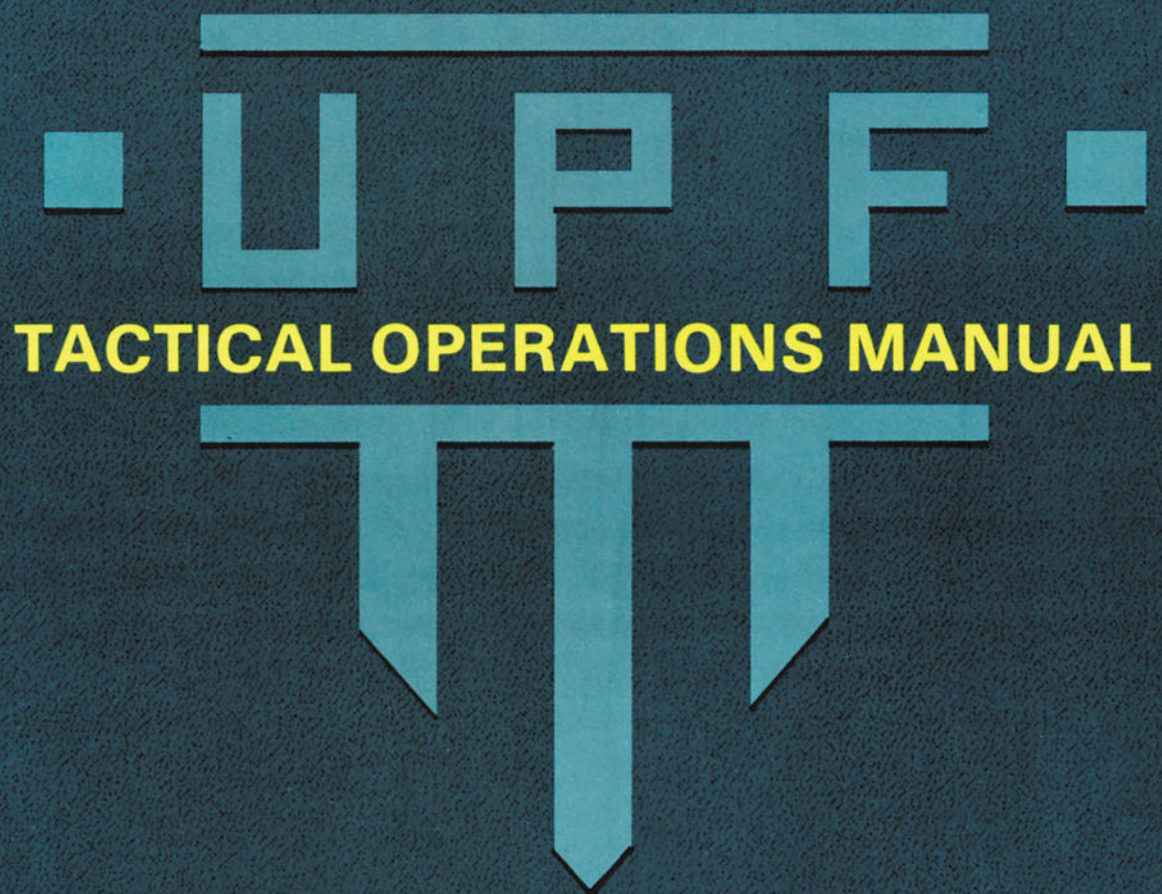




TACTICAL OPERATIONS MANUAL

COMBAT TABLE

Weapon	Defense		Reflective Hull	Proton Screen	Electron Screen	Stasis Screen	Masking Screen	ICM	Hull Damage					
	None													
Laser Cannon	75%	60%	60%	45%	75%	60%	75%	60%	75%	60%	25%	10%	—	2d10
Laser Battery	65%	55%	50%	40%	65%	55%	65%	55%	65%	55%	20%*	10%*	—	1d10
Proton Beam Battery	60%	50%	60%	50%	25%*	15%*	70%	60%	40%	30%	50%	40%	—	1d10
Electron Beam Battery	60%	50%	60%	50%	70%	60%	25%*	15%*	40%	30%	50%	40%	—	1d10
Disruptor Cannon	60%	45%	60%	45%	50%	35%	50%	35%	40%	25%	50%	35%	—	3d10
Torpedo	50%	45%	50%	45%	50%	45%	50%	45%	75%	65%	50%	40%	-10/ICM	4d10
Assault Rocket	60%	50%	60%	50%	60%	50%	60%	50%	60%	50%	60%	50%	-5/ICM	2d10+4
Rocket Battery	40%	30%	40%	30%	40%	30%	40%	30%	40%	30%	40%	30%	-3/ICM	2d10
Mines	60%		60%		60%		60%		80%		60%		-5/ICM	3d10+5
Seeker Missile	75%		75%		75%		75%		90%		75%		-8/ICM	5d10

* Weapon causes half damage (rounded up) on Hull hits.
Shaded percentages apply to characters using Gunnery skills.

DAMAGE TABLE MODIFIERS

Laser Cannon	0
Laser Battery	0
Proton Beam Battery	+10
Electron Beam Battery	+10
Disruptor Beam Cannon	+20
Assault Rocket	-10
Rocket Battery	-10
Torpedo	-20
Mine	-20
Seeker Missile	-20

WEAPON RESTRICTIONS

Weapon	Restrictions	Range
Laser Cannon	FF, RD	10
Laser Battery	RD	9
Torpedo	MPO, LTD	4
Assault Rocket	FF, MPO, LTD	4
Rocket Battery	LTD	3
Proton Beam Battery	RD	12
Electron Beam Battery	RD	10
Disruptor Beam Cannon	FF, RD	9
Mines	LTD	0
Seeker Missiles	LTD	unlimited

ADVANCED GAME DAMAGE TABLE

Modified Die Roll	Type of Damage
-20 — 10	Hull hit: double normal damage
11 — 45	Hull hit: roll normal damage for weapon
46 — 49	Drive hit: lose 1 ADF point
50 — 52	Drive hit: lose 1/2 total ADF (round up)
53	Drive hit: lose entire ADF
54 — 58	Steering hit: lose 1 MR point
59 — 60	Steering hit: lose entire MR
61 — 62	Weapon hit: LC; LB; PB; EB; AR; RB
63 — 64	Weapon hit: PB; EB; LB; RB; T; AR
65 — 66	Weapon hit: DC; LC; AR; T; LB
67 — 68	Weapon hit: T; AR; EB; PB; LB; RB
69 — 70	Weapon hit: LB; RB; T; AR; PB; EB; LC
71 — 74	Power short circuit: lose all screens and ICMs
75 — 77	Defense hit: PS; ES; SS; MS; ICM
78 — 80	Defense hit: MS; ICM; SS; PS; ES
81 — 84	Defense hit: ICM; SS; PS; ES; MS
85 — 91	Combat Control System hit: -10% on all attacks
92 — 97	Navigation hit: lose maneuvering control
98 — 105	Electrical Fire: roll additional damage at +20 each turn
106 — 116	Damage Control hit: DCR cut in half
117 — 120	Disastrous Fire: DCR cut in half; lose entire ADF and MR; -10% on all attacks; roll additional damage at +20 each turn

Basic and Advanced Boardgame Rules

Starships Clash over Unknown Worlds

Designed by Douglas Niles



TABLE OF CONTENTS

INTRODUCTION	2	ADVANCED GAME	10
BASIC GAME	3	Sequence of Play	10
Sequence of Play	3	Advanced Game Movement	10
Movement	3	Advanced Game Combat	10
Combat	4	Advanced Game Tables	12
Combat Table	6	Repairs	14
Spaceships	7	Advanced Game Spaceships	14
Basic Game Scenarios	8	Advanced Game Scenarios	15

TSR, Inc.
POB 756
Lake Geneva,
WI 53147



TSR (UK) Ltd.
The Mill, Rathmore Road
Cambridge CB14AD
United Kingdom

TSR, Inc.

PRODUCTS OF YOUR IMAGINATION™



Accompanied by a Stiletto class assault scout ship, the UPF Frigate Z'Gata cruised toward the orbiting station Doliin Bay. The ship's commander, Beril Gamache, was nervous. Doliin Bay, and its mining colony on the planet Kenzah' Kit, were on the very edge of the Frontier. Reports of unfamiliar ships had been trickling in from this area for the last few months. Gamache hated to carry a valuable cargo into a border system without more information about possible dangers.

Suddenly, the frigate's sensors lit up; long range detectors reported two ships emerging from the Void inside the system. Immediately, the commander ordered all hands to their stations. There was no good reason to be suspicious, but he had an odd feeling . . .

INTRODUCTION TO STAR FRONTIERS™ KNIGHT HAWKS

STAR FRONTIERS™ Knight Hawks Space Battle game mixes the role-playing rules of STAR FRONTIERS™ Science Fiction Game with rules for spaceships. This booklet contains rules for a fast-moving boardgame of spaceship combat. The game can be played on its own, and requires no knowledge of STAR FRONTIERS game. The second book in this set contains rules that tie this game into the STAR FRONTIERS role-playing game. It covers spaceship design and construction, boarding combat and new spaceship-related skills for STAR FRONTIERS characters. It is ideally suited for players that want to expand their STAR FRONTIERS adventures into the dark reaches of space.

How to Use this Book

This boardgame is divided into two sections: the Basic Game and the Advanced Game. The Basic Game introduces simple rules on ship movement and combat. The Advanced Game expands the basic system, adding detail and complexity. Players should try the Basic Game first, moving on to the Advanced Game after playing the Basic Game scenarios.

Components

To play this game, players need the map, dice and cardboard playing pieces (counters) included with this set. Paper and pencils also are needed to keep notes about the different ships. Sample ship roster forms are included with the game. Players may photocopy these or make copies on scratch paper.

The map shows an empty area of space. A hexagonal grid is printed on it. This grid divides the map into spaces, called hexes, to regulate ship movement and indicate positions.

Most of the counters represent individual spaceships or space stations. Some are used to record other information that is needed during the game. Many of the counters are not used in the Basic Game.

Game Scale

One turn in this game represents 10 minutes of time. Each hex is 10,000 kilometers across. Each unit is a single ship or space station.

As the intruders closed in, Gamache studied the computer's report:

OBJECT ONE:	STARSHIP	HEAVY CRUISER CLASS
	ORIGIN:	UNKNOWN
	BUILDERS:	UNKNOWN
	COURSE:	DOLIIN BAY

OBJECT TWO:	STARSHIP	DESTROYER CLASS
	ORIGIN:	UNKNOWN
	BUILDERS:	UNKNOWN
	COURSE:	DOLIIN BAY

ADVISEMENT: INTERCEPT AND CONTACT INTRUDERS
PROCEDURE YELLOW ALERT

The UPF ships swung into an intercept course. With weapon crews on alert, Z'Gata's automatic beacons began radioing friendly messages in all known languages toward the unidentified ships. The intruder's reply vaporized the Stiletto's starboard thrusters in a blinding laser flash—The Second Sathar War had begun!

How To Use The Dice

Two dice are included in Knight Hawks games. These dice have 10 sides, numbered from 0 to 9. They are called ten-sided dice (abbreviated d10).

If the rules tell you to roll one ten-sided die (abbreviated 1d10), roll one die to get a number from 1 to 10. A zero is read as a 10.

If the rules tell you to roll two ten-sided dice (abbreviated 2d10), roll both dice and add the results to get a number from 2 to 20. A zero is read as a 10. For example, if the rolls were 0 and 4, the result would be (10 + 4 =) 14. More dice can be rolled to give results of 3-30 (3d10), 4-40 (4d10), etc. If the number of dice is followed by a plus sign and a number, then the number is added to the dice roll. For example, 1d10 + 2 means roll one die and add 2 to the result.

If the rules tell you to roll percentile dice (abbreviated d100), roll both dice. Instead of adding the results, read the dark-colored die as the first (tens) digit and the light-colored die as the second (ones) digit. A zero is read as a zero. The following table shows several examples of percentile dice rolls.

dark die	light die	result
5	3	53
6	0	60
0	6	6
0	0	100

The crayon included with this game can be used to color in the numbers on the dice and make them easier to read. Simply rub the crayon over the sides of the die and wipe away the excess wax with a tissue or paper towel.

BASIC GAME

The Basic Game can be played by two or more players. The players must be divided into two teams: the United Planetary Federation and the Sathar, an evil race of worm-like aliens. Each player controls one or more starships in a space battle. Two sample battle set-ups, called scenarios, are given at the end of the Basic Game. Players can make up an endless variety of scenarios on their own.

Sequence of Play

The game is played in a series of game turns. Each game turn is divided in half. The first half is Side A's turn and the second half is Side B's turn. During Side A's turn, Side A is the moving side and Side B is the non-moving side. During Side B's turn, Side B is the moving side and Side A is the non-moving side. During each side's turn, players do the following things in order:

1. Player A's Turn

a. Movement

Player A announces which of his ships are using masking screens. A masking screen counter is placed on top of each of these ship counters.

Ships and space stations in orbit are moved one hex, following the direction of their orbit.

Player A moves each of his ships, making sure that no ship moves a longer or shorter distance than its speed from the previous turn will allow. The player writes down each ship's new speed after it moves.

b. Combat

The non-moving player (player B, in this case) announces which of his ships will shoot at moving ships, and which weapons they will use. The non-moving player then resolves all of these attacks and their effects are applied immediately.

The moving player (player A, in this case) announces which of his ships will shoot at the non-moving player's ships, and which weapons they will use. He then resolves all of these attacks, and their results are applied.

2. Side B's Turn — The steps described above are repeated, but Side B becomes the moving side and Side A becomes the non-moving side.

MOVEMENT

Speed

Every ship has a speed when the game starts. This speed is the number of hexes the ship will move on the space map during its turn. Players should write down each of their ships' speeds so they remember them during the turn. Also, a ship's speed this turn will affect its speed next turn.

Acceleration and Deceleration

Each ship has an Acceleration/Deceleration Factor (ADF). This is a number that tells the player how many hexes the ship

can add to or subtract from its speed in one turn. Ships accelerate or decelerate just before they move. A ship cannot accelerate and decelerate on the same turn.

EXAMPLE: A ship that moved five hexes last turn has a speed of 5 at the beginning of this turn. If its ADF is 2, it can add one or two hexes to its previous speed, or subtract one or two hexes from its previous speed. This turn, the ship can move 3, 4, 5, 6 or 7 hexes. The player decides he wants the ship to move 6 hexes this turn. He moves the ship 6 hexes, then writes down "6" as the ship's speed so he will remember it next turn.

STOPPING. A ship can stop moving (decelerate to a speed of 0) only if its speed during the previous turn was equal to or less than its ADF. A ship that had a speed of 0 during the last turn can remain at 0, or accelerate to any speed up to its ADF. A ship does not move at all on the turn it stops.

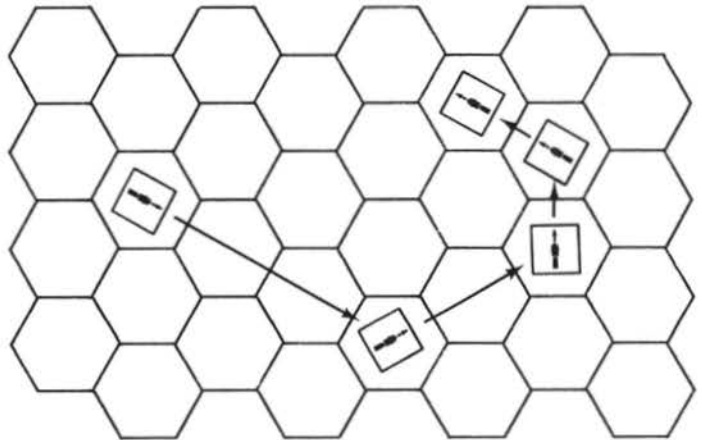
TOP SPEED. Ships do not have a top speed. They can accelerate to any speed, but players may find that ships traveling very fast will be forced to leave the map.

Turning

Each ship has a Maneuver Rating (MR). This number tells the player how many times the ship can turn during its move.

The bow (front) of a ship always must point at one of the six sides of the hex the ship is in. When a ship moves, it must move into the hex it is facing.

A ship can turn after it enters a hex. A ship turns by rotating so that its bow faces the first hexside to its right or left. During its move, a ship can make a number of turns equal to its MR. A ship can turn only one hexside in any hex, however. If the number of hexes a ship moves is less than its MR, it still can turn only once per hex.



EXAMPLE: The frigate in the illustration has a speed of 7 and an MR of 3. The player controlling the ship decides she wants it to perform a wide turn. She moves the ship forward three hexes and turns it one hex side to the left. She then moves it two more hexes and turns to the left again. So far, the ship has moved five hexes and turned twice. She moves the ship one hex forward, turns it left again, and finishes the move by moving the ship one more hex forward. The ship has now moved seven hexes and turned three times.

If a ship has a speed of zero through the entire turn, it can rotate during its movement phase so it faces any hexside.

Stacking Counters

Any number of ships can be in one hex at the same time. Ships can shoot at other ships in the same hex without penalty.

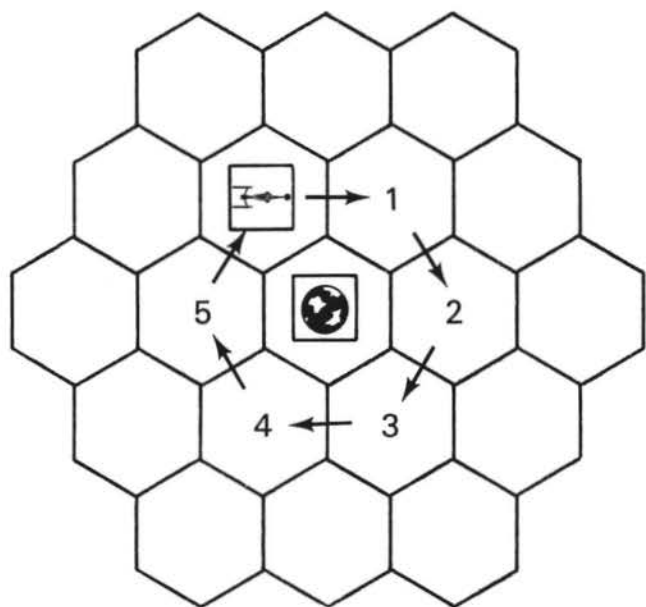
Planets

A hex that contains a planet counter is blocked. No ship can move into or through that hex. The planet also blocks shots if the shortest path from the attacker to the target must be traced through the planet's hex.

Orbiting Planets

Any ship that starts its move in a hex next to a planet can orbit that planet. The player simply announces during his movement phase that the ship is orbiting the planet.

A ship that is orbiting a planet has a speed of zero. However, the ship automatically moves one hex around the planet each turn. The direction of the orbit (clockwise or counterclockwise) is up to the player who controls the ship. Once it is established, the direction cannot be changed unless the ship leaves orbit and returns to start a new orbit in the opposite direction. The ship in the illustration is orbiting clockwise. The numbers show how many turns it will take the ship to move from its starting hex to the various hexes around the planet. It will return to its starting hex in six turns.



Because a ship in orbit has a speed of zero, it can rotate to face any hexside during its movement. The ship can rotate this way even if it leaves orbit during the turn. If the ship leaves orbit, it still has its full MR to use during its move.

Moving Off The Map

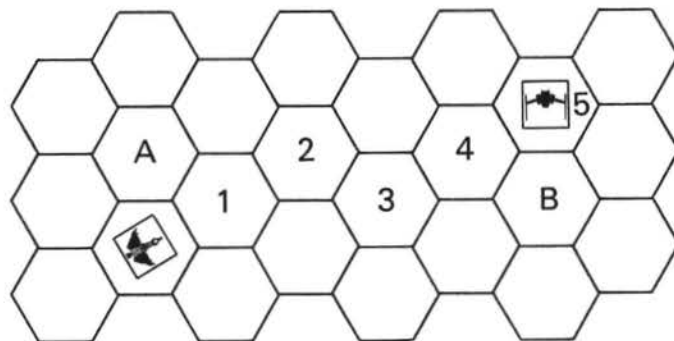
Ships that leave the map are considered lost and are taken out of the game. If a ship travels off the map because it cannot turn before reaching the edge, then it cannot return to the map on a later turn.

COMBAT

A ship can fire its weapons during the opposing player's movement phase and during its own combat phase. Weapons cannot be fired at any other time during the turn.

Range

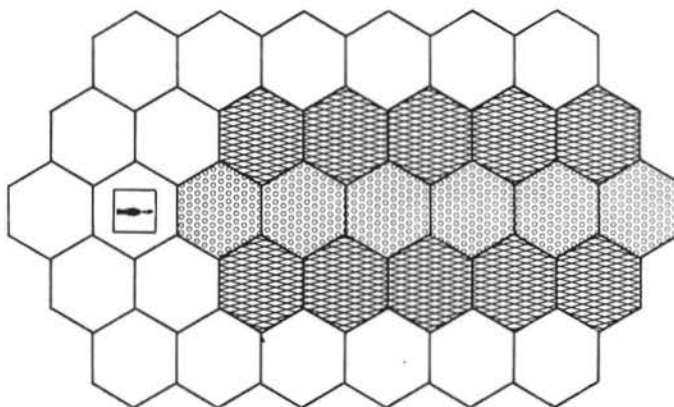
Before firing any weapons, the player that is attacking must count the range from the attacking ship to its target. To find the range, count the number of hexes in the shortest path between the attacking ship and the target ship. Count the hex the target ship is in, but not the hex the attacking ship is in. Weapons cannot be fired at targets beyond a certain range, and some weapons become less effective at long ranges; see Weapon Systems for more information.



EXAMPLE: The range from Ship A to Ship B in the illustration is five hexes.

Fields of Fire

Laser batteries, torpedos and rocket batteries can be fired in any direction. Laser cannons and assault rockets can only be fired straight ahead of the firing ship. Laser cannons and assault rockets are called Forward Firing Weapons. Forward firing weapons can be fired at any target inside the three-hex-wide area outlined in the diagram. (The weapons are not limited to the range shown in the diagram. The field of fire extends to the limit of the weapon's range. Targets in the central row of hexes are easier to hit; see Head-On Shots.)



If a moving ship enters a hex containing an enemy ship, the moving ship may always use its FF weapons against that enemy ship. The enemy ship, however, may only use an FF weapon for defensive fire if the last hex the moving ship was in before entering the enemy's hex was in the enemy ship's forward field of fire.

Aiming Weapons

A player must announce which weapons he is using and which targets he will use them against before the dice are rolled to resolve any attacks. If a target is destroyed by the first few shots, any other weapons the player had aimed at that target must be fired, even though there is nothing for them to hit. The attacker cannot shift these weapons to a new target once they are aimed. If these wasted shots include torpedo or

rocket fire, these weapons are fired and must be crossed off the attacking ship's record sheet.

EXAMPLE: A player announces he will fire five weapons — two lasers, two torpedos and a rocket battery — at an enemy. The lasers and one torpedo are enough to destroy the target. The second torpedo and the rocket battery are wasted shots, because their target is already destroyed.

Combat Procedure

When a player wants to shoot at an enemy ship, he must use the Combat Table. Find the row on the Combat Table that lists the weapon being fired, and the column that lists the defensive system being used by the target ship. The number that is printed at the intersection of the weapon's row and the defense's column is the attacker's percentage chance to hit the target. If the attacker rolls this number or less on d100, the target ship has been hit. If the target ship has more than one defensive system operating, the defense that is most effective against the attacking weapon is used.

EXAMPLE: A laser battery is being fired at a ship that has a reflective hull. According to the Combat Table, the laser battery has a 50% chance to hit its target. The attacking player rolls d100 and the result is 26. This number is less than or equal to 50, so the laser hits the ship. If the ship had a masking screen, the laser battery would have had only a 10% chance to hit, and a roll of 26 would have missed.

Attack Modifiers

A ship's percentage chance to hit its target can be modified by several factors. These are explained below.

Head-On Shots. If a forward-firing weapon is used against a target in the center row of the three-hex firing area, the attacker can add 10% to his chance to hit. This central row is shown in the Forward Field of Fire diagram.

If a ship with a forward-firing weapon enters the same hex its target is in, the attacking ship automatically gets the head-on bonus.

Range Diffusion. Laser cannons and laser batteries become less effective at longer ranges. The attacker's chance to hit his target with a laser weapon is reduced by $5\% \times$ the range to the target.

EXAMPLE: A ship is firing its laser cannon at an enemy ship that is four hexes away. The target ship has a reflective hull, so the attacker's base chance to hit is 60%. The attacker is making a head-on shot, increasing the chance to 70%. This is reduced by $(4 \times 5\%) = 20\%$ because of the range. The attacker will hit the enemy ship on a d100 roll of $(70 - 20) = 50$ or less.

Evasive Maneuvers. Fighters and assault scouts have a special defensive ability. Because they are small and maneuverable, these types of ships can try to dodge torpedos that have been launched at them. The player controlling the ship under attack must declare that he is taking evasive action. The MR of the evading ship is then multiplied by 5% and the result is subtracted from the torpedo's percentage chance to hit.

If the evading ship is not destroyed by the torpedo, it must turn in every hex it enters during its next move, until its MR is used up. The ship must move a number of hexes equal to or greater than its MR on its next turn; it cannot evade by staying in its hex and rotating. An evading ship can zig-zag or move in a circle.

Rate of Fire

Laser cannons, laser batteries and rocket batteries can be fired during both the controlling player's combat phase and during his opponent's combat phase. Torpedos and assault rockets can be fired only during the controlling player's combat phase. A ship with more than one torpedo, assault rocket or rocket battery can fire each only once per turn. For example, a ship with four torpedos and two rocket batteries can fire only one torpedo and one rocket battery per turn.

Automatic Hits and Misses

If a target is within a weapon's maximum range, a d100 roll of 5 or less always will hit the target, even if the attack's chance to hit was modified to 0 by range, evasion or other factors. Similarly, a d100 roll of 96 or more will always miss, even if the attack's chance to hit was modified above 100%.

Defensive Attacks

The non-moving player can shoot at his opponent's ships at the start of his opponent's combat phase. Moving ships can be shot at in any hex they moved through during their move. No shots are resolved until after all ships have finished moving. At that time, the non-moving player can shoot at any of his opponent's ships as if they were in any hex they moved through during the turn. The non-moving player can place upside-down counters in hexes his opponent's ships move through, so he will remember where the opposing ships traveled.

Laser cannons, laser batteries and rocket batteries can be fired defensively at the start of the moving player's combat phase. Torpedos and assault rockets cannot be launched at this time; they can be used only during the player's own combat phase.

Ship Damage

If a weapon hits its target, the player who made the attack must roll dice to determine how many points of damage the attack caused. The number of dice rolled depends on the weapon used; this information is listed on the Combat Table.

Each ship has a number of Hull Points. When a ship is hit, the number of points of damage caused by the attack is subtracted from the ship's hull points. When all of the ship's hull points are gone, the ship is destroyed and immediately removed from the map.

EXAMPLE: An assault scout has 15 hull points. In one turn it is hit by a rocket battery (2d10 points of damage). The attacking player rolls 2d10 and gets a total of 11 points of damage. The defending player subtracts 11 from his ship's 15 hull points, leaving it with 4 hull points. On the next turn, the ship is hit by a laser battery (1d10 points of damage). This attack causes 6 points of damage. This damage reduces the ship's hull points to 0 or less, so the ship is destroyed and the player removes it from the map.

Weapon Systems

The following weapons are used in the Basic Game. The abbreviations listed after the weapon name are explained at the end of the weapon list.

Laser Cannon — FF / RD / Range: 10 / Damage: 2d10

A laser cannon is a large weapon that is mounted on the bow of a spaceship. It fires an intense, concentrated beam of light.

Laser Battery — RD / Range: 9 / Damage: 1d10

A laser battery is a cluster of very small laser cannons mount-

ed in a rotating turret. It can fire in any direction, but is not as powerful as a laser cannon.

Torpedo — MPO / LTD / Range: 4 / Damage: 4d10

A torpedo is a self-guided nuclear bomb that homes in on its target after it is launched. Torpedos are propelled by prolonged fission reactions which enable them to travel at tremendous speeds. A ship can carry only a limited number of torpedos, and these must be marked off the ship's record sheet as they are used.

Assault Rockets — MPO / FF / LTD / Range: 4 / Damage: 2d10+4. Assault rockets usually are carried by fighters and other small ships. They can be launched at a target during the owning player's combat phase. Assault rockets are powered by a brief fusion reaction which causes them to fly even faster than torpedos. Unlike torpedos, however, assault rockets are not guided missiles. They rely on their tremendous speed to hit their target before it can dodge away. A ship can carry only a limited supply, so assault rockets must be marked off the ship's record sheet as they are fired.

Rocket Battery — LTD / Range: 3 / Damage: 2d10

A rocket battery is a cluster of small rocket launchers. These rockets are much smaller than assault rockets, but they cause nearly as much damage as an assault rocket because many rockets are fired together. Like torpedos and assault rockets, rocket batteries must be marked off the ship's record sheet as they are fired.

Explanation of Terms

FF — Forward-firing weapon.

MPO — Moving Player Only. MPO weapons can be fired only during the attacking player's combat phase.

RD — Range Diffusion. The accuracy of RD weapons is reduced by 5% × the range to the target.

LTD — Limited Supply. A ship can carry only a limited supply of these weapons. They must be marked off the ship's record sheet as they are fired.

Range: # — The weapon can be used only against targets within the listed range of hexes.

Damage: #d10 — This is the number of 10-sided dice that are rolled to determine how many points of damage are caused by a successful attack.

Defensive Systems

The following types of spaceship defenses are available in the Basic Game. If a ship has more than one defensive system, an attack's chance to hit is calculated against the most effective defense.

Reflective Hull. This is mirror-like paint that is sprayed onto a ship's hull. It will often cause a laser beam to bounce off the ship without causing any damage. A reflective hull is the most common defense on spaceships.

Masking Screen. A masking screen is created when a ship releases a cloud of water vapor into space. The vapor crystallizes and forms a protective cloud surrounding the ship.

Besides making the ship more difficult to hit, a masking screen absorbs energy from a laser. If a ship is hit by a laser while inside a masking screen, the amount of damage that is rolled is

divided in half (fractions are rounded up). The result is the number of damage points inflicted on the target ship.

A masking screen has exactly the same effect on a laser fired out of the screen as it does on a laser fired into the screen. If a ship surrounded by a masking screen fires its lasers, resolve the attack as if the defending ship is masked.

To indicate that a ship is using a masking screen, place a screen counter on top of the ship counter. This screen counter stays on top of the ship as long as the ship travels in a straight line at its current speed. If a ship or space station in orbit around a planet creates a masking screen, the screen will last through one complete orbit. The hex the ship or station was in when the screen was created should be marked with an upside-down counter, so players will know when one orbit is finished.

A ship can carry only a limited number of masking screens. These must be marked off the ship's record sheet as they are used. When all of them are used, the ship cannot create any more masking screens.

Interceptor Missiles (ICM). Interceptor missiles are small missiles that can be fired at incoming torpedos, assault rockets and rocket battery barrages. Before the torpedo or rocket attack is resolved, the player controlling the target ship can declare that it is launching ICMs. The player must declare how many ICMs the ship is using. The attack's chance to hit is determined as if the attack was hitting a reflective hull or a masking screen, whichever the ship is using. The number of ICMs launched by the target ship is multiplied by the modifier on the Combat Table, and the result is subtracted from the attack's chance to hit.

EXAMPLE: A torpedo is launched at a ship with a reflective hull. The player that controls the target ship announces that it will fire two of its ICMs in defense. The torpedo normally has a 70% chance to hit, but each of the ICMs lowers this by 10%. The torpedo's final chance to hit is (70 – 20 =) 50%.

A ship carries a limited number of ICMs. Whenever one is used, it must be checked off the ship's record sheet. ICMs can defend only the ship that launched them.

COMBAT TABLE

Weapons	Defenses			Damage
	Reflective Hull	Masking Screen	ICM	
Laser Cannon	60%	20%*	—	2d10
Laser Battery	50%	10%*	—	1d10
Torpedo	70%	70%	-10%/ICM	4d10
Assault Rocket	60%	60%	-5%/ICM	2d10 +4
Rocket Battery	40%	40%	-3%/ICM	2d10

* The target ship takes only one-half damage (round fractions down) if it is hit.

WEAPON RESTRICTIONS TABLE

Weapon	Restrictions	Range
Laser Cannon	FF, RD	10
Laser Battery	RD	9
Torpedo	MPO, LTD	4
Assault Rocket	MPO, LTD, FF	4
Rocket Battery	LTD	3

SPACESHIPS

All of the spaceships used in the Basic Game are warships. Space stations that serve as bases for these military vessels also are used. All of the various types of ships and stations used in the Basic Game are described below.

Besides a short report about the ship, each description includes the number of hull points the vessel has, the types of weapons it can carry, how many limited supply weapons (torpedos and rockets) it carries, the defensive systems built into the ship and movement information.

Not all ships of the same type are identical. All ships of one type will have the same ADF, MR and hull points. The weapon and defense information, however, lists the maximum amount of equipment a ship can carry. Many ships do not carry their maximum armament.

Fighters. Fighters are small, single-seat spaceships. They must be based on an assault carrier or a space station. Fighters are fast and maneuverable, but because they are small the only weapons they can carry are three assault rockets. Their size also makes them easy to destroy.

A fighter that has fired all of its assault rockets can dock at a station or assault carrier to rearm. In order to dock, the fighter must stop (have a speed of 0) in the same hex as the station or assault carrier.

To be rearmed, a fighter must spend one complete game turn on board its station or carrier. If the fighter's base is attacked, the fighter cannot be rearmed that turn. A fighter that is docked cannot be attacked.

Hull Points: 8
ADF: 5
MR: 5
Weapons: 3 assault rockets
Defenses: reflective hull

Assault Scout. Assault scouts are larger than fighters, and carry five crew members. They are as fast as fighters, and are big enough to operate without a base station or carrier. They are lightly armed and easily damaged, however.

Like fighters, assault scouts can rearm at a space station. They cannot be attacked while docked at the station. Assault scouts cannot be rearmed at assault carriers.

Hull Points: 15
ADF: 5
MR: 4
Weapons: 4 assault rockets, laser battery
Defenses: reflective hull

Frigate. Frigates are small warships, carrying about 25 crew members. They are commonly used as patrol ships by the UPF, as they are large enough to handle most pirate ships and other criminal vessels.

Hull Points: 40
MR: 3
ADF: 3
Weapons: laser cannon, laser battery, 2 torpedos, 4 rocket batteries
Defenses: reflective hull, 1 masking screen, 4 ICMs

UPF: Enemy Silhouette Recognition Card



DESTROYER



FRIGATE



HEAVY CRUISER



ASSAULT CARRIER

Know
Your
Enemy!

Destroyer. Destroyers are slightly larger than frigates, and also a little slower. They carry 40 to 50 crew members. Their main function is to escort larger ships.

Hull Points: 50
ADF: 3
MR: 2
Weapons: laser cannon, laser battery, 2 torpedos, 6 rocket batteries
Defenses: reflective hull, 2 masking screens, 4 ICMs

Heavy Cruiser. These large ships were the first space battleships. Advances in technology have caused them to be downgraded to cruisers, and they tend to be slow and somewhat clumsy compared to most modern warships.

Hull Points: 80
ADF: 1
MR: 1
Weapons: laser cannon, 3 laser batteries, 4 torpedos, 8 rocket batteries
Defenses: reflective hull, masking screen, 8 ICMs

Battleship. These galactic dreadnoughts are the mightiest vessels to travel between the stars. The UPF has only a few of them, and they usually stay near the largest space stations. Battleships have never fought in ship-to-ship battles, so their effectiveness is a matter of theory.

Hull Points: 120
ADF: 2
MR: 2
Weapons: 2 laser cannons, 4 laser batteries, 8 torpedos, 10 rocket batteries
Defenses: reflective hull, 4 masking screens, 20 ICMs

Assault Carrier. This type of ship is a relatively new development. Assault carriers carry groups of four to 10 fighters through the Void, launching the fighters where they are needed and taking them back on board to refuel and rearm.

Hull Points: 75
ADF: 2
MR: 1
Weapons: 2 laser batteries, 6 rocket batteries
Defenses: reflective hull, masking screen, 8 ICMs

Space Station. These are large outposts that orbit planets. A space station has no engines to move itself; it simply serves as a base of operations for other ships.

Any ship can dock at a space station by entering the station's hex and stopping there. At the end of the movement phase, the ship's counter is placed under the station's counter to show that it has docked. As long as the ship remains there, it is linked to the station, and people and supplies can move back and forth freely. The ship can leave the station during its movement phase, and pays no penalty for doing so. When the station moves, the ship that is leaving does not move with the station. It can move normally during its movement phase.

A docked ship can use its battery weapons to help defend the station. A docked ship cannot fire any forward-firing weapons, torpedos or ICMs.

An attacker must declare whether his ship is firing at the space station or at a ship that is docked with the station. Any docked ship except fighters and assault scouts can be attacked by enemy ships. If a station is destroyed while ships are docked at it, each docked ship takes points of damage equal to one-half of the station's original hull points. If a ship is destroyed while docked, the station takes points of damage equal to one-half of the ship's original hull points.

Hull Points: 20 to 200
ADF: 0
MR: 0
Weapons: 1 to 3 laser batteries, 2 to 12 rocket batteries
Defenses: reflective hull, 1 to 4 masking screens, 2 to 8 ICMs

BASIC GAME SCENARIOS

After reading the Basic Game rules, play one of the following scenarios. Beginning players should try Scenario 1 first, playing it several times to become familiar with ship movement and the various weapons and defenses. After players feel comfortable with the rules, move on to Scenario 2. This battle involves several ships on each side.

Regardless of which scenario is played, players must become familiar with the ships they control and the weapons and defenses of each. Before starting to play, carefully read the ship descriptions in the scenario. Double-check the rules if you have any questions about weapons or defenses. It is important to understand the capabilities and limitations of each vessel under your control.

Ships designated UPFS are United Planetary Federation Ships. Those designated SAV are Sathar Attack Vessels.

Scenario 1: SURPRISE ATTACK!

A pair of UPF Ships—the frigate Z'Gata and the assault scout Stiletto—have been dispatched to guard the small space station Doliin Bay, in orbit around the planet Ken'zah Kit. In the second week of this routine duty, the Doliin Bay's powerful sensors detect a pair of ships entering the system from the Void. As they streak closer, the computer sketches the sleek outlines of a Sathar heavy cruiser and its destroyer escort. The UPF crews, facing a far stronger enemy, realize they must flee, but they cannot leave the Doliin Bay garrison defenseless against the invaders!

Unknown to the UPF defenders, the attacking ships represent only one prong of a huge attack against colonized planets along the edge of the Frontier. The attackers' mission is simple: destroy any UPF starships encountered and wipe out any colonies in the area.

In this scenario, the Sathar player is Player A, and moves first. The UPF player is Player B and moves second.

UPF Ships

1. UPFS Z'Gata (frigate) 40 Hull Points
Weapons: laser cannon, laser battery, 2 torpedos
Defenses: reflective hull, 4 ICMs
ADF: 3 MR: 3
2. UPFS Stiletto (assault scout) 15 Hull Points
Weapons: 4 assault rockets, laser battery
Defenses: reflective hull
ADF: 5 MR: 4
3. UPFB Doliin Bay (space station) 25 Hull points
Weapons: laser battery
Defenses: reflective hull, 6 ICMs
ADF: 0 MR: 0

Sathar Ships

1. SAV Venomous (destroyer) 50 Hull Points
Weapons: laser cannon, laser battery, 2 torpedos
Defenses: reflective hull, 2 masking screens
ADF: 3 MR: 2
2. SAV Perdition (heavy cruiser) 80 Hull Points
Weapons: 2 laser batteries, 4 rocket batteries, 2 torpedos
Defenses: reflective hull, 2 ICMs
ADF: 1 MR: 1

Setting Up. Both UPF ships are docked at the station, which is in orbit around the planet Ken'zah Kit. The planet can be placed anywhere on the map by the UPF player; somewhere near the middle is best.

After the planet, space station and UPF ships are placed on the map, the Sathar ships can be placed in any hex touching one of the short ends of the map. These ships need not be in the same hex, but they must be on the same side of the map. They can start at any speed the Sathar player wants, but both ships must have the same speed.

Evacuating Doliin Bay. The Z'Gata must spend three complete game turns docked at Doliin Bay in order for the station's crew to get aboard. These three turns need not be consecutive; the ship can leave the station after one turn and return later for two more turns to rescue the station crew.

After Doliin Bay has been evacuated, the station's weapons cannot be used.

Victory Conditions. If the UPF player evacuates Doliin Bay and flies the Z'Gata off the map, the UPF has won this battle. Any other result is a Sathar victory.

Scenario 2: THE BATTLE OF FORTRESS KDIKIT

News of the Sathar invasion has reached all the planets of the Frontier. The story always is the same; defeat and retreat. Soon, the major UPF planets will be in danger.

Task Force Cassidine has been dispatched to the planet Kdikit with one goal: Stop the Sathar onslaught. Circling the planet is Fortress Kdikit, a huge and well-defended space station. Along with the ships that have been sent to reinforce it, the UPF hopes Fortress Kdikit will be the bastion that breaks the Sathar assault.

The Sathar player is Player A in this scenario, and the UPF player is Player B.

UPF Ships

1. UPFS Admiral Clinton (battleship) Hull Points 120
Weapons: 4 laser batteries, 10 rocket batteries, 8 torpedos
Defenses: reflective hull, 4 masking screens, 9 ICMs
ADF: 2 MR: 2
2. UPFB Fortress Kdikit (space station) Hull Points 100
Weapons: 3 laser batteries, 12 rocket batteries
Defenses: reflective hull, 2 masking screens, 8 ICMs
ADF: 0 MR: 0

The following two fighters are based at Fortress Kdikit.

- a&b. UPFS Fighters Hull Points 8 each
Weapon: 3 assault rockets each
Defense: reflective hull
ADF: 5 MR: 5
3. UPFS Allison May (destroyer) Hull Points 50
Weapons: laser cannon, laser battery, 4 rocket batteries
Defenses: reflective hull, 1 masking screen, 2 ICMs
ADF: 3 MR: 2
4. UPFS Driadia (frigate) Hull Points 40
Weapons: laser cannon, laser battery, 2 torpedos
Defenses: reflective hull, 2 ICMs
ADF: 3 MR: 3
5. UPFS Dauntless (assault scout) Hull Points 15
Weapons: 4 assault rockets, laser battery
Defenses: reflective hull
ADF: 5 MR: 4
6. UPFS Razor (assault scout) Hull Points 15
Weapons: 4 assault rockets, laser battery.
Defenses: reflective hull
ADF: 5 MR: 4

Sathar Ships

1. SAV Infamous (assault carrier) Hull Points 75
Weapons: 2 laser batteries, 6 rocket batteries
Defenses: reflective hull, 4 ICMs
ADF: 2 MR: 1

The following five fighters are based on the Infamous:

- a-e. Sathar Attack Fighters Hull Points 8 each
Weapons: 3 assault rockets each
Defenses: reflective hull
ADF: 5 MR: 5
2. SAV Star Scourge (heavy cruiser) Hull Points 80
Weapons: laser cannon, 2 laser batteries, 4 torpedos, 4 rocket batteries
Defenses: reflective hull, 6 ICMs
ADF: 1 MR: 1
3. SAV Vicious (destroyer) Hull Points 50
Weapons: laser cannon, laser battery, 2 torpedos
Defenses: reflective hull, 2 masking screens
ADF: 3 MR: 2
4. SAV Pestilence (destroyer) Hull Points 50
Weapons: laser cannon, 4 rocket batteries, 2 torpedos
Defenses: reflective hull, 2 masking screens
ADF: 3 MR: 2
5. SAV Doomfist (destroyer) Hull Points 50
Weapons: laser cannon, laser battery, 2 torpedos
Defenses: reflective hull, 2 masking screens
ADF: 3 MR: 2
6. SAV Stinger (frigate) Hull Points 40
Weapons: laser cannon, 4 rocket batteries, 1 torpedo
Defenses: reflective hull, 1 masking screen, 2 ICMs
ADF: 3 MR: 3

Setting Up. The UPF player sets up his ships first. The planet Kdikit should be placed at least 15 hexes from any map edge. Fortress Kdikit (with its fighters docked) is placed in orbit around the planet. The other ships can be placed on the map wherever the UPF player wants them. All of the ships should be given a speed from the previous turn (the turn before the game starts). This can be any speed the UPF player wants, and need not be the same for all UPF ships.

All of the Sathar ships must be placed along one map edge. The Sathar player chooses which side of the map his ships start on. The fighters must be on board the assault carrier when it is placed on the map, but they can be launched on the first or any following turn. All Sathar ships must be traveling at the same speed at the beginning of the game.

Victory Conditions. The victory conditions for this scenario are very simple. This is the UPF's last desperate chance to stop the Sathar fleet before it reaches major planets, so the UPF will fight to the last ship. Sathar, of course, do not know the meaning of retreat. Whichever fleet survives the battle is the victor. The space station is considered part of the UPF fleet. If one player destroys all of his opponent's ships but has only fighters remaining, the game is a draw.

ADVANCED GAME

INTRODUCTION

The Advanced Game expands the Basic Game rules, adding new types of ships, new movement rules, more weapons and defenses and more detailed damage and repair rules. All of the rules from the Basic Game are used in the Advanced Game, but Advanced Game players have more decisions to make and more options to choose from.

SEQUENCE OF PLAY

The turn sequence for the Advanced Game is outlined below.

Side A's Turn

1. Movement Phase
 - activate screens
 - activate and move seekers
 - move ships in orbit
 - move other ships
2. Combat Phase
 - roll for fire damage
 - defensive fire
 - offensive fire

Side B's Turn

1. Movement Phase
2. Combat Phase

Repair Turn (after every 3 turns)

The only changes are the addition of a Seeker Activation step, a dice roll for damage from fires burning on ships, and a Repair Turn following every three game turns. Seekers are explained under New Weapons; fires are explained under Damage; and Repair Turns are explained under Repairing Damaged Ships.

ADVANCED GAME MOVEMENT

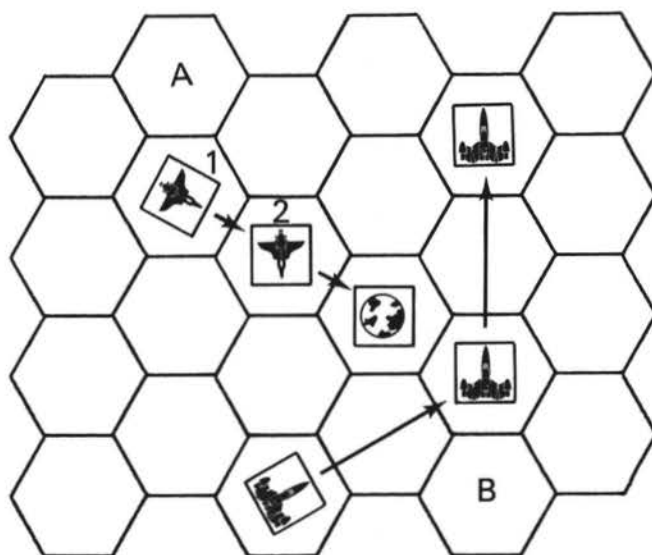
Three major changes are made to the movement rules in the Advanced Game. First, gravity has a greater effect on ships near planets. Second, ships can move off the map edge without being removed from the game. Third, ships that are damaged in battle can have their MR or ADF reduced (this is explained further under Effects of Damage).

Gravity

A ship that is traveling straight toward a planet may get caught in the planet's gravity well. A planet's gravity extends into the six hexes surrounding the planet. Any ship that enters one of these hexes by crossing the hexside directly opposite the planet's surface will be unable to pull away from the planet's gravity. The ship will crash into the planet and be totally destroyed. This is illustrated in the diagram on this page.

Moving Through Gravity Wells. A ship that moves through one of the six hexes surrounding a planet will have its facing changed by the planet's gravity. The ship's facing will be changed 60 degrees (one hexside) as the ship passes the planet. This effect is illustrated in the Gravity Diagram.

If a ship uses its MR to make a facing change away from the planet as it flies through the surrounding hexes, it can continue past on a straight course. The maneuver cancels the effect of the planet's gravity.



Ship A entered the planet's gravity well while headed straight toward the planet. Even if it turns in hex 2, it cannot escape the planet's gravity and will crash into the planet. Ship B is moving through the planet's gravity well. The planet's gravity changes the ship's course by turning it one hexside to the left. If the ship does not counter this by turning to the right, it will continue moving along its new course.

Moving Off The Map

At the end of the Campaign Book is a perforated page printed with a hexagon pattern. If a player wants to move a ship off the edge of the map, this perforated page can be placed next to the map so the hex patterns match. Ships can move and maneuver on the page the same as on the map.

This page can be photocopied, so the map can be extended as much as the players want. If a ship keeps moving away from the map, additional pages can be added next to the first.

When only a few ships are in play, a ship leaving the map from one side can move onto the opposite side of the map. Players must remember that the ship moved off the far side of the map, and treat the ship as if it was on a separate map. Also, if a ship is about to move off the map, all counters on the map can be shifted the same number of hexes toward the other side of the map. This will give the ships more room to maneuver, without changing their relative positions.

ADVANCED GAME COMBAT

The most important change in combat in the Advanced Game is the use of the Damage Table. In the Basic Game, all damage was marked off the ship's hull. The Damage Table spreads damage around, so hits can destroy a ship's weapons, engines or other components. This makes it possible for a ship to be severely damaged with only a few shots, and to be removed from the fight without being destroyed.

Besides the Damage Table, the Advanced Game adds many new types of weapons and defenses for starships, giving play-

ers more choices to make during battles. More information is given about the weapons from the Basic Game, so they can be used with the new rules.

New Statistics for Basic Game Weapons

All of the weapons used in the Basic Game can be used in the Advanced Game. The abbreviations that are used are:

FF	Forward Firing
RD	Range Diffusion
MPO	Moving Player Only
LTD	Limited Supply
RA	Range
DTM	Damage Table Modifier
HDR	Hull Damage Rating

Laser Cannon — FF / RD / RA 10 / DTM 0 / HDR 2d10

Laser Battery — RD / RA 9 / DTM 0 / HDR 1d10

Torpedo — MPO / LTD / RA 4 / DTM -20 / HDR 4d10

Assault Rocket — FF / MPO / LTD / RA4 / DTM-10
HDR 2d10+4

Rocket Battery — LTD / RA 3 / DTM -10 / HDR 2d10

ICMs in the Advanced Game

In the Basic Game, interceptor missiles could defend only the ship that launched them. In the Advanced Game, ICMs can defend any ship in the same hex as the ship that launched them. For example, an ore carrier in a hex with two destroyers may be attacked with torpedos or assault rockets. The two destroyers could launch ICMs against the missiles that were aimed at the ore carrier.

New Advanced Game Weapons

Proton Beam Battery — RD / RA 12 / DTM +10 / HDR 1d10

This weapon fires an electrical beam of positively charged particles (protons). Like all batteries, it can fire in every direction.

Electron Beam Battery — RD / RA 12 / DTM +10 / HDR 1d10

An electron beam battery fires an electrical beam of negatively charged particles (electrons). It can fire in all directions.

Disruptor Beam Cannon — RD / FF / RA9 / DTM+20 / HDR

3d10. This powerful weapon must be mounted on the bow of a large spacecraft. It fires an intense beam, alternating protons and electrons. Disruptor beams can do heavy damage to a ship's electrical system.

Mines — LTD / RA 0 / DTM-20 / HDR 3d10+5

The defending player can place mines in a hex before the game starts, or either player can drop them from a minelayer during the course of play. When a hex is mined, the player that placed the mines must record the number of that hex on a sheet of paper. When an enemy ship enters that hex, the mines detonate automatically at the end of all movement for that turn. If several enemy ships enter or pass through a mined hex on the same turn, all of them will be attacked by the mines (a mine pattern involves several hundred individual explosive devices). After the mines in a hex have exploded, the hex is no longer mined.

Seeker missiles — LTD / RA DTM-20 / HDR 5d10.

Seeker missiles are placed the same way mines are; the defending player can put them in a hex before the scenario begins, or a ship that carries seekers can drop them at any

time. Once a seeker missile is placed, it will not move until it is activated. The player that placed a seeker can activate it at the beginning of his movement phase on any turn.

Immediately after it is activated, the seeker will move two hexes toward the closest ship. If the closest ship is more than two hexes away, the turn is over for the seeker. On the next turn, the seeker will move four hexes toward the closest ship. It will continue accelerating at the rate of two hexes per turn (six on the third turn, eight on the fourth, etc.), and can make an unlimited number of facing changes to keep itself aimed at the nearest ship. A seeker can change facing up to three times before it moves each turn.

Note that the seeker may change targets many times, because a different ship may be closest to it at the beginning of each turn. The seeker cannot tell the difference between friendly and enemy ships, and will always fly toward the closest ship. If two or more ships are an equal distance from the seeker, players should roll a die to determine which ship the missile will aim at.

A seeker detonates as soon as it enters a hex containing a ship, or a ship enters the hex containing the activated seeker. If the hex contains more than one ship, the seeker will attack the largest. If the two largest ships are the same size, players should roll a die to determine which ship the missile attacks. When the seeker explodes, the player that placed it rolls one attack on the Damage Table.

On the turn that a seeker moves 12 hexes, it will automatically detonate. If there is no ship within range at that time, the explosion will do no damage. Seekers will not be attracted to planets, moons, asteroids or space stations.

New Advanced Game Defenses

None. This is a category used to describe the many ships (usually civilian) that do not have even a reflective hull as a means of defense.

Proton Screen. This screen is a field of charged particles which surrounds a ship. It is effective in blocking proton and disruptor beams, but actually attracts electron beams!

Electron Screen. This screen is the opposite of a proton screen. It blocks electron and disruptor beams, but attracts proton beams.

Stasis Screen. A stasis screen is moderately effective against all electrical beam weapons. It is not as good as a proton or electron screen against their respective weapon types, but it does not attract any beams. However, the electrical pulse of a stasis screen allows missiles and rockets to home in with increased accuracy.

NOTE: When using electron, proton or stasis screens, exceptions will occasionally arise to the rule that states "A weapon's chance to hit is determined against the most effective defense in use." Since some defenses actually attract a weapon type, the percentage chance to hit is calculated against the defense that is attracting it, not the defense that is most effective against it.

When a player activates a screen, he simply circles in pencil the notation for that screen on his ship roster. When the screen is deactivated, the circle is erased. No more than one screen can be activated on a ship at one time.

Combat Table

The Advanced Game Combat Table is used the same as the Basic Game Combat Table. All weapons and defenses used in the game are included on the Advanced Game Combat Table.

Each entry on the Advanced Game Combat Table has two percentages; the first is used in the Advanced Game, and the shaded number is used with characters who have gunnery skills (see Skills in the Campaign Book). Use only the unshaded entries for now.

COMBAT TABLE

Weapon	Defense		Reflective Hull		Proton Screen		Electron Screen		Stasis Screen		Masking Screen		ICM	Hull Damage
	None													
Laser Cannon	75%	60%	60%	45%	75%	60%	75%	60%	75%	60%	25%*	10%*	—	2d10
Laser Battery	65%	55%	50%	40%	65%	55%	65%	55%	65%	55%	20%*	10%*	—	1d10
Proton Beam Battery	60%	50%	60%	50%	25%*	15%*	70%	60%	40%	30%	50%	40%	—	1d10
Electron Beam Battery	60%	50%	60%	50%	70%	60%	25%*	15%*	40%	30%	50%	40%	—	1d10
Disruptor Cannon	60%	45%	60%	45%	50%	35%	50%	35%	40%	25%	50%	35%	—	3d10
Torpedo	50%	45%	50%	45%	50%	45%	50%	45%	75%	65%	50%	40%	-10/ICM	4d10
Assault Rocket	60%	50%	60%	50%	60%	50%	60%	50%	60%	50%	60%	50%	-5/ICM	2d10+4
Rocket Battery	40%	30%	40%	30%	40%	30%	40%	30%	40%	30%	40%	30%	-3/ICM	2d10
Mines	60%		60%		60%		60%		80%		60%		-5/ICM	3d10+5
Seeker Missile	75%		75%		75%		75%		90%		75%		-8/ICM	5d10

* Weapon causes half damage (rounded up) on Hull hits.

Damage

When a ship is hit, the attacking player must determine what damage was caused. The Damage Table lists all the possible types of ship damage. The attacking player rolls d100. The result of this roll is modified by the weapon's DTM, and the modified result is found on the Damage table. Modifiers for the various weapons are listed under Damage Table Modifiers. The number listed is added to or subtracted from the die roll.

EXAMPLE: A destroyer is hit by a proton beam battery. The modifier for a proton beam battery is +10. The attacking player rolls d100 and gets a result of 73. The weapon modifier is added, giving a modified result of 83—"Defensive Control hit."

DAMAGE TABLE MODIFIERS

Laser Cannon	0
Laser Battery	0
Proton Beam Battery	+10
Electron Beam Battery	+10
Disruptor Beam Cannon	+20
Assault Rocket	-10
Rocket Battery	-10
Torpedo	-20
Mine	-20
Seeker Missile	-20

ADVANCED GAME DAMAGE TABLE

Modified Die Roll	Type of Damage
-20 — 10	Hull hit: double normal damage
11 — 45	Hull hit: roll normal damage for weapon
46 — 49	Drive hit: lose 1 ADF point
50 — 52	Drive hit: lose 1/2 total ADF (round up)
53	Drive hit: lose entire ADF
54 — 58	Steering hit: lose 1 MR point
59 — 60	Steering hit: lose entire MR
61 — 62	Weapon hit: LC; LB; PB; EB; AR; RB
63 — 64	Weapon hit: PB; EB; LB; RB; T; AR
65 — 66	Weapon hit: DC; LC; AR; T; LB
67 — 68	Weapon hit: T; AR; EB; PB; LB; RB
69 — 70	Weapon hit: LB; RB; T; AR; PB; EB; LC
71 — 74	Power short circuit: lose all screens and ICMs
75 — 77	Defense hit: PS; ES; SS; MS; ICM
78 — 80	Defense hit: MS; ICM; SS; PS; ES
81 — 84	Defense hit: ICM; SS; PS; ES; MS
85 — 91	Combat Control System hit: -10% on all attacks
92 — 97	Navigation hit: lose maneuvering control
98 — 105	Electrical Fire: roll additional damage at +20 each turn
106 — 116	Damage Control hit: DCR cut in half
117 — 120	Disastrous Fire: DCR cut in half; lose entire ADF and MR; -10% on all attacks; roll additional damage at +20 each turn

Explanation of Results

Hull Hits. Hull hits affect the ship's hull points. The player that scored the hull hit rolls the correct number of dice (indicated by the weapon's HDR) and the result is subtracted from the target ship's hull points. If the result indicates "Double Damage," the attacker should roll the dice and multiply the result by 2.

When more than half of the ship's hull points are gone, the ship is severely damaged and there is a chance it will break apart. Whenever a severely damaged ship accelerates, decelerates or turns, the player controlling the ship must complete the following steps to determine if the ship breaks apart:

1. Subtract one-half (rounded down) of the ship's original hull points from the number of points of damage the ship has taken.
2. Multiply the result from step 1 by the number of ADF and MR points the ship is using this game-turn.
3. Roll d100. If the number rolled is equal to or less than the result from step 2, the ship breaks apart performing the maneuver. If the number rolled is greater than the result from step 2, the ship completed the maneuver safely.

A ship that is torn apart is completely destroyed.

EXAMPLE: A destroyer with 50 hull points has taken 32 points of damage. The player that controls the destroyer wants to get it away from the battle as quickly as possible, so he decides to accelerate and turn one hex side. The destroyer's ADF is 3, and 1 MR point is used to make the turn. Subtracting one-half of the destroyer's original hull points from the ship's damage gives $(32 - 25 = 7)$. The ship is using $(3 + 1 = 4)$ ADF and MR points this turn. The chance the ship will break apart is $(7 \times 4 = 28\%)$. The player rolls d100 and gets a 29—the destroyer makes its move successfully! If the player had rolled 28 or less, the ship would have been destroyed.

All weapons cause the same damage when they hit anything other than the hull. The attacker does not roll dice to reduce the ship's hull points unless the result on the Damage Table was a Hull Hit. The number of dice rolled is determined by the weapon that was used.

Drive Hit. A drive hit can cause a ship to lose 1 ADF, one-half of its original ADF or all of its ADF. If a ship with 3 ADF loses 1, its ADF is reduced to 2. If it loses one-half of its ADF, its ADF is reduced to 1 (one-half of 3, rounded down). If the ship loses its entire ADF, its ADF is reduced to 0. If a ship has taken some drive damage, and receives a "1/2 ADF" hit, it loses a number of ADF points equal to one-half of its original ADF.

Losing ADFs does not affect the ship's current speed. A ship that loses its entire ADF can turn, but it cannot accelerate or decelerate. The ship may recover ADF during the Repair Turn.

Steering Hit. Steering hits reduce a ship's MR. The hit will either lower the ship's MR by 1, or reduce the ship's MR to 0. A ship with an MR of 0 cannot turn or change its facing, even if it stops and remains in a single hex. Damage to a ship's MR can be repaired.

DRIFTING. A ship that loses all of both its ADF and MR will drift. A drifting ship travels at the same speed and in the same direction it had before it started drifting. It cannot turn, accelerate or decelerate until repairs are made.

Weapon System Hit. If a weapon system is hit, the system that is destroyed is the system that is listed first at that Damage Table result. If the damaged ship does not have that type of system, then the system listed second will be destroyed, and

so on. If the ship has none of the listed systems, then treat this result as a hull hit. If an LTD system with no ammunition left is hit, the system is still destroyed.

EXAMPLE: A destroyer is damaged in combat. The attacker rolls d100 and gets a 66—Weapon hit: DC, LC, AR, T, LB. The destroyer does not have a disruptor cannon. The next system listed is a laser cannon. The destroyer does have a laser cannon, so the laser cannon is destroyed.

Power Short Circuit. All active defenses on the damaged ship stop working. This includes ICMs and electron, stasis and proton screens, but not reflective hulls and masking screens that have already been launched. No new masking screens can be released, however. Repairing a power short circuit will remove all effects of the hit.

Defense Hit. Defense hits are handled the same as weapon system hits, except defensive systems are destroyed instead of weapons.

Combat Control System Hit. The ship's automatic targeting devices are damaged. The player must subtract 10% from this ship's chance to hit with any weapon.

Navigation Hit. The ship's navigation and steering equipment is damaged. The player controlling the ship must roll 1d10 before the ship moves. If the result is 1-5, the ship must turn to the left in each hex it enters until its MR is used up. If the result is 6-10, the ship must turn to the right. The ship remains out of control until the damage is repaired. If the ship's hull is severely damaged, these turns affect the ship's chance of breaking apart. A stopped ship can ignore a navigation hit.

Electrical Fire. Electrical equipment in the ship is burning. Place a "fire" counter on top of the ship's counter. The player must make another damage roll for this ship with a +20 modifier at the start of his opponent's combat step every turn, until the fire is put out. If a fire causes hull damage, it will cause 1d10 points of damage.

Damage Control Hit. The ship's DCR is cut in half (round fractions up). This can be repaired, the same as normal damage.

Recording Damage

The player that controls a damaged ship must mark the damage on his ship roster. If a weapon or defense system is damaged, then that system is crossed off the roster in pencil. If a torpedo, assault rocket or other LTD weapon is damaged, the entire system is shut down, not just one torpedo or rocket. When a ship's movement ability is damaged, the original ADF or MR is crossed out and the modified number written in pencil. Electrical fires, navigation, combat control and damage control hits are recorded in the box labelled "Damaged Systems" on the Advanced Game ship roster.

Most damage is cumulative. For example, if a ship takes three drive hits and each calls for the ship to lose 1 ADF point, the ship loses 3 ADF points altogether. If the ship had only 1 or 2 ADF points to begin with, then its ADF is brought to 0 and all further drive hits are treated as hull hits. Damage will remain in effect until it is repaired (see Repair).

Combat control system and damage control hits are not cumulative. After one of these systems has been hit, any more hits on that system are considered hull hits. Also, a ship can have only one fire at a time, so a result that would cause a second fire is treated as hull damage.

If the damage table indicates a hit on a system that a ship does not have (a weapon hit on a civilian ore carrier, for example), the hit is considered as a hull hit. Likewise, if a hit is scored on a ship's system that has already been destroyed by damage (a drive hit on a ship with no ADF left, for example), that hit is treated as a hull hit.

Defensive Fire

As in the basic game, the non-moving player gets defensive fire at the moving player's ships as they move. The moving player finishes moving, and then the non-moving player can shoot at the moving player's ships in any hexes they traveled through. Any damage that is caused does not take effect until the ships have finished moving, however. For example, a ship that lost its entire MR at the beginning of its move could still maneuver during that turn.

REPAIRS

Each ship in the Advanced Game has a Damage Control Rating (DCR). These range from 30 to 200. The DCR is a measure of the crew's ability to repair damage to the ship.

A special repair turn takes place after every three turns of play. This is noted on the time record track. A repair turn is not a separate measure of time, but represents the efforts of the ship's crew to repair damage over the last thirty minutes (three turns). Both sides try to make repairs at the same time. After all repair attempts have been made, the battle picks up exactly where it left off before the repair turn.

All of a ship's DCR points can be allocated during each repair turn. The number of points assigned to a specific repair equals the percentage chance that that repair will succeed. After all DCR points are allocated, the player who controls the ship rolls d100 for each repair attempt. If the roll is equal to or less than the number of DCR points allotted for that repair, the damage is erased from the ship's roster. If the roll is higher than the number of DCR points allotted for that repair, the system is still damaged.

The DCR of a ship can be used to repair as many damaged systems as a player wants to repair. However, the more systems a player tries to repair, the less likely each attempt is to succeed.

Drive and Steering Repairs. When drive or steering damage is repaired, only 1 ADF or MR point is restored per repair, even if the entire drive or steering system was destroyed with one hit. However, players can allocate more than one block of DCR points to drive or steering repairs. For example, 90 DCR points could be split into three blocks of 30 points each and applied toward three Maneuver hits. If all three rolls at 30% are successful, three MR points will be repaired.

Fires. Successfully repairing a fire extinguishes the fire, but does not repair any damage that was caused by the fire. Extinguishing a disastrous fire does not repair the ship's DCR, movement or combat control systems.

Hull Repairs. Players can repair hull damage by following the usual repair procedure for allotting DCR points and rolling for success. If the repair is successful, the player rolls 1d10. The result is the number of hull points that are restored to the damaged ship.

Automatic Failure. A damage repair roll of 90 to 00 always is unsuccessful. If the roll is 99 or 00, the damage is too severe to

be repaired in space, and requires the facilities of a station airdock. Once a 99 or 00 has been rolled for any system, no further attempts can be made to repair that system.

EXAMPLE: A battleship with a DCR of 200 has been severely pounded during the last three turns. It has lost its entire ADF (2), its torpedo system, a laser battery, its combat control system, and has an electrical fire. The player decides that the fire must be put out and that he wants to launch torpedos and repair his drives, so he puts 50 DCR points on the fire, 50 on the torpedos and 50 on each of the ADF points lost.

The fire repair roll is 89, which is higher than 50, so the fire continues to burn. The torpedo repair roll is 24, so torpedos can be launched again. The ADF repair rolls are 62 (unsuccessful) and 30 (successful), so the ship regains 1 ADF.

ADVANCED GAME SPACESHIPS

New Types of Ships

Minelayer. A minelayer is a large, lightly armed ship. Its purpose is to place defensive mines and seeker missiles throughout a section of space. In order to place mines or seekers, the minelayer simply passes through the hex where the mines or seeker will be placed. The player controlling the minelayer writes down the hex number on a sheet of paper.

Mines are activated when an enemy ship enters the hex. A seeker can be activated at the start of its movement step on any turn. Only one group of mines can be in a hex at a time. Another pattern of mines can be placed in a hex after the first group detonates. There is no limit to the number of seekers that can be placed in a hex.

Light Cruiser. A light cruiser is a fast, heavily armed ship. Light cruisers maneuver almost as well as destroyers, but carry almost as many weapons as a heavy cruiser.

Civilian. Civilian craft serve a wide range of purposes and vary in size and performance as much as military ships. Some standard designs include mining and ore transport ships, passenger liners, scientific research and exploration ships. In the Advanced Game, they are used only as objectives to be protected or attacked by warships.

Advanced Game Ship Statistics

Each type of ship that can be used in the Advanced Game is listed in this section. All of the information on weapons, defenses, movement and damage control that is needed for play is included. Players should read this section carefully, since the specifications used in the Advanced Game are different from those in the Basic Game.

The format used for each ship will be:

Ship Type; Hull Points; ADF; MR; Damage Control Rating
Weapons:
Defenses:

The following abbreviations are used for weapons:

AR = Assault Rockets	M = Mines
DC = Disruptor Beam Cannon	PB = Proton Beam Battery
EB = Electron Beam Battery	RB = Rocket Battery
LB = Laser Beam Battery	S = Seeker Missiles
LC = Laser Beam Cannon	T = Torpedos

RH = Reflective Hull	SS = Stasis Screen
ES = Electron Screen	MS = Masking Screen
PS = Proton Screen	ICM = Interceptor Missiles

Fighter:	HP 8	ADF 5	MR 5	DCR 30
	Weapons: AR (×3)			
	Defenses: RH			
Assault Scout:	HP 15	ADF 5	MR 4	DCR 50
	Weapons: AR (×4) LB			
	Defenses: RH			
Frigate:	HP 40	ADF 4	MR 3	DCR 70
	Weapons: LC RB (×4) LB T (×2)			
	Defenses: RH MS (×2) ICM (×4)			
Destroyer:	HP 50	ADF 3	MR 3	DCR 75
	Weapons: LC RB (×4) LB T (×2) EB			
	Defenses: RH MS (×2) ICM (×5)			
Minelayer:	HP 50	ADF 1	MR 2	DCR 75
	Weapons: M (×20) S (×4) LB (×2)			
	Defenses: RH ICM (×4)			
Light Cruiser:	HP 70	ADF 3	MR 2	DCR 100
	Weapons: DC LB EB PB RB (×6) T (×4)			
	Defenses: RH ES SS ICM (×8)			
Heavy Cruiser:	HP 80	ADF 2	MR 1	DCR 120
	Weapons: LB (×2) PB EB DC S (×2)			
	T (×4) RB (×8)			
	Defenses: RH ES PS SS			
	ICM (×8)			
Assault Carrier:	HP 75	ADF 2	MR 1	DCR 150
	Weapons: LB PB RB (×8)			
	fighter (×10)			
	Defenses: RH MS (×4) ICM (×10)			
Battleship:	HP 120	ADF 2	MR 2	DCR 200
	Weapons: DC LB (×3) PB EB (×2) S (×4)			
	T (×8) RB (×10)			
	Defenses: RH ES PS SS			
	ICM (×12)			
Space Station:	(Statistics for stations vary with the size and type of station.)			
	HP 20-300 ADF 0 MR 0 DCR 1/2 HP			
	Weapons: 1 EB, LB, PB or RB per 50 HP			
	Defenses: RH All Screens			
	ICM (×4-24)			

ADVANCED GAME SCENARIOS

The two scenarios described in this section are intended to give players the “flavor” of Knight Hawks games. Players are encouraged to create their own scenarios after playing these a few times. Both of these scenarios pit the UPF against the Sathar. Other conflicts (involving pirates, rebels, dictators or other interstellar ruffians) certainly are possible, and players are encouraged to experiment with new forces and situations.

Scenario 1: CLOSE ESCORT

While escorting a heavily laden ore carrier, a UPF light cruiser and a pair of assault scouts encounter a Sathar light cruiser and destroyer near a major fortified space station. Neither side will request or receive mercy, as these sworn enemies meet in modern, deadly ships.

UPF Ships

UPFS Courageous (Light Cruiser)

HP 70 ADF 3 MR 2 DCR 100
Weapons: DC LB EB PB RB (x6) T (x4)
Defenses: RH ES SS ICM (x8)

UPFS Scimitar (Assault Scout)

HP 15 ADF 5 MR 4 DCR 50
Weapons: AR (x4) LB
Defenses: RH

UPFS Dagger (Assault Scout)

HP 15 ADF 5 MR 4 DCR 50
Weapons: AR (x4) LB
Defenses: RH

UPFS Megasaurus (Freighter)

HP 75 ADF 1 MR 1 DCR 40
Weapons: None
Defenses: MS (x1)

Sathar Ships

SAV Faminewind (Light Cruiser)

HP 70 ADF 3 MR 2 DCR 100
Weapons: DC LB EB PB RB (x6) T (x4)
Defenses: RH ES SS ICM (x8)

SAV Nemesis (Destroyer)

HP 50 ADF 3 MR 3 DCR 75
Weapons: LC RB (x4) LB (x2) EB
Defenses: RH MS (x2) ICM (x5)

Setting Up. The two forces enter the map from opposite, short map edges. The Sathar player can establish whatever speed he wants for each of his ships on the previous turn. Because of the slow freighter, the UPF ships must begin with a speed of 5. After the ships are placed, each player rolls a die. The player rolling the higher number is side A, and moves first.

Special Rule. The Megasaurus must travel in a straight line at a speed of 5 hexes per turn until it has crossed the map. If it has not been destroyed by this time, it will leave the map and is assumed to have reached the safety of the fortified station as the warships resolve the battle.

Victory Conditions. The player who destroys all of his opponent's ships is the victor. If the Megasaurus escapes and all of the other UPF ships are destroyed, however, the game is a draw.

Scenario 2: THE STAND

The approach of the Sathar fleet has been observed by the residents of the fortified station at Ken'zah Kit for several days. The word has come from fleet headquarters: "No reinforcements available." The few UPF ships already at the station are ready for the fight, their officers and crew knowing the fate that will fall to the civilians on the station if they fail.

The wait is almost over.

UPF Ships

UPFB Ken'Zah Station (Space Station)

HP 140 DCR 100
Weapons: LB (x2) RB (x8)
Defenses: RH MS (x2) ICM (x10)

The following 5 fighters are based at Ken'zah Station:

Fighters A-E

HP 8 ADF 5 MR 5 DCR 30
Weapons: AR (x3)
Defenses: RH

UPFS Z'Rak't Zoz (Minelayer)

HP 50 ADF 1 MR 2 DCR 75
Weapons: M (x20) S (x4) LB (x2)
Defenses: RH ICM (x4)

UPFS Shimmer (Frigate)

HP 40 ADF 4 MR 3 DCR 70
Weapons: LC RB (x4) LB T (x2)
Defenses: RH MS (x2) ICM (x4)

UPFS Zz' Nakk'T (Frigate)

HP 40 ADF 4 MR 3 DCR 70
Weapons: LC RB (x4) LB T (x2)
Defenses: RH MS (x2) ICM (x4)

UPFS Rapier (Assault Scout)

HP 15 ADF 5 MR 4 DCR 50
Weapons: AR (x4) LB
Defenses: RH

UPFS Lancet (Assault Scout)

HP 15 ADF 5 MR 4 DCR 50
Weapons: AR (x4) LB
Defenses: RH

Sathar Ships

SAV Maelstrom (Assault Carrier)

HP 75 ADF 2 MR 1 DCR 150
Weapons: LB PB RB (x8)
Defenses: RH MS (x4) ICM (x10)

The following 6 fighters are based aboard the Maelstrom:

Fighters A-F

HP 8 ADF 5 MR 5 DCR 30
Weapons: AR (x3)
Defenses: RH

SAV Bludgeon (Destroyer)

HP 50 ADF 3 MR 3 DCR 75
Weapons: LC RB (x4) LB T (x2) EB
Defenses: RH MS (x2) ICM (x5)

SAV Viper (Destroyer)

HP 50 ADF 3 MR 3 DCR 75
Weapons: LC RB (x4) LB T (x2) EB
Defenses: RH MS (x2) ICM (x5)

SAV Deathstroke (Light Cruiser)

HP 70 ADF 3 MR 2 DCR 100
Weapons: DC LB EB PB RB (x6) T (x4)
Defenses: RH ES SS ICM (x8)

SAV Carrion (Heavy Cruiser)

HP 80 ADF 2 MR 1 DCR 120
Weapons: LB (x2) PB EB DC RB (x8) S (x2)
T (x4)
Defenses: RH ES PS SS ICM (x8)

Setting Up. The planet Ken'zah Kit is placed in the middle of the map with the station in orbit around it.

The Sathar will enter the map from one of the narrow edges, and the Sathar player must announce which edge it will be before the UPF player places his ships. The UPF player then places his ships anywhere on the map, traveling at any speed desired. The UPF player may also place mines and seeker missiles anywhere on the map, noting the numbers of the hexes on a piece of paper. The Sathar player then places his ships on the map edge. The Sathar are the attackers in this scenario, and have the first move.

Victory Conditions. The player who destroys all of his opponent's ships is the victor. The station is considered a ship for this purpose. If all of the ships on one side have been destroyed and the other side has only fighters remaining, however, the game is a draw.

Attention All Star Fleets:

bleep Request comments and questions about the Knight Hawks Game
bleep Send message via interplanetary code:

Knight Hawks Questions
TSR, Inc.
POB 756
Lake Geneva, WI 53147

bleep Enclose a stamped, self-addressed envelope (don't let a Dralasite lick it, though) bleep

Distributed to the book trade in the United States by Random House, Inc., and in Canada by Random House of Canada, Ltd.
Distributed in the United Kingdom by TSR (UK) Ltd. Distributed to the toy and hobby trade by regional distributors.

This book is protected under the copyright laws of the United States of America. Any reproduction or other unauthorized use of the material or artwork contained herein is prohibited without the express written permission of TSR, Inc.

STAR FRONTIERS and PRODUCTS OF YOUR IMAGINATION
are trademarks owned by TSR, Inc.

First Printing: March 1983 Second Printing: November 1983
Printed in U.S.A.

© 1983 TSR, Inc. All Rights Reserved.

SHIP NAME: Orion		SHIP TYPE: LC	
HULL POINTS: 70			
ADF: 3	MR: 2	DCR: 100	
WEAPONS:		RB	
DC, LB, EB, PB		T	
DEFENSES: RH, ES, SS		ICM	
SPEED:			
DAMAGED SYSTEMS:			

A form containing four ship rosters is printed on the inside back cover of the Knight Hawks Campaign Book. This form can be photocopied for personal use during Knight Hawks games.

The sample below shows how the form should be filled out for a typical light cruiser. The area of boxes can be used to mark off LTD weapons. The light cruisers on the sample form carries six rocket batteries (RB), four torpedos (T), and eight interceptor missiles (ICM). Unused boxes are darkened or crossed off to show that they are not available.

The Damaged Systems box is needed only if players are using the Advanced Game Damage Table.

PLAYING KNIGHT HAWKS WITH MINIATURES

Players interested in expanding their Knight Hawks games can use miniature metal spaceships instead of the cardboard counters included with the game. Besides being fun to paint and collect, metal miniatures are more interesting and add a new degree of excitement to the game. Be sure to look for TSR's STAR FRONTIERS Spaceship Miniatures, available wherever Knight Hawks is sold.

If the miniatures are small enough, they can be used directly on the space map. Playing with miniatures is most fun, however, when they are used without a map. To do this, simply convert all measurements to inches by letting one inch equal 10,000 km (the size of one hex).

For example, a ship that is moving with a speed of 5 travels five inches. If it has an ADF of 3, it can increase or decrease its movement by three inches per turn.

A ship can turn up to 60 degrees when it uses one MR point—this can be measured with a protractor or a cardboard template. A ship can turn less than 60 degrees, but this still uses one whole MR point. For extra realism, players can allow a ship to make several turns that add up to 60 degrees for one MR point.

Planets and moons can be cut out of cardboard and colored however the players like. These planets can be cut to reflect their real size, unlike the counters in the game. For example, the Earth would be 1.3 inches in diameter. The moon would be .3 inches in diameter, 38 inches away from the Earth.



ROLE PLAY WITH THE BEST.

Join the only official DUNGEONS & DRAGONS® game club.

Thousands of gamers the world over agree that our POLYHEDRON™ Newszine and RPGA™ network are the best way to stay in the arena with the most avid role players. There are membership cards and pins, new product releases and a two-way communication with the experts. For your membership application write:

RPGA HQ Box 509 C183
Lake Geneva, WI 53147



DUNGEONS & DRAGONS and POLYHEDRON are trademarks owned by TSR Inc. RPGA is a service mark owned by TSR, Inc. ©1983 TSR, Inc. All Rights Reserved.

What would you call the science fiction magazine that has four-time Hugo winner George Scithers as its editor?

Simply
AMAZING™
SCIENCE FICTION STORIES



AMAZING™ Magazine is now part of Dragon Publishing, a division of TSR, producers of the DUNGEONS & DRAGONS™ game phenomenon. Amazing. That's what it is!

**For subscription information contact:
AMAZING™ Magazine Subscription Dept. C193
Box 110 Lake Geneva, WI 53147**



TSR, Inc.
Products Of Your Imagination.™

DUNGEONS & DRAGONS is a registered trademark owned by TSR, Inc. "TM" designates other trademarks of TSR, Inc. ©1983 TSR, Inc. All Rights Reserved.