See page 73 for more on terrain modeling.

### ◆ COUNTERS



They are not absolutely required, but counters may come in handy in the course of a game to keep track of things. You can make your own or download and print the file from Dream Pod 9's website.

**Command Point Counters:** these come in two varieties: Initiative and Tactical, and are given to Players to help them remember how many points they have left to spend (spare dice can also be used). See page 24 for more on Command points.

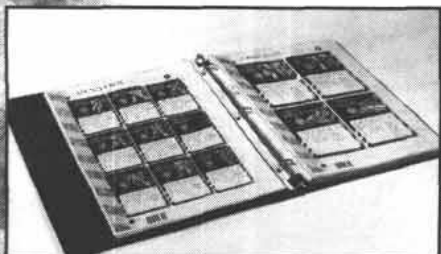
**Top Speed Counters:** used to mark a unit as using Top Speed movement. See page 25.

**Evasive Maneuver Counters:** these are used to signify that a unit is evading. See page 31.

**Damage Counters:** there are two types of damage counters (Light and Heavy), both of which may be assigned to a single unit at once. See page 32.

**ECM Counters:** these are placed on units that are actively using electronic counter-measures to block enemy command and control. ECM rules are found in Chapter 3, Advanced Rules — see page 39.

### ◆ BOOKKEEPING



Each unit type in **Heavy Gear** has its own datacard that provides all of the information necessary to use that unit in gameplay. One can either use the datacard reference sheets included in this rulebook or keep a stack of the datacards that will be included with each Heavy Gear miniature. If special equipment or extra weapons, like grenades or missiles, are installed on a unit, the datacard can be altered to note this; otherwise, the datacard need never be written on, and a single datacard is sufficient to provide data for any number of that type of miniature, so long as they are all identically equipped. Blank datacards and other support material will be available as computer files of various types at Dream Pod 9's Web site (<http://www.dp9.com>).

The best way to use datacards, however, is to place them in a document binder with transparent plastic sleeves. Erasable markers, such as those pictured at left, can then be used to mark damage and carried ordnance directly onto the sleeve-protected datacards, without any permanent effects.

Keeping all the cards in one binder also makes them easier to organize and store. For example, a Combat Group (see page 21) can be stored in a single sleeve. Getting an army together is then a simple matter of looking through the binder and selecting squads. The task is made even easier if a slip of paper with the group's point value and other special data (such as earned experience and pilot skills) is slipped in one corner of the sleeve.

Binders and transparent sleeves can be found at the local office supply stores, but game stores generally carry them as well for game cards storage. The larger datacards will not fit those sleeves, but full page document sleeves or quarter-page photo sleeves will hold them perfectly.



# QUICK START RULES

2

## SILHOUETTE BASICS - 2.3

Silhouette is the adaptable, realistic, effects-based game engine that is behind the **Heavy Gear** miniatures tactical wargame. Silhouette can seamlessly combine roleplaying and tactical elements; a roleplaying character operates under exactly the same basic game mechanics as a Heavy Gear walker or a massive Gateship. In fact, Silhouette is so versatile it serves as the core of a dark fantasy game, a space-based science fiction game and a pulp genre game as well as **Heavy Gear!** Because it is effects-based, the actual details behind an effect are not as important to the mechanics of the system as the end effect is. For example, a target designator need not be a laser designator in order for it to work in Silhouette; it need only designate targets for incoming guided munitions.

## Dice and Die rolling - 2.3.1

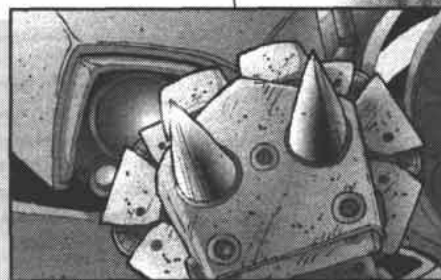
The Silhouette system uses everyday **six-sided dice** to add a random element to the game. These are sometimes referred to as '1d6' in the rules, '2d6' for two dice, '3d6' for three, and so on. You can find these dice in most boardgames or at your local hobby store.

When two or more dice are rolled simultaneously, their results are *not* added together. Instead, the highest result is considered to be the outcome of the die roll. If more than one '6' is rolled, each extra '6' adds one (1) to the total. If every die rolled turns up '1,' the die roll is a Fumble and counts as an overall result of zero and no modifiers may change this value. Unless specifically mentioned otherwise, all die rolls work in this way.

The totals of die rolls are often influenced by modifiers. Modifiers are added to the total of a die roll. If negative modifiers lower the total below zero, the final result is always zero and cannot go any lower. Modifiers are not applied to Fumbles.

### Die Rolling Examples

- Example 1:** Albert rolls two dice. The dice read 3 and 5. The total of his die roll is 5 (the highest individual die result).
- Example 2:** Beth rolls five dice. The dice read 1, 6, 4, 6, and 6. The total of her die roll is 8 (the highest roll + 2 for the two extra sixes).
- Example 3:** Charles rolls three dice. All three dice read 1. He has Fumbled the die roll. His total is considered to be 0.
- Example 4:** Dana rolls two dice and has a +2 modifier. The dice read 1 and 5. The total of the die roll is 7 (highest roll + 2).



## Ratings, Skills, and Skill Tests - 2.3.2

In **Heavy Gear**, pilots and crews are rated in terms of their **Skills**. A Skill is a learned talent or ability which is often improved with practical experience. It is a common practice to rate a pilot in terms of his general training. For example, a pilot rated as Veteran is assumed to have an average Skill level of 3 in the basic tactical game Skills (Piloting and Gunnery).

The number of dice rolled by a combat unit in a Skill Test (Piloting, Attack, Defense, etc.) is equal to its Skill, plus any applicable modifiers. The first number is the Skill level, the number after the slash an Attribute modifier. Ignore the Threat Value multiplier column for the time being. By default, most tactical games should be played with Qualified crews (Level 2).

### Crew Skill Level Values

Crew Level	Type	Piloting	Gunnery	Electr. Warfare	Leadership	Tactics	TV Mult.
1	Rookie	1/0	1/+1	0/0	0/0	0/0	x0.25
2	Qualified	2/0	2/+1	1/0	1/0	1/0	x1.00
3	Veteran	3/+1	3/+1	2/0	2/0	2/0	x2.25
4	Elite	4/+1	4/+2	3/+1	3/0	3/+1	x4.00

## Margin of Success/Failure - 2.3.3

Most attacks and tactical actions in **Heavy Gear** require Skill Tests. These consist of a die roll whose result is compared to another die roll. The difference between both rolls is called Margin of Success (MoS) for the winner and Margin of Failure (MoF) for the loser. If the roll is a tie, the MoS is zero. For instance, a Qualified attacker uses his Gunnery Skill and rolls two dice: a '1' and a '4.' The defending Veteran defender rolls three dice for his Piloting Skill: a '2,' a '3,' and a '6.' The attacker has a MoF of 2 and fails to hit his opponent.





## 2.3.4 - Vehicle Datacard

Each vehicle has an appropriate datacard that details the necessary statistics for game play. These sheets allow clear tally of damage and other important information. The infantry datacard is similar but is discussed in the infantry section, page 47.

### • ARMOR

**Armor** represents the toughness of the vehicle's protective hide and general structure. The Light damage, Heavy damage, and Overkill Thresholds are equal to one, two, and three times this base value, respectively (see *Damage*, page 32).

### • THREAT VALUE

Everything on the battlefield has a **Threat Value**. It reflects a combat unit's offensive, defensive and miscellaneous abilities. The higher the number, the more powerful the unit is in that particular field. Games can be easily balanced by allocating an equal amount of points to each side.

### • SIZE

Every vehicle is assigned a **Size** value based upon its mass. Size values are primarily used to determine the outcome of physical attacks like ramming attempts. The following table lists the mass range that each Size value roughly represents.

### • SIZE TO MASS CHART

Size	Mass in Tons	Size	Mass in Tons
1	0-0.08	6	4.5-7.3
2	0.09-0.3	7	7.4-10
3	0.4-1.1	8	11-16
4	1.2-2.4	9	17-22
5	2.5-4.4	10	23-30

### • FIRE ARCS

**Fire Arcs** determine whether or not a given weapon can be aimed at a target. There are six standard arcs: Forward (F), Right (Rt), Left (L), Rear (Rr), Fixed Forward (FF) and Turreted (T). For a visual representation of the fire arcs, turn to page 27.

### • FIRE CONTROL

**Fire Control** is a catch-all category for targeting devices and stabilizers. This rating is used as a modifier to all attack rolls.

### • SENSORS

**Sensors** rates the quality of a vehicle's detection systems. It covers all systems, regardless of their actual nature.

### • SPEED

A vehicle's speed is translated directly into **Movement Points** (MP). Moving across terrain costs a certain number of Movement Points. Each vehicle can move at two different rates. The first one, called **Combat Speed**, is the highest speed a vehicle can achieve and still participate efficiently in combat. The number after the slash, **Top Speed**, is twice as fast as **Combat Speed**, but the vehicle's finesse is strongly impaired. Gears can use both the Walker and Ground movement types (first and second arrows).

### • CREW

Combat vehicles always carry a **Crew**. In high-tech vehicles, robotic systems replace live crew members, but they are considered crew nonetheless. Additional personnel increases the number of actions a vehicle can perform during a combat round. The blank rectangle at the right of the card is to write down the Skill level.

### • PERKS AND FLAWS

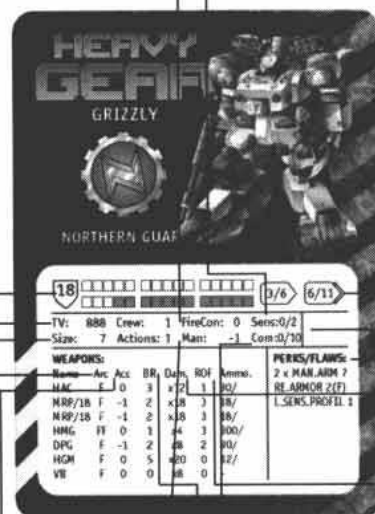
The **Perks and Flaws** section lists any special characteristics the vehicle has that affect its performances on the battlefield. See page 90 for the full descriptions.

### • DAMAGE MULTIPLIER

The **Damage Multiplier** (Dam) of a weapon is a rating of how destructive the weapon's attack is. Damage Multipliers work on an exponential scale, not a linear one: a Damage Multiplier of x10 is four times as effective as a Damage Multiplier of x5!

### • RATE OF FIRE

The **Rate of Fire** (ROF) of a weapon is listed under the weapon list when applicable. A weapon with an ROF of 0 fires a single shot; it expends one round of ammunition per attack. Weapons with ROF of 1 or more are rapid-loading and can fire many more shots during the same interval of time (see page 42).



### • MANEUVER

**Maneuver** indicates a vehicle's ease of control and its responsiveness to sudden changes of direction. The value is used as a modifier to all Piloting Skill rolls, including Defense rolls.

### • ACCURACY

The **Accuracy** (Acc) of each individual weapon affects the odds of successfully damaging opponents. It is applied as a modifier to each attack roll made with the weapon. Accuracy can drop because of damage (see *System Damage*, page 17).

### • COMMUNICATIONS

**Communication systems** combine radios and laser transmission devices. They are especially important to allow units to talk to each other during battle and to coordinate their fire, or to transmit enemy coordinates to friendly artillery fire.

### • RANGE BANDS

Each weapon has four **Range Bands**: Short (S), Medium (M), Long (L) and Extreme (Ex). The Short Range is also called the Base Range of the weapon; the Medium, Long and Extreme ranges are equal to twice, four times and eight times the Base Range.



# QUICK START RULES

2

## Large Vehicle Datacard - 2.3.5

Some of the vehicles are larger and more complex, and thus require a little more room for their game statistics. Their datacard may be a little larger, but it function in essentially the same way as the smaller version.

They will not fit in the standard collectable card binders, however (see page 12). Full page document sleeves or quarter-page picture sleeves should do the trick, however, and will protect them just as well.

**HEAVY GEAR**  
NAGA  
SOUTHERN MIL

23 4/7 6/12

TV: 1645 Crew: 2 FireCon: 0 Sens: 0/4  
Size: 8 Actions: 2 Man: -2 Com: 0/12

**WEAPONS:**

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
MAC	F	0	3	x10	1	200/-
ATM	F	1	3	x25	0	4/-
ATM	F	1	3	x25	0	4/-

**PERKS/FLAWS:**  
HEAT ARMOR 2  
TARGET DESIGN 1  
3 x TOOL ARM 1  
L-SENSOR PROFILE 1

## Customizable Vehicle Datacard - 2.3.6

The greatest advantage of the Gear weapon system is its inherent flexibility. These machines are the direct descendants of the walking all-terrain engineering vehicles that were used to create the infrastructures of the first human colonies, and they share their ancestors' built-in ruggedness and versatility. Hardpoints and manipulators allow weaponry to be exchanged with a few hours of work in the field hangar, while options (such as smoke launchers or camouflage tarps) can be thrown in with little effort. Though primarily intended for Duelist character vehicles, this system can be used for your line squads as well, provided you are willing to invest the modeling time.

We provide customizable datacards on page 93 for the eight most common Gear designs currently in service on Terra Nova. The top section of the card is exactly the same as the one used on standard datacard, but the lower section (weapons, perks and Flaws) works a little differently. We provide a list of weaponry and additional systems, along with their associated point costs, to allow you to choose the right equipment mix for your machine. You can also buy additional clips of ammo (the number after the slash, if any); changing clips cost one action.

Once you have selected the weapons and options you want, simply add the point costs together with the base "stripped" value listed at the top of the card. If the pilot has a higher (or lower) Skill level than Qualified, check the table on page 13 for the Threat Value multiplier; use it to multiply the TV cost of the machine with all its new equipment to yield a final Threat Value and see how powerful your new creation is!

**HEAVY GEAR**  
HUNTER  
NORTHERN GUARD

15 4/7 6/12

BaseTV: 236 Crew: 1 FireCon: 0 Sens: 0  
Size: 6 Actions: 1 Man: 0 Com: 0

**WEAPONS:**

Name	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	x3	6	15/-
DPG	F	-1	2	x8	30	30/5
MAC	F	0	3	x10	40	80/10
HAC	F	0	3	x12	30	100/10
SC	F	-1	1	x28	3	250/5
MBZK	F	0	2	x20	10	200/10
LRP/16	F	-1	1	x12	16	100/-
MBP/9	F	-1	2	x18	9	200/-
HG	F	-1	0	x15	1	5/-
SKG	F	-1	0	x12	10	10/1

**PERKS/FLAWS:**  
2 x MAN ARM 86

**OPTIONS:** + TV

CREW ARMOR 2	12
SMOKE LAUNCHERS	12
CAMO NETTING	12

TOTAL WEAPON TV: FINAL TV:



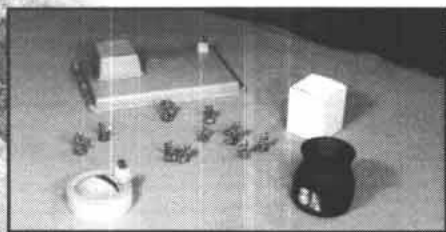


## 2.4 - THE PLAYING FIELD

You will need a large flat surface to play the game and some terrain elements to put on it to provide obstacles and cover for your units. Note that you can play a game across a featureless surface, but the novelty will wear off quickly.

The playing field can be very detailed or very simple. The choice depends on the preferences and resources of the playing group. There are three general categories of terrain: simple, moderate and full-blown. Which one is used has no effect on the game mechanics themselves as long as the terrain types (Clear, Rough, Woodland, etc.) are clearly identified and their boundaries delimited.

### 2.4.1 - The Simple Battlefield



This is the bare floor or table top, with maybe a few pieces of furniture or some boxes and other household items to represent elevations, cover and obstacles. Each box can have a Damage Point Capacity like a building (see page 37) or it can be considered indestructible. This type of background is well suited for "arena" duels or scenarios taking place in the deep deserts of the Badlands, where there are few obstacles around other than large rock formations.

Good terrain truly brings a miniature battle to life, and it does not require any special skills, tools or supplies to make. In fact, you can probably use common household items to craft some very acceptable structures, hills and vegetation zones.

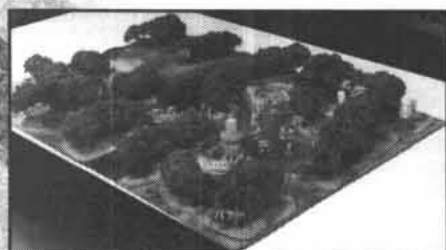
### 2.4.2 - The Moderate Battlefield



This background is made with a big piece of canvas or a sheet covering books piled to form the elevations, with some simple cardboard cut-outs to represent the buildings and features of the environment. Empty tin cans make wonderful factories and storage tanks. Since the main terrain contours are made of separate elements, it is easy to rearrange the board for a new scenario.

This type of terrain can also profit from the use of commercially-available modular terrain. Although they are pricier than the above, the foam terrain pieces come in a large variety of styles, colors and shapes, letting you assemble some very interesting terrain without the time and effort of making your own. You can also combine the two methods and use foam terrain pieces for the elevations, with cardboard or paper pieces to identify forests, streams and other landmarks.

### 2.4.3 - The Full-Blown Battlefield



This is the *summum bonum*: a complete miniature map with scale buildings, ruins, vegetation and so on. Water can be represented by plastic sheets or bits of mirror or glass (although we strongly advise you to leave the house's mirrors and windows alone). A wide selection of commercial models and buildings customized for science-fiction gaming are available in many styles, shapes and materials; check the selection of terrain elements available from Dream Pod 9 on page 108.

Building terrain pieces for a miniature battlefield requires a balance between looks and playability (the miniatures have to fit on the table). This especially evident when dealing with vegetation such as woodland or jungle, since if you place too many tree models on the board, you won't be able to place your units in it!



In general, it is enough to create "patches" that look like the terrain type being represented and use either sand, pieces of string or an actual base to delimitate where that type of terrain begins and end (see image). If you make small patches of trees and plants, your table set-up will be more versatile since you can vary the shape and surface area to suit individual scenarios.

A convenient way to build miniature scenery for full-blown miniature battlefields is the "tile" method. Sections of terrain are built on square tiles made of strong cardboard or wood. These tiles are easy to store and can be assembled to form a variety of different playing surfaces. The only limitation is that roads and rivers must be either straight or curved or they will not line up when the tiles are put together.

Though it takes time to put together, such a game board is generally the most fun to play with.

## JUNGLE/TEMPERATE BATTLEFIELD

The table below is a small 4'x3' set-up that can represent any typical area in the Polar regions. The base is green felt fabric with pieces of black, blue and brown felt lightly glued in place to represent roads, water and sand banks. This basic set-up was then sprayed with light brown paint and textured with spray adhesive and several shades of flocking. This blends the different elements together into a more realistic-looking terrain. Buildings, hills, mountains and trees were then added on top to provide cover and obstacles to movement. Though this set-up was planned for a small and brutal skirmish game, it can just as well be used for a larger-scope tactical game.

The buildings were assembled from odd bits and left-overs from model kits and packaging. They were then spray-painted and slightly weathered with acrylic paint. See page 73 for more details on creating structures.





# NORTHERN SQUADS

2

## GENERAL PURPOSE GEAR SQUADRON



General Purpose (GP) squadrons constitute the bulk of most Gear regiments. They are used in almost every type of mission, even missions which require specialized units, and perform all types of duties, from patrols to sentry, from assault to field engineering. Most Gear pilots begin their careers in GP squadrons, then later move on to units that make better use of their strengths.

## RECON GEAR SQUADRON



Recon squadrons are often assigned light combat duties or peripheral positions where minor encounters are expected. Their extremely mobile Gears race from one end of the battlefield to the other, gathering crucial intelligence on enemy positions and clearing the flanks of any hostile trying to ambush the main force when it is most vulnerable.

## STRIKE GEAR SQUADRON



Strike squadrons hit hard and fast, and hold onto the ground they have gained. They are made up of powerful Jaguar Gears assisted by rugged trooper machines, often backed up by at least one special weapon Gear for extra firepower. Being a member of a Strike squadron often confers prestige to a pilot.

## FIRE SUPPORT GEAR SQUADRON



When armored targets need to be eliminated, when enemy positions have to be softened up or when a commander simply feels raw firepower is a necessity, Fire Support squadrons are called in. Slow and heavy, they do not have the battlefield flexibility of most other units, but their offensive punch makes up for it as long as they are well deployed.



# SOUTHERN SQUADS

2

## GENERAL PURPOSE GEAR CADRE

General Purpose (GP) cadres constitute the bulk of most Southern Gear regiments. They perform all types of duties, from patrols to sentry, from assault to field engineering, and are deployed in almost every type of mission — especially when specialized units are not available, which is often. GP squadrons are the first assignment of most pilots, allowing them to gain experience in the field.



## RECON GEAR CADRE

Recon cadres are composed of extremely mobile Gears that can cover large sections of the battlefield to gather crucial intelligence on enemy positions and keep the flanks clear of any hostile units. Since they lack firepower and armor, they are often assigned light combat duties or peripheral positions where only minor encounters are expected.



## STRIKE GEAR CADRE

Strike cadres are often seen as the elite of the rank and file troops, pilots promised to a bright future — if they survive. They are made up of powerful Black Mamba Gears assisted by rugged trooper machines, often backed up by at least one special weapon Gear for extra firepower. They are deployed to act as mobile shock troops, striking hard and fast to gain and hold ground rapidly.



## FIRE SUPPORT GEAR CADRE

Fire Support cadres provide indirect fire support for other units in the field, and are the next best thing to dedicated artillery platforms or air support. Few things are more reassuring to a Southern unit commander than to know that a hail of heavy rockets from a team of Spitting Cobras is only a radio call away. These squads generally include their own forward observer units.





# BATTLEFIELDS

2

## DESERT BATTLEFIELD



The table below is a 5'x4' set-up that represents a fairly typical area of the Badlands. The base is tan felt fabric, lightly sprayed with a can of brown paint to give it some texture and character. Terrain pieces, such as buildings, hills, mountains and oasis were then added on top to provide cover and obstacles to movement. Though this set-up was planned for a fairly large tactical game (the oasis tower would scale to a diameter of 600 meters!), it can be used just as well for a quick skirmish game about a raid on an isolated listening post.

The buildings were assembled from odd bits and left-overs from model kits and packaging. They were then spray-painted and slightly weathered with acrylic paint. See page 73 for more details on creating structures.







# QUICK START RULES

2

## SETTING UP THE GAME - 2.5

You first need to gather together a few essential components, such as this book, game terrain, miniatures and the items listed on page 12. Make sure you have all you need before the game starts — nothing is more irritating than having to pause the game while someone puts together a few Top Speed counters.

You will need datacards for all the vehicles entered in the battle. The various sections of the datacards are fully explained on pages 14 and 15. Note that you can use the regular **Heavy Gear** record sheets that are found in the other sourcebooks of the line; they are just as valid as the datacards, but are more cumbersome to use and may not be suitable for large battles where a lot of units are fighting.

Each unit has one blank entry on the datacard: their Skill Level. In the basic game, all units have a Skill Level of 2 (see the table on page 13 for the actual Skill values). This simply means that in combat, they roll two dice for Actions, Attacks and Defense (sometimes with modifiers, depending on the Skill being tested — again, see page 13). These are referred to as **Standard pilots** (or standard crews). Once you are comfortable using the basic rules, you will be able to use pilots and crews with higher or lower Skill Levels and Skill Bonuses, as listed on the Skill table on page 13.

## Assembling Combat Groups - 2.5.1

The standard combat unit, represented on the game table by a miniature, is either a single vehicle or an infantry squad. Military units, however, very rarely fight alone: they are formed into teams that move and act together to reach their objective.

Vehicles are grouped into squadrons or cadres of around five (5) vehicles and infantry is generally grouped into platoons of four (4) squads; it really depends on the army (see page 78). These groupings are referred to as **Combat Groups** for game purposes.

A Group is simply a number of units working together, much like the members on a football team. The purpose of Grouping in the basic rules set is to determine which units are activated at the same time. Independent units may move independently but cannot effectively combine attacks, while larger Groups must move together and thus lose some tactical flexibility in exchange for massed firepower.

Units that are designated as being in the same group do not have any restrictions placed on their movement relative to their Group-mates. Since there is no restriction on how far units in a single Group may be from one another, one must make it easily distinguishable which Group a unit belongs to. One can use different paint schemes to define permanent Groups. For Group organizations that can change mid-battle, one can use colored paper clips or slips of paper attached to the miniatures' bases.



## Choosing a Scenario - 2.5.2

Page 65 and following contain a selection of scenarios depicting a variety of incidents and battles from the conflicts that took place on Terra Nova. They are all fairly straightforward and can be used as an introduction to the game. Note that all of the scenarios have been designed for a standard 4'x6' area tabletop with 1/144 miniatures. Feel free to experiment and change the scenarios and their victory conditions.

One look at any of the myriad texts on the history of the **Heavy Gear** world will provide thousands of ideas for possible scenarios. Not all battles were set piece affairs: small actions were common, perhaps a clash of two patrols in the darkness, a raid on an unsuspecting ammo dump, an ambush on a supply column; the possibilities are limited only by one's imagination. As is often the case, Players can simply arrange their tabletop terrain to their mutual satisfaction and then just have at it.

Balancing the forces in presence may be a little arduous at first. The majority of forces on any side of a battle should be made up of the "mudfoot" regular troops. It may not be as glamorous or heroic, but it is more accurate, if one considers the amount of time training and expense that goes into creating elite formations. Threat Values can be used to create two equally powerful armies, or the Players can agree on the forces they will field. Often a "balanced" scenario will not result in this case, but real war is not a balanced affair either. Historically, commanders would not normally consider an attack on an enemy in prepared defensive positions unless they were sure of at least a 3:1 ratio of troops in their favor. Most preferred to have more. To keep the game entertaining, differences in forces can be balanced by interesting (and achievable) victory conditions.

Now you're ready to play; turn the page for the battle Quick Start rules.

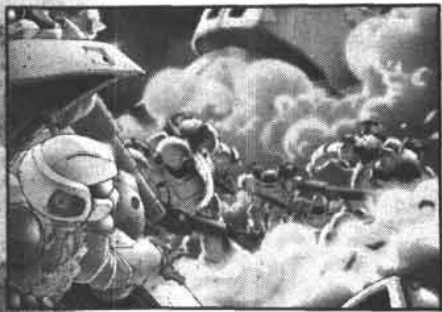


# QUICK START RULES

2



## 2.6 - TACTICAL COMBAT



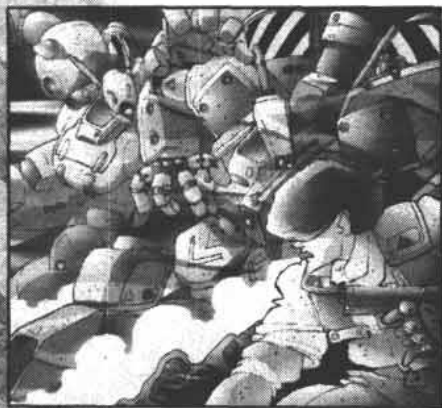
This is where it begins: the table is covered with a scaled-down world, the miniatures are set up on each side of the table, and the commanders have received their orders. What's next? The following pages (22 to 32) contain the core **Heavy Gear** rules. The best way to learn them is to take a couple of miniatures and some simple terrain, and act out a "training scenario" with your opponent to familiarize yourself with the flow of the game. An example of play can be found on page 33 to help you get started.

Before starting, you should have read the section on *Silhouette Basics*, found on page 13. These procedures are at the core of all Silhouette-based games, including **Heavy Gear**. You should also make sure you have read the datacard explanations on pages 14-15, and the combat group rule on the previous page. Make a copy of the reference charts (pages 104-105), and you're all set to begin playing the game.

### 2.6.1 - Measurement and Scale

Each round represents about 30 seconds of battlefield time. Each inch on the tabletop represents approximately 50 meters. Obviously, this means that the scale of the terrain pieces and miniatures is not "accurate;" if they were actually in scale with the playing field, they would need to be handled with fine tweezers! To look at it another way, you have the same view a commander would have on his or her battle display, with all the units enlarged and labeled for easy identification. The vertical scale has to be exaggerated to be seen, but since everything is equally enlarged, lines of sight are preserved. Any combat activity (shooting, line-of-sight, etc.) is measured and dealt with from the centerpoint of the miniature, with the exception of close combat and cover, as explained later.

### 2.6.2 - The Combat Round



A tactical game is subdivided into combat rounds that simulate approximately 30 seconds of real life events. Each unit normally get one Action (or more) during that round, which can be used to shoot, communicate important information or scan the area. While the fact that shooting once every thirty seconds may appear unrealistic, we must point out that the crews involved in tactical combat are only shooting when they get an opportunity. In a computer simulation, everything can be adjusted every thousandth of a second, so simultaneous combat and repetitive shooting are a possibility. For a pen-and-paper-and-miniatures simulation, combat has to be broken down into 'chunks' of time and distances in order to be manageable.

If Players truly want to have the opportunity to make several attacks during the round, they can still do so, but at a cost in accuracy since the crew will be trying to get more things done in the same amount of time and will thus be less careful. It is possible to declare several Actions instead of just one, but this will cause a penalty of -1 to all dice rolls for each additional Action.

During each combat round, the following four steps occur in order, except Step Zero, which only occurs at the beginning of the game.

#### ◆ Step Zero: Set-up Phase

A battle always begins with the Set-up Phase, which occurs only once. An overall Commander must be chosen for each side, with a Second in Command. Their identities can remain secret, but must be noted down for future reference. The Commander's Leadership and Tactics Skills are one level above normal for his level. The Second in Command's Leadership Skill is one level above normal. If the Commander becomes a casualty, he or she is replaced by the Second in Command. If both are put out of action, all future Leadership Skills are rolled at the Skill level of the pilot with the highest Leadership Skill.

A Tactics Skill test is made by each side based upon the Skill level of the Commander. Fumbles count as a die result of one. Reroll ties. The winner chooses which Player will begin placing his or her combat groups upon the map. Players should alternate, each placing one combat group at a time on the table. After placing a unit, the Player must declare what speed (stationary, Combat, or Top Speed) it is moving at. Pre-designed scenarios have clearly defined set-up locations for each faction. When not using pre-designed scenarios, the Players should agree on which type of terrain to use and set up within the first 3-6 inches of the table edge on opposite sides.

If, during the first round, a unit is attacked before it has been moved, it is treated as if it were moving at the maximum number of MPs possible for its speed for the purpose of defense rolls.

Each Player should record the result of the Tactics roll. Each point represents one Tactical Command Point (TCP) that can be played at any time during the game. Command points represent an Action reserve for unexpected situations; they are fully explained further on.



# QUICK START RULES

2

## Step One: Declaration Phase ◆

Both sides declare any extra Actions and individual evasive maneuvers for the round. Use one or more counters to mark extra Actions taken to avoid confusion during game play. This token can be placed either near the playing piece or on the datacard, whichever the Player finds more suitable.

## Step Two: Initiative Phase ◆

Initiative determines which side has the advantage during the present round of combat. Each side rolls an Action test based on their commander's Leadership Skill. If only two machines are facing each other, the Piloting Skill is used instead of the Leadership Skill. The highest result wins. Draws are rerolled.

Record the Margin of Success (MoS) of the Initiative roll. The Winner receives a number of Initiative Command Points (ICP) equal to that MoS. The Loser receives no IPCs this combat round, but may use Tactical Command Points if he wants. If there are more than two sides to the battle, only the Winner gets ICPs.

The side with the least number of combat groups decides which side will play first. If both sides have the same number of combat groups, the winner of the Leadership roll makes the decision.

## Step Three: Activation Phase ◆

The side whose turn it is to play may move any or all units in one of their combat groups. Units that shift speeds (Combat to Top and vice-versa) must declare so immediately after movement (the new movement will only be applicable next round). Actions, such as firing or activating a system, may be resolved at any time before, during or after the movement. Attack penalties are based on the unit's total movement; for example, if Combat Speed is announced, the unit cannot spend more than Combat MPs.

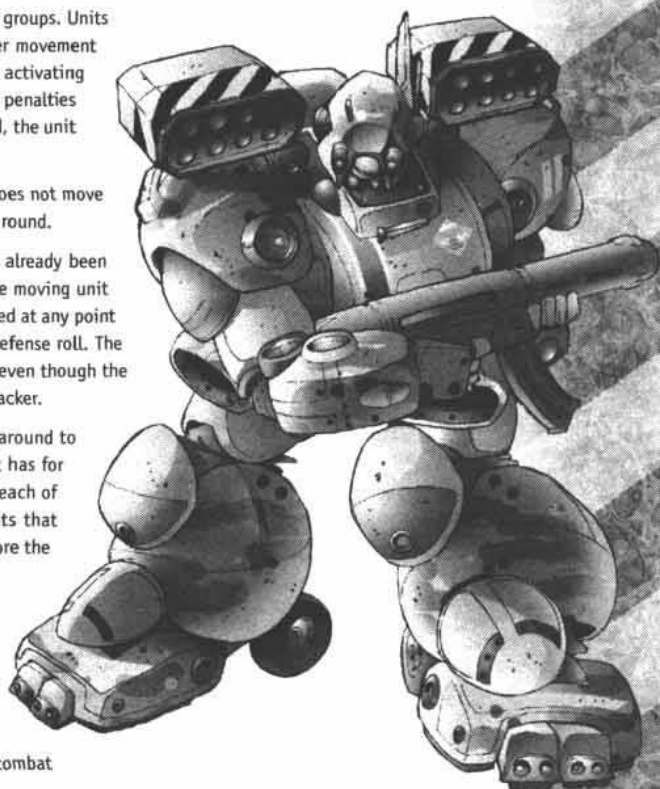
Each unit moves and takes its Actions before another unit is activated. If a unit does not move or act when its combat group is activated, it cannot do so at a later point in the round.

At any time during the activated unit's movement, any enemy unit that has not already been activated may use one (or more) of its Actions to fire or perform a task against the moving unit (and only against the moving unit). This is called **Snap Fire**. Attacks may be directed at any point along the moving unit's path, but the unit's full movement counts towards the Defense roll. The total MP allocation of the target is used to determine the defense speed modifier, even though the actual displacement may be shorter, because this is a hurried reaction for the attacker.

Snap firing does not cost Command Points (unless the firing unit needs to turn around to fire), but it reduces by 1 the total number of Actions which the snap firing unit has for the round. The defender must spend at least one MP or end its movement before each of the attacker's Actions if more than one Action is used. Forward observers (units that spend an Action feeding enemy coordinates to their people) must always act before the firing unit(s).

Once every unit in the combat group has moved and acted (or forfeited its chance to do either), the other side activates one of his own combat groups, which may move and take action. This exchange goes back and forth until all groups have moved and acted.

**A combat group may only move once per combat round.** If one Player no longer has any combat groups left to use, the opponents activates their remaining combat groups one by one until they all have been moved.



## Step Four: Miscellaneous Events Phase ◆

During this phase, any unusual events, such as long-range artillery and bombing attacks, are resolved. These are optional rules which are not all covered in this book (but see Chapter 6 for more on battlefield support, once you're comfortable with the basic rules). Initiative Command points go back to zero. Any Action not spent at this point is lost.

Repeat Steps 1 to 4 until the battle is resolved or pre-planned objectives are met.



# QUICK START RULES

2



## 2.6.3 - Number of Actions

A vehicle's Actions are limited by the total number of crewmen. All vehicles automatically get one Action. Vehicles with two or more crewmen get additional Actions at no cost. This is listed on the vehicle's datacard. Some or all of these additional Actions can be lost when crew casualties occur. It takes two crewmen to have a total of two Actions each round; it takes four crewmembers to have four Actions. If the number of crewmembers goes below that minimum, one Action is lost. A crewless unit cannot perform Actions. It is possible to take more Actions than allowed during a combat round, but each additional Action causes a -1 penalty on all Actions.

### Action Examples

•	fire one weapon once
•	fire one set of linked weapons once
•	perform a single physical attack (ramming, kicking, punching, etc.)
•	activate an auxiliary system (ECM, active sensors, communication, etc.)
•	embark/disembark one crewman
•	embark/disembark a number of passengers equal to the Size of the vehicle

### Number of Actions Examples

<b>Example 1:</b>	<i>A Hunter Gear has a crew of one person. This vehicle gets its one automatic Action and no free additional Actions. If the Hunter needed to perform three Actions in a single turn (2 more than its normal allocation), it would receive a -2 penalty on all three Actions.</i>
<b>Example 2:</b>	<i>A tank has a crew of four people. This vehicle gets its one automatic and two additional Actions due to its crew complement, for a total of three Actions per turn (without penalty). If the tank needed to perform four Actions, it would suffer a -1 penalty on all four Actions. No benefit is gained from performing less than three Actions.</i>
<b>Example 3:</b>	<i>If the tank's crew were injured and one crewmember was incapacitated, the vehicle would have an effective crew of 3, giving it only one additional Action (instead of 2). The short-handed tank would now be able to perform up to 2 Actions without penalty.</i>



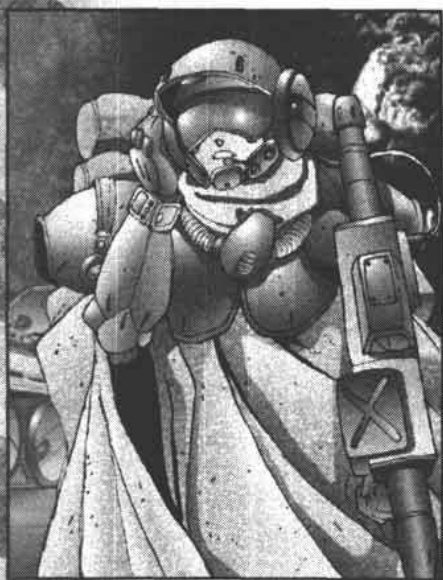
## 2.6.4 - Command Points

Command Points represent the commander reacting to or anticipating the enemy's actions. There are two types of Command Points: Tactical Command Points (TCPs) and Initiative Command Points (ICPs). TCPs are available throughout the game, but cannot be regained once spent. ICPs are valid for one round only, but are refreshed during each new Initiative roll. Other than this, there is no difference between the two.

Command Points may be used by any unit with a functional Communication system. They can be used as an additional regular Action incurring no penalty. One Command Point can be used to buy a +2 modifier to a single Defense roll (representing a warning shout). A Command Point can be used to activate a unit out of sequence — to get out of harm's way, for example. In the latter case, the unit must not have been activated (i.e., moved) previously, and it cannot be moved again when its combat group is activated (though it may act if it has any Actions left). Finally, a Command Point may be used to turn a unit around by up to 180 degrees, even if it has been activated before (and thus has no MP left). A unit can use only one Command Point per round.

### Using Command Points

•	Extra Action (no penalty)
•	Defensive maneuvering (+2 to single defense roll)
•	Activate a unit out of sequence (if it hasn't been activated already)
•	About-face (change facing 180°)





# QUICK START RULES

2

## Movement and Terrain - 2.6.5

A vehicle can move a certain number of inches based on its Movement Points (MPs). The vehicle's datacard contains the values for Combat Speed and Top Speed. Combat Speed allows a vehicle to engage in offensive actions unhindered. Top Speed is twice as fast as Combat Speed, but severely impairs offensive actions.

Speeds are listed in MPs; one MP equals movement across one inch of clear ground, or about 6 kph. Thus a vehicle with a Combat Speed of 12 MPs moves at about 72 kph. Every turn, each vehicle receives as many Movement Points as its current speed (Combat or Top).

### Combat Speed ♦

A vehicle normally receives a number of Movement Points equal to its Combat Speed value. If the vehicle expends none of these Movement Points to move, it is considered stationary. Otherwise, the vehicle is said to be traveling at Combat Speed. Attacks can be made normally at this rate of movement. Vehicles moving at half their Combat Speed or less gain an additional +1 to their attack rolls due to the additional stability provided by lower speeds (see *Movement Modifiers*, page 29).

A vehicle moving at up to half Combat Speed can opt to move backward instead of forward. Reverse movement is not possible at higher speeds. Half the Combat Speed means an extra +1 modifier to the attack roll for extra stability. This is particularly efficient when using several vehicles in a combat group that is retreating from the field: enemy units will think twice before attacking them.

### Top Speed ♦

A vehicle that expends its full Combat Speed MPs can shift to Top Speed in the next round. This shift must be declared by the Player immediately after moving the unit. The vehicle is considered to be at Top Speed for attack and defense purposes for the rest of the combat round.

In subsequent combat rounds, the vehicle receives movement points equal to its Top Speed value. The vehicle must expend a number of movement points greater than its Combat Speed while moving at Top Speed. A vehicle may return to Combat Speed after any number of rounds of Top Speed movement. The Player declares the return to Combat Speed immediately after moving the unit.

Players should put a Top Speed counter beside the vehicles moving at Top Speed. This helps to prevent disputes over the speed at which a vehicle is moving.

### ■ Speed Examples

**Example:** *A Hunter Gear is rolling at Combat Speed (6 MPs). It may spend anywhere between 0 and 6 MPs. If it spends zero, it is considered to have stopped moving and is immobile. If it spends the full 6 MPs, it has the option to shift to Top Speed. The Hunter's Player opts to do this and declares the speed shift immediately after moving the Hunter. To making record keeping easy, the Player puts down a 'Top Speed' marker beside his or her unit counter on the table.*

### Multiple Movement Systems ♦

Vehicles with multiple movement systems, such as walking and rolling, are able to switch modes during combat. A vehicle may only switch modes while at Combat Speed, not at Top Speed. During the switching round, the initial movement mode is used to determine the available MPs. The vehicle expends MPs as its original movement mode until the switch is declared. The remaining MPs are expended at the terrain cost of the new movement mode. If the vehicle has already spent more MPs in movement than it would have in the system it switches to, then it stops moving after the switch.

A vehicle with multiple movement systems may only switch modes once per round. This option must be announced during the movement phase.

### ■ Movement System Examples

**Example:** *A Hunter pilot is currently moving at Combat Speed with his Ground Secondary Movement System (6 MPs). After moving 4 inches, he decides to switch to Walker mode. His Walker Combat Speed is 4 MPs; having already reached this limit, his movement ends. If he had only moved 2 inches before switching, he would have had 2 more MPs to spend.*



## ◆ Turning

A vehicle spends zero Movement Points to turn 60 degrees or less. Turning more than 60 degrees and up to 360 degrees (full spin) in a single turn costs one MP. Multiple turns can be performed along a vehicle's movement, as long as each turn is followed by at least one inch of forward movement before another turn is performed.

Any vehicle that turns more than 60 degrees while moving at Top Speed requires a Piloting Skill roll versus a Threshold equal to (3 + Terrain MP cost). This test does not count as an Action. If the test is a draw or success, the vehicle turns without complications. If the test is failed, the vehicle skids forward one inch (if something is in the path, consider it a ram — see page 30) but still turns. If the test is Fumbled, the vehicle crashes: this ends the vehicle's movement, even if it has MPs left to expend. Roll one die and assign either Light (1-3) or Heavy (4-6) damage, depending upon the number rolled.

## ◆ Terrain

Terrain affects both a unit's movement and the ability of other units to spot and attack it. These two factors are measured by a given terrain's Movement Point Cost (MP Cost) and its Obscurement. The rougher and thicker the terrain, the higher these two numbers. Some terrain types merely slow down a unit, which is reflected by their higher MP cost but their low Obscurement.

The terrain on which more than 50% of the base (or the miniature itself if it has no base) rest count as the terrain type the vehicle currently resides in. In case of disagreement, roll one die (1-3 owner's call, 4-6 opponent's call).

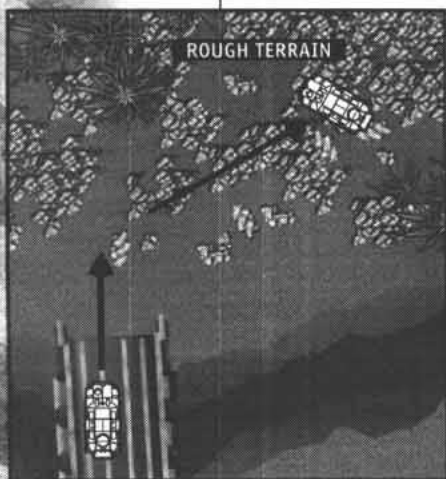
The following chart lists the MP cost for the various types of transmission to traverse different types of terrain. Certain types of terrain also reduce visibility and provide cover, which is represented by their Obscurement value.

Terrain Costs				
Terrain Type	Walker MP	Ground MP	Hover MP	Obscurement
Clear	1	1	1	-
Rough	1	2	1	-
Sand/Snow	2	2	1	-
Woodland	1	2	2	1
Jungle	2	3	3	2
Swamp	3	4	1	1
Water	2*	3*	1	2**
up 30+ degrees slope	add 2	add 2	add 4	-
down 30+ degrees slope	add 1	-	-	-

\* Only Amphibious vehicles may enter Water terrain. Other vehicles will flood and automatically be put out of action if they enter water. Amphibious vehicles cannot enter or exit water while moving at Top Speed.

\*\* Water only produces Obscurement if the defender is in water and is not a hovercraft or naval vessel.

## Movement & Terrain Example



- A jeep (Ground vehicle) is moving at Combat Speed (10 MPs). It begins its movement in Clear terrain. It travels forward two inches across Clear terrain (expending 2 MPs) and then turns sixty degrees clockwise (expending 0 MP). The jeep then moves forward 3 inches across Rough terrain (expending 6 MPs, 2 per inch of Rough terrain), turns one hundred-sixty degrees counterclockwise (expending 1 MP, since it is more than sixty degrees), and ends its movement. The remaining 1 MP is wasted and does not carry over to the next round.
- A wheeled APC has 12 MPs and is moving on desert Sand (movement cost: 2 MP per inch). It expends 2 MPs to move forward one inch. It turns 60 degrees to the right at no MP cost. It then spend 2 MPs to move forward another inch. The vehicle then attempts to turn 180 degrees. The driver has a Piloting Skill of 2: the Threshold he must surpass is 3 + the MP Cost of Sand (2), for a total of 5. The two dice give a result of 4, not enough. The vehicle skids one inch in the direction of its movement and turns. It can now spend its remaining MPs.





# QUICK START RULES

2

## Line of Sight and Detection - 2.6.6

It is a requirement for a unit to "see" its target to fire. The ability to detect and target an opposing unit is called, for simplicity, having a Line of Sight (LOS). This does not necessarily implies that the target is within human visual sight, merely that it can be acquired and locked on by the sensors and fire control computers available to the detecting unit. Units are considered to have a Line of Sight to their target unless one of the following conditions exists:

### Blocked Line of Sight

•	The target is beyond the detecting unit's Sensor range;
•	Any terrain between the two units is taller than both units;
•	Either unit is within the dead zone of an intervening elevation. A unit is within a dead zone if it is adjacent to an interceding elevation increase.
•	The Concealment value between the vehicle and the target is greater than the vehicle's Detection rating.

### Concealment

The Concealment value is equal to the Obscurement score of all terrain directly between the two units. If one of the two vehicles is on a higher elevation than the other, only the terrain directly in the line of sight between the two units are counted for Concealment purposes. Obscurement makes a target more difficult to detect and hit, and thus cause penalties that are applied to the attacker's roll.

The Terrain table indicates the Obscurement value (per inch) for each type of terrain. Only whole inches contribute Obscurement; fractions of distance are disregarded.

### Detection Rating

Sensors and crewmen are always on the lookout for enemy units. Every vehicle has a passive Detection Rating; this value is used to calculate whether a unit can gain line of sight to its target. All units, including infantry, get a Base Detection Rating of 4 in daylight and 2 at night. A vehicle also has a Passive Sensor value equal to its Sensor rating plus its crew's Electronic Warfare Skill level. The final Detection Rating is either the Base Detection Rating or the Passive Sensor value, whichever is higher. This represents how much Concealment a vehicle can see through. Unassisted vision has a range of 1 kilometer (20" in the tactical scale, complete table in skirmish); if sensors are available, their range is used instead.

### Line of Sight Examples

**Example 1:** Alpha is faced with a Jäger and has taken shelter in jungle vegetation. Three inches of Jungle (Obscurement 2) lie between the two, for a total Concealment value of 6. This is greater than the Jäger's Detection score of 4, so Alpha remains hidden and cannot be attacked.

**Example 2:** Gear Beta is within range of an enemy APC (6") but both units are just behind ridges. The APC is hidden and cannot be fired upon. If the Gear was to climb on the nearest ridge, it would still not be able to see the APC because the vehicle is located in the dead zone at the base of the ridge. If the Gear moves to the other ridge, however, it will then see the APC directly below itself.

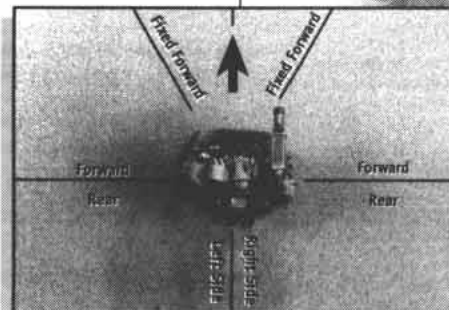


### Firing Arcs

Vehicles may only detect and target opponents that are within their weapons' firing arcs. Each weapon is mounted within a certain arc and can only fire in it; targets which lie outside the arc cannot be targeted.

There are six common firing arcs: Forward (F), Right (Rt), Left (L), Rear (Rr), Fixed Forward (FF) and Turreted (T). The first four are 180-degree arcs; side arcs include directly forward and backward. The fixed forward arc is a 120-degree arc on a vehicle's front facing (note that side or rear fixed arcs are also possible, but uncommon). Turreted arcs span 360 degrees.

Infantry squads do not have facing, as the men can quickly turn around to respond to a threat or to move. They do not have firing arcs and may detect and attack anything in a 360-degree radius around them.

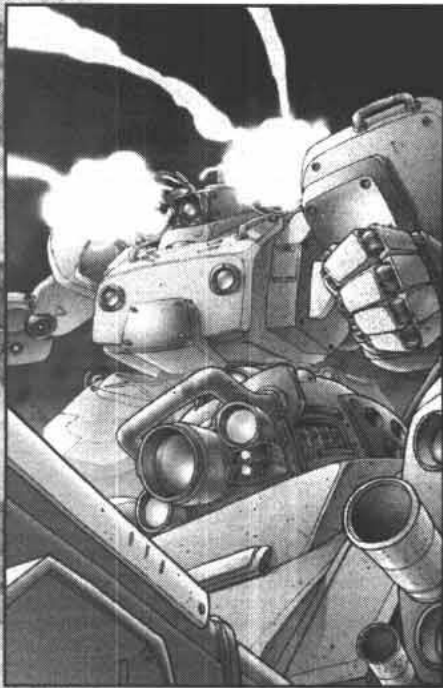


# QUICK START RULES

2



## 2.6.7 - Ranged Combat



If a unit has a Line of Sight to a target within its weapon's firing arc and range, it can attack that target. When an attack occurs, an opposed Skill test is required to determine the success of the attack. The attacker uses his unit's Gunnery Skill and the defender uses his unit's Piloting Skill to make the test, both rolls modified by the appropriate Attributes and situation modifiers.

If the attacker wins the Skill test, the attack succeeds. If the defender wins or if a draw occurs, the attack misses. The following table contains a list of the modifiers to both rolls; they are explained further in the text.

### Attack And Defense Modifiers

Attack Roll Modifiers:	
-	Fire Control System Rating
-	Weapon Accuracy Rating
-	Range Modifier
-	Attacker Movement Modifier
-	Obscurement Penalty (if any)
Defense Roll Modifiers:	
-	Maneuver Rating
-	Defender Movement Modifier
-	Arc of Attack Modifier
Possible Outcomes:	
If Attackers total is above Defender's	HIT
If Attacker's total is equal to or below Defender's	MISS

### Attack Example

**Example 1:** Gear Alpha shoots at Gear Beta. Alpha moved at Combat Speed and used up all his MPs (+0). Its Fire Control system and weapon Accuracy are both rated at +0. It is attacking within the "Short" range band (2 inches) of its weapon (+0). There is no obscuring terrain. Alpha's pilot rolls his Gunnery Skill and obtains a total of 6. Since Alpha's modifiers total up to +0, his final attack roll is 6. Beta must now make a Defense roll. On his last move, Beta traveled 7 inches (+1). Beta's Maneuver rating is +1. Alpha's attack occurs in Beta's forward defense arc (+0). Beta's pilot rolls his Piloting Skill and obtains a score of 5. This is modified by the situation bonuses to yield a final total of 7. Since 7 is greater than or equal to 6, Beta avoids Alpha's attack.

**Example 2:** Later, Gear Alpha is again shooting at Gear Beta. Alpha moved at Top Speed (-3). Its fire control system was damaged and Alpha now receives a -1 modifier to all attacks. It is 5 inches away from Beta, and is therefore at Long range with his weapon (-2). In addition, two inches of Woodlands terrain (Obscurement 1 each) lay between the two (-2). Alpha's Gunnery Skill test yields the remarkable roll of 10. Unfortunately, after the total -8 penalty is applied, the final total is only 2. Beta attempts to avoid this attack. On his last move, Beta only traveled 2 inches (-2). In addition, Alpha now lies in Beta's rear defense arc (-2). Fortunately, Beta still has his good Maneuver (+1). Beta rolls his Piloting Skill test and obtain a lowly 3. After the situation modifiers are applied, this is reduced to a final total of 0. Since Alpha's total of 2 is greater than Beta's total of 0, Alpha has successfully attacked Beta with a Margin of Success of 2.

### ◆ Attacker Modifiers

Life is not a firing range; combat is always harder under certain conditions, easier under others. Modifiers resolve this by introducing penalties and bonuses to each and every combat roll.

Apart from the quality of the vehicle's Fire Control computer and the accuracy of the weapon, three other factors apply: the range to the target, the Obscurement (or cover) between the attacker and defender and the attacker's own movement.

**RANGE:** Every ranged weapon is rated by a value known as its Basic Range. This is further expanded into four Range Bands, each one doubling the maximum distance of the preceding band. The further away the target, the harder it is to hit and damage it. Although there is no theoretical limit on certain weapons' ranges, such as lasers and particle accelerators, the ranges given are practical combat ranges that take into account both the increased difficulty of aiming and the loss of energy caused by distance.



# QUICK START RULES

2

**OBSUREMENT:** Various terrain types, such as swamp and wooded areas, obscure a target and make it difficult to hit. The Concealment value of the defender (see *Line of Sight*, page 27) is subtracted from the attacker's roll to represent both the lack of accuracy and the damage absorption caused by the intervening cover.

**ATTACKER MOVEMENT:** A moving gun platform has a higher chance of missing than a stationary one. Conversely, a unit that is moving slowly generally has less trouble keeping its weapons trained on a target. Stationary attackers (i.e., that have spent no MP) are the best firing platforms. Since the penalty for moving slowly are higher than the attack benefits gained, Players must be careful to place their slow-moving units in a position where return fire is least likely.

## Attack Modifiers

RANGE MODIFIERS		OBSUREMENT MODIFIERS		MOVEMENT MODIFIERS	
Point Blank (less than 1")	+1	Swamp	1	Stationary	+2
Short (1" to Basic Range)	0	Woodlands	1	Half Combat Speed or less	+1
Medium (Previous to 2x Basic Range)	-1	Jungle	2	Combat Speed	+0
Long (Previous to 4x Basic Range)	-2	Water	2*	Top Speed	-3
Extreme (Previous to 8x Basic Range)	-3				

\* Only produces Obsurement if the defender is not a Hover, Naval or Amphibious vehicle.

## Defender Modifiers

The Defense roll is not an actual dodging of the attack, but is rather an abstract representation of the target's attempts at evasion and its use of any available cover (both impossible to properly represent at the fifty-meter ground scale). Targets rely on the following modifiers to help them avoid shots and blows. In general, the only defense of large and ungainly vehicles is their speed, as their poor Maneuver rating will often severely hamper their defense.

Attacks coming from the rear are much more dangerous than attacks from the front, both because the armor is thinner there and because the crew's attention is much more focused on the front arc.

**MANEUVER VALUE:** Each vehicle has a set Maneuver value by design. Negative Maneuver values are for slow ponderous vehicles like battleships and large tanks. Positive Maneuver values are for fast and agile vehicles like motorcycles, combat helicopters and Gears.

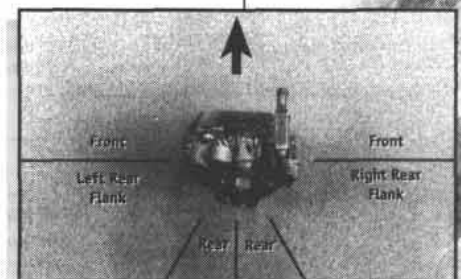
**TARGET SPEED:** An enemy platform's speed affects how easy it is to hit. Speed modifiers are determined according to the following ever-increasing scale. If the target has yet to move in the round, its last recorded movement is used to determine its modifier. On the first round of combat, assume that the vehicle has moved the maximum number of inches for its current speed in its current terrain.

## Target Modifiers

MANEUVER VALUE	TARGET SPEED MODIFIERS	DEFENSE ARC MODIFIERS
Vehicle: Depends on Model	Inches Moved	Defense Modifier
Infantry: 0	0	-3
(+2 if fired upon by non-AI weapon)	1-2	-2
	3-4	-1
	5-6	+0
	7-9	+1
	10-19	+2
	20-99	+3

## Defense Arc

The defender's orientation, when attacked, can reduce his chances of successfully escaping the attack, either because of inattention or thinner armor. Most combat vehicles carry less armor on their back than on the front, due to unavoidable engineering concerns. More importantly, however, pilots cannot dodge attacks they cannot see coming!







## 2.6.8 - Melee Combat

There are few vehicles that can make effective physical attacks. Ground vehicles are capable of ramming, but few commanders exercise the option. With humanoid Gears, the old-fashioned close-in attacks have become common. Ramming, punching, kicking, stomping and all manner of melee weapons are being used on the battlefield when ammo runs out. All physical attacks use the attacker's Piloting Skill instead of his or her Gunnery Skill, except when an arm or a melee weapon is used (see the description of each maneuver in the texts below).

### ◆ Ramming

Impact at high speeds can be devastating. Frontal collisions are almost always deadly, while impacts from either side or from the rear are slightly less dangerous. Ramming is a standard Opposed Skill roll. Unlike other attack forms, ramming inflicts collision damage on both the attacker and the defender.

When checking for ramming damage, impact speed is first determined based upon the direction of the incoming ram. Head on collisions add the speeds of the attacker and defender. Side impacts take the attacker's speed, and rear collisions take the difference between the two speeds.

Once the impact speed has been established, a damage modifier is determined using the Impact Speed Table (below). This damage modifier is added to the Size of each vehicle involved in the collision to determine its actual Damage Multiplier. Each vehicle will take an amount of damage equal to the Margin of Success of the Attack multiplied by its opponent's Impact Damage Multiplier (see Damage, page 32). The larger the unit, the more damage it will inflict on the other unit involved in the collision. If the attacker gets a MoF and still had MPs to spend, he moves one inch forward and stops there; otherwise, he stops at the collision point.



### Ramming Speed ☐

RAMMING DIRECTION	IMPACT SPEED
Head On	Attacker Speed + Defender Speed
Side	Attacker Speed
Rear	Attacker Speed - Defender Speed

### Impact Speed Modifiers ☐

IMPACT SPEED	DAMAGE MODIFIER
1-2	-2
3-4	-1
5-6	+0
7-9	+1
10-19	+2
20-99	+3

### Ramming Example ☐

**Example:** Gear Alpha (Size 6) rams tank Beta (Size 12) in the side. Alpha traveled 8 inches that round. Beta had last moved 7 inches. Since this is a side impact, the impact speed is equal to the attacker's movement, or 8. A quick glance at the Impact Speed Table shows this to produce a +1 damage modifier. Thus, Alpha's impact Damage Multiplier is  $(6 + 1 =) 7$  and Beta's impact Damage Multiplier is  $(12 + 1 =) 13$ . If Alpha has a Margin of Success of 2 for the ramming attack, then Alpha will take  $(13 \times 2 =) 26$  in damage and Beta will take  $(7 \times 2 =) 14$  in damage. Maybe Gear Alpha's pilot should reconsider this course of action!

### Physical Attack Example ☐

**Example:** Out of ammunition, Gear Omicron (Size 6) decides to run up to the light tank it disabled last turn and finish it off with a well-placed kick. The damaged tank is not very maneuverable and rolls a low 2 as defense. With modifiers, Omicron's pilot rolls a 6, for a MoS of 4. The final damage is  $(4 \times 6 =) 24$  points of damage. The Gear jumps on the hapless tank's hull and kicks the turret clean off.



# QUICK START RULES

2

## Punching ◆

An arm or an equivalent appendage is required to punch. The Gears are the most common punching vehicles, but construction machines equipped with hydraulic arms can achieve a similar effect if the latter are sturdy enough to withstand the impact (this is noted in the Perk's description on the vehicle sheet). Punch attacks require a Gunnery Skill roll (modified by the Fire Control rating) versus the defender's own Piloting (or Infantry Skill, if attacking infantry units). The Damage Multiplier of a vehicle's punch is normally equal to the rating of the punching arm, but the pilot may elect to "pull" the punch to lower the DM and thus reduce the damage.

## Kicking and Stomping ◆

Kicking other vehicles and stomping infantry squads are both valid attacks for a Walker vehicle. Kick attacks require a Piloting Skill roll (modified by the Maneuver rating) versus the defender's own Piloting (or Infantry Skill, if attacking infantry units). If successful, the Margin of Success is worked out and the damage calculated as normal. The Damage Multiplier of a kick is equal to the Size of the vehicle. If the vehicle is capable of putting its full weight on the target (if the latter cannot defend itself, for example), the damage is doubled.

## Throwing ●

Throwing is the attack used to hurl items, such as rocks or grenades. At least one arm is required for throwing. Battle and Tool Arms may not be used to throw objects, unless they have been specifically designed to do so. They may not be used for another function, and the Battle Arm cannot pick up the projectile by itself.

The base throwing range (in meters) of the arm is equal to twice its Rating. The Size of the object being thrown is subtracted from the throwing arm's Rating before it is doubled. If the object being thrown is larger than half the Size of the throwing vehicle, half the Rating of another arm can be added to the effort. Weapons' Sizes are equal to their Minimum Size requirement minus one.

The base range calculated above is doubled for each additional range band, as for any other weapon. If the calculated range is greater than fifty meters, the thrown object can be hurled one inch away, else base contact is needed (throwing is better suited for Skirmish scale combat and its ten-meter increments — see page 52).

When an object is thrown, a Gunnery Skill roll, modified as normal for range and movement, is made. If the modified die roll is equal or higher than the defense roll, the object thrown lands right on target. If the dice roll is failed, the shot will deviate from its intended destination by a number of meters equal to twice the Margin of Failure. One die is rolled for the direction of the deviation. When using inches, the deviated projectile is placed in the nearest possible location, considering the target point as the center of the deviation.

If the attack roll was Fumbled, the shot deviates as normal, but toward the throwing unit. Sometimes, a Fumble will land a projectile right on top of another unit anyway. The attack is resolved as normal if the defense roll of the new target is failed.

## Melee Weapons ◆

Much like punching, attacking with various handheld weapons is a Gear battle signature. The pilot attacks the target using his Gunnery Skill, applying the Fire Control as a modifier. If successful, the Margin of Success is worked out and the damage calculated as normal. A melee weapon's Damage Multiplier is listed in the Weapon section of the vehicle datacard, along with any special effect or rule.

## Evasive Maneuvers - 2.6.9

Evasive maneuvers allow the pilot to avoid incoming attacks. An evasive maneuver counts as an Action and *must* be declared at the beginning of the combat round (units may not "abort" to evasive maneuvers later in the round). Performing evasive actions adds a +3 bonus to all defense rolls for the combat round, but forbids the vehicle from attacking or performing any other Action that round. Multiple "evasive actions" cannot be performed to accumulate defensive bonuses.

### ■ Evasive Maneuvers Example

**Example:** *Hunter Alpha is outnumbered and still far from safety. The pilot would very much like to use the +3 defense bonus but cannot, since he has not declared evasive actions at the beginning of the round. In the next round, he decides to play it safe and elects to spend the round dodging madly: the pilot declares evasive maneuvers. As the Hunter weaves around, enemy attacks miss repeatedly until the pilot fumbles one of his defense rolls, negating his bonus. He still manages to survive and reach some woods, where he spots a juicy target for the artillery. Unfortunately, the poor pilot is so busy throwing his machine about he cannot communicate the information back to base!*



# QUICK START RULES

2



## 2.6.10 - Damage



After an attack hits a target, a certain amount of damage is inflicted. **An attack's damage is equal to the weapon's Damage Multiplier times the Margin of Success of the attack roll.** The final damage is compared to the target's Armor rating.

If the total damage is less than the Armor value, the hit was a glancing blow, and no damage is incurred to the vehicle. If the damage is equal or greater than the Armor, but less than twice the Armor, the unit sustains Light damage. If the damage is equal or greater than twice the Armor, but less than three times the Armor, the unit sustains Heavy damage. If the damage is equal or greater than three times the base Armor of the vehicle, the unit is destroyed outright. The table below summarizes this for easy reference.

Only the most severe of these possible damage results applies to the target. Thus a unit that sustains Heavy damage does not get Light damage as well. In short, only one damage result is inflicted from each hit.

Though some ablation and loss of integrity is to be expected, there is no armor degradation in the Quick Start rules; the Armor value remains constant. This is done for simplicity and smoothness of play.

### Damage Table

Damage less than Base Armor	NO DAMAGE
Damage is equal to or greater than Base Armor	LIGHT DAMAGE
Damage is equal to or greater than 2x Base Armor	HEAVY DAMAGE
Damage is equal to or greater than 3x Base Armor	OVERKILL

### ◆ Light Damage

Units that receive Light Damage are mildly shaken up by the attack, but not seriously damaged. Place a Light Damage counter on the unit's base or make a note on the datacard. If, at any time, a unit register two Light Damage hits, both are immediately removed and replaced with a single Heavy Damage result (see below).

For simplicity and speed of game play, Light Damage has no adverse effects, and a Light Damage unit may operate at full power; the only danger is that if the unit gets another Light Damage hit, it will get Heavy Damage.

### ◆ Heavy Damage

Units that receive a Heavy Damage result are permanently affected. They follow the 'rule of halves:' values for MP allowance(s) and weapon damage are all halved, rounding up. A Heavy Damage result may not be removed from a unit; it stays until the unit is killed (or repaired after the battle).

If a unit ever has two Heavy Damage results placed on it, it is immediately Overkilled. Overkilled units are immediately eliminated from the game and are removed from the board in a spectacular explosion.

### ◆ Overkill

An Overkill hit results in the vehicle being removed from play. This may or may not result in the total destruction of the vehicle. Due to the abstractness of Tactical level play, the vehicle may be destroyed, or it may just have suffered enough damage to make it inoperable — the distinction matters little to the commander, who has just lost a unit.

You may wish to have extra detail in the way damage is handled during game play. If all Players agree, use the more detailed Silhouette standard damage resolution procedure, as detailed in the *Advanced Rules* chapter (see page 44). It requires additional bookkeeping, however, and may not be suited to very large engagements.

### Vehicle Damage Example

**Example:** Gear Alpha fires his bazooka at tank Beta. Alpha's modified attack roll is 7. Beta's modified defense roll is 4. Alpha hits with a Margin of Success of  $(7-4=) 3$ . If Gear Alpha's bazooka has a Damage Multiplier of  $\times 20$ , his total damage is  $(3 \times 20 =) 60$ . Tank Beta has a Base Armor value of 25. Since 60 is over double that value but not triple it, the tank takes Heavy Damage.





# QUICK START RULES

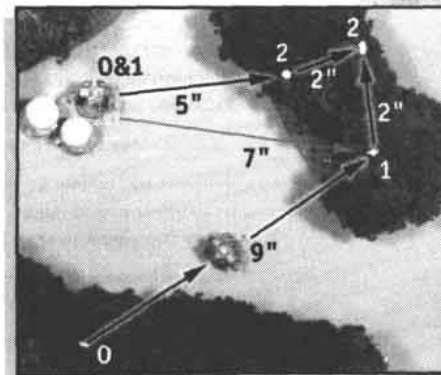
2

## COMBAT EXAMPLE - 2.7

This example shows exactly how the **Heavy Gear** miniatures game quick start rules work. It is recommended that you actually set up the terrain and use the miniatures as you read through the example in order to get a better understanding of what is taking place.

Miranda and Katja, the players, decide to play a very simple scenario involving just one Gear per side. Miranda, playing the South, would like to use a Spitting Cobra, but since it's a fire support unit, it probably won't be as good in a one-on-one battle. She chooses a Black Mamba instead. Katja, playing the North, picks a Jaguar, the Black Mamba's opposite. It is a good balance of two high-performance machines.

They choose a wooded area for battle, with a pair of enigmatic stoneheads for decoration as well as extra cover. For their initial tactical rolls, Miranda rolls a 2 and Katja rolls a 3. They make a note of those numbers for their Tactical Command Point pools. Katja forces Miranda to set up her units first, letting her respond to her opponent's position. Miranda places her Gear in the forest; Katja places hers behind the stoneheads for some initial cover.



## Round One - 2.7.1

In the first round, Miranda plans on moving her Mamba across an open clearing to get a better angle on Katja, who is under the protection of the stoneheads that block Miranda's line of sight. Miranda decides she should take evasive maneuvers when she runs across the clearing. Katja chooses not to go evasive. They roll their initiative rolls (Piloting Skills, since it's a one-on-one battle); Katja rolls a 5 and Miranda rolls a 2. Katja decides to force Miranda to move first.

Miranda darts across the clearing at Top speed for her Black Mamba, moving 9". With her Gear's Maneuver rating of +1 and her evasive maneuvers, she will have a total defense of +5 from frontal attacks. However, since she is evasive, she cannot herself attack this round. Her activation phase is over and it is Katja's turn.

Katja decides to hold still (+2 to her attack rolls) and fire. Her Jaguar is 7" from Miranda's Mamba and there are 2" of woodland terrain between the two Gears. With her Jaguar's Fire Control rating of +1, if she fires her medium autocannon (MAC, which is at Long range for a -2 on her attack roll and which has an Accuracy of +0), she has a total modifier of -1. Odds are not in her favor, but she does have a nice pool of three Initiative Command Points to spend on extra Actions if she chooses. She uses one, gaining one extra attack at no penalty. Her first roll is a 3, modified by -1 to 2. Versus Miranda's defense roll of 2 modified by 5 to 7, so the attack misses. Katja's second attack, however, is luckier: she rolls a 4, which is modified to 3, and Miranda fumbles! It results in a Margin of Success of 3. The damage from the MAC is x10, so she does 30 points of damage. Compared to the Mamba's Armor Rating of 17, this is a Light Damage result. The Mamba takes a Light Damage counter. It is not an immediate threat, but one more Light Damage result will roll over into a Heavy Damage result. Miranda is suddenly in a tight position.

## Round Two - 2.7.2

For the next round, both rivals decide not to evade. Miranda is out for Katja's blood, and Katja feels she's in a good enough position to focus on the offensive once again this round. They roll their Initiative rolls again. Katja rolls a 6 and Miranda rolls a 5. Katja once more forces Miranda to move first.

Moving at half-Combat speed, Miranda marches her Gear a bit closer to Katja's and fires her own MAC. Now 6" away (Medium range for the MAC), Miranda's attack modifiers are +1 (Fire Control), +0 (MAC Accuracy), -1 (Range), +1 (Movement) and -2 (2" of Woodlands Obscurement) for a total of -1. Katja, who was stationary last round, is treated as stationary for this attack, because it happens before she moves during the round. That's a -3 penalty to her defense, mitigated by her +1 Maneuver to -2. Miranda fires, rolling a 6 that is modified to 5. Katja rolls a 6 for her defense, modified to a 4. The attack hits, but only for 10 points of damage — not enough for even a Light Damage result. Miranda decides to spend one of her Tactical Command Points to gain another shot. She rolls a 4 (modified to 3) and Katja rolls a 3 (modified to 1). This time she scores a Light Damage result.

Katja activates her Gear, moving 5" forward it into the forest, and fires her Gear's MAC at Miranda. She misses, and she decides to spend her Initiative Command Point for a second shot. This time she hits for a Margin of Success of 4, resulting in a Heavy Damage. A single Light Damage result will now completely destroy Miranda's Black Mamba, since the two Light Damages would become a Heavy Damage, and the resulting two Heavy Damages would become an Overkill. Katja smiles evilly and prepares to launch another attack . . .



## DOUBLE-CROSS

"I've lost them again, sir. Last known position was Nav Buoy 18, then I lost telemetry."

Commandant Dusseault frowned. The sensor network had detected the advance of a Federation armored column in the jungle east of their position ten hours ago, and they had only intermittent sightings since. Most of the time, it was only the death cry of another automated sensor post that allowed them to map the movements of the invaders.

"What can they be trying to accomplish, I wonder... Duong! Come over here!"

Dusseault walked over to the command holoviewer, which was displaying a view of the surrounding region. Charles Duong, his second-in-command, joined him. The computer displayed the thick forest canopy as a continuous green cloud, which was kept mostly transparent to allow them to see the troops massed under its bulk.

"It doesn't make much sense, sir. They've been canvassing the zone with no apparent pattern for quite a while now. Should we send a patrol to gather more intelligence?"

"Not yet. There's something going on here that I can't put my finger on, and that always worries me." Dusseault decreased the magnification to show more of the surrounding area. "See here... and here." He rapidly drew a virtual box to highlight an otherwise unremarkable section of jungle.

"There's nothing there." Duong brow furrowed.

"Exactly. There should be at least, according to the logs, twenty-three different early warning buoys." Dusseault smiled. He felt better, now that he had some ideas of what was going on.

The same thing dawned on Duong. "They're opening a path..."

"...For another, large group or air support, yes. We should relay a warning to HQ and prepare..."

A shrill cry from the other side of the command post interrupted him. "Contact! Sir, we have contact along the perimeter, due West!"

"West!? But..." Dusseault recalibrated the holotable. *Smart. Attract our attention to one side while the bulk of the column goes around and approach silently from the other side. But it wasn't enough.*

He started to issue orders to redeploy their on-site forces to face the enemy thrust. Meanwhile, patrols would be called back to ensnare the Northerners in twin flanking actions that would hammer them on the anvil of the base's defenders.

Dusseault smiled at his tactical brilliance. "By the book, Duong. A classic case of active defense."

The smile faded, however, when the first aeroported Gears of the 23rd Lancers — whose transport had slipped undetected through the disabled early warning network — started to land in the base's deserted courtyard.







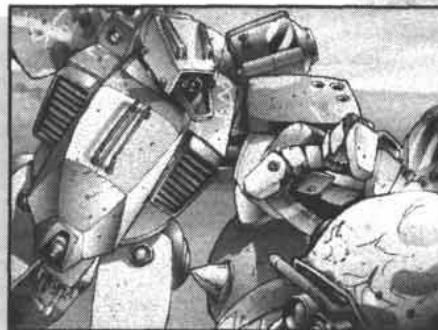
# ADVANCED RULES

3

## ADVANCED RULES - 3.1

Combat is a complex realm, with many variables and sudden surprises. It is often confusing and chaotic, with officers struggling to keep their troops moving in the right direction. There is a lot more going on than just marching forward and blindly firing one's gun at the enemy: you might encounter cliffs and prepared defensive positions, or be pounded by indirect bombardments or hails of automatic fire. You might need to know exactly who got hit where, in order to see if they can still accomplish the complex and detailed mission objectives. Additional rules are required to faithfully reproduce this on the miniature battlefield.

The following pages contain optional rules that bring extra detail and tactical options to the basic game. While they do give you a lot more offensive and defensive options, they make the game more complex and will slow down gameplay until you are familiar with them. Their use is left to the players' decision, and all must agree before the game begins which rules are in effect and which are not.



## MOVEMENT OPTIONS - 3.2

The basic rules let you move your units across the board with little difficulty, since there so few terrain types. The following optional rules introduce new elements that impede the movement of the vehicles and troops on the board and sometimes provide them with extra protection. These terrain features are a nightmare to the inexperienced commander, but a boon to the one wise enough to recognize the pitfalls and use the advantage they provide.

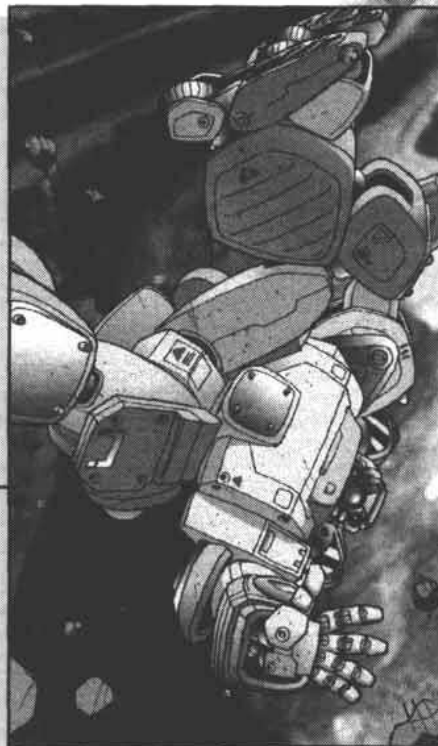
### Cliffs - 3.2.1

Any terrain with a vertical elevation change of two or more inches is considered to be a cliff. Vehicles may not normally ascend or descend cliffs. Walkers with arms are the only exception. Infantry may descend cliffs at normal costs for elevation changes (see page 48).

If a walker has arms that can lift a vehicle of its own Size, it can climb up or down a cliff face. The walker must pass a Piloting Skill test with a Threshold of 5. The walker ascends or descends the cliff face at a rate of one inch per combat round. If the walker fails or fumbles the Piloting test, it falls. Climbing consumes a vehicle's entire MP allotment and is considered to be equal to expending the vehicle's entire Combat Speed Movement Points.

If a vehicle falls off a cliff, it takes a number of damage points equal to a standard two-die test roll times the vehicle's Size times the number of inches fallen. Fumbles result in an automatic kill. For example, a Size 6 Gear with a Base Armor of 15 falls off a 3" tall cliff (150 meters tall). Two dice are rolled for damage, resulting in a 3 and a 5. The Gear takes  $5 \text{ (die roll)} \times 6 \text{ (vehicle Size)} \times 3 \text{ (elevation fallen)} = 90$  points of damage and is smashed to pieces (Overkill result).

Climbing units may not attack. Climbing walkers and infantry are in poor defensive positions and suffer -2 on all Defense rolls.



### Elevation as Range - 3.2.2

If the elevation level difference between an attacker and his chosen target is greater than the (horizontal) range between the two, substitute the difference in elevation for the range. This approximation, while inexact, speeds up game play; purists may want to calculate the exact distance using the Pythagorean Theorem.

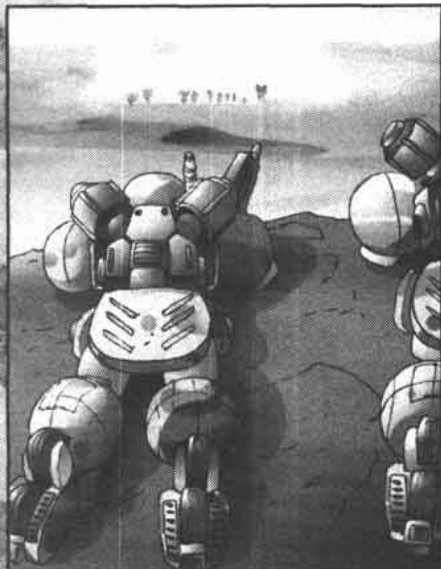
For example: Gear Alpha is standing on the edge of a cliff. Gear Beta is one inch beside him at the bottom of the cliff (4 inches below). Since the difference in elevation levels (4) is greater than the range between the two (1), the difference in elevation levels is treated as the range (i.e. range equals 4 inches).

### Walkers Falling/Knockback - 3.2.3

Whenever a vehicle using Walker movement mode takes large amounts of damage, it may fall down from the force of the impact. If the total damage received in one attack is equal to or higher than twice the Size of the vehicle, the pilot must pass a Piloting Skill test against a Threshold equal to one plus the Margin of Success of the attack that hit it. If the walker fails the test, it falls down, suffering Light Damage. If the walker fumbles the test, it falls down, taking Heavy Damage. Walkers must spend one MP to stand before they can spend MPs on movement.



## 3.2.4 - Hull-Down Positions



Hull-down refers to a classic battlefield position where only the turret of an armored vehicle is exposed to enemy fire, the hull itself being protected by a natural or man-made obstacle such as a ridge or a low wall. This drastically reduces the chances of being hit while not impeding the attacker's own fire. Obviously, other vehicle types can also use hull-down positions, including walkers. These simply squat or lie down behind cover.

Because of the large ground scale chosen for the tactical game (50 meters per inch) and the fact that non-flexible miniatures are used as game pieces, it is not always possible to exactly put a unit behind a ridge or other land feature. Instead, a somewhat abstract system is used: by spending MPs, a vehicle can entrench itself behind hard cover almost anywhere. It is assumed that there are terrain features suitable in the terrain for such a move. The MP cost (which is listed in the Hull-Down Table, below) represents the fact that the unit must move out of its way, find suitable cover, slow down and otherwise park itself into the hull-down position. Some terrain types offer less protection than others, and this is reflected in the MP cost — it is always easier and faster to find a suitable defensive position in broken terrain or in a city than on open ground.

Once a unit goes hull-down, mark it with a small counter (a paper chit with the letters "HD" or a shield symbol works well for this purpose). Remove the counter when the vehicle or unit moves again. If you feel more adventurous or have modeling experience, you can model special hull-down versions of your miniatures. By cutting and reposing the model in an ambush position (such as kneeling or otherwise lying down), and mounting it on a small base with earthwork modeled with plaster or foam around it, you can get a spectacular — and very visual — Hull-Down marker.

### ◆ Combat Effects

The *Hull-Down Table* below lists the various costs and protection factors assigned to each terrain type. The values listed apply equally to the tactical and Skirmish scale rules (see page 52 for the latter). "Covers" shows how much of the vehicle is hidden behind the obstacle when the vehicle is in hull-down position with weapons at the ready. If the vehicle's commander so choose, the vehicle can hide completely, covering all locations but unable to fire anything but indirect fire weaponry.

Rather than applying a modifier to hit the now smaller silhouette of the vehicle, the attack is made normally. If it hits, roll a single die: if the number is listed in the "Covers" column, the obstacle absorbs part of the damage first. If you are using the complete Silhouette damage rules (see page 44, the numbers listed in the table refer to the die roll numbers on the System Damage table.

"Protection" gives the amount of damage points subtracted from the attack when it hits the cover first; the attack then proceeds normally with the remaining damage points, if any. If the damage is reduced to zero, there is no further effect on the target vehicle. To prevent unnecessary bookkeeping, the protection afforded by the cover remains constant and does not ablate under fire. Aimed attacks are not possible against hull-down vehicles.

Infantry is assumed to always look for possible "hull-down" positions, hence the natural -2 modifier on all attacks against them (see the *Infantry* rules, page 47). They may still use the protection afforded by revetments and foxholes, but may not claim any damage reduction from other "hull-down" positions.

HULL-DOWN TABLE ☐

Terrain Type	MP Cost	Covers	Protection
Clear	n/a	n/a	none
Rough	+2	2 to 4	15
Sand	+3	3 to 4	10
Woodland	+2	2 to 4	15
Jungle	+1	2 to 6	20
Swamp	+1	2 to 6	10
Water*	+3	2 to 6	5
Urban	+2	2 to 6	15
Dense Urban	+1	2 to 6	20
Elevation change**	+1	2 to 6	15

\* Water only produces hull-down effects if the vehicle is capable of immersing itself completely (the vehicle must have the Submarine movement type).

\*\*It is assumed that the vehicle is located at the edge of the elevation level.







## Bridges, Roads and Urban Terrain - 3.2.5

Many man-made objects can be found on battlefields. The players should agree on what human structures are on the mapboard, if any. Man-made objects can be destroyed in the course of battle. Each structure has a **Damage Point Capacity**. If it takes more damage points than this, the structure is destroyed. Man-made structures take damage in a manner similar to infantry (i.e. they accumulate damage points instead of Light/Heavy Damage effects). Burst fire weapons affect structures in the same manner as they do infantry.

### Bridges ◆

Bridges span bodies of water such as rivers and straits, or chasms, including canyons and gullies. The bridges presented here are the large ironworks found over prominent terrain features, not the small ten or twenty-meter bridges found in the city or on campaign roads (those are considered as part of the road itself for simplicity).

Movement across bridges has the same MP cost as Clear terrain, unless a road has been built on the bridge (see *Roads*). Each inch of bridge is rated by three attributes: Damage Point Capacity, Elevation Level and Size Capacity. The middle part of some of the biggest bridges can be one or more elevation level higher than the land it connects to.

The Size Capacity of a bridge inch is the maximum Size of vehicle that this bridge section can safely support. If a larger vehicle attempts to cross the bridge, roll one die. If the die roll is equal to or less than the difference between the vehicle's Size and the bridge's Size Capacity, the bridge loses one tenth of its original Damage Point Capacity per point in Size difference (see example below). Repeat the die roll until the bridge section either does not take damage (at which point, stop rolling for bridge collapse) or breaks under the strain and collapses. If a vehicle is six or more Size points greater than the bridge's capacity, the bridge section will automatically and immediately collapse.

If a bridge section collapses, sections in the adjoining inches have a 50% chance of collapsing as well. Roll one die for each adjacent inch: if the result is 3 or less, the adjoining bridge section collapses. All vehicles on a collapsing bridge take normal falling damage based on the number of elevation levels they fall. The bridge is transformed into Rough terrain afterward, unless it is over Water terrain — it then becomes a Swamp terrain (this only represents the presence of debris in the shallow water, not a sudden growth of vegetation!). A bridge collapsing above a Deep Water terrain (i.e., deeper than 50 meters) leaves no debris.

### Bridge Example □

- Each inch of a three-inch long (150 m) bridge has a Damage Capacity of 100 and a Size capacity of 10. The middle inch is elevated one level higher than the other two inches and the surrounding terrain. The bridge spans a chasm that is two elevation levels lower than the surrounding terrain. If a Size 12 vehicle attempts to cross the bridge, it must pay the normal MP cost for Clear terrain to travel across. Since the vehicle is too large for this bridge, it must test for bridge collapse. Upon entering the first bridge inch, the vehicle roll one die. On a result of 2 or less (Size 12 - Size capacity 10), the bridge loses 20 damage points (one-tenth of its original damage point capacity, times the Size difference). If the bridge is damaged, the roll is repeated until the roll is greater than 2 (at which point the bridge stabilizes) or until that section of the bridge collapses. If the bridge collapses, the vehicle will suffer a two inches fall. If the middle part of the bridge collapses, any vehicle on it will suffer a three inches fall since it is one elevation higher than the surrounding terrain.*



### Roads ◆

Roads are designed to make travel easier for ground vehicles by providing them with an ideal travel surface. Roads have a 100 Damage Point Capacity per inch. Any Ground vehicle traveling on a road gains an additional number of MP equal to half of its current speed (Combat or Top) rounded down to the nearest whole number. These free MPs must be entirely expended on movement along the road or they are wasted. Additionally, if a vehicle (of any type) follows the path of a road, it pays the MP cost of Clear terrain instead of whatever terrain the road crosses.

Roads over bridges use the bridge's Damage Point Capacity but still confer the movement bonus to Ground vehicles.

Urban terrain types have small streets, but they do not normally receive the road movement bonus due to the large number of minor obstructions in urban settings (speed bumps, pedestrians, parked vehicles, etc.). All major streets or highways should be represented by Roads through Urban terrain.



## ◆ Urban Terrain

Since a tactical inch is 50 meters across, it can easily hold several buildings. An inch of ground that contains from one to six buildings is considered to be urban terrain; seven or more buildings is considered to be dense urban terrain. Both types of urban terrain naturally favor Ground vehicles and offer poor traction for Walkers and poor maneuvering space for Hover vehicles. These optional terrain types have the following attributes.

Urban Terrain <input type="checkbox"/>					
Terrain Type	Walker MP Cost	Ground MP Cost	Hover MP Cost	Obscurement	Damage Capacity
Urban	2	1	2	1	80*
Dense Urban	3	2	3	2	100*

\* Assumes generic buildings. Reinforced buildings or fragile buildings would vary accordingly.

## 3.2.6 - Minefields



Any one square-inch area may be designated as a minefield. The type of mine used to lay the minefield determines the minefield's Threshold and Damage Multiplier. Treat minefields as areas that have a continuous area saturation attack in effect (see *Saturation Fire*, page 43). Some types of mines have different Thresholds versus different unit types (e.g. some are more effective versus infantry).

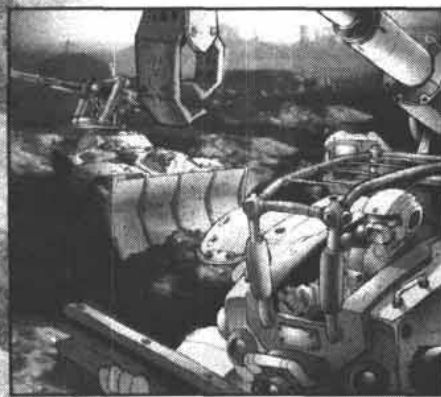
### Minefield Example ☐

- *Gear Zeta wanders into a heavy anti-armor minefield area (x25 damage, Thresholds = 8 vs. vehicles, 3 vs. infantry). Zeta must now roll a Piloting Skill test to avoid the mines. He rolls a 6. The Margin of Failure is 2, yielding 50 damage points against Zeta. Since Zeta is a standard Hunter (Overkill = 45 damage points), Zeta is blown to smithereens.*

### Sample Minefields ☐

Mine Type	Damage Multiplier	vs. Vehicles	vs. Infantry	Threat Value per Square Inch
Anti-Personnel	x5	4	7	2
Improved Anti-Personnel	x7	4	8	3
General Purpose	x10	6	6	5
Heavy General Purpose	x15	6	6	7
Anti-Armor	x15	7	4	8
Heavy Anti-Armor	x25	8	3	10

## 3.2.7 - Towing Capacity



All types of vehicles are assumed to be capable of towing objects. A vehicle's maximum towing capacity (in kilograms) is equal to the vehicle's mass. This assumes that the towed item is designed to be towed (e.g. a trailer, a barge, another ground or naval vehicle). Items which were not designed to be towed, such as disabled Gears, are considered to have double their normal mass for towing purposes.

Vehicles can tow up to half their maximum towing weight without a reduction in speed. Vehicles towing between half and three-fourths of their capacity are limited to Combat Speed; loads from three-fourths to full towing capacity reduce the speed to half Combat Speed until the charge is dropped.





# ADVANCED RULES

3

## ADVANCED DETECTION RULES - 3.3

Most of the 62nd century combat vehicles carry sophisticated sensor suites to locate enemy units lurking nearby: radar, motion detectors, IR and UV cameras, etc. By performing an active sensor sweep, these systems can be used to obtain a combat lock-on on an enemy unit even when visual or passive sensor line of sight is blocked. This procedure is called performing an **Active Sensors check**, which costs one Action to do.

An Electronic Warfare Skill test is rolled against a Concealment Threshold (see the table below). A success gives the detecting unit a line of sight to the defender, as if they were in the open (though hard Obscurement still counts against the Attack roll — after all, radar waves may go through trees, but bullets might get deviated). A draw, failure, or Fumble does not grant line of sight but has no other effect. Vehicles with no sensors (or destroyed sensors) cannot perform Active Sensor detection. Active Sensor sweeps, unlike passive or visual detection, require a full Action to complete.

### Concealment Threshold

Base Threshold = Concealment + defender's Stealth - attacker's Sensors - defender's movement penalty - 1 for every weapon fired by the defender

### Active Sensor Example

**Example 1:** *Gear Alpha cannot normally detect Gear Beta, since the total Obscurement value of the terrain between the two machines is greater than the Detection Rating of Alpha (which is 4). Three Jungle inches intervene between the two and Beta is in a Swamp. This produces a Concealment value of (2+2+2+1=) 7. Alpha's unit leader, however, is expecting trouble and orders the Gear to do an active sensor sweep to try to lock-on to the faint readings from Beta's direction. The Concealment value of 7 is the base Threshold for Alpha's sensor Skill test.*

*Beta last moved two inches. This reduces the Threshold by 2 points, down to 5. Beta did not fire any weapons this round. To add to Alpha's difficulties, Gear Beta is an experimental combat model with the Stealth Perk at a rating of 3. This is added to the Threshold, producing a final Threshold of 8.*

*Alpha's Sensors are rated at +1. Alpha's pilot spends an Action and rolls his EW Skill test, obtaining a 6. He adds his Sensor rating (+1) to the roll and obtains a final score of 7. This is not enough to detect Beta — Alpha needed to get a higher score (9 or better) than the Threshold of 8 to detect the enemy Gear.*

## ECM and ECCM - 3.3.1

Electronic Countermeasures and Electronic Counter Countermeasures are used to affect communication and sensor transmissions. ECM and ECCM Thresholds (Electronic Warfare Skill + rating) are rolled immediately after the Action is spent to activate these systems, but their effect is not felt until the beginning of the next round.

If ECM is active and functional during the initiative phase, all Sensor and Communication rolls for the round are affected and must beat the ECM Threshold. The unit which is using either of these systems is the one testing, not the receiver. Transferring Command Points requires a Communication test from the commanding unit (if an infantry squad, use Infantry Skill with Communications -2). ECM affects all enemy units within the emitter's Sensor range.

If ECCM is active during the initiative phase of the turn, all active ECM systems within the Sensor range of the ECCM unit must compare their own Threshold to the ECCM's Threshold (or Thresholds, if there are more than one ECCM system active). If the ECCM Threshold is equal or higher than the ECM's Threshold, the ECM has no effect that turn.

The ECM unit may spend an Action during the turn to try and increase its own Threshold in order to beat the ECCM in the next round. Likewise, the ECCM unit may spend an Action to try to raise its own Threshold for the next round. The new result stands, even if it is lower than the previous one. Friendly ECM units are not affected by their side's ECCM.

## Stealth Effects - 3.3.2

Some vehicles are equipped with special systems that reduce their overall sensor signature: these are grouped under the Perk "Stealth." During daytime, the rating of a Stealth system is added to the Concealment total only when there is Obscurement between the attacker and the defender — Stealth does not confer invisibility. Stealth systems are always added to the defender's Concealment at night, since most stealth vehicles are painted in dark shades and feature silent running drive trains, making it hard to locate them with human senses and sensors alike.

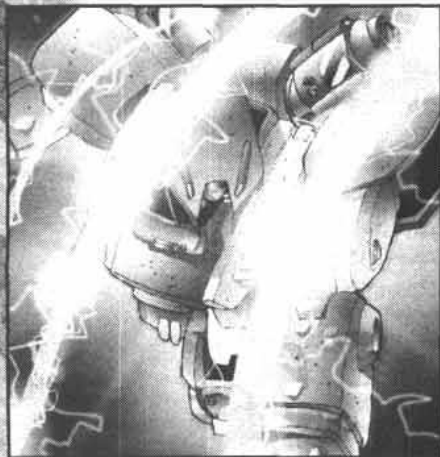




## 3.4 - ADVANCED COMBAT RULES

This section covers advanced rules for tactical combat. All of the rules presented here introduce new ways of using ranged weapon fire to hit several targets at once, or hit targets that may not be visible. Not all of them will apply to all the games you can play, but they can be mixed and matched without ill effects. Whenever a rule affects or changes another one, it is clearly mentioned in the text. Because the advanced options bring additional complexity to the game session, it is recommended that you have a good understanding of the basic rules before attempting to use any of the following. The use of any rule in this section is completely optional and must be agreed to by all players before the start of the game.

### 3.4.1 - Area Effect Weapons



Area effect weapons damage everything in their radius, irrespective of friend or foe. These weapons are rated in Area Effect (AE), followed by the radius of their blast area in inches. An AE of radius 0 means that only the target is affected (anything in base contact with the target must defend against the attack). A single attack roll is made, while each and every vehicle and squad (allies included) in the affected area roll their defense against this value separately. Even if the blast is completely defended against (e. g. Margin of Success equal to 0), any unit in the blast zone still takes half the explosion's Damage Multiplier in concussion damage.

#### Area Effect Example

**Example:** An area effect weapon (AE1, DM x30) is fired at Gear Alpha (Armor 15/30/45). Both Alpha and strider Beta nearby are affected since the blast is AE1. The attack roll is low — a mere 3. The Gear rolls a 6 and the strider a 3 (after modifiers). Still, both take 15 points of damage (half the weapon's Damage Multiplier). The strider shrugs off the damage, but the Gear suffers a Light Damage.

### 3.4.2 - Called Shots



A gunner may elect to perform a called shot versus a specific component of a vehicle rather than aim for the center of mass. Possible targets are Fire Control, Structure, Crew Compartments, Movement Systems, and Auxiliary Systems. These locations are represented by 1 to 5 on the Systems Damage Table (see *Damage*, page 44). Called shots take a -1 modifier on their attack. If the called shot hits, the odds of hitting the specific component are increased: result 6 now also correspond to the desired location (see page 44).

For scenario purposes, high precision shots versus tiny targets (headlights, for example) are possible. The shot must be aimed (-1 Accuracy) and a Margin of Success of at least 3 is required to hit. If the MoS is lower then 3 but above 0, the attack hits the targeted location but not the tiny target. For example, a gunner wishing to blow out a headlight on the Gear's structure would make a precision shot; if the MoS is under 3, he hits the Structure instead. Small targets and their locations are mentioned in the scenario when this option is available.

Called shots, being less likely to hit than other attacks, are usually best used for specific objectives. For example, destroying a vehicle's movement system helps to capture it, while specifically targeting the fragile antennae array of the Gear providing ECM cover to the opponent is more likely to silence it than a random hit to the structure.

#### Called Shot Example

**Example:** Gear Alpha's pilot holds a grudge against Gear Beta's pilot and performs an aimed shot towards Beta's crew compartment. Alpha takes a -1 on his attack roll, but if he hits Beta, his odds of hitting the crew compartment are slightly increased. When Alpha's Player rolls on the Systems Damage Table, either a "3" or a "6" result will hit the crew compartment. Normally, only the "3" is a crew compartment hit — a "6" usually results in a "Roll twice on this table" result.





Indirect fire is used by artillery batteries and other vehicles that have weapons capable of indirect fire. Indirect fire is primarily used for long range fire support, though it is also useful to attack targets that are out of visual line of sight. Only weapons that are specifically designated as indirect firing weapons may use this form of attack.

To fire indirectly, an allied unit must be designated as the forward observer. The forward observer must have a valid LOS to the target. Being a forward observer takes up one Action (and possibly a Communication roll to beat ECM, if any is present). However, a single forward observer can relay firing coordinates to multiple indirect fire units at no additional Action cost.

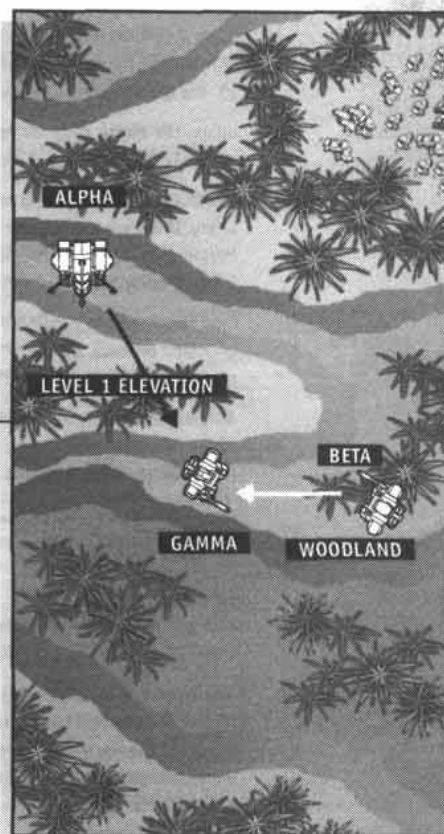
Indirect attacks can be performed over obstacles, including interfering elevation levels, because the attacks are angled over the obstructions. The attack receives the forward observer's Obscurement modifier to attack instead of his own. If the attack is successful, however, only the target terrain's Obscurement counts, thus increasing the MoS. If the attack fails, the shot scatters in a random direction by a number of inches equal to the MoF.

## Indirect Fire Example

**Example 1:** Alpha and Beta are allies. Gear Gamma is their enemy. Alpha and Gamma cannot see each other due to an obstructing hill. However, Alpha has an indirect fire weapon. Beta has a line-of-sight with Gamma and can serve as a forward observer for Alpha. If Beta expends one Action to serve as a forward observer, Alpha may fire indirectly at Gear Gamma using the Obscurement between Gears Beta and Gamma as his own Obscurement modifier.

**Example 2:** The total Obscurement between Beta and Gamma is 0, because there is less than one inch of Obscurement. Beta can then transfer the information (at the cost of one Action) to Alpha, who fires with Beta's Obscurement penalty, but its own range and Accuracy modifiers. If it hits, the MoS is increased by removing all Obscurement except Gamma's own terrain. If it misses, the shot scatters randomly by a distance equal to the Margin of Failure.

## Indirect Fire - 3.4.3



## Incendiary Effects - 3.4.4

Incendiary weapons can decimate enemy troops. When an incendiary weapon hits a vehicle, the damage is equal to the weapon's Damage "Multiplier" (called its Intensity score) plus the Margin of Success. While this may seem like less damage than most weapons, many incendiary weapons are labeled as "slow-burn" weapons. Slow-burn weapons cause the same amount of damage for a number of rounds equal to the Margin of Success. Consequently, if a slow-burn weapon with an Intensity score of 12 hits a target with a Margin of Success of 3, it would do 15 points of damage to the target for three rounds.

Incendiary weapons are most effective versus infantry. Against infantry, add the Margin of Success to the Intensity and multiply this value by the Margin of Success to obtain their damage. Slow-burn weapons apply their later rounds of damage to the unit only if it remains in the same position.

## Incendiary Examples

- Vehicle Alpha attacks vehicle Beta with a slow burn incendiary weapon. The attack succeeds with a Margin of Success of 3. The weapon has an Intensity rating of 15 (the substitute for the damage multiplier). This attack will do 18 points of damage to Beta for three rounds. The first round's damage is allocated immediately. In later rounds, the damage is allocated during the miscellaneous events phase. Vehicle Alpha attacks infantry squad Gamma with the same slow-burn incendiary weapon (15 Intensity). The attack succeeds with a Margin of Success of 2. This attack will inflict  $(15 + 2) \times 2 = 34$  damage to the infantry squad per round for two rounds. Vehicle Alpha attempts to ignite a woodlands terrain using the same weapon. Alpha must attack the terrain at least four times  $(15 \times 2 \times 4 = 120)$  to amass the 100 points of Intensity required to ignite a terrain.





## ● Firestarting

Incendiary weapons can be used to start fires. To ignite a one square-inch zone, a total of 100 points of Intensity must be fired into it. No attack roll is necessary. Slow-burn incendiaries have their Intensity doubled. Once the zone is ignited, it is considered to be a fire of Intensity 10. At the end of every combat round thereafter, its flame Intensity is increased by one until it reaches 20. Once it reaches 20, the burning zone increases by 1" in all directions with an Intensity 10 fire.

Unless the battle drags on for hours, wind will have little effect on the spread of the fire. If such an effect is desired nonetheless, randomly determine the direction of wind before the game, then spread fire only downwind.

Vehicles crossing a burning zone must pass a Piloting Skill test versus a Threshold equal to one-half of the zone's fire Intensity to pass safely. If the vehicle fails the roll, treat the result as a successful incendiary attack on the vehicle with a Margin of Success equal to the Margin of Failure of the Piloting Skill test. Treat Fumbles as if the incendiary attack's Margin of Success were equal to the test Threshold. Infantry units that enter a burning zone are automatically destroyed.

Only Woodland and Jungle terrains can be ignited. Alternatively, the Players may agree that the Rough and Clear terrains on the map are grassland or scrub and allow them to be ignited. Sand, Swamp and Water terrains cannot ignite for obvious reasons; a scenario might cover them with oil or a similar flammable substance and thus allow these to be ignited, but they normally cannot burn.

Burning terrains produce smoke in an irregular fashion. Roll one die per burning zone every round to know how much Obscurement the smoke from that zone causes: 1-2, no Obscurement; 3-4, Obscurement 1; 5-6, Obscurement 2. The smoke causes Obscurement in the two levels above the ignited area as well.

## 3.4.5 - Burst Fire

Burst fire is a typical example of the effect-based rule design philosophy that permeates the Silhouette system. Rather than worry about each and every bullet or rocket sent toward the enemy by a rapid fire weapon, they are generalized and abstracted into a form that is easier (and faster) to use during the game.

Any weapon with a Rate of Fire (ROF) rating of 1 or greater is capable of burst fire. The Rate of Fire is added to the weapon's Damage Multiplier when the weapon is used against vehicles and other hard targets such as buildings and other structures. This represents the increased damage effect caused by the pounding of many projectiles upon the target's armor (remember, Silhouette's Damage Multipliers increase exponentially, not linearly). A successful burst fire attack versus infantry and other soft targets, on the other hand, adds the ROF bonus to the Margin of Success instead of the Damage Multiplier to represent the devastating effect of the multiple rounds on the unprotected target(s).

Ten rounds of ammunition are expended (not entirely realistic, but much simpler game-wise) for every point of Rate of Fire bonus used in the attack. Burst fire has the effect of lowering the weapon's total effective damage for the ammo fired because many rounds will simply not connect with the target. To conserve ammunition, the attacker may elect to use only part of the weapon's entire ROF rating. If the ROF rating is equal to zero (by choice or by design), only one round of ammunition is expended per firing of the weapon.

### Burst Fire Example



#### Example:

*Smitty fires his 20mm autocannon at the enemy. His gun has a ROF bonus of 2. He elects to fire with the full ROF bonus, expending 20 rounds of ammunition. He hits with a Margin of Success of 2. His gun's normal Damage Multiplier is x8; since his ROF is 2, this now becomes  $(8 + 2 =) 10$ . The total is now 20 points of damage. Had he elected to use an ROF bonus of 1 his total damage would have been  $((8 + 1) \times 2 =) 18$ . He would, however, have saved himself 10 shots. Had he used his full ROF bonus of 2 against infantry, the bonus would have been applied directly to his Margin of Success. This raises his Margin of Success to 4, thereby causing  $(8 \times 4 =) 32$  points of damage to the hapless infantry unit.*

## ◆ Missile ROF

Unlike other weapons, rocket and missile launch systems do not expend 10 rounds of ammunition per point of ROF bonus used in the attack. Instead, the number of rockets or missiles used doubles for every point of ROF that is applied to an attack. Thus, an attack with ROF +1 requires 2 missiles, ROF +2 requires 4 missiles, ROF +3 requires 8 missiles, ROF +4 requires 16 missiles, and so on, doubling every time. This reduction in ammunition cost both represents the increased effectiveness of rockets and acts as a counterpoint to their vulnerability to anti-missile devices.







# ADVANCED RULES

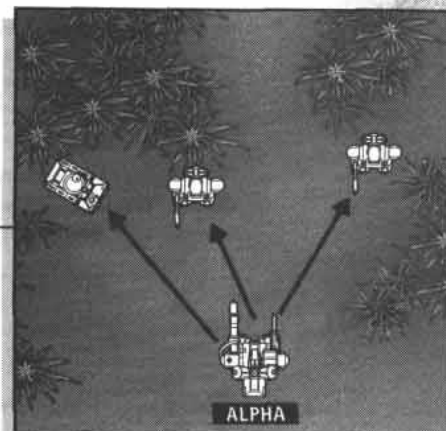
3

## Walking Fire ◆

Weapons capable of burst fire can be used to attack multiple targets in a single Action by walking the burst across the targets. A Player must declare that he is walking fire before any attacks are made. The Player then chooses the targets of his attack. A number of targets equal to the weapon's ROF plus one may be attacked. For each extra target, the weapon's ROF is reduced by one for damage purposes (but not for ammo expenditure). All targets must be within the weapon's firing arc. Each separate attack is rolled separately. Each individual target may not be attacked more than once per round by the same weapon (no extra attacks against one target).

### Walking Fire Example

**Example:** *Gear Alpha sprays rocket fire across three targets. Since the rocket pod has a Rate of Fire of +4, he could chose to attack up to five targets in a single attack (basic target plus four others). Since he is attacking two extra target, his effective Rate of Fire for each individual attack is +2, two points of ROF having been expended to switch target. Alpha still expends 16 rockets.*



## Saturation Fire ◆

A burst fire weapon (ROF equal to or greater than +1) can be used to saturate a mapboard zone and automatically attack anyone entering it. The weapon is put on full automatic fire and ammunition is emptied liberally in the target zone, filling the air with a virtual wall of projectiles. Every unit that is in the target zone or enters the zone later in the combat round suffers an attack automatically, regardless of speed, maneuver or allegiance.

To perform saturation fire, the attacker chooses a zone with a 1" radius. He then rolls his attack normally except that half the weapon's ROF (rounded down) is added to his total. The ROF is not used to increase the Damage Multiplier or Margin of Success of the attack. After rolling, the attacker records the total attack roll. Any unit in the zone, or that enters the zone later in the combat round, must surpass this number or be damaged by the saturation fire. The Margin of Failure of the defender is treated as the Margin of Success in a normal attack (i.e. total damage = Margin of Failure x Damage Multiplier of weapon). There are two limitations to this type of fire: the saturation zone cannot be further than the Medium range of the weapon, and the weapon uses 30 shots of ammunition (or 8 rockets) per ROF point used in the attack. If the weapon does not have this much ammo left, the result still stands (although the ammo magazine is emptied). A least 10 rounds of ammunition (or 4 rockets) are required to saturate a zone.

### Saturation Fire Example

**Example:** *Smitty, our ever vigilant autocannon fiend, decides to saturate a certain zone using all of his autocannon's ROF of +2. Smitty empties his massive clip into the tiny 50-meter area. His attack roll turns up a 7. Smitty adds 1 (half his ROF bonus) to the total, bringing it to 8. Any unit presently in that zone, or that enters that zone later in the round, must immediately roll a normal defensive roll versus a Threshold of 8 (Smitty's attack roll). If one of these defenders failed the roll, he would be treated as if he had received a successful attack from Smitty's autocannon. The poor schmoe's Margin of Failure would be multiplied by the autocannon's Damage Multiplier of 8. It is a pity that Smitty is now out of ammo, but then again, his opponents are likely to get shredded to itty, bitty pieces.*






## 3.5 - DETAILED DAMAGE RULES

The Armor rating of a vehicle represents the toughness of its best armored location. Aiming for the weaker points of the structure thus increase the chances of damaging the unit. A weapon's damage increases with the Margin of Success of its attack, since weapon damage is rated as a multiplier to the Margin of Success. Thus the better the marksman, the greater the damage.

$$\text{Total Damage} = \text{Margin of Success} \times \text{Damage Multiplier}$$

This final damage is compared to the Base Armor of the target vehicle. The following table, Damage versus Armor, lists the possible outcomes. Only the most severe effect applies. For example, if a vehicle suffers Heavy Damage because it took damage exceeding twice its Base Armor value, it does not suffer Light Damage even though it obviously took damage in excess of its Base Armor rating.

Damage versus Armor 		
Damage versus Armor	Outcome	What to Do
Damage smaller than Armor	No Effect	Nothing; Damage bounces off
Damage greater or equal to Armor but lower than 2 x Armor	Light Damage	-1 to Armor Rating; roll on Systems Damage Table, Light
Damage greater or equal to 2 x Armor but lower than 3 x Armor	Heavy Damage	-2 to Armor Rating; roll on Systems Damage Table, Heavy
Damage greater or equal to 3 x Armor	Overkill	Vehicle Destroyed; remove miniature

### Vehicle Damage Example

**Example:** Gear Alpha fires his bazooka at tank Beta. Alpha's modified attack roll is 7. Beta's modified defense roll is 4. Alpha hits with a Margin of Success of (7-4=) 3. If Gear Alpha's bazooka has a Damage Multiplier of x20, his total damage is (3 x 20 =) 60. Tank Beta has a Base Armor value of 25. Since 60 is over double that value but not triple it, the tank takes Heavy Damage.

## 3.5.1 - Systems Damage

The attacker rolls 1d6 to find the location of the hit. When multiple possibilities exist for exactly which vehicle component is damaged, such as when a weapon is damaged, a single die is rolled. If the result is an odd number, the defender chooses which system is damaged. If the result is an even number, the attacker chooses which system is damaged.

For example, a defender might receive a "-1 to Single Weapon" damage effect. If this defender has more than one weapon, a die is rolled. If the number is odd, the defender will probably choose to penalize his most feeble weapon ("we lose more vibroknives that way"). If the number is even, the attacker will most likely opt to damage the defender's main weapon. The penalty is then applied to the Accuracy of the weapon chosen.

If the damage table indicates damage to a system that is not present on the vehicle (or that has already been totaled), the vehicle takes no further damage beyond the loss of Armor points. A vehicle is not destroyed until it is either down to zero Armor point, it receives damage in excess of three times its Armor in a single attack, or the System Damage table result indicates that it is destroyed.

### Vehicle Damage Example

**Example:** Following on the previous attack, a roll on the Systems Damage table produces a 2: Structural Damage. This requires a roll on the Structural Damage Subtable B, and this die roll is a 4. One is added to the result, as directed in the previous table. This brings the total to 5: Power Transfer Failure/No Movement. The tank can no longer move, probably because of extensive damage to its treads or gearboxes. It also loses two points of Armor, down to 23.

## Fire Control

Fire Control is a catch-all category that represent the vehicle's targeting devices, acquisition gear and its weaponry. If more than one weapon system is present, all damage received is randomized following the procedure outlined in the previous section.

The damage penalties are applied to the affected weapon's Accuracy. If a weapon's cumulative penalties ever reach a total of -5, the weapon is put out of commission and cannot be used anymore. If the penalties drop to -6 or lower, the weapon is completely destroyed and blown off the hull.





## Structure ◆

Structure hits damage the vehicle's frame and structural integrity. The hull and other components are twisted out of shape or ripped apart, causing further damage to the mechanisms within. Most Structure hits are fairly straightforward: loss of Movement Points are applied to one Movement Type, while Maneuver losses affect the vehicle as a whole.

Power Transfer Failure hits destroy the vehicle's transmission, effectively putting all movement systems out of service. It is still possible to fire weaponry, though. Catastrophic Crew Compartment Failure is just that: the vehicle's structure collapses, trapping the crew between the very armor plates that were supposed to protect them. The Reinforced Crew Compartment Perk is ineffective against this, but the Reinforced Structure Perk will absorb the hit as normal.

## Crew ◆

"Crew Stunned" results means one Action is lost. If the Actions were already taken that round, the lost Actions carry over to the following round(s). Command Points may also be used to pay the Action debt. A chit can be placed on the game sheet as a reminder of Action owed.

The Crew result on the System Damage Table is also used to determine damage among the vehicle's passengers, if any are aboard. One die is rolled to determine whether the crew or the passengers take the hit. Damage is then applied as normal. Passengers cannot normally replace lost crew, though allowances can be made for this in a scenario.

## Movement ◆

Any penalty to the speed of the vehicle is applied to one of its Top Speeds; the Combat Speed is then recalculated as needed. If all Movement Systems are totalled, either through successive minuses (max. -5) or Heavy Damage, the vehicle's defense rolls are equal to zero from now on, since it cannot move.

## Auxiliary Systems ◆

Auxiliary Systems include Sensors, Communications and any Perks which are labeled as auxiliary systems (e. g. life support, ejection seats). If any turret is present, it is counted as an Auxiliary system and may be disabled like the rest (turrets are not affected by "-1" results). A disabled turret is frozen in place and any weapon mounted in it becomes fixed in the arc where it was last fired.

If a vehicle's Sensors or Fire Control system are utterly destroyed, the vehicle may still perform Actions that require these systems, but it suffers a -5 modifier. If a vehicle's Communications system is destroyed, the vehicle may not be used as a forward observer and may not receive Command Points.

Damaged AUX Perks have a -1 to any roll involving those particular systems (for example, -1 on any Sensor roll with Aquatic Sensors), or a 20% loss in efficiency (on systems like mining equipment). If a system's cumulative penalties reach -5 (100% efficiency loss), it is considered destroyed.

### ■ System Damage Example

**Example:** *In the middle of a furious firefight, Gear Theta is hit by a light autocannon. The MoS is equal to 4. The 32 points of the attack cause a Heavy Damage result. Rolling one die, we get a 1 (Fire Control). Rolling on Subtable A, we get a 3, plus 1 for Heavy Damage. The result is "Single Weapon Destroyed." Gear Theta's Player must now roll 1d6 to determine which weapon is destroyed. The result (a "5") indicates that he can choose which one he loses, probably the smaller one. Had the number been even, his opponent would have made that choice for him.*

### □ Systems Damage Table: Light Damage

Roll	Damaged System	Result
1	Fire Control	Roll on Subtable A
2	Structure	Roll on Subtable B
3	Crew	Crew stunned (-1 Action for 1 round)
4	Movement	-1 MP
5	Auxiliary Systems	-1 to 1d6 Auxiliary Systems
6	Roll Twice on this table*	-

- If the attack was a called shot, the attacker hits his target location (as effects 1 to 5 on table, depending on target).





## Systems Damage Table: Heavy Damage ☐

Roll	Damaged System	Result
1	Fire Control	Roll on Subtable A and add +1
2	Structure	Roll on Subtable B and add +1
3	Crew	10% casualties, min. 1
4	Movement	1/2 remaining MP (round down) & -2 Maneuver
5	Auxiliary Systems	1d6 Auxiliary System destroyed
6	Roll Twice on this table*	-

- If the attack was a called shot, the attacker hits his target location (as effects 1 to 5 on table, depending on target).

## Subtable A: Fire Control Damage ☐

Die Roll	Effect
1	-1 to a single Weapon
2	-2 to a single Weapon
3	-1 to all Weapons
4	Single Weapon destroyed
5	Fire Control system destroyed (-5 to attacks)
6	Roll Twice on this table
7	Ammunition/Fuel Hit (roll 1d6)
1-3	Ammo Storage and Fuel Tank Ruptured (vehicle cannot move or fire weapons)
4-6	Chain Reaction! Ammo and Fuel Explodes! (Vehicle Destroyed and Crew Killed)

## Subtable B: Structural Damage ☐

Die Roll	Effect
1	-1 MP
2	1/2 remaining MPs (round down)
3	-1 to Maneuver
4	-2 to Maneuver
5	Power Transfer Failure; no movement
6	Catastrophic crew compartment failure, 75% casualties, min. 1
7	Complete structural failure; vehicle is destroyed; crew survives.

## 3.5.2 - Damage to Armor

Armor loses its effectiveness when damaged due to cracking and structural fatigue. Bits and parts may fall off, or chinks may develop through which the next attack will reach a vital system or component inside, hastening the vehicle's demise.

When a vehicle receives Light Damage, it loses 1 point of Base Armor permanently in addition to the effect outlined in the System Damage Table. Heavy Damage causes a vehicle to lose 2 points of Base Armor permanently, in addition to the system damage. Each point of Base Armor that is lost reduces the amount needed to inflict Heavy Damage by 2 and the amount need to produce Overkill by 3 (for example, a Hunter with 15/30/45 Base Armor would drop to 14/28/42 after a Light Damage result).

Even if the vehicle has specialized armor-related Perks (such as Reinforced Armor), damage is always taken off the Base Armor rating. This is mostly done to simplify bookkeeping and keep the game moving along.

## Armor Loss ☐

**Example:** Gear Alpha has 15 points of Base Armor (15/30/45). It receives 24 points of damage in one attack, enough to cause Light Damage. The Armor thus drops by one point and becomes (14/28/42). It then receives 28 points of damage. Normally, this would cause Light Damage, but because of the previous hit lowering the Armor, it now causes Heavy Damage. The Armor drops by two points, becoming (12/24/36). Any future hit of 36 points or more will kill the Gear.





# ADVANCED RULES

3

## INFANTRY RULES - 3.6

Machines are expensive and require maintenance, but humans need only food and motivation to participate in a battle. Consequently, foot soldiers still form a large percentage of the fighting forces in the 62nd century.

### Infantry Datacard - 3.6.1

Each infantry squad has an appropriate datacard that details the necessary statistics for game play. These are used to tally the damage and record other important information.

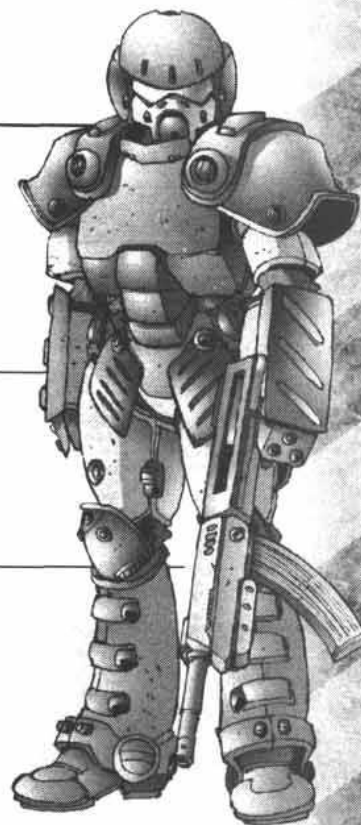
The name of the infantry squad should be entered on the card. Naming a squad can be as elaborate as listing the unit's regiment, battalion, company, platoon and squad designation or as simple as a number (i. e. squad #1).

### Quality ◆

There are five levels of infantry quality (see table below). The level of quality determines the Stamina and Skill of the squad's members. Stamina is a measure of how much physical punishment each trooper can endure. Unlike vehicle crews, infantry are assigned one generic Skill to keep the game simple. This Skill serves for attack, defense and other Skill tests.

### ☐ Infantry Quality

Quality Level	Stamina	Skill
Rookie	3	1
Qualified	3	2
Veteran	4	3
Elite	4	4
Legendary	5	5



### Armor ●

Many infantry squads wear some type of body armor for protection against light weapon fire and shrapnel. There are three primary forms of body armor available to infantry: light flak, heavy flak and "turtleshell," each offering an increasing amount of protection. Tougher armor, however, is restrictive and heavier, slowing down the trooper wearing it; this is simulated by Encumbrance points. Each point of Encumbrance results in a -1 modifier on all rolls made by the squad. Only one type of armor may be worn by a trooper at any one time. Infantry Armor values are not comparable to vehicle Armor values.

### ☐ Infantry Armor

Armor Type	Protection	Encumbrance
Light Flak	2	0
Heavy Flak	4	1*
Turtleshell	6	2†

\* No encumbrance for Veteran, Elite or Legendary troops

† Only 1 for Veterans; none for Elite or Legendary

### Weapons ◆

Infantry units carry two types of weapons: **Standard Weapons** and **Heavy Weapons**. Standard weapons are usually some form of rifle. A few troopers (usually 2) in a squad carry a heavy weapon to deal with tougher opponents. Refer to the Infantry Weapons Table (following page) to obtain the statistics of particular weapons.

Note that the infantry squad datacard has no place to record ammunition. This is intentional: infantry squads are assumed to carry enough ammunition to last them through a battle. While this is not always true in real life, it does dramatically reduce the paperwork for Players with numerous infantry units.



## Infantry Standard Weapon

Weapons	Accuracy	Damage	Range	ROF
7mm Rifle	0	x2	1/2/4/8	0
7mm Assault Rifle	0	x2	1/2/4/8	1
9mm Heavy Rifle	0	x3	1/2/4/8	0
15mm Sniper Rifle	+1	x4	2/4/8/16	0

## Infantry Heavy Weapon

Weapons	Accuracy	Damage	Range	ROF
9mm Light Machinegun	0	x3	2/4/8/16	2
9mm Chaingun	0	x3	1/2/4/8	4
24mm Anti-Gear Rifle	+1	x7	3/6/12/24	0
37mm Grenade Rifle	0	x8	1/2/4/8	0
50mm Rocket Launcher	0	x14	1/2/4/8	0
62mm Light Mortar	-1	x12	3*/6/12/24	0
Sniper Laser Rifle	+1	x4	4/8/16/32	0

\* Cannot fire at Range 2 or less.

## Squad Damage Track

**HEAVY GEAR**  
INFANTRY

**NORTHERN GUARD**

Unit name:Std. Quality:Qualif. Armor/Point:2  
Encumbrance:0 Stamina:3 Dam. Point:5

**WEAPONS:**

Name/Type:	Acc	S/M/L/Ex	Range	Dam.	ROF
9mm LMG/Heavy	0	2/4/8/16	x3	2	
7mm Assault Rifle	0	1/2/4/8	x2	1	

**DAMAGE TRACK**

1 STD	6 STD
2 STD	7 STD
3 STD	8 STD
4 STD	9 STD
5 HVY	0 HWY

The infantry datacard is composed of several lines which represent the squad members. The first column (#) lists the members numerically. Circle one of these ten numbers to indicate your squad leader. If he is killed, the squad's Leadership Skill rating drops to 1 (all other Skill rolls are unchanged). It is these trooper numbers that the Infantry Hit Location table (see page 50) refers to.

The Weapon column reads "Std/Hvy." This refers to standard weapons (Std) and heavy weapons (Hvy). Circle the type of weapon each particular trooper carries.

The third column is composed of eleven boxes. Each box represents one damage point. Each trooper can take a number of damage points equal to his Stamina plus his Armor rating. Cross out the extra boxes for each trooper. When the infantry squad takes damage, cross out one of these boxes for each point of damage the unit takes.

## Infantry Squad Examples

- Infantry Squad Beta is composed of green recruits, who, because of an administrative mishap, have been outfitted with the finest equipment. The troopers have a Stamina of 3 and are wearing heavy flak (Armor 4). There are ten men in the unit, but only two of them are heavy weapon soldiers (#5 and 10 have "Hvy" on the sheet). The leader will be #4 (his number is circled). Three damage boxes are crossed out for each trooper, leaving 7 points for each of them. Unfortunately, the bulky and heavy armor will cause a penalty of -1 on all attack rolls made by the inexperienced squad.*

## Movement - 3.6.2

Infantry squads on foot receive 2 Movement Points per round. Infantry units do not have Top Speeds, and always move at Combat Speed. They use the Walker movement costs, but it never costs them more than 2 MPs per inch (in short, they can always move at least one inch per round). While the squads are assumed to be equipped with all the latest climbing gear, they can only go down cliffs, not up — climbing is too time-consuming for a combat environment (see page 35). Furthermore, it would make infantry prone and helpless, something nobody wants during combat.

Some specialized infantry squads have modes of transportation other than walking. Rapid deployment teams are equipped with jetpacks or tiny unarmed all-terrain vehicles (dirt bikes and the like). Because they require extra supplies and training, these units are more costly to field and thus comparatively rare. Jetpack units have 6 MPs and use the same movement costs as Hover vehicles. Squads with light ATVs have 8 MPs and use the same movement costs as Ground vehicles. The condition of the vehicles or jetpacks is not tracked to reduce the paperwork — it is assumed that the vehicle is damaged beyond immediate repair when the trooper becomes a casualty.







## Sensors - 3.6.3

Most infantry squads are not equipped with special sensors, though they have a camera and communication suite mounted within their helmet to relay information to other members of the combat group. When used with the goggles' Head-Up Display, these can be used to receive limited sensor and targeting information.

Infantry have Detection values of 4 during the day and 2 at night, with a range of 1 km (20" in tactical, complete table in skirmish). Infantry can be equipped with night vision equipment, giving them a Detection value of 4 at night, at double the cost. They are assumed to have small personal communicators that are sufficient to allow them to coordinate their actions with the rest of their teammates. If tested, these communicators are assumed to have a range of ten kilometers and a Communication rating of -2.

## Infantry Actions - 3.6.4

Infantry units have one Action per squad, which is normally used to attack. When an infantry unit goes on the offensive, it gets one attack *per gun type* at the cost of a single Action; weapons of the same type must attack the same target. All attack rolls are made with the unit's Infantry Skill (with any applicable modifiers). Even if the entire squad is equipped with disparate weaponry (more than two types of weapons), the squad can attack two different targets at the most.

Massed attacks of infantry squads also have a special Rate of Fire bonus. If two or more troopers are using the same weapon type, the value listed in the Infantry ROF Bonus table on the next page is added to the weapon's Rate of Fire. Infantry weapon ROF otherwise works as for vehicles (see *Burst Fire*, page 42), with the same offensive options available (Walking Fire, Saturation, etc.).

### Infantry ROF Bonus

Min. Number of Troopers w/Weapon	ROF bonus	Min. Number of Troopers w/Weapon	ROF bonus
1	0	4	+2
2	+1	8	+3

### Infantry Attack Examples

**Example 1:** *Infantry squad Alpha has 9 members, 5 of which are armed with 9 mm machineguns (MGs) while the remaining 4 carry 37 mm grenade rifles. One attack will be made with the machineguns (ROF 2), and another with the grenade rifles (ROF 0). If the MGs succeed, they cause a x7 attack (x3, +2 ROF, +2 number of troopers bonus), while the grenade rifles are at x10 (x8 +2).*

**Example 2:** *Only two troopers with MGs survive. They attack, gaining a measly +1 ROF bonus because there are only two of them firing. They elect to put two points of ROF (from the MGs) into boosting the damage and one point to walk their fire across a second target. The net result is two x5 attacks aimed at two different targets.*

## Attacks versus Infantry - 3.6.5

Due to their small sizes, dispersed formation and uncanny ability to take advantage of any available cover, infantry do not suffer any defense modifiers for their slow movement: their Defense Movement modifier is always 0. In addition, a -2 penalty modifier is applied to any unit other than other infantry squads attempting to attack them.

Some vehicles are equipped with specialized anti-infantry weapons which can ignore the -2 modifier due to their special targeting systems or method of attack. These weapons are marked with the letters "AI" (for "Anti-Infantry") in their description.

### Applying Damage to Infantry

If an infantry squad is hit, the total damage points caused by the attack are calculated normally. The exceptions to this rule are burst fire weapons, which add their ROF bonus to their Margin of Success instead of to the Damage Multiplier when using burst fire (see page 42).

The damage points, however, are applied somewhat differently. They are not compared to the Armor rating; infantry units do not suffer damage like vehicles. Instead, each point of damage is removed from the squad on a one-to-one basis. When the squad takes damage, the attacker rolls one die using the Infantry Hit Location Table (see next page) to see where in the unit the attack hit.

The table indicates which trooper is the first one to take damage. If the trooper runs out of damage points, he is considered a casualty and the remaining damage points are applied to the next trooper either up or down the list (depending on the die result), and so on. If damage remains to be allotted up past trooper #1 or down past trooper #10, the damage loops around to the other end of the squad's damage track (i. e. to #10 or #1, respectively).



## ◆ Infantry Casualties

A trooper is not considered to be a casualty until his entire damage track is crossed out. The debilitating effects of injuries are ignored for convenience — the troopers are equipped with emergency first aid packs with stimulants, and some of the damage points may well represent shell shock instead of actual physical wounds. As for casualties in vehicle crew, a trooper with zero points remaining is not necessarily dead — but he is unconscious, wounded or otherwise unable to keep on fighting, and thus takes no further part in the scenario.

The ROF bonuses from mass attacks with infantry weapons is reduced if casualties occur. If the number of squad members with a particular weapon drop below the 2, 4, or 8-member levels (see previous page), the squad loses the associated ROF bonus.

### Infantry Damage Examples ■

**Example 1:** *Infantry squad Bravo has two heavy weapons troopers, #3 and #8. The leader is #9. Each trooper has 6 damage points. An autocannon burst chews into squad Bravo for 32 points of damage. A roll on the Infantry Hit Location table turns up a 3. #5 is the first in line for damage and the damage will work its way down the damage track. The first 6 points drop #5. The next 6 points drop #6. The 6 points after that make #7 a casualty. The fourth 6-point group eliminates #8, the heavy gunner. The fifth 6-point group drops #9, the squad leader. #10 takes 2 points of damage but is still up and functional. The unit is now down to one heavy gunner (massed attack ROF bonus drops from +1 to 0) and 4 standard weapon troopers (massed attack ROF bonus drops from +3 to +2). In addition, the unit is now leaderless (Leadership Skill of unit drops to 1).*

### Infantry Hit Location ■

Die Roll	Start at Trooper #	Direction
1	1	down
2	3	down
3	5	down
4	6	up
5	8	up
6	10	up

## ◆ Area Effect Weapons versus Infantry

Infantry units are very vulnerable to area effect weapons designed to be used against them. These weapons typically bounce right up before exploding and showering the landscape under them with thousands of sharp fragments moving extremely fast. This negates most of the cover that is available to infantry units and cause devastating injuries. The anti-personnel grenade launchers that are mounted on Gears and tanks work on the above principle, releasing dozens of micro-bomblets above their targets.

When a weapon with both the Anti-Infantry and Area Effect characteristics hits an infantry unit, the damage is inflicted upon *each* trooper instead of working its way through the squad as per the method above.

### Area Effect Versus Infantry Example ■

**Example:** *Each trooper in infantry squad Bravo has 7 damage points. An anti-personnel area effect attack hits them, causing 6 points of damage. All the troopers lose 6 points from their damage track, leaving each one with a single damage point left. If the area attack had done 7 or more points, the entire squad would have been wiped out.*

## 3.6.6 - Infantry Threat Value

Customized infantry squads are easy to generate. Choose the Skill rating, armor, equipment and weapons, then calculate the Threat Value according to the following formula.

**Individual Infantryman Threat Value = square root ((Infantryman's Damage Points)<sup>2</sup> x Weapon's Damage Multiplier)**

The individual Threat Value of all infantrymen is added up, then modified according to their Skill level (see the table on page 13). Infantry has a single generic Skill, which is equal to the rating listed in the parentheses. Infantry squads equipped with either jetpacks or All-Terrain Vehicles double their final Threat Value.





# ADVANCED RULES

3

## WEATHER CONDITIONS - 3.7

Certain weather conditions complicate tactical combat. Players who want to add a little extra realism to their game may want to use some or all of the optional rules below. The rules give the simplified game effects of common (and uncommon) weather phenomena, such as wind, storms and rain. The following are just a few.

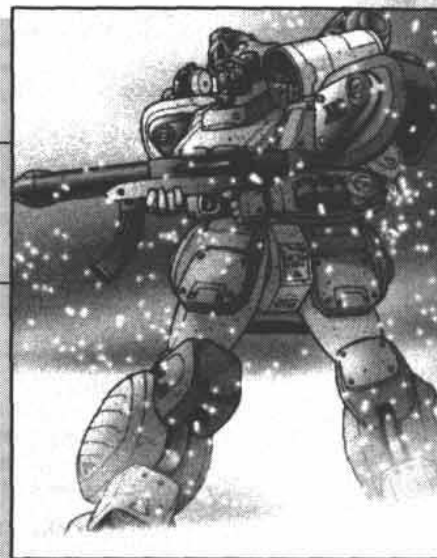
### Blizzards ◆

Blizzards have the same penalties as sandstorms. In addition, vehicles that lack the Hostile Environment Protection: Extreme Cold perk must spend one additional MP per inch of terrain moved.

### Extreme Temperatures ◆

Extreme cold ( $-40^{\circ}\text{C}$  or lower) or extreme heat ( $+50^{\circ}\text{C}$  or higher) is very detrimental to the functioning of vehicles. Any vehicle that lacks the appropriate Hostile Environment Protection Perk automatically suffers Light Damage whenever pushed to Top speed. In addition, such vehicles must roll one die at the beginning of each combat round. On a roll of one, the vehicle breaks down for a number of rounds equal to the roll of one die.

Infantry cannot function in extreme temperatures unless it has special gear to protect it (coolant/thermal suits). When so equipped, infantry functions normally. Unless so noted, infantry is automatically equipped at no cost in a special environment scenario.



### Night ◆

Nighttime combat functions as daytime combat except that the Night Detection score of a vehicle is used instead of its Daytime Detection score. Infantry without nightvision equipment and vehicles without functional sensors will move only at half Combat speed and have a -1 modifier applied to weapon fire (they can't see anything!).

Some units are equipped with powerful searchlights (see *Perks*, page 90) that illuminate the area around the vehicle so that it is treated as daylight. Searchlights can be turned on or off at the beginning of each round. Using searchlights obviously make the vehicle easier to spot, however. Any sensor inquiry or weapon fire directed at the vehicle is also treated as if it were in daylight, regardless of the arc of the searchlight. Enemy fire can target the searchlight(s) by performing an aimed shot. If successful, the searchlight is automatically taken out.

Units are more easily detected by sound at night. Vehicles can be heard up to two kilometers away, infantry only 300 meters. Naval units will be detected up to one kilometer away, unless they keep their speed below two MPs. Stealth vehicles are detected at a distance equal to the above, divided by their Rating. For example, a stealth tank with a Rating of 4 will be heard at a distance of  $(2000 \text{ m} / 4)$  500 meters away.

### Rain ◆

Rain mainly causes visual Obscurement. Light rain does not affect visual detection within  $20''$ ; beyond that, it has an Obscurement value of 1. Heavy rain has an Obscurement value of 2. For Active scanning, the value decreases by 1. Rain only counts for Detection purposes, and does not affect attacks (i.e., the Obscurement penalty for rain is not applied to the Attack roll).

### Sandstorms ◆

Sandstorms are somewhat common in the middle latitudes of Terra Nova. These turbulent dustclouds obscure both visibility and sensors alike and diffract energy beams, while the strong winds cause projectiles to deviate from their intended trajectory. If both Players agree that a sandstorm is occurring during their combat, add +1 to the Obscurement value of every inch of terrain.

### Terranovan Tempests ◆

Terra Nova is subject to massive sandstorms known as tempests. Tempests add +2 to the Obscurement value of every inch of terrain. In addition, only sealed vehicles can operate outside during a tempest; open-topped vehicles and infantry cannot participate in the battle.





## 3.8 - SKIRMISH SCALE

The Skirmish scale rules are an optional rule set intended to simulate fast and furious action-by-action, short-range combat between small numbers of units. These rules can also be used to simulate combat in heavily restricted environments, such as FIBUA (Fight In Built Up Area), jungles or canyons, with greater accuracy than the normal 50-meter/inch scale allows. They are also particularly well suited to miniature tabletop play, as they require less table surface and allow more detail to be added to the battlefield.

Skirmish fighting takes place in a shorter time span and over shorter distances than its tactical counterpart. All combat rounds are 6 seconds long, while each inch of ground represents about ten meters. Because both time and distance are scaled down, the Movement allowances remain the same. This is not entirely accurate, but it allows combat to be played on a reasonably sized area without vehicles traveling across the table in one or two turns. With the increased weapon ranges, combat will be deadly, as fighting moves to short and medium ranges.

The following Skirmish scale rules are changes and additions to the combat rules detailed in the Quick Start and Advanced Rules chapters. Unless a rule is specifically modified here, assume it is the same as for the standard tactical wargame.

### 3.8.1 - Movement

Vehicle movement is more streamlined in skirmish level fighting, but the mechanics of movement work much the same as in the basic tactical game. Instead of simply declaring a change from Combat Speed to Top Speed or vice versa after movement, in Skirmish scale combat this change requires the expenditure of an Action (the change still takes place after movement).

The other big difference is in the Movement Point costs of the various types of terrain. When dealing with 50-meter increments, some averaging must be made to account for natural variation: for example, ground-effect vehicles cannot normally cross a forest because they lack the required leverage to knock down trees that are in their way. Movement is still allowed through Forest terrain in the basic game, however, because trails, clearings or small dirt roads might exist that would allow them to pass.

Skirmish scale leaves a lot less room for suppositions, and so the MP costs of the various terrain types have been changed to take this into account. Some terrains are now prohibited to certain types of units; these are marked "n/a" in the table below.

Skirmish Terrain Costs ☐

Terrain Type	Walker MP	Ground MP	Hover MP	Naval/Sub MP	Obscurement?
Clear	1	1	1	n/a	-
Rough	1	2	2	n/a	-
Sand	2	2	1	n/a	-
Woodland	2	4	n/a	n/a	+1/5*
Jungle	3	n/a	n/a	n/a	+1/3*
Swamp	3	4	1	n/a	+1/5*
Water	3*	4*	1	1	+1/3*†
Going up 30° slope	+2	add 2	add 4	n/a	-
Going down 30° slope	+1	0	0	n/a	-

\* Only Amphibious vehicles may enter Water terrain. Other vehicles will flood and automatically be put out of action. Amphibious vehicles cannot enter or exit Water while moving at Top Speed.

† Water only produces Obscurement if the defender is in Water and can submerge.

### ◆ Urban Terrain

Urban terrain in the Skirmish scale is considered to be a single building about the size of a house (16 damage points per square inch). Dense Urban terrain is considered to be a larger, more strongly built building (20 damage points per square inch). If a building has lost half of its damage points or more, vehicles may then enter it at the same movement cost as Rough terrain. House-sized buildings count as immobile Size 6 vehicles for ramming purposes; larger buildings are immobile Size 12 vehicles. Because they do not move, the buildings' defense rolls are always equal to zero against attacks.

A typical wall stands at about three meters tall and is made of a resilient material such as stone or ferroconcrete. Walls made of lighter material, such as wood fences, have little defensive value for vehicles and are disregarded for simplicity. Walls are impassable unless they are damaged, destroyed, climbed or jumped over. A typical wall segment of one inch has a Damage Point Capacity of 12 for a standard Wall and 16 for a Dense Wall. If involved in a collision, treat Walls as stationary Size 4 objects, while Dense Wall are Size 10. If the Wall segment loses one half of its damage points or more, vehicles may cross it at the same movement cost as Rough terrain (by going through the gaps). Most large vehicles are able to fire over walls, gaining the wall's full Obscurement benefit but not being impeded in their own attacks. For simplicity, any unit of Size 4 or more can fire over walls.



## Line of Sight and Detection - 3.8.2

In the Skirmish scale, all Obscurement-producing terrain types cause one point of Obscurement per terrain type, not inches, crossed by the line-of-sight between attacker and target. For example, if there is Jungle terrain in the line-of-sight, the Obscurement modifier is +1. If the LoS also crossed Swamp terrain, the Obscurement modifier would be +2, and so on. Additional Obscurement may be caused by great distances: the Skirmish Terrain Cost table (see previous page) lists the minimum number of inches required to produce one more point of Obscurement for each terrain type.

### Partial Cover ◆

If an obstacle covers at least half of a vehicle, and that vehicle is in base to base contact with the obstacle, then the defending player may claim partial cover and gain a bonus to its Armor. This bonus applies only as long as the unit is in contact with the terrain feature, and is not reduced by damage received. If the vehicle is not in base to base contact with the cover, and an attacker can still see at least half of the vehicle or more, then a shot may be fired with no penalty to either the attacker or the defender. Note that partial cover is different from being hull-down (see page 36), since no MPs are required.

**Light Cover** include trees, bushes, wooden fences, etc. If a defender is in base to base contact with a terrain feature identified as being light cover, then the base Armor of the defender receives a +2 bonus.

**Heavy Cover** include boulders, concrete, reinforced barricades and walls, etc. If a defender is in base to base contact with a terrain feature identified as being heavy cover, then the base Armor of the defender receives a +4 bonus.

## Combat - 3.8.3

**Multiple Attacker Penalty (MAP):** In large, pitched battles, one doesn't always have time to react to incoming fire from multiple attackers. A penalty of -1 is applied to the Defense roll of a unit when defending against a second attacker from the same Combat Group as the first attacker. Another -1 is added for each additional attacker, up to a maximum penalty of -3 (4 attackers or more).

**Area Effect Weapons:** these weapons cover a certain area on the playing surface. Everything within the blast zone is subject to the attack. A single Attack roll is made, while each unit completely within the blast zone must make a Defense roll to determine their own fate. Even if the attack is completely defended against, any unit completely or partially in the blast zone still suffers half the explosion's Damage Multiplier in concussion damage.

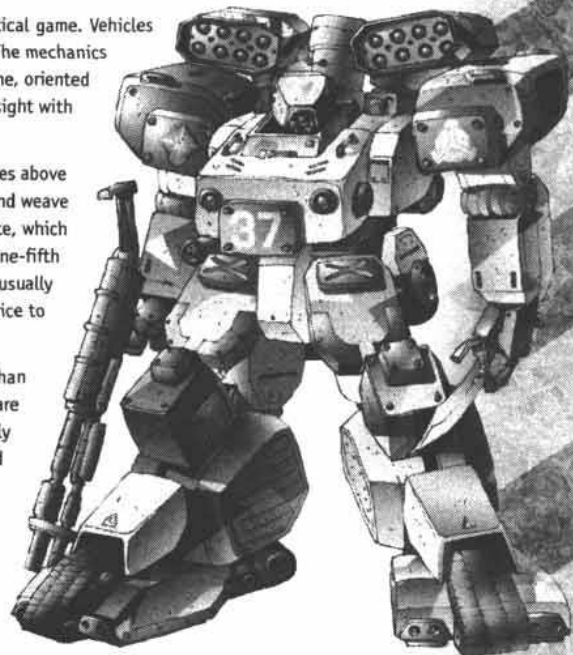
### Area Effect Diameter

Weapon Area Effect	Blast Radius	Weapon Area Effect	Blast Radius
AE0	2.5"	AE2	7.5"
AE1	5"	AE3	10"

**ROF Fire:** Burst fire and walking fire are handled in the same way as in the standard tactical game. Vehicles expend only 5 points of ammunition per point of ROF, but missile ROF remains unchanged. The mechanics of Saturation Fire remain unchanged as well. Saturation Fire covers an area five inches by one, oriented in any way the attacker desires. All part of the pattern, however, must have a direct line of sight with the weapon (unless it's indirect fire); no curving patterns to reach targets behind walls!

**Careful Fire:** This is a combat option that is only available in Skirmish scale combat. The rules above assume that vehicle pilots and infantry will be taking potshots at each others as they duck and weave through the maelstrom of close range combat. This makes their weapon fire wildly inaccurate, which is why the weapons' Range Bands are not modified even though the scale is compressed to one-fifth the standard tactical scale. It is possible to take the same care and attention that is usually lavished to long range combat in a skirmish, and still get the increased range. There is a price to pay, however.

Before attacking, any unit can elect to use Careful Fire. It must not have moved any faster than Combat speed when it last moved, and must pay two Actions to fire. Its Range Bands are immediately multiplied by five (for example, the Short range of a Light Autocannon, usually 2", would now be 10"); ammunition cost, Damage Multiplier, Area Effect (if applicable) and other stats are not affected.





## 3.9 - HEAVY GEAR TOY BATTLES

**Heavy Gear Toy Battles** is a fast and easy game to play. It simulates combat between enemy forces on the distant world of Terra Nova, where warring nations have fought battles using human-shaped **Heavy Gear** battle machines for more than two centuries. Battles can take place between small rival teams in the arenas of "Trash City," or they can take place between whole armies of soldiers on the sweat-soaked battlefields of the desert Badlands. No matter what kind of game they choose, players of all ages will enjoy Heavy Gear Toy Battles with the official Heavy Gear toy action figures.

The rapid pace of the game makes it ideal for quick miniatures battles, too. Although the standard Heavy Gear tactical game is streamlined and relatively fast, gamers looking for an even simpler alternative for an evening's "pick-up" game will find Heavy Gear Toy Battles perfect for their needs. For miniatures battles between truly massive forces — dozens of individual units and players on each side — the Heavy Gear Toy Battles rules are ideal.

### 3.9.1 - Set-Up

To play Heavy Gear Toy Battles, gather up a group of friends. There must be at least two players to play, but the game is more fun with more. About six total players is a good number to have. Divide the players fairly into two teams. Each player will need at least one Heavy Gear toy to control. On Terra Nova, however, most teams (sports and military) have five or six Gears, so some players might have to control more than one toy. Each team must set up its toys on opposite ends of the playing field.

Take a careful look at each toy model. Most will have about three weapons. On Terra Nova, Gears usually have one gun, one rocket pod and one weapon that is used for close combat, like a sword or a knife. The toys might have more or fewer weapons, but they should all have at least one. It is important to keep track of how many weapons a Gear has, because during the game, Heavy Gears will lose weapons as they get hit in battle. Once a Gear has no more weapons, it is easier for it to get disabled and removed from the game!

#### ◆ The Playing Field

Heavy Gear Toy Battles works equally well indoors and outside. Indoors, a room such as a bedroom or a family room can serve well as one of the many gladiator or sports arenas of Terra Nova. Furniture, boxes and stacks of books or magazines represent the obstacles that arena owners put in their arenas. These obstacles make the battles more interesting for fans and Gear pilots alike. The more obstacles, the better!

Outside, the playing field is a little bit different. There is more room for Gear teams to spread out. There are also more open spaces, which sometimes makes it harder for Gears to find cover. Twigs, sticks and rocks make natural obstacles for Gears when playing outside. So do small puddles of water — most Gears cannot go into water. Since many battles on Terra Nova take place in the desert Badlands, a large sandbox makes a perfect playing field. Be sure to build lots of hills and sand dunes for your Gears.

### 3.9.2 - Playing the Game

In **Heavy Gear Toy Battles**, the basic goal of the game is to **disable** all of the rival team's Gears before they disable yours. A Gear is **disabled** when it is successfully attacked while knocked over (or "prone"). Whichever team disables all the other team's Gears first wins the game.

Gameplay takes place in **rounds**. At the beginning of each round, players decide which team goes first by flipping a coin. The team that wins the coin toss may **activate** one of its toys, or it may make the other team activate one of its own toys first. Teams alternate activating toys. When a team finishes activating one of its toys, the other team activates one of its own. Play continues in this manner until all of the toys have been activated. A Gear toy may be activated only once during a round. When all Gears have been activated, a new round begins with a new coin toss.

#### ◆ Activating a Toy

When a Gear toy is activated, the player may move and conduct a single attack on a rival Gear. The order of events for the activated Gear is up to the controlling player. He may

•	move first, then attack,
•	attack first, then move, or
•	move partway, attack, then complete his move.

A Gear may conduct either a **ranged attack** or a **close-combat** attack during its activation, but not both. There is one exception: if a Gear is **prone**, it may not move and it may not attack. The only thing it can do is stand up and wait for the next round.





# ADVANCED RULES

3

## Movement ◆

A Gear may make one of three kinds of move when activated. It may **walk**, it may **run**, or it may **climb**. It may make only one of these moves during a round and no more. If a Gear is walking, it may move up to three (3) hand lengths in any direction. If it is running, it may move up to five (5) hand lengths, but it may not attack at all. If it is climbing, it may move one (1) hand length straight up a cliff face. It does not have to reach the top of the cliff in this round. It may not conduct close combat in the same round that it is climbing. When playing outside, use foot lengths instead of hand lengths for all distances.

## Combat ◆

**Line of Sight:** In order to attack a rival, a Gear must have a clear **line of sight** to that rival. The player must be able to trace a direct, straight line to the rival Gear without passing through any obstacles. Players may need to get a "Gear's-eye-view" of the playing field by sighting from the toy's head to the rival. If the player can see any part of the rival, a line of sight exists and the player may attack.

**Rock, Paper, Scissors:** Combat in Heavy Gear Toy Battles is played through games of **Rock, Paper, Scissors**. The attacking player and the defending player each make a fist with one hand. The defender counts out loud to three, and on three, each player chooses Rock (closed fist), Paper (open palm) or Scissors (two fingers spread in a "V" shape). To determine the winner, compare the two choices. Rock beats Scissors. Scissors beats Paper. Paper beats Rock. Look on the Combat Results chart to find the damage the defender takes.

### □ Combat Results

Loss to Rock	The defender may not initiate an attack during its next activation, but it may move normally. If it has already lost its attack for its next activation, the Gear is knocked down and is prone. It must spend its next activation standing up.
Loss to Scissors	The defender loses a weapon of his choosing. If no more weapons remain, the Gear is knocked down and is prone. It must spend its next activation standing up.
Loss to Paper	The defender's Gear is knocked down and is prone. It must spend its next activation standing up.

The results apply only to the defender. A tie results in a missed attack. If a Gear is hit while **prone**, it is disabled and removed from play.

**Ranged Attacks:** If an active Gear toy has a ranged weapon (a gun, a rocket pod, a grenade launcher, or similar weapon), the controlling player may make a ranged attack against any rival his Gear can see. Determine line of sight to a rival, as above. Range is not important. If the attacker can see the defender, he can hit him.

**Close Combat:** If two rival Gears come to within one hand length of each other (or one foot length if outdoors), the active Gear may engage in close combat with the defender. In close combat, Gears may not use ranged weapons, only close-combat weapons such as axes, swords and knives. All Gears always have at least one close-combat attack, even if all of their weapons are destroyed, because they can punch and kick. For each close-combat weapon a Gear possesses, it may make one additional close-combat attack. Thus, a Gear with a vibrosword may make two attacks against its opponent. If the attacker fails in his attack, he takes damage as if the defender had attacked him.

**Prone Gears:** A Gear that is knocked down (or "prone") is very vulnerable to attacks. If an attack against a prone Gear succeeds, then the Gear is disabled and removed from play. A prone Gear does not do any damage to an attacking Gear while in close combat if the attacker fails, because the prone Gear is trying to get out of the way.

### ■ Example of Combat

- Ross and Rachel are playing Heavy Gear Toy Battles. Early in their game, Ross moves his Mad Dog around the corner of an obstacle to line up a ranged attack on Rachel's Rattlesnake. He fires, and they make a Rock, Paper, Scissors check. Ross picks Rock but Rachel picks Paper. Since Paper beats Rock, Ross' shot misses. Rachel goes next. She moves her Rattlesnake, which has a close-combat weapon (a vibrosword), in close to the Mad Dog and makes a close-combat attack. Since she has a vibrosword, she can make two attacks (one sword swing and one punch or kick). On the first, she chooses Paper again and Ross chooses Rock. Since Ross is now defending, he gets knocked down. For her second attack, Rachel picks Rock and Ross picks Scissors. Scissors beats Rock, and since Ross' Mad Dog is prone and it takes damage in this attack, it is disabled and removed from the game!*

## Block and Run Games - 3.9.3

An alternative to the basic **Heavy Gear Toy Battle** game is the Block and Run game. For this variation, one team is designated as the Blockers. The other team is called the Runners. The Runners start at one end of the play area. The Blockers start in the middle of the play area. The Runners' goal is to reach the opposite end of the play area. The Blockers' goal is to prevent that from happening by disabling the Runners before they reach their goal. Runners may not attack Blockers, but Blockers may certainly attack Runners. If more Runners are disabled than reach their goal, the Blockers win. Otherwise, the Runners win.



## BETWEEN A ROCK...

"I think we're lost." The deadpan statement might have been funny in other circumstances, but here, in the middle of nowhere, it acquired an ominous overtone.

"We're certainly off the beaten path, Sergeant." Captain Breckridge answered in the same careful tone he always used when he was not barking commands. He manipulated a control on the right side of his helmet to bring the latest satellite map of the area on his head-up display. It was several hours out of date already, but at least it might tell them where they were.

Breckridge pointed to the jagged rock formations to their right. "There's a trail about 200 meters off that way. It leads back down to the valley's floor. Once we get out of these rocks, we should be able to contact home base and ask for a pick up."

The men knew better than to complain, but the looks on their exhausted faces told the officer all he needed to know. The combination of lack of rest, water and psychological tension was getting to them. Now if they could just get out of these damned hills...

After several difficult hours of march, the ground gradually sloped out under them, and they didn't need to climb down as much. A small oasis, nestled in a curve of the rock formation, was ahead of them. Breckridge had spotted the patch of vegetation about ten minutes ago but hadn't discussed it with anyone. No need to bring their hopes up.

His patience was rewarded by a small source hidden in the foliage, probably an outpour of the underground MacAllen network. The parched squad descended on it like rocs on a dying hopper, stopping just long enough to test the water — pure — and shrug off their field packs. Breckridge smiled: things were looking up.

*Maybe not for long, though.* One of the sentinels was waving to attract his attention. "Sir, I think I see something. Dust plumes on the horizon."

"Any idea what they are?"

The trooper squinted through the binoculars again. "Looks like Gears, Sir. Can't tell yet if they're ours or not. I think so, though."

Breckridge grabbed the offered binoculars and peered through them. If those were indeed CNCs troops, then all their problems were solved. If not, though...

A cry on the other side of the ridge made him turned around. Trooper Rebecaa Ng was frantically waving to attract his attention, being careful to keep her motions concealed behind the ridge. "Captain! I got some too — only opposite direction! And... those are definitely not ours."

Breckridge just closed his eyes and massaged his weary brow. "Gather your packs, gentlemen. Seems we got ring-side seats to the fight of the cycle."





# SCENARIOS AND CAMPAIGNS

4

## TACTICAL SCENARIO GENERATOR - 4.1

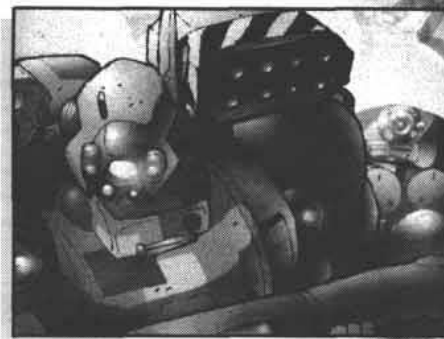
The Scenario Generator is a set of tables and guidelines enabling the rapid creation of scenarios for stand-alone tactical combat. They have been designed so that the participation of a Gamemaster is not required for play. By either selecting the scenario's elements (or rolling them randomly), a large number of tactical scenarios can be easily generated. Some additional work may be required to tie together the various elements, but it is much faster and easier than having to design the whole scenario from scratch.

Both Players receive a number of mission objectives that have to be fulfilled in order to win the battle. The opponent is trying to prevent the other from achieving his mission while at the same time fulfilling his own objectives. Enemy mission objectives normally remain secret, unless resources are allocated to find out what they are.

### Step 1: Preparing the Scenario - 4.1.1

The scenario's characteristics will be determined later on. First though, a Threat Value point total must be decided upon according to the time available to play the game (see the table below). A time limit to the game can also be decided upon, though one will most likely be generated for the scenario. Forces will be chosen for both sides using this point total. For a more challenging and interesting game, however, there are specialized options further down.

In order to facilitate the preparation process, it might be useful if both sides (or all sides, if there are more than two) agreed on which vehicles they can use for the scenario and have all the miniatures and record sheets ready. If the scenario involves newcomers to the game, it might be preferable to only use the vehicles included in this rulebook so they can become familiar with the basic machines. Other restrictions could be based on a maximum Threat Value, Pilot Level or Availability Number. Ideally, a Rules Specialist should be designated between all the Players to look up any rule in the book and to make objective judgment calls on the rules in case of dispute.



#### Suggested Point Total

TV Points per Side	Battle	Approximate Time
2000	Patrol	1 hr
4000	Skirmish	2-3 hrs
8000	Raid	3-4 hrs
12000	Minor Battle	5-6 hrs
20000	Major Battle	8+ hrs

#### Bidding

The general Threat Value for the battle is chosen depending on the space and time available to play out the battle. Bidding allows additional variations on the theme, and forces players to become better tacticians through skillful use of the available resources.

The participants start the bidding with one of them (selected by tossing a coin or rolling a dice) makes a bid: "I'll try this scenario with only 1,700 points in TV instead of the full 2,000." The process goes clockwise, with everyone trying to outbid his predecessor. When all the Players agree that one of them has gone lower than they are willing to go, the process starts again between the remaining Players, who cannot have a lower TV than the "winner" of the last bidding. The process is repeated until only one Player is left, who will take the basic TV. Bids should be made in increments of 100 points for the sake of simplicity.

#### Going for Glory

One side may voluntarily chose to lower its available Threat Value total in order to gain more Victory Points. The gain in VPs is directly proportional to the reduction in force: divide the VP total by the fraction. For example, if a Player elects to use a force equal to only 75% of his opponent's Threat value point total, his total VPs for the game will be worth 133% (100 divided by 0.75).

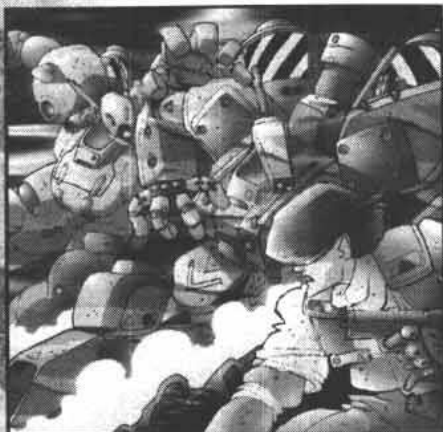
#### Subplots Galore

Subplots are complications that hinder the fighting abilities of an armed force (see Step 4 for more details). Normally, a single subplot is rolled for both sides. By lowering its available Threat Value, one side may force extra Subplots onto the enemy. For each slice of 10% the initial TV is reduced by, one additional Subplot is rolled. In other words, if a player who has 1,500 points in TV and wants to purchase two additional subplots, he will lose two slices of (10% x 1,500 =) 150 points (a total of 300 points), leaving him with a final TV of 1,200 points. (If the Subplot requires something to be bought, such as a minefield, this is where the TV comes from.)





## 4.1.2 - Step 2: Mission Design



Very few military actions are of the "kill them all" sort. When forces are engaged in an operation, it is always for very specific reasons, which may or may not be related to actual body count. The type of mission indicates the specific objective(s) that need to be fulfilled in order to win the scenario.

The main Mission Design table is divided into three columns. A die roll on the first column defines the type of mission: the task that must be fulfilled in order to win. Another die is then rolled to indicate the specific objective of that mission: the object or target of the task already decided upon. Both are explained in more detail further along in the text. Finally, a time limit is assigned for the completion of the task.

The Mission Design table provides only the bare bones of the scenario. It is up to the Players to further flesh it out by meshing elements from the world of Heavy Gear into it. For example, a mission rolled as "Capture, ECM, Random" could be interpreted as follow: "the enemy has deployed a heavy ECM cover in the valley. We need to know their operating frequencies so that we can effectively counter them. You must capture the enemy's ECM vehicle so we can download the information from it. Hurry up, though: once the enemy is aware of your presence, reinforcements will be sent and you will be cut off if you have not retreated by the time they arrive."

### Mission Design Table ☐

1d6	Type	Objective	Time Limit
1	Capture	All forces	None
2	Defend	Communications	None
3	Destroy	ECM	Random
4	Destroy	Object	Random Increasing
5	Disable	Terrain	Objective
6	Provide	Vehicle	Objective

### Mission Types ☐



Capture:	The enemy has something you want. It might be a physical object, like a vehicle or a terrain feature, or it might be a more abstract condition (control of the communication airwaves, for example). It must be held (i.e. only friendly vehicle within 200 meters) for at least three rounds or until the end of the game, if a time limit is present.
Defend:	The enemy wants something you have. It might be a physical object, like a vehicle or a terrain feature, or it might be a more abstract condition (control of the communication airwaves, for example). It must be held (i.e. only friendly vehicle within 200 meters) for at least three rounds or until the end of the game, if a time limit is present.
Destroy:	The objective, whatever its actual nature, must be denied to the enemy. It must be destroyed before the end of the game.
Disable:	The objective, whatever its actual nature, must be denied to the enemy. It must be disabled (no movement, no action of any kind) before the end of the game.
Provide:	The objective must be provided to the rest of the armed forces of your side. It might be an actual item, in which case it has to be delivered beyond the enemy line. Or it might be a condition, such as ECM cover. If the latter, it must be provided for at least three rounds or until the end of the game, if a time limit is present.

### ● Mission Objectives

The Mission Objectives have been generalized for simplicity. Each category is meant to suggest a broad number of options that can be selected to fit a particular scenario. While some are fairly straightforward ("All Forces," for example), others lend themselves to more than one choice. For example, Communications might cover a dedicated command vehicle, or perhaps the communication center of the enemy firebase that sits in the middle of the board. It could also mean the relay tower that is sitting on top of Hill 832.

How the Objective fits into the mission profile will vary depending on the Mission Type. If the mission type is an offensive, such as Capture, Destroy or Disable, then the Objective means the enemy forces. For example, "Destroy All Forces" means that all enemy units have to be put out of commission, somehow. If the Mission Type is more defensive in nature, such as Defend or Provide, then it means the friendly forces. For example, "Provide Terrain" would mean that a clear access to a certain terrain feature must be kept open.

Missions normally have just one Objective, but ambitious Players may want to create more complex scenarios that have secondary objectives, perhaps worth less Victory Points.





# SCENARIOS AND CAMPAIGNS

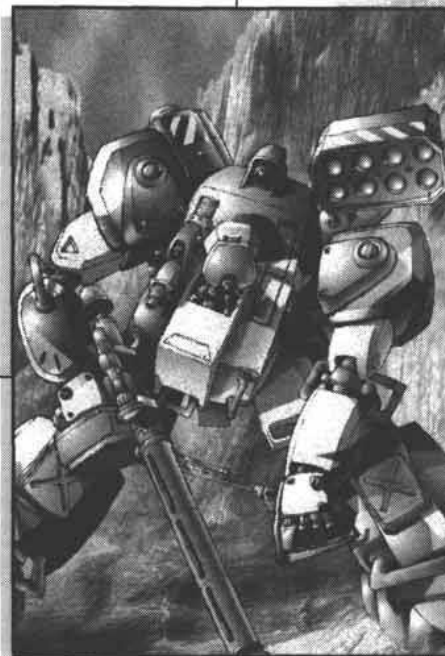
4

## Mission Objectives

All forces:	All units present on the table for that side. Regardless of the mission type and the task(s) involved, all units are equally affected.
Communications:	This means that clear communication channels must be available to friendly forces or denied to the enemy. Clear communications are available if at least one vehicle is able to use its Communication system.
ECM:	This means that ECM cover must be available to friendly forces or denied to the enemy. ECM cover is available if at least one vehicle is able to use its ECM system.
Object:	An object is considered vital by headquarters. It is probably something small that can be picked up and carried by a Gear or an infantryman.
Terrain:	A terrain feature (50 by 50 meter zone, or one hex) is considered vital by headquarters. It may be a high ground, or perhaps it is the entrance to a subterranean access tunnel.
Vehicle:	One of the vehicles is considered vital by headquarters. It might be a prototype, or it is piloted by someone important.

## Time Limits

None:	The game ends when the Players have no more time to play, or one of the forces in presence is completely destroyed (or retire from the field).
Random:	The game proceeds normally for five rounds. A die is then rolled to know the number of rounds remaining before the end of the game.
Random Inc.:	The game proceeds normally for five rounds. A die is then rolled versus a Threshold that starts at 1 but increases by one every round. If the die roll does not exceed the Threshold, only one more round is played before the scenario ends.
Objective:	Once one side has completed its scenario objectives, only one more round is played before the scenario ends.



## Location

Location is where the battle will take place. A game table with the most representative terrain is chosen and miniature terrain pieces are placed on the table. Regardless of the type of game, who will do the actual board set-up will depend on which side assigned the most resources to scouting (see *Scouting*, further on, for more detail).

The following tables randomly assign a certain type of battlefield to each scenario. Due to the limited page count and the huge number of possible setups, only the general look of the battlefield is suggested. The numbers found in the table on the next page are provided as guidelines, not hard and fast requirements. As long as the terrain is laid out in a logical, believable manner and looks like what it is supposed to be (no desert with half the board as jungle, for example), then the minimum requirements are met. For more variety, the battlefield can be further divided into several equally sized sub-zones, each of which will receive a different terrain type.

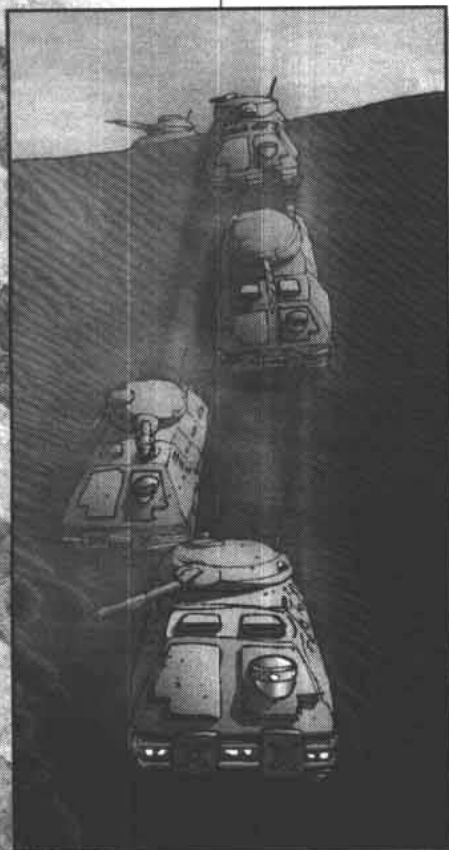
Players should make sure there is plenty of cover and hiding places, even on the flattest of desert. This is especially true of Skirmish scale game, where even individual rocks can be modeled. It is important to avoid choking the battlefield with too much obstructing terrain, however — the troops will have to move through it, and any cover may well become the enemy's if the battle takes an unsuspected turn.

## Location Table

1-2	Northern Hemisphere
3-4	Badlands
5-6	Southern Hemisphere

## Terrain Table

1d6	North	Badlands	South
1	Broken Ground	Desert	Broken Ground
2	Mountains	Desert	Mountains
3	Woodland	Broken Ground	Woodland
4	Jungle	Mountains	Jungle
5	Polar	White Desert	Swamp
6	Urban	Urban	Urban



Terrain Description Table ☐

<b>Desert:</b>	Although they are constituted of a multitude of different terrain types, the Badlands still feature quite a lot of empty and dusty flat deserts. Desert battleground has at least 50% of the playing surface made up of Clear or Sand terrain.
<b>Broken Ground:</b>	In the transition between the flat deserts of the equatorial Badlands and the rocky mountains and steamy jungles of the hemispheres, lie savannahs and hilly terrains that bear resemblances to both. Broken Ground battlefields have at least 50% of the playing surface made up of Rough hexes; many feature at least a one elevation change.
<b>Mountains:</b>	For a time, Terra Nova was very geologically active — the large mountain ranges that dot the planet are proof of this. Mountain battlefields have at least 75% of the playing surface made up of Rough terrain. Alternatively, it may be composed of any type of terrain provided there are at least three different levels.
<b>Woodland:</b>	Not all Terranovan forests are densely packed steamy jungles. In many places the trees grow far enough from one another to allow the existence of a flourishing vegetation floor. These forests have at least 50% of the playing surface made up of Woodland terrain.
<b>Jungle:</b>	The hot and humid climates of the lower basins of the southern hemisphere have allowed huge rainforests to prosper. The dense vegetation and the high humidity wreck havoc with sensors, making combat a lethal close range affair. The battleground is designated as a Jungle when at least 50% of the playing surface is made up of Jungle terrain. Really dense forests (75% of the surface is made up of Woodland terrain), such as can be found in the North, can also be considered jungles.
<b>Swamp:</b>	In some regions of the planet, water from the MacAllen network seeps to the surface and helps develop a swamp ecology. The battleground is a Swamp when at least 50% of the playing surface is made up of Swamp terrain. Zones with 75% Water terrain also count as a Swamp (the water zones are shallow pools or a river delta).
<b>Polar:</b>	Because of its position in the Helios system, Terra Nova features very few locations that can be truly referred to as polar. They do exist, but combat there is quite unlikely because there is simply nothing worth fighting over. Polar battleground have at least 50% of the playing surface made up of Snow or Ice terrain.
<b>White Desert:</b>	White sand is one of the most dangerous substances on the planet — few will willingly fight nearby its corrosive influence. White Deserts have at least 25% of their surface covered by White Sand, or 50% by White Sand Rough terrain.
<b>Urban:</b>	Battles rarely occur within the heavily fortified walls of a city-state and are much more likely in the crowded streets of neighboring towns and villages. This type of battleground is composed of at least 50% of Urban or Dense Urban terrain (in any proportion, not including Roads or Bridges).

## ◆ External Conditions

External Conditions is a catch-all category that cover various weather effects and the time of day, both of which may affect the course of the battle and the performances of the units involved. Only one External Condition is rolled for the entire scenario, and it applies throughout the game for everyone.

The conditions described in the table on the next page are fairly generic and should provide enough complication for the entire scenario. It is possible to have more than one condition in effect at the time (such as a Night battle under Heavy Rain) but the combined bookkeeping and complexity may prove more trouble than it is worth. Some of the conditions are also mutually exclusive — the battle cannot be fought under both Daylight and Night conditions, unless part of the board is considered to be underground. Using more than two conditions at the same time is probably too complex.

Ambitious Players may want to build a complex scenario where the External Conditions are *modified* as the battle moves along. For example, the battle could be fought as the day comes to a close, with conditions changing from Daylight to Dusk in the middle of the fight. Or a tempest could suddenly move across the battlefield, changing one third of the board every round into a Sandstorm environment. This requires a bit more bookkeeping than usual and is more complex to play, but results in very unpredictable (and enjoyable) battles — especially if the changes are triggered randomly!

External Condition Table ☐

1d6	North	Badlands	South
1	Daylight	Daylight	Daylight
2	Daylight	Daylight	Daylight
3	Dawn/Dusk	Dawn/Dusk	Dawn/Dusk
4	Night	Night	Night
5	Rain	Sandstorm	Fog
6	Winds	Winds	Heavy Rain







# SCENARIOS AND CAMPAIGNS

4

## External Condition Table

Daylight:	The battle occurs under normal conditions.
Dawn/Dusk:	The battle occurs literally between night and day. The scenario is treated as being a normal day scenario, but with all Detection ratings being reduced by one (they cannot go lower than the Night rating, though).
Fog:	The entire battlefield is covered with a rolling fog that makes visual identification nearly impossible. Each full three inches of fog count as one point of Obscurement for detection purposes (but not weapon fire).
Heavy Rain:	The battle takes place under heavy rain. Each full ten inches of terrain, regardless of its type, count as one point of Obscurement.
Night:	The battle takes place at night, with all the associated night combat rules being in effect (see page 51).
Sandstorm:	The battle takes place during a violent storm, with all the associated rules being in effect (see page 51).
Rain:	The battle takes place under a light rain. Each full twenty hexes of terrain, regardless of its type, count as one point of Obscurement.
Winds:	Heavy winds blanket the battlefield, lifting dust clouds and making air support very difficult. All energy weapons lose an additional point of Damage Multiplier per Range Band due to the dust. Neither players can count on air support.



## Step 3: Assign Priorities - 4.1.3

Each Player has five points to secretly distribute between Scouting, Troops and Support. Scouting is used to determine the strength of the enemy, his position and his intentions. Troops are the actual fighting force: Gears, combat vehicles and infantry. Support represents the elements that, although not present on the immediate battlefield, can affect it: air support, artillery and intelligence work.

### Scouting ◆

Scouting represents the resources that are used to recon the terrain ahead. It might be a satellite observation, a report from a forward scout or an on-site unit, but the result is the same. The points that were secretly assigned to Scouting by each Player are revealed and compared. The Player with the highest total wins an advantage. The difference between Scouting Points is noted as the Scouting Advantage Margin.

## Scouting Table

Scouting Advantage	Effect
0	No effect. One randomly determined Player sets up the playing field; the other may choose his home edge.
1	Minor Advantage: the Player may choose between setting up the playing field or choosing his home edge.
2	Major Advantage: the Player sets up the playing field and chooses his home edge.
3	Ambush: in addition to the major advantage above, the Player automatically wins the initiative for the first round.
4	Total Ambush: in addition to the major advantage above, the Player may hide his units anywhere on his half of the board, noting their positions on a sheet of paper.
5	Perfect Intelligence: in addition to the total ambush advantage above, the Player knows the enemy's mission type, objective and time limit.

### Troops ◆

The total Threat Value points available to purchase units for the game have already been decided in the first step. The points assigned to Troops by each player are revealed and compared. The player with the highest total wins an advantage. The difference between Troop Points is noted as the Troop Advantage Margin. The opponents' total TV is reduced by an amount equal to the Troop Advantage Margin times 10% of the original TV. For example, if Player A assigns 2 points to Troops and Player B assigns 4 points, the Troop Advantage Margin is equal to 2. The forces of Player A are reduced by  $(2 \times 10\%) = 20\%$ . He will be able to spend a number of TV points equal to only 80% of the agreed-upon Threat Value total.

### Support ◆

Support are options that can be bought just before the scenario to help the Player. They are normally written down and concealed from the opponent, unless they manage to learn about them (see *Intelligence*, further on). The points assigned to Support by each Player are revealed. Each side may buy support up to an amount equal to the Support Points times 10% of the TV total. For example, if Player A assigns 2 points to Support, he will get a number of TV points equal to  $(2 \times 10\%) = 20\%$  of the battle's agreed-upon Threat Value total.



## Support Options Table

<b>Air Support:</b>	<p>Aircraft can be called to provide ground support for beleaguered combat units. They are generally more precise than an artillery barrage but run the chance of being shot down before they can complete their attack. For more detailed air support rules, consult the Tactical Air Support sourcebook.</p> <p>All air support operations take place during Step 4 of the combat round. Because of their great speed, aircraft enter and exit the game surface in the same round, traveling in a straight line across the table. Any target within two inches of this trajectory may be attacked by the plane's weapon(s); all attacks are made at Short range. The number in parenthesis indicates how many attacks may be made using the weapon indicated. A level 2 crew is assumed, but Players may buy higher levels of Skill by multiplying the air support cost by the Crew Level Multiplier (see page 13).</p> <p>Air assets may also be used to intercept enemy planes before they can attack: each plane has been assigned a certain number of dice for interception and defense. These are not Skills, merely a gross generalization of the capabilities of each type of plane. The dice are rolled and compared. A Margin of Success between 1 and 3 means the plane has been driven off, but may attempt another attack next round. A Margin of Success of 4 or more means the plane has been destroyed. Aircraft may attempt any number of interceptions, but must fly back to base after a successful one. Likewise, they must return to base after they have expended their weapon stock. Aircraft do not return to the battlefield after going back to base.</p>
<b>Artillery Barrages:</b>	<p>Artillery barrages are massive attacks made by off-board artillery pieces or even spaceships in low orbit. The actual nature of the support battery matters little to the immediate battlefield — only the end effect counts. Artillery barrages are bought salvos by salvos, and cannot account for more than a quarter of the available Threat Value. For more detailed fire support rules, consult the Tactical Field Support sourcebook.</p> <p>Artillery barrages are called by a spotter unit (Player's choice), who can call fire missions at any time by spending one action. No other personnel may request artillery support. Only specific hexes, terrain features or buildings can be targeted by artillery fire, never individual combat units. The spotter must have a clear Line-of-Sight to the target.</p> <p>A Leadership Skill roll modified by the Communication system is made against a Threshold of 5. Artillery fire will arrive on the same round if the roll is successful. If the Leadership roll is failed, the request is not heard or simply misunderstood, but the next attempt is at +1, provided it is made the round immediately after.</p> <p>All artillery fire take place during Step 4. The barrages have an area effect to reflect the large number of incoming projectiles. Two dice are rolled versus a Threshold of 6. If the dice roll is equal to or higher than the Threshold, the fire mission lands right on the target point. If the die roll is failed or fumbled, the shot deviates by a number of inches equal to the Margin of Failure. The attacker rolls one die for direction.</p> <p>Damage is per normal weapon fire and is applied immediately. The number rolled on the two dice is used as the Threshold to beat for defense. For defense arc purposes, the attack comes from the fire's home edge. If the attack fails, the weapon still cause damage equal to its basic Damage Multiplier to everything in its area of effect (this is an exception to the standard area effect rules explained on page 40 and applies only to artillery barrages).</p>
<b>Intelligence:</b>	<p>Information gathering is a major part of warfare. By knowing what the opposing forces are up to, countermeasures can be more effectively designed to foil the enemy plans. It is assumed that both sides have access to fairly complete intelligence reports before the start of the scenario. Sometimes, though, the system does not come through and there are differences in the preparedness level of the forces in presence.</p> <p>Intelligence resources can be used to buy dice rerolls, representing the increased level of preparation of the friendly forces. Die rerolls can be used at any time, and cost the equivalent of 1% of the Threat Value total each. When dice are rerolled, however, the second result stands, even if it was worse than the first one.</p> <p>Intelligence assets can also force the other Player to reveal either his mission type, mission objective or time limit. They may also be used to reveal the type of support bought for the game. Every 5% of the total Threat Value assigned to this purpose forces the opponent to reveal one of the above.</p>

## Air Support

TYPE	ATTACK	INTERCEPTION	DEFENSE	TV COST
Fighter	Light Autocannon (2)	2d6+2	1d6	200
Fighter-Bomber	Anti-Gear Missile (2)	2d6	2d6	1000
Bomber	Anti-Tank Missile (4)	N/A	2d6	2000

## Artillery Barrages

TYPE	DAM	ACC	SPECIAL	TV COST
Light Salvo	x12	0	AEO	50 ea
Medium Salvo	x18	0	AE1	200 ea
Heavy Salvo	x22	0	AE2	500 ea

## Intelligence

Dice Reroll	1% of the Threat Value total each
Intelligence Asset	5% of the Threat Value total per item revealed





# SCENARIOS AND CAMPAIGNS

4

## Step 4: Subplots - 4.1.4

Subplots are what makes a scenario interesting. They are complications that have to be taken into account when formulating battle plans. When purchasing Subplots, beneficial ones are applied to the buyer and the negative ones to the enemy.

### Subplot Generator Table

1d6	Cinematic	Military	Unforeseen Events
1	Coordinated	Bad Intelligence	Bystanders
2	Coward	Corrupted Supplies	Friendly Fire
3	Vendetta	Leftover Ammo	MacAllen Collapse
4	The Hero	Low Priority	MacAllen Network
5	Love Shall Prevail	Malfunctions	Phantom Echoes
6	Traitor	Minefield	Tempest

### Cinematic Subplots

<b>Coordinated:</b>	Link two friendly units. When they attack the same target, they each get a +1 on their attack roll.
<b>Coward:</b>	A random enemy unit falls back as soon as it is damaged. If someone with the Leadership Skill is within Comm range, he may attempt to rally the fleeing unit: the Threshold is 4.
<b>Vendetta:</b>	A random enemy unit hates a random friendly unit. The enemy must match speeds (Combat or Top) and attack it continuously until one of the two is destroyed.
<b>The Hero:</b>	A random friendly unit is piloted by a young hero. He gets one reroll per round. The second roll stands.
<b>Love Shall Prevail:</b>	A random enemy unit is in love with an friendly unit. It will not fire on the object of its affections under any circumstance.
<b>Traitor:</b>	One of the enemy works for your side. At any point during the game, the weakest unit (in TV modified by the pilot's level) is transferred to your control and remains thus for the remainder of the game.

### Military Subplots

<b>Bad Intelligence:</b>	Once setup is finished, you may relocate up to a quarter of your forces on the playing surface.
<b>Corrupted Supplies:</b>	One enemy vehicle starts the game with a random Light Damage result from bad maintenance (disregard Crew results if using the Detailed Damage Rules).
<b>Leftover Ammo:</b>	One random unit has been supplied with leftover ammunition. One die is rolled every round, immediately after the unit's first attack: on a 4 or more, all attacks that round are duds, including the one just rolled.
<b>Low priority:</b>	The mission objectives are not that important to the enemy commander, and his troopers know it. The opponent applies a -2 penalty to all Leadership rolls.
<b>Malfunctions:</b>	One random enemy vehicle is experiencing weapon malfunctions. One action is required to clear the weapon after each Fumble.
<b>Minefield:</b>	An old forgotten minefield is located somewhere on the board. The Player gets a standard minefield (see page 38) and may place it anywhere in the middle of the playing surface.



### Unforeseen Events Subplots

<b>Bystanders:</b>	A group of civilians have unwittingly wandered into the battle zone. Depending where the battle takes place, they can be impoverished nomads, or perhaps even lost tourists. They are treated as an unarmed, unSkilled infantry unit, moving in a random direction every round. A penalty of one Victory Point is deducted for every civilian killed.
<b>Friendly Fire:</b>	A plane, back from a mission with spare ammunition, is looking to dump it on anything resembling a target. A fighter-bomber makes an attack run centered on a random enemy unit. Any target within the attack corridor, friend or foe, is at risk.
<b>MacAllen Collapse:</b>	A section of the underground river network has been weakened recently, and the heavy vehicles trampling on it have completed the job. One die's worth of inches, placed in a line, drop down one inch under a random enemy vehicle.
<b>MacAllen Tunnel:</b>	There are tunnels nearby. You can select the entrance at any point (put a token on the opening, which anyone can now use) and move in a straight line underground until you determine an exit point (which also needs a token).
<b>Phantom Echoes:</b>	Depending on where the battle takes place, the phantom echoes can be mirages, swamp gases or even large animals, but they attract their share of attacks. One die is rolled after every attack: on a 5 or more, the attack hits a phantom rather than the intended target.
<b>Tempest:</b>	A sudden change in the atmospheric conditions heralds the formation of a tempest (see page 51 for rules). This subplot may occur only in the Badlands.





## 4.2 - TACTICAL CAMPAIGNS

It is possible to link multiple scenarios into a large story that is called a Campaign. Campaigns, although they require more preparation and maintenance than stand-alone scenarios, are generally more interesting to play because you have to take into account the "big picture" when playing. For example, it is much less tempting to use guided missiles indiscriminately when you know you might not be able to get replacement ones in time for the next session... Between each scenario, several steps must be followed to ensure proper continuity and consistency. For starters, vehicles and infantry suffer damage and must be cared for by specialists.

### 4.2.1 - Repairs

In many campaigns, Players will have the opportunity to repair vehicles that survived previous battles. If your campaign uses this option, both Players should agree on the quality and quantity of each faction's technicians. The quality of a technician is represented by his total rating; better technicians can do more work, but they cost more in Threat Value. The base Threat Value of a technician is 50 for Rating 1, and double every level after that (for example, a Rating 4 technician is worth  $50 \times 2 \times 2 \times 2 = 400$  TV).

Each technician has a number of Labor Points per day equal to his rating times five (Rating  $\times$  5). Each attempt to repair damage requires a number of Labor Points equal to the vehicle's Size plus a modifier from the Damage Effect Modifier table. To repair a damage effect, you must supply the required Labor Points; once these are expended, the technicians must pass a Skill test. The values against which the technicians must roll (called Thresholds) are found in the Repair Threshold table below. Failed rolls or draws do not produce any results and the Labor Points are wasted. Fumbles cause Light Damage to the vehicle in addition to a failure to do the repairs.

Damage Effect Modifier and Repair Threshold Table ☐

Damage Effect	Labor Modifier	Repair Threshold	Damage Effect	Labor Modifier	Repair Threshold
Armor Rating Loss	+1 per point	1 per point	Fire Control Destroyed	+6	6
Movement Point Loss	+1 per MP	1+1 per MP	Power Transfer Failure	+5	5
Maneuverability Loss	+2 per point	2+2 per point	Crew Compartment Failure	+10	7
Weapon Accuracy Loss	+1 per -1/weapon	2+1 per -1/weapon	Complete Structural Failure	+vehicle Size	8
Weapon Destroyed	+5	5	Auxiliary Systems	+3	4

### 4.2.2 - Victory Points

Whenever they achieve some objectives, the participants in a battle cumulate a number of Victory Points (VPs). Over the course of the game, a participant can spend these Victory Points to benefit from some battlefield advantages. They must be paid for immediately and are usable once (or have a duration of 1 round, whichever is applicable). It is possible to gain a negative number of Victory Points for a scenario. In that case, the available Victory Points are reduced by that number of points, but cannot drop below zero.

The side which earns the most Victory Points during a scenario is declared the winner. It is entirely possible to appear to lose a battle, but end up with more Victory Points than the opponent because more objectives were achieved. In that case, the apparent loser has earned a technical victory — not as glorious as an overwhelming victory, but a victory nonetheless.

Using Victory Points Table ☐

Action/Advantage	VP Cost	Action/Advantage	VP Cost
Additional Labor Point	1	Additional Priority Point (see p.61)	7
Artillery Barrage (Light Salvo, page 62)	2	Cancel one Light Damage	2
Artillery Barrage (Medium Salvo, page 62)	3	Cancel one Heavy Damage	5
Artillery Barrage (Heavy Salvo, page 62)	5	Cancel one Overkill	10
ECCM cover (1 round)	1/rating	ECM cover (1 round)	2/rating
Fog	3	Rain/Heavy Rain	1/2
Night	2	Reinforcements	1 per 100TV

### ◆ And the Winner Is...

Once the campaign is over, the winner is the Player with the most Victory Points. It is entirely possible (albeit unlikely) that a Player who has lost every single battle may nonetheless end up the victor of the overall campaign. This may occur if his opponent has consistently spent his Victory Points to achieve his victories: the "technical" victor has required too much resources, too much time and has performed too poorly for the importance placed upon the campaign.



# SCENARIOS AND CAMPAIGNS

4

## Scenario One: King of the Ridge - 4.3.1

A Southern attack is underway. Northern intelligence satellites have spotted the approach of the Southern forces and HQs redirected some of the newly arrived Strider reinforcements to the area. Whether they make it in time to have any effect on the battle still remains to be seen.

The battle takes place on a clear day. Both sides have 5 Priority Points. The Southern Player may place his forces anywhere within 3" of his home edge. The Northern Player places all his forces on the ridge; they may start the game in hull-down positions or in cover.

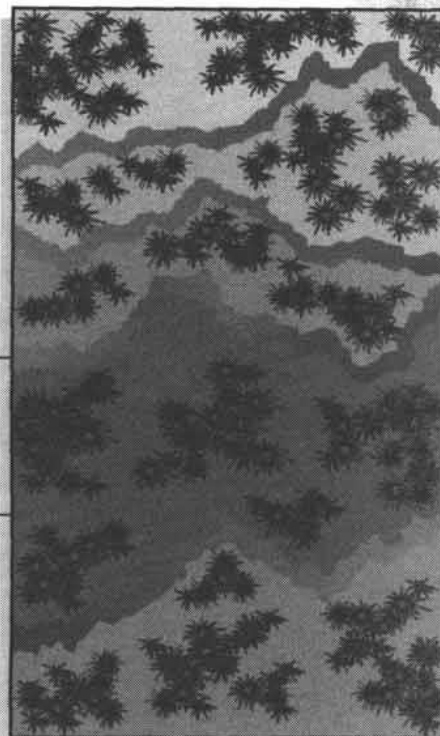
The South's objective is to break through the North's line and drive them off the ridge. The North must hold out until reinforcements arrive and control the ridge by the end of the battle. If the Northern Player still has units on the ridge on Round 6, roll a die: on a roll of 4 or higher, a single Mammoth enters the battlefield at the Northern Player's home edge. If the roll fails, roll again each subsequent Round and add one to the die roll for each Round past the 6th until the Mammoth arrives.

### Force Compositions

North:	1 x General Purpose Squadron, 1 x Fire Support Squadron
South:	1 x Recon Cadre, 1 x Fire Support Cadre

### Victory Conditions

The South wins if they are the only ones with functional units on the ridge for 3 consecutive Rounds. They can also win by forcing the North to retreat or by destroying or immobilizing all of their vehicles. This is worth 4 VPs; if the Mammoth shows up and the South still wins, another 2 VPs are awarded. The North wins the battle if they completely drive off the Southern forces or hold out (still have units on the ridge) by Round 15.



## Scenario Two: Pressure Point - 4.3.2

Momentum is everything. To keep the drive going, the capture of one of the few bridges in the area strong enough to support the weight of an armored column is critical.

The battle takes place during the day in heavy rain. The South has 6 Priority Points and the North 5. The Southern Player may place his forces anywhere within 3" of his starting edge while the Northern Player may place one of his squadrons anywhere on his side of the chasm (which is 5" deep and 3" wide). The other one has not arrived yet: its transport had difficulty in the weather. At the end of Round 4, roll a die: if the result is 5 or higher, the North may place his second squadron along any edge of the battlefield on his side of the chasm at the start of the next Round. If the rolls fails, add one to the die every Round and reroll until the squadron arrives.

The South must drive the Northern forces away from the bridge and secure it so further troops and supplies can pass through. The North is trying to blunt the attack and bring the Southern offensive to a standstill. Due to the high value of the bridge, neither side is allowed to fire on it for any reason; doing so automatically lose the game.

### Force Compositions

North:	1 x General Purpose, 1 x Strike Squadron
South:	1 x General Purpose Cadre, 1 x Strike Cadre

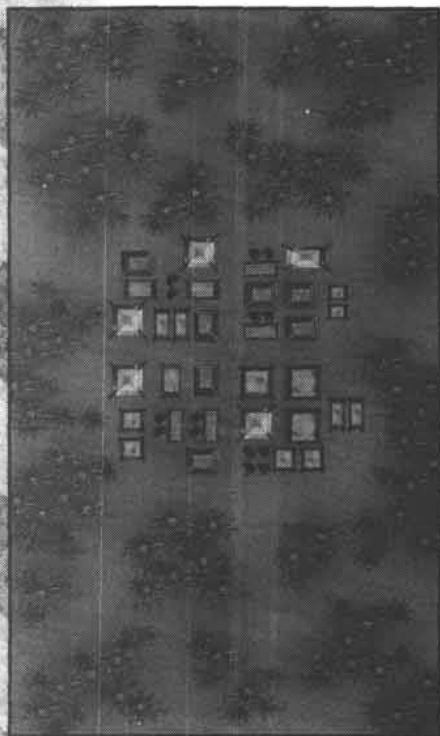
### Victory Conditions

The South wins if at least half of their forces are on the opposite of the bridge from whence they started for four consecutive Rounds. They can also win by forcing the North into retreat or destroying the entire Northern force. No matter how they win, the South gains 4 VPs. The North has the same objectives as the South, only reversed, table-wise.





## 4.3.3 - Scenario Three: Cornered!



A lone Mammoth has been trapped in a small isolated village. A lone squadron has been airdropped in to help hold the town and protect the Mammoth until reinforcements and a transport can be brought up.

The battle takes place on a clear day. The South has 5 Priority Points and the North 4. The Mammoth starts out in the town square. The Northern squadron starts anywhere within 5" of the town. The town's buildings all have a Damage Point Capacities of 60. The Southern Player may place his forces along any edge of the battlefield except the one closest to the city.

The South must destroy the Mammoth and its escort, and do so before Northern reinforcements arrive. The North has sworn to protect the town: the Mammoth cannot leave it for any reason during the battle, and the escort squadron cannot move further than 5" from the town's limits.

### Force Compositions ☐

North:	1 x Strike Squadron, 1 x Mammoth Strider
South:	1 x General Purpose Cadre, 1 x Fire Support Cadre

### Victory Conditions ☐

The South must destroy the Mammoth and at least two enemy Gears, and do so before Round 12, when Northern reinforcements show up. If successful, the Southern Player gains 5 VPs. The Southern Player may also destroy town buildings if desired (destroyed buildings become Rough terrain). The Northern Player wins the battle if the Mammoth survives (no Overkill and at least one crewmember alive) the game. If the Northern Player wins, he receives 4 VPs, +1 VP if no buildings were destroyed.

## 4.3.4 - Scenario Four: Back Against the Wall



Things are looking bleak for the North. They have been pushed well into their own territory and taken severe casualties in battle so far. HQs has been given order to pull back to Charlie Nav, a full 100 km north of the current position. All they have to do is survive the South's last gap attempt to stop them.

The battle takes place on a clear day. The South has 6 Priority Points and the North 5. Colonel Mayak Stevens has suited up for battle and will lead this final defense. One Northern vehicle may be upgraded to a Veteran pilot (Skill 3) at no point cost; this is now Mayak Stevens and he is the North's commander for the battle. While Mayak Stevens is alive, not stunned, and has a functioning Comm system, the North receives 1 Command Point per Round, on top of what they might already have. The Southern Player places his forces first within 3" of his edge of the battlefield. The Northern Player then places his forces anywhere on the top half of the battlefield.

The North must stop the South in their tracks while taking minimal casualties. The South must win at any cost since they've thrown everything they have into this attack and a loss could cost them the entire offensive.

### Force Compositions ☐

North:	1 x Recon Squadron, 1 x Strike Squadron
South:	1 x Recon Cadre, 1 x Fire Support Cadre, 1 x Naga Strider

### Victory Conditions ☐

The South immediately wins if they destroy more than 50% of the Northern forces; this is worth 8 VPs. If the South loses but still manages to kill Mayak Stevens, they receive 5 VPs. The North wins by destroying or driving off the Southern attack. Doing so grants 5 VPs, but if Mayak Stevens is killed in the process, only 2 VPs are awarded.







# SCENARIOS AND CAMPAIGNS

4

## Scenario Five: Come Out, Come Out, Wherever You Are - 4.3.5

The North is escorting a convoy of medical supplies while they control the region. Unbeknownst to them, a small Southern force has laid an ambush after breaking through the lines earlier that night.

The battle takes place under a blanket of fog. The South has 5 Priority Points, the North has 4. The North Player places all his units first, 3" from the edge of the map. The Southern Player then places all his units on the opposite side of the clearing.

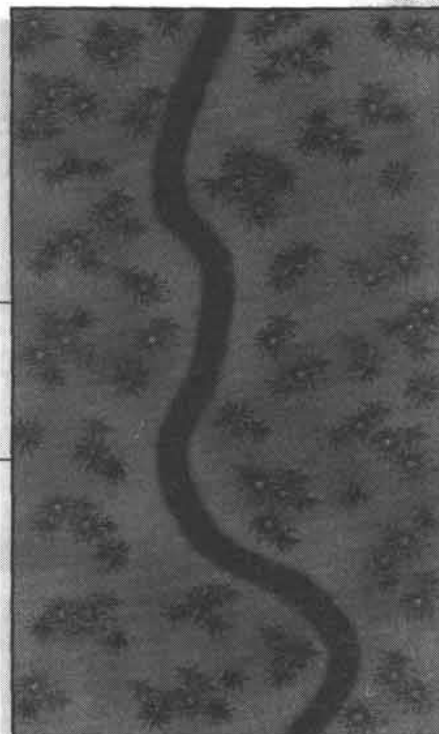
The North must get the medical trucks across the battlefield. The trucks are Size 8 vehicles with Armor 9/8/27, Maneuver -1 and a Ground speed of 4/7. The trucks cannot go evasive and start the battle at Combat speed. The trucks cannot go to Top speed until the Round after one of them is destroyed. The South's objective is to destroy all the trucks.

### Force Compositions

North:	1 x Recon Squadron, 1 x Strike Squadron, 8 x Truck
South:	1 x General Purpose Cadre, 1 x Strike Squadron

### Victory Conditions

The North gains 1 VP for each truck they get off the battlefield. The South gains 1 VP for each truck destroyed. The South also gains 2 additional VPs if at least half of the escorts are destroyed and 3 VPs if all the escorts are destroyed.



## Scenario Six: Opportunity Knocks - 4.3.6

A small Northern strike force has been dropped behind Southern lines on a mission to plant a virus in the MILICIA's computer network. Northern Intel has pinpointed a mobile MILICIA C3 vehicle that apparently is stranded and waiting for assistance. A force has been sent but their time is short: not only does their transport have a short loitering window, but enemy forces are moving to intercept as well.

The battle takes place at night. Both forces have 5 Priority Points, but cannot call in artillery. Before setup, the Southern Player places 4 chits on the board. These must be on the Southern Player's half of the battlefield and they cannot be within 10" of each other. One of these chits is the vehicle, this must be noted somewhere, preferably on the chit itself. The North must move close enough to identify the chit without using Active Sensor sweeps. The Northern Player starts within 5" of his edge of the battlefield and the Southern Player starts within 3" of his own side.

The North must scout out the South's C3 vehicle; they have only 10 Rounds to find it and plant the virus. To do this, one Northern Gear must be stationary and in contact with the vehicle for 2 full Rounds while spending no actions. Neither side can destroy the vehicle; doing so automatically lose the game.

### Force Compositions

North:	1 x Recon Squadron, 1 x Strike Squadron
South:	1 x Recon Cadre, 1 x General Purpose Cadre

### Victory Conditions

The battle is called at the end of Round 10. If the Northern Player succeeds in planting the virus he receives 5 VPs. If at least 75% of his forces survive, he receives an additional 2 VPs. The Southern Player receives 4 VPs if he prevents the virus from being planted and 2 VPs for destroying 75% or more of the North's forces.





## 5.1 - MODELING HEAVY GEAR



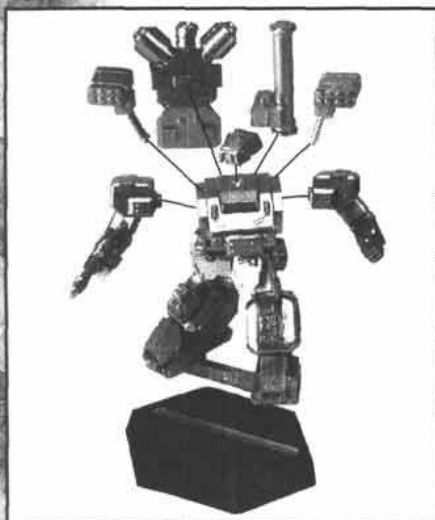
The **Heavy Gear** miniatures are high-quality multi-part kits that require some assembly to complete.

A few tools will be needed; while some may be costly, they will last for many years if cared for properly. You will need glue, a pin vise, drill bits, a hobby knife and wire snips. Some other tools you may want are: pliers, clamps, needle files, sandpaper (multiple grades), tweezers, small scissors and modeling putty.

You will need either cyanocrylate (CA) or two-part epoxy glue to assemble the model. CA glue is better known as superglue. It bonds just about anything very strongly (including flesh), but the bonds formed are weak unless the mating surfaces are clean, absolutely dry and fit well. CA glue is best applied with a small toothpick. The better the fit between the parts to be joined, the stronger the bond. Be extremely careful when working with CA glue. It will glue anything that comes into contact with it, including skin. Cyanocrylate contains some minute quantity of cyanide, which is a toxic compound. Use it in a well-ventilated area and don't breathe the fumes. Never, ever heat it to make it cure faster.

The term "epoxy glue" covers a variety of adhesive resins that are cured by a chemical reaction instead of evaporation. Most epoxies come as a two-part set that must be mixed in equal proportions, yielding a strong and nearly universal glue. They require a few minutes to set, making them perfect for assembling variable position parts.

### 5.1.1 - Basic Assembly



Your kit include metal parts, which require the use of either CA or epoxy glue for assembly. Start by cleaning all the pieces, removing flash and mold lines.

Small parts may be attached to a metal sprue. Do not twist the parts off the sprues — it is the best way to damage them. Use a hobby knife or a pair of small cutters, and don't cut too close to the pieces; after the pieces are loose, you can clean them up with a hobby knife or file.

Once the part is free, remove any flash or mold lines by gently scraping it off with a knife or file, then lightly sand until you are satisfied with the finish. Repeat for each new part, paying special attention to small detail pieces.

Assemble the parts without glue to see how they fit together. Cut, file and bend where necessary to improve the fit.

When you're ready, attach the parts with glue. Some parts may be left off for painting to make the job easier. If this is the case, make sure the joint won't be too apparent afterward, since you won't be able to apply putty on the painted surfaces. Spray the model with an undercoat primer before painting it.

Some of the miniatures, especially the terrain pieces, include bits that are cast in resin, a light and easy-to-work polymer. Resin is easier to cut and drill than pewter, but it is also more fragile. Be extra careful when working with thin parts, since resin is brittle and can't bend like metal. Otherwise, prepare the model for painting just as you would a pewter kit.

#### ◆ Safety First!

When talking about tools one must talk about safety. Remember that any tool capable of cutting through plastic and metal is doubly capable of cutting through flesh!

When using a cutting tool, make sure you cut away from yourself to avoid accidents. A dull blade will be harder to control and require more pressure to cut, increasing the chances of slipping and causing injuries, so be sure the blade is very sharp.

Don't forget that many paints and glues are toxic to some degree. Do not breathe the fumes and be sure to work in a well-ventilated area.

When sanding or filing, remember that *any* small airborne particulates can be carcinogenic. Always use water when sanding or filing to prevent particles from accumulating in the air you're breathing.

Your work area should always be kept tidy, clean, and well-organized. It is vital that it be well lit; the best light source, bar none, is the sun. If a window is not available, make sure that you have plenty of good illumination that is comfortable to your eyes.





# HOW TO PAINT MINIATURES

5

## STEP 1: PAINTING PREPARATIONS

Once the miniature is cleaned and assembled, attach it securely to its base (or other convenient handle) so you don't have to touch it while painting. Apply a coat of primer to the entire surface — this will allow the paint to stick better to the model, and also allows you to see (and correct) any surface defect before you start painting. Primers are generally sold in spray cans; white or light gray is a good choice.

Once the primer coat is thoroughly dry, apply the basic colors of the paint scheme you have selected to the entire model. Acrylic paints are the best choice, since they are non-toxic, have little odor and can be diluted with water.



## STEP 2: BASIC COLORS

Try to keep the divisions between basic colors neat and straight, though at this point any mistakes are easily corrected. Make sure the paint is properly diluted and not too thick: it should cover the surface without obscuring details. Remember that two light coats are always preferable to a single thick coat.

Once the basic colors are dry, start painting the other major areas of the models: wheels, weapons, missiles, etc. Once more, it's important to keep the colors neat and apply thin coats to avoid obscuring surface details. By now you'll have a good idea of what the finished model will look like.



## STEP 3: DETAILS AND LINING

Prepare a darker mix of the color of the area you'll be working on, and dilute it so the paint will flow freely. Using a thin brush, apply this mixture to the model's panel lines and joints. This will create deep shadows and generate the illusion that the miniature is a complex mechanical device rather than a solid piece of pewter.

The raw metal areas can be accentuated by brushing metallic paint over a black or dark gray undercoat. Load the brush with pigment but remove most of it on a dry towel before applying it. You want metallic accents, not a solid color (remember, you can always add more if need be).



## STEP 4: HIGHLIGHTS AND DECALS

Highlighting accentuates the details. Prepare a lighter mix of the color of the area you'll be working on. Using a thin brush, lightly apply this mixture on raised details and corners — basically, any place that would catch light. This is easy to overdo, so be careful. Once this is done, paint any remaining small details: sensors, antennae, etc.

Each miniature comes with a small decal sheet so you don't have to paint the markings on; see page 77 for full instructions and tips. Once this is done, paint the base in a neutral ground color, glue some sand or flock to it (optional) and seal the paint job with a clear varnish to protect the model during play.



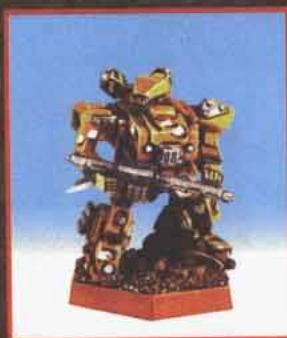


# NORTHERN VEHICLES

5



DP9-215 HUNTER



DP9-223 ASSAULT HUNTER



DP9-224 HEAD HUNTER



DP9-237 HUNTER PARATROOPER



DP9-219 CHEETAH



DP9-235 CHEETAH PARATROOPER



DP9-239 FERRET



DP9-216 JAGUAR



DP9-227 STRIKE JAGAR



DP9-220 GRIZZLY



DP9-229 ASSAULT GRIZZLY



DP9-233 KODIAK



DP9-213 ASSAULT MAMMOTH STRIDER



DP9-209 MAMMOTH STRIDER

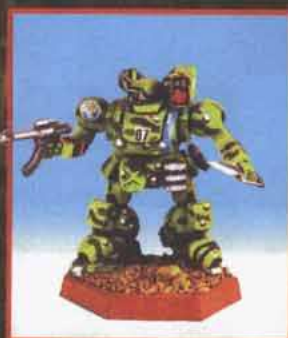


# SOUTHERN VEHICLES

5



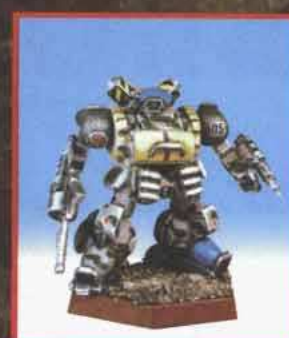
DP9-217 JÄGER



DP9-225 BLITZ JÄGER



DP9-226 COMMAND JÄGER



DP9-238 JÄGER PARATROOPER



DP9-221 IGUANA



DP9-236 IGUANA PARATROOPER



DP9-218 BLACK MAMBA



DP9-228 B.M. BRAWLER



DP9-222 SPITTING COBRA



DP9-234 STRIKING COBRA



DP9-230 KING COBRA



DP9-214 LONG FANG NAGA STRIDER



DP9-210 NAGA STRIDER



# CAMOUFLAGE PATTERNS

5

## BROKEN GROUND PATTERNS



Pattern Breaker



**BROKEN GROUND** is a common term that covers a wide variety of hilly and rocky terrain, such as the savannah and sloping terrain that leads to the great northern mountain chains. Broken ground, as its name implies, features numerous small hills and elevation changes as well as the occasional boulder or large rock formation.

**PATTERN-BREAKER** camouflage does not actually hide the unit, but breaks up its shape and silhouette to make visual identification more difficult. The actual colors used do not matter much, although they are always flat and muted to avoid attracting unnecessary attention. Pattern-breakers are most often applied to very large units such as main battle tanks.

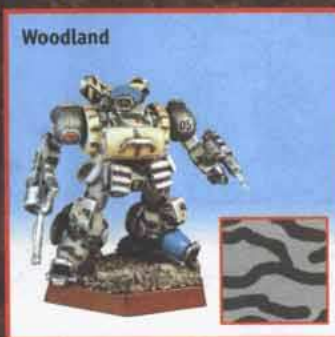
## MOUNTAIN AND URBAN PATTERNS



**MOUNTAINS** and other rocky areas are a prominent feature of Terranovan geography. For a time, Terra Nova was very geologically active — the large mountain ranges of the Northern Hemisphere are proof of this. Northern Guard combat groups are often called to deploy in mountainous regions, both within the leagues' boundaries and at the borders.

**URBAN:** An urban camouflage series has been officially recognized by the high command of all northern armed forces. Its function is not so much to hide the war machine, but to break its silhouette as it moves between the buildings in search of prey.

## VEGETATION PATTERNS



**JUNGLES** are common in the lower basins of the Southern Hemisphere. There are many hot and humid climates that allow huge rain forests to prosper. Hot winds from the equatorial regions mix with the water of the southern valleys to grow tall and lanky trees along the shores of the rivers and lakes.

**WOODLAND:** Not all Southern forests are densely packed steamy jungles; in many places the trees grow far enough from one another to allow the existence of ground vegetation. The resulting combat environment is quite similar to that found in the northern forests, and as such requires similar camouflage patterns.

## SWAMP PATTERNS



**SWAMP:** The Southern Hemisphere features an inordinate amount of swampy areas. The water from the MacAllen network seeps to the surface and helps develop a swamp ecology in the lower valleys where it accumulates. Southern swamps tend to have a green-brown color due to the large quantity of algae floating in the water.



# CONVERSIONS AND TERRAIN PIECES

5

## HITBASHING AND CONVERSIONS

Entire books and websites have been devoted to this subject, which encompasses more tricks and techniques than we could ever cover in one rapidly diminishing paragraph. Simple conversions can be accomplished by cutting and pinning arms, legs and waists into different poses, or using bits of spare sprue or plastic rod to create modified weapons and equipment.

For example, the Hunter at right sports a medium bazooka and a left arm from another Hunter (the new parts were left bare to show them off). The Jäger on the far right has an additional shoulder-mounted rocket pack, giving it added short range punch and indirect fire capacity.



## KEEP YOUR SPARE PARTS!

You should always keep any and all parts left over from the modeling project you complete — one never knows when that extra Light Autocannon will be needed...

The two Weapon Packs (DP9-242 and 243) are an excellent source of spare parts that will allow you to build a large numbers of the vehicle variants shown in the Heavy Gear sourcebooks (notably the two Vehicle Compendiums, DP9-025 and 026).



## ADAPTING COMMERCIAL BUILDING KITS

It is easy to adapt existing commercial plastic kits (in this case, a model railroad refinery) to serve on the tabletop. Cut and glue so that the structure looks interesting. Feel free to remove any bits that are either not to scale or too primitive-looking; likewise, you can add spare bits (in this case, old electronic components and a disposable razor) to make the whole thing more futuristic.

Once you are satisfied with the looks of your structure, apply an even coat of primer to the surface. Let it dry thoroughly; fix any problem that showed up, and reprime until it looks good.



## PAINTING BUILDINGS

Paint the entire structure in any color you choose (though tan, gray or green work well). In this particular case, a few panels were masked prior to painting so that the primer color would show through to produce darker segments for contrast.

Mix a darker color and dilute it so that it flows well, then apply it to the entire construct to bring out the shadows. Let dry thoroughly. Take a lighter shade of the base color and lightly brush it across the raised edges to bring out the edges and details.

Once this is done, decorate with spare decals and painted markings, then seal the whole thing with flat clear varnish.





# MAKING TERRAIN PIECES

5

## HITBASHING COMPLEX STRUCTURES



Despite their apparent complexity, structures such as bases, bridges and bunkers are easy to make. Starting with just the odd empty food container and some bits of plastic and wire, one can turn out quite an acceptable building in just a few hours' work.

Check out the various Heavy Gear sourcebooks for images and structure ideas; for example, *Heavy Gear Design Works* (DP9-037) includes several sketches of buildings of every type, from small hangars to large city-blocks.

## PAINTING BUILDINGS AND STRUCTURES



Once you are satisfied with the looks of your structure, apply an even coat of primer to the surface. Once it is dry, paint the entire structure in any color you choose (though tan, gray or green work well). Some sections can receive lighter or darker colors to detach them from the rest.

Mix a darker color and dilute it so that it flows well, then apply it to the entire construct to bring out the shadows. Let dry thoroughly. Take a lighter shade of the base color and lightly brush it across the raised edges to bring out the edges and details.

Once this is done, decorate with spare decals and painted markings, then seal the whole thing with flat clear varnish.

## PREPARING GUN TURRETS



Gun turrets and towed artillery pieces are sometimes used to defend important installations and choke points. They have Armor 25, do not move and ignore all Movement-related hits (but still lose a point of Armor per hit), and are equipped with either a linked pair of Medium Autocannons or a linked pair of Heavy Rocket Packs (HRP/24). Resin and pewter gun turrets are available in blister format (DP9-245); here's how to prepare them.

Clean the mold lines and the base. Apply a uniform coat of a light color to the base. The weapons should be glued to either side of the sensors mount and the whole assembly painted gray or steel.

## PAINTING GUN TURRETS



Apply a coat of diluted brown or black ink or paint over the whole surface, making sure it gets in all the panel lines and crevices. This will bring out the recessed details. Let dry thoroughly; repeat if needed to accentuate details.

Prepare a lighter mix of the color of the base. Using a thin brush, lightly apply this mixture on raised details and corners. Once this is done, paint any remaining small details: sensors, antennae, etc.

Use the decal packs (DP9-231 or 232) to put some markings on the surface, or just paint them on with a fine brush. Once everything is dry, seal with a coat of clear flat varnish.



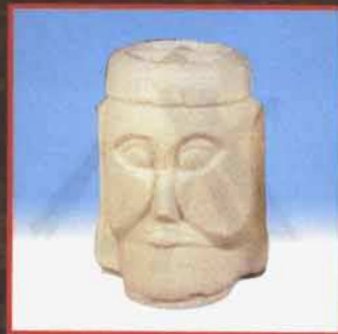
# MAKING TERRAIN PIECES

5

When Terra Nova was first colonized many centuries ago, the early settlers sculpted giant heads in stone and masonry. The hardy stoneheads can still be seen here and there on the planet, often near human settlements. Weathered and sun-bleached, they gaze solemnly at the events around them. Resin stoneheads are available in blister format (DP9-241); here's how to prepare them.

Clean the mold lines and the base. Apply a uniform coat of a light color overall (tan or sand works best, but gray is also good for temperate zones). Using a pencil, draw horizontal and vertical lines to represent individual stones in the structure.

## PREPARING THE STONEHEADS

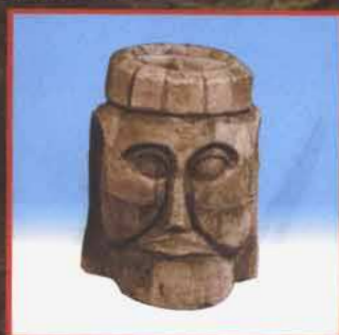


Apply a coat of diluted ink or paint over the whole surface and let dry as is. Test the effect on a small area first.

Reapply the same treatment over selected stones and recessed areas to create variations in surface detail. Seal with a coat of clear flat varnish.

The finished stoneheads can be used as is, or they can be glued to a base which is then decorated with sand, flock and small twigs. Bases also let you break apart or cut the resin pieces to make half-buried or damaged stoneheads, which can then be "buried" on the base with sand.

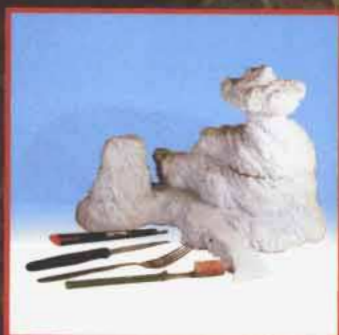
## PAINTING THE STONEHEADS



Rock formations and other changes in elevation are easy to build and make for a more varied battlefield. The best material for this is isolation foam, which is readily found and can be bought in various thicknesses.

Draw the general shape of the mountain on the foam and cut it out with a sharp modeling knife. It is easier to make tall formations out of several layers of foam, since it gives you flat locations to put the miniatures. Attach the foam together with epoxy or white glue. Using sandpaper, files and cutting tools, sculpt the surface to give it a rocky texture.

## MAKING MOUNTAINS AND ROCK FORMATIONS



Once you are satisfied with the looks of your mountain, apply an even coat of primer to the surface (careful — some paints dissolve foam!). Once it is dry, paint the entire mountain brown, gray or tan. Mix a darker color and dilute it so that it flows well, then apply it to the entire construct to bring out the shadows. Let dry thoroughly. Take a lighter shade of the base color and lightly brush it across the raised edges to bring out the texture of the rock.

If you prefer, you can glue flock and lichen to the mountain to match the rest of the game table. Don't overdo it, though — it's always interesting to see bare rock here and there.

## PAINTING MOUNTAINS AND ROCK FORMATIONS





# MAKING TERRAIN PIECES

5

## MAKING TROPICAL TREES



There are several ways to get trees for the game table, and while very different they are all valid. The easiest way is, of course, to buy ready-made trees (you can find those in railroad model stores); these tend to be expensive, however. If you are on a budget, you can make very nice trees out of household items.

Scavenge some cotton swabs, garbage bag ties (preferably the green paper kind) and some foam, putty and sand for the base.

Cut off one of the tip of the cotton swab. The cotton swab become the trunk; it can be bent a little if desired.

## MAKING TROPICAL TREES, CONTINUED



Take the ties and cut long leaf shapes into them, being careful to keep the metal wire centered. Some wire should remain at the base so that the leaf can be attached to the trunk. Cut indentations on either side of the leaves. Be careful not to cut through entirely!

Paint the leaves green or khaki and the trunk in brown, gray or tan. Glue the leaves' wires in the cotton ball. Stick the resulting palm tree on a base made of foam or putty, and glue sand and lichen on top so that the tree (or trees — you can put more than one per base) is sturdy and looks good. You can also glue the leaves directly into the base to make giant fern plants, if you want.

## MAKING HILLS AND TERRAIN ELEVATIONS



Changes in elevation are easy to build and make for a more varied battlefield. The best material for this is isolation foam, which is readily found and can be bought in various thicknesses.

Draw the general shape of the hill on the foam and cut it out with a sharp modeling knife. Using sandpaper, files and cutting tools, sand the edges until they make a nice slope. You can also mix plaster and sand and apply it evenly to the foam to texture it.

Once you are satisfied with the looks of your hill, apply an even coat of primer to the surface (careful — some paints dissolve foam!) then paint it brown, green or tan.

## PAINTING HILLS AND TERRAIN ELEVATIONS



Take some white glue (carpenter's glue) and slightly dilute it with water. Apply it to the top surface, then glue sand, flock and lichen to the hill to match the rest of the game table. Unless you intend to stack hill pieces to make higher elevations, you can add little clumps of lichen to represent vegetation.

Trees can also be added to the hill base, if desired. The tropical trees shown above can simply be inserted into holes in the foam.

This method can also be used to build a small oasis. Prepare a hill as above, but dig a shallow hole on the hill. Paint the inside blue or brown to represent water.



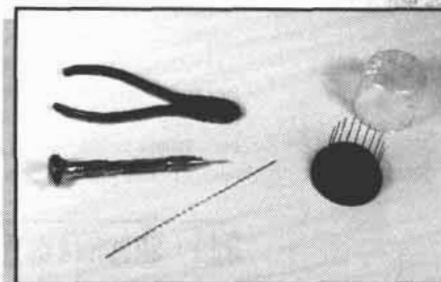
## Advanced Modeling Techniques - 5.1.2

Once you have a few miniatures under your belt, you might want to start using a few advanced modeling techniques. Though available space precludes a complex discussion of the more interesting techniques, the following ones should come in useful for the time being. Pinning the various parts together will make your miniatures sturdier and better able to resist the day-to-day wear of wargaming; gap-filling will make them look better and also help to reinforce the structure of the model; and finally, decals will allow you to put complex markings on the hulls of your war machines without slaving for hours with a magnifying glass and a single-hair brush.

### Pinning ♦

Although CA glue is strong stuff, gamers are stronger by far. While a simple glue joint is sufficient for display and careful handling, a regularly used gaming miniature will probably require more structural support. Pinning involves drilling a small hole in a part where it joins another part, and inserting a stiff piece of wire (like a pin) into the hole, so that part of the pin protrudes. Then, a matching hole is drilled where the part is supposed to go, allowing the two parts to be joined with the pin acting as a structural reinforcement. Use a longer wire for bigger parts to add more strength.

Although any thin, stiff wire will work, the best pinning wire for the price is a small paper clip. Simply unbend a portion of the clip and use snips to cut off a piece of the desired length. Use an appropriately-sized drill bit to drill the holes. If you lose your pin, there's plenty more where that came from.



### Putty and Gap-Filling ♦

Gaps may appear where the parts meet. Putty is a malleable substance that hardens when it dries. Putty comes in small, squeezable tubes, and several brands are available at your local hobby store. Apply the putty with a toothpick — just enough to fill the gap — and let it dry before sanding off the excess. Model putty takes forever to dry when applied in thick coats.

The structural strength of regular model putty is somewhat poor. If you have to build up a large area, two-part epoxy putty is a better choice. Epoxy putty consists of two bars of different colors that must be mixed in equal proportions. The putty will adhere to almost any surface, so work it with damp tools. Always wash your hands and your tools immediately afterwards.

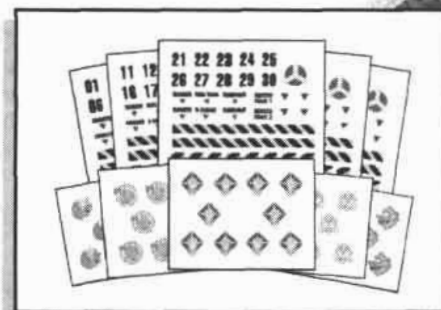
If the gap to be filled is in a detail-dense area of the model, apply strips of masking tape on either sides of the gap to prevent the putty from filling in the detail. Remove the tape once sanding is done. You could also work the putty with sculpting tools, blending it into the model.



### Decals And Markings ♦

**Heavy Gear** miniatures include decal sheets with numbers and national insignia on them. For extra personality and flashiness, you can also find a huge variety of small-scale decals at many hobby shops. Warning tags, nose art and other insignia can really enhance your fleet's appearance, and with decals, you won't have to be a master painter to get things to look good.

Each marking should be cut out from the sheet as close as you can without damaging it. This will help hide the carrier film. The model's surface must be clean and dry. Dip each marking in water for a second or two; don't put them all in at the same time though, because the glue will dissolve to nothing before you have the chance to place them all. Let the wet decal stand for a few seconds. Using tweezers, place the damp decal over its intended spot. Carefully slide it into place — don't try to lift it from the backing sheet, you'll rip it apart. Once you are satisfied with the decal's position, use a dry cloth to absorb the excess water. Don't rub, just tap, or you will damage the decal.



### Flight Stands ♦

Some of the miniatures, such as the hover tanks, includes a two-part plastic flight stand. A hole for the flight stand will have to be drilled on the miniature. If you are using the plastic display post included with the miniature, use a 1/16" drill bit. Alternatively, you can use the same kind of wire you use for pinning the miniature; simply drill a hole in the bottom of the plastic hex base and glue the wire in to make a sturdier flight stand suitable for rough use (don't forget how useful paper clips are).





## 6.1 - ARMIES OF THE HEAVY GEAR WORLD

This chapter provides information on the main forces found on Terra Nova in the post-Interpolar War era. They can, however, be used to fight battles earlier in the history of the planet, from the War of the Alliance that saw opposition between the Terranovans and the CEF, to the early days of independence, when bands of rovers clashed in the desert over caches of supplies.

The structure of sections, companies and regiments follows a pyramidal command structure. This has the advantage of letting you start small and create your own regiments, adding the unit types you want while maintaining a modicum of realism and believability. Military officers generally prefer to have balanced regiments rather than forces with one elite section and fifteen lame ones; such a regiment would rapidly fall apart once the elite squad was wiped out by the combined firepower of the enemy army.

Please note that there are many more designs than are represented by these formations. Most commanders have high degrees of leeway in what they can field (or are just caught in supply problems), which means there may be a lot of deviations from the established norm within the divisions, or even the regiments themselves. If you want to use miniatures that are not featured in a particular squadron, you may swap them in for other vehicles of the same or lower Threat Value (unless you are willing to divert some TVs from elsewhere in the regiment). For example, if a Southern Player wanted to use a Brawler Black Mamba in a Recon squadron, he could swap the standard Black Mamba for the Brawler. The **Northern Guard Army List** (DP9-046) and **Southern MILICIA Army List** (DP9-048) feature yet more preconstructed Gear squadrons along with armor and infantry formations.

### 6.1.1 - Structure of Military Formations

Legions and divisions are the largest military units maintained by the Terranovan military during peacetime. They are composed of about 20,000 troops on average, but this number varies with the unit composition. Infantry form the bulk of most military organizations and are used to slowly take and hold territory, or to consolidate supply lines. Cavalry and armored columns are used to exploit weaknesses in enemy lines by breaking through and overrunning the enemy, while border groups are rapid-deployment units with integrated air wings. Lastly, airborne groups are rare combined armed military forces with light, *airdroppable equipment*. These legions or divisions are usually composed of three brigades.

Brigades are the smallest standard military units capable of independent action for extended periods of time. In addition to a nucleus of fighting troops, brigades include many necessary support units like medical evacuation teams, military police, combat engineers, artillery batteries and quartermasters. In addition to their core units (usually three regiments), brigades have one to two thousand additional troops scattered across several support units. The highly variable structure of a brigade means they can have as little as 5,000 troops and as many as 12,000.

### 6.1.2 - The Regiment: A Family Away from Home

Military organizations are rich in tradition and history. It is at the regimental level that this subculture is consolidated. Soldiers may share a certain pride in their specific squadron or company's recent performance, but they are proud of their regiment's rich past. Regimental traditions often include variations from official uniforms, rituals to commemorate past events and regimental emblems and songs. Infantry regiments consist of three infantry battalions and a command section. They are composed of nearly 2500 troops, along with the 150 vehicles needed to transport them and their equipment. Gear regiments are sub-divided into four companies, then into four sections, and then into three squadrons or cadres of five Gears each. They usually consist of about 600 troops and 200-250 Gears. Cavalry regiments are also sub-divided into four companies, then into four squadrons or cadres of three armored vehicles each. Sometimes, regiments combine two or three companies of various types. These hybrid regiments benefit from greater flexibility and are often assigned more general missions. Regiments are normally commanded by a colonel (in the Northern Guard) or a commandant (in the MILICIA).

#### ◆ The Dueling Option

Most Gear regiments elect one of their pilots to become their Duelist. That job entails half public relations work, half combat expertise. The Duelist is expected to be the very best in his unit, both on the field and off. A Duelist is allowed much less leeway in his behavior; everybody looks up to him, although he is not the leader of the regiment, and draws strength and inspiration from his accomplishments and skill. A unit can occasionally be judged solely through an inspection of its Duelist. As such, a Duelist who fails to meet the minimal standards of his regiment is quickly demoted from his position and replaced by someone better.

It occasionally happens that regiments decide not to fight and resort to Dueling to resolve their confrontations. This is not a regular occurrence, but is a honored tradition which both Northerners and Southerners respect greatly. Two regiment commanders who are about to enter a long battle or who have fought for too long may agree to call upon their Duelists to resolve the situation without further bloodshed. In most North vs. South campaigns, the opposing Players may agree to fight a Duel at any time to end the campaign. The other factions of the Heavy Gear world do not follow the Dueling tradition, and so this option cannot be taken with them.



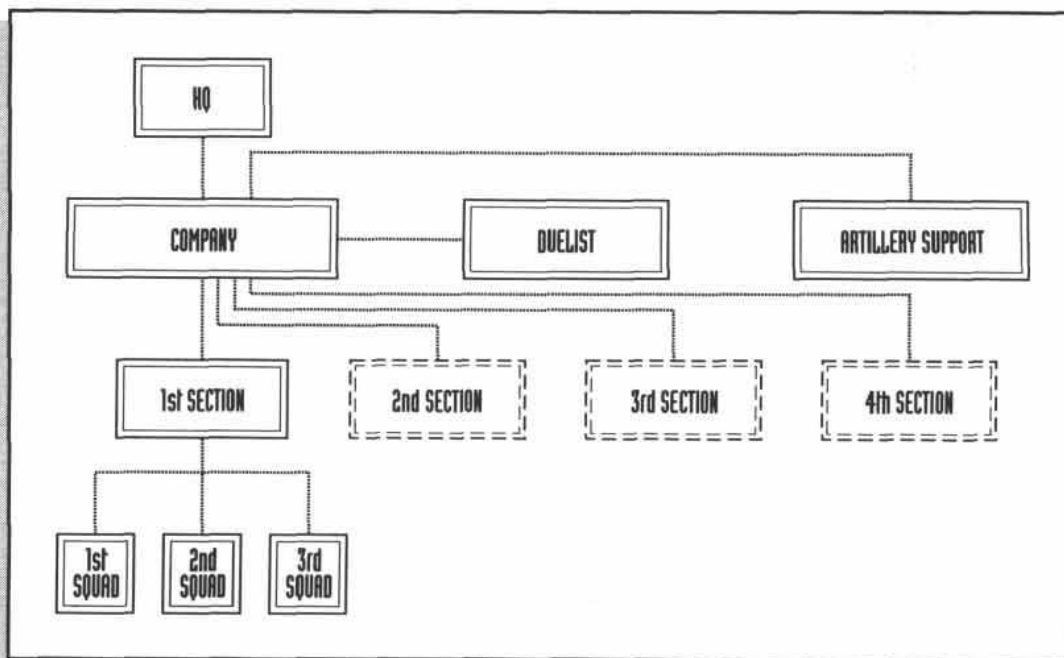


## 'Army Builder' Sheet - 6.1.3

The following outline allows players to build their own regiments using the construction rules found in the later Army listing as well as using the rules found in the **Northern Guard Army List** and the **Southern MILICIA Army List**. The following is merely an outline for a basic company. It can be used for both the North and South, with the noticeable exception that the South may have one extra cadre per section than the North does. While this may seem like a big advantage it should be noted that most battles are of smaller portions of a regiment at once and that the Northern Guard and MILICIA have vastly different support structures. This enables Northern forces, while outnumbered, to maintain an edge with their larger counterparts in the Antarctic.

Both sides usually use letter names to distinguish companies (i.e. A Company, B Company or Delta Company, Echo Company) though some do use number as well. Northern sections are usually labeled 'Section 1' with the number last whereas their southern counterparts usually place the number first like '1st Compagnie'. Differences in spelling are also common between the two polar powers.

Some Players may be curious about the strong similarities between the two sides formations: the main reason for this was the War of the Alliance. During the War, both sides adopted similar unit structures and procedures when working with each other to ease the process and streamline supply and repair needs. After the conflict ended, the changes stuck.

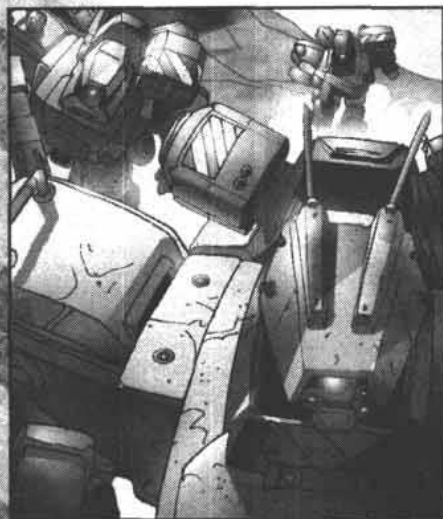


### Company Record Sheet

COMPANY	1st SECTION	2nd SECTION	3rd SECTION	4th SECTION
HQ	1st SQUAD	2nd SQUAD	3rd SQUAD	4th SQUAD
DUELIST	1st SQUAD	2nd SQUAD	3rd SQUAD	4th SQUAD
SUPPORT	1st SQUAD	2nd SQUAD	3rd SQUAD	4th SQUAD



## 6.2 - THE NORTHERN GUARD



The burden of defending the North and attacking its enemies falls primarily on the Northern Guard, a multinational force made up of soldiers recruited from all three Northern leagues. With a declaration of war, the national armies of the leagues soon falls into the Guard's organizational structure, although they retain some degree of independence of operation. Dedicated Guard divisions, however, remain the core of the North's armed forces. They are generally undermanned, but make up for it with a large percentage of mechanized combat units instead of relying on infantry.

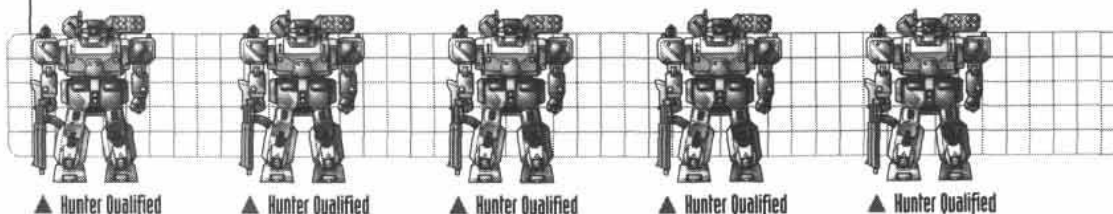
Northern Guard Gear squadrons have remained largely the same over the cycles of the Interpolar War and other recent conflicts, though there are a few noticeable exceptions here and there. The first and the most noticeable to all squadron commanders has been the increased distribution of the Weasel-class Electronic Warfare Gear (or other similar machines) among the recon forces. This now puts the Northern Guard almost on par with the Southern Republic Army as far as electronic coverage is concerned, and means that the earlier Guard battlefield command and control problems are expected to become largely a thing of the past.

Other subtle improvements include the upgrade of most Strike squadrons to a completely airdroppable status, giving company commanders small but effective airborne capability, and the introduction of strider squadrons as a backup to standard Gear formation. However, the Gears are not confined in a bodyguard status anymore: the new teammates are dedicated spotters for the Mammoths. More details can be found in the **Northern Guard Army List (DP9-046)**.

### 6.2.1 - General Purpose Squadron

General Purpose (GP) squadrons are pretty self explanatory. They constitute a great part of most Gear regiments and are used in almost every type of mission, even missions which require specialized units. They perform all types of duties, from patrols to sentry, from assault to field engineering. Most Gear pilots begin their careers in GP squadrons, then later move on to units that make better use of their strengths. The standard GP squadron constitutes almost 75% of all General Purpose squadrons in the Northern Guard. Regiments occasionally include a Senior GP squadron in a Gear Company, provided that at least ten of the company's squadrons are GP themselves. The Prime GP squadron is the most rare of that category, and there can only be one in a regiment.

Standard (TV 1900) ☐



▲ Hunter Qualified

▲ Hunter Qualified

▲ Hunter Qualified

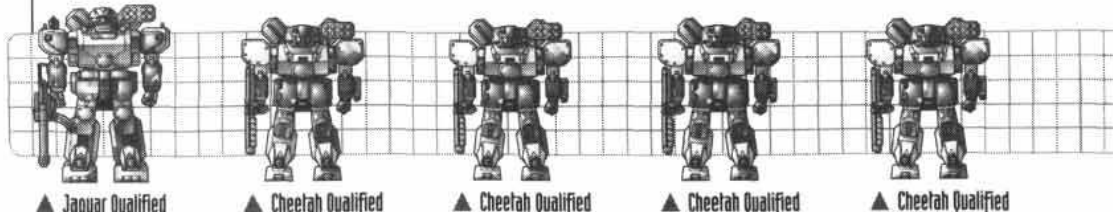
▲ Hunter Qualified

▲ Hunter Qualified

### 6.2.2 - Recon Squadron

Recon units handle a variety of functions, usually patrolling areas to find hidden enemies. In light regiments that lack the resources for more specialized machines, recon units are often assigned light combat duties or peripheral positions where minor encounters are expected. Recon units are vital to a well-balanced regiment.

Standard (TV 3,128) ☐



▲ Jaguar Qualified

▲ Cheetah Qualified

▲ Cheetah Qualified

▲ Cheetah Qualified

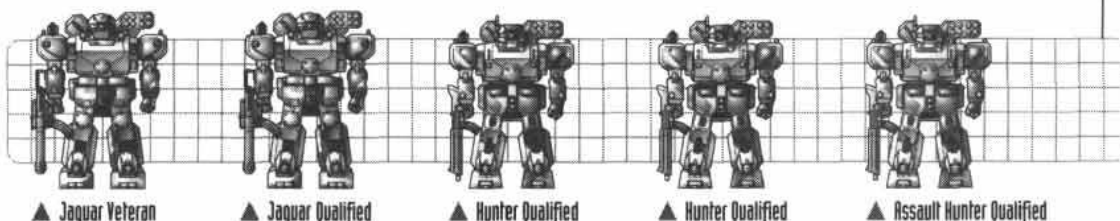
▲ Cheetah Qualified



### Strike Squadron - 6.2.3

When it comes time to take an enemy position or eliminate opposing forces, Strike squadrons take the brunt of the work. They are designed to hit hard and fast, and still be able to hold ground they have gained. They are usually composed of five GP Gears, three of them from the Hunter family. The Hunters usually flank the opponents drawn out by the other two. This is a good training ground for pilots who have spent a few cycles as GP pilots and who show promise. It is considered fairly prestigious to be a pilot in a Strike squadron, although not as much as a Commando or Elite squadron.

#### Standard (TV 3,236)



▲ Jaguar Veteran

▲ Jaguar Qualified

▲ Hunter Qualified

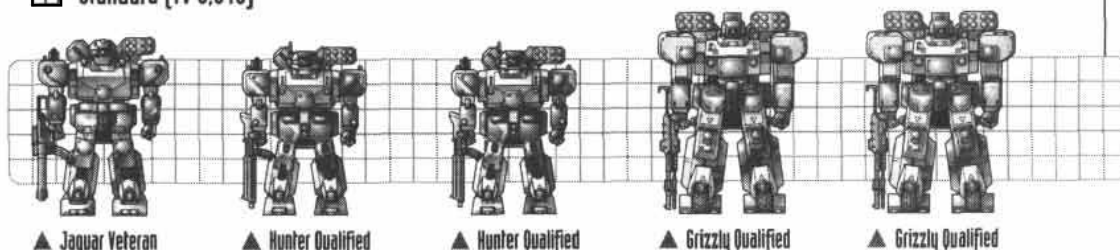
▲ Hunter Qualified

▲ Assault Hunter Qualified

### Fire Support Squadron - 6.2.4

When heavy targets need to be eliminated, when enemy positions need to be softened up or when a commander simply feels firepower is a necessity, fire support squadrons are called in. Slow and heavy, these squadrons do not have the battlefield flexibility of most other squadrons, but their offensive punch makes up for it as long as they are well deployed. For the most part, they include two heavier Gears who stay in the back while the lighter vehicles feed them firing coordinates. Depending on the commander, one of the lighter Gears may stay at intermediate range, acting as a defender for the heavier Gears in case of an enemy strike.

#### Standard (TV 3,949)



▲ Jaguar Veteran

▲ Hunter Qualified

▲ Hunter Qualified

▲ Grizzly Qualified

▲ Grizzly Qualified

### Heavy Support Squadron - 6.2.5

Though they are not Gears, the armored walker vehicles known as striders are often attached to a Gear regiment since they have similar maintenance requirements and cross-country capabilities to the smaller one-man walkers. It may happen that an armored regiment requests and receives a certain number of striders to bolster its forces, but they generally need extensive transport assets in order to keep up with the other vehicles. Strider squadrons used to incorporate one or two Gears within their rank to act as bodyguard and forward observer, but the current trend is to assign an entire, separate squadron to perform the same job — only better.

#### Standard (TV 3,500)



▲ Mammoth Qualified

▲ Mammoth Qualified

▲ Mammoth Qualified





## 6.2.6 - Building a Northern Guard Force

The following is a set of guidelines for building your own detachment of Northern Guard forces, including Gear, armored vehicles and infantry units. Air and space forces operate separately, require some additional tactical rules and so are treated in other products, including **Tactical Air Support** (DP9-008) and **Tactical Space Support** (DP9-060). More detailed guidelines, including the history of the Northern Guard, notes on awards, uniforms, personal weaponry and famous commanders, can be found in the **Northern Guard Army List** (DP9-046).

Note that you can mix and match unit types (by replacing a squad of one type by another). This will add flexibility to your regiment, but requires a little more management on the field. For logistic purposes, though, officers generally prefer to keep the same type of unit (Gear, armored vehicle or infantry) within a company.

### ◆ Step One: Select Size

Choose how large your force will be. You will probably want to start with something small and easy to manage, such as a section (three squads of either five Gears, three vehicles or thirty men). Keep in mind you can always expand your force later, "bumping up" the Headquarters group to command of an ever larger detachment. Ambitious players can even form a complete regiment of four companies, each with four sections, along with attendant support units.

The diagram on page 79 show how the various combat units are organized. The full boxes are the units you need to get to properly start your detachment. The phantom boxes are for future expansions as you acquire more units and assign them to additional sections and companies. It is possible to start other companies or sections without completely filling the existing ones, as long as there is at least one complete section per company and one complete squad per section.

### ◆ Step Two: Select Units

Start selecting combat units to fill the table of equipment and organization you prepared in Step One. Pre-generated squads can be found in the previous pages, though you can also make your own by adding the Threat Values of the units selected. For example, it is allowable to make a squad out of the five Jaguar miniatures you own. The **Northern Guard Army List** (DP9-046) lists many more possible squad combinations, including the less common Senior and Veteran upgrades.

You'll need a Headquarters squad as well. This is your commander on the field. He and his staff might not always be present in all scenarios, but you need them to make a proper armed force. The HQ squad is a squad of Gears or vehicles that is in overall command of your force; unless the entire regiment is composed of infantry, the HQ unit is never an infantry squad. HQ squads are generally better off with vehicles that have good Communication systems (+1 or better), but they don't have to; indeed, some commanders prefer to mix it up on the field and lead by example, and they will thus require heavily armored units instead!

### ◆ Step Three: Select Support

Each company can field one Duelist, a specialized pilot that fights duels to resolve matters of honor (see **Duelist's Handbook 2nd Edition**, DP9-105, for more details on Duelists). Though the tradition is to have one very skilled Duelist per regiment, it is not unusual for company leaders to select a promising pilot to represent them in competitions and to provide a possible future replacement for the regiment's Duelist post, with all the glory attached to it.

Duelists always pilot Gears, never vehicles, and are generally given a lot of leeway in how they equip their machine. The datacards appendix at the end of this book contains four specialized datacards for the most common Gears currently in service with the Northern armies. Simply select the weapons and equipment desired, then add the point costs to get the final Threat Value of the Duelist's machine. Note that this equipment *must* be represented on the miniature, else it does not count! When this is done, select the Duelist's Skill level and multiply the Gear's TV by the listed multiplier: this is the final point cost of the Duelist.

Artillery and other support arms, such as air power and logistics, are dealt with separately depending on the scenario (see page 61). It is, however, always a good idea to budget some Threat Value points for them, just in case — that way, you don't have to leave a squad at home to get the single aircraft strafing run you need to win!

### ◆ Step Four: Fill in the Background

You now have a Northern Guard force assembled. Game-wise, you have everything that you need to play. It is more fun, however, to go the extra mile and complete the job. Select a name for your regiment; it is generally a number followed by something evocative, like "Nova Redriders" (a Northern regiment). Once you have selected a name, pick up a logo or distinctive for it: it should be something that is easy to reproduce on the miniature using either the decal set (DP9-231) or a well-aimed paint brush. For example, the aforementioned Redriders all have one armor panel painted dark red, no matter what camouflage scheme they wear.





## THE SOUTHERN MILICIA - 6.3

The task of taking on invading armies fall primarily to the multinational force known as the Southern MILICIA (an acronym which stands for MILitary Intervention/Counter-Insurgency Army). The MILICIA is made up of soldiers from all the Southern leagues, and although poorly equipped and trained, their large number make them a force to reckon with. Though they are normally used to quell disturbances and do other tasks deemed beneath the national armies, the Southern command prefers to see them out of the way, just to avoid possible sympathies with the locals. Besides, they might just weaken the enemy forces enough that the South can win the war easily; the utter destruction of the MILICIA in the process is a small price to pay.

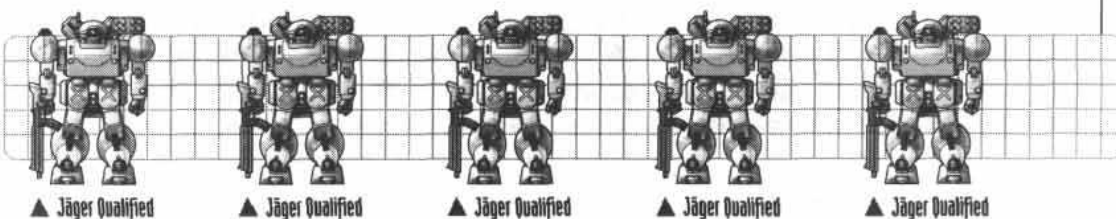
MILICIA recon cadres, like their SRA brethren and Northern Guard counterparts, are now better equipped with Electronic Warfare Gears than before. This move now gives MILICIA commanders clear communications in nearly all engagements and almost brings them up to par with their Northern adversaries. While the Black Box Iguana is not as capable as the Weasel on the EW side, it is based on the widely available Iguana frame which has led to easy repair and upkeep records. More troubling for the MILICIA, though, has been that as the war has gone on replacement Gears have gone to the SRA first and to the MILICIA last. So while the MILICIA started the war with high numbers of Black Mambas, the overall percentage has dropped some. To make up for this shortfall, increased numbers of Iguanas and Spitting Cobras are being seen in roles previously filled by the elite machines. More details can be found in the **Southern MILICIA Army List** (DP9-048).



## General Purpose Cadre - 6.3.1

General Purpose units are the Jacks-of-all-trades of the MILICIA, and are found in almost every regiment. GP cadres are often required to perform all of the tasks of more specialized units, from strike and fire support to reconnaissance and field engineering, including the basic assignments as well. GP units are also favored in units based in the South's many jungles and wetlands, as their reliability and ease of maintenance in the field, as well as standardized and readily-available parts, outweigh any shortcomings in firepower. Some regiments permanently assigned to wetlands will receive Gears optimized for that environment, but the bulk of their forces remain the tried-and-true GP Gears.

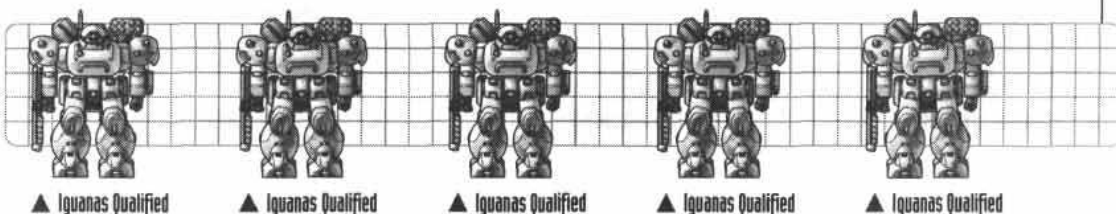
### □ Standard (TV: 1900)



## Recon Cadre - 6.3.1

Like the horse cavalry of old, Recon Gear cadres are the eyes and ears of their regiments. They operate in advance of their regiment and relay information about terrain and enemy strengths and dispositions back to their superiors. More experienced pilots are assigned to cadres specializing in fast and long-range recon/patrol (LRRP) missions. Recon pilots must be able to think quickly and adapt to changing situations, and when off-duty are often looked to for advice and guidance by other personnel. Pilots assigned to Recon cadres are also seen as "rising stars" in the MILICIA, as only recon and Airborne personnel are considered for the service's most plum assignments.

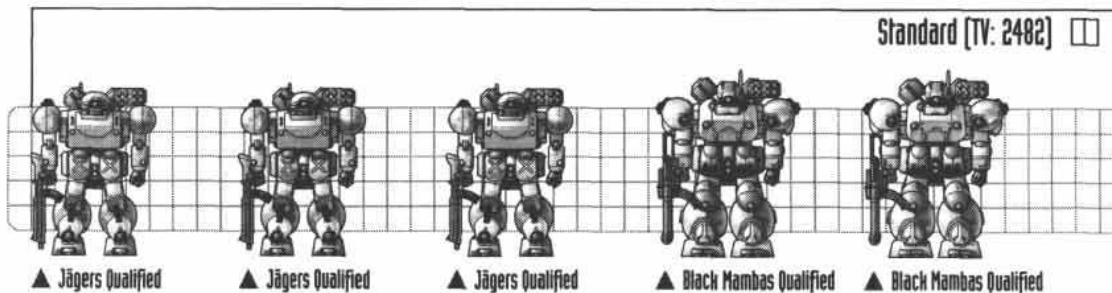
### □ Standard (TV: 2920)





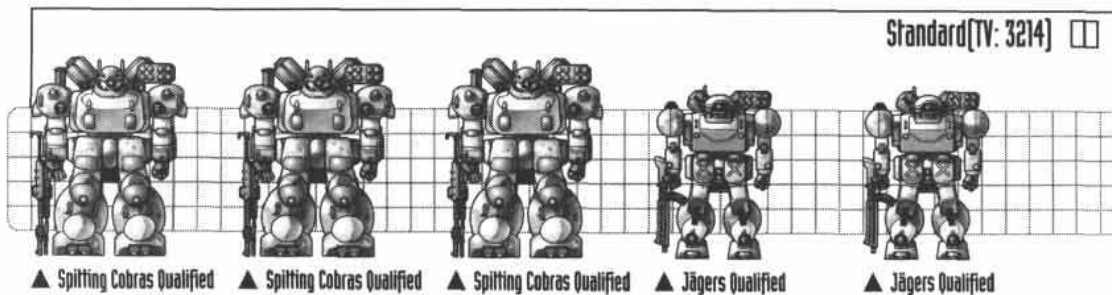
## 6.3.3 - Strike Cadre

When pilots "hurt enough to want the very best," Strike cadres come into their own. Capable of placing an absolutely devastating amount of fire on a target, Strike Gears are often the first in and last out of any battle. They are the best type of cadre to call in to soften up enemy targets during an advance and provide covering fire for other units during a retreat. Because of the nature of their assignments the attrition rate for Strike pilots is quite high in wartime, but the prestige and respect bestowed upon Strike cadres after their first engagement ensures a large number of volunteers when a slot opens up.



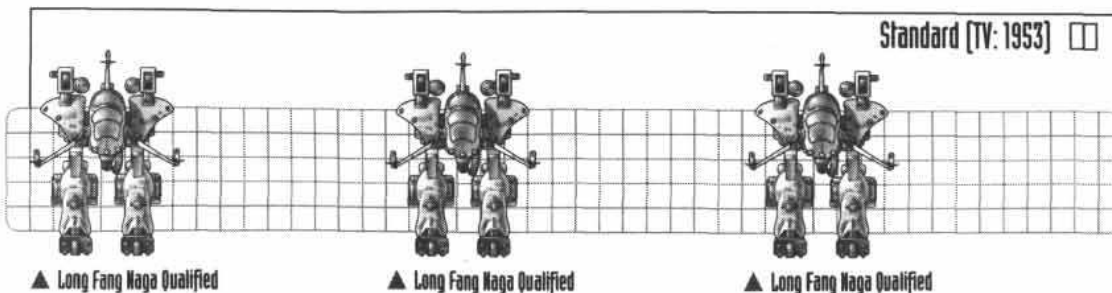
## 6.3.4 - Fire Support Cadre

These units provide indirect fire support for other units in the field, and are the next best thing to dedicated artillery platforms (either vehicles or striders). Few things are more reassuring to a Southern unit commander than to know that a hail of heavy rockets from a team of Spitting Cobras is only a radio call away. The largest regiments are able to turn some of their Fire Support cadres into dedicated artillery teams, with true artillery and antiaircraft assets.



## 6.3.5 - Artillery Strider Cadre

Artillery striders combine the firepower of vehicular artillery and the flexibility of legged chassis to provide indirect fire support in places that normal artillery vehicles would find hard if not impossible to get to. They respond to calls for fire missions from other units with deadly efficiency, but are often limited by their onboard ammunition supplies. Those units who do not have resupply vehicles (such as Stone Masons) available must often reserve the striders for certain tasks, such as bombardment of a target before an attack or supporting the operations of one particular unit.







## Building a Southern MILICIA Force - 6.3.6

The following is a set of guidelines for building your own detachment of Southern MILICIA forces, including Gear, armored vehicles and infantry units. Air and space forces operate separately, require some additional tactical rules and so are treated in other products, including **Tactical Air Support** (DP9-008) and **Tactical Space Support** (DP9-060). More detailed guidelines, including the history of the Southern MILICIA, notes on awards, uniforms, personal weaponry and famous commanders, can be found in the **Southern MILICIA Army List** (DP9-048).

Note that you can mix and match unit types (by replacing a squad of one type by another). This will add flexibility to your regiment, but requires a little more management on the field. For logistic purposes, though, officers generally prefer to keep the same type of unit (Gear, armored vehicle or infantry) within a company.

### Step One: Select Size ◆

Choose how large your force will be. You will probably want to start with something small and easy to manage, such as a section (three cadres of either five Gears, three vehicles or thirty men). Keep in mind you can always expand your force later, "bumping up" the Headquarters group to command of an ever larger detachment. Ambitious players can even form a complete regiment of four companies, each with four sections, along with attendant support units.

The diagram on page 79 show how the various combat units are organized. The full boxes are the units you need to get to properly start your detachment. The phantom boxes are for future expansions as you acquire more units and assign them to additional sections and companies. It is possible to start other companies or sections without completely filling the existing ones, as long as there is at least one complete section per company and one complete squad per section.

### Step Two: Select Units ◆

Start selecting combat units to fill the table of equipment and organization you prepared in Step One. Pre-generated squads can be found in the previous pages, though you can also make your own by adding the Threat Values of the units selected. For example, it is allowable to make a squad out of the five Black Mamba miniatures you own. The **Southern MILICIA Army List** (DP9-048) lists many more possible squad combinations, including the less common Senior and Veteran upgrades.

You'll need a Headquarters cadre as well. This is your commander on the field. He and his staff might not always be present in all scenarios, but you need them to make a proper armed force. The HQ squad is a squad of Gears or vehicles that is in overall command of your force; unless the entire regiment is composed of infantry, the HQ unit is never an infantry squad. HQ squads are generally better off with vehicles that have good Communication systems (+1 or better), but they don't have to; indeed, some commanders prefer to mix it up on the field and lead by example, and they will thus require heavily armored units instead!

### Step Three: Select Support ◆

Each company can field one Duelist, a specialized pilot that fights duels to resolve matters of honor (see **Duelist's Handbook 2nd Edition**, DP9-105, for more details on Duelists). Though the tradition is to have one very skilled Duelist per regiment, it is not unusual for company leaders to select a promising pilot to represent them in competitions and to provide a possible future replacement for the regiment's Duelist post, with all the glory attached to it.

Duelists always pilot Gears, never vehicles, and are generally given a lot of leeway in how they equip their machine. The datacards appendix at the end of this book contains four specialized datacards for the most common Gears currently in service with the Southern armies. Simply select the weapons and equipment desired, then add the point costs to get the final Threat Value of the Duelist's machine. Note that this equipment *must* be represented on the miniature, else it does not count! When this is done, select the Duelist's Skill level and multiply the Gear's TV by the listed multiplier: this is the final point cost of the Duelist.

Artillery and other support arms, such as air power and logistics, are dealt with separately depending on the scenario (see page 61). It is, however, always a good idea to budget some Threat Value points for them, just in case — that way, you don't have to leave a squad at home to get the single aircraft strafing run you need to win!

### Step Four: Fill in the Background ◆

You now have a Southern MILICIA force assembled. Game-wise, you have everything that you need to play. It is more fun, however, to go the extra mile and complete the job. Select a name for your regiment; it is generally a number followed by something evocative, like "Azure Devils" (a Southern aeroported regiment). Once you have selected a name, pick up a logo or distinctive for it: it should be something that is easy to reproduce on the miniature using either the decal set (DP9-232) or a well-aimed paint brush. For example, the aforementioned Azure Devils all sport a thin vertical azure blue line on their main hull, no matter what camouflage scheme they wear.



## 6.4 - THE COLONIAL EXPEDITIONARY FORCE

The Colonial Expeditionary Force is unique in all of human history in that it is an interstellar invasion force sent out by the government of Earth to capture all of the known human colonies. Due to the necessities of being based in space and having supply lines which stretch across the galaxy, the CEF has been conceived as an almost purely offensive army. The ships of the fleet cannot carry much supplies or troops, and the CEF must thus fight in a lightning war fashion, moving faster and further than their enemies can. While CEF troops and equipment are among the most powerful and capable ever fielded by any army, they are also incredibly undermanned and undersupplied; they cannot win long, drawn out wars of attrition.

### 6.4.1 - Building a CEF Force

The following is a set of guidelines for building your own detachment. CEF air and space forces normally operate with the ground troops but require some additional tactical rules and so are treated in other products, including **Tactical Air Support** (DP9-008) and **Tactical Space Support** (DP9-060). More detailed guidelines, including the history of the CEF, notes on awards, uniforms, personal weaponry and famous commanders, can be found in the **Colonial Expeditionary Force Sourcebook** (DP9-065).

#### ◆ Step One: Select Size

Choose how large your force will be. You will probably want to start with something small and easy to manage. The diagram below shows how the various combat units are organized. The full boxes are the units you need to get to properly start your detachment. The phantom boxes are for future expansions as you acquire more units and assign them to additional troops and companies. It is possible to start other companies or troops without completely filling the existing ones, as long as there is at least one complete troop per company and one complete patrol per troop.

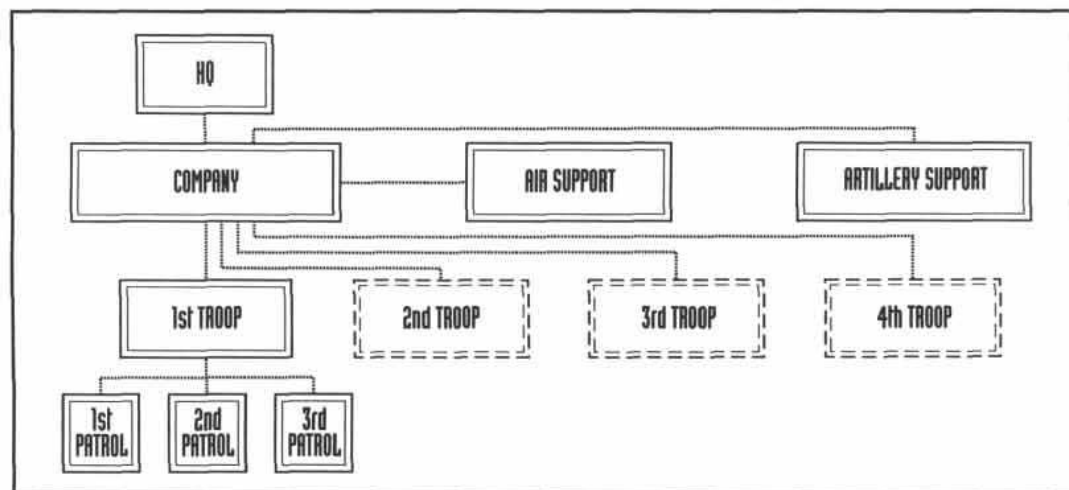
#### ◆ Step Two: Select Units

Start selecting combat units to fill the table of equipment and organization you prepared in Step One. Make your own patrols by adding the Threat Values of the units selected. CEF forces group their vehicles in patrols of four (two "wingmen" teams of two) and use GREL infantry almost exclusively, often with jump packs so they can marginally keep up with the fast-moving tanks. For example, it is allowable to make a squad out of the two HT-68 and two HT-72 hoversuit miniatures you own. GREL infantry are generally kept in troops of their own, since they cannot follow the tanks without their own armored personnel carriers (see **CEF sourcebook**).

You'll need a Headquarters patrol as well. This is your commander on the field. He and his staff might not always be present in all scenarios, but you need them to make a proper armed force. The HQ patrol is a group of vehicles that is in overall command of your force; the HQ unit is never an infantry patrol, being composed of human officers.

#### ◆ Step Three: Select Support

Artillery and other support arms, such as air power and logistics, although normally integrated with the rest of the CEF forces, are dealt with separately depending on the scenario (see page 61). It is, however, always a good idea to budget some Threat Value points for them, just in case — that way, you don't have to leave a patrol at home to get the single aircraft strafing run you need to win!





## ROVER FORCES - 6.5

Rovers are outlaw raiders, usually making their living by stealing from small communities and trade caravans. Most are only lightly armed and prey only on isolated targets. Almost all rovers gather around a charismatic leader who provides arms, money, alcohol or some other desired item. Gangs usually last only as long as their leader is able to bring them success.

The original rovers were colonial workers who struck out against their employers, living in desert shelters and raiding supplies from mining camps. Currently, rovers are mostly drawn from desert settlements. Few towns can afford prisons and so most criminals are exiled, often forming outlaw gangs. Others leave settlements of their own accord, seeking the thrill and freedom of the rover lifestyle.

For the most part, the threat of rovers is greatly exaggerated by the media. Despite tales of huge rover armies, most gangs can only threaten isolated homesteads and small trading convoys. Lightly armed bands are easily chased off by even a nominal defense force, and those communities with enough money to invest in light military vehicles such as Gears have little to fear from a lot of rovers.

The aftermath of the War of the Alliance has led to an increase in the power of Rovers, however. The Peace River Army mobilized and armed a large section of Badlander society and battlefields remain littered with discarded or damaged weapons. Many gangs have acquired Gears, tanks and heavy weapons, making them much more dangerous. Several communities have armed themselves in response, or have called in the PRDF, the Arthurian Corps or even polar forces for aid. Unfortunately, North and South have realized that Rovers can serve as excellent tools with which to harass their enemies and several gangs have acquired new weapons from their patrons.

### Building a Rover Force - 6.5.1

The following is a set of guidelines for building your own rover band. They are generally too poor and ill-equipped to include air and space assets — artillery for that matter — so no rules are required for those. Rover gangs cannot call on air support or artillery barrages (see scenario generator, page 62), though they rely extensively on surprise and battlefield recon to gain an element of surprise (again, see page 62). More detailed background data on rovers can be found in **Into the Badlands** (DP9-018).

Choose how large your band will be. You will probably want to start with something small and easy to manage (like a half-dozen vehicles or infantry squads), and just add units as you go. We will assume new bandits are attracted to the band, or that the band scavenges and repairs equipment as they go.

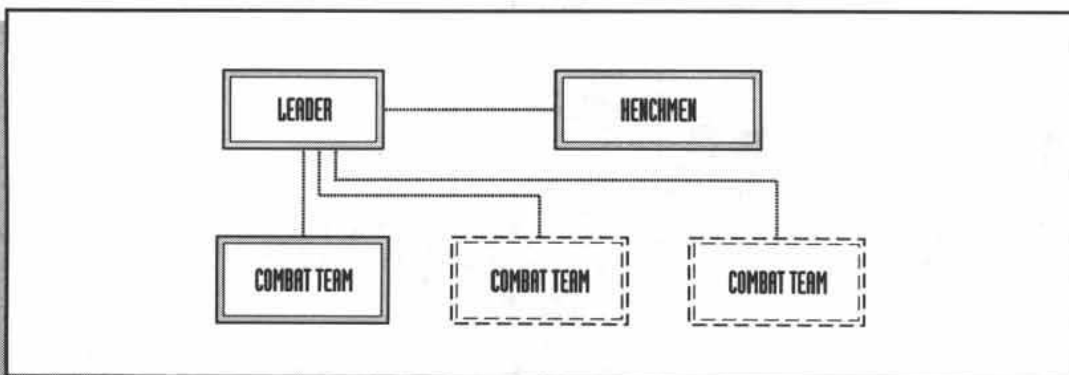
#### Step One: Select Units ◆

Rovers do not use a rigid military structure, but they still fight in small teams where each member backs up the others. Make your own teams by adding the Threat Values of the units selected; these can be Northern, Southern or Badlands vehicles, it does not matter. Each team should include no less than two combat units (Gear, vehicle or infantry squad) and no more than six.

You'll need a commander as well, probably with a couple of henchmen and bodyguards for safety. He and his henchmen might not always be present in all scenarios, but you need them to make a proper rover band (who else has the charisma to hold all these bandits together?). The leader always pilot a vehicle — generally the one with the highest Threat Value — even if there are only infantry units in the gang.

#### Step Two: Fill in the Background ◆

You now have a rover gang assembled. Game-wise, you have everything that you need to play. It is more fun, however, to go the extra mile and complete the job. Select names for your leader and your gang; it should be something evocative, like "Iron Crushers" or "Danger Crew." Once you have selected a name, pick up a logo or distinctive paint job for it: it should be something that is easy to reproduce on the miniature using either the decal sets (DP9-231 and 232) or a well-aimed paint brush.







## THE BRIDGE OVER THE RIVER KWAI

The dark, heavy rain had been pouring down for days, pounding the Gears of the 678th Armored Company as they moved slowly through the thick jungle. The war machines were stepping carefully, ever aware of hidden snipers or mines. Their armored hides glistened in the torrent of water that stuck to their rough surface for a brief time before crashing down to the ground.

"What a Prophet-forsaken country..."

Ranger Miller was worried. The Southern counter-offensive had been surprisingly successful so far, given the initial delay in launching the attack and the small number of units the Dominion had committed to the operation.

The greatest strength going for the Southerners at the moment was their momentum, which if lost would certainly spell the end to the offensive. Miller devoutly hoped this would happen, as the 678th was fast running out of supplies. This far down South, the overextended supply chains were unreliable at best.

Up ahead, Captain Broer's Gear raised a manipulator to signal a halt. Miller's own machine capted the gesture and the onboard neural net immediately translated it to an audiovisual command. Miller stepped up near the Captain's machine and applied his induction comm patch against its counterpart and waited for the contact to be established.

Broer's gruff voice rang loud and clear in the helmet's tiny speakers: "Pointmen report a bridge up ahead. According to the maps, we're almost at the river Kwai."

Miller winced, though the captain couldn't see him through the helmet. "Kwai? If I remember the briefing, it's fairly fast and deep. We could lose people there."

"Exactly. And the Snakes are going to have exactly the same problem, so they *have* to keep that bridge open. It's the only bridge in the area strong enough to support the weight of an armored column..."

"...Which means they'll do anything to keep it open. Right. Can't they make their own temporary field bridges?" Miller sweated just at the idea of hunting enemy units across tens of kilometers of river bank.

"No. According to our latest Intel, they were unable to secure bridgelaying vehicles before the offensive started. They must drive us away from the bridge and secure it so further troops and supplies can pass through, and they've already got a head start on us: there's a pair of turrets defending the thing."

"What about our backups?" Another combat group was assigned to the same offensive.

"Apparently, stuck in the mud about five clicks back, at least. We're gonna have to take that bridge by ourself, the old fashioned way. And tell your men: no one, I repeat, no one is to damage that bridge. We'll need it later."





## COMBAT VEHICLES - 7.1

Time brought forth incredible advance in all of the major scientific fields. Computers became faster, material sturdier, weapons deadlier. However, the numerous armed conflicts of the third and fourth millenniums demonstrated that although high tech equipment often turned the tide of the war, victory laid with the side that could afford to exhaust its enemy's capacity to fight and/or hold onto conquered territories. This caused a general stabilization of the level of technology used in wars, with new developments made horizontally in already known fields instead of developing new ones.

If one side could afford to field ten tanks for the price of one of their enemy's design, it did not matter if the tanks were slightly inferior: they would overwhelm the enemy by sheer number as long as they were reasonably well-designed and, most of all, well used. Another consideration was the ease of building cheap weapons able to defeat multi-million credits vehicles in one shot, such as the infamous infantry hand-held "tank-killer" missile launchers.

With the advent of interplanetary conflicts, logistics became a procurement officer's nightmare. More than once, military forces had to use whatever was available to them instead of the advanced tools and equipment designed and produced by their side in far away locations. Thus, the last important factor in the stabilization of the technology of war was the ease of maintenance of the vehicle. A point was reached where a multi-million dollar vehicle could fail because of a grain of dust in one critical circuit. Designs gradually reverted to simplified, modular forms that could receive a lot of punishment, minimal maintenance and extensive hours of use without breaking down all the time.

## The Right Tool for the Right Job - 7.1.1

Conventional vehicles, either tracked, wheeled, or hover, are still widely used in the 62nd century. They are cheaper, sturdier and easier to maintain than the complex walker mechanisms. Unfortunately, while they are superior in open terrain, vehicles fare poorly in broken or difficult ground. This has led to a specialization of sort: conventional vehicles are widely used for assault, transport and support duty while the walkers are used either as powerful, highly mobile infantry units (Gears), or broken terrain transport (Striders).

"Strider" is the catch-all term used to designate non-humanoid weapon platforms which use legs for locomotion. The term is of course derived from the striding motion of the machine's legs. Striders are more specialized units than Gears, lack their versatility and are easier to spot due to their size. They can, however, carry more payload. Most striders have four or six legs and are equipped with large footplates. This enables them to carry more weight since there is more surface to distribute it on the ground. A few smaller models have only two legs, but the enlarged feet are retained. Arms and manipulators are rarely used, with weapons mounted on hardpoints and turrets.

Aircraft are uncommon on Terra Nova, simply because the weather is unpredictable and dangerous. Short flights between polar locations are fine, but voyages across the Badlands pit aircraft against strong heat-generated convection winds, not to mention the occasional tempests which is sure to bring down a plane. Ground and sub-orbital travels are safer and more efficient. The vehicles most often seen by grunts on the ground are the support and transport vehicles. Choppers and hoppers (vectored thrust aerodynes) are used for close support and anti-vehicular duties, zipping across the battle zone to deliver pinpoint attacks.

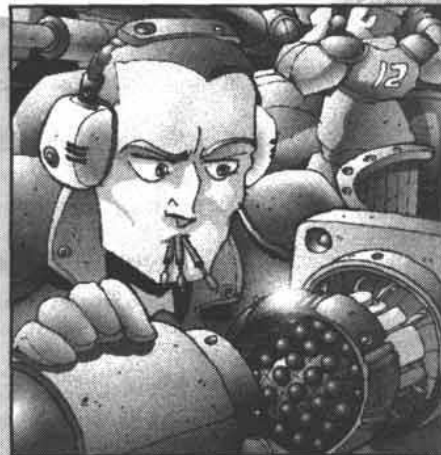
Naval warfare is practically non-existent on Terra Nova. All water bodies are small and land-locked, which means that boats are practically useless for attacking the enemy. Both the Confederation and the Alliance maintain a small fleet of naval hovercraft, but they exist mostly for civil patrol duty.

## Customization ♦

Because much of the modern technology is based on relatively standardized bases, modifications to already existing vehicles are fairly simple to accomplish even while in the field. Additional weapons can be bolted on and linked to an existing fire control system, a more powerful engine can be installed, an improved suspension can be retrofitted, or armor plates can simply be welded on the hull.

Changing the weapon payload is probably one of the most common modifications performed on a vehicle. Fire control computers can usually be reprogrammed to take into account extra weapons, even though a lag of a few micro-seconds might be perceptible when generating a firing solution. Some of the vehicle datacards (see page 93 and following) allow you to do just that. Simply select the weapons and equipment desired, then add the point costs to get the final Threat Value of the machine. Note that this equipment *must* be represented on the miniature, else it does not count! When this is done, select the pilot's Skill level and multiply the Gear's TV by the listed multiplier: this is the final point cost of the combat unit.

If you are interested in further customization options (or the full vehicle design process), see the **Heavy Gear Technical Manual, 2nd edition (DP9-104)**.





## 7.2 - PERKS & FLAWS

Many vehicles have special features that are not covered by the tactical attributes. These extra features are represented by Perks, which are explained below. A number of other, less tactically-relevant Perks are detailed in the Heavy Gear roleplaying and tactical game line. Perks with the designation (AUX) count as Auxiliary Systems for damage purposes. Flaws are the opposite of Perks: they represent defects in the vehicle. Sometimes these defects are planned into the vehicle as a cost cutting measure, at other times they are the result of design or production errors.

### ► AIRDROPPABLE

The vehicle can be equipped with a parachute or an equivalent device that allows it to be dropped onto the battlefield. Depending on the tactical scenario, the airdroppable vehicles can enter the board at a non-standard location.

### ► AUTOPILOT (AUX)

Autopilots are device that can take over piloting tasks. They can be used to keep a vehicle moving in a straight line or performing 60° turns. In tactical terms, they dodge attacks as a level 1 pilot and can be programmed to ram large targets without endangering the crew.

### ► BACHUP SENSORS

The vehicle may ignore any Sensor damage effect on the first Auxiliary System Hit on the Systems Damage Table, but then loses this Perk. It can be restored by a normal repair. All non-sensor Auxiliary Systems take normal damage effects, if applicable.

### ► CAMO NETTING

The vehicle is covered with a heat-absorbent tarp which has leaves and other camouflage material attached to it. This gives +1 Concealment when in vegetal cover (Woodland or Jungle terrain) and stationary.

### ► EASY TO MODIFY

The vehicle is designed to be easily modified or repaired (standardized parts, modular aspects). Add +2 to all technical Skill rolls to modify or repair the vehicle. This Perk is primarily meant for campaign games and has no effect during a tactical scenario.

### ► ELECTRONIC COUNTERMEASURES (ECM)

Electronic CounterMeasures (ECM) are devices used to jam sensors and communication systems. Using ECM to jam requires one Action per roll and an Electronic Warfare Skill test. ECM range is identical to the vehicle's base Sensor Range.

### ► ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)

Electronic Counter-CounterMeasures are devices used to block jamming systems or punch through their effects. Using ECCM to prevent jamming requires one Action and an Electronic Warfare Skill test. ECCM range is identical to the vehicle's Sensor Range.

### ► HEAT RESISTANT ARMOR

The vehicle's armor is designed to dissipate the intense energy of shaped-charge warheads or lasers. The Rating is added to the vehicle's Armor when the vehicle is attacked by Heat-based weapons (Bazookas, Mortars, Grenades, Missiles, Laser, Particle Beam).

### ► HIGH TOWING CAPACITY (DOUBLE)

The vehicle is equipped with a high torque, heavy duty powerplant and a rugged transmission. Its towing capacity is doubled, meaning it can now tow up to twice its weight.

### ► HOSTILE ENVIRONMENT PROTECTION

The vehicle can withstand extended exposure to extreme conditions without needing special maintenance to avoid problems. This Perk has no effect on the tactical game other than to allow the vehicle to operate in extreme terrains.

### ► IMPROVED OFF-ROAD ABILITY

The vehicle is designed to handle rugged terrain even better than standard military craft. The vehicle pays one less MP for any terrain type that requires more than one MP to move through, down to a minimum of 1.

### ► MANIPULATOR ARM

The vehicle has an arm that can pick up and manipulate objects. It can lift an object whose Size is equal to its Rating (but not if it's greater than twice the Size of the vehicle). Arms can be used to punch, for a Damage Multiplier equal to the Rating of the arm.





## ► PASSENGER SEATING

The vehicle has extra seats for passengers. The passengers do not confer any extra Actions to the vehicle, nor can they control it. Damage is applied to passengers on Crew hits, randomized with the actual crew.

## ► REINFORCED ARMOR

The vehicle has one or more facings (arcs of attack) with better armor. Four possible arcs can be reinforced: front, rear, right rear flank and left rear flank. When the vehicle is hit on a reinforced facing, the Perk's rating is added to the Base Armor.

## ► REINFORCED CREW COMPARTMENT

The crew compartment is layered with additional armor and fitted with crash-absorbing material. The vehicle may ignore the first "Crew Hit" on the Systems Damage Table, but then loses this Perk. It can be restored by a normal repair.

## ► RUGGED MOVEMENT SYSTEMS

The vehicle may ignore the first movement hit on the Systems Damage Table, but then loses this Perk. Its effect can be restored by a normal repair if a technician works on the vehicle after combat.

## ► SMOKE LAUNCHERS

AUX

Smoke Launchers have a range of one inch and can be fired at any time during movement at no Action cost. The 1" radius smoke cloud has an Obscurement of 2 and will last until the end of the turn. Smoke Launcher never cause damage.

## ► SEARCHLIGHT

AUX

The vehicle has a high-power Searchlight. At night, the vehicle's F (or Rt, L, or Rr, depending on where the searchlight is mounted) firing arc is treated as if it were in daylight, up to the searchlight's maximum range.

## ► SHIELDED WEAPONS

The vehicle's weaponry is sheathed in plates of armor. One weapon damage effect (destruction or penalty) on the Fire Control Damage Table may be ignored. The Perks is then destroyed, but can be restored by a normal repair.

## ► SNIPER SYSTEMS

Sniper systems are additional targeting systems that make weapons more accurate at long range. In game terms, Sniper Systems add a +1 modifier to the attack roll at Long and Extreme ranges.

## ► STEALTH

AUX R

Stealth systems are features that make a vehicle difficult to detect with sensors: heat baffles, radar-absorbing skin, silent systems, etc. See the rules for Stealth, page 39.

## ► TARGET DESIGNATOR

AUX

Target Designators are used to lock-on Guided weapons. The vehicle "attacks" with the designator: its Base Range is equal to its Rating (doubled for each range band). It has +0 Accuracy, not modified by Fire Control, and does no damage. A successful attack "paints" the target for incoming Guided munitions. The target remains designated until the end of the round. Designators are not affected by ECM.

## ► TOOL ARM

R

The vehicle has an arm with a specialized tool attachment, such as an earthmoving scoop or a cargo handling claw. It can lift an object whose Size is equal or under its Rating (but cannot lift an item whose Size is greater than twice the vehicle's). Half the Ratings of other, weaker arms can be added to the Rating. Some tool arms can punch opponents; this attack type has a DM equal to the rating of the arm.

## ► WEAPON LINK

Only one Action is required to fire linked weapons. The link's Accuracy and Base Range are equal to the worst Accuracy and Range among the link's weapons. Each weapon attacks separately, but as soon as one weapon misses all the other weapons not yet rolled for automatically miss (but still use their ammunition). When a link is fired, all of the weapons in the link fire. However, the individual weapons that make up the link may still be fired individually. Weapons sometimes are part of more than one link.

## ► DEFECTIVE [ACTIVE SENSORS, FIRE CONTROL]

R

The vehicle's systems have a tendency to go on the blink in a random manner. One die is rolled before a Skill test. If the roll is equal to or less than the Rating, the Flaw's Rating is applied as a negative modifier to the test.



## EXPOSED (AUX SYSTEMS, CREW COMPARTMENT OR MOVEMENT) ◀

Some of the vehicle's components have little protection. Whenever a hit is rolled on the Systems Damage Table, the damage becomes one step worse (i.e. *no damage* becomes *Light Damage*, *Light damage* becomes *Heavy*, and *Heavy Damage* destroys that particular component).

## EXPOSED FIRE CONTROL SYSTEMS ◀

The vehicle's Fire Control mechanisms (gun sights, sensors, actuators) are inadequately protected. A +1 modifier is applied when rolling for damage on the Fire Control Damage Table.

## FRAGILE CHASSIS ◀

The vehicle's chassis is overly fragile and is prone to damage. This might be planned as part of a crash protection system, or it might just be a bad design. A +1 modifier is applied when rolling on the Structural Damage Table.

## HAZARDOUS AMMO/FUEL STORAGE ◀

The vehicle's fuel tanks and/or ammunition bays are poorly designed. They are either placed in a prominent place, lightly armored, or both. The vehicle adds +2 to Ammo/Fuel hit rolls when the "Ammo/Fuel Hit" result is obtained on the Fire Control Damage Table.

## POOR OFF-ROAD ABILITY ◀

Whenever entering terrain that costs two or more MP, the MP cost is increased by one. The vehicle may ignore this penalty and move normally with a Piloting roll for each inch against a Threshold equal to 4 + the MP cost. If failed, the vehicle suffers *Light Movement* damage or is stuck for 1d6 rounds. If fumbled, *Heavy Movement* damage or is stuck permanently and must be towed out.

## SENSOR DEPENDENT ◀

The vehicle's cockpit does not allow a direct, clear visual image of his vehicle's surroundings. If the sensors are damaged or destroyed, the vehicle is running blind and cannot attack, nor can it move. Any such attempt is automatically randomized on the board.

## WEAK FACING ◀

The vehicle has a weak facing (arc of defense). When the vehicle is attacked on that side, halve its Base Armor (round up).

## 7.2.2 - Weapon Special Characteristics

Most military vehicles carry weapons of some kind. Regardless of their performance, these weapons all share the same attributes, but also sometimes special characteristics. These are characteristics that make the weapon useful for a particular task. Some weapons also have limitations placed upon their use.

**Anti-Infantry:** The weapon can negate the cover advantages of infantry units, either through accuracy or sheer volume of firepower, and does not suffer the normal -2 modifier when attacking infantry.

**Area Effect:** The weapon explodes or otherwise causes damage to a widespread area (see *Area Effect Weapons*, page 40).

**Fragmentation:** The weapon can fire multiple small projectiles. If the ammunition is used, add +1 to the attack roll, halves the Damage Multiplier, and adds +2 to ROF. However, the weapon cannot walk its fire or saturate an area unless it has +1 or better ROF without the fragmentation ammunition.

**Guided:** Guided weapons have all the benefits of indirect fire weapons. In addition, they gain a +2 modifier on their attack roll versus targets that have been "tagged" by an allied target designator.

**Haywire:** The weapon's attack causes an electrical discharge. The weapon gets two rolls on the Systems Damage Table when it scores *Light* or *Heavy Damage* on an opponent.

**Incendiary:** Incendiary weapons are intended to ignite and burn their targets. (see *Incendiary Weapons*, page 41).

**Indirect Fire:** The weapon has the ability to perform indirect fire, that is, fire in a high arcing trajectory above obscuring material (see *Indirect Weapons*, page 41).

**Minimum Range:** The weapon is unable to fire at a target that is too near to it. The weapon cannot be used to attack targets whose range is less than the weapon's minimum range.

**Minus Damage per Range Band:** The weapon loses power over distance due to atmospheric interactions. The Damage Multiplier drops by the Rating for each range band past *Short*.



# VEHICLES & UNITS

7

## HEAVY GEAR HUNTER



NORTHERN GUARD

15 4/7 6/12

TV: 380 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
LAC	F	0	2	x8	2	60/	
LRP/24	F	-1	1	x12	3	24/	
APGL	FF	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
2 x MAN.ARM 6

## HEAVY GEAR ASSAULT HUNTER



NORTHERN GUARD

15 4/7 6/12

TV: 500 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
SC	F	-1	1	x28	0	3/	
APGL	FF	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
2 x MAN.ARM 6

## HEAVY GEAR HEADHUNTER



NORTHERN GUARD

15 4/7 6/12

TV: 392 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:1/15

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
LAC	F	0	2	x8	2	60/	
LRP/24	F	-1	1	x12	3	24/	
APGL	FF	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
2 x MAN.ARM 6

## HEAVY GEAR HUNTER PARA



NORTHERN GUARD

15 4/7 6/12

TV: 526 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
LAC	F	0	2	x8	2	60/	
LGL	F	-1	1	x15	2	10/	
APGL	FF	-1	3	x8	0	60/	
FR	F	-1	3	x8	0	60/	
CR	F	0	3	+1	0	-	

PERKS/FLAWS:  
AIRDROPPABLE  
2 x MAN.ARM 6  
RUGGED MOVE.

## HEAVY GEAR JAGUAR



NORTHERN GUARD

16 5/9 7/13

TV: 628 Crew: 1 FireCon: 1 Sens:0/3  
Size: 6 Actions: 1 Man: 1 Com:1/15

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
MAC	F	0	3	x10	1	40/	
LRP/32	F	-1	1	x12	4	32/	
APGL	FF	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
AIRDROPPABLE  
2 x MAN.ARM 6

## HEAVY GEAR STRIKE JAGUAR



NORTHERN GUARD

16 5/9 7/13

TV: 880 Crew: 1 FireCon: 1 Sens:0/3  
Size: 6 Actions: 1 Man: 1 Com:1/15

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
MBZK	F	0	2	x20	0	20/	
IRP/20	F	-1	1	x13	2	20/	
APGL	F	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
AIRDROPPABLE  
2 x MAN.ARM 6

## HEAVY GEAR CHEETAH



NORTHERN GUARD

10 6/11 8/15

TV: 625 Crew: 1 FireCon: 0 Sens:2/5  
Size: 6 Actions: 1 Man: 2 Com:1/25

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
DPG	F	-1	2	x8	2	30/	
LRP/24	F	-1	1	x12	3	24/	
HG	F	-1	0	x15	0	4/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
ECM 3  
2 x MAN.ARM 6  
TARG.DESIGN. 2

## HEAVY GEAR CHEETAH PARA



NORTHERN GUARD

10 5/9 8/15

TV: 763 Crew: 1 FireCon: 0 Sens:1/2  
Size: 6 Actions: 1 Man: 2 Com:0/10

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
LAC	F	0	2	x8	2	30/	
LGL	F	0	1	x15	2	10/	
CR	F	0	0	+1	0	-	

PERKS/FLAWS:  
AIRDROPPABLE  
ECM 3  
2 x MAN.ARM 6  
RUGGED MOVE.  
TARG.DESIGN. 2

## HEAVY GEAR BLACK CAT



NORTHERN GUARD

10 5/9 8/15

TV: 806 Crew: 1 FireCon: 0 Sens:2/5  
Size: 6 Actions: 1 Man: 2 Com:1/25

WEAPONS:						PERKS/FLAWS:	
Name	Arc	Acc	S/H/L/Ex	Dam.	Ammo.		
LAC	F	0	2	x8	2	40/	
LRP/24	F	-1	1	x12	3	24/	
HG	F	-1	0	x15	0	4/	
VB	F	0	0	x8	0	-	

PERKS/FLAWS:  
ECM 2  
2 x MAN.ARM 6  
STEALTH 6  
TARG.DESIGN. 2



# VEHICLES & UNITS



7

## HEAVY GEAR GRIZZLY



NORTHERN GUARD

18 3/6 6/11

TV: 888 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
HAC	F	0	3	x12	1	30/
MRP/18	F	-1	2	x18	3	18/
MRP/18	F	-1	2	x18	3	18/
HMG	FF	0	1	x4	3	300/
DPG	F	-1	2	x8	2	30/
HGM	F	0	5	x20	0	12/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

2 x MAN.ARM 7  
RE.ARMOR 2(F)  
L.SENS.PROFIL 1

## HEAVY GEAR ASSAULT GRIZZLY



NORTHERN GUARD

18 3/6 6/11

TV: 748 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: -1 Com:1/15

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
HBZ	F	0	2	x20	0	30/
IRP/20	F	-1	1	x13	2	20/
IRP/20	F	-1	1	x13	2	20/
HMG	FF	0	1	x4	3	300/
DPG	F	-1	2	x8	2	30/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

AUTOPILLOT  
BACKUP.COMM  
2 x MAN.ARM 7  
RE.ARMOR 2(F)  
L.SENS.PROFIL 1

## HEAVY GEAR KODIAK



NORTHERN GUARD

20 3/6 6/11

TV: 1072 Crew: 1 FireCon: 0 Sens:1/2  
Size: 7 Actions: 1 Man: -1 Com:1/15

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
LPA	F	1	2	x10	0	12/
MRP/36	F	-1	2	x18	4	36/
2xHMG	FF	0	1	x4	3	400ea/
APGL	F	-1	1	x3	0	6/
AGM	F	-1	3	x15	0	12/
HG	F	-1	0	x15	0	6/
HHG	F	-1	0	x25	0	6/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

JMP.REAR DEF.  
2 x MAN.ARM 7  
RE.ARMOR 3(F)  
L.SENS.PROFIL 1

## HEAVY GEAR FERRET



NORTHERN GUARD

12 3/6 7/13

TV: 323 Crew: 1 FireCon: 0 Sens:1/5  
Size: 5 Actions: 1 Man: 1 Com:1/25

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
DPG	F	-1	2	x8	2	30/
LRP/24	F	-1	1	x12	3	24/
HG	F	-1	0	x15	0	1/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

LOW PROFILE  
2 x MAN.ARM 5  
TARG.DESIGN. 2  
MAN.-2 (WALK)  
EXPOSED MOVE.

## HEAVY GEAR BOBCAT



NORTHERN GUARD

13 4/8 7/13

TV: 527 Crew: 1 FireCon: 0 Sens:1/4  
Size: 6 Actions: 1 Man: 1 Com:1/20

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
DPG	F	-1	2	x8	2	30/
LRP	F	-1	1	x12	3	24/
HG	F	-1	0	x15	0	4/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

ECM 2  
IMPR.REAR.DEF.  
TARG. DESIGN. 2  
FRAGILE CHASS.

## HEAVY GEAR WEASEL



NORTHERN GUARD

14 4/7 7/13

TV: 384 Crew: 1 FireCon: -1 Sens:0/10  
Size: 6 Actions: 1 Man: 0 Com:2/50

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
LAC	F	0	2	x8	2	50/
APGL	FF	-1	1	x3	0	6/
HG	F	-1	0	x15	0	1/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

ECM 4  
ECM 4  
2 x MAN.ARM 6  
SAT. UPLINK  
EXPOSED ALIX  
VULN HAYWIRE

## HEAVY GEAR MAD DOG



NORTHERN GUARD

16 3/5 5/9

TV: 342 Crew: 1 FireCon: 0 Sens:2/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
HAC	F	0	3	x12	1	40/
HRP/24	F	-1	3	x20	3	24/
LMG	FF	0	1	x3	4	200/
LMG	FF	0	1	x3	4	200/
VB	F	0	0	x8	0	-

### PERKS/FLAWS:

2 x MAN.ARM 7  
L.SENS.PROFIL 1  
RANDOM SENSOR  
SHUTDOWN 1

## HEAVY GEAR PEACEMAKER R.B.



NORTHERN GUARD

20 3/6 5/10

TV: 522 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

### WEAPONS:

Name	Arc	Acc	BR	Dam	ROF	Ammo
VHAC	F	0	3	x15	1	80/
HRP/24	F	-1	3	x20	3	24/
LMG	F	0	1	x3	4	100/
DPG	F	-1	2	x8	2	30/
APGL	FF	-1	1	x3	0	6/
CR	F	0	0	-1	0	-

### PERKS/FLAWS:

2 x MAN.ARM 7  
DEF. SENSORS 1  
L.SENS.PROFIL 1

## HEAVY GEAR CAMEL



NORTHERN GUARD

8 7/13

TV: 75 Crew: 1 FireCon: -3 Sens:n/a  
Size: 4 Actions: 1 Man: -3 Com:2/10

### WEAPONS:

None

### PERKS/FLAWS:

PASSENGERS 2  
SEARCHL.(100m)  
EXPOSED MOVE.  
L.SENS.PROFIL 1

### VARIANT:

Stinger Missile Truck: Ground 6/11, Size 8, Crew 2,  
Sensors 0/4, Comm 0/20, FireCon 0, LAM (FF, BR20, Acc-3,  
DMx12, Guided-AEO-MR40, Ammo 16), TV1469



5



WEAPONS:						PERKS/FLAWS:
Name	Arc	Acc	BR	Dam.	ROF	Ammo.
LAC	F	0	2	x8	2	60/
LRP/24	F	-1	1	x12	3	24/
APGL	F	-1	1	x3	0	6/
HG	F	-1	0	x15	0	3/
VB	F	0	0	x8	0	-

2 x MAN.ARM 6
---------------



WEAPONS:							PERKS/FLAWS:
Name	Acc	BR	Dam.	ROF	Ammo.		2 x MAN ARM 6
MAC	F	0	3	x10	1	40/	
ATM	F	1	3	x25	0	1/	
APGL	F	-1	1	x3	0	6/	
HG	F	-1	0	x15	0	3/	
VR	F	0	0	x8	0		



WEAPONS:		PERKS/FLAWS:	
Name	ARC Acc BR Dam RQF Ammo.	2 x MAN.ARM 6	
LAC	F 0 2 x8 2 60/		
LRP/24	F -1 1 x12 3 24/		
APGL	F -1 1 x3 0 6/		
HG	F -1 0 x15 0 3/		



WEAPONS:		Range					PERKS/FLAWS:
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
LAC	F	0	2	x8	2	60/	AIRDROPPABLE
LGL	F	-1	1	x15	2	10/	2 x MAN ARM 6
APGL	FF	-1	1	x3	0	5/	RUGGED MOVE.
APGL	FR	0	1	x3	0	5/	
CR	F	0	0	+1	0	-	



WEAPONS:			Range.				PERKS/FLAWS:
Name	F	Acc	BR	Dam.	ROF	Ammo.	
MAC	F	0	3	x10	1	40/	AIRDROPPABLE
LRP/32	F	-1	1	x12	4	32/	AUTOPILOT
APGL	F	-1	1	x3	0	6/	2 x MAN.ARM 6
APGL	F	-1	1	x3	0	6/	WEAK FACE (R)
HG	F	-1	0	x15	0	3/	
VB	F	0	0	x8	0	-	



WEAPONS:		PERKS/FLAWS:	
Name	Att Acc BR Dam. ROF Ammo.	AIRDROPPABLE	
HGL	F -1 2 x20 1 20/	AUTOPILOT	
VLP/32 F	-1 1 x8 4 32/	2 x MAN.ARM	
APGL	FF -1 1 x3 0 6/	WEAK FACE (R)	
APGL	FF -1 1 x3 0 6/		
HG	F -1 0 x15 0 3/		
VR	F -1 0 x8 0 0/		



WEAPONS:							PERKS/FLAWS:	
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	BACKUP SENS.	
DPG	F	-1	2	x8	2	30/	ECM 2	
LRP/24	F	-1	1	x12	3	24/	2 x MAN.ARM 6	
VB	F	0	0	x8	0	-	TARG.DESIGN. 3	



WEAPONS:							PERKS/FLAWS:
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	AIRDROPPABLE
LAC	F	0	2	x8	2	30/	ECM 2
LGL	F	-1	1	x15	2	10/	2 x MAN. ARM 6
CR	F	0	0	+1	0	-	RUGGED MOVE



Size: 0 Actions: 1 Man: 1 Com: 2/30							
<b>WEAPONS:</b>							
Name	Arc	Acc	BR	Dam.	ROF	Ammo.	
DPG	F	-1	2	x8	2	30/	
LRP/24	F	-1	1	x12	3	24/	
VB	F	0	0	x8	0	-	
<b>PERKS/FLAWS:</b>							
2 x MAN.ARM 6							
STEALTH 5							
TARG.DESIGN 3							
EXPOSED AUX							

# VEHICLES & UNITS



## HEAVY GEAR SPITTING COBRA



SOUTHERN MILICIA

21 3/6 5/10

TV: 818 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
HAC	F	0	3	x12	1	30/					
MRP/18	F	-1	2	x18	3	18/					
HRP/48	F	-1	3	x20	4	48/					
LMG	FF	0	1	x3	4	400/					
LGM	F	-1	3	x15	0	10/					
HG	F	-1	0	x15	0	6/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
2 x MAN.ARM 7  
L.SENS.PROFIL 1

## HEAVY GEAR STRIKING COBR



SOUTHERN MILICIA

21 3/6 5/10

TV: 534 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
MBZK	F	0	2	x20	0	30/					
MRP/18	F	-1	2	x18	3	18/					
LMG	FF	0	1	x3	4	400/					
HG	F	-1	0	x15	0	6/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
2 x MAN.ARM 7  
REINF. CREW  
L.SENS.PROFIL 1

## HEAVY GEAR SUPPORT COBRA



SOUTHERN MILICIA

21 3/6 5/10

TV: 452 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
VHAC	F	0	3	x15	1	40/					
VLF	FF	-1	5	x20	0	12/					
LMG	F	0	1	x3	4	400/					
HG	F	-1	0	x15	0	6/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
2 x MAN.ARM 7  
REINF. CREW  
L.SENS.PROFIL 1

## HEAVY GEAR KING COBRA



SOUTHERN MILICIA

21 3/6 6/11

TV: 1100 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: -1 Com:1/18

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
LPA	F	1	2	x10	0	12/					
MRP	F	-1	2	x18	3	36/					
HRP	F	-1	3	x20	3	24/					
LAC	FF	0	2	x8	2	120/					
LGM	F	-1	3	x15	0	10/					
APGL	FF	-1	1	x3	0	6/					
HG	F	-1	0	x15	0	6/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
HEAT ARMOR 6  
IMPR. REAR DEF.  
2 x MAN.ARM 7  
RE.ARMOR 2(F)  
REINF. CREW  
L.SENS.PROFIL 1

## HEAVY GEAR FLAMMJAGER



SOUTHERN MILICIA

15 4/7 6/12

TV: 522 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
MFL	F	1	0	x7	1	20/					
IRP/20	F	-1	1	x13	2	20/					
APGL	F	-1	1	x3	0	6/					
HG	F	-1	0	x15	0	3/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
FIRE RESISTANT  
2 x MAN.ARM 6

## HEAVY GEAR SNAKEYE B.M.



SOUTHERN MILICIA

17 5/9 7/14

TV: 857 Crew: 1 FireCon: 1 Sens:1/2  
Size: 6 Actions: 1 Man: 1 Com:1/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
SLC	F	1	5	x12	0	40/					
APGL	FF	-1	1	x3	0	6/					
APGL	FF	-1	1	x3	0	6/					
HG	F	-1	0	x15	0	3/					
VB	F	0	0	x8	0	-					

PERKS/FLAWS:  
AIRDROPPABLE  
AUTOPILOT  
2 x MAN.ARM 6  
STEALTH 5  
EXPOSED AUX.

## HEAVY GEAR DESERT VIPER



SOUTHERN MILICIA

16 4/7

TV: 530 Crew: 1 FireCon: 0 Sens:0/2  
Size: 6 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
HGL	F	-1	2	x20	1	20/					
MRP/18	F	-1	2	x18	3	18/					
APGL	F	-1	1	x3	0	6/					
HG	F	-1	0	x15	0	3/					

PERKS/FLAWS:  
IMPR.OFF-ROAD  
2 x MAN.ARM 6  
RE.ARMOR 2(F)  
RUGGED MOVE.  
DEF. SENSORS 2  
L.SENS.PROFIL 1  
OVERHEATING

## HEAVY GEAR BLACK ADDER



SOUTHERN MILICIA

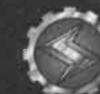
16 4/7 6/12

TV: 536 Crew: 1 FireCon: 0 Sens:0/2  
Size: 7 Actions: 1 Man: 0 Com:0/10

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
SC	F	-1	1	x28	0	10/					
MRP/36	F	-1	2	x18	4	36/					
APGL	F	-1	1	x3	0	6/					

PERKS/FLAWS:  
EMERG.MEDICAL  
2 x MAN.ARM 6  
REINF. CREW  
ARMOR +3(CREW)  
SENSOR DEPEND.

## HEAVY GEAR SIDEWINDER



SOUTHERN MILICIA

16 4/8 7/13

TV: 387 Crew: 1 FireCon: 0 Sens:0/3  
Size: 6 Actions: 1 Man: 0 Com:0/12

WEAPONS:						PERKS/FLAWS:					
Name	Arc	Acc	BR	Dam.	ROF	Ammo.					
MAC	F	0	3	x10	1	40/					
MRP/36	F	-1	2	x18	4	36/					
APGL	F	-1	1	x3	0	6/					

PERKS/FLAWS:  
EMERG.MEDICAL  
2 x MAN.ARM 6  
REINF. CREW





# VEHICLES & UNITS

7

## HEAVY GEAR BASIC INFANTRY



NORTHERN GUARD

Name: Std. Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 74

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm LMG/Heavy	0	2/4/8/16	x3	2	
7mm Assault Rifle	0	1/2/4/8	x2	1	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR MOTOR INFANTRY



NORTHERN GUARD

Name: Recon Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 212

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm Heavy Rifle/Standard	0	1/2/4/8	x3	0	
62mm Lt. Mortar/Heavy	-1	3/6/12/24	x12	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR BASIC INFANTRY



SOUTHERN MILICIA

Name: Std. Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 74

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm LMG/Heavy	0	2/4/8/16	x3	2	
7mm Assault Rifle	0	1/2/4/8	x2	1	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR HEAVY INFANTRY



NORTHERN GUARD

Name: Heavy Quality: 2 Armor: 4  
Encumbrance: -1 Stamina: 3 TV: 148

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm LMG/Standard	0	2/4/8/16	x3	2	
50mm Rocket Launcher/Heavy	0	1/2/4/8	x14	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR GREL



CEF

Name: GREL Quality: 3 Armor: 6  
Encumbrance: 0 Stamina: 4 TV: 560

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm Chaingun/Standard	0	1/2/4/8	x3	4	
50mm Rocket Launcher/Heavy	0	1/2/4/8	x14	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 HVY	9 HVY				
5 HVY	0 HVY				

## HEAVY GEAR HEAVY INFANTRY



SOUTHERN MILICIA

Name: Heavy Quality: 2 Armor: 4  
Encumbrance: -1 Stamina: 3 TV: 148

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm LMG/Standard	0	2/4/8/16	x3	2	
50mm Rocket Launcher/Heavy	0	1/2/4/8	x14	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR RECON INFANTRY



NORTHERN GUARD

Name: Recon Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 106

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm Heavy Rifle/Standard	0	1/2/4/8	x3	0	
62mm Lt. Mortar/Heavy	-1	3/6/12/24	x12	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR MOTOR INFANTRY



SOUTHERN MILICIA

Name: Recon Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 212

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm Heavy Rifle/Standard	0	1/2/4/8	x3	0	
62mm Lt. Mortar/Heavy	-1	3/6/12/24	x12	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

## HEAVY GEAR RECON INFANTRY



SOUTHERN MILICIA

Name: Recon Quality: 2 Armor: 2  
Encumbrance: 0 Stamina: 3 TV: 106

WEAPONS:		Range			
Name/Type:	Acc	S/M/L/Ex	Dam.	ROF	
9mm Heavy Rifle/Standard	0	1/2/4/8	x3	0	
62mm Lt. Mortar/Heavy	-1	3/6/12/24	x12	0	

DAMAGE TRACK		Range			
1 LDR	6 STD				
2 STD	7 STD				
3 STD	8 STD				
4 STD	9 STD				
5 HVY	0 HVY				

# VEHICLES & UNITS

7



## HEAVY GEAR

MAMMOTH



NORTHERN GUARD



25 3/5

TV: 1500 Crew: 2 FireCon: 0 Sens: 1/3  
Size: 9 Actions: 2 Man: -2 Com: 0/12

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
MAC	F	0	3	x10	1	200/
ATM	F	1	3	x25	0	8/
SC	F	-1	1	x28	0	20/
LMG	FF	0	1	x3	4	600/
LMG	FF	0	1	x3	4	600/

### PERKS/FLAWS:

AMMO/FUEL CONT.  
BACKUP SENSORS  
2 X BATTLE ARM 9  
HEAT ARMOR 5  
IMPR. OFF-ROAD  
REINF. ARMOR 2(F)  
TARGET DESIGN. 1  
L.SENS.PROFILE 2  
SENSOR DEPENDENT

## HEAVY GEAR

ASSAULT MAMMO



NORTHERN GUARD



25 3/5

TV: 991 Crew: 2 FireCon: 0 Sens: 0/2  
Size: 9 Actions: 2 Man: -2 Com: 0/10

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
HAC	F	0	3	x12	1	150/
SC	F	-1	1	x28	0	25/
SC	F	-1	1	x28	0	25/
LMG	FF	0	1	x3	4	600/
LMG	FF	0	1	x3	4	600/

### PERKS/FLAWS:

AMMO/FUEL CONT.  
BACKUP SENSORS  
2 X BATTLE ARM 9  
HEAT ARMOR 5  
IMPR. OFF-ROAD  
REINF. ARMOR 4(F)  
TARGET DESIGN 1  
L.SENS.PROFILE 2  
SENSOR DEPENDENT

## HEAVY GEAR

KLEMM



NORTHERN GUARD



25 6/11

TV: 1867 Crew: 4 FireCon: 0 Sens: 0/1  
Size: 10 Actions: 3 Man: -1 Com: 0/15

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
ATM	T	1	3	x25	0	6/
LAC	F	0	3	x8	2	200/
APGL	T	-1	1	x3	0	16/

### PERKS/FLAWS:

AUTOPILOT  
BACKUP SENSORS  
HEAT ARMOR 5  
REINF. ARMOR 5(F)

## HEAVY GEAR

ALLER



NORTHERN GUARD



40 5/10

TV: 2817 Crew: 4 FireCon: 0 Sens: 0/2  
Size: 14 Actions: 3 Man: -2 Com: 0/20

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
HRG	T	0	10	x35	0	20/
LPLC	T	1	3	x20	0	30/
MAC	T	0	3	x10	1	60/
LMG	T	0	1	x3	4	1200/
LMG	T	0	1	x3	4	1200/

### PERKS/FLAWS:

AUTOPILOT  
BACKUP SENSORS  
HEAT ARMOR 10  
PINTLE MOUNT  
REINF. ARMOR 5(F)  
REINF. CREW  
RUGGED MOVEMENT  
SMOKE LAUNCHERS  
SNIPER (HRG)  
L.SENS.PROFILE 2  
SENSOR DEPENDENT





# VEHICLES & UNITS

7

## HEAVY GEAR BATTLE FRAME



CEF

13 4/8 10/20

TV: 760 Crew: 1 FireCon: 0 Sens: 1/2  
Size: 6 Actions: 2 Man: 0 Com: 1/10

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
LLC F 0 5 x16 20/  
AGM F 1 3 x15 6/  
HG F -1 0 x15 3/

PERKS/FLAWS:  
2 x MAN.ARM 6  
REIN.ARMOR 4 F  
TARGET DES.: 3

## HEAVY GEAR ANTELOPE



NORTHERN GUARD

4 8/15

TV: 47 Crew: 1 FireCon: -2 Sens: -  
Size: 3 Actions: 1 Man: -1 Com: -2/10

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
None

PERKS/FLAWS:  
PASSENGERS 3  
PINTLE MOUNT  
EXPOSED CREW  
NO SENSORS

## HEAVY GEAR EVILEYE



SOUTHERN MILITIA

7 10/20

TV: 156 Crew: 2 FireCon: -1 Sens: 1/2  
Size: 4 Actions: 2 Man: -1 Com: 2/30

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
VLAC F 0 2 x6 2 100/

PERKS/FLAWS:  
BACKUP COMM.  
ECCM 1  
TARG. DESIGN. 3  
EXPOSED AUX.

## HEAVY GEAR WARRIOR



PAXTON

15 4/7 6/12

TV: 413 Crew: 1 FireCon: 0 Sens: 0/3  
Size: 6 Actions: 1 Man: 0 Com: 0/12

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
LAC F 0 2 x8 2 60/  
LRP/24 F -1 1 x12 3 24/  
APGL FF -1 1 x3 0 6/  
HG F -1 0 x15 0 3/  
VB F 0 0 0 0 -

PERKS/FLAWS:  
ECM 1  
2 x MAN.ARM 6

## HEAVY GEAR WARRIOR IV



PAXTON

17 5/9 7/14

TV: 700 Crew: 1 FireCon: 1 Sens: 0/3  
Size: 6 Actions: 1 Man: 0 Com: 0/12

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
LAC F 0 2 x8 2 60/  
MRP/18 F -1 2 x18 3 18/  
APGL FF -1 1 x3 0 6/  
HG F -1 0 x15 0 3/  
VB F 0 0 x8 0 -

PERKS/FLAWS:  
AIRDROPPABLE  
2 x MAN.ARM 6  
ECM 2  
RAM PLATE (F)

## HEAVY GEAR TURRET W/HAC



NEUTRAL FORCES

25

TV: 585 Crew: 1 FireCon: 0 Sens: 0/2  
Size: 5 Actions: 1 Man: - Com: 0/10

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
HAC F 0 3 x12 1 200/  
HAC F 0 3 x12 1 200/

PERKS/FLAWS:  
BCKP. FIRECON  
HEAT ARMOR 5  
IMPR. REAR DEF.  
WEAPON LINK

## HEAVY GEAR

TV: Crew: FireCon: Sens:  
Size: Actions: Man: Com:

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.

### PERKS/FLAWS:

## HEAVY GEAR TURRET W/HRP



NEUTRAL FORCES

25

TV: 682 Crew: 1 FireCon: 0 Sens: 0/2  
Size: 5 Actions: 1 Man: - Com: 0/10

### WEAPONS:

Name Arc Acc BR Dam. ROF Ammo.  
HRP F -1 3 x20 3 48/  
HRP F -1 3 x20 3 48/

PERKS/FLAWS:  
BCKP. FIRECON  
HEAT ARMOR 5  
IMPR. REAR DEF.  
WEAPON LINK

## HEAVY GEAR

Name: Quality: Armor:  
Encumbrance: Stamina: TV:

### WEAPONS:

Name/Type: Range: Acc S/M/L/Ex Dam. ROF

### DAMAGE TRACK

1 6   
2 7   
3 8   
4 9   
5 0



# VEHICLES & UNITS



7

## HEAVY GEAR

NAGA



SOUTHERN MILITIA

23 4/7 6/12

TV: 1645 Crew: 2 FireCon: 0 Sens: 0/4  
Size: 8 Actions: 2 Man: -2 Com: 0/12

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
MAC	F	0	3	x10	1	200/
ATM	F	1	3	x25	0	4/
ATM	F	1	3	x25	0	4/

### PERKS/FLAWS:

HEAT ARMOR 2  
TARGET DESIGN. 1  
3 X TOOL ARM 1  
L.SENSOR PROFILE 1

## HEAVY GEAR

LONG FANG NAGA



SOUTHERN MILITIA

23 4/7 6/12

TV: 651 Crew: 2 FireCon: 0 Sens: 0/4  
Size: 8 Actions: 2 Man: -2 Com: 0/12

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
LFG	F	0	5	x20	0	12/
LFG	F	0	5	x20	0	12/
MAC	F	0	3	x10	1	200/

### PERKS/FLAWS:

HEAT ARMOR 2  
STABILIZER MOUNT  
TARGET DESIGN. 1  
3 X TOOL ARM 1  
L.SENSOR PROFILE 1

## HEAVY GEAR

HUN



SOUTHERN MILITIA

25 6/12

TV: 927 Crew: 2 FireCon: 0 Sens: 0/2  
Size: 10 Actions: 2 Man: -1 Com: 0/15

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
HRF	T	0	4	x12	1	40/
LLC	T	0	5	x16	0	10/
MRP/36	FF	-1	2	x18	4	32/

### PERKS/FLAWS:

AMPHIBIOUS  
AUTOPILOT  
HEAT ARMOR 6  
REINF. ARMOR 3(F)  
SHIELDED WEAPONS  
SENSOR DEPENDENT

## HEAVY GEAR

VISIGOTH



SOUTHERN MILITIA

40 5/10

TV: 2585 Crew: 4 FireCon: 0 Sens: 0/2  
Size: 13 Actions: 3 Man: -2 Com: 0/20

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
HFG	T	0	3	x28	0	25/
HAC	T	0	3	x12	1	300/
LLC	T	1	3	x16	0	60/
MRP/9	F	-1	2	x18	1	9/
MRP/9	F	-1	2	x18	1	9/

### PERKS/FLAWS:

AUTOPILOT  
HEAT ARMOR 10  
PINTLE MOUNT  
REINF. ARMOR 5(F)  
RUGGED MOVEMENT  
SMOKE LAUNCHERS  
L.SENSOR PROFILE 2  
SENSOR DEPENDENT





# VEHICLES & UNITS

7

## HEAVY GEAR

CAIMAN



SOUTHERN MILITIA

13



8/16

TV: 190 Crew: 2 FireCon: -1 Sens: 0/1.5  
Size: 8 Actions: 2 Man: -3 Com: 0/8

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
MAC	T	0	3	x10	1	40/
LMG	T	0	1	x3	4	800/

### PERKS/FLAWS:

PASSENGERS 10  
REINF. CREW  
SHIELDED WEAPONS

### VARIANTS:

**Alligator:** Ground 6/12, add Amphibious, TV242  
**Crocodile:** add HRP/48 (T, 48), remove MAC & LMG, TV316  
**Support Crocodile:** add HRP/48 (T, 48), Lab (Tech 1), remove MAC & LMG, TV610

## HEAVY GEAR

BADGER



NORTHERN GUARD

12



10/20

TV: 214 Crew: 2 FireCon: 0 Sens: 0/2  
Size: 8 Actions: 2 Man: -3 Com: 0/10

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
LAC	F	0	2	x8	2	60/
LAC	F	0	2	x8	2	60/

### PERKS/FLAWS:

PASSENGERS (20)  
REINF. PASS. COMP.  
EXPOSED FIRECON

### VARIANTS:

**Rabid Badger:** Ground 10/19, add AGM (T, 12), remove LACs, TV591  
**Badger Cavalry:** Ground 10/19, Passengers 4, add 2xMRP/36 (T, 36ea+72), Ammo/Fuel Cont., remove LACs, TV831  
**Medevac Badger:** Sensors 0/1, Comm 0/20, Passengers 4, add Ammo/Fuel Cont., Chaff/Flares (R2, 10), Emergency Medical 6, Life Support, Sick Bay 4, remove LACs, TV351

## HEAVY GEAR

HT-68 HOVERTANK



CEF

36



12/23

TV: 3417 Crew: 3 FireCon: +1 Sens: 0/4  
Size: 12 Actions: 3 Man: -2 Com: 2/30

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
LPA	T	1	2	x10	0	60/
ATM	F	1	3	x25	0	8/
CR	FF	0	0	+1	0	60/

### PERKS/FLAWS:

AIRDROPPABLE  
BACKUP SENSORS  
JUMP JETS 2  
SNIPER (LPA)  
TARGET DESIGN. 3  
URBAN FRIENDLY  
L.SENS.PROFILE 3  
SENSOR DEPENDENT  
WEAK PT. 8 (MOVE)  
WEAK PT. 8 (AUX)

## HEAVY GEAR

HT-72



CEF

36



13/25

TV: 3715 Crew: 2 FireCon: +1 Sens: 0/4  
Size: 12 Actions: 2 Man: -2 Com: 2/30

### WEAPONS:

Name	Arc	Acc	BR	Dam.	ROF	Ammo.
HPA	T	1	2	x15	0	60/
ABM	T	1	3	x10	0	6/
ATM	FF	1	3	x25	0	6/
CR	FF	0	0	+1	0	60/

### PERKS/FLAWS:

AIRDROPPABLE  
BACKUP SENSORS  
JUMP JETS 2  
SNIPER (LPA)  
TARGET DESIGN. 3  
URBAN FRIENDLY  
L.SENS.PROFILE 2  
SENSOR DEPENDENT  
WEAK PT. 6 (MOVE)  
WEAK PT. 6 (AUX)

# VEHICLES & UNITS



## HEAVY GEAR

HUNTER



NORTHERN GUARD



15 4/7 6/12

BaseTV: 236 Crew: 1 FireCon: 0 Sens: 0  
Size: 6 Actions: 1 Man: 0 Com: 0

### WEAPONS:

Name	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	x3	6	15/-
DPG	F	-1	2	x8	30	30/5
MAC	F	0	3	x10	40	80/10
HAC	F	0	3	x12	30	100/10
SC	F	-1	1	x28	3	250/5
MBZK	F	0	2	x20	10	200/10
LRP/16	F	-1	1	x12	16	100/-
MRP/9	F	-1	2	x18	9	200/-
HG	F	-1	0	x15	1	5/-
SKG	F	-1	0	x12	10	10/1

### PERKS/FLAWS:

2 x MAN.ARM, R6

### OPTIONS:

CREW ARMOR 2	+ TV
SMOKE LAUNCHERS	12
CAMO NETTING	12

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR

JAGUAR



NORTHERN GUARD



16 5/9 7/13

BaseTV: 284 Crew: 1 FireCon: 1 Sens: 0  
Size: 6 Actions: 1 Man: 1 Com: 1

### WEAPONS:

Name	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	x3	6	25/-
DPG	F	-1	2	x8	30	50/5
LAC	F	0	2	x8	60	80/10
HAC	F	0	3	x12	30	160/10
SC	F	-1	1	x28	3	400/5
HGL	F	-1	2	x20	10	450/10
LRP/24	F	-1	1	x12	24	250/-
HG	F	-1	0	x15	1	10/-
MBZK	F	0	2	x20	10	300/10
SKG	F	-1	0	x12	10	15/1

### PERKS/FLAWS:

AIRDROPPABLE  
2 x MAN.ARM, R6

### OPTIONS:

CREW ARMOR 2	+ TV
SMOKE LAUNCHERS	8
CAMO NETTING	8

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR

CHEETAH



NORTHERN GUARD



10 6/11 8/15

BaseTV: 422 Crew: 1 FireCon: 0 Sens: 2  
Size: 6 Actions: 1 Man: 2 Com: 1

### WEAPONS:

Name	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	X3	6	15/-
LAC	F	0	2	X8	60	50/10
MAC	F	0	3	X10	40	80/10
SC	F	-1	1	X28	3	250/5
LRP/8	F	-1	1	X12	8	60/-
LRP/16	F	-1	1	X12	16	100/-
MRP/9	F	-1	2	X18	9	200/-
HG	F	-1	0	X15	1	5/-
MBZK	F	0	2	X20	10	200/10
SKG	F	-1	0	X12	10	10/1

### PERKS/FLAWS:

2 x MAN.ARM, R6  
ECM 3  
TARGET DESIGN, 2

### OPTIONS:

CREW ARMOR 2	+ TV
SMOKE LAUNCHERS	16
CAMO NETTING	16

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR

GRIZZLY



NORTHERN GUARD



18 3/6 6/11

BaseTV: 172 Crew: 1 FireCon: 0 Sens: 0  
Size: 7 Actions: 1 Man: -1 Com: 0

### WEAPONS:

Name	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	X3	6	15/-
DPG	F	-1	2	X8	30	30/5
HGL	F	-1	2	X20	10	300/20
LGM	F	-1	3	X15	10	150/20
MAC	F	0	3	X10	40	80/10
AGM	F	1	3	X15	3	375/20
HRP/24	F	-1	3	X20	24	300/-
HG	F	-1	0	X15	1	5/-
LPA	F	1	2	X10	10	150/10
MBZK	F	0	2	X20	10	200/10

### PERKS/FLAWS:

2 x MAN.ARM, R7  
REIN. ARMOR 2(F)

### OPTIONS:

CREW ARMOR 2	+ TV
SMOKE LAUNCHERS	10
CAMO NETTING	10

TOTAL WEAPON TV:

FINAL TV:







# VEHICLES & UNITS

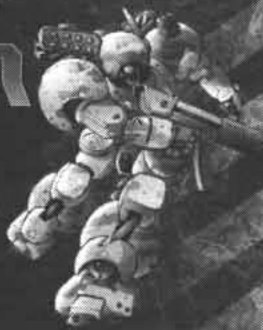
7

## HEAVY GEAR

JAGER



SOUTHERN MILICIA



15 4/7 6/12

BaseTV: 236 Crew: 1 FireCon: 0 Sens: 0  
Size: 6 Actions: 1 Man: 0 Com: 0

### WEAPONS:

Name:	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	x3	6	15/-
DPG	F	-1	2	x8	30	30/5
MAC	F	0	3	x10	40	80/10
HAC	F	0	3	x12	30	100/10
SC	F	-1	1	x28	3	250/5
MBZK	F	0	2	x20	10	200/10
LRP/16	F	-1	1	x12	16	100/-
MRP/9	F	-1	2	x18	9	200/-
HG	F	-1	0	x15	1	5/-
SKG	F	-1	0	x12	10	10/1

### PERKS/FLAWS:

2 x MAN.ARM, R6

### OPTIONS:

CREW ARMOR 2 + TV 12  
SMOKE LAUNCHERS 12  
CAMO NETTING 12

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR

BLACK MAMBA



SOUTHERN MILICIA



17 5/9 7/14

BaseTV: 315 Crew: 1 FireCon: 1 Sens: 1  
Size: 6 Actions: 1 Man: 1 Com: 1

### WEAPONS:

Name:	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	x3	6	25/-
DPG	F	-1	2	x8	30	50/5
LAC	F	0	2	x8	60	80/10
HAC	F	0	3	x12	30	160/10
SC	F	-1	1	x28	3	400/5
HGL	F	-1	2	x20	10	450/10
LRP/24	F	-1	1	x12	24	250/-
HG	F	-1	0	x15	1	10/-
MBZK	F	0	2	x20	10	300/10
SKG	F	-1	0	x12	10	15/1

### PERKS/FLAWS:

AIRDROPPABLE  
AUTOPILOT  
2 x MAN.ARM, R6  
WEAK FACING: REAR

### OPTIONS:

CREW ARMOR 2 + TV 10  
SMOKE LAUNCHERS 10  
CAMO NETTING 10

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR

IGUANA



SOUTHERN MILICIA



14 5/9 7/14

BaseTV: 391 Crew: 1 FireCon: 0 Sens: 1  
Size: 6 Actions: 1 Man: 1 Com: 2

### WEAPONS:

Name:	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	X3	6	15/-
LAC	F	0	2	X8	60	50/10
MAC	F	0	3	X10	40	80/10
SC	F	-1	1	X28	3	250/5
LRP/8	F	-1	1	X12	8	60/-
LRP/16	F	-1	1	X12	16	100/-
MRP/9	F	-1	2	X18	9	200/-
HG	F	-1	0	X15	1	5/-
MBZK	F	0	2	X20	10	200/10
SKG	F	-1	0	X12	10	10/1

### PERKS/FLAWS:

2 x MAN.ARM, R6  
BACKUP SENSORS  
ECM 2  
TARGET DESIGN. 3

### OPTIONS:

CREW ARMOR 1 + TV 16  
SMOKE LAUNCHERS 16  
CAMO NETTING 16

TOTAL WEAPON TV:

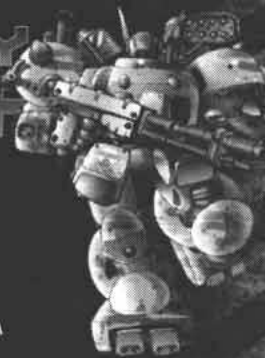
FINAL TV:

## HEAVY GEAR

SPITTING COBRA



SOUTHERN MILICIA



21 3/6 5/10

BaseTV: 174 Crew: 1 FireCon: 0 Sens: 0  
Size: 7 Actions: 1 Man: -1 Com: 0

### WEAPONS:

Name:	Arc	Acc	BR	Dam.	Ammo	TV
APGL	FF	-1	1	X3	6	15/-
DPG	F	-1	2	X8	30	30/5
HGL	F	-1	2	X20	10	300/20
HGM	F	-1	5	X20	10	325/20
MAC	F	0	3	X10	40	80/10
AGM	F	1	3	X15	3	375/20
MRP/36	F	-1	2	X18	36	250/-
HG	F	-1	0	X15	1	5/-
LPA	F	1	2	X10	10	150/10
MBZK	F	0	2	X20	10	200/10

### PERKS/FLAWS:

2 x MAN.ARM, R7  
REINF. CREW COMP.

### OPTIONS:

CREW ARMOR 1 + TV 7  
SMOKE LAUNCHERS 7  
CAMO NETTING 7

TOTAL WEAPON TV:

FINAL TV:

## HEAVY GEAR VEHICLE WEAPON LIST

Name	Code	Range	Dam.	Acc.	RoF	Min. Size	Special
AP Grenade Launcher	APGL	1/2/4/8	x3	-1	0	2	Anti-Inf., Indirect Fire, AE=0
Anti-Personnel Mortar	APM	2/4/8/16	x4	0	0	3	Anti-Inf., Ind. Fire, AE=0, Min Rg 2
Deployable Pack Gun	DPG	2/4/8/16	x8	-1	+2	3	Disposable
Fragmentation Cannon	FGC	1/2/4/8	x14	0	0	5	Anti-Inf., Frag Ammo
Heavy Autocannon	HAC	3/6/12/24	x12	0	+1	5	-
Heavy Field Gun	HFG	8/16/32/64	x28	0	0	10	Indirect Fire
Heavy Grenade Launcher	HGL	2/4/8/16	x20	-1	+1	5	Indirect Fire
Heavy Guided Mortar	HGM	5/10/20/40	x20	-1	0	5	Guided, Ind. Fire, Min Range 5
Heavy Machine Gun	HMG	1/2/4/8	x4	0	+3	3	Anti-Inf.
Light Autocannon	LAC	2/4/8/16	x8	0	+2	4	-
Light Field Gun	LFG	5/10/20/40	x22	0	0	8	Indirect Fire
Light Grenade Launcher	LGL	1/2/4/8	x15	-1	+2	0	Indirect Fire
Light Guided Mortar	LGM	3/6/12/24	x15	-1	0	4	Guided, Ind. Fire, Min Range 3
Light Machine Gun	LMG	1/2/4/8	x3	0	+4	3	Anti-Inf.
Medium Autocannon	MAC	3/6/12/24	x10	0	+1	4	-
Snub Cannon	SC	1/2/4/8	x28	-1	0	6	-
Anti-Tank Missile	ATM	3/6/12/24	x25	+1	0	6	Guided, Indirect Fire
Heavy AT Missile	HATM	5/10/20/40	x30	+1	0	9	Guided, Indirect Fire
Heavy Rocket Pack/24	HRP/24	3/6/12/24	x20	-1	+3	5	Indirect Fire
Heavy Rocket Pack/48	HRP/48	3/6/12/24	x20	-1	+4	5	Indirect Fire
Inc. Rocket Pack/10	IRP/10	1/2/4/8	x13	-1	+1	4	Indirect Fire, Slow Burn Incendiary
Inc. Rocket Pack/20	IRP/20	1/2/4/8	x13	-1	+2	4	Indirect Fire, Slow Burn Incendiary
Inc. Rocket Pack/30	IRP/30	1/2/4/8	x13	-1	+3	4	Indirect Fire, Slow Burn Incendiary
Light Rocket Pack/8	LRP/8	1/2/4/8	x12	-1	+1	3	Indirect Fire
Light Rocket Pack/16	LRP/16	1/2/4/8	x12	-1	+2	3	Indirect Fire
Light Rocket Pack/24	LRP/24	1/2/4/8	x12	-1	+3	3	Indirect Fire
Light Rocket Pack/32	LRP/32	1/2/4/8	x12	-1	+4	3	Indirect Fire
Med. Rocket Pack/9	MRP/9	2/4/8/16	x18	-1	+1	4	Indirect Fire
Med. Rocket Pack/18	MRP/18	2/4/8/16	x18	-1	+3	4	Indirect Fire
Med. Rocket Pack/36	MRP/36	2/4/8/16	x18	-1	+4	4	Indirect Fire
Chassis Reinforcement	CR	0/0/0/0	+1	0	0	n/a	Physical Attack Only
Hand Grenade (1)	HG	0/0/0/0	x15	-1	0	2	Anti-Infantry
Heavy Bazooka	HBZK	2/4/8/16	x25	0	0	5	-
Heavy Laser Cannon	HLC	5/10/20/40	x20	+1	0	5	-3 Dam. per RB.
Heavy Particle Accelerator	HPA	3/6/12/24	x15	+1	0	8	-1 Dam. per RB., Haywire
Heavy Railgun	HRG	10/20/40/80	x35	0	0	12	-
Light Bazooka	LBZK	2/4/8/16	x15	0	0	4	-
Light Laser Cannon	LLC	5/10/20/40	x16	+1	0	5	-2 Dam. per RB.
Light Particle Accelerator	LPA	2/4/8/16	x10	+1	0	6	-1 Dam. per RB., Haywire
Light Railgun	LRG	5/10/20/40	x14	0	+2	7	-
Medium Bazooka	MBZK	2/4/8/16	x20	0	0	4	-
Rapid-Fire Bazooka	RFB	1/2/4/8	x14	0	+2	4	-
Sniper Laser Cannon	SLC	5/10/20/40	x12	+1	0	14	-1 Dam. per RB
Vibroblade	VB	0/0/0/0	x8	0	0	3	Physical Attack Only

## INFANTRY WEAPON LIST

Weapons	Accuracy	Damage	Range	ROF	Weapons	Accuracy	Damage	Range	ROF
7mm Rifle	0	x2	1/2/4/8	0	9mm Chaingun	0	x3	1/2/4/8	4
7mm Assault Rifle	0	x2	1/2/4/8	1	24mm Anti-HG Rifle	+1	x7	3/6/12/24	0
9mm Heavy Rifle	0	x3	1/2/4/8	0	37mm Grenade Rifle	0	x8	1/2/4/8	0
15mm Sniper Rifle	+1	x4	2/4/8/16	0	50mm Rocket Launcher	0	x14	1/2/4/8	0
9mm LT. Machine gun	0	x3	2/4/8/16	2	62mm Light Mortar	-1	x12	3*/ 6/12/24	0
Sniper Laser Rifle	+1	x4	4/8/16/32	0	* Cannot fire at range 2 or less.				

HEAVY  
GEAR

## THE COMBAT ROUND

[Step Zero:	Set-up Phase]
Step One:	Declaration Phase
Step Two:	Initiative Phase
Step Three:	Activation Phase
Step Four:	Miscellaneous Events Phase

Repeat Steps One to Four until each combat group has had the opportunity to move and act. A combat group may only move and act once per combat round. If one player no longer has any combat groups left to use, he skips his phases until the end of the combat round.

## ACTIONS EXAMPLE

Among possible combat actions:

- fire one weapon
- fire one set of linked weapons
- embark/disembark one (1) crewman
- perform a physical attack (ramming, kicking, punching, etc...)
- activate an auxiliary system (ECM, active sensors, communication, etc...)

## TERRAIN COSTS

Terrain Type	Walker MP	Ground MP	Hover MP	Obscurement
Clear	1	1	1	-
Rough	1	2	1	-
Sand	2	2	1	-
Woodland	1	2	2	1
Jungle	2	3	3	2
Swamp	3	4	1	1
Water	2*	3*	1	2**
Deep Water	2*	3*	1	4**
Urban†	2	1	2	1
Dense Urban†	3	2	3	2
up 30° slope	add 2	add 2	add 4	-
down 30° slope	add 1	-	-	-

\* Only Amphibious walkers and ground vehicles may enter Water. Other walkers and ground vehicles will flood and automatically be put out of action if they enter Water terrain. Amphibious vehicles cannot enter or exit water while moving at Top speed.

\*\* Water only produces Obscurement if the defender is in Water and is not a hovercraft. Only affects normal sensors; vehicles with the Aquatic Sensors Perk do not suffer any Obscurement effects from Water or Deep Water terrain.

† Damage Point Capacity: 80 per square inch for Urban, 100 for Dense Urban.

## DETECTION THRESHOLD MODIFIERS

Applied to attacker's Electronic Warfare skill roll

- Sensor Bonus variable, by default 0

Applied to defender's Concealment Threshold

- Stealth Bonus variable, by default 0
- Movement Penalty -1 per inch moved by target
- Combat Penalty -1 per weapon fired by target

## ATTACK ROLL

Roll **Gunnery Skill/Attribute** plus these modifiers:

- Fire Control

The Fire Control rating of the vehicle

- Weapon Accuracy

The Accuracy rating of the weapon

- Range

Point Blank	+1	Long	-2
Short	+0	Extreme	-3
Medium	-1		

- Attacker's Movement

Stationary	+2	Combat Speed	+0
Half Combat Speed or less	+1	Top Speed	-3

- Minus the Obscurement Total

## DEFENSE ROLL

Roll **Piloting Skill/Attribute** plus these modifiers:

- Maneuver

The Maneuver rating of the vehicle

- Defender's Movement

Inches Moved	Defense Mdf.	Inches Moved	Defense Mdf.
0	-3	7-9	+1
1-2	-2	10-19	+2
3-4	-1	20-99	+3
5-6	+0	100-999	+4

- Arc of Attack

Attack is from Front	-0	Attack is from Rear	-2
Attack is from Rear Flank	-1		

## DETAILED DAMAGE VS ARMOR

Damage to armor	Outcome	What happens
Dama. < Base Arm.	No Effect	Nothing; armor is merely scratched
Dam. = or > Base Arm.	Light Dam.	-1 Armor; Roll on Syst. Damage Table
Dam. = or > Base Arm. x 2	Heavy Dam.	-2 Armor; Roll on Syst. Damage Table
Dam. = or > Base Arm. x 3	Overkill	Vehicle Destroyed

## FIRE ARCS

F	forward (180 degrees)
FF	fixed forward (120 degrees)
Rt	right (180 degrees)
L	left (180 degrees)
Rr	rear (180 degrees)
T	turreted (360 degrees)

## INFANTRY ROF

Min. Number of Troopers w/Weapon	ROF bonus
1	0
2	+1
4	+2
8	+3

## SYSTEMS DAMAGE

Damaged System	Light DAM.	Heavy DAM.
1 Fire Control	SubTable A	Roll on SubTable A and add +1
2 Structure	SubTable B	Roll on SubTable B and add +1
3 Crew	Crew stunned*	10% casualties, min 1.
4 Movement	-1 MP	1/2 remaining MP (round down) & -2 maneuver
5 Auxiliary Syst.	-1 to 1d6 Aux. Systems	1d6 Auxiliary systems destroyed

6 Roll Twice on this table

\*-1 action for 1 round

## SUBTABLE A: FIRE CONTROL DAMAGE

1	-1 to a single Weapon
2	-2 to a single Weapon
3	-1 to all Weapons
4	Single Weapon destroyed
5	Fire Control system destroyed (-5 to attacks)
6	Roll Twice on this table
7	Ammunition/Fuel Hit — roll 1 die:
1-3 Ammo Storage and Fuel Tank Ruptured (vehicle cannot move or fire weapons)	
4-6 Chain Reaction! Ammo and Fuel Explodes! (Vehicle Destroyed and Crew Killed)	

## SUBTABLE B: STRUCTURAL DAMAGE

1	-1 MP
2	1/2 remaining MP (round down)
3	-1 to Maneuver
4	-2 to Maneuver
5	Power transfer failure; No movement
6	Catastrophic crew compartment failure, 75% casualties, minimum 1
7	Complete structural failure; vehicle is destroyed, but crew survives

## TACTICAL SYSTEM FUMBLE EFFECTS

Situation	Fumble Effect
Initiative	lose automatically; if both fumble, reroll
Attack	miss automatically
Defense	hit automatically unless attack also fumbles; for damage purposes treat roll as 0
Active Sensors	fail to achieve LOS automatically
High Speed 180° turn	crash; take Light (1-4) or Heavy (5-6) damage

## RAMMING

Ramming Direction	Impact Speed
Head On	Attacker Speed + Defender Speed
Side	(Attacker Speed + Defender Speed)/2 (round up)
Rear	Attacker Speed - Defender Speed

## IMPACT SPEED MODIFIERS

Impact Speed	Damage Modifier
1-2	-2
3-4	-1
5-6	+0
7-9	+1
10-19	+2
20-99	+3
100-999	+4



# INDEX

A



<b>A</b>	Actions .....	24	Dice .....	13
	Actions, Infantry .....	49	Die Rolling .....	13
	Activation .....	23	Earth .....	5
	Advanced Rules .....	34	<b>E</b>	
	AE Weapons vs. Infantry .....	50	Easy to Modify .....	90
	Airdroppable .....	90	ECCM .....	90
	Anti-Infantry .....	92	ECM and ECCM Effects .....	39
	Area Effect Weapons .....	40, 53	ECM .....	90
	Area Effect .....	92	Evasive Maneuvers .....	31
	Armor Loss .....	44	External Conditions .....	60
	Armor .....	9, 47	<b>F</b>	
	Army Builder Sheet .....	79	Fire Control .....	44
	Army Lists .....	78	Fire Support Cadres .....	84
	Assault Strider Cadres .....	84	Fire Support Squadrons .....	81
	Attack Procedure .....	28	Firing Arcs .....	26
	Attacker Modifiers .....	29	Flaws .....	92
	Attacks Versus Infantry .....	50	Fragmentation .....	92
	Attributes .....	13	Full Cover .....	52
	Autopilot .....	90	<b>G</b>	
	Auxiliary Systems .....	44	General Purpose Cadres .....	83
<b>B</b>			General Purpose Squadrons .....	80
Backup Sensors .....	90		Guided .....	92
Basics, Silhouette .....	13	<b>H</b>	Haywire .....	92
Bidding .....	57	HEAT-Resistant Armor .....	90	
Bridges .....	38	Heavy Gears .....	8	
Burst Fire .....	42, 53	Heavy Support .....	81	
<b>C</b>		High Towing Capacity .....	90	
Called Shots .....	40	History of Warfare .....	6	
Campaigns .....	64	Hostile Environment Protection .....	90	
Casualties, Infantry .....	50	Hull-down Positions .....	36	
Central Processing Unit .....	8	Improved Off-Road Ability .....	90	
Cockpits .....	8	<b>I</b>	Incendiary Effects .....	41
Colonial Expeditionary Force .....	86	Incendiary .....	92	
Colonies .....	5	Indirect Fire .....	41, 92	
Color Section .....	17-20, 69-76	Infantry Record Sheets .....	47-48	
Combat Example .....	33	Infantry Rules .....	47	
Combat Groups .....	21	Infantry Threat Value .....	50	
Combat Options .....	40	Initiative .....	23	
Combat Round, the .....	22	<b>K</b>	Kick .....	31
Combat Rules .....	22	Labor Points .....	64	
Combat Speed .....	25	<b>L</b>	Levels .....	13
Combat Units .....	88	Line of Sight .....	27	
Combat, Toy .....	55	Location .....	59	
Command Points .....	24	<b>M</b>	Manipulator Arms .....	90
Concealment .....	26	Margin of Failure .....	13	
Controls .....	8	Margin of Success .....	13	
Crew .....	44	Measures .....	22	
<b>D</b>		Melee Combat .....	30	
Damage Effects .....	32	Minefields .....	37	
Damage Table, Simplified .....	32	Miniatures, Painting .....	69-76	
Damage to Armor .....	44	Minimum Range .....	92	
Damage, Detailed .....	44	Minus Damage per Range Band .....	92	
Damage, Infantry .....	50	Missile ROF .....	43	
Damage, Simplified .....	32	Mission Design .....	58	
Damage, Toy .....	55	Mission Objectives .....	58	
Datacards .....	14-15	Modeling Techniques, Advanced .....	77	
Datacards, Infantry .....	103	Modeling .....	68	
Datacards, Vehicles .....	93-102	Movement Options .....	35	
Declaration .....	22	Movement .....	25, 44, 48	
Defective Systems .....	91	Movement, Toy .....	54	
Defender Modifiers .....	29	Multiple Movement Systems .....	25	
Detection Options .....	39	<b>N</b>	Night .....	51
Detection Rating .....	26	Northern Force, Building a .....	82	
Detection .....	27	Northern Guard .....	80	



# INDEX

**A**

<b>O</b>	Obscurement .....	26
	Optional Movement Methods, Infantry .....	48
<b>P</b>	Painting .....	68
	Partial Cover .....	52
	Passenger Seating .....	91
	Perks .....	90
	Playing Field, the .....	16
	Powerplant .....	9
	Priorities .....	61
	Punch .....	31
<b>Q</b>	Quality .....	47
	Quick Start Rules .....	10
<b>R</b>	Rain .....	51
	Ramming .....	30
	Ranged Combat .....	28
	Recon Cadres .....	83
	Recon Squadrons .....	80
	Reference Sheets (Advanced Rules) .....	105
	Reference Sheets (Quick Start) .....	104
	Reinforced Armor .....	91
	Reinforced Crew Compartment .....	91
	Repairs .....	64
	Roads .....	38
	Rovers .....	87
	Rugged Movement System .....	91
<b>S</b>	Saturation Fire .....	43,53
	Scale .....	22
	Scenario Generator .....	57
	Scenarios .....	56
	Scenery, Making .....	69-76
	Scouting .....	61
	Searchlight .....	91
	Secondary Movement Systems .....	9
	Selecting a Scenario .....	21
	Sensors .....	8
	Sensors, Infantry .....	49
	Set-up Phase .....	22
	Set-up .....	21
	Shielded Weapons .....	91
	Silhouette Basics .....	13
	Skills .....	13
	Skirmish Rules .....	52
	Sniper System .....	91
	Southern Force, Building a .....	85
	Southern MILICIA .....	83
	Squad Damage Track .....	48
	Starting Fires .....	41
	Stealth .....	39,91
	Strike Cadres .....	84
	Strike Squadrons .....	81
	Structures .....	38,44
	Subplots .....	57,63
	Support .....	62
<b>T</b>	Target Designator .....	91
	Temperatures, Extreme .....	51
	Terra Nova .....	5
	Terra Nova, Regions of .....	7
	Terrain .....	26
	Threat Value, Infantry .....	50
	Tool Arm .....	91
	Tools and Supplies, Modeling .....	68
	Top Speed .....	25
	Towing .....	37
	Toy Combat .....	54
	Transmission .....	9
	Troops .....	61
	Turning .....	26
<b>U</b>	Urban Terrain .....	38
	Urban Terrain, Skirmish Scale .....	52
<b>V</b>	Vehicles .....	88
	Victory Points .....	64
<b>W</b>	Walking Fire .....	42,53
	Walls, Skirmish Scale .....	52
	Weak Facing .....	92
	Weapon Characteristics .....	92
	Weapon Link .....	91
	Weapons .....	9,48
	Weather Conditions .....	51
	What You Need to Play .....	12

# HEAVY GEAR

## DREAM POD 9 MAIL ORDER SHEET OR VISIT WWW.DP9.COM

### HEAVY GEAR TACTICAL BOOKS

Northern Guard Army List, DP9-046, \$18.95us/\$20.75can	x _____ = \$ _____
Southern MILICIA Army List, DP9-048, \$18.95us/\$20.75can	x _____ = \$ _____
Northern Vehicle Compendium One, DP9-025, \$26.95us/\$29.50can	x _____ = \$ _____

Southern Vehicle Compendium One, DP9-026, \$26.95us/\$29.50can	x _____ = \$ _____
Northern Vehicle Compendium Two, DP9-038, \$17.95us/\$19.75can	x _____ = \$ _____
Southern Vehicle Compendium Two, DP9-039, \$17.95us/\$19.75can	x _____ = \$ _____

### Heavy Gear Miniatures

Mammoth Strider, DP9-209, \$29.95us/\$34.44can	x _____ = \$ _____
Naga Strider, DP9-210, \$14.95us/\$17.19can	x _____ = \$ _____
Northern Infantry (10 per pack), DP9-211, \$7.45us/\$8.57can	x _____ = \$ _____
Southern Infantry (10 per pack), DP9-212, \$7.45us/\$8.57can	x _____ = \$ _____
Long Fang Naga Strider, DP9-214, \$15.95us/\$18.34can	x _____ = \$ _____
Assault Mammoth Strider, DP9-213, \$29.95us/\$34.44can	x _____ = \$ _____
Hunter, DP9-215, \$5.95us/\$6.84can	x _____ = \$ _____
Jaguar, DP9-216, \$6.95us/\$7.99can	x _____ = \$ _____
Jager, DP9-217, \$5.95us/\$6.84can	x _____ = \$ _____
Black Mamba, DP9-218, \$6.95us/\$7.99can	x _____ = \$ _____
Cheetah, DP9-219, \$5.95us/\$6.84can	x _____ = \$ _____
Grizzly, DP9-220, \$7.95us/\$9.14can	x _____ = \$ _____
Iguana, DP9-221, \$5.95us/\$6.84can	x _____ = \$ _____
Spitting Cobra, DP9-222, \$8.95us/\$10.29can	x _____ = \$ _____
Assault Hunter, DP9-223, \$5.95us/\$6.84can	x _____ = \$ _____
Head Hunter, DP9-224, \$5.95us/\$6.84can	x _____ = \$ _____
Blitz Jager, DP9-225, \$5.95us/\$6.84can	x _____ = \$ _____
Command Jager, DP9-226, \$5.95us/\$6.84can	x _____ = \$ _____

Strike Jaguar, DP9-227,	\$7.45us/\$8.57can x _____ = \$ _____
Brawler Black Mamba, DP9-228,	\$7.45us/\$8.57can x _____ = \$ _____
Assault Grizzly, DP9-229,	\$8.45us/\$9.72can x _____ = \$ _____
King Cobra, DP9-230,	\$9.95us/\$11.44can x _____ = \$ _____
Northern Regiments Decal Pack, DP9-231,	\$4.95us/\$5.69can x _____ = \$ _____
Southern Regiments Decal Pack, DP9-232,	\$4.95us/\$5.69can x _____ = \$ _____
Kodiak, DP9-233,	\$8.95us/\$10.29can x _____ = \$ _____
Striking Cobra, DP9-234,	\$8.45us/\$9.72can x _____ = \$ _____
Cheetah Paratrooper, DP9-235,	\$6.45us/\$7.41can x _____ = \$ _____
Iguana Paratrooper, DP9-236,	\$6.45us/\$7.41can x _____ = \$ _____
Hunter Paratrooper, DP9-237,	\$6.45us/\$7.41can x _____ = \$ _____
Jager Paratrooper, DP9-238,	\$6.45us/\$7.41can x _____ = \$ _____
Ferret, DP9-239,	\$6.45us/\$7.41can x _____ = \$ _____
CEF HT-68 Hovertank, DP9-240,	\$11.95us/\$13.74can x _____ = \$ _____
Stone Heads (2 per pack), DP9-241,	\$9.95us/\$11.44can x _____ = \$ _____
Weapon Pack 1: Guns, DP9-242,	\$6.95us/\$7.99can x _____ = \$ _____
Weapon Pack 2: Missiles & Mortars, DP9-243,	\$6.95us/\$7.99can x _____ = \$ _____
Hex Bases (15 per pack), DP9-244,	\$4.95us/\$5.69can x _____ = \$ _____
Defense Turret, DP9-245,	\$9.95us/\$11.44can x _____ = \$ _____

The items below are only available by mail order or by ordering at DP9's online store [www.dp9.com](http://www.dp9.com).

Stone Heads (4 per pack), DP9-9007,	\$18.95us/\$21.79can x _____ = \$ _____
Destroyed Hunter, DP9-9008,	\$8.45us/\$9.72can x _____ = \$ _____
Destroyed Jager, DP9-9014,	\$8.45us/\$9.72can x _____ = \$ _____

DP9 Promo T-Shirt (XL), DP9-9009,	\$9.95us/\$11.95can x _____ = \$ _____
Ltd. Ed. DP9 Hockey Jersey (XL), DP9-9012,	\$34.95us/\$44.95can x _____ = \$ _____
Ltd. Ed. DP9 Hockey Jersey (XXL), DP9-9013,	\$34.95us/\$44.95can x _____ = \$ _____

US and International customers use the US prices. Canadian customers use the Canadian prices. Payment can be made with VISA, Mastercard, International \$US Money Order or \$Canadian Money Order. Sorry we do not accept personal checks.

### SHIPPING COSTS:

(US Customers: \$5us for orders under \$50, \$10us for orders between \$50 & \$100, and \$15us for orders over \$100)  
(International Customers: \$10us for orders under \$50, \$20us for orders between \$50 & \$100, and \$30us for orders over \$100)  
(Canadian Customers: \$5can for orders under \$50, \$10can for orders between \$50 & \$100, and \$15can for orders over \$100)

SUB-TOTAL 1: = \$ \_\_\_\_\_

+ SHIPPING COST: = \$ \_\_\_\_\_

SUB-TOTAL 2: = \$ \_\_\_\_\_

Taxes 1 (Canadian Customers Only add 7% GST): = \$ \_\_\_\_\_

Taxes 2 (Quebec Customers Only add 7.5% PST (\* PST does not apply to books)): = \$ \_\_\_\_\_

SUB-TOTAL 2: = \$ \_\_\_\_\_

GRAND TOTAL: = \$ \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State/Province: \_\_\_\_\_  
Zip/Postal Code: \_\_\_\_\_  
Country: \_\_\_\_\_

Day Time Phone # with area code: \_\_\_\_\_  
Email Address (optional): \_\_\_\_\_  
VISA/Mastercard Info \_\_\_\_\_  
Card Holder Name: \_\_\_\_\_  
Card Number: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_



MAIL TO:  
Dream Pod 9  
5000 Iberville, #332  
Montreal, Quebec  
H2H 2S6, Canada  
Tel: (514) 523-1350  
Fax: (514) 523-8680