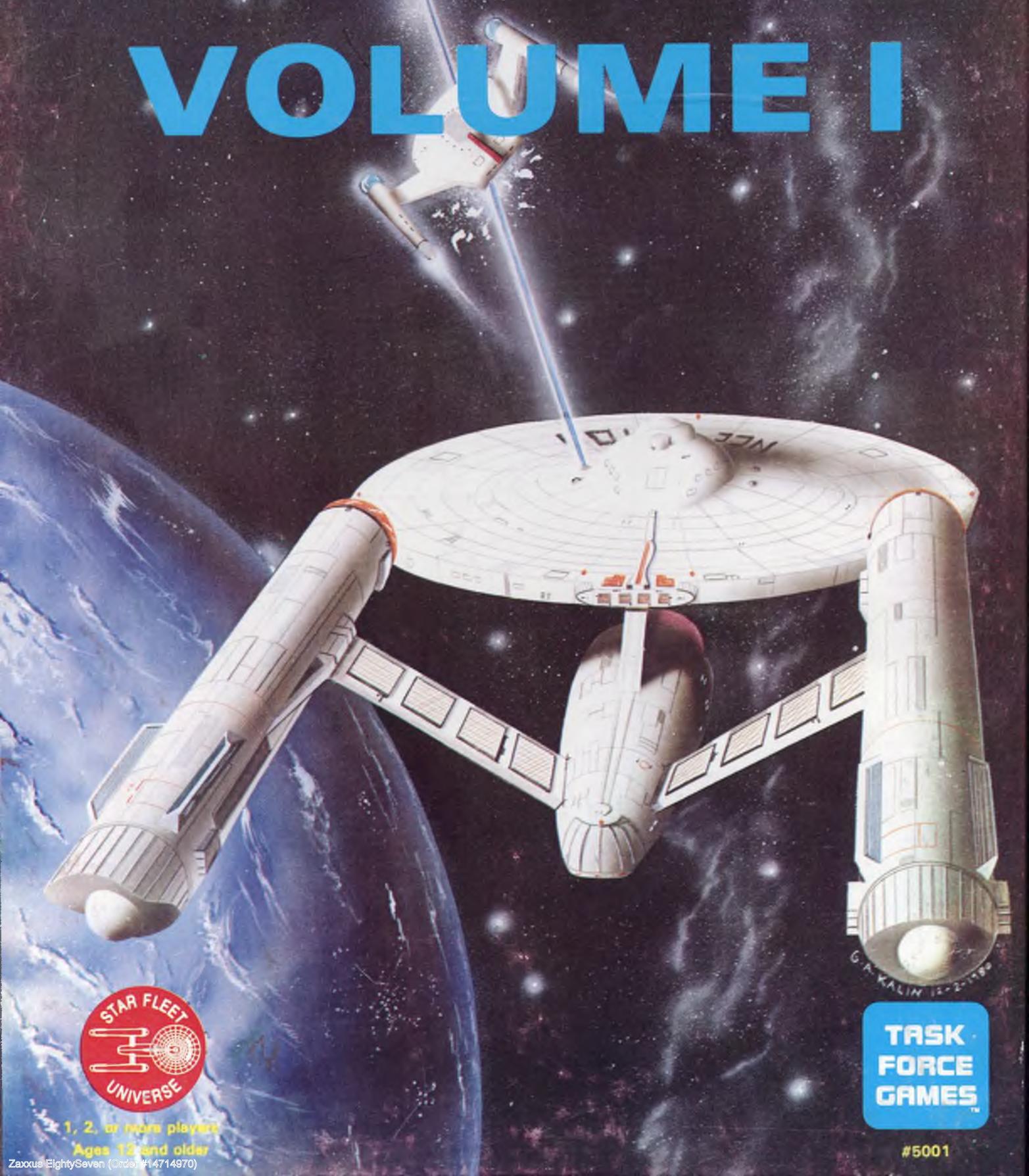


STAR FLEET BATTLES

VOLUME I



1, 2, or more players

Ages 12 and older

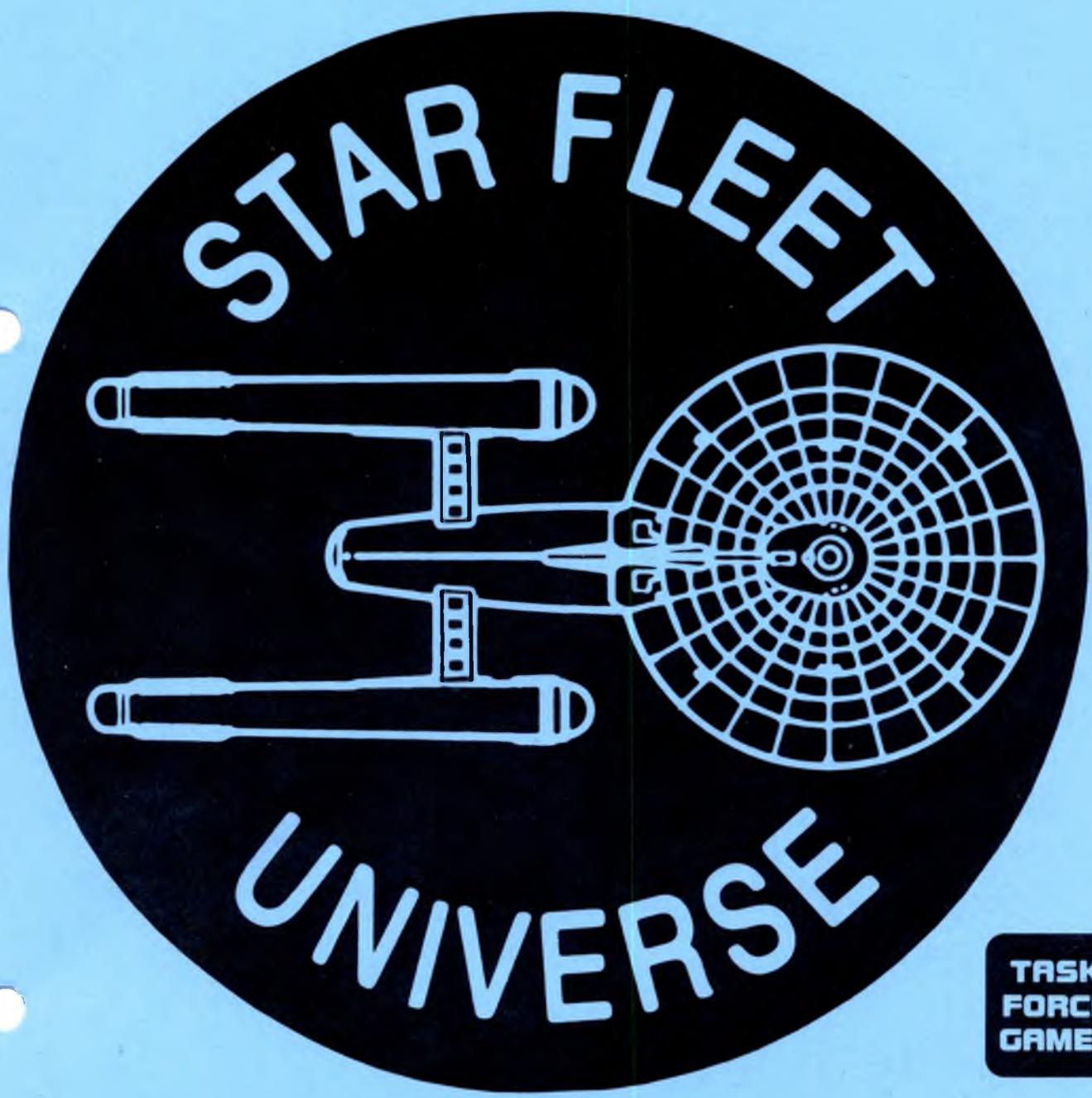
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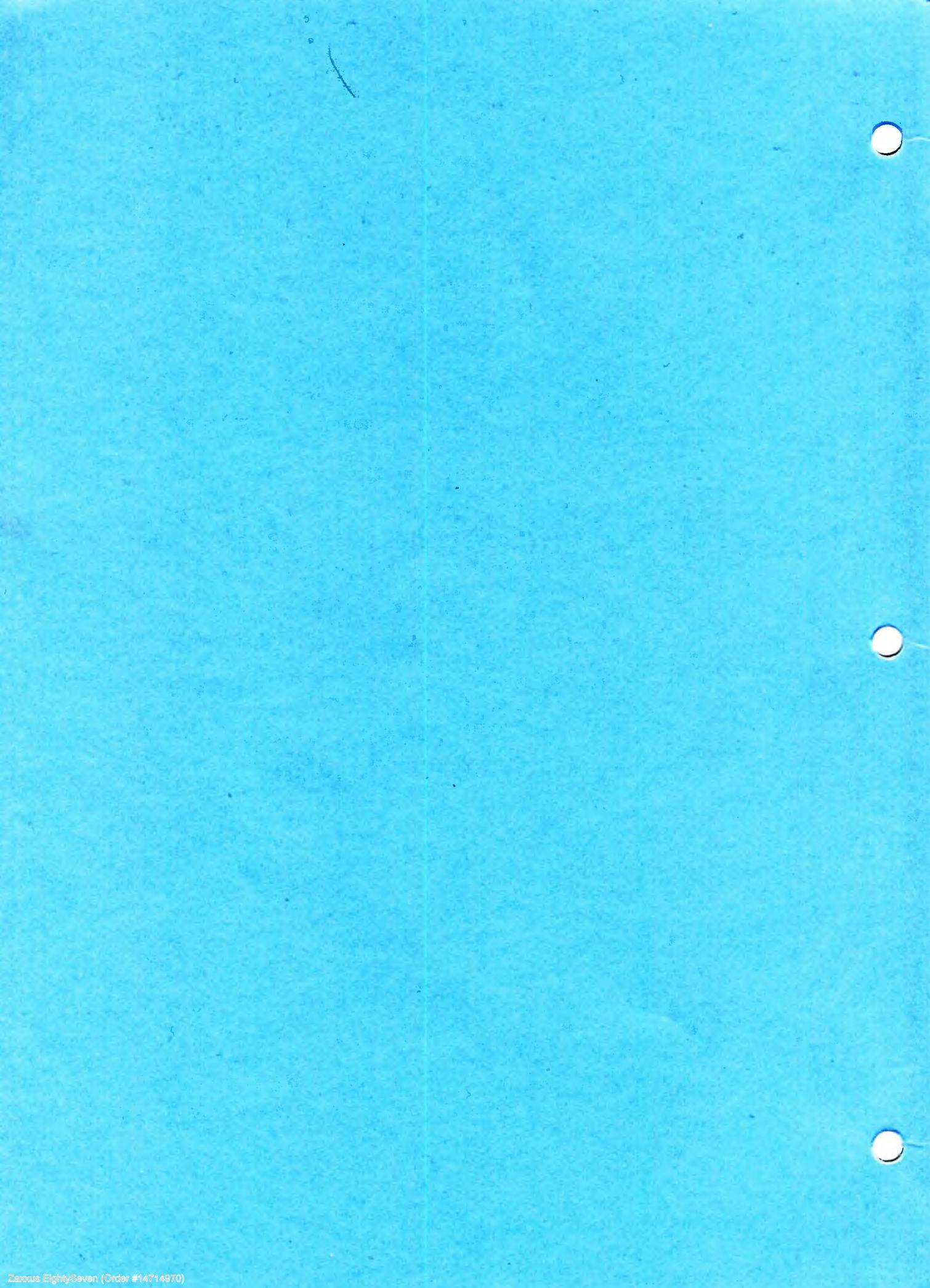
STAR FLEET BATTLES

COMMANDER'S

RULEBOOK



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STAR FLEET BATTLES

— THE COMMANDER'S EDITION

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(A0.0) GENERAL RULES**(A1.0) INTRODUCTION**

STAR FLEET BATTLES is a game of starships. Each player in the game will personally command one (or sometimes more) starships which he will use in various scenarios to perform assigned missions.

Starships in this game are portrayed at a level of detail and accuracy never before reached in simulation games. The game is, at the same time, both complex in its mechanics and simple in its execution. Many things that sound difficult upon first reading of the rules will become clear as the players attempt them. Starship captains undergo years of training for their jobs; don't expect to master this game in a day. But conversely, you need not concern yourself with the thousands of details faced by a starship captain, who spends over half his time on administrative problems (something that you, the game player, will not have to bother with).

(A1.1) INTRODUCTION TO THE COMMANDER'S EDITION

STAR FLEET BATTLES began in 1979 as a 28-page "pocket edition" game with 14 starships, 7 scenarios, and 108 counters. The instant popularity of the game resulted in the boxed Designer's Edition (roughly twice as large) and three expansions (each the size of the original pocket game). Long before the third of those expansions was complete, it was realized that the rules had outgrown the organizational format (which was still that of the pocket game). *STAR FLEET BATTLES* had to stop and "catch its breath," and the result was this rulebook.

This edition of the game has been designated as *COMMANDER'S EDITION STAR FLEET BATTLES*, as distinguished from the *DESIGNER'S EDITION* and *POCKET EDITION*.

Many of you reading this will be unfamiliar with the original editions of the game. You have the advantage of not having to wade through changes made (rather haphazardly) over a period of years, but will have to suffer through a few "ghosts" in the rules. Some things will not be clear until you have studied volume II.

Veterans of the game (who have awaited this rulebook with considerable excitement) will find that many things have been simplified and codified. Many rules sections (such as phaser capacitors and the infamous "anything on any impulse" rule) have been presented in bits and pieces, while others (such as tractor beams, webs, and cloaking devices) have been continually revised until what is left as the "rule in force" is a patchwork of three different systems. All of this has been corrected in this rulebook. These rules supersede all previously published rules. If a familiar rule is gone, you can safely assume that it has been voided, not simply forgotten. One example is that, under the *COMMANDER'S EDITION*, there is no penalty for firing overloaded weapons.

Volume I of the new *COMMANDER'S EDITION* includes everything from the old boxed Designer's Edition, plus all of the errata from the three expansions and certain rules sections from them. Volume II will include the remainder of the material from the three expansions. Volume III will include all of the material from the unpublished expansions 4, 5, and 6 and will complete the project. Thereafter, the rules will be expanded by supplements and material from the two magazines (*NEXUS* and *CAPTAIN'S LOG*).

Those of you who have the three previously published expansions should be able to continue using them (with only minor difficulty) until Volume II is released. Those who are meeting *STAR FLEET BATTLES* for the first time need not fear that you have only "half a game." You have a complete game; Volume II simply adds to and builds on it. You can play *STAR FLEET BATTLES* with ease and pleasure without ever seeing Volume II. Anything mentioned in this rulebook which is identified as a Volume II rule can be safely ignored until (and unless) you add Volume II (or other expansion). Players will find numerous references to Volume II, Supplement I, and other products. This will make integration of those volumes easier; the fact that such references are available indicates the advantage of knowing what will be in those volumes in advance.

Many rules sections have undergone major (or minor) "damage repairs" since their original publication. These include electronic warfare, cloaking devices, scenario format and victory conditions, and the Tholian web. A few hours of study (for those familiar to the Designer's Edition rules) will yield a full understand-

ing of these changes. It should be obvious that a player familiar with the changes will hold a considerable advantage over one who is not, especially if the moment of calling attention to the change is judiciously chosen.

(A1.2) STARLINE 2200 MINIATURES

The game as presented in this package uses die-cut playing pieces to represent the starships, planets, asteroids, shuttlecraft, drones, monsters, etc. used in the game. There is an alternative, however, that will dramatically increase the visual imagery of the game: miniature starships.

A boxed set of five miniature starships, also produced by Task Force Games, is available to complement *STAR FLEET BATTLES*. This special set of starships is available in most of the finer toy and hobby stores where *STAR FLEET BATTLES* itself is available. A special set of miniatures rules (section W) is included in *COMMANDER'S SFB*, as are the needed turn gauges and other equipment. A special scenario (SN6.0) designed specifically to be used with this set of miniatures is included in section (W0.0). If you purchased this boxed set of miniatures with your *COMMANDER'S SFB* game, you will find everything included here to use them immediately. It might be noted that while the boxed set includes five ships, and while scenario (SN6.0) uses all five ships, the Klingon D7 battlecruiser and Federation heavy cruiser can be used in scenario (SG1.0), which is the basic duel scenario of the Cadet's (or beginner's) Game. See (A4.0).

This boxed set of miniatures will introduce you to the *STARLINE 2200* series of miniatures, all in a constant 1/3788 scale. (In this scale, the Federation heavy cruiser is 3" long.) At the time of this writing, some 30 ships are available, with more being added all the time.

(A1.3) SOURCE DATA

At some point prior to 1970, the master computer at U.S. Air Force Security Control in Omaha, Nebraska, received a transmission, apparently via a time warp, from Star Fleet Headquarters some 250 years in the future. The Air Force discovered this information during 1970, and turned it over to Franz Joseph Designs, an aerospace consulting firm, in 1973 for analysis.

The memory files, which comprise several thousand printed pages and were badly garbled in transmission and translation, appear to be a history of the United Federation of Planets, its Star Fleet, and nearby regions of the galaxy, including a considerable amount of technical data.

Through the cooperation between Franz Joseph Designs and Amarillo Design Bureau, this data (a very small portion of which was published earlier as the Star Fleet Technical Manual) has been used as a basis for this game. Changes made in the rules and history reflect additional material obtained from the tapes. At present, virtually 75% of the material has yet to be translated or analyzed. As more material is translated (by our dedicated staff), it will be used as the basis for additional games.

(A2.0) GENERAL COURSE OF PLAY

The game is divided into scenarios, which are specific missions (usually combat against other starships). Each scenario is played in turns, and each turn is divided into several phases and a number of "impulses." During each turn, the players will determine the amount of energy that is available from engines, reactors, and batteries and will allocate this power to move, fire weapons, operate shields, and use other instruments and equipment. Then the starships in the scenario will actually be moved (using a proportional movement system to reflect relative speed) and will fire their weapons during movement, as the "enemy" starships come within optimum range. Damage is recorded on ship systems displays. These are a stylized layout of the ship with small boxes labeled for each of the various systems. As the ship takes damage in combat, the boxes are checked off. The ship's systems display is used to determine just what systems are still operating. Play generally continues until one player has taken so much damage that his ship no longer has a chance of winning, and attempts to escape at high trans-light speed. The player who managed to keep his ship relatively undamaged while damaging the enemy ship (or ships) wins the scenario. In some cases, the enemy might be a "monster" of one type or another. These scenarios can be particularly challenging.

(A2.1) BASIC CONCEPTS

There are three basic concepts to *STAR FLEET BATTLES* that must be understood and mastered in order to get the most out of the game. These are ENERGY ALLOCATION, the SHIP'S SYSTEMS DISPLAY, and PROPORTIONAL MOVEMENT.

The energy allocation system is basically a management tool. Power can be drawn from the warp (anti-matter) engines, the impulse (nuclear ionic) engines, the auxiliary (nuclear) reactors, and (for short periods) from batteries. This is recorded on a special Energy Allocation Form, but is not a simple total. Movement requires warp energy, as do certain weapons. Generally, there is never enough energy to move at full speed, fire all weapons, and operate all of the other equipment on board at the same time.

The Ship's Systems Displays (SSD's) are the second basic concept. Each box represents some specific piece of equipment, which has certain requirements and capabilities. The more boxes there are (or remain unmarked) on the SSD, the more powerful the ship is.

Proportional movement is difficult to explain but relatively easy to perform. Each ship moves a number of hexes each turn. The exact number is determined by the energy allocated to movement. Each turn is divided into 32 (sometimes fewer) impulses. A ship that is moving at a speed of 16 hexes per turn will move in every other impulse. A ship moving at a speed of 10 hexes per turn will move in (approximately) every third impulse. Thus, all ships are continuously moving throughout the entire turn, but at the proper and relative rates of speed. This system closely approximates reality. This system is superior to systems where first one player moves his units and then the other player moves his, and to systems where all units move at the same speed but some stop moving during the middle of the turn while other, faster, ships keep moving.

(A3.0) GENERAL INFORMATION

(A3.1) RULES ORGANIZATION

Each rule in the *COMMANDER'S EDITION* of *STAR FLEET BATTLES* is assigned an alpha-numeric designation referred to as a "rule number." This system is organized in a hierarchy, reading left to right.

(A3.11) SECTIONS: The game is divided into sections, each designated by a letter. For example, you are now in "section A" which deals with "General Rules and Information." All rule numbers in section A begin with the letter "A" as in (A3.11), the number of this rule.

(A3.12) SYSTEMS: After the letter and before the decimal point are one or two digits which refer to a specific system, weapon, or major group of rules. These are read consecutively, and there is no particular relationship between, say, rule G5 and G15.

The letter and numbers left of the decimal point will bring you to a rule concerning one specific subject. For example, section E concerns direct-fire weapons, while E2 concerns phasers and E4 concerns photon torpedoes. The system works from left to right, from the general to the more and more specific.

(A3.13) SUBDIVISIONS OF THE RULES: To the right of the decimal point, the numbers work somewhat differently. Rule 1.23, for example, is not the 23rd thing the designer wanted to say about rule 1, but the third thing about the second topic under subject #1. For example, section E3 refers to the disruptor bolts mounted on Klingon (and some other) starships. Rule (E3.1) identifies which boxes on the SSD's are disruptors; (E3.2) explains how to fire them; (E3.3) tells how to determine the amount of damage they cause; (E3.4) is the probability table used to resolve disruptor fire; (E3.5) describes how disruptors can be "overloaded" for additional effect at shorter ranges; and (E3.6) explains the effect of certain advanced targeting and fire-control systems on disruptor fire. There is no rule (E3.7) or (E3.8) because only six topics within the subject of disruptor bolts require discussion. Rules (E3.21) through (E3.24) describe certain additional rules, restrictions, or information about firing disruptor bolts. These rules come between rules (E3.2) and (E3.3), not after them.

(A3.14) EXCEPTIONS: As with all things, there are exceptions to the rules about the organization of the rules. Section F, which deals with "seeking weapons" (those that home in on their

targets) is divided into two major parts. Rules dealing with missiles (called drones in SFB) begin with FD, while rules dealing with plasma torpedoes begin with FP. Other than having two letter superscripts, the rules work normally within those sections. Section S (scenarios, the battle incidents you will be playing) is divided into general scenarios (SG), historical scenarios (SH), and monster scenarios (SM). Scenarios for this game presented in *NEXUS* magazine are designated (SN) while those presented in *CAPTAIN'S LOG* magazine are designated (SL).

There is a further exception in section R, which deals with specific information about each starship in the game. In that section, and in that section only, numbers to the right of the decimal are fully consecutive. In this section only, rule (R2.11) comes after (R2.10), not between (R2.1) and (R2.2).

(A3.15) LEVELS OF RULES: Rules in *COMMANDER'S STAR FLEET BATTLES* are divided into several levels of complexity. Rules not otherwise marked are part of the STANDARD GAME. These are rules that should be learned and mastered; they are the core of the game. Some of these rules are assigned by (A4.0) as part of the CADET'S GAME, a very simplified version designed to allow players to gain experience with the game after a very short period of study.

Some rules are marked as ADVANCED. These are rules that should be learned in order to experience the full enjoyment and challenge of the game. Players should master the STANDARD GAME before using any of the ADVANCED RULES.

The next level is the OPTIONAL RULES. These rules are not necessary to play most of the scenarios, but may be used to add increased challenge. The use of optional rules requires the mutual consent of all players in the scenario.

The highest level is the COMMANDER'S LEVEL RULES, which are for the most experienced players. These rules are very complex and require considerable knowledge of the entire game system.

(A3.16) ANNEXES: Some information changes with every expansion to the game. The prime example is the MASTER SHIP CHART, which lists every ship in the game. Obviously, since each expansion adds new starships, the chart must be replaced with a new one listing all of the old ships together with all of the new ones. A series of annexes provides a capability to continually update the primary data of the game with each expansion.

It should be noted that the annexes provided with the *COMMANDER'S EDITION* are complete through Volume II and Supplement #1. This is for the benefit of veteran player's of the game. As with all other sections, a player new to the game should not be concerned about seeing a ship that he has never heard of listed on the chart. Likewise, do not be intimidated by the size of the chart (and the challenge it presents). Once you have mastered the basic concepts of the game, you will find yourself reaching for more and more ships, systems, and challenges.

(A3.17) UPDATES

From time to time, the designer and publisher may replace certain pages in this rulebook with revised pages. These revised pages (with revised, expanded, or corrected rules) may be included in a future expansion or simply included in future printings. In either case, the updated pages will be made available to players of the game; watch *Nexus* magazine for information and instructions.

(A3.2) GAME EQUIPMENT

Included in the boxed *STAR FLEET BATTLES COMMANDER'S EDITION* are: one rules booklet, one 24" x 20" playing map, two six-sided dice, 216 die-cut multi-colored playing pieces, two copies of the Energy Allocation Form, two proportional movement charts, and six sheets of ship's systems displays. Each sheet includes several ships. These diagrams are referred to as SSD's. The SSD's are used in the game to record damage to the various ships. Players should take great care with the SSD sheets as they are required for play. Additional copies are available, see (Z5.0). Players may wish to use marking pencils and page protectors (wiping the sheet clean after each use) or to produce extra copies of the SSD's (which could then be marked with regular pens or pencils and discarded after each playing). Purchasers of this game have the permission of the publishers to produce, by any convenient means, copies of the SSD sheets, Energy Allocation Forms, and movement charts for their own private use. Reproduction for sale or in publications is NOT authorized.

(A3.21) COUNTERS (PLAYING PIECES)

(A3.211) The die-cut counters are used to represent the various starships and weapons which are used in the play of *STAR FLEET BATTLES*. Generally, each counter represents one starship, weapon, shuttle, monster, etc.

(A3.212) The race/nation/empire of the counter is shown by its color. Because each new expansion volume and supplement add new counters with new races, the colors are given in Annex #7A.

(A3.213) Each counter displays a silhouette of the ship represented (in plan view) as well as an identifying abbreviation to more readily distinguish ship types and an identification number to distinguish one ship from another of the same type.

(A3.214) While the counters included with the game will be adequate for most of the scenarios in the game, players who are devising their own scenarios may wish to have more of some particular type. There is nothing wrong with using a counter for something that it was not specifically intended to be, so long as this is made known to your opponent prior to the start of play. For example, if you wished to have five Federation heavy cruisers in a given scenario, you might use two command cruisers to "fill in," telling your opponent of the substitution. Alternatively, if you wished to have 12 Klingon D7 cruisers in a given scenario, you might use the three D7's that come with the game, then use the three D6's, the three Romulan KR's, and three Kzinti strike cruisers. So long as the usage is consistent and known to the opponent, any substitution of counters is acceptable. Note, however, that it would be confusing to have both players using counters from the same race/nation. Additional counters are available, see (Z5.0).

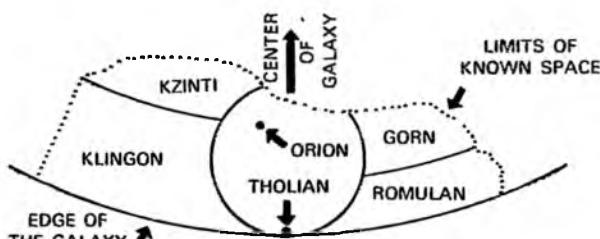
(A3.22) THE MAPSHEET (PLAYING BOARD)

(A3.221) The map used in *STAR FLEET BATTLES* is overlaid with a hex grid, used to regularize the position of each ship and its distance to other ships. Players may, if they wish, obtain a larger hex grid or additional maps (Z5.0) to expand the field of play if they are using large fleets, but the map included with the game should be adequate for all scenarios. Players may, similarly, wish to cut the map into six sections, so that, if their battles tend to drift one direction or the other, the map can be "leapfrogged" in front of the action. Alternatively, if one ship moves off the map, all ships can be shifted enough hexes to one side to correct the situation.

(A3.222) Players should note the two directional displays on the map. One is composed of numbers, the other of letters. These are used to determine direction. Players should refer to the movement rules (CO.0) for explanation of the use of these displays.

(A3.3) BACKGROUND

As can be seen from the map (below), the races portrayed in the game occupy a rather small area on the edge of the galaxy. Background material for the individual races is included in section R. More races are added to the game by Volume II and Volume III.



Based on an Original Map ©1975
Franz Joseph Designs
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The chronology below describes the major events of the game universe.

YEAR	EVENT
1	First contact between the Human race and their nearest neighbors (Orions, Vulcans, etc.).
4	Formation of the Federation.
40-46	The first Romulan War (between Federation and Romulan Republic).
45	Introduction of the cruiser design by the Federation.
46	The Romulan ceasefire.
50-82	First Klingo-Kzinti War.
62	Federation begins conversion of cruisers to warp power.
62-67	All races (except the Romulans) develop warp-powered ships.
71	Federation Star Fleet is formed, member races begin disbanding their "national" fleets in favor of the unified fleet.
82	Klingons win First Klingo-Kzinti War, depriving Kzintis of three key colony planets.
103-106	Second Klingo-Kzinti War is won by the Kzintis, regaining the three planets.
110-111	First war between the Federation and Klingon Empire. The war is bitter, but inconclusive.
113	The Federation completes the disbanding of the "national" fleets in favor of the unified Star Fleet. Sixteen Orion starships (of various types) with almost 9,000 skilled crewmen mutiny and disappear. They form the nucleus of the Orion Pirates.
123-131	Third Klingo-Kzinti War. Inconclusive results.
150-170	Primary time frame of the game.
154-155	Second Romulan War (between Romulan Empire and Federation) results in a treaty of the Neutral Zone.
156	Second War between Federation and Klingon Empire ends in the Organian Treaty.
157	The war between the Gorns and the Federation ends in Treaty of Friendship.
158-162	Fourth Klingo-Kzinti War. Results inconclusive.
159	Klingon-Romulan Treaty of Friendship is signed. Klingons begin supplying advanced technology to Romulans, resulting in greater pressure on Federation border. Federation transfers main fleet units from Klingon border to Romulan border, releasing Klingon ships to fight Kzintis.
160	First KR's and KF5R's delivered to Romulans.
161	Kzintis introduce advanced attack shuttle.
162	Romulans begin conversion of Warbirds to War Eagles at the rate of two per year.
165	Eagles launch the first of a class of shuttle carriers.
166	Federation-Kzinti Articles of Agreement.
167	Improved attack shuttle introduced by Kzintis.
168	First introduction of dreadnaughts by both Klingons and Federation.
168-185	The First General War. All races are involved in a very destructive war that covers most of the galaxy.

A more extensive chronology was provided in issue #1 of *NEXUS* magazine. It should be noted that some locally-operated campaign games are set within certain time periods, limiting the ships and technology available.

(A3.4) GAME SCALE

Each hex in *STAR FLEET BATTLES* represents an area 10,000 kilometers across. Movement at a speed of one hex per turn equals movement at the speed of light. Thus, each turn represents 1/30 of a second of subjective time. However, using relativistic variable time distortion, the time elapsed during a turn appears to the crew inside the ship to be about a minute.

(A3.5) FRACTIONS

Many of the calculations in the game will produce fractions. If not otherwise stated, drop fractions of 0.499 or less; round fractions of 0.500 or more to the next higher number.

(A4.0) THE CADET'S GAME

Players unfamiliar with *STAR FLEET BATTLES* should begin by playing the "Cadet's Game." (This is sometimes known as the "beginner's game.") This involves only certain rules sections (less than 10% of this rulebook) which are not otherwise marked. Reading them will allow you to play, within an hour or two of opening this volume, a battle between a Federation heavy cruiser and a Klingon D7 battlecruiser. Once you have played that scenario (perhaps two or three times), you will, no doubt, be anxious to read and master the remainder of the rules.

The Cadet's Game includes the following rules: (B2.1), (B2.3), (B3.0), (C1.1), (C1.2), (C1.31), (C1.4), (C2.0), (C3.0), (D1.0), (D2.0), (D3.0), (D4.0), (E1.0), (E2.0), (E3.0), (E4.0), all of section H except (H7.0), (R2.4), (R3.4), (S1.0), and (SG1.0). Anything on the SSD sheet which is not within these rules can be ignored. If your opponent destroys it, assume that you weren't planning to use it anyway so it's not important.

Read the indicated sections and play scenario (SG1.0) NOW, before going on to read any other sections. AFTER playing it, return to the rules and read those sections that immediately capture your interest. After playing another scenario or two, stop and read all rules that are NOT marked as Advanced, Optional, or Commander's Level. These other rules can be added later, after you have mastered the standard rules.

(B0.0) HOW TO PLAY THE GAME

(B1.0) GENERAL RULES

This section details the Sequence of Play (the exact order in which the actions of the game take place) and the rules for Energy Allocation.

(B2.0) SEQUENCE OF PLAY

STAR FLEET BATTLES is played in turns, of which there may be almost any number in a given scenario. Each turn consists of several phases, some of which are broken down into several segments and/or impulses. Each turn consists of several steps (primarily planning and the launching of some weapons types) followed by a number of impulses during which movement and combat take place.

(B2.1) CADET'S GAME SEQUENCE OF PLAY

1. ENERGY ALLOCATION PHASE
2. SPEED DETERMINATION PHASE
3. SELF-DESTRUCTION PHASE
4. SENSOR LOCK-ON PHASE
5. DRONE AND SHUTTLECRAFT LAUNCH PHASE
6. IMPULSE PROCEDURE
 - A. MOVEMENT SEGMENT
 - B. (Skip this segment)
 - C. (Skip this segment)
 - D. DIRECT-FIRE WEAPONS SEGMENT
 - E. POST-COMBAT SEGMENT
7. PLASMA TORPEDO LAUNCH PHASE
8. RECORD KEEPING PHASE

This completes one turn. The procedure is repeated for each turn of the scenario.

(B2.2) STANDARD GAME SEQUENCE OF PLAY

1. ENERGY ALLOCATION PHASE
2. SPEED DETERMINATION PHASE
3. SELF-DESTRUCTION PHASE
4. SENSOR LOCK-ON PHASE
5. INITIAL ACTIVITY PHASE
6. IMPULSE PROCEDURE
 - A. MOVEMENT SEGMENT
 - B. IMPULSE ACTIVITY SEGMENT
 - C. DOGFIGHT RESOLUTION INTERFACE (See Supplement #1)
 - D. DIRECT-FIRE WEAPONS SEGMENT
 - E. POST-COMBAT SEGMENT
7. FINAL ACTIVITY PHASE
8. RECORD KEEPING PHASE

(B2.3) EXPLANATION OF THE SEQUENCE OF PLAY

This section describes the basic operation of the Sequence of Play and the turn procedure. Note that a more detailed listing of all actions that can be taken during the Sequence of Play, in the specific order in which they occur, is given in Annex #2.

1. ENERGY ALLOCATION PHASE: Each player, for each ship that he controls, fills out the next available column on the Energy Allocation Form for that ship. Refer to Energy Allocation Rules (B3.0). It is by the allocation of energy that players determine, in this phase, what the speed of their ships will be during the current turn and what equipment and weapons may be operated.

2. SPEED DETERMINATION PHASE: The speeds for all ships (as well as drones, shuttles, plasma torpedoes, and any other moving objects) are announced or determined. During this phase, the controller (C1.44) prepares his control sheet.

3. SELF-DESTRUCTION PHASE: Ships which are plotted to self-destruct do so at this time, and the effects of the blast are applied immediately to any ships within range of the blast. Refer to rule (D5.0).

4. (CADET'S GAME) DRONE AND SHUTTLECRAFT LAUNCH PHASE: Players that plotted to launch drones or shuttles do so within the limits of the appropriate rules (FD1.2) or (J1.5). Note that as shuttles must plot movement, and can move in the turn of launch, the movement plots for shuttles launched on this phase should have been prepared in the first phase.

4. (STANDARD GAME) INITIAL ACTIVITY PHASE: During this phase, players take certain actions such as tractor rotations, undocking from bases, movement through an atmosphere, etc. See Annex #2; shuttles and drones cannot be launched during this phase.

5. SENSOR LOCK-ON PHASE: All ships which wish to fire at enemy ships during the current turn, or which have drones on the map targeted on other ships, MUST attempt to achieve a sensor lock-on at this time. Refer to rules (D6.1). This is resolved with a single die roll for each ship attempting lock-on for all of that ship's potential targets. The effects of the lock-on or failure to lock-on will last for the entire turn. A given ship will either have a lock-on to every other ship on the map, or to none of them. Note that in the case of ships that have not suffered sensor damage, lock-on is automatic.

NOTE: The presence of a planet or the use of cloaking devices could result in a ship having a lock-on to one enemy ship but not to another. Also, electronic warfare (D6.5), planets (P2.0), and other conditions could lower the quality of a lock-on. These conditions could also result in a lock-on being broken or reestablished during the turn.

6. IMPULSE PROCEDURE: The movement/combat portion of the turn is divided into 32 impulses. Note that players have the option of using 20, 10, or even 6 impulses in a turn, but that the rules are written in terms of 32.

A. MOVEMENT SEGMENT: The ships that will move in the current impulse are determined by the controller from the movement chart (see separate sheet). This information is announced to all players. Each player whose ship is to move in this impulse moves it one hex within the limits of the ship's turn mode (or in accordance with his pre-plotted movement (C1.32)). Note that "homing" weapons have special rules for movement. Also note that the impact of seeking weapons is determined, and any resulting damage resolved, at the end of the Movement Segment.

B. IMPULSE PROCEDURE ACTIVITY SEGMENT: This segment is used for activities that take place during the Impulse Procedure such as transporter operations, laying mines, launching shuttles or seeking weapons, recovering shuttles, or other activities specified by the rules. These activities take place in a specific order shown in Annex #2. This data is shown in an Annex so that it can be replaced and updated with each Volume, Supplement, or Expansion.

C. DIRECT-FIRE WEAPONS SEGMENT: Players determine for each of their ships if it will fire any of its weapons during this impulse. This is done secretly and simultaneously. Players announce for each of their ships if they will fire, and if so, which weapons and at which targets. Weapons are then fired in any convenient order in accordance with the rules on combat (D0.0). Damage is assumed to be simultaneous, i.e. a weapon committed to fire may still fire if it is destroyed by a weapon firing in the same segment of the same impulse.

D. DOGFIGHT RESOLUTION INTERFACE: This special section, dealing with fighters, happens only in certain impulses. For more information see Supplement #1.

E. POST-COMBAT SEGMENT: Certain decisions and announcements, detailed in Annex #2, are done at this time.

The Impulse Procedure is repeated for each impulse of the current turn. When all impulses are completed, return to the sequence of play and proceed with the Plasma Torpedo Launch Phase or Final Activity Phase.

7. (CADET'S GAME) PLASMA TORPEDO LAUNCH PHASE: After the completion of the Impulse Procedure, players who had previously plotted to fire plasma torpedoes (FPO.0) on the current turn do so by placing the counters for these torpedoes on the map, on top of the firing ship, facing in an appropriate direction.

8. FINAL ACTIVITY PHASE: See Annex #2 for details of actions and announcements made at this time.

9. RECORD KEEPING PHASE: See Annex #3 for a detailed list of the actions and announcements made at this point.

After completion of all activities of a given turn, the turn is complete and the next turn is begun. The sequence of play is repeated for each turn until the scenario is over. Note that each turn may contain a different number of impulses in the impulse procedure.

NOTE: The expanded sequence of play listing in Annex #2 has been carefully written to show the EXACT and SPECIFIC order in which the actions of a turn or impulse are to be taken. Careful study of this listing will answer many questions about the rules. The order is specifically intended to prevent (or allow) certain actions from happening on the same impulse.

(B3.0) ENERGY ALLOCATION

The heart of the game is in the energy allocation rules. Here players must determine how much power (energy) is available and how to use it most wisely.

(B3.1) PROCEDURE

Energy is calculated and allocated on an Energy Allocation Form. There are two of these included with the game. Players should use plastic page protectors and grease pencils or photocopy extra copies of this form for use in the game. Each turn during the Energy Allocation Phase, each player, for every starship he controls, must fill out the next column of his Energy Allocation Form.

Specific instructions for filling out the form are given on a line by line basis, as follows:

1. WARP ENGINES: This is the amount of warp power available. Simply count the unchecked warp engine boxes on the ship's SSD. For example, the Federation cruiser starts with 30, the Kzinti strike cruiser with 27, and the Gorn heavy cruiser with 32. This number may be reduced by combat.

2. IMPULSE POWER: This is the amount of power available from the impulse engines. Again, simply count the number of unchecked boxes. (The Fed cruiser has four.)

3. REACTOR POWER: This is the amount of power from nuclear reactors. The Klingon battlecruiser has two reactor boxes on its SSD. The Federation command cruiser also has two, but the Federation heavy cruiser has none.

4. TOTAL POWER: This is the total amount of power available from all sources other than batteries. At the start of a scenario, an undamaged Federation heavy cruiser will have 34 units of power, a Federation command cruiser 36, a Klingon battlecruiser 37, and a Gorn heavy cruiser 38. Assuming that the ship has not been damaged, line 4 will have the same number each turn.

5. BATTERIES AVAILABLE: This is the number of batteries available for use. Note the value of leaving some or all of these batteries unused as detailed in (H7.0).

6. BATTERIES DISCHARGED: This is the number of batteries which have previously been used. The total of 5 and 6 will always equal the number of undestroyed battery boxes on the SSD. At the beginning of a scenario, the batteries will all be charged. Careful players save their batteries until the ship is heavily damaged and use them to fill in, temporarily, for destroyed engines. Skillful players, however, use their batteries constantly for that one additional unit of power that can be critical. Batteries destroyed in combat are presumed to have been those previously discharged, if any such batteries exist.

7. LIFE SUPPORT: You MUST allocate energy to life support or your entire crew will perish immediately. The life support cost for a ship depends on its size class. The size class of each ship is shown on the MASTER SHIP CHART; the life support cost for each size class is shown on the chart below. Note that if a ship is crippled (S2.4) it can use emergency life support, which costs no power.

8. FIRE CONTROL SCANNERS: One unit of power will operate scanners and sensors for the current turn. If no power is allocated to this line, you cannot have a lock-on and weapons MAY NOT BE FIRED. Seeking weapons may lose their tracking and be removed, see (FD5.0).

9. PHASERS: Energy for phasers is explained in the rules on phaser capacitors (H6.0).

10. TORPEDOES: This line is used for photon torpedoes, plasma torpedoes, disruptor bolts, and other heavy weapons. The allocation of energy for each launching tube (system box) is recorded separately on one line here. The specific method of allocation for each weapon type is covered within the rules on that weapon type.

11. SHIELDS: Shields may be operated at "minimum" or "full" power. The cost for each depends on the size class of the ship, as is shown on the chart in (D3.32).

12. GENERAL SHIELD REINFORCEMENT: Any amount of power may be applied here (D3.34).

13. REINFORCE SHIELDS: Energy may be added directly to one or more specific shields. For more information on reinforcement, see (D3.34).

14. MOVEMENT: Energy is required to move the ship. This energy can come from either warp or impulse engines. No more than one unit of power can come from impulse engines, and it

will provide one movement point regardless of the size of the ship. Warp energy provides movement at a rate specified for each ship. Basically, the amount of warp energy allocated is divided by the movement cost for that ship to yield the number of movement points provided. For example, the Gorn CA has a movement cost of 1, so 17 points of warp energy will provide 17 movement points. The Federation DN has a movement cost of $1 \frac{1}{2}$, so 18 points of warp energy will provide 12 movement points. The Klingon F5 has a movement cost of $\frac{1}{2}$, so 13 points of warp energy will provide 26 movement points. No more than 30 movement points can be provided by warp engines.

15. DAMAGE CONTROL: This line is used to allocate energy using the optional damage control rules (D9.2).

16. RECHARGE BATTERIES: Energy allocated on this line will recharge previously discharged batteries. See the rules on batteries (H5.0).

17., 18., 19. These lines are used to allocate energy to miscellaneous systems not specifically listed above. Examples of these would include electronic warfare, tractor beams, transporters, or shuttles.

20. TOTAL POWER USED: This line is used as a final mathematical check to make sure that you have allocated the correct amount of power. It also serves to determine if you have discharged any batteries.

21. BATTERIES DISCHARGED: This is a record of the number of batteries which were discharged on the current turn. It is used to adjust lines 5 and 6 on the next turn.

NOTE: Except when specifically stated to do so, energy does NOT "carry over" from turn to turn.

Example: If power was allocated to movement on a given turn, this power could not be used to move the ship on a later turn. If 15 units of power were allocated to a ship on turn 5 and none on turn 6, it would move 15 hexes on turn 5 and would not move at all on turn 6. If energy was allocated to transporters on turn 5, and not used, this power is lost and cannot be used to operate the transporters on any later turn. ONLY in the case of phasers, as detailed in (H6.0), is power carried over from one turn to a later turn. In some cases (e.g. photon torpedoes) energy must be expended over a period of two or more turns. The energy expended on each of those turns comes from power generated during each specific turn.

(B3.2) FRACTIONAL ACCOUNTING (OPTIONAL)

Players willing to accept the increased workload may elect to retain all fractions when calculating energy requirements.

(B3.21) Fractions of energy points used for various systems may be combined. For example, a Klingon C8 dreadnought uses $1\frac{1}{2}$ energy points to move one hex and uses $\frac{1}{2}$ of an energy point to fire a phaser-III. Therefore, two energy points ($1\frac{1}{2} + \frac{1}{2} = 2$) would be needed to perform these two functions, but without the fractional accounting system, three points would be required since all energy expenditures are rounded up.

(B3.22) All unused fractions of an energy point can be stored in batteries; otherwise they are lost. The fractions are subject to the normal storage limits; a battery can hold less but not more than one point of energy (with the exception of certain ships in Volume II). Thus, a battery could hold $2/3$ of an energy point but not $1-1/3$.

(B3.3) LIFE SUPPORT COST CHART

The amount of life support required by a given ship depends on its size, as shown on the chart below:

SIZE CLASS	LIFE SUPPORT ENERGY COST
1	3
2	$1\frac{1}{2}$
3	1
4	$\frac{1}{2}$
5	0

(C0.0) MOVEMENT RULES

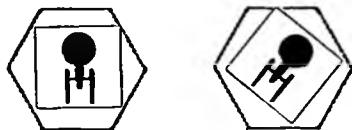
(C1.0) GENERAL MOVEMENT RULES

Starships move on the map by impulse power and warp engine power. The speed of most ships in the game varies from turn to turn, depending on the amount of power which is allocated on any given turn for movement. Each hex moved into during the course of a given turn equals one times the speed of light. (Moving 10 hexes during a given turn is equal to moving 10 times the speed of light on that turn.)

Players in this game determine the speed of their own ships during the Energy Allocation Phase by the amount of energy allocated to movement. The amount of energy allocated is limited by the rules (which restrict speed to a maximum of 31), damage taken by the ship in previous turns (which may reduce power available), the restrictions on acceleration, and tactical considerations. (It may not be necessary or desirable to move completely across the map, and the power may be needed for other things, such as shields and weapons.)

(C1.1) PROCEDURE

Ships move from hex to hex on the mapsheet. Except in rare special cases a ship moves one hex per impulse and will probably not move during every impulse. Each ship must always be within a single hex and must always be "faced" directly toward one of the six adjacent hexes.



CORRECT INCORRECT

(C1.2) FACING

A ship may be faced in any of six directions. These directions are designated by the letters "A" through "F." Note hex #4002 on the mapsheet. Arranged around this hex are these letters. This is a standard element of many games, used to designate direction. Ships moving in "direction A" move in the direction they would move in IF they were in hex 4002 and were facing toward hex #4001 (the hex with the "A" written in it.) Thus a ship in hex 0608 facing in direction A faces hex 0607, while a ship in 2210 facing in direction C faces hex 2311.

(C1.3) PLOTTING

Players use the directional notations to plot the movement of their ships. Players may elect, by mutual consent, either "pre-plotted" or "free" movement. The free movement system is assumed to be the standard system within these rules.

(C1.31) FREE MOVEMENT: Under the "free" movement system, whenever the movement chart calls for a given ship to move, the owning player may move it in any direction or combination of directions he wishes, within the limits of the ship's turn mode and other rules.

When using this rule, it is possible for two ships to be moving in the same impulse. When this happens, both players might gain a considerable benefit from knowing the other player's move. (This is not a problem with plotted movement, since the movement of both ships is committed in writing beforehand.) In such cases, monsters move first, ships second, "nimble" ships (C11.0) third, fighters fourth, and seeking weapons last. Within these groups, the slower ship moves first. If the speeds are equal, the ship with a better turn mode at that speed moves last. If speed and turn mode is the same, both players write down their movement for that impulse only and expose these written orders simultaneously.

(C1.32) PRE-PLOTTED MOVEMENT: Under the "pre-plotted" movement system, players must specifically plot the movement of their ships for the current turn in advance, during the Energy Allocation Phase. Note that "seeking weapons" are not plotted, but follow their designated targets. A simplified notation is used, wherein "2A" indicates two hexes in direction A, and "4C" indicates four hexes in direction C. Note that under all forms of plot-

ted movement, it is not necessary to plot the firing of seeking weapons, launch of shuttles, etc.

Example: A Klingon D7 battlecruiser is in hex 1021, facing hex 1122. The Klingon has decided to expend 10 units of energy in movement on this turn. Since his movement cost is 1 energy point per hex, he will move 10 hexes. A Kzinti strike cruiser is in hex 1520, facing hex 1420. The Klingon anticipates that the Kzinti ship will move slowly, if at all, on the current turn (due to tactical circumstances too complex to explain here). The captain of the Klingon ship wants to maneuver to bring himself behind the Kzinti ship, facing it at close range. He plots movement as (4C, 2B, 2A, 2F), a classic "Klingon Hook" maneuver. This movement will take him, successively, into hexes 1122, 1222, 1323, 1423, 1523, 1622, 1621, 1620, 1520, and finally to 1419. His theory is that if the Kzinti ship does not move, or moves very slowly, he (the Klingon) will get a shot at his flank shields and finally overrun him. (Note that the firing arcs of the phasers on a D7 make the hex directly behind it a particularly bad place to be.) If the Kzinti moves quickly, the Klingon will still get at least one good shot early in the turn. Note that if the Kzinti ship is badly damaged, this maneuver should bring the D7 within transporter range (for boarding purposes). Also note that if the Kzinti ship is very badly damaged, plotting movement that will end the turn adjacent to it is inviting that ship to self-destruct and possibly take the Klingon ship with it.

There are several possible variations of pre-plotted movement. The basic system, as described above, is functionally complete. The variations listed below are not required, but may be used to increase the perceived realism of the game.

(C1.321) HALF-TURN PLOTTING: Plot the movement for each turn at the mid-point of the previous turn. After half of the impulses of a given turn (16, 10, 5 or 3, depending on the chart) have been played, plot movement (and fill out the energy allocation form) for the next turn. This will require even more inductive reasoning (and shrewd second guessing) than the basic system. It is possible that, at the actual start of a turn, there may not be sufficient energy to perform all planned activities. In this event, the programmed energy expenditures must be reduced to the level of power available. In this event the following process must be followed until the imbalance is corrected.

1. Use any reserve power (H7.0) available.
2. Discharge batteries.
3. Cancel energy allocated to recharge batteries.
4. Reduce the amount of energy expended for movement by up to 50%.
5. At the owning player's option, reduce energy to systems not listed in these seven steps.
6. Reduce energy allocated (this turn) to phasers to three units, or less at the owning player's option.
7. Cancel energy used for non Phaser weapons, ejecting them into space if necessary.

If, after completing the seven steps, the imbalance has not been satisfied, the owning player may reduce planned energy expenditures at his own discretion to restore the balance. He may NOT re-establish expenditures canceled in steps 1 through 7.

This chart is used for several functions, including the effects of damage (C2.3). Note that it is not possible to cancel energy expenditures that have already been made. If, for example, weapons have already been fired, their energy cannot be used to resolve the shortage. Energy for shields (but not reinforcement) and life support can never be canceled. If all other energy expenditures are canceled, the ship simply stops moving and the shortage is ignored.

(C1.322) PURSUIT PLOTTING: When using the various "plotted" systems, a ship can be directed simply to "follow" a given ship (or other unit). If so directed, the ship is moved as if it were a seeking weapon, though with its own speed and turn mode. Should it enter the hex occupied by the ship it is following and then be required (by its speed) to move out of that hex before the target does, it moves straight ahead one hex and then begins "pursuing" the target again. Federation ships could use emergency deceleration (C8.0).

(C1.3221) Ships not using pursuit plotting may adopt it at any point in the turn by announcing the fact; it takes effect four impulses (1/8 turn) later.

(C1.3222) Ships using pursuit plotting may drop it at any point in the turn by announcing the fact. The ship is released from pur-

suing its target eight impulses ($\frac{1}{4}$ turn) later. It must plot the remainder of the turn at the time the announcement is made.

(C1.3223) A ship may also use EVASION PLOTTING, in which the ship always moves in such a way as to move farther from a given ship, unit, or object.

(C1.3224) A ship may also use STATION KEEPING PLOT, in which the ship always moves in such a way as to maintain (as nearly as possible) or attempt to restore the distance between itself and another ship, unit, or object (based on the distance at the start of the turn).

(C1.323) SEGMENTED PLOTTING: In this alternative, players must use the 32-impulse chart at all times. Plot the ship's activities for the first eight impulses. At the end of impulse 4, plot the activities for impulses 9-12. At the end of impulse 8, plot 13-16, and so on. Thus, a player will always be plotted for 4-8 impulses in advance. Players may experiment with other combinations such as 5-10, 15-30, 2-4, etc. Players fill out their energy allocation forms at the end of impulse 28 of the previous turn. Use (C1.321) to resolve any energy imbalance at the end of a turn.

(C1.4) PERFORMING MOVEMENT

Each ship will move one hex, and only one hex, during each impulse in which movement is called for by the IMPULSE CHART. If a player allocates energy for 16 hexes of movement, his ship will move one hex in each of 16 impulses during that turn.

Note: Involuntary movement not under control of any player (e.g. black hole) is in addition to movement plotted by the players.

(C1.41) GENERAL: The actual movement and firing of weapons is done during the impulse procedure; see (B2.3), Explanation of the Sequence of Play. Each turn is divided into 32 impulses.

(C1.42) MAXIMUM SPEED: The maximum allowable speed in the game is 31 unless specifically excepted; for example, see plasma torpedoes (FP0.0).

(C1.43) MOVEMENT PROCEDURE: During the impulse procedure, the various units on the map (including shuttles, drones, and plasma torpedoes) are moved by a proportional movement system. In simple terms, this means that if ship "A" is moving at 10 hexes per turn, ship "B" is moving at 5 hexes per turn, and the turn is divided into a number of impulses, then ship "A" will move during twice as many of those impulses as ship "B" and will, of course, move twice as far. A more detailed version of the procedure is included in the explanation of the sequence of play (C2.3).

(C1.44) THE CONTROLLER: During the course of the game, one player assumes the duties of "controller." These duties consist of reading the IMPULSE CHART and informing the various players when their units move. There is no particular advantage to being the controller, but in large scenarios it may be preferable to have a non-playing person perform as the controller to prevent slowing down the game.

At the start of the impulse procedure, the controller should lay the movement chart out flat and place a sheet of scratch paper over it, just below the column headings. On the edge of this sheet, under the speed column heading for the speed of each unit on the map that turn, he should mark some identifying initial or mark for that unit. Then, as each impulse begins, he lowers the sheet of scratch paper by one row, announcing the units that move in that particular impulse. For example, on impulse #7, a unit which was moving 10 hexes per turn would be told to move its pre-recorded second impulse movement.

No impulses are skipped, even if no unit is scheduled to move. Units may still fire/launch weapons and perform other functions.

For example, let us assume that in a given scenario, there is a Federation cruiser moving at a speed of 7, a Klingon BC moving 11, and a Klingon drone moving at a speed of 8. The controller sets up his sheets and marks the 11, 8, and 7 columns.

No units move during impulses #1 and #2 although weapons could be fired. The Klingon will move in impulse #3, the drone in #4, and the cruiser in #5. During impulse #6 the Klingon will move. No units move during impulse #7, but during impulse #8 the drone moves its second impulse. The Klingon moves again in impulse #9 (note, however, that the Klingon is moving HIS third impulse) and the cruiser moves in impulse #10. Nothing happens in impulse #11, but during impulse #12 the Klingon and drone

move. (There are, of course, 20 more impulses, but it would be rather redundant to go through them all.)

(C1.5) ADDITIONAL MOVEMENT CHARTS (OPTIONAL)

The game rules are written for the 32-impulse movement chart. However, there are situations in which no ship is moving anywhere near that speed, and the procedure becomes unnecessarily laborious. For this reason, charts based on 20 and 10 impulses are included with the game. (The sub-light game chart, based on 6 impulses, is also available for use.) When all ships (as well as monsters, drones, etc.) are programmed for lower speeds in a given turn, the slower speed charts may be used since these will require fewer steps to resolve the actions of the turn. Logically, if the fastest ship is moving at less than 10 hexes per turn, use the 10-impulse chart. If the fastest ship is moving from 11 to 20 hexes, use the 20-impulse chart.

(C1.51) The use of the 20-, 10-, or 6-impulse charts is for the convenience of the players. If any player insists on using the 32-impulse chart (so that he will have a particular firing opportunity), then it must be used. If the 32-impulse chart is not requested but other charts are, the highest requested chart shall be the one used.

(C1.52) As mentioned, the rules are written for the 32-impulse chart. Many activities and function within the game are set up within a specific time period designated in impulses. When using the other movement charts, adjustments must be made. Two impulses on the 20-impulse chart are equal to three on the 32-impulse chart. One impulse on the 10-impulse chart is equal to three on the 32-impulse chart. One impulse on the 6-impulse chart is equal to five on the 32-impulse chart.

(C1.6) STACKING (more than one counter per hex).

Players are permitted to freely stack counters within a given hex. Each counter is still treated independently for all purposes. Fire into a hex is directed at ONE (and ONLY one) counter within that hex. Explosions (D5.0) and Mines (M0.0), as well as WW collateral damage (J3.3) can damage several units simultaneously.

(C2.0) ENERGY COST OF MOVEMENT

(C2.1) GENERAL RULES

Movement is expressed in movement factors. During the Energy Allocation Phase of each turn, each player records on line 14 of the Energy Allocation Form(s) a number of energy points for each of his ships.

(C2.11) Energy allocated to movement can only come from warp engines or impulse engines. No more than one point of energy may come from impulse engines. One point of impulse engine energy always yields one hex of movement, regardless of the size of the ship.

(C2.12) The number of points of warp energy is divided by the movement cost of the ship. (This movement cost is shown on the SSD sheets and the MASTER SHIP CHART.) This calculation yields the number of hexes of movement provided by warp energy. No more than 30 hexes of movement (per turn) can come from the warp engines.

(C2.13) The movement provided by warp energy and impulse energy is totaled, and the result is the total number of hexes that the ship will move during the current turn.

Example: A Federation destroyer has a movement cost of $\frac{1}{2}$. On a given turn, it allocates one point of impulse engine energy and six points of warp engine energy. The six points of warp engine energy are divided by the movement cost to yield 12 hexes of movement; the impulse energy provides another movement point. The ship will move 13 hexes during the current turn.

(C2.14) Certain ships have no warp engines, but only impulse engines. These ships can never move more than one hex per turn under their own power.

(C2.15) Certain units, primarily bases, have no engines and never move. Bases can rotate; see (C3.7).

(C2.16) No ship may exceed a speed of 31 during any turn. While ships move at considerably faster speeds in getting to and from their patrol areas, combat is impossible at those speeds, and all ships are presumed to slow to 31 (or slower) before entering a tactical scenario.

(C2.17) It is necessary to keep expending power every turn to maintain movement. For example, if a given ship (with a movement cost of one) expends 10 energy points for movement on turn 1 and 3 points on turn 2, its speed on turn 2 is 3, NOT 10 or 13.

(C2.2) ACCELERATION

Movement at trans-light speeds is not, in the purest sense, movement, but rather the warping of space around the starship. As this is the case, there is no need for periods of "acceleration" as such. However, the energy conversion and transmission systems of the ships cannot suddenly change from a standing start to 500 times the speed of light.

(C2.21) When allocating energy to movement, the player may increase the ship's speed by a number which is equal to the previous turn's speed, or 10, whichever is greater. There are exceptions to this noted in the specific rule for each ship, for example freighters (R1.5) and (R1.6).

Example: If speed on turn 5 was 3, then it could be increased to no more than 13 on turn 6 (13 is 10 more than 3). If speed is increased to 13 on turn 6, then on turn 7 speed could be increased to 26 (26 is double 13).

(C2.22) There is no penalty or restriction for reducing speed or maintaining a constant speed.

(C2.23) If a ship uses emergency deceleration (C8.0) or suffers a breakdown (C6.5), its speed is considered to be zero for purposes of acceleration on the next turn.

(C2.24) A ship caught in a Tholian web is considered (for purposes of acceleration) to have continued moving at its recorded speed, even though it did not actually travel any hexes.

(C2.3) DECELERATION DUE TO DAMAGE (COMMANDER'S LEVEL)

When a ship takes damage in combat, its speed may be reduced by damage to its engines. In this case, use the procedure in (C1.321) to resolve the energy imbalance resulting from damage whenever damage reduces the number of engine boxes. Note that this procedure will affect more than just movement.

(C3.0) TURNING AND TURN MODES

Each ship in the game which moves at trans-light speed (more than one hex per turn) on a given turn must maneuver within the limits of its turn mode.

(C3.1) TURNING

The actual act of turning the ship by 60° is done at the start of a given impulse (immediately before moving into the next hex) and NOT at the end of the impulse (after entering a given hex). A ship's turn mode regulates how often a 60° turn can be made.

(C3.2) DEFINITION OF TURN MODE

A turn mode is the number of hexes which the ship must move in a straight line (straight ahead) before it can turn 60 degrees (one hex side) right or left. After each 60-degree turn, the ship must again move the stated number of hexes straight ahead before it can turn again. Turn modes increase with speed; also, less-maneuverable ships have higher turn modes.

(C3.3) ASSIGNMENT OF TURN MODES

Each ship is assigned a turn mode on the MASTER SHIP CHART. The turn mode is designated by a letter, which, on the TURN MODE CHART, indicates the turn mode of that ship at various speeds.

(C3.31) TURN MODE CHART (see separate sheet)

(C3.32) To determine the turn mode of each ship at its current speed, look under the column for that ship's turn mode rating for the speed bracket that includes the current speed. Then, look across on that line to find the turn mode (the number of hexes the ship must move in a straight line between each turn).

(C3.4) RESTRICTIONS OF TURN MODES

The hex entered on the impulse the turn was made counts as the first hex of straight line movement for turn mode purposes. **(C3.41)** Turn mode restrictions carry over from turn to turn. For example, a ship with a turn mode of 4 that moves A6-B1 on a given turn must move B3 on the next turn before making a turn to C or A (assuming no HET or change of speed).

(C3.42) Hexes moved in a straight line at the end of a previous turn, if in the same direction (forward, reverse), may be counted toward fulfillment of a ship's turn mode.

(C3.5) REVERSING DIRECTION (ADVANCED)

Ships normally move directly forward, turning 60 degrees right or left as their turn mode permits. Ships may, however, also move backwards using exactly the same turning procedure.

(C3.51) Ships may not mix forward and reverse movement during a single turn. The direction that a ship will be traveling (forward or reverse) must be noted during the Energy Allocation Phase. Direction can be changed only at this point. See possible exceptions in (C12.4).

(C3.52) Before a ship can reverse direction, however, it must pay a "braking energy" cost equal to its current speed. This energy must be warp energy, except for one point that may be from impulse power. After paying this braking cost, the ship may be given sufficient energy to move at any speed (albeit in a reverse direction) within the acceleration limits of its original speed.

(C3.6) QUICK REVERSE (ADVANCED)

Ships may attempt to reverse direction without paying the full braking energy cost. If doing so, the ship rolls a die in the Movement Segment of the impulse during which direction is reversed. If the die roll is less than or equal to the shortage (of braking energy), the ship suffers a breakdown (C6.5).

(C3.7) BASE ROTATION

Bases (including starbases, battle stations, base stations, and other types in Volume III) may be set to rotate. The owning player may elect that the base will not rotate, in which case it will keep its facing throughout the entire turn. The decision as to whether or not the base will rotate, and if so at what rate, is made by the owning player before the scenario begins.

(C3.71) The rate of rotation is at the option of the owning player, but may not be less than one 60° turn each turn, or more often than one 60° turn each eight impulses ($\frac{1}{4}$ turn).

(C4.0) SIDESLIP (ADVANCED)

The restrictions of the hexgrid used in this game create certain limitations on the movement of ships that do not correspond with reality. To correct this situation, ships may execute a "sideslip" maneuver.

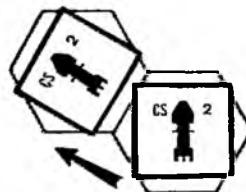
(C4.1) SIDESLIP MODE

A sideslip maneuver is executed during the Impulse Procedure. For purposes of sideslip maneuvers ONLY, all ships at all speeds are assumed to have a "slip" mode of "1." After satisfying the requirements of this slip mode (i.e. moving one hex in a straight line since the last sideslip), the ship may execute a sideslip maneuver. After executing a sideslip, the ship begins counting again to satisfy the requirements of a sideslip. After satisfying the normal turn mode, it may make a normal turn; after satisfying the sideslip turn mode of "1," the ship may execute a sideslip. Normal and sideslip turn modes are recorded and satisfied independently of each other.

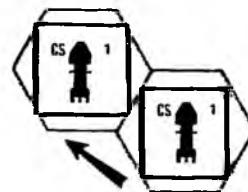
(C4.2) PROCEDURE

When executing a sideslip maneuver, the ship is moved into one of the hexes forward and to the side, but retains its original facing.

Example: A starship in hex 3212 facing A has satisfied the requirements of either a turn or sideslip. If the owning player wanted to execute a turn on the next impulse when the ship is scheduled to move, it would be turned to face direction F and moved into hex 3112. If the owning player wanted to execute a sideslip, the ship would (when next scheduled to move) enter hex 3112 but retain its heading of "A."



TURN



SIDESLIP

(C4.3) RESTRICTIONS

- (C4.31)** For purposes of satisfying the sideslip mode requirement, the hex entered during the sideslip does not count.
- (C4.32)** For purposes of satisfying the regular turn mode, the movement before, during, and after the sideslip counts as movement in the same direction.
- (C4.33)** For purposes of satisfying the sideslip mode requirement, a regular 60° turn resets the sideslip mode to zero; the sideslip mode must resume at that point. A unit may not sideslip on the hex of movement made during a normal turn. (That is, a ship may not turn and sideslip on the same impulse.)

Example: A given ship has a turn mode of four at its current speed. It is in hex 3626 facing in direction F. It moves one hex straight ahead to hex 3526. It has now (by moving one hex straight ahead) satisfied the sideslip requirement. On its next impulse the ship sideslips to hex 3525, maintaining its "F" facing. It cannot sideslip on its next movement impulse because it has not moved one hex in a straight line, so it moves ahead into hex 3424 (facing F). At this point it has satisfied the sideslip requirement and, during its next impulse, moves to hex 3423 (facing F). At this point it has moved four hexes in direction F (sideslips do not affect normal turn mode requirements), and during its next impulse it executes a turn, moving into hex 3422 facing in direction A. Note that the one hex of movement into hex 3422 counts as movement in a straight line for both turn mode and sideslip mode requirements.

(C5.0) TACTICAL MANEUVERS

(ADVANCED)

From time to time a ship's captain may be unable or unwilling to move the ship out of the hex it occupies, but want to retain the ability to turn his ship from side to side to respond to enemy operations. This is known as a tactical maneuver. There are two types of tactical maneuvers: sub-light tactical maneuvers and warp tactical maneuvers.

(C5.1) SUB-LIGHT TACTICAL MANEUVERS

Players operating ships which cannot move at trans-light speeds (for example, a Warbird or a badly damaged ship) or, on a given turn, do not wish to move at trans-light speed may either move in normal movement or use "tactical maneuvers."

(C5.11) PROCEDURE: A player wanting his ship to make sub-light tactical maneuvers may write "TAC" in his movement plot indicating the intention to use high sub-light speed for tactical maneuvers. In this case, the ship does not actually move (it remains in the hex it is in), but on any impulse AFTER the first impulse during which counters are moved, it may make ONE 60° turn.

Example: A Romulan Warbird is in hex 0305, facing hex 0304. The owning player has the option of using normal movement, in which case he could move his ship either "1A" (which would move him to hex 0304), or "1B" (which would move him to hex 0404), or "1F" (which would move him to hex 0204). If he had plotted "TAC," the owning player would be able to turn the ship to face one of these hexes, but not enter it. However, he could make this maneuver at any time and in either direction, as he sees fit during the course of the turn. Note, however, that only ONE such maneuver is permitted during each turn of the game.

(C5.12) RESTRICTIONS: A ship must spend one unit of impulse engine energy to make a sub-light tactical maneuver. This energy must come from impulse engines.

(C5.2) WARP TACTICAL MANEUVERS

In certain tactical situations a ship's captain may decide that he does not want to change his position for the next turn, but that he does wish to maintain warp maneuverability.

(C5.21) PROCEDURE: Tactical warp maneuvers are performed much like sub-light tactical maneuvers. The ship remains in the same hex for the entire turn, but can turn 60° (several times) under certain circumstances.

(C5.22) ENERGY COST: A given ship may make up to four tactical warp maneuvers during a given turn. Each requires the same

energy it would have to move one hex. Impulse energy may not be used to perform tactical warp maneuvers.

(C5.23) OPERATIONS: When a ship is designated to make tactical warp maneuvers, the number of such maneuvers paid for is announced. This is the speed used on the movement chart.

(C5.231) A ship using tactical warp maneuvers is assumed to have earned its first such maneuver on the second impulse of the turn. Thereafter, it earns an additional maneuver each time it is scheduled to "move" by the impulse chart, except on the last impulse of the turn. Thus, a ship scheduled to make four tactical maneuvers would earn one on impulses 2, 8, 16, and 24.

(C5.232) A given ship may have only one "earned" and unused tactical warp maneuver at any one time. If the movement chart calls for the ship to move (i.e. earn another maneuver) and it has not used the last one it earned, the new one is lost and the ship still has only one "earned" maneuver.

(C5.3) COMBINATIONS

A ship may use tactical warp maneuvers and sub-light tactical maneuvers during the same turn.

(C5.4) RESTRICTIONS

(C5.41) On the turn after performing tactical warp maneuvers, the ship is considered to have had a speed of "zero" for acceleration purposes.

(C5.42) If using plotted movement, the direction and impulses of tactical maneuvers need not be plotted but can be made during the turn at the option of the owning player.

(C6.0) HIGH ENERGY TURNS (ADVANCED)

All warp-powered ships are capable of making "high energy" turns. Basically, such a turn requires the application of warp energy force to bring the ship onto a new heading with a "snap turn." These maneuvers are dangerous, however, and if improperly performed (and sometimes even if they are properly performed) can result in serious damage to the ship.

(C6.1) PROCEDURE

The effect of a high energy turn is to, at the point for which it is plotted, turn the ship TO FACE ANY ADJACENT HEX regardless of turn mode. High energy turns may be made during the Movement Segment of any impulse, regardless of whether or not the ship is scheduled to move.

(C6.11) If using free movement (C1.31), the player could allocate energy for a HET and use it at any point during the turn. A ship that allocates energy for a HET (when using free movement) is not required to expend it. Any unused energy is lost.

(C6.12) If using plotted movement, the impulse on which the HET will be performed must be plotted in advance.

Example: Movement plot 7A, 5B, HET/E, 8E would indicate that on the 13th impulse a high energy turn would be used to reverse direction completely.

(C6.13) The act of making a HET is not movement per se. It will not set off mines or cause asteroid damage. It does not move the ship into the next hex.

(C6.2) ENERGY COST

Each high energy turn requires warp energy equal to five hexes of movement. The cost must be paid in addition to any energy used for movement.

(C6.3) RESTRICTIONS AND CONDITIONS

(C6.31) High energy turns do not affect acceleration and are not affected by it.

(C6.32) After a high energy turn, turn mode calculations (for normal turns) must begin again.

(C6.33) A ship may make a high energy turn during any impulse whether it is scheduled to move or not. If the HET is made during an impulse in which the ship is scheduled to move, the HET is resolved first (turning the ship to a new facing), and then movement is executed.

(C6.34) Subject to available energy and the other rules, a ship may make any number of HET's during any given turn.

(C6.35) A ship may use high energy turns on the same turn as tactical maneuvers.

(C6.36) A ship may not perform a high energy turn within $\frac{1}{4}$ turn of performing a quick reverse (C3.6).

(C6.37) No unit may make an HET on the first impulse of the turn.

(C6.4) OTHER HIGH ENERGY TURN RULES

(C6.41) Seeking weapons may perform one HET during their entire existence on the board. On the impulse that the HET is performed, the weapon does not move but the owning player may change its facing to any other direction. Seeking weapons never suffer breakdown.

(C6.42) Fighters may make one (and only one) HET per turn, but never roll for breakdown.

(C6.5) BREAKDOWN

There is a considerable possibility that a high energy turn could result in a breakdown. This is an event a bit more disastrous than having the chessboard slide off of the captain's desk, and somewhat (but only a little) less catastrophic than having the engines fall off.

(C6.51) PROCEDURE: Whenever a ship performs a HET, roll a single die to determine if the ship has suffered a breakdown. If the die roll is within the numbers specified in the ship's adjusted breakdown rating, the ship has suffered a breakdown.

Example: The breakdown rating for a Klingon D7 is 5-6. Whenever the ship makes a HET, roll a die. If the result is 5 or 6 (after certain adjustments), the ship has suffered a breakdown.

(C6.52) ADJUSTMENTS TO BREAKDOWN DIE ROLL: On the first HET during each scenario, two is subtracted from the die roll when determining the possibility of breakdown.

(C6.521) Nimble ships (C11.0) and Orion ships (C15.0) subtract two from the die roll of the first and second HET each scenario.

(C6.522) Freighters, warp-powered booms and saucers, auxiliary carriers, auxiliary cruisers, and all crippled ships do not receive an adjustment to the breakdown die roll. Certain ships in future volumes may have this limitation; if so, it will be listed in the ship specifications.

(C6.53) ASSIGNMENT OF BREAKDOWN RATINGS: Each ship is assigned a breakdown rating on the MASTER SHIP CHART.

(C6.54) EFFECTS OF BREAKDOWN: Whenever a ship suffers a breakdown, it suffers the following effects:

(C6.541) The ship immediately stops and makes no further moves on the current turn unless it "tumbles" (C6.55).

(C6.542) One third of the crew units (including $\frac{1}{4}$ of the boarding parties and $\frac{1}{4}$ of the deck crews) and one fifth of the warp engine boxes are considered destroyed (round fractions down when calculating the losses). This refers to the number of these items remaining when the breakdown occurs.

(C6.543) The ship suffers two interior hits, distributed randomly and immediately by the DAMAGE ALLOCATION CHART (D4.21).

(C6.544) Each breakdown reduces the breakdown rating by one for the remainder of the scenario. For example, 4-6 becomes 3-6 (and possibly 2-6 and 1-6 later).

(C6.545) All stasis fields and expanding spheres generated by the ship suffering the breakdown are lost immediately. All tractor beams generated by the ship suffering the breakdown are released.

(C6.546) No deck crew activities can be performed on that turn.

(C6.547) A ship suffering a breakdown is under the following restrictions until the end of the current turn, or for $\frac{1}{4}$ turn (eight impulses), whichever is less:

No weapons (see Annex #7D) may be fired.

No shuttles or fighters may be launched or recovered.

No seeking weapons may be launched. (Plasma torpedoes may be fired on the 8th impulse.)

No transporters or tractor beams can be used.

(C6.548) If a ship is docked inside a larger ship, and the larger ship suffers a breakdown, the ship inside also suffers the full effects of the breakdown, which are resolved independently.

(C6.55) TUMBLING AS A RESULT OF A BREAKDOWN

(OPTIONAL): In the event of a breakdown, roll one die. If the result is a "1," the ship has begun "tumbling" and suffers the following effects:

(C6.551) The ship CONTINUES moving in the direction, and at the speed, that it was moving BEFORE ATTEMPTING the HET regardless of its facing. Every impulse for the remainder of the turn, during the Activity Segment, roll one die and turn the ship to face in the indicated direction. Note that, in all probability, the ship will be facing in a new direction every impulse. Also note that in this case facing will have nothing to do with movement.

(C6.552) Ships that are tumbling cannot fire weapons or take any other action.

(C6.553) They are considered to be using EM.

(C6.554) At the end of that turn, it comes to a stop with a speed of 0 and its final facing is determined by die roll before the Energy Allocation Phase of the next turn.

(C6.555) Roll one die and score extra crew units killed AND extra points of internal damage equal to the result. (This is in addition to the damage from the breakdown itself. P/F's are exempted from this extra damage.)

(C6.56) EFFECT OF BREAKDOWN ON TUGS: The ungainly transport tugs, with their fragile pods, suffer more damage as a result of breakdown than most ships.

(C6.561) In the event that a tug carrying pods suffers a breakdown, roll again for each pod. If the result is within the breakdown range of the tug, the pod has separated.

(C6.562) If a pod separates, immediately apply one point of damage (directly by the DAC) to the tug and one to the pod for each unit of the tug's speed (before the breakdown).

(C6.563) The pod is detached from the tug and remains in that hex; the tug tumbles (C6.55). The pod does not tumble. Any seeking weapons targeted on the tug accept the pod as their target.

(C6.564) In the case of a Federation tug (which attaches the second pod to the first one), separation of the first pod means the loss of both. The two pods separate from each other.

(C6.565) If a separated pod is manned, roll one die and score this number of crew casualties to the crew and passengers of the pod.

(C7.0) DISENGAGEMENT

In some cases a starship captain may find himself in a situation that he cannot handle. In these cases, the only thing to do is to leave. Combat at extreme speeds (those over 31 hexes per turn) is virtually impossible due to the tremendous amounts of energy required to simply move the ship at those speeds and the inability of the weapons tracking systems to function accurately.

In cases where one starship captain simply accelerates his ship out of the area, the other captain will not normally follow (at least not closely) as he may be led into a trap. In game terms, this is disengagement.

There are four means of disengagement: acceleration, separation, sub-light evasion, and automatic.

(C7.1) DISENGAGEMENT BY ACCELERATION

(C7.11) PROCEDURE: On a given turn, the starship wishing to disengage must move at the maximum possible speed which it can, as restricted by available engine power (which may have been reduced by combat) and the game imposed speed limit of 31. At the end of that turn, if the starship in question still has total warp power available equal to either 50% of his original power (rounding fractions up) or 15, whichever is lower, the owning player simply announces that he is "disengaging." His ship is then removed from the board and presumed to return to its nearest base. If the disengaging ship is the only one (on that side) of the scenario, the scenario is over.

Example: A Klingon cruiser finds itself outnumbered by four Kzinti cruisers. The owning player elects to disengage. He moves one turn at a speed of 24 (which is the maximum he could reach because of acceleration restrictions), and on the next turn accelerates further to 29 (he cannot go 31 as he has taken two engine hits). During that turn, the Klingon ship is badly damaged, and warp engine power is reduced to 15. The ship may still break off the action by disengaging, since 15 is 50% of the original 30 warp engine boxes. If the warp engines had been reduced to 14 or fewer factors, the Klingon could not disengage and would likely have been destroyed.

(C7.12) RESTRICTIONS: The conditions of (C7.11) must be fulfilled based on engine power available at the beginning of the turn. If a ship, for example, has 30 engines at the beginning of the turn but cannot move faster than 24 due to acceleration and is, dur-

ing that turn, reduced to 24 (or fewer) engine boxes, it CANNOT disengage that turn. It must move another turn at what is now its maximum speed (24) before disengaging. The reason for this is that a ship must "prepare" for the transition to high trans-light speeds, and such preparations must be timed very closely. A ship not moving at its maximum speed would not know for sure that enemy fire will reduce its maximum speed to its current speed and could not make the preparations.

(C7.2) DISENGAGEMENT BY SEPARATION

(C7.21) If at any time a given ship is not within 50 hexes of any enemy ship, then that ship may, at the owning player's discretion, be deemed to have disengaged.

(C7.22) If seeking weapons are on the board targeted on the ship, the ship cannot disengage unless the distance from the weapon to the ship, plus the ship's maximum speed, is greater than the speed of the weapon.

(C7.3) DISENGAGEMENT BY SUB-LIGHT EVASION

Ships without warp engines (including sub-light ships such as the Warbird, separated booms from Klingon ships, separated saucers from Federation ships, ships that have dropped their warp engines, etc.) can disengage by sub-light separation. Note that only dropping the warp engines, not the mere act of turning them off, counts for this purpose.

(C7.31) PROCEDURE: The player owning a ship wishing to disengage by this method rolls one die and makes the adjustments listed below. If the adjusted result is "3" or less, the ship has successfully disengaged.

(C7.32) ADJUSTMENTS

- 1 for every friendly ship (not shuttle) within 35 hexes.
- + 1 for every uncrippled enemy ship (not shuttle) within 15 hexes.

(C7.4) AUTOMATIC DISENGAGEMENT

In certain circumstances or scenarios, a ship may be designated to disengage "automatically". One case would be a Klingon ship in a monster scenario, which automatically disengages after a successful mutiny. In this procedure, the ship is simply taken from the board and considered to have disengaged.

(C7.5) DISENGAGEMENT CONDITIONS AND RESTRICTIONS

In cases of disengagement, there may be situations in existence that must be resolved, even if this means continuing the scenario past the point at which it "ended."

(C7.51) Boarding parties on board an enemy ship that is disengaging must continue to fight until they capture the ship or are destroyed. For humanitarian or simply practical considerations, boarding parties in a hopeless situation may be ordered to surrender by the controlling player. In a similar manner, boarding parties on an enemy ship that are left behind when their own ship disengages may surrender or fight on to victory or death. Should they capture the ship, it is presumed that they force it to stop and their own vessels catch up.

(C7.52) Shuttlecraft left behind by a disengaging ship may attempt to escape using sub-light evasion (C7.3).

(C7.53) Seeking weapons targeted on a disengaging ship lose their tracking and cannot pursue it (if it successfully disengaged). Seeking weapons targeted on ships remaining behind must be resolved before the scenario can end.

(C8.0) EMERGENCY DECELERATION (ADVANCED)

ONLY Federation ships may use emergency deceleration to improve their maneuverability in a combat situation. (Ship's of other races may purchase this ability under Annex #6A.)

(C8.1) PROCEDURE

At any time during any turn, a player using Federation ships may announce his intention to use emergency deceleration. This announcement is made in the Impulse Activity Segment of any impulse. During the Movement Segment of the second subsequent impulse (including any in which the ship does not move), the ship stops and moves NO further in that turn. All unused movement energy is calculated, and the amount is divided in half. This amount

is added to the general shield reinforcement power or to the specified shields at the option of the owning player.

(C8.11) Power added to the shields may be divided, as the owning player sees fit, between either the forward shields (#1, #2, and #6) or the rear shields

(#3, #4, and #5). This power may be added to one shield or divided in any manner between the three shields of the relevant group.

(C8.12) A ship could perform a high energy turn immediately prior to executing emergency deceleration. This would be executed normally, after paying the appropriate cost.

(C8.2) CONDITIONS AND REQUIREMENTS

During the portion of the turn before emergency deceleration takes effect, the ship must still satisfy all movement and turn mode requirements for its originally stated speed.

Note: This tactic can be very useful in situations where the Federation player wants to quickly separate from enemy ships, but doesn't want to get totally out of the battle area. By announcing a speed of 20+, the ship will probably be able to move several hexes before enemy ships could move (and possibly bring weapons to bear), and yet the Federation ship can stop and await further developments without ending up all the way across the map.

(C8.21) If a ship uses emergency deceleration, it is considered to be at a speed of "0" for calculating the next turn's speed.

(C8.3) OTHER SHIPS

It is not known why the starships of other races have not used this tactic, but it is presumed to be the inability of the engines to take the strain. Players may wish to experiment with using this tactic for other races. Note that civilian-owned ships of Federation registry are not considered "Federation" ships for this purpose.

(C9.0) POSITRON FLYWHEEL (ADVANCED)

Scientists in the Federation (and presumably other areas) have experimented with a concept known as the "positron flywheel effect." This is a method of storing warp movement momentum temporarily. If used by a starship, the effect is to allow the starship to increase speed much more rapidly after a temporary reduction of speed. The effect of this in the game would be to allow a player to choose the fastest speed in the last four turns to determine his new speed. For example:

Turn	1	2	3	4	5
Speed	21	4	4	8	?

Using the standard rules, the fastest that this starship could go on turn 5 would be 18 hexes. Using the positron flywheel effect, it could use the speed on turn 1 (within the last four turns) as its base and accelerate to a speed of 42. (Note, however, that a speed of 31 is the maximum allowed in the game so the full benefit of this device could not be felt, but even 31 is better than 18.

SYNOPSIS OF VOLUME II

(C10.0) ERRATIC MANEUVERING (OPTIONAL)

(C11.0) NIMBLE SHIPS (ADVANCED)

(C12.0) CHANGING SPEED IN MID-TURN

(COMMANDER'S LEVEL)

(C13.0) DOCKING (ADVANCED)

(D0.0) COMBAT

(D1.0) GENERAL RULES

Combat takes place during the impulse procedure of each turn. Combat consists of firing weapons at the ships of the opposing player (or players) with the intention of damaging or destroying those ships.

(D1.1) PURPOSE OF COMBAT

The actions of combat are a means to an end, not an end in themselves. Combat is used, basically, to gain or maintain control of territory, or to destroy or reduce enemy forces as a means to that end. The operation of combat involves causing damage to enemy ships to such an extent as to destroy them or force them to go elsewhere.

(D1.2) OPERATION OF COMBAT

Within the game, players will use weapons to cause damage to enemy ships. The impact of each weapon results in a number of "damage points" as determined by the rules on that weapon. These damage points are then allocated to cause damage to specific equipment on board the ship, thereby reducing its capabilities.

(D1.3) WEAPONS TYPES

Weapons are divided into two types. These are "seeking" and "direct-fire." Direct-fire weapons include, for example, phasers, disruptor bolts, and photon torpedoes. Seeking weapons include, for example, drones, plasma torpedoes, and in some cases shuttlecraft. Mines (M0.0) and expanding sphere generators (Volume II) can have the effects of weapons, even though they are not actually weapons.

Direct-fire weapons are covered in section (E0.0). These are weapons which are aimed and fired at targets; their effects are resolved immediately. Seeking weapons (F0.0) are "launched" during a specific part of the turn and represented by a counter that moves on the map and follows its target.

The term "weapons" is used in various contexts to include specific items. Refer to Annex 7D for specific information.

(D1.4) RANGE

To determine the range to the target, count the number of hexes from the hex occupied by the firing unit to the hex occupied by the target unit along the shortest possible route without skipping hexes. Count the hex occupied by the target, but not the hex occupied by the firing unit. If both are in the same hex, the range is zero. This is the "true range." The "effective range" (which may be different from the true range due to sensors, scanners, cloaking devices, and other effects) is the range used on the weapons tables.

(D2.0) FIRING ARCS

All ships with weapons have these designated as to which direction they can fire. This is done in terms of firing arcs.

(D2.1) FIRING ARC DESIGNATIONS

Note the diagram below. This diagram is used to designate firing angles for all ships in the game. It is repeated on each SSD. The area around each ship is divided into six "firing arcs," each of which is designated by code letters:

LF — left forward, RF — right forward, R — right, L — left, RR — right rear, LR — left rear.

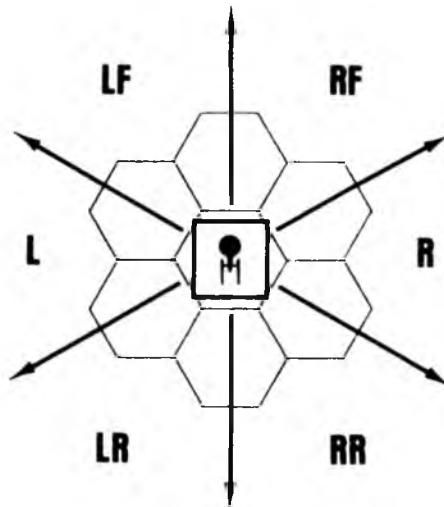
Each weapon on the SSD (except for drones and anti-drones, which can be fired in any direction) is marked with one or more of these designations. For example, the forward phasers on the Klingon battlecruiser are marked: L-LF-RF-R. This indicates that they can fire in the left, left forward, right forward, and right firing arcs. Note that when several weapons are shown as a group of adjoining boxes (such as the three phasers on the D7 just mentioned), all of them can fire in all of the arcs shown.

Each firing arc is a 60° section of the map bounded by two straight rows of hexes.

For example, a ship in hex 0925 which is facing hex 1025 (direction C) would have a right forward (RF) firing arc bounded

by the row of hexes from 0925 to 1628 (directly forward) and the row from 0925 to 0932. All hexes on these rows (which extend to infinity) are within the RF firing arc and can be fired at by any weapon capable of firing in the RF arc (examples: 1132, 1229, 1430, 1831, 0927, and 1528). Hexes outside of this arc (examples: 0716, 2610, 0924) cannot be fired at by a weapon with only the RF designation.

NOTE: Some weapons are designated as 360°. These weapons can fire in ANY firing arc. Note that each firing arc overlaps the adjacent arcs on each side by a single row of hexes. For example, all six phasers on the Federation Heavy Cruiser can fire directly ahead of the ship.



(D2.2) COMBINED FIRING ARCS

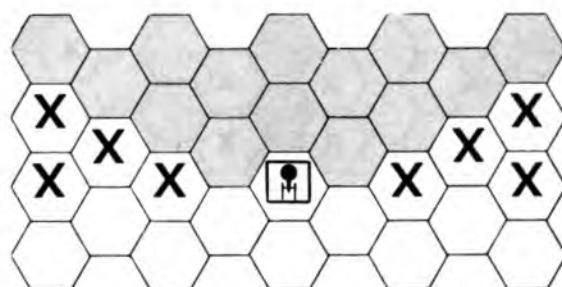
For simplicity, some firing arc designations are combined into a shorthand version. Combined designations used in the game are:

FA	= FRONT ARC	= RF + LF
FX	= FRONT ARC EXPANDED	= L + LF + RF + R
RA	= REAR ARC	= LR + RR
RX	= REAR ARC EXPANDED	= L + LR + RR + R
RS	= RIGHT SIDE	= RF + R + RR
LS	= LEFT SIDE	= LF + L + LR

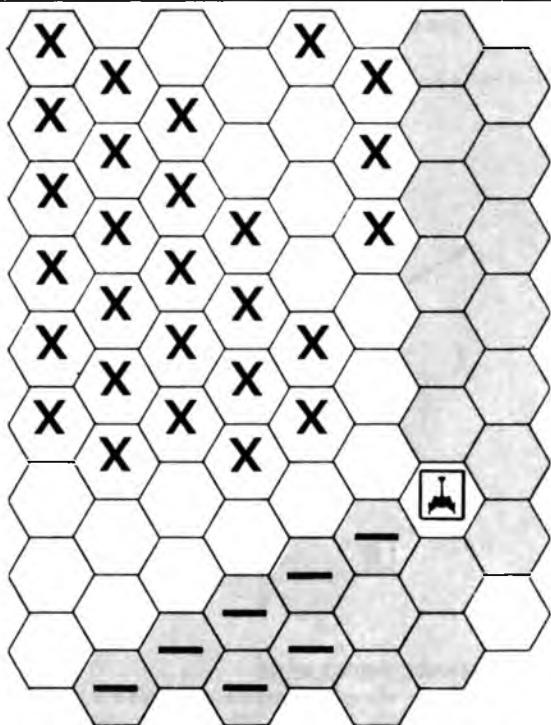
(D2.3) SPECIAL MODIFIED FIRING ARCS (COMMANDER'S LEVEL)

The limitations of the hex grid and its 60° arcs make it impossible to accurately reflect the firing arcs of certain ships. Specially designated arcs must be used.

(D2.31) FEDERATION FORWARD PHASERS: The FH (front half or front hemisphere) firing arc is that shown in the diagram below. The following ships have this arc for their FA (RF + LF) phasers: Federation CA, CC, DN, DN+, SC, DD, DE, Tug, CV, FF, FFG, and all variants built on these hulls. Their BPV includes this adjustment. Other ships may have this arc if so designated on their SSD.

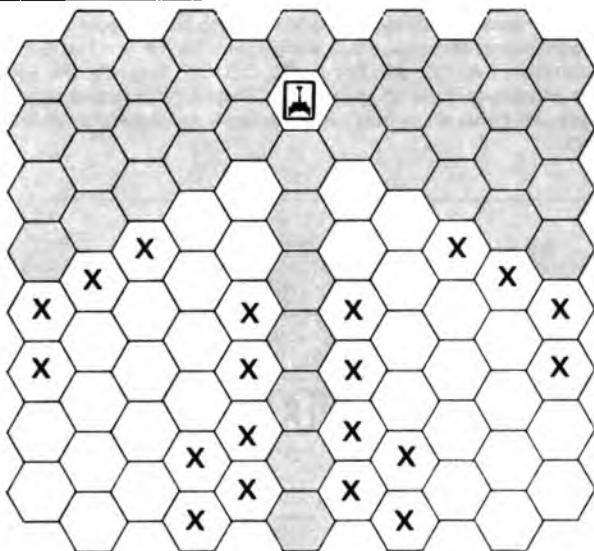


(D2.32) KLINGON WING PHASERS: The wing phasers on certain Klingon ships have a modified firing arc as shown in the illustration below. Note that this illustration is for the right wing phasers on the D7 battlecruiser. The hexes marked "X" represent hexes added to the firing arc of this position. This phaser position is able to fire cross-decks into a part of the left-forward arc, the two gaps representing the blind spots created by the command boom and left engine. This firing arc is used on the D7- and D5-class ships, as well as the tug. The adjustment is included in the BPV.

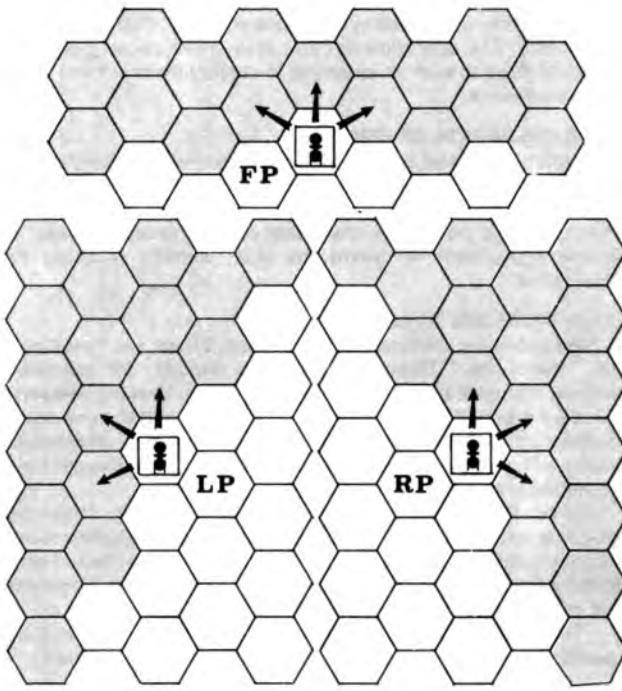


NOTE: Right Wing Phasers shown.

(D2.33) KLINGON FORWARD PHASERS: The forward phasers on certain Klingon ships use the firing arcs shown. The shaded boxes are part of their normal firing arc; the hexes marked "X" are used when the revised, "true" firing arcs are used. The forward phasers of the D7, D6, F5, E4, E3, and G2 types have the firing arcs shown. The B10, C9, C8, and tug have the extensions to the main FX arc, but cannot fire to the rear so they do not have the shaded or X hexes directly behind the ship.



(D2.34) PLASMA TORPEDO SWIVEL MOUNTS: Certain ships are equipped with swivel mounts for their plasma torpedoes. These ships are able to track targets in a 180° firing arc and to fire their weapons in any of three specified directions. The illustrations below show these arcs, which are designated LP, FP, and RP (for left, forward, and right plasma arcs). Most of the SSD sheets do not have these firing arc designations; see the ship specifications for details.



ARROWS DENOTE LAUNCH DIRECTION
SHADING DENOTES TRACKING ARC

(D3.0) SHIELDS

Shields are the primary defense of starships in this game. Shields will absorb tremendous amounts of punishment, can be operated at various power levels, and can be reinforced.

(D3.1) DESIGNATIONS OF SHIELDS

(D3.11) Each ship is surrounded by six shields. These are numbered 1 through 6, and each shield faces one of the six surrounding hexes. (For example, if a given starship was in hex 0202 and facing hex 0201, the #1 shield would be facing hex 0201, #2 would be facing 0302, and #5 would be facing 0103.)

(D3.12) The shields are fixed in position and cannot be rotated or moved. If a given shield is down, it is down until repaired by damage control (D9.0). No other shield can be shifted into its position or expanded to cover a double arc. The #1 shield will always be to the front of the starship.

(D3.2) SHIELD OPERATION

The shields are represented on the SSD's by the rectangular groups of boxes surrounding the ship. These are marked "shield #1," etc.

(D3.21) Each hit on a shield checks off one box. When all boxes on a given shield are checked off, the shield is "down." Damage points scored on a shield that is "down" penetrate to the interior and destroy systems within the ship. These are called "internal hits."

(D3.22) Shields can be reinforced (D3.3) and repaired (D9.2).

(D3.23) Shields can be dropped (D3.5), but if this is done, the fact must be announced at the start of the turn.

(D3.3) ENERGY COST OF SHIELDS

Shields can be operated at "minimum" level or at "full strength." They can also be repaired. All of this requires varying amounts of energy depending on the ship.

(D3.31) STRENGTH OF SHIELDS: Minimum shields are five boxes in each direction. Full strength shields mean that all of the boxes printed on the SSD are active and available to absorb damage. Reinforcement creates the effect of additional boxes.

(D3.32) COST OF OPERATION: The cost to operate a ship's shields is based on its size. The size class of each ship is shown on the MASTER SHIP CHART. The cost to operate shields is shown below:

Size Class 1 (starbases)	= 2 pts for minimum + 5 pts for full
Size Class 2 (dreadnoughts)	= 1 pt for minimum + 3 pts for full
Size Class 3 (cruisers)	= 1 pt for minimum + 1 pt for full
Size Class 4 (destroyers)	= 1 pt for minimum or full
Size Class 5 (P/F's)	= 1 pt for minimum or full

When using fractional accounting (B3.2), the cost of operation for size class 4 or 5 is $\frac{1}{2}$ for minimum and $\frac{1}{2}$ for full. The ship types in parenthesis are generalizations for purposes of illustration; refer to the MASTER SHIP CHART for the size class of each ship.

(D3.33) OPERATION OF MINIMUM SHIELDS: If a given shield has 20 boxes, but is operated at "minimum" level, only five of those boxes are operable and available to absorb damage. If six (or more) hits were scored on the shield in this condition, the first five would destroy the minimum level shield and the remainder would penetrate to become internal hits, even though 15 undestroyed (but unpowered) shield boxes remained. Also note that the five boxes of the minimum shield are the first to be destroyed, even if the shield is at full power. Thus if the shield above was at full power and took two hit points (reducing it to 18), and later was operated at minimum power, it would only have three working boxes. It could be reinforced.

(D3.34) REINFORCEMENT

The purpose of reinforcement is to use some of the ship's energy to absorb hits and prevent them from damaging the ship (i.e. to avoid marking out any boxes on the SSD).

(D3.341) Energy supplied for general reinforcement is divided by two, and the resulting number (round fractions down) is the number of general reinforcement points available during that turn. These points reinforce all shields and are eliminated by the first damage points from any direction (but NOT from each direction). For example, if 10 units of energy had been provided during the current turn, this would provide 5 points of general reinforcement. The first 5 damage points scored on the ship during this turn (regardless of direction) destroy this general reinforcement.

(D3.3411) General reinforcement must be used before specific reinforcement.

(D3.3412) In the case of certain weapons, such as enveloping plasma torpedoes (FP5.0) and Hellbores (E10.0), general reinforcement is subtracted from the weapon's strength before damage is calculated. In these cases, it is the number of general reinforcement points, not the number of energy points, that is subtracted.

(D3.342) Energy supplied for specific reinforcement adds a number of "extra" boxes to that shield for the duration of the current turn.

(D3.343) A shield that is down cannot be reinforced, but general reinforcement would still block fire coming from that direction up to a point.

EXAMPLE: A given ship has a front shield consisting of 20 boxes. The ship has allocated 10 points of energy to reinforce the front shield and 6 points to general reinforcement. At a given point in the turn, 2 damage points are scored on a different shield, eliminating 2 of the 3 points of general reinforcement. Later during the turn, 15 points of damage is scored on the front shield. The first point is stopped by general reinforcement, the next 10 by specific reinforcement, and the last 4 score permanent hits on the shield, reducing it from 20 boxes to 16. Note that

without the reinforcement, the shield would have been reduced to 5 boxes.

(D3.4) DETERMINING WHICH SHIELD WAS HIT BY ENEMY FIRE

It is important to determine which shield has been struck by incoming fire. In the case of seeking weapons, this is the shield facing the hex that the weapon approached from.

For direct-fire weapons, the line of fire must be determined. To do this, simply draw an imaginary line from the center of the target ship's hex to the center of the firing ship's hex, and determine which shield is crossed. For example, our imaginary ship at hex 0202 is attacked by a ship in hex 0305. A line from hex 0202 to hex 0305 crosses the hex side separating hex 0202 from hex 0203; therefore, it is the rear shield (#4) which takes the damage.

(D3.41) SHIELD BOUNDARIES: In the event that the line from the firing to target hex travels exactly along a hex side (for example, if the firing ship was in hex 0304), then the shield actually hit is resolved by examining the movement records, determining which ship would move next, and judging the firing from the position that the ships would occupy when one of them next moves. For example, in our example of ships at 0202 and 0304, if the ship at 0304 was to move next, and it was to move to hex 0303, then the shield would be determined from this position, and #3 shield would take the damage.

(D3.42) SHIPS IN THE SAME HEX: If two ships are in the same hex, firing directions are judged (for both shields and weapons purposes) from the positions occupied the impulse before the impulse on which the ships occupied the same hex. Note: Captain's Log #1 includes a more elaborate system for judging this situation.

(D3.43) RESOLUTION OF AMBIGUOUS SITUATIONS: There are certain situations that can arise in complex maneuvers where the determination of which shield has been hit becomes difficult. Players are advised to resolve the situation with common sense, guided by these principles:

A. If both ships are to move simultaneously in their next movement, and this movement still leaves the situation unresolved, judge the shield hit from the situation as if ONLY the target ship had moved.

B. If the next movement would result in a situation unresolvable by "A," or in both of the possible shields being turned away from the firing ship, resolve the situation by judging which of the potential target shields would be crossed first.

C. If no other means of resolution is possible, use one of these methods to apply the damage:

1. Divide the effect of the weapon in half and apply half to each of the two shields. If there is an odd number of hit points, allow the firing player to apply the final point to either of the two shields at his option.

2. Toss a coin (or roll a die) to determine which shield was hit.

3. Allow the owning player (of the ship) to select which shield was hit.

The method used may be selected by the players by mutual consent, but should be used consistently throughout an entire scenario.

(D3.5) DROPPING SHIELDS

Shields can only be dropped at the start of the turn and if dropped must stay down for the entire turn. This can be detected and must be announced, including which shield was dropped. This is normally done to facilitate use of transporters.

(D3.51) As an optional alternative, allow a player to drop one shield at any point during the turn (see Annex #2). This action must be announced, and the shield must remain down for $\frac{1}{4}$ turn.

(D3.6) OPTIONAL SHIELDS RULE (OPTIONAL)

Instead of all hits on a given shield being scored against that shield until it is down, allow every fourth hit to penetrate as an interior hit. This will tend to shorten games by allowing the ships to be destroyed faster. It can also create some interesting situations.

(D4.0) DAMAGE ALLOCATION

When damage is scored on a ship, the effect of that damage must be determined. This is done by allocating this damage to certain areas and systems of the ship.

(D4.1) DETERMINING INTERNAL HITS

Damage points scored must be allotted to the systems on the target ship's SSD by the following procedure:

(D4.11) DETERMINE SHIELD HIT. All hits are presumed to first hit shields. Ships have six shields (one facing each of the six surrounding hexes). In recording damage, the first step is to determine which shield was hit (D3.4). Hits scored are recorded against that shield by the procedures set forth in the shield rules.

(D4.12) ARMOR: Some of the ships included in the game have armor installed in their hulls (specifically: starbases, base stations, battle stations, the Federation CL, and the Romulan Warbird/War Eagle). Hits which penetrate the shields are assumed to strike the armor.

(D4.13) INTERNAL HITS: Any hits which penetrate the shields and armor are distributed among the interior systems of the ship (causing considerable damage) by the damage allocation procedure (D4.2) which uses the DAMAGE ALLOCATION CHART (D4.21).

(D4.14) DAMAGE RECORDS: The damage records on the SSD are not secret. Any player may examine the SSD of any ship at any time. This is unlike the energy allocation forms, which ARE secret.

(D4.15) DEFINITION: The terms "damage point" and "hit point" are interchangeable, but the term "hit" is not strictly interchangeable with either. A weapon might score a hit, which would score several damage points.

(D4.2) DAMAGE ALLOCATION PROCEDURE

This procedure is used to distribute any hits which have penetrated to the interior of the ship. The hits are distributed by the DAMAGE ALLOCATION CHART.

(D4.21) DAMAGE ALLOCATION CHART (see separate sheet).

(D4.22) PROCEDURE: First determine the number of hits which have penetrated the shield and armor (if there is any armor). Each hit must be distributed individually. All hits scored against a given shield in a given impulse must be resolved together and are collectively known as a "volley."

(D4.221) For each hit of the volley, roll two dice and find the resulting number in the "die roll" column of the DAMAGE ALLOCATION CHART (D4.21).

(D4.222) Look across (to the right) of the die roll result, and note the system listed in column "A." Normally, the hit in question is scored against one box of that type. Players must allocate EACH hit of a given volley by this procedure. However, if there are no remaining boxes of that type on the target ship's SSD (or never were any), move one column to the right and score the hit against the system listed in column "B." If there are no remaining boxes of the system type listed in column "B," move on to column "C" and so on.

(D4.223) When a particular system is determined to have been hit, the player owning the target ship MUST mark one of the boxes on his ship identified as being that system as destroyed. Thereafter (unless repaired), that system does not exist and cannot be used.

(D4.3) DAMAGE ALLOCATION RESTRICTIONS AND CONDITIONS

Several conditions, restrictions, and special rules are involved in the Damage Allocation Procedure.

(D4.31) BOLD-FACE RESULTS: Note that some of the results on the DAMAGE ALLOCATION CHART (D4.21) are printed in BOLD type. These results are treated specially. A given BOLD result can only be scored ONE time in each volley. For example, if three hits were scored, and the allocation die roll was a "12" in each case (unlikely, but possible), then these three hits would be scored against: auxiliary control, emergency bridge, and scanners. If the three allocation die rolls had all been "9," then the hits would

have been scored against left warp engine, forward hull, and forward hull. Note, however, that the prohibition against scoring a BOLD result twice is against the position of the chart, NOT against the given system. If allocation die rolls of "10" and "4" were obtained, both would be scored against phasers.

(D4.32) SPECIAL WEAPONS CONDITIONS

(D4.321) PHASER DIRECTIONAL HITS: In the case of hits against phasers, the hit must be scored against a phaser that is capable of firing in the direction from which the volley came. For example, if a Federation cruiser in hex 0619 was hit from the direction of hex 0719 (the #2 shield) and a phaser hit was called for, the owning player could mark this hit against either a forward or right phaser, since these could fire in this direction. (The Fed CC has two phasers in the secondary hull with 360° traverse. These phasers could fire in this direction and be destroyed on this hit if the target was a CC.) However, the hit could not be scored against the left phasers (which cannot fire in that direction) since the hull protects these from the blast. If such a hit cannot be scored against a weapon bearing in that direction, it is then (and only then) scored against the system in the next column of the DAMAGE ALLOCATION CHART (D4.21). Hits designated as "any weapon" may be scored against phasers regardless of direction. Otherwise, ONLY phasers use the "direction" rule for damage allocation.

(D4.322) MULTIPLE WEAPONS: In the case of ships with several types of phasers (such as Kzinti ships with both I and III), each third phaser hit in a given volley must be applied to the best available phaser type, assuming that the specific phaser can be hit from that direction. Note that ships with several types of a given weapon must score every third hit against one of the more powerful types.

(D4.323) ALTERNATE HIT RESULTS: The result "TORP" on the DAMAGE ALLOCATION CHART is applied to disruptor bolt, photon torpedo, and plasma torpedo boxes on the SSD's.

(D4.324) ANY WEAPON HITS: An "any weapon" hit may be scored on a non-weapon system that is listed to be destroyed on a specific weapon hit (e.g. PA panels, in Volume II, are destroyed on drone hits) if the owning player so chooses. He is not required to do so. An "any weapon" hit could be scored on a shuttle bay occupied by a shuttle or fighter, but this isn't required.

(D4.325) SHUTTLE HITS: A shuttle hit can be scored on a shuttle or fighter box. The exact box chosen is up to the player, but if it contains a shuttle, that shuttle is also destroyed.

(D4.33) SPECIAL FUNCTION TRACKS: The last box on the sensor, scanner, and damage control tracks is NEVER marked as destroyed. This represents the residual capability (if any) existing after the system has been effectively destroyed.

(D4.34) MULTI-SHIP VOLLEYS: It is possible for a volley striking a given shield during a given impulse to include hits scored by two enemy ships firing from two slightly different directions. This causes a problem when "phaser" hits (which have a directional restriction) must be resolved. In such a case, first resolve the damage points from the unit which caused the most damage, then from other units in the order of the damage they caused. The volley is still resolved as a single volley; this procedure governs only the direction of fire for the phaser hit restriction.

(D4.35) SPECIFIC DAMAGE: When the DAMAGE ALLOCATION CHART (D4.21) calls for damage to a system not installed on a given ship, go to the next column. Do not disregard the left/right designations.

(D4.351) HULL HITS: The exception to this is with hull spaces. Some ships have only one group of hull spaces. These hull spaces are destroyed on any hull hit (forward or aft). Other ships have two groups of hull spaces. In this case, the forward group is destroyed on "forward" hits, the aft group on "aft" hits. If one group is completely destroyed, its hits are NOT transferred to the other group but go to the next column. Note that certain ships (the Gorn CA for example) have three groups of hull spaces, and that the central group absorbs forward hits after all hull boxes in the forward group are destroyed and aft hits after all boxes in the aft group are destroyed. Also note that some ships, such as the Kzinti CV, have two groups of hull spaces that are in an identical position with respect to forward and aft, but in opposite positions (right vs. left) with respect to longitudinal symmetry. Such groups are considered to be the same; they are drawn in this way only for artistic purposes in making the SSD's as symmetrical as possible.

(D4.352) ENGINE HITS: In some cases the warp engines on an SSD are not specifically marked as "left" or "right." If the ship has two warp engines, they are "left" and "right." If the ship has three warp engines, they are "left," "right," and "center." If the ship has one warp engine, it is "center."

Example: Do not score "left engine" or "right engine" hits scored on a Federation destroyer on the one engine (which is considered a centerline engine) as this will make the ship run out of engines three times as fast as it should.

(D4.36) CARGO: If undestroyed cargo spaces exist on a ship, excess damage hits may be scored against them at the option of the owning player.

(D4.4) HOW SHIPS ARE DESTROYED

When there are no "excess damage" boxes remaining, and one additional excess damage hit is scored on the ship, the ship is destroyed.

(D4.41) At the instant of destruction, the ship is removed from the game, all personnel on board are assumed to have perished, all drones on the map guided by that ship lose their tracking guidance and are removed (unless control is transferred), and the ship is considered destroyed for victory purposes.

(D4.42) Self-guiding weapons are not affected by the destruction of the ship that launched them.

(D4.43) Ships explode at the instant of destruction. See (D5.12).

(D4.5) EXAMPLE OF SHIELD OPERATION AND DAMAGE ALLOCATION

During the Energy Allocation Phase, the captain of a Klingon D7 battlecruiser has placed his shields on full power (using 2 energy points), reinforced his forward shield (#1) with 10 units of power, and put 8 units of power into general reinforcement (which will provide 4 extra shield boxes). During the fourth impulse of the turn, his ship is struck on its #2 shield with 2 damage points of long-range phaser fire. These 2 damage points are scored first on the general reinforcement, reducing it from 4 extra shield points to 2. During the sixth impulse, a photon torpedo scores a hit on the #1 shield. As photon torpedoes have 8 damage points; 2 of these are scored on the general reinforcement energy (eliminating general reinforcement) and the other 6 on the reinforcement on the front (#1) shield. This reduces the reinforcement from 10 to 4. Note that at this point NO shield boxes on the Klingon's SSD are checked off. The battlecruiser is undamaged, having used surplus energy to prevent permanent damage. (The term "permanent" is relative, as even this could be repaired by damage control or a starbase.)

During the 10th impulse, however, a Federation light cruiser scores 8 damage points (with phasers) on the #3 shield. These damage points are not offset by reinforcement (the only remaining reinforcement energy is on the #1 shield) and are marked off on the #3 shield boxes on the SSD. This reduces the #3 shield from 15 to 7 boxes.

Finally, during the 13th impulse, a Federation command cruiser, having braved the fire of the Klingon, has closed to 3 hexes away and directly ahead. Three out of four photon torpedoes strike home (24 damage points), and the eight phasers of the command cruiser score an additional 35 damage points. These 59 damage points are scored as follows:

The first 4 are scored on the reinforcement for the forward shield.

The next 30 are scored on the forward shield, destroying it completely.

The remaining 25 are scored on interior systems (determined by the DAMAGE ALLOCATION CHART, D4.21) as follows:

Hit #	Die Roll	System Destroyed
1	6	One forward hull box
2	7	No cargo on SSD, so one forward hull box
3	9	One left warp engine box
4	2	One bridge box
5	7	No cargo, so one forward hull box
6	4	One phaser, the Klingon selects the right wing phaser
7	10	One phaser, the Klingon selects the left wing phaser
8	7	No cargo, so the last forward hull box is eliminated
9	8	One aft hull box
10	11	One disruptor bolt box

11	7	No cargo or forward hull, so one battery destroyed
12	6	No forward hull, so one impulse engine box destroyed
13	3	One drone rack destroyed
14	8	One aft hull box destroyed
15	5	One right warp engine box destroyed
16	6	No forward hull, one battery destroyed
17	8	One aft hull box destroyed
18	4	The phaser on this line has been hit, so one transporter is hit
19	5	The right warp engine on the line has been hit, so one aft hull
20	10	The phaser on this line has been hit, so one tractor beam
21	12	Auxiliary control hit
22	7	No cargo or forward hull, so the last battery is destroyed
23	9	The engine on this line has been hit, and there is no forward hull, or cargo, or batteries, so the hit is scored on the lab
24	7	There is no cargo, forward hull, battery, or center engine, so this hit is scored on a shuttle box
25	2	Flag bridge (scored on one of the security stations)

(D4.6) BATTLE DAMAGE: CODE RED

Task Force Games has published a play aid entitled "Battle Damage: Code Red." This play aid provides a deck of cards that can be used to resolve damage as an alternative to using dice.

(D5.0) SELF-DESTRUCTION (ADVANCED)

In dire circumstances, the captains of starships may deem it necessary to destroy their own ships to prevent their capture. Players should take special care in using this procedure to avoid abuse. Self-destruction is a desperate move designed to avoid capture, not a tactic to be used in attacking an enemy fleet.

(D5.1) DECLARING SELF-DESTRUCTION

A player may only declare self-destruction at the start of a turn after the other players have completed their energy allocation forms. When a player decides to destroy his ship (or one of his ships), he simply marks the energy allocation form for that turn "self-destruct." He does not make any other entries, and the ship can do nothing except execute the self-destruct order. Self-destruction takes place in the Self-Destruction Phase of the turn.

(D5.11) Self-destruction automatically takes place, unless the captain is not in control of his ship; see (G6.41) mutiny and (D7.7) boarding parties.

(D5.12) When a ship is destroyed in combat (D4.4), it explodes immediately. The self-destruction procedure is used to determine the extent of the explosion.

(D5.13) This procedure is used for ships, P/F's, and bases. Fighters and shuttles DO NOT explode.

(D5.14) In the case of destruction in combat, escape (D5.69) may affect the calculation procedure below.

(D5.2) SELF-DESTRUCTION FORCE CALCULATION PROCEDURE

When a ship self-destructs, or receives an "excess damage" hit after all excess damage boxes are destroyed, it explodes. The force of this explosion is calculated by the following procedure:

- Find the total number of undestroyed weapons boxes on the ship.
- Divide line A by two, round fractions up.
- Find the total number of undestroyed engine, battery, and APR boxes.
- Find the total of lines B and C.
- Find the total number of original engine, battery, weapons, and APR boxes.
- Divide line E by three. Round 1/3 down, 2/3 up.
- Take the larger of line F or D.

H -- To line G add the following:

- 1 for each undestroyed shuttle on board.
- 1 for each drone in a drone rack or loaded on a shuttle.
- 1 for each fusion beam loaded on a Stinger-type fighter. The warhead strength of any plasma torpedo in the ship's launch tubes. (Only if they are fully armed.)
- (Type F plasma torpedoes in stasis boxes do not explode.)
- Half of the amount of energy stored in PA panels.
- Any energy stored in an ESG.
- The pulse strength of a PPD.

I -- To the result of line H add the following:

- 1 if one or more mines or transporter bombs are on board.
- 1 for each charged (undestroyed) fusion beam or hellbore.
- 10 if the ship is an Orion (built-in nuclear suicide bomb).

J -- If the ship is an Andromedan and satellite ships are in the hangar, calculate their explosion force. If the ship is a tender with P/F's docked, calculate their explosion force.

K -- If the ship is an FRD or starbase, calculate the explosion force of any ship docked inside of it. Note that such "inside" ships are considered destroyed.

L -- If the ship has X technology, calculate the total amount of energy in all of its batteries.

M -- Add lines I, J, K, and L. This total is the basic explosion strength.

(D5.3) MULTIPLE EXPLOSIONS

If another ship is in the same hex as the exploding ship and is destroyed by the explosion, calculate its basic explosion strength and add this to the basic explosion strength of the original ship and treat them as a combined explosion (since the ships blew up virtually instantaneously). If a ship in another hex is destroyed by the explosion, count its final explosion as a separate case.

(D5.4) APPLICATION OF EXPLOSION STRENGTH

The number determined in rule (D5.2) is the basic explosion strength. This is the number of hits scored on any ship (including shuttles, drones, and monsters) in the same hex, or adjacent to the self-destructing ship. Three-fourths of the total is the number of hits scored on any ship two hexes away. Half the total is the number of hits scored on any ship three hexes away, and one-fourth the total is the number of hits scored on any ship four hexes away.

(D5.41) Base all calculations on the original total, and drop all fractions.

(D5.42) Ignore cloaking devices in calculating the range for "self-destruction" blast effects.

(D5.5) SELF-DESTRUCTION RESTRICTIONS AND CONDITIONS

(D5.51) In multi-ship scenarios, a ship may not self-destruct unless all but two (or fewer) of its crew units have been killed or transported to another friendly ship. This restriction is ignored if there are more enemy than friendly boarding parties on board, or if there are no other friendly ships remaining in play.

(D5.52) If enemy boarding parties are on board the ship, they may be able to prevent self-destruction. See (D7.7).

(D5.53) Klingon ships: If a mutiny has taken place on board the ship, or if the officers have separated the boom section, self-destruction may not be automatically successful. See (G6.41).

(D5.54) If there is a possibility that self-destruction may not occur, and if pre-plotted movement is planned, a player plotting self-destruction must also plot his next turn in case self-destruction is prevented.

(D5.55) Note that planets block the effects of explosions (P2.547), and that webs limit their effects (G10.72).

(D5.6) CATASTROPHIC DAMAGE (COMMANDER'S LEVEL)

In some cases a ship receives so much damage in one instant that its computers know that it cannot survive. In these cases, the computers institute certain actions to save what can be saved.

Should a ship, at any point, receive more damage than it can survive, then the owning player may declare the catastrophic damage rule to be in effect. Certain units may then attempt to escape (D5.69). This is resolved after the total number of internal damage points is determined and before they are allocated. Within (D5.6), all references to "escape" refer to the procedure in (D5.69). The following actions then take place immediately:

(D5.61) All shuttlecraft may attempt to escape. The restrictions of (J1.5) remain in force, but the allowable launch rates double.

(D5.62) All P/F's held on mech links may attempt to escape. P/F's in internal bays may not attempt to escape; those in collapsible repair bays may attempt to escape.

(D5.63) A Klingon ship with boom separation capability may order the boom to attempt to escape.

(D5.64) A Federation ship with saucer separation capability may order the saucer to attempt to escape.

(D5.65) A pod (carried by a tug) that is capable of independent movement may attempt to escape.

(D5.66) Satellite ships in the hangar of an Andromedan ship may attempt to escape (but only if working transporters are available).

(D5.67) A number of crew units equal to four times the number of available transporters may, within the transporter rules, be transported to other ships, locations, or units (including available planets and asteroids). This may be done even if no shields are down.

(D5.68) (rule number held for later use).

(D5.69) ESCAPE: There is a 50% chance of escape; roll a die, a result of 1-3 indicates that the unit has escaped. It can then be placed anywhere within five hexes of the ship.

(D6.0) FIRE CONTROL SYSTEMS

Ships use their sensors and scanners to detect, identify, and (sometimes) direct weapons to targets. The ships in *STAR FLEET BATTLES* use a system functionally similar to 20th century radar (although operating on different principles because the ship and its target are usually moving faster than light).

Sensors and scanners operate in two modes (active and passive) simultaneously. In their active mode, they broadcast an electronic pulse which will be reflected back to the broadcasting ship by any target. In their passive mode, they search (without active broadcasting) for energy emissions from any potential targets. Computers analyze the returns from both systems to gain information about the target. Certain types of known targets (asteroids, Klingon frigates, plasma torpedoes) have distinctive patterns that can be recognized.

Electronic warfare is used to attempt to keep the enemy from taking the full effect of his sensors.

(D6.1) SENSORS

Sensors are the reconnaissance systems (similar to radar) of the ship. They are used to "lock-on" to targets.

(D6.11) LOCK-ON: Ships must have a lock-on to their target to fire their weapons with their full effect. Ships roll for lock-on in the Sensor Lock-On Phase of each turn, and possibly at other times. Usually, a ship either has a lock-on to every potential target on the map, or to none of them, but some circumstances (planets, cloaking devices, and others) could result in having a lock-on to some ships but not others.

Roll a single die, and if the result is equal to or less than the highest unchecked number on the sensor track of the SSD, the lock-on is achieved. Note that as almost all ships have a "6" in the first box of their sensor track, and until damaged, sensor lock-on is automatic.

(D6.111) Some situations break lock-ons during the course of a turn. These include cloaking devices, planets, and chaff. If the circumstances under which a lock-on was broken or prevented change during the course of a turn, a new lock-on can be rolled for.

(D6.112) The optional electronic warfare rules (D6.3) may reduce the "quality" of a lock-on (by reducing weapons effects) but will not break it.

(D6.12) EFFECTS OF FAILING TO LOCK-ON: If a lock-on is not achieved, then the following restrictions are placed on the ship which failed to achieve lock-on.

(D6.121) The failing ship may not launch seeking weapons.

(D6.122) Any drones on the map controlled by the failing ship are removed from the map unless their guidance can be transferred to another ship.

(D6.123) The firing range to all targets for other weapons is doubled. This doubling refers to the true range, not the range after being adjusted for scanners (D6.2).

(D6.124) Anti-drones cannot fire without a lock-on.

(D6.13) OTHER CONDITIONS REGARDING SENSORS

(D6.131) Ships which have launched drones must attempt to achieve a lock-on every turn that they have drones on the map. Failure to achieve a lock-on causes the drones to lose tracking of their target, and they are removed from the map unless their guidance can be transferred to another unit.

(D6.132) Sensors are used to control drones and to determine the number of drones that a given ship can control. See (FD5.0).

(D6.2) SCANNERS

Scanners are the weapons sighting systems of the ship. They are used to aim and fire all direct-fire weapons.

(D6.21) SCANNER ADJUSTMENT: The scanner adjustment factor is the lowest numbered undestroyed box on the scanner track. This is initially "0" for most ships. When computing firing range, always add the scanner adjustment factor to the actual range in hexes (which may have been doubled due to failure to achieve sensor lock-on (D6.1)).

Example: A Klingon D6 battlecruiser is having a rather difficult time with a Kzinti strike cruiser. The D6 has taken two hits on its sensors (reducing this factor from 6 to 5) and three hits on its scanners (increasing this number from 0 to 3). The Klingon wishes to fire and rolls for sensor lock-on. He rolls a "6" and does not achieve lock-on. The true range is 3 hexes. This is doubled to 6, and then the scanner adjustment factor of 3 is added to that, resulting in an effective range of 9. At this range, the phasers of the battlecruiser will do little, if any, damage.

Note also that a cloaking device could increase the effective range by five more hexes, and that electronic warfare could reduce the effectiveness of the weapons at even that range.

(D6.3) ELECTRONIC WARFARE (COMMANDER'S LEVEL)

Players may use these rules to simulate the use of Electronic Counter Measures (ECM) and Electronic Counter-Counter Measures (ECCM). These are collectively known as Electronic Warfare (EW).

Basically, ECM is an advanced form of jamming intended to prevent the enemy from targeting your ship, or at least reducing the effect of his fire. The broadcasting ship is sending false data signals, disguised to appear as the returning sensor transmissions of the enemy ship or as passive emissions of a target. The sensor operator in the enemy ship is confronted with not only a great deal of static, but with dozens of false targets (where no target actually exists) which are indistinguishable from the real target. (One 20th century USAF pilot described it as "playing 'Space Invaders' on the enemy radar screen.")

ECCM is the application of additional power or technology to "burn through" this jamming and detect the actual target. The relative success of ECM and ECCM changes rapidly from one instant to the next. A target that is perfectly clear on the scanners may suddenly be obscured by static; another target hidden by static may suddenly become clearly distinguishable.

In *STAR FLEET BATTLES*, ECM and ECCM cannot "break" a "lock-on," but they can dramatically reduce the effectiveness of that lock-on. Even with electronic warfare, a unit must still have a lock-on to fire without penalty or guide seeking weapons, and even with a lock-on must still roll for a near miss (D6.36) when firing seeking weapons.

(D6.31) ENERGY APPLIED TO ELECTRONIC WARFARE: Players may put energy into ECM or ECCM. The total amount of energy put into ECM and ECCM cannot exceed the highest unchecked number on the sensor track (usually 6).

(D6.311) Ships with scout functions (G24.0) may use more power for EW.

(D6.312) Reserve power may be used to increase ECM or ECCM strength at any point, but not in excess of the limits stated for total power applied. In such cases, the EW calculations must be made again at the time such power is applied.

(D6.313) The power of ECM and ECCM is not reduced over its effective range, which is 100 hexes.

(D6.314) Electronic Warfare points (ECM and ECCM) can come from five sources:

1. Points received for power expended by the ship.
2. Points built into the unit and received automatically.
3. Points received from natural causes, such as an atmosphere.
4. Points loaned by other ships (see Volume II).
5. Points received if the ship has an operating wild weasel on the board.

(D6.32) ANNOUNCEMENT: In the sensor lock-on segment of each turn, players announce their ECM and ECCM strength (the number of energy points expended).

(D6.33) TIME OF EFFECT: In the case of direct-fire weapons (E0.0), the effect of ECM/ECCM is determined at the instant of firing. In the case of seeking weapons (F0.0), the effect of ECM/ECCM is determined when the weapon reaches its target (D6.36).

(D6.34) CALCULATION OF EFFECT: To determine the net effect of ECM and ECCM, make the following calculation:

1-Determine the ECM strength of the target ship. This may be adjusted (usually increased) by various factors, including ECM drones (FD9.0), SWAC shuttles, scouts (G24.0), or other means. Note that some ships have an additional ECM strength built-in due to their design; see ship descriptions. Also note that certain objects, such as planets (P0.0) can produce an ECM effect.

2-Determine the ECCM strength of the firing ship. In the case of seeking weapons, this is the ship guiding the seeking weapon, or (in some cases) the weapon itself. Note that some ships have an automatic built-in ECCM strength in addition to any power they apply.

3-Subtract the ECCM strength of the firing ship from the ECM strength of the target ship.

4-If the result of #3 is a negative number or zero (the ECCM is stronger than or as strong as the ECM), there is no electronic warfare effect and the rest of the calculation is skipped.

5-If the result of #3 is a positive number, use it to determine the "net ECM shift" from the chart below:

Net ECM Strength (result from #3)	Net ECM Shift
1-3	1
4-8	2
9-15	3
16-24	4
25-35	5
36 +	6

Players may recognize this calculation as taking the square root and dropping all fractions.

(D6.35) EFFECT ON DIRECT-FIRE WEAPONS: In the case of most direct-fire weapons, the ECM shift is added to the die roll. Should the total be greater than the highest number on the chart (usually 6), take any additional shifts by moving to a higher range column.

Example: ECM has resulted in three ECM shifts being applied to fire by a phaser-I. The die roll is 4, the range is 3. Without ECM this results in 4 damage points. Two of the three ECM shifts change the die roll from a four to a six; the third increases the range to the next column (4). The final result is 2 damage points (die roll 6, range 4).

This system is used in the case of phasers, disruptors, photon torpedoes, fusion beams, and T/R beams. It is also used for Hellbores and plasmatic pulsar devices, but in that case the entire ECM shift is added to the die roll; none is used to adjust the range. In the case of maulers, the mauler has a "to hit" die roll of 1-6 (on one die); the ECM shift is used to adjust this die roll and may result in a miss.

(D6.36) EFFECT ON SEEKING WEAPONS: The ECM shift is used to adjust the die roll on the PROXIMITY OF DETONATION table below:

Die Roll	Effect on Seeking Weapon
1-6	Warhead 100% strength
7-8	Warhead 50% strength
9-10	Warhead 25% strength
11+	Warhead 0% strength

PROCEDURE: Whenever a seeking weapon enters the hex of its target, roll a single die to determine the proximity of detonation (i.e. the effect of the warhead). If there are any ECM shifts, they are added to this die roll. A result over 6 means, in effect, that the weapon exploded at some distance from the ship rather than against its shields. Note that if there is no ECM shift, or if players are not using the ECM rules, the only possible result is a normal (100%) detonation.

Example: A drone, fired by a Kzinti ship, has reached the hex of its target, a Klingon D7. The net ECM shift at the time of arrival is +2. (The Klingon is using a lot of power for ECM.) The Kzinti player rolls a die; the result is "5." The ECM shift is added,

yielding a "7" and indicating that the drone does only 50% of the normal damage.

This system is used for drones, suicide shuttles, and plasma torpedoes. Even when using this system, a seeking weapon will not damage any ship other than its target.

(D6.37) OTHER SYSTEMS AFFECTED: Certain non-weapons systems also require a positive lock-on, and certain weapons do not operate in a manner that is suitable for (D6.35) or (D6.36). This procedure is used for the following systems: displacement devices, tractor beams, transporters, and stasis field generators.

PROCEDURE: Roll a single die and add the net ECM shift to the result. If the total is more than six, the lock-on is not strong enough and the system cannot be used. If an unsuccessful attempt is made, another attempt with that same specific system box cannot be made on the same turn. (Thus, you could make as many transporter attempts as you have transporters, assuming all were powered, but each could only make one attempt.) Any energy allocated to a system that cannot be used is lost (unless energy can be held in that system).

Example: A Klingon ship wants to use its stasis field generator to place a Federation ship in stasis. At the instant the attempt is made, the Federation ship has a net ECM shift of +2. The Klingon player rolls a die and gets a result of "5" to which the shift is added for a result of "7." As this is greater than six, the SFG cannot be used at this time, and another attempt (with the same SFG) cannot be made later in the turn. If the Klingon ship has two or more SFG's, it could make another attempt (on the same or a later impulse) with the other SFG.

(D6.38) SYSTEMS NOT AFFECTED: The following systems are not affected by ECM/ECCM: anti-drones, labs identifying drones, type I-S (and all dogfight drones), all mines, and expanding sphere generators.

(D6.39) OTHER EFFECTS OF ELECTRONIC WARFARE

(D6.391) Wild weasels and wild SWACS operate independently of ECM/ECCM, and override its effects. If a ship drops a WW or orders a SWAC to "go wild," the appropriate rules take effect immediately, regardless of the ECM/ECCM status.

(D6.392) Certain units (e.g. scouts) may "loan" ECM or ECCM to another ship. No more than six units of ECM and no more than six units of ECCM may be received by any unit from all outside sources (except natural sources, such as planets, asteroids, etc., and the ship itself.)

(D6.393) Certain units have built-in ECCM. This includes plasma torpedoes (which have three points); and fighters, P/F's, and ATG drones (which have two).

(D6.394) Certain units have built-in ECM. These are specified in the ship specifications, but are primarily Orion ships. All Orion ships (other than freighters and Q-ships, but including Slavers) have two points of built-in ECM due to their design. All fighters have two points of ECM built-in.

(D6.395) Fighters can gain extra ECM and ECCM by way of special modules (J4.9).

(D6.396) Electronic warfare has no effect in a dogfight (J7.0).

(D6.397) Electronic warfare has no effect on monsters.

(D6.398) Ignore the effects of electronic warfare when calculating the effects of a self-destruction blast.

(D6.4) NON-VIOLENT COMBAT (OPTIONAL)

The highest principles of the Federation call for the absolute minimum loss of sentient life (preferably no loss of life at all, whatever the circumstances). Because of this, the Federation Star Fleet has developed a computer system for its weapons control computers which carefully directs fire against only the weapons stations and engines of the opposing ship. It is felt that the opposing ship will always be the aggressor (in strategic terms, anyway) and that simply destroying its weapons systems will be sufficient to force it to retreat.

Any ship's captain can decide to use the non-violent combat options. This decision is made at the start of the scenario. In fleet scenarios, all ships on one side of the same race must use the same system. In the strictest sense of the Federation charter, Federation ships should never use anything else. (Very few players use this alternative, although it has considerable value

in piracy.) Once the decision is made to use the non-violent options, the player cannot change his mind during that scenario. Refer to the NON-VIOLENT COMBAT OPTION DAMAGE ALLOCATION CHART (D6.41). When using NVC, use chart (D6.41) for hit distribution instead of the regular DAMAGE ALLOCATION CHART.

(D6.41) NON-VIOLENT COMBAT OPTION DAMAGE ALLOCATION CHART

Die Roll	Effect
1	Weapons hit, see chart (D6.411)
2	Power system hit, see chart (D6.412)
3,4,5	Miss — no effect
6	Random hit, use normal DAMAGE ALLOCATION CHART

The NON-VIOLENT COMBAT OPTION DAMAGE ALLOCATION CHART is used to distribute hits that have previously penetrated shields, armor, or PA panels.

(D6.411) WEAPONS SYSTEMS HITS CHART

Die Roll	Effect
2	Bridge (or any control system)
3	Scanner
4	Torpedo
5,6	Miss — no effect
7	Phaser
8,9	Miss — no effect
10	Drone rack
11	Sensor
12	Bridge (or any control system)

(D6.412) POWER SYSTEMS HIT CHART

Die Roll	Effect
1	Impulse engine
2	APR
3,4	Warp engine
5,6	Miss — no effect

(D6.42) Hits on systems that are not installed on a given ship or have already been destroyed are considered to be misses (see (D6.411), (D6.412), Non-Violent Combat). A "Bridge" hit causes one crew casualty. Other hits (except possible random hits) do not cause crew casualties. Any Legendary Captain, Weapon's Officer, or Navigator on board the ship may be killed or disabled (G22.0).

(D6.43) All weapons of any ship using this rule, with the exceptions of seeking weapons, Hellbores, and maulers, will be resolved on the above charts. While contemporary students of starship combat may be puzzled by this, consider that it would be illogical for a race to adopt a doctrine that their weapons could not use or to carry weapons their doctrine would not allow them to fire. Mines and transporter bombs do not use the NVC tables.

(D6.44) Systems that are destroyed on "Flag Bridge" hits would be hit on "12" on chart (D6.411) instead of a bridge.

(D6.45) There is no recorded instance of a Romulan captain using non-violent combat. Except for the Federation and Pirates, other races use it only rarely.

Note: There has been a great deal of philosophical discussion regarding this rule. Wargamers who bought this game because it was a good tactical space combat game may feel that the use of rule (D6.4) limits their activities and spoils the fun. SF fans who bought this game so that they could live the adventures they had been reading will enjoy the challenge of the rule. It may well be argued that this doctrine was never used on film, or at least that there is not conclusive evidence that it was. Purists may claim that the doctrine is built into the battle computers and used automatically. It has been established that the only direct references to it are in material published long after the film. It should be noted that this rule can be used effectively by pirates who wish to capture a ship without damaging the cargo, by captains rescuing hostages, and by ships attempting to keep combat situations to a minimum. No player should ever be forced to use this system against his wishes unless directed to do so by the scenario.

(D6.46) Boarding party actions by a ship using NVC require the use of "stun" weapons. "Destroyed" enemy boarding parties and control boxes return to action at the start of the third turn after they are eliminated. (If a boarding party is destroyed during the combat portion of turn 4, it returns to duty at the start of turn 7.) When a ship is captured (or the attempt fails with all enemy boarding parties stunned), all "stunned" boarding parties are presumed to be captured by the victorious (but non-violent) troops. Obviously, the non-violent troops could be on both sides or either side.

(D6.47) When ships of two races are allied and only one is using NVC, each functions accordingly. In the case of NVC with boarding parties, where boarding parties of the two allies were fighting those of a third race, enemy boarding parties would be divided evenly between killed and stunned. Any odd casualties are scored as stunned.

(D6.5) UBITRON INTERFACE MODULES (OPTIONAL)

The Klingon Deep Space Fleet has experimented with this device as a means of achieving more effective long-range firepower from their ships. It is basically a passive amplifier designed to increase the effectiveness of weapons by more accurate fire control. Due to the vagaries of its operation, however, it is useful only at moderate ranges.

(D6.51) When a ship equipped with the UIM is firing phasers or photon torpedoes at a target from 9 to 15 hexes distant, fire at that target is resolved as if the range was 8 hexes. Disruptors are fired under rule (E3.61).

(D6.52) Whenever the device is used for fire control, there is a 33% chance that it will break down (the special liquid crystals burn out easily). Roll a die. A "1" or "2" will result in breakdown. The die is rolled for breakdown at the end of every impulse in which the device is used. Repairs are difficult and time consuming and cannot be accomplished during the course of a scenario. The device may be repaired between scenarios of a campaign game at no cost.

Note: The device is experimental and should not be considered as automatically included on all Klingon ships. Other fleets may, of course, experiment with the weapon.

(D6.53) Players are not required to use a UIM on every impulse that they fire weapons, or for every weapon they fire during an impulse. Use of the UIM is entirely at the discretion of the owning player.

(D6.54) When a UIM breaks down, all weapons eventually return to normal operation. However, the ship's weapons may not fire during the remainder of the turn on which the device breaks down. Thereafter, resume normal operations. A ship could purchase up to three extra UIM systems as standby systems.

(D6.55) The UIM may be used with overloaded weapons. A ship firing overloaded disruptor bolts with the aid of a UIM cannot fire at ranges greater than 8 hexes. The hit # is 5 at ranges 1-8 in this case.

(D7.0) SPACE MARINE BOARDING PARTIES (ADVANCED)

All ships are provided with groups of trained troops that can be used in various security duties. These troops can also be organized and used as boarding parties. The number of boarding parties available to each ship type is shown on the MASTER SHIP CHART.

(D7.1) RECORD KEEPING

Boarding parties are recorded as individual units. At any time, and for any reason, players (or a player) on one side may transfer boarding parties from one ship to another, using the transporter rules. In multi-scenario campaign games, the boarding parties are carried over from scenario to scenario, as assigned to the various ships.

Note: The Gorn and Kzinti races are physically larger and more powerful than the other races in the game. This has been compensated by including more boarding parties on their ships. No combat adjustments are necessary in combat between the various races.

The records for boarding parties are kept independently from the crew records.

(D7.2) BOARDING PARTY CASUALTIES

Every tenth internal hit destroys one boarding party, in addition to one crew unit (G9.21). The first four such boarding party casualties are ignored; the last two boarding parties on the ship cannot be killed by this method but could be broken up by the owning player (declared to be simple crew units) to form part of a skeleton crew (G9.83). Also see (D7.83), which can result in crew unit casualties.

(D7.3) BOARDING PARTY COMBAT

If boarding parties are transported onto an enemy ship, combat occurs between the boarding parties and the ship's defenses. While boarding parties may be transported onto the ship during any impulse, the actual resolution of combat is not done until the end of the turn, during the Final Activity Phase. The ship's "boarding defense factor" is equal to the sum of friendly boarding parties on board (not counting those assigned as guards), and the number of undestroyed command systems (bridges, security, auxiliary control, etc.). When combat is taking place, the "defending" player is assumed to be the player owning the starship, and the "attacking" player is the one who boarded it. More than one ship may transport boarding parties to the ship on which the combat is taking place, and ships friendly to the boarded ship may also send boarding parties to assist in the defense.

(D7.4) COMBAT PROCEDURE

The attacking player totals the number of boarding parties that he has on board the boarded ship, and rolls one die, adding its results to his total. The defending player takes his boarding defense factor and rolls one die, also adding the result to his factor. The player with the higher result "wins" the combat on that turn, and the difference in the totals is the number of losing boarding parties eliminated.

Example: A Klingon battlecruiser has been seriously damaged. It has only three command boxes and four boarding parties left. Three Federation ships are in the area and transport a total of nine boarding parties to the Klingon ship. The Federation player rolls a "4" for a total of 13. The Klingon has a boarding defense factor of 7 ($3 + 4$) and rolls a "2," for a total of 9. The Federation player has won the round of combat and eliminates four Klingon boarding parties (the only ones on board). No other Klingon ships are within range (if they were, they could send their own boarding parties). On the next turn, the Federation player has added four more parties (total 13) and with a die roll of 2 has "15." The Klingon has a boarding defense factor of 3, and even with a die roll of 6 (for a total of 9), must lose 6 boarding parties. As he has none, these are taken by destroying command spaces, which isn't even enough. The ship has been captured.

(D7.5) CAPTURING A SHIP WITH BOARDING PARTIES

A starship is considered to be captured if all boarding parties friendly to the starship and all control systems (including security stations) have been destroyed. When a starship is captured, the capturing player cannot operate the weapons of the ship, but can maneuver it and attempt to leave the map with it.

(D7.51) For a captured ship to be moved, it must be manned by a "skeleton crew." See (G9.4) for required size. This crew must be transported from the capturing player's other units.

(D7.52) Hits on up to three control systems may be erased, allowing the ship to be controlled.

(D7.6) CAPTURING SHUTTLECRAFT WITH BOARDING PARTIES (COMMANDER'S LEVEL)

Players may attempt to capture shuttlecraft with boarding parties. One boarding party (only) may transport onto an enemy shuttlecraft. At the instant this party arrives, a die is rolled for resolution of the combat. A die roll of "1" or "2" indicates the capture of the shuttlecraft. A die roll of "3," "4" or "5" indicates that the boarding party has been destroyed. A die roll of "6" indicates that the issue is still in doubt. The shuttle stops at that point, and combat is resolved again at the end of the turn. If still in doubt, the shuttle does not move and a die is rolled to resolve combat at the end of each turn until resolved. A player may not operate the weapons of a captured shuttlecraft.

(D7.61) Boarding parties may attempt to board and capture WW and suicide shuttles.

In this case, a die roll of "1" indicates that the systems have been deactivated and the boarding party takes over the shuttle. The WW or suicide systems have been deactivated.

In the case of a WW, a die roll of "5" or "6" indicates that the shuttle has exploded, destroying the boarding party and the WW.

In the case of a suicide shuttle, a die roll of "6" indicates that "booby traps" in the shuttle have destroyed the boarding party. The shuttle continues on its mission.

In the case of any other die roll, the issue is still in doubt and must be resolved by a die roll at the end of each turn.

(D7.7) PREVENTING SELF-DESTRUCTION (COMMANDER'S LEVEL)

If boarding parties are on board of any given starship, they may be able to prevent self-destruction from being carried out, if the crew should attempt to do so (D5.52). In such cases, the owning player must roll a die to determine if the boarding parties have prevented self-destruction. On a die roll of "1," self-destruction has been permanently prevented. On a die roll of "2" or "3," the boarding parties have only temporarily prevented self-destruction, and a new die roll must be made on the next turn. Any other result indicates that the crew has successfully destroyed their own ship.

(D7.8) HIT AND RUN RAIDS (COMMANDER'S LEVEL)

Boarding parties may be used on "hit and run" raids. In this event, the party is attempting to destroy some key item of equipment on the enemy ship.

Procedure: For each boarding party making such an attempt, designate the specific box on the SSD that they are attacking. A die is then rolled to resolve their attack. A die roll of "1" indicates destruction of the system and safe return of the boarding party. A die roll of "2" indicates destruction of both the boarding party and the system. A die roll of "6" indicates safe return of the boarding party, but no damage to the system. Any other result indicates destruction of the boarding party and no damage to the system. Any given boarding party may make ONE such raid per turn, assuming transporters are available. Each transporter can support one such raid, performing both the "in" and "out" operation.

These raids are conducted and resolved during the Impulse Activity Segment. Note that each raid is conducted and resolved during the Activity Segment of a specific impulse.

(D7.81) Boarding parties can attack "sensor" and "scanner" boxes but not damage control or excess damage boxes. Raids cannot be used to cause critical hits.

(D7.82) Hit and run raids may be made to remove specific individuals or objects from a given ship. This will normally involve items specified by a given scenario.

(D7.83) A player may designate some of his boarding parties to be guarding specific individuals or objects. In this case, a hit and run raid may not be successful (D7.831) against these objects, but the boarding party assigned as a guard cannot be used in normal boarding party actions. Assignments of such guards are made at the start of the turn and cannot be changed until the next turn; no more than one boarding party may be assigned to guard a given compartment/object. Up to six individuals may be specified as being in a given compartment (or room, a designation not specifically translatable into specific systems boxes on the SSD), and one boarding party can guard that one room. For example, several legendary officers could be designated as being in the "bridge" (which probably corresponds to two or more specific boxes on the SSD).

(D7.831) If a hit and run raid is conducted against a guarded object, person, or compartment, roll one die. A result of 1-3 indicates that the raiding boarding party is destroyed. A result of 4-5 indicates that they have returned to their ship unharmed, but did not accomplish their mission. In the case of a 6 result, conduct the raid normally using another die roll (D7.8).

(D7.832) If the box that a boarding party is guarding is destroyed, there is a 50% chance that the boarding party was destroyed with it.

(D7.833) No more than one boarding party can be assigned to guard one object, area, or group of people.

(D8.0) CRITICAL HITS (OPTIONAL)

In order to increase the excitement of particularly tense scenarios, players may wish to include the possibility of critical hits.

(D8.1) PROCEDURE

If 20 or more damage points (including those scored on shields or reinforcement and those that penetrate) are scored against a given shield during any single impulse, that ship must roll two dice to determine if a critical hit has been scored. Only one such roll is made during any given turn, even if these conditions are met several times during the turn.

(D8.2) EFFECT

The systems that suffer a critical hit, and the effect of those hits, are as follows:

- 2 = Weapons tracking system knocked out for an unknown number of turns. No weapons can be fired or launched until the system is repaired. All lock-ons are lost.
- 3 = Transporter failure. Transporters cannot be used until repaired.
- 4 = Power failure in the labs. Labs cannot be used until repaired.
- 5-9 = No critical hit.
- 10 = Shuttle launch controls jammed. No shuttles can be launched or recovered until repaired. Shuttles could land and launch from a balcony, but could not move back and forth between the balcony and hangar bay.
- 11 = Tractor beam breakdown. Tractors cannot be used until repaired.
- 12 = Warp engine controls are damaged, and the ship cannot use warp energy for movement. One-half of the output of the warp engines can be used for other purposes; the other half of the power cannot be used for any purpose until repaired.

(D8.21) Critical hits never destroy any system. They only prevent its use until the critical hit is repaired. Note that repairs to critical hits are resolved separately from repairs to damage.

(D8.22) All critical hits take effect immediately.

(D8.23) In the case of a warp engine critical hit, the ship stops moving immediately. If impulse power was allocated to movement, the ship may use it to make one tactical maneuver during the remainder of the turn. The ship's Energy Allocation Form must be adjusted immediately. If more than half of the warp engine output was allocated to movement, no adjustment is necessary. If more than half of the warp engine output was allocated to non-movement functions, this must be reduced to no more than one half of the warp engine output.

(D8.3) REPAIR

All critical hits are repaired in the same way, but if more than one is in effect, the owning players may only attempt to repair one of them during the turn. (Note that legendary officers, in Volume II, may make independent attempts to repair critical hits.) The procedure is to roll one die at the end of the turn. If the result is equal to or less than the highest remaining number on the damage control track (on the SSD), the system is considered to be repaired. EXCEPTION: A die roll of "6" never results in repairs.

(D9.0) DAMAGE CONTROL

Damage control is the ability of a ship to repair combat damage (and other damage) without a base or other support facilities. In game terms, damage control is used to repair the shields during a scenario, to repair other systems between the scenarios of a multi-scenario campaign game, and to repair critical hits. It is assumed that the damage control parties are, during the course of the game, also taking action to seal off any hull areas that rupture and to prevent any fires or electrical overloads from spreading. This is factored into the various charts and tables and can be ignored.

(D9.1) DAMAGE CONTROL CAPABILITY

The current level of damage control ability is reflected in the damage control rating, which is the highest undestroyed box on the damage control track of the SSD. This rating itself may be reduced by damage taken during combat.

(D9.2) REPAIRING SHIELDS IN COMBAT

During any turn, energy may be allocated to damage control up to the highest number on the track. For each two units of energy allocated to damage control, one shield hit may be erased at the end of the turn. If the shield in question had been knocked down during the current turn, then it would be restored to one or more boxes (shield points) by damage control. Energy allocated to damage control is NOT used to reduce the effects of hits made during the turn. You must specify which shield you are repairing during the Energy Allocation Phase. Energy cannot be allocated to undamaged shields in anticipation of damage. Energy from Reserve Power (H7.0) can be allocated to damage control during a turn and take effect at the end of the turn, but cannot (when combined with regularly allocated power) exceed the damage control rating.

(D9.3) CRITICAL HITS

Damage control may be used to repair critical hits (D8.0).

(D9.4) CAMPAIGN REPAIRS

Between scenarios of the multi-scenario campaign games, the damage control rating of the ship may be used to repair various systems of the ship. This is done as follows; in the exact order given.

(D9.41) All hits on the Damage Control Track are erased. (All repairs listed below are based on the ship's full damage control ability.) All shield hits are erased. A number of hits on control systems equal to the damage control rating are erased. All "Hull" hits are erased.

(D9.42) Multiply the damage control rating by three. This is the number of power system (warp engine, impulse engine, battery, and reactor) hits which can be erased.

(D9.43) Multiply the damage control rating by two. This is the number of weapon systems hits which can be erased. For definition of "weapon," see Annex #7D.

(D9.44) Multiply the damage control rating by three. This is the number of non-weapon, non-control, non-power system hits that can be erased.

(D9.5) LIMITATIONS

No damage control procedure can ever be used to increase the number of shields or other systems above the number originally shown on the SSD for that ship. That is, damage control can only repair systems; it cannot build new ones.

(D9.6) CARRYOVER

Any damaged systems that damage control does not repair after one scenario may be repaired after later ones. A system does not have to be repaired in the interlude immediately following the scenario in which it was damaged.

SYNOPSIS OF VOLUME II

(D10.0) POWER ABSORBERS

(D11.0) CHAFF

(D12.0) CHAIN REACTIONS AND INTERNAL EXPLOSIONS

(COMMANDER'S LEVEL)

(D13.0) AEGIS FIRE CONTROL

(D14.0) EMERGENCY DAMAGE REPAIR

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(E0.0) DIRECT-FIRE WEAPONS

(E1.0) GENERAL RULES

Direct-fire weapons are fired during the Impulse Procedure of and impulse. Their effects are determined and recorded immediately upon firing. Two ships firing on each other during the same impulse are presumed to fire simultaneously. (The fire of both is calculated and determined before damage to either is applied.)

(E1.1) PROCEDURE

There are no counters for direct-fire weapons. A player simply indicates his ship and the target and says (for example): "I am firing my two forward phasers at your ship."

(E1.2) REQUIREMENTS

Each direct-fire weapon may be fired only ONCE per turn, and then only if they have satisfied their requirements for energy (see the specific rules for each weapons type). All direct-fire weapons have a definite field of fire which is shown on their SSD and cannot engage targets outside of their field of fire unless allowed by the rules.

(E1.21) Gatling phasers, anti-drones, and plasmatic pulsar devices are excepted from the limitation of firing once per turn. See the specific rules for each type of weapon.

(E1.3) EFFECTS

The effects of each such weapon are shown on the various weapons tables. The number of hits scored by a given phaser on a given firing depends on the type of phaser, the range, and a die roll. Photon torpedoes and disruptor bolts either hit or miss their targets. (Phasers are swept across the target in an arc; how much of this arc actually touches the enemy ship determines the damage.) The damage caused by each hit or miss varies in the case of disruptor bolts but is constant in the case of photon torpedoes.

(E1.4) FINALITY OF EFFECT

There is no counter-weapon to a direct-fire weapon. While clever maneuvers will restrict your opponent's ability to get in a decisive shot, and your shields will reduce the damage he causes, there is nothing that can be done directly against the fire of the weapon.

(E1.5) FIRING RATES

No weapon may be fired twice within a period of less than one-fourth of a turn. (Note that, in most cases, this involves firing the weapon on two consecutive turns.) For example, if a specific phaser were fired during impulse 29 of one turn, it could not be fired again before impulse 5 of the next turn. This rule is NOT to be interpreted as meaning that a weapon can be fired more than once per turn. It is intended to eliminate the unrealistic tactic of firing a "full broadside" on impulse 32 of one turn and then repeating it on impulse 1 of the next.

(E1.51) Certain weapons are specifically capable of being fired more, or less, rapidly. Specific rules for specific weapons will take precedence over (E1.5). Note that while a gatling phaser can be fired during four impulses, the first such firing impulse of one turn must be at least one-quarter turn later than the last firing impulse on the previous turn.

(E1.52) If different impulse charts are used on two consecutive turns, the calculations must be done in terms of portions of a turn until the total equals 0.25 turns. Note the chart below:

impulses/turn	fraction/impulse
6	.16667
10	.10000
20	.05000
32	.03125

Thus, for example, if a weapon were fired during impulse 29 of a 32-impulse turn, 3 impulses (.09375 turns) would elapse before the end of that turn. If the 20-impulse chart were used on the next turn, 4 impulses (.200 turns) would complete the timing requirements (3 impulses, for a total of .24375, would not), so the weapon could be fired on impulse #4 but not #3.

(E1.6) NARROW SALVOES (ADVANCED)

Any direct-fire weapon can be fired in a narrow salvo. This is basically an "all or nothing" proposition. Usually, weapons fired simultaneously are fired into a pattern that will insure at least some hits but preclude maximum effect. Narrow salvos concentrate the fire of weapons onto a single point. While there is less chance of success, that success can be devastating.

(E1.61) CONDITIONS: Only direct-fire weapons of single type being fired by a single ship during a single impulse at a single target can be concentrated into a narrow salvo. See the specific rules for each weapon for exceptions and restrictions. Note that while normal and overloaded photon torpedoes could be fired together in a narrow salvo, proximity and normal photons could not. Note that different types of phasers CAN be combined in a narrow salvo; the same die roll result is used on each of the various tables.

(E1.62) PROCEDURE: Resolve the fire of one weapon normally. All other weapons in the same salvo use the same result. (In effect, you simply roll one die, and use that result for each weapon.)

(E1.63) OTHER RULES

(E1.631) A player using a narrow salvo for some of his weapons is not required to use it for all of his weapons, even if fire at the same target during a single impulse.

(E1.632) Seeking weapons cannot be fired in narrow salvos.

(E1.7) FIRING MODIFICATIONS AT SMALL TARGETS

Due to their small size and normally erratic maneuvers, drones and fighters are difficult targets to hit at long range. When firing at certain types of units with direct-fire weapons, certain modifications must be made to the die roll. These modifications are shown on the chart below:

Target type	Die Roll modification at stated range		
	none	+ 1	+ 2
Admin Shuttle	0-11	12-24	25+
SWAC, MSS, MRS			
Fighter	0-9	10-19	20+
Drone			
Nimble ship	0-14	15-29	30+

The modifiers shown are added to the die roll when firing at that target type at the indicated range. For example, when firing a direct-firing weapon at a drone at a range of 14 hexes, add one to the die roll.

(E1.71) These effects are not cumulative with the effects of erratic maneuvers (C8.0); the player owning the ship may decide which to use. They are cumulative with specific weapons penalties when firing at drones (FD1.5). They are cumulative with electronic warfare.

(E1.72) Seeking weapons fired at small targets are unaffected by this rule.

(E2.0) PHASERS

The phaser is the primary weapon of most starships in the game. It is a phased energy beam which, when striking the target, does physical damage due to its kinetic force and also creates an electrical discharge that can burn out various systems. There are five types of phasers, each of which use a different table when fired at an enemy ship or other target.

(E2.1) TYPES OF PHASERS

(E2.11) TYPE I — OFFENSIVE PHASER: This is the most powerful type of phaser carried by starships, causing considerable damage out to as much as 10 hexes. It costs one unit of energy to fire a phaser-I one time.

(E2.12) TYPE II — OFFENSIVE-DEFENSIVE PHASER: These are shorter-ranged than phaser-I due to less accurate fire control. It costs one point of energy to fire a phaser-II one time.

(E2.13) TYPE III – POINT DEFENSE PHASER: This type of phaser is the least powerful of all, having an effective range of only one or two hexes. They were designed to be used only against drones. In practice they are used against other ships in dogfights, but are, of course, less effective. The phasers carried by utility shuttles (J2.213) use the phaser-III table. It costs $\frac{1}{2}$ unit of power to fire a phaser-III one time. Many fighters carry this weapon.

(E2.14) TYPE IV – HEAVY PHASER: Very powerful model used only on bases. It costs two units of power to fire a phaser-IV one time.

(E2.15) TYPE G – GATLING PHASER: A particularly vicious weapon developed by the Hydrans and later copied by the Federation. A gatling phaser can be fired up to four times during a single turn. Each firing may be during the same or a different impulse, and at the same or a different target. The effect of a phaser-G is determined on the phaser-III table. Each firing costs $\frac{1}{4}$ of an energy unit (a total of 1 point for all four shots).

(E2.2) RESTRICTIONS AND CONDITIONS

(E2.21) A given ship may fire any number of its phasers in a given impulse, assuming that energy has been allocated for this purpose (E2.3) and the ship has fields of fire that permit such firing (E2.4).

(E2.22) Players must allocate energy in the Energy Allocation Phase to be able to fire their phasers. See the rules on energy allocation (B3.0) and phaser capacitors (H6.0) for more details.

(E2.23) During each turn, each phaser on the ship may be fired no more than one time (exception: gatlings). Note that all phasers have a specific field of fire, and that a ship may not have targets for all of its phasers on any given turn. Possible fields of fire for the ensuing turn should be considered when planning how much energy to allocate to firing phasers.

(E2.24) Each box on the SSD represents one phaser and can be destroyed by a single phaser hit.

(E2.3) ENERGIZING PHASERS

Before phasers can be fired, they must be energized (i.e. "warmed up"). Ships do not normally enter scenarios with their phasers energized because they were not expecting to face combat. The typical patrol of a cruiser has been described as "six months of boredom and an hour of stark, screaming terror." Without knowing when that hour will come, the ship can ill afford to burn fuel keeping weapons ready to fire.

(E2.31) It costs one point of energy to energize all of the phasers (of all types) on board a given ship. This requires one turn. During and prior to that turn, no energy may be allocated to the phasers or stored in the capacitors of that ship (other than the energy to energize them).

(E2.4) FIRING PHASERS

When firing phasers, first determine the range to the opposing ship. Note that the effective range may be different from the true range due to the effects of cloaking devices, sensors, and scanners. Then roll one die (the die result may be adjusted by electronic warfare) and cross-index the result with the range on the appropriate phaser chart to yield the number of damage points scored.

Example #1: A phaser-III is being fired at a target three hexes away. There is no electronic warfare. The die roll is "2" which means that two points of damage have been scored.

Example #2: A phaser-I is being fired at a ship one hex away. However, the ship does not have lock-on, so the range is doubled to two hexes. Further, the firing ship's scanners have been damaged, and it has a scanner rating of 1, yielding an effective range of three hexes. The die is rolled and the result is a "1," which would normally mean six damage points (it would have been eight if the fire control systems had been working). In this case, however, there is one electronic warfare shift (D6.3), which increases the die roll to "2" and yields five damage points.

(E3.0) DISRUPTOR BOLTS

Disruptor bolts are carried by Klingon, Tholian, Lyran, and Kzinti ships. (Certain other ships, notably the Orion Pirates and the WYN, also use disruptors on some of their ships.) They work, basically, on the principle of an energy discharge. They are somewhat less effective than photon torpedoes, but can be fired more often.

(E3.1) DESIGNATION

Each "DISR" box on the SSD represents one disruptor bolt firing point. Each is recorded and fired separately.

(E3.2) ARMING PROCEDURE

Disruptor bolts are fired by the following procedure. Two units of energy are allocated for each bolt which is to be launched. The bolts are an energy discharge and as such cannot be held from one turn to the next. Any bolts for which energy has been allocated, but which have not been fired by the end of the turn, are lost.

(E3.21) Energy to fire disruptor bolts can come from any power source.

(E3.22) Disruptor bolts are fired during the Impulse Procedure. There is no counter for a disruptor bolt. Their effect is determined by die roll and recorded immediately.

(E3.23) A given disruptor bolt may not be fired more than once per turn.

(E3.24) If energy is allocated to fire a disruptor, and it is not fired, the energy is lost and cannot be regained.

(E3.3) FIRING PROCEDURE

The number of hit points scored by the disruptor bolt is determined by the range, the firing characteristics of the weapon being fired, and a die roll. Refer to the DISRUPTOR BOLT CHART (E3.4). Determine whether normal or overloaded disruptors are being fired and whether UIM or DERFACS fire control is being used, and determine from this which line on the disruptor chart to use. Using the range, determine the hit probability for this weapon configuration. Roll a single die. If the result is within the range of probabilities listed, the weapon has hit, scoring a number of damage points as shown on the bottom lines of the chart.

(E3.31) When the effective range of a disruptor bolt is different from the true range, use the effective range to determine the probability of a hit and the true range to determine the number of damage points scored.

(E3.32) The maximum range of disruptors is different with each ship class that carries them. Refer to Annex #8A.

(E3.4) DISRUPTOR BOLT CHART (see MASTER WEAPONS CHART)

(E3.5) DISRUPTOR BOLTS – OVERLOADS (ADVANCED)

Disruptor bolts may be overloaded. This requires more energy, but increases the effect.

(E3.51) The energy to fire an overloaded disruptor bolt must be programmed at the start of the turn (along with the intention to fire such a weapon). Once energy is allocated to overload a disruptor, it cannot be fired (on that turn) as a non-overloaded one.

(E3.52) The energy cost and warhead strengths of overloaded disruptor are doubled. This is shown on the MASTER WEAPONS CHART.

(E3.53) The maximum range of an overloaded disruptor bolt is 8 hexes. This range limitation applies to true range, not to adjusted range.

(E3.54) Overloaded disruptors can be fired at range "0." The hit probability is 1-6, insuring a hit (unless other factors, such as electronic warfare, produce a die roll modification). If an overloaded disruptor scores a hit at a true range of "0," two points of damage are scored on the facing shield of the firing ship. This does not reduce the amount of damage done to the target or affect any other ship. Like overloaded photons, the damage is caused by the ionized ether trail from the launcher to the target.

(E3.6) ADVANCED FIRE CONTROL

In an attempt to improve the firepower of their ships, the Klingons have developed several advanced fire-control systems for their disruptors.

(E3.61) UBITRON INTERFACE MODULES (D6.5) can be used to increase the effectiveness of disruptor fire. When using the UIM system, normal disruptors fire at ranges of 16 to 22 are resolved as if they were fired at a range of 15. Overloaded disruptors fired at a range of 3 to 8 are resolved as if they were fired at a range of 2 (for purposes of hit probability, the effect of a hit is the same).

(E3.62) DISRUPTOR EXTENDED-RANGE FIRE ATTENUATION CONTROL SYSTEM (DERFACS) was designed to improve the long-range firepower of Klingon ships. All disruptor fire at ranges of 23-30 is resolved as if the range was 22.

(E4.0) PHOTON TORPEDOES

Photon torpedoes are carried by Federation ships and certain others. They are considered to be the heavy weapons of the ship, but because they must be armed in advance and cost a considerable amount of energy to hold in the launch tubes if they are not fired immediately, their use is restricted to heavy combat situations. A Federation ship does not normally keep photon torpedoes armed because of the energy requirement to simply hold them in the tubes.

(E4.1) FIRING PHOTON TORPEDOES: Each "PHOTON" box on a Federation ship's SSD represents one photon torpedo launch tube. Each tube is kept track of separately.

A given photon torpedo tube cannot be used to arm, hold, or fire more than one photon torpedo at a time. The maximum firing rate for a cruiser, for example, is four torpedoes in each two-turn period.

(E4.11) Photon torpedoes are fired in the Impulse Procedure, and their effect is determined immediately by die roll. There are no counters for photon torpedoes.

(E4.12) To determine if a photon torpedo has hit the target, roll a single die. If the result is between the listed hit numbers (inclusive), the torpedo has hit its target. For example, a die roll of 4 is within the hit numbers listed (1-5) for range 3, so the torpedo would score a hit at a range of 3 with a die roll of 4.

(E4.13) Regardless of range, a photon torpedo does 8 hit points of damage if it hits.

(E4.14) Even when firing without a "lock-on" (where the range would be doubled) photons cannot be fired at an ACTUAL range of one hex or less (exception: overloads).

(E4.15) Photon torpedoes can be fired in a narrow salvo (E1.6). Overloaded and non-overloaded torpedoes can be combined; proximity and non-proximity torpedoes cannot.

(E4.2) OPERATIONS

(E4.21) ARMING: To arm a photon torpedo, two factors of warp energy must be allocated to a specific photon torpedo tube on each of two consecutive turns. The second turn may be the turn of firing. The Federation cruiser, which has four photon tubes, would have to expend eight units of warp energy on each of two consecutive turns to fire a full spread of four torpedoes.

(E4.22) HOLDING ARMED TORPEDOES: If the arming of a photon torpedo has been completed on a given turn, and the torpedo is not fired on that turn, then the ship must allocate one unit of energy for that tube for each turn until the torpedo is fired.

Example: On turn 5, two units of energy are allocated to a tube. On turn 6, two more units are allocated, and the torpedo is armed. If two units of energy had NOT been allocated, the torpedo would have been expended automatically, and arming must begin again. Assuming that arming was completed on turn 6, the torpedo could have been fired on turn 6. If not, then on turn 7 the ship must either expend one unit of energy to hold the torpedo in the tube or eject the torpedo harmlessly into space. If not fired on turn 7, another unit of energy must be allocated on turn 8 to hold the torpedo in the tube, or again the torpedo would have to be ejected.

(E4.23) ENERGY REQUIREMENT. The four points of energy to arm a photon torpedo (and any used to overload it) MUST all come from the warp engines. The one unit of power to hold it may come from any source.

(E4.3) PROXIMITY FUSE (ADVANCED)

Photon torpedoes may be fitted with a proximity fuse. This increases their chance of a hit at longer range but reduces their effectiveness.

(E4.31) A photon torpedo that is to carry a proximity warhead must be recorded as such when the second turn's arming is recorded. It must be announced as such when fired.

(E4.32) Proximity-fused photon torpedoes automatically miss at all ranges less than nine hexes. At ranges of nine or more hexes, two is subtracted from the die roll when rolling to determine if the torpedo has hit.

(E4.33) The strength of a proximity-fused photon torpedo is four instead of the normal eight. This accounts more for the fact that the weapon has exploded some distance from the target than any actual change in warhead yield.

(E4.34) Proximity-fused photons that have just been fully charged or are being held could be changed to normal types, and vice-versa, during the Energy Allocation Phase. There is no energy cost for the changeover. Note, however, that proximity-fused photons cannot be overloaded.

(E4.4) OVERLOADS (ADVANCED)

Ships that carry photon torpedoes have the option of "overloading" them. This involves using extra energy to arm them, but it increases their power.

(E4.41) LEVELS OF ARMING: Photon torpedoes can be overloaded by up to 100%. During the arming process for a normal photon torpedo, a total of four units of warp energy is applied to charging the torpedo. If additional energy (up to four points) is applied during the two-turn arming process, or while the torpedo is being held in the tube, this energy has the effect of overloading the torpedo. Note that energy paid to hold the torpedo in the tube does not count for overloading. The strength of an overloaded torpedo is determined as follows:

Total Energy	Warhead Strength	Feedback	Hold Cost	
			Standard	Fractional
5	10	1	2	1 1/4
6	12	2	2	1 1/2
7	14	3	2	1 3/4
8	16	4	2	2

(E4.42) MAXIMUM RANGE: The maximum range of an overloaded photon torpedo is 8. The weapon is unstable and will dissipate at that point. The range limitation applies to true range, not to adjusted range.

(E4.43) FEEDBACK DAMAGE: Overloaded photon torpedoes may be fired at a range of 0 or 1. In such case, the hit probability is 1 - 6. Note that electronic warfare (D6.4) and other conditions might still result in a miss.

(E4.431) If an overloaded photon torpedo scores a hit at a range of 0 or 1, damage is scored on the facing shield of the firing ship. The amount of damage is shown in the "feedback" column above. The ionized ether trail from the firing ship to the target (created by the passage of the torpedoes) conducts some of the blast back to the firing ship. If the weapon misses the target, there is no damage to the firing ship.

(E4.432) The feedback damage is not subtracted from the warhead strength.

(E4.433) No other ship, regardless of its location proximate to the firing or target ship, takes damage as a result of this effect.

(E4.44) HOLDING: Overloaded photons may be held in the tubes at a cost of two units of energy per turn regardless of the warhead yield. (Using fractional accounting, the cost may be considerable less.) This does not have to be warp energy.

(E4.45) OVERLOADING WITH RESERVE POWER: A photon that has completed arming could be overloaded during the turn using reserve power (H7.0). However, this must be reserve warp energy (H7.4).

(E5.0) ANTI-DRONES

Some ships carry a special drone rack that is loaded with short-range hyper-velocity missiles used to destroy incoming drones. This is known as an "anti-drone" or (rarely) "point defense drone." Each ADD box on the SSD represents one ADD rack.

(E5.1) ADD RACKS

The anti-drone rack contains six anti-drones; once this ammunition is exhausted the rack cannot be fired again until reloaded. (Some ships have larger magazines. If so, this is stated in the specific rules on that ship.) An ADD rack (or G-rack) can fire one ADD per impulse. All ADD's have 360° firing arcs. If a ship does not have lock-on, its ADD cannot fire. Anti-drones can be fired from type-G drone racks.

(E5.2) OPERATION

Anti-drones are direct-fire weapons normally used to fire at drones. Fire is resolved by the ANTI-DRONE PROBABILITY OF HIT CHART (E5.5) below. The player firing the ADD designates the drone that is the target and rolls one die. If the result is within the range of hit probabilities for that range on the chart, the ADD has hit the target. A "hit" automatically destroys the drone fired at.

(E5.3) ALTERNATIVE TARGETS

An ADD can be fired at fighters or shuttles, but if a hit is scored, a die must be rolled. The result is the number of damage points scored on the fighter. The ADD's warhead is extremely small, and a fighter, being much larger than a drone, can survive the damage it causes. The ADD warhead is too small to score even a single damage point on a ship, base, P/F, asteroid, ESG field, or anything larger than a FTR or drone.

(E5.4) ALTERNATIVE AMMUNITION

Ships may load IS (or ISH or ISF or ISHF) drones in the ADD launcher. These can be mixed with the anti-drones on a one-for-one basis. These are targeted by the ADD's computer and can only be fired if the target is within six hexes of the firing ship. A single ADD can only fire one IS drone per turn and cannot fire IS drones and AD drones in the same turn.

(E5.5) SPECIAL DRONE/ANTI-DRONE RACKS

There is a special type-G drone rack that can fire anti-drones. Refer to rule (FD3.7) for information on this rack.

(E5.6) ANTI-DRONE PROBABILITY OF HIT CHART					
RANGE	0	1	2	3	4+
Die roll for hit for miss	—	1-2	1-3	1-4	—
	1-6	3-6	4-6	5-6	1-6

(E5.7) RELOADING

All ships equipped with ADD racks have two complete sets of reloads for the rack. One, two, or three anti-drones can be loaded on each ADD rack each turn, but only if the rack is not fired during that turn. This reloading is accomplished automatically if the rack does not fire.

Ships firing anti-drones from their type-E and type-G drone racks reload them by (FD2.42).

(E6.0) MONSTER CLOSE-IN DEFENSE SYSTEM

Some monsters (see the "SM" scenario sections) are equipped with a special close-in defense system designed to protect them from drones.

(E6.1) PROCEDURE AGAINST DRONES

To resolve the fire of the MCID, roll a single die. If the result is 1-4 the drone has been intercepted and destroyed. If the result is 5-6, the drone has not been destroyed.

(E6.2) PROCEDURE AGAINST SHUTTLES

To resolve fire of the MCID against shuttles, roll a single die. If the result is 1-2, the shuttle is destroyed, 3-4 the shuttle receives enough damage points to cripple it, 5-6 the shuttle is undamaged.

(E6.3) LIMITATIONS

The monster close-in defense system can be used up to three times per impulse (at any type or types of targets) on targets within 3 hexes. It is not affected by any other systems or effects, except that it cannot fire through webs or planets.

SYNOPSIS OF VOLUME II AND VOLUME III

(E7.0) FUSION BEAMS

(E8.0) MAULERS

(E9.0) TRACTOR-REPULSOR BEAMS

(E10.0) HELLBORES

(E11.0) PLASMATIC PULSAR DEVICE

(E12.0) WEB CASTER

ANNEX #8A DISRUPTOR RANGE TABLE

Ship race and class	Max Range
Klingon B10, C8/9	40
Klingon D7, D7C, D5	30
Klingon BP, D6B	30
Klingon D6, Tug	22
Klingon F5	15
Klingon E4, E3, G2, G1	10
Lyran DN, BC	40
Lyran CA, CW, CV	30
Lyran CL, DD	22
Lyran FF	15
Lyran P/F	10
Kzinti SSCS, SCS	40
Kzinti CV, CVA, CS	30
Kzinti CL, BC, CC, CM	30
Kzinti PFT	22
Kzinti FF	15
Tholian D	40
Tholian C	30
Tholian DD	22
Tholian P/F	10
Orion CA	30
Orion Sal, CVL, PFT	30
Orion CR	22
Orion LR	22
Orion Slaver	15
Orion Bcnr	10
WYN OrCr	22
WYN LyDD	22
WYN KzFF	15
WYN KIG2	10
WYN Aux C, CV	22
Q-Ships	22
Starbase	40
Battle Station	30
Base Station	30
Aux CV	22
Aux CVL	15

(F0.0) SEEKING WEAPONS

Seeking weapons, unlike direct-fire weapons, are represented by a counter on the map and move toward their targets at a given speed. Normally, a seeking weapon will hit (or miss) its target several impulses (or even several turns) after it is fired. The primary characteristic of seeking weapons is that the target ship has an opportunity to outrun, evade, and fire at the weapon.

(F1.0) TYPES OF SEEKING WEAPONS

There are two types of seeking weapons: drones (basically radar-homing missiles) and plasma torpedoes (charged balls of energy). Because this rules section describes only two weapons, and because those weapons are very complicated devices to explain, it is organized somewhat differently than most other sections. A two-letter superscript (FD) is used on rules concerning drones, while a different superscript (FP) is used on rules concerning plasma torpedoes. The one-letter superscript "F" is used on rules that apply to both types.

It is possible that a third type of seeking weapon might be added to the game at a later point. In that event, a unique superscript will be assigned to it.

In the Cadet's Game, drones are launched during the Initial Activity Phase, plasma torpedoes in the Final Activity Phase. In the Standard Game, either may be launched during any impulse. Seeking weapons are NOT launched during the Initial or Final Activity Phases in the Standard Game. The specific launch tube or rack of a drone or plasma torpedo need not be disclosed.

(F2.0) SEEKING WEAPON MOVEMENT

Seeking weapons move with a fixed speed (32 for plasma torpedoes, various speeds for drones depending on type) and a turn mode of 1 at all speeds. They "home in" on their target, moving in each of their impulses in any manner (at the owning player's option) so long as they move closer to their target if it is possible. If it is not possible to get closer to the target, they must move in such a way as to get no farther away from their target, if possible.

(F2.1) If a seeking weapon and its target are moving on the same impulse, the weapon homes in on the hex the target is entering, not the one it is leaving. If the target enters the weapon's hex, the weapon does not move but is assumed to have hit the target.

(F2.2) Seeking weapons explode immediately when entering the hex of their target. (They are considered to have hit their targets at this point.) The effect of this explosion is resolved during the Movement Segment of the impulse (see Annex #2). As a seeking weapon explodes immediately upon entering the target's hex, the target may not fire on it at a range of "0." Note that if a seeking weapon targeted on one ship passes through the hex occupied by another ship, the ship being "passed" could fire at it at a range of "0" since the weapon did not explode when entering that hex (since it hasn't reached its target).

(F2.3) If the seeking weapon is launched in the same hex as its target, the regular impulse rules are used. Since weapons launch comes in the Impulse Activity Segment (after the Movement Segment and before Direct-Fire Weapons), the target ship will have the opportunity to fire direct-fire weapons at the seeking weapon before it can hit. Which weapons are eligible to fire and which shield is facing the weapon is determined by determining the direction to the ship that fired the weapon. If the weapon moves first (in a later impulse), it will hit the target (unless distracted); if the ship moves first, the seeking weapon will follow it.

(F2.4) Even if more than one ship is in the same hex as the target, only the target is damaged by a seeking weapon.

(F2.5) In the case of one seeking weapon targeted on another (which usually means one drone targeted on another drone), the following example defines the procedure:

Drone A is targeted on ship B; drone C is targeted on drone A.

1-If drone A enters a hex that contains drone C but not target B, or if drone C enters a hex that contains drone A but not target B, drone C destroys drone A and is, itself, destroyed in the process.

2-If drone A enters a hex that contains target B but not drone C, drone A hits target B, and drone C, having nothing to track, is removed.

3-If drone A enters a hex that contains both target B and drone C, drone C destroys drone A before it can hit target B.

4-If drone A and drone C both enter target B's hex on the same impulse, the faster drone will hit its target first. If both drones are the same speed, BOTH will hit target B.

(F2.6) If a target being tracked by seeking weapons docks inside or to a larger unit, the seeking weapon will accept this larger unit as its target.

(F2.7) If a unit undocks or launches from a unit that is the target of a seeking weapon, the seeking weapon will remain locked onto its original (larger) target. Exceptions: Wild weasels (J3.0), SWACS (R2.93)

(F2.8) All drones and plasma torpedoes may make one high energy turn during each turn on the board. When making an HET, the weapon does not move, but simply turns in place. The HET costs nothing and cannot produce a breakdown. The option to use an HET is up to the player owning the weapon; it can never be forced to make one. If used, an HET must satisfy the restrictions of this rules section (e.g. move closer if possible).

Note: This rule modifies the first line of (C6.41) in the Rev-0 edition.

(F2.9) In the Cadet's Game, all seeking weapons are launched at the start of the turn in the Drone and Shuttlecraft Launch Phase. These weapons will be removed from play during the Final Activity Phase of the last turn of their endurance (excepting the faster versions short-ranged dogfight drones, which would be removed at the end of their 12-hex range). The endurance of plasma torpedoes is one turn, although all but the most powerful will have no effect during the later portions of that turn and should be removed (once their damage rating reaches zero) to avoid cluttering the board.

In the Standard Game, seeking weapons can be launched during any impulse, and their endurance must be tracked individually.

(F3.0) DIRECT-FIRE SEEKING WEAPON RESOLUTION

This section is presented in Supplement #1. It presents a method of resolve drone and plasma torpedo combat as seeking weapons, using a series of charts, die rolls, and playing conventions to create the effect of seeking weapon combat without actually moving counters on the board.

Depending on which printing of Supplement #1 you have, the chart in (F3.23) may not include the medium-speed drones, which were not added to the game until after the first printing of that Supplement. The complete chart is given below:

Range (hexes)	0	1	2	3	4	5	6	7	8	9+
Delay (F)	0	1	1	2	2	2	3	3	3	4
Delay (M)	1	1	2	2	2	3	3	3	4	4
Delay (S)	1	2	2	3	3	3	4	4	4	4

EXAMPLES

This page, which would have been left blank under the normal procedures for this rulebook, has been used instead to provide examples for some of the more complex rules sections. While out of sequence, these examples are no less valuable.

(G16.72) RELEASING A SHIP FROM STASIS

EXAMPLE #1: A ship fills out its energy allocation at the start of turn 4. The ship is put in stasis during impulse #12 and released during impulse #19. During impulses #20-#23, the ship will execute whatever its owner plotted/allocated for impulses #13-#16. At the end of impulse #23, the player can write new plot/allocation orders for the remaining impulses of the turn. However, if he had fired a phaser during impulse #10, he must still allocate power for that phaser. Also, he would be required to maintain the same speed, unless the players were using (C12.0), in which case he must satisfy the restrictions of that rule. Also, assuming he allocated power for a speed of 12 (assuming a movement rate of 1 this would require 12 units of power), he would move whenever a speed-12 unit moved, even though he is (in effect) paying for hexes of movement lost while in stasis.

EXAMPLE #2: In the above example, if the ship had not been released until impulse #9 of a later turn, it would execute impulses #13-#16 during impulses #10-#13, then complete a revised plot/allocation for the remainder of that turn. He would be under the restrictions of the prior turn during impulses #10-#13, but would then start a new (even though shorter) turn on impulse #14. Note that if a ship with a movement rate of 1 allocated 12 units of power to movement, it would actually move only eight hexes during the remainder of that turn.

(J4.8) EXPLANATION OF FIGHTER LOADING AND WEAPONS ARMED STATUS

The ship in question is a Hydran Ranger equipped with nine Stinger fighters. Each fighter has two fusion beams; each beam needs two charges. Each fighter box has eight charges stored (J4.83). There are nine deck crews (Annex 7G).

In weapons status 0 or I, none of the fighters can have any of these fusion beams loaded at the start of the scenario (S4.1).

Assuming that each fighter is to be completely loaded, none can be launched before turn 3, because the nine deck crews will take two complete "operations" to load the four charges (1/2 of an operation per charge, four charges per fighters). Each deck crew can perform one operation per turn, that the operation takes the entire turn (J4.823).

If the ship considered it important to launch the fighters on turn two, it could launch each fighter with only two charges (rather than four), or it could launch four fighters with four charges each and one fighter with two charges, leaving four fighters without any fusion charges loaded. The player might find it more efficient to have six deck crews load three fighters with four charges while the remaining three deck crews each loaded one charge onto each of two fighters. That would allow all nine fighters to launch with at least some weapons.

It is important to note, particularly in the case of Hydran ships, that a deck crew can work on two fighters, but they must be in the same bay (J4.833). In the above example, the three fully-armed fighters could not be from the same bay because this would not allow the remaining three deck crews to be evenly divided between the other two bays.

Note that in Weapons Status II or III, two turns of arming could have been completed before turn 1 of the scenario, so all fighters could be fully armed before the scenario and launched on the first turn.

(G7.36) EXAMPLE OF MOVEMENT BY TRACTORED SHIP

A Klingon F5 (movement cost 1/2) tractors a Federation DN (movement cost 1 + 1/2). The F5 has allocated five units of warp energy and one unit of impulse energy to movement, which would call for a speed of 11. The DN has allocated 20 units of warp energy and one unit of impulse energy, which would call for a speed of 14. The total movement cost of the two ships is two energy units per hex. The F5 thus has a pseudo-speed of two hexes per turn (five divided by two and dropping all fractions). The DN has a pseudo-speed of 11 (twenty divided by two plus the one point for the impulse engines). The tractor link was established on impulse #14. On impulse #15, a ship with a speed of 11 would move, so the Federation player would move both ships one hex in the direction that the DN was facing (or was turned to face within the restrictions of its turn mode). During this movement, the F5 will retain its facing. On impulse #16, a ship with a speed of 2 would move, so the Klingon player would move both ships. In this case, the F5 captain must apparently be trying to slow down the DN so that other Klingon ships can engage it. If not, the DN captain will probably tow him behind some convenient asteroid and beat the daylights out of him! (But the DN captain must be careful, or the F5 captain will steer him into an asteroid!)

(M7.24) EXAMPLE OF DETECTING MINES

There is a minefield on the map. It includes mines which are listed below by an identifying letter, their hex number and detection number.

A-0719-1	G-0922-1	N-1212-1	U-0504-1
B-0814-2	H-1111-2	P-0820-2	V-1206-2
C-0517-3	J-0812-3	Q-0606-3	W-0710-3
D-1011-4	K-1010-4	R-0704-4	X-0916-4
E-0616-5	L-0305-5	S-1004-5	Y-0314-5
F-0912-6	M-0411-6	T-1117-6	Z-1105-6

A ship, planning to investigate this minefield, is in hex 1510, moving at a speed less than six (as required by the rules). The ship makes an attempt by spending the one point of power and rolling a die. The result is "4". According to rule (M7.22) any mine within six hexes with a detection number of "4" must be revealed to the ship. Mines D and K are revealed, mines R and X are beyond the six-hex range and are not revealed.

On a later attempt from hex 1406, the ship rolls a "5". Mine S is detected, but mines E, L, and Y are beyond range.

An attempt by a ship in hex 1208 with a die roll of "3" would detect mines J, Q, and W.

(M8.6) EXAMPLE OF MINESWEEPING

There is a mine in hex 1010. A minesweeper enters hex 1110 to begin an attempt to sweep the mine. There is a possibility that the mine will explode (M2.4) and this must be resolved at the time the ship enters the hex.

The ship now attempts to gain a lock-on to the mine. Since its sensors are undamaged, it has a sensor rating of six. However, rule (M8.2) limits this to a rating of four. The ship rolls a "5" indicating no lock-on, and must wait for the next impulse. (It can't detonate the mine if it does not move. However, it is still in tactical danger because something else could detonate the mine.)

On the next impulse, the die roll is "3" and a lock-on is achieved. The ship now uses a tractor-beam to grab the mine, and is ready to fire at it. The ship can fire any number of available phasers, but if the first salvo fails to destroy the mine it will detonate instead. For example, if the ship fired only a single phaser-I, die rolls of 3, 4, 5, or 6 would result in less than six points of damage and result in an explosion. Firing two phaser-Is would guarantee successful sweeping.

(FDO.0) DRONES

(FD1.0) GENERAL RULES

Drones are small unmanned missiles with a trans-light speed capability. The Klingon ships carry these devices as auxiliary weapons; Kzinti ships carry them as their primary armament. Other races also use drones. Drones are very similar to 20th Century radar-homing missiles. They are launched by a starship which has a sensor lock-on to another ship and then home in on that ship.

(FD1.1) DRONE LAUNCHERS

Drones are carried in drone racks. These racks are of various types and sizes (FD3.0), although the most common type holds four drones and can fire one per turn. Fighters also carry drones on their launch rails.

(FD1.2) LAUNCHING DRONES

Drones can be launched (or fired) during the Impulse Activity Segment of each turn. (In the Cadet's Game, drones are launched only in the Drone And Shuttlecraft Launch Phase of each turn.) When launched, the drone is placed on top of the launching ship, facing any direction at the option of the owning player. The target ship for each drone must be announced in this phase. It requires no energy to launch a drone (although fire control must be powered). However, a record must be kept of the drones remaining in each launching rack.

(FD1.3) DRONE TARGETS

A drone may be targeted on anything (including another drone or a fighter) except a plasma torpedo. Players may wish to experiment with keeping the actual target of a drone secret.

(FD1.4) DRONE RANGE

All drones are assigned an endurance expressed in turns. If the drone has not been destroyed or hit its target when this endurance is exhausted, it is removed from play. Drones that have expended their fuel are not recoverable. Note that if a drone is fired during a given impulse of a turn, it will reach the end of its endurance during the same impulse of a later turn. See (F2.9).

(FD1.5) FIRING AT DRONES

Any type of weapon can be fired at drones, but some (because of their nature) are penalized when doing so.

(FD1.51) Phasers, plasma torpedoes, drones, displacement devices, stasis field generators, anti-drones, maulers, and the web caster all fire at drones without penalty.

(FD1.52) Photon torpedoes, disruptors, TR beams, hellbores, fusion beams, and plasmatic pulsar devices, are all penalized by four points of ECM when firing at drones.

(FD1.53) Expanding spheres have a special effect on drones (G23.0).

(FD1.54) A drone is destroyed if it receives damage points equal to its destruction rating (FD2.2).

(FD1.55) If several drones are in the same hex and one is destroyed, the others are not affected.

(FD1.56) The impact of any drone will destroy any other drone regardless of the warhead strength of the intercepting drone or the required destruction points of the target drone. This does not apply to suicide or SP shuttles; they use the normal combat rules requiring a specified number of points to destroy.

(FD1.6) DRONE COMBAT

When a drone enters the hex of its target, it explodes and scores a number of points on the facing shield equal to its warhead rating (FD2.2). Hit points are scored against the shield facing the direction of approach (assuming that shield is still functioning). Damage points in excess of the shield's strength are scored as internal hits.

Note: In practice, Klingon drones seldom reach their targets, although they do tie up enemy phaser energy. The Kzinti strike cruiser, with the capability of launching large numbers of drones, has a substantial chance of gaining hits with drones, while its point defense phasers make it a difficult target. A squadron of fighters (especially the later fighters in Volume II), each able to fire several drones, can make things rather exciting.

(FD2.0) TYPES OF DRONES

There are some dozens of different types of drones, each of which has different characteristics. All drones used in the game are shown on the following chart.

(FD2.1) DRONE TYPE CHART

TYPE	SPEED	ENDURANCE	WARHEAD	DAMAGE	SPACE	COST
I	12	1	8	3	1/2	0
I	8	3	12	4	1	0
II	12	2	12	4	1	1/2
III	12	25	12	4	1	1
IV	8	3	24	6	2	0
V	12	2	24	6	2	1/2

(FD2.2) EXPLANATION OF THE DRONE CHART

Speed = number of hexes moved each turn.

Endurance = number of turns the drone remains in play.

Warhead = number of damage points scored on impact.

Damage = number of damage points required to destroy drone.

Space = size of the drone, expressed in "spaces."

Cost = the cost to exchange a type-I drone for this drone.

(FD2.21) The type-I drone is the standard type. The type-IV drone is a larger version of the standard type-I drone, with a larger warhead. Type-II drones are basically faster versions of type-I drones (just as the -V is a faster -IV). The type-II and -V drones all but disappeared when improvements in small warp engines increased the speed of all drones to 20 (medium speed) in Y167 and then to 32 (fast drones) in Y180. The Type-III drones are special long-range drones used in special situations.

(FD2.22) Many optional improvements are available, each of which costs points that must be paid through (S3.0). All costs are based on additions to the basic cost of a type-I drone.

(FD2.221) Active terminal guidance (FD5.2) costs 1/2 pt per drone. The warhead rating is not reduced.

(FD2.222) Extended range costs 1/2 point per drone and doubles the endurance (exception: type-III becomes IIIIXX with range 100 and size of two spaces). Any type of drone EXCEPT a dogfight drone can be modified to have double endurance.

(FD2.223) "-M" or medium speed (the speed is increased to 20) costs 1/2 point per drone.

(FD2.224) "-F" or fast speed (the speed is increased to 32) costs 1 point per drone.

(FD2.3) SELECTION

All drone racks are presumed to be loaded with type-I drones (except E and G) and the ship has a reload set (enough to reload all of its racks one time) on board. (Any exceptions will be noted in the ship specifications.) This is included in the BPV of the ship. If a player wishes to use advanced drones, he must pay a penalty (in victory points) for the privilege. The chart above includes the cost of trading a standard type-I drone for another type. For example, to exchange a type-I for a I-XFH (that is, extended range, fast speed, and active homing) would cost 2 points. To change all 16 drones on a Klingon D7 to "fast" drones would cost 8 points (the cost of converting the 8 drones in the racks, the reloads are free).

Historically, about 75% of Klingon, 67% of Federation, and 50% of Kzinti drones were type-I (or versions of it).

Note: Players should use reasonable judgement in their selection of drones. While it may seem perfectly logical to some to use only the best marks of drone (such as the II-X and IV-X), this did not happen in the actual service. The better drones were more expensive and more difficult to produce and often just not available. Smaller ships (with their lower-ranking captains) almost never got advanced models. Players who restrict themselves to only the very best (and most powerful) ships and weapons are missing a great deal of the game. Throughout history, many decisive battles were fought with "outdated" or "inappropriate" weapons because the new ones were not available in quantity. The "Falklands War" of 1982 is an example of this, where outdated Skyhawk jets bombed "anti-submarine" ships.

(FD2.4) LOADING

(FD2.41) Drones may be mixed in drone racks as the players may elect. Any drone in a given rack may be fired (they are on a rotary launcher and do not have to be fired in order).

(FD2.42) A ship can reload its drone racks with drones from storage during combat. One or two spaces of drones can be loaded on a given rack during a single turn, provided that the rack is not fired during the entire turn. This plan to reload must be plotted in advance, taking the rack out of service for that turn.

(FD2.43) All ships are presumed to carry one complete set of reloads (i.e. drones equal to the number of spaces held by all of their racks). In addition, certain ships that operated fighters carry extra drones to equip these fighters. Drones carried by fighters or launched from drone racks are identical.

(FD2.44) Unless otherwise specified a cargo box will hold 50 spaces of spare drones. It does not have them automatically, however, unless specified in the ship description.

(FD2.45) The cost of improved drones (FD2.22) is paid only for a single loading of each launch rack and/or fighter; the reloads (and drones stored on a carrier for use by its fighters) are presumed to be of the same type without additional cost. The drones in storage can be of a less expensive, but cannot be of a more expensive, type than the drones in the loading paid for. Drones cannot be transferred to another ship that did not pay for better drones because that ship would not have the facilities to store, maintain, and operate that type of drone.

It should be noted that a drone-using ship used during a period when medium- or high-speed drones are used are, effectively, forced to purchase those drones which in effect increases their BPV. For example, a Kzinti CS has a BPV of 116. However, it has four drone racks, each of which hold four drones. Equipped with medium-speed drones, the BPV increases by 8 points (1/2-point per drone) to 124. The BPV of a Kzinti CS armed with fast drones is 132.

Normally, all drones on a given ship are of the same speed. There might be exceptions to this during a brief historical period when new technology was being introduced. Thus, a ship might have one fast drone per rack while the remainder were medium-speed drones. Alternatively, a ship equipped with medium-speed drones could logically be expected to have a few old slow drones left over and stored in an otherwise unused storage facility. (Although these would have to be purchased as extra equipment.)

(FD2.5) DOGFIGHT DRONES

(FD2.51) All type-IS drones (including all variants of them) are classed as "dogfight" drones. (The terms "IS" and "ISH" are interchangeable and refer to dogfight drones.) They are carried ONLY by fighters or on the special E and G drone racks (which use them to shoot at fighters) and on ADD racks (E5.23). They are extensively used in dogfights (J7.0). Dogfight drones cannot be loaded on or fired by any drone racks except E and G.

(FD2.52) Any fighter which carries non-dogfight drones can trade these for IS drones on a one-for-one exchange. There is no BPV adjustment for this exchange. The exchange is one-for-one rather than two-for-one because the limitation is the number of launch rails, not size or weight.

(FD2.53) Dogfight drones are not affected by many factors that affect other drones. See (FD5.1).

(FD2.54) Dogfight drones which hit ships score only two damage points. Those which hit fast patrol craft score four damage points. Those which hit planets cause no damage. This is because the tiny warhead is designed to score a direct hit on a fighter engine instead of damaging the shields of a ship. They will do two points of damage to monsters.

(FD2.55) Type-IS drones have a maximum range of 12 hexes regardless of speed. The range cannot be extended. Type-IS drones will acquire their target when they move within 8 hexes of it and need no further guidance after that.

(FD2.56) Type-IS drones, despite being warp seekers, cannot be used to cause selective damage on warp engines. Warp-seeking warheads cannot be used on any other type of drone.

(FD3.0) TYPES OF DRONE RACKS

The Kzintis (the primary drone-using race) have developed several types of drone racks that are improvements over the standard ("A") model. To a limited extent, these have been copied by the Klingons, Orions, and others. During the General War, many of these racks were installed on various ships. None of these improved types can be combined with each other. All require a victory point adjustment in combat scenarios; see Annex #6A.

Except as noted, no drone rack can fire two drones within 1/4 turn of each other, even if on different turns.

(FD3.1) The standard "A" rack has a capacity of four spaces of drones and can fire one per turn. Unless stated otherwise in the ship descriptions, all drone racks are of this type, but can be replaced with other types by modifying the ship's BPV (S3.0).

(FD3.2) The larger "B" drone rack has a capacity of six spaces of drones and can fire one per turn.

(FD3.3) The "C" drone rack is designed for "rapid fire." Two drones may be launched from this rack during a single turn. These cannot be launched within 12 impulses of each other (even on consecutive turns). (In the Cadet's Game, both would be launched during the Drone and Shuttlecraft Launch Phase.) It holds four spaces of drones. This type of rack was installed on many fast patrol craft (Volume II) but is not included in their BPV.

(FD3.4) The "D" drone rack is actually a modified launcher. It replaces two drone boxes that are adjacent and joined on an SSD. The two rack boxes represent two launchers, which are served by a joint magazine holding nine spaces of drones (each launcher also holds one at the beginning of each scenario for a total of 11). Due to mechanical restrictions, the drones must all be of the same type, and only one-space drones can be used. The first damage point scored on a D-rack destroys one of the two launchers but does not reduce the magazine capacity; the second damage point destroys the magazine and remaining launcher.

(FD3.5) The "E" drone rack holds eight dogfight drones. It can carry no other types. Many fast patrol ships carried this version which proved useful in hunting fighters. This rack can fire up to four drones per turn, but cannot fire two drones within 1/4 turn (8 impulses) of each other, even on consecutive turns.

(FD3.6) The "F" drone rack (known as the "jump rack") was designed for ships that did not normally carry drones or which needed some extra firepower. Identical to an "A" rack, it is installed in the shuttle bay of a starship and fires through the shuttle loading hatch. In this way, no expensive modifications to the ship were required. Over 200 of these racks were sold to the Federation, Gorn, Tholian, and Hydran fleets during the General War, with mixed results. Some were acquired by the Orions. At least one was installed on a Romulan ship. Each "F" takes up one shuttle box. An "F" drone rack can be traded for a B, C, D, E, or G rack for the same cost as trading an A rack.

(FD3.7) The "G" rack can carry four spaces of drones, and it is equipped with targeting radar for anti-drones (E5.0). Each anti-drone takes 1/2 space. The G rack can carry the 1/2 space dogfight drones or any other type of drone. The rack can carry a mixture of types and fire any one drone loaded on it per turn. If fired in the anti-drone mode, it cannot fire normal drones that turn, but can fire one anti-drone per impulse. In the drone mode, it can fire one drone per turn. The decision as to which mode to use is made the first time (each turn) it is fired. Many ships were converted to use this type of rack during the General War. For example, Federation ships (which used G-racks extensively) needed anti-drones on the Klingon front, but these systems were all but useless on the Romulan front. Klingon ships needed anti-drones on the Kzinti front but needed extra drones on the Hydran front. Most drone-equipped Aegis ships eventually had this type of rack.

(FD4.0) FIRING RATES

(FD4.1) Unless stated otherwise in the ship descriptions, or when player-modifications are being used, all ships are assumed to have "A" drone racks.

(FD4.2) Unless stated otherwise in the ship descriptions, or when using player-modifications, all ships are presumed to be able to fire one drone from each of their racks each turn.

(FD4.21) Klingon ships, unless stated otherwise in the ship descriptions or when player-modifications are being used, are able to fire (each turn) a number of drones equal to one half the original number of drone racks (round fractions up). Thus, a C8 with six racks can fire three drones per turn; a D7 with two racks can fire one. This restriction is based on the total number of operational racks on the ship, including destroyed racks, but not including the non-operational forward racks on the C9, which are (in fact) cargo boxes rather than drone racks.

(FD4.22) Many Orion ships (most of them in Volume II) can mount large numbers of drone racks. None of these ships, however, can fire drones from more than three of their drone racks during a turn (at the appropriate firing rate for the type of rack).

Some Orion ships are configured for long-range drone bombardment, or for short-ranged anti-fighter work. These have sufficient tracking capacity to fire every rack (at its maximum rate) every turn, and to guide a number of drones equal to double the current sensor rating. This modification, known as OAKDISC (Orion Advanced Killer Drone Improved System of Control) costs 10 points for CR-class ships, 15 points for CA and Salvage-class ships, and 7 points for LR-, Slaver-, and PF-class ships.

(FD5.2) SELF-GUIDING DRONES

Any drones (other than IS) can be equipped with active terminal guidance (ATG) for a cost in BPV points. ATG drones guide themselves; but they can be distracted by electronic warfare, wild weasels, SWAC/Scouts, or chaff.

Federation scientists, while working on a deep space probe design, developed the technology for the active terminal guidance system. During the third Klingo-Kzinti War, a special treaty between the Federation and the Kzinti Hegemony resulted in various exchanges between the two fleets (including Federation observers serving on Kzinti ships and occasionally piloting Kzinti attack shuttles), one of which was this technology being passed on to the Kzintis. Shortly after they began using it, the Klingons began issuing their forces with this type of drone (and less than a year later, the Orion pirates were using it).

(FD5.21) Drones equipped with active terminal guidance (ATG) after closing to within 8 hexes of their assigned target, do not require command guidance from the launching ship but will track and follow the target independently. They must keep the target in their FA arc to track it. If launched within eight hexes of their target, they lock-on immediately. However, the launching unit must have the ability to control the drone before it can be launched. A unit that is already controlling its maximum number of drones cannot launch an ATG drone, even if that drone would immediately have its own lock-on. If only one control circuit was available, and the target was within 8 hexes, the unit could launch one ATG (or dogfight) drone per impulse.

(FD5.22) Any drone other than an IS may be equipped with ATG. However, doing so costs 1/2 BPV point. The warhead is not reduced.

(FD5.23) If, after acquiring its target, circumstances cause the drone to be more than 12 hexes from the target (or the target is outside of the FA arc at the end of an impulse), guidance is lost and the drone is removed from play unless a ship (friendly to the drone) is available to control it. See (G18.64).

(FD5.24) ATG cannot track a ship using the cloaking device (G13.32).

(FD5.25) Type-III drones use a modified form of ATG guidance. They do not require any outside guidance and can track their targets from several hundred hexes away. Targets are located by special passive sensor gear not within the scope of the game. (See explanation in Nexus #9.) Type-III drones include 2 points of built-in ECCM.

(FD5.0) METHODS OF CONTROL

There are basically three methods of controlling drones: energy seeking, self-guiding, and launcher-controlled.

(FD5.1) ENERGY SEEKING DRONES

(FD5.11) Dogfight drones (FD2.5) are all controlled by warp-energy seekers, which look for and home in on the emissions of warp energy by their targets. The drone can find any type of energy it was told to look for, so the target need not have warp energy. Also note that turning off or dropping a ship's warp engines, or the fact that they may have been destroyed, will not prevent the drones from tracking their target.

(FD5.12) These drones cannot be fired unless the launching unit has a lock-on to the target at the time of firing (exception: dogfights (J7.0)) and maintain it until the drone has moved within 8 hexes of its target (at which point it will gain its own lock-on), but thereafter do not require guidance by any outside element. Once it has its own lock-on, the drone releases itself from the guiding unit; if it loses this lock-on (is more than 8 hexes from the target or does not have the target in its FA arc at the end of an impulse), the drone is removed from the board.

(FD5.13) Dogfight drones that have gained their own lock-ons cannot be distracted by electronic warfare (D6.3), scramblers (FD5.4), wild weasels (J3.0), cloaking devices (G13.0), SWACs (R2.92), or Scouts (G24.0), but can be distracted by chaff (D11.0). Note that WW, SWACs, and scouts could divert a dogfight drone that did not have its own lock-on.

(FD5.14) Energy seeking guidance cannot be used on any other type of drone.

(FD5.15) The restrictions of (FD5.21) also apply to this type of drone.

NOTE: Because all dogfight (type-IS) drones have a self-guiding capability, the designator "H" is sometimes included in their nomenclature. Thus, type-ISH and type-IS drones are identical, as are type-ISHF and type-ISF.

(FD5.3) LAUNCHER-GUIDED DRONES

If a given drone does not have ATG (or is not yet close enough to acquire its target via ATG) or a warp seeker, it must be guided to the target by the launching unit or another unit. Note that the term "launcher-guided" does NOT mean that the player can move the drone at will, but that his ship has focused a scanner on the target to identify it to the weapon.

(FD5.31) To guide drones, a ship must have a lock-on to the target and be within 35 hexes of the drone and the target. If the lock-on is broken, the drones are lost and removed from play unless control can be transferred. Most ships can guide a number of drones equal to their sensor rating. Some ships can guide a number of drones equal to double their sensor rating. A ship not armed with drones can control them (and assume control of them) but can only control drones equal to 1/2 its sensor rating. Fighters not armed with non-dogfight drones cannot control drones.

(FD5.32) Planets can cause a lock-on to be broken (P2.3). In some cases the drone may suddenly accept the planet as its target and strike the planet. (Since the warheads of drones are thermonuclear, this could cause considerable damage.)

(FD5.33) A unit guiding a drone to a target can transfer control of the drone (i.e. responsibility for its guidance) to another unit at any instant in any impulse (including the impulse it is destroyed or loses lock-on), so long as:

- 1-the accepting unit has a lock-on to the target.
- 2-both units are within 35 hexes of the target.
- 3-both units are within 35 hexes of the drone.
- 4-both units are within 35 hexes of each other.

Note that if a unit guiding a drone loses lock-on, it can still transfer control so long as this is done immediately.

(FD5.34) Electronic warfare can cause a drone to "miss" its target, or at least reduce the effect of a "hit" (D6.3).

(FD5.4) SCRAMBLING DEVICE (Optional rule)

This optional rule can be used by players who have ATG drones in play, but are not using electronic warfare (D6.3). If you are using electronic warfare, do not use this rule.

Approximately 2 years after the ATG equipped drone first appeared, a "scrambler" (based on the Romulan cloaking device) was issued by most fleets which prevented ATG from acquiring and tracking a target. However, even after it was issued, it was not always successful in thwarting the drone threat. When playing situations from this period, both players roll one die (at the instant an ATG drone first tries to acquire a target, and again at the start of each turn thereafter), and the player with a higher result is found to have superior electronics in that turn. His ATG drones will function; his opponent's will not. (Note that this will change continuously.) In the event of a tie (on the die roll), neither player's ATG drones will function. Note that in many cases, one of the players may not have ANY drones. The die rolls are still performed as all starships were equipped with scramblers eventually.

The effect of a scrambler is only to prevent ATG drones from locking on. The drones will still function normally if kept under launcher control or re-acquired by (FD5.23). Scramblers cannot affect dogfight drones.

SYNOPSIS OF VOLUME II**(FD6.0) PROBE DRONES****(FD7.0) SCATTER-PACK DRONES****(FD8.0) MULTI-WARHEAD DRONES****(FD9.0) ECM DRONES**

(FP0.0) PLASMA TORPEDOES

(FP1.0) GENERAL RULES

A plasma torpedo is a ball of matter on the brink of being converted totally to energy. The weapon includes a small mechanical device to trigger this conversion and is extremely powerful. It is used by the Romulans and Gorns as well as by the Orion pirates and (in Volume III) by the Interstellar Concordium. There are four different types of this weapon, each with different strengths and operating costs.

(FP1.1) LAUNCHERS

(FP1.11) Each "TORP" box on the SSD represents one plasma torpedo tube and can arm and fire one plasma torpedo at a time.

(FP1.12) The specific type of launcher in each case is given in the ship specification rules.

(FP1.13) Any given plasma torpedo launcher may be used to load a less powerful, but not a more powerful, torpedo than it is rated for. Thus, a plasma-S launcher could load and fire a plasma-G but never a plasma-R. This is known as "down-loading." Ships cannot down-load prior to the start of a scenario; they cannot load G, S, or R launchers with type F torpedoes in order to have them available on turn 1 in lower weapons status ratings.

(FP1.2) ARMING

(FP1.21) Each plasma torpedo requires three turns to arm. Energy must be allocated to the specific launch tube on each of three consecutive turns. The different types of torpedoes cost different amounts of energy to arm. These costs are shown in the rules for each torpedo (FP2.0). The arming energy can come from any source.

(FP1.22) The energy to arm the torpedo must be applied over a three-turn period in EXACTLY the increments shown in (FP5.51). No more energy can be allocated; if any less energy than required is allocated, the weapon is lost and must begin arming all over again.

Exception: a ship may, in effect, delay the firing of a R, S, G, or F plasma torpedo by only allocating two units of energy (one point for a plasma-F) on the third turn of arming. If done, the first turn's energy is lost, and the second and third turns (two energy points each) become the first two turns of the three-turn arming cycle.

(FP1.23) Plasma torpedoes are expensive (in power) to arm and hold. A ship would not normally travel for months with loaded torpedoes just in case trouble showed up. Ships do not normally begin scenarios with plasma torpedoes armed (S4.0). Exception: Plasma-F torpedoes, held in stasis boxes, can be held almost indefinitely and are always ready at the start of a scenario.

(FP1.3) LAUNCHING

Each plasma torpedo may be fired during the Impulse Activity Segment of any impulse during the third turn of arming. If it is not fired during this turn, it may be held over and fired during any subsequent turn (exception: type-R torpedoes fired by ships cannot be held, those on starbases can be) by paying a specified energy cost to hold the torpedo (exception: type-F torpedoes in type-F launchers cost nothing to hold). Plasma torpedoes CAN be fired in the same hex as their targets (F2.3).

When a plasma torpedo is placed on the board, the owning player must state which type (R, S, G, F) it is. If it is a PPT, he must state what type it is simulating (although not that it is a simulation).

(FP1.4) MOVEMENT

Plasma torpedoes are seeking weapons and move by (F2.0). As plasma torpedoes have an endurance of 15 to 30 hexes, they may (if fired late in the turn) be on the board during parts of two turns. All plasma torpedoes move at a speed of 32.

(FP1.5) WARHEAD STRENGTH

The warhead strength of a plasma torpedo is determined at the instant of impact, based on two factors: the distance that the torpedo has traveled (it grows weaker the farther it travels) and damage done to it by phasers and (possibly) other effects. The warhead strength vs range (for each type) is shown on the MASTER WEAPONS CHART. The damage is applied during the

movement segment, see the expanded Sequence of Play in Annex #2.

(FP1.6) FIRING AT PLASMA TORPEDOES

Plasma torpedoes may be fired at only by phasers (of any type) just as any ship may be. Every two points of damage by phaser fire reduces the warhead strength by 1. Record hits made against a plasma torpedo during a given turn and adjust the strength of the weapon accordingly on impact. No other weapon, including another plasma torpedo, will damage a plasma torpedo. No other effect (for example: self-destruction blast, mines, expanding spheres) will damage a plasma torpedo unless specifically stated to do so. ONLY phasers or impact with a huge object (such as a planet or asteroid) will damage a plasma torpedo.

(FP1.7) SPECIAL COMBAT RULES

If a plasma torpedo has been armed, and the torpedo launch tube is destroyed during that turn's combat, the torpedo may be launched within eight impulses, otherwise it is destroyed. It cannot be held. Destruction of the plasma torpedo systems box on the SSD destroys the ability of the ship to produce new weapons, but not its ability to fire the one it has already created.

(FP1.8) OTHER SPECIAL CASES

(FP1.81) Plasma torpedoes may be distracted by "wild weasel" shuttlecraft (J3.0) or by wild SWACs (G24.0).

(FP1.82) Plasma torpedoes are affected by planets (P2.33) and asteroids (P3.24).

(FP1.83) Plasma torpedoes may be placed in a stasis field.

(FP1.84) Plasma torpedoes may cause a mine to detonate (if it was set to accept one as a target), but mines (other than phaser-captors) will not damage a plasma torpedo.

(FP1.85) Plasma torpedoes cannot be overloaded.

(FP1.86) If the torpedo is launched in the same hex as its target and hit its target before the target moves to another hex, the firing ship receives "feedback" damage on the shield facing the target equal to 25% of the warhead's strength. This does not reduce the warhead's strength. As with similar rules for photon torpedoes and disruptors, this does not affect any other unit in that hex. If the effect of the torpedo is reduced by electronic warfare, the feedback damage is reduced by an equal percentage.

(FP1.87) Plasma torpedoes cannot be held in a tractor beam.

(FP2.0) TYPES OF PLASMA TORPEDOES

There are four types of plasma torpedoes, each of which is described in this section.

(FP2.1) TYPE R PLASMA TORPEDO

This is the most powerful type of plasma torpedo, causing up to 50 points of damage out to 10 hexes, and with a maximum range of 30 hexes. In the case of ships carrying plasma-R, the weapon cannot be held if it is not fired before the end of the third turn of arming. A starbase (but not a smaller base) armed with a plasma-R could hold it when fully charged.

(FP2.2) TYPE S (G-II) PLASMA TORPEDO

This type, known as "S" or as "G-II" (the two terms are interchangeable; the first is what the Gorns call it; the second was applied by Federation Intelligence), is an improvement of the plasma-G. Historically, it was available after Y170. Any ships equipped with plasma-G can fire plasma-S if they allocate the additional energy required. If a ship armed with plasma-G is designated as able to fire plasma-S in a given scenario, the BPV of the ship is increased by 5 points for each launcher.

(FP2.3) TYPE G PLASMA TORPEDO

This was the original Gorn type and is carried by most of their ships. The Romulan KR-class cruiser (a converted D6) carries this type but can be converted to fire the type-S.

(FP2.4) TYPE F PLASMA TORPEDO

Being the smallest plasma torpedo, the plasma-F has been adapted to a stasis (time-freeze) box firing system. For this reason, the plasma-F costs nothing to hold once fully charged (unless it has been armed in a larger launcher, in which case it costs 1 point to hold). The plasma-F is (in volume I) only used by the Orion pirate CR in its optional weapons mount and certain bases. In volume II, the plasma-F is widely used on ships, fighters, gunboats, etc.

Fighters carrying plasma-F torpedoes are unable to arm these weapons themselves. Ships operating such fighters are specified as having a number of plasma-F storage boxes (which can hold, but not fire, the weapons) in their hangar bays. One deck crew (J5.21) can load one plasma-F onto one fighter during one complete turn.

(FP2.5) PLASMA TORPEDO DATA TABLES

(FP2.51) ARMING COST				
Type	Turn 1	Turn 2	Turn 3	Hold Cost
R	2	2	5	4
S	2	2	4	2
G	2	2	3	1
F	1	1	3	0*

* 1 point if downloaded from a larger launcher.

(FP2.52) WARHEAD STRENGTH: This is shown on the MASTER WEAPONS CHART. As can be seen, a type-R plasma torpedo that has traveled 13 hexes has a strength of 35 damage points.

(FP3.0) FIRING ARCS AND LAUNCHERS

During the Impulse Activity Phase in which a plasma torpedo is launched, the counter for the plasma torpedo is placed on top of the firing ship. The direction that the counter is faced depends on the launcher. There are two types: fixed and swivel.

(FP3.1) FIXED LAUNCHERS

This type of launcher can be fixed in any direction (relative to the ship), facing one of the six surrounding hexes. The target must be in a 120° arc bisected by (60° to either side of) the direction of the launcher. If the launcher is facing directly ahead, the target must be in the FA firing arc. If no target is within the valid arc, the torpedo cannot be targeted (a plasma-R held by a ship would have to be fired into empty space). The counter must be faced in the same direction as the launcher. The firing arc designated for that launcher is the arc that the target must be in. Early Gorn CA and CL ships had their torpedo tubes aimed to the side at 60° angles, so that one could track targets in the RF+R arc; the other in LF+L arc.

(FP3.2) SWIVEL MOUNTS

Some ships have "swivel" tubes allowing their torpedoes to be aimed at targets within a larger arc. Using this system, the torpedo could be fired in any of three directions at a target within a 180° arc. See (D2.34) for a layout of this firing pattern.

(FP4.0) PLASMA TORPEDO GUIDANCE

Plasma torpedoes are self-guiding. Once launched, they do not require the assistance of any ship to find their targets.

(FP4.1) The firing ship must have lock-on to the target at the time the weapon is launched. If the firing ship does not have a lock-on to the target, the weapon cannot be fired.

(FP4.2) Once launched, the plasma torpedo provides its own guidance. It is not necessary for the firing ship (or another ship) to maintain a lock-on while the torpedo is following its target.

(FP4.3) All plasma torpedoes are assumed to have three points of power applied to electronic counter-counter measures. If the launching ship (or another friendly ship to whom control of the weapon has been passed) maintains a lock-on while the weapon is following its target, the ECCM power of the controlling ship (adjusted for range) is added to that of the torpedo when determining if the target's ECM has diverted the torpedo. If no ship maintains control, no ECCM power can be added.

(FP4.4) Electronic warfare cannot stop a plasma torpedo from being fired, but can reduce its effect when it reaches the target (D6.36).

(FP5.0) ENVELOPING PLASMA TORPEDOES (ADVANCED)

The Romulans have developed this weapon; it is also used by the Gorns. The weapon was first seen in Y162.

(FP5.1) The enveloping plasma torpedo (EPT) can be fired by Romulan and Gorn ships instead of their regular plasma torpedoes and from the same launcher. There are G, S, and R type EPT's, but no type "F" EPT's have been deployed. A ship loading a plasma torpedo must specify on the final turn of arming whether it will be fired as a normal or enveloping type.

(FP5.2) The weapon is armed, fired, and operated in the same manner as a standard plasma torpedo, except that it requires twice the normal amount of energy on the final turn of arming, which MUST be the turn of launch. The warhead strength is double that shown on the appropriate chart. It cannot be held. The decision to fire a given torpedo as an EPT is made during the Energy Allocation Phase of the turn of firing.

(FP5.3) Upon reaching its target, the EPT "envelopes" it and implodes, causing damage to all six shields equally. Divide the warhead strength by six. Round fractions of $\frac{1}{2}$ or more up, others down. This is the number of damage points that are immediately applied to all shields. EPT's strike with other seeking weapons but are treated as a separate "volley." Penetrating hits from all six shields are resolved internally as a single volley due to the near simultaneity of the implosion. In this case ignore the "directional" restriction for phaser hits. If an EPT hits an Andromedan ship (Volume II), the strength must be divided equally between the front and rear PA panels.

(FP5.4) Any general reinforcement allocated (the points produced by the power allocated, not the power itself) by the target ship is subtracted from the weapon's warhead strength before it is divided.

(FP6.0) PSEUDO-PLASMA TORPEDO (ADVANCED)

Due to the slow firing rate of plasma torpedoes, the pseudo-plasma torpedo (PPT) was developed by the Romulans to improve the flexibility of the weapon. This device simulates a plasma torpedo, making it more difficult to time attacks on a plasma-armed ship to the rearming cycle. The Gorns began using them shortly thereafter. The PPT is available in all time periods that the plasma torpedo is. (Earlier research, which indicated that this might not have been so, has now been found to be in error.)

(FP6.1) The pseudo-plasma torpedo is a "fake" plasma torpedo. All F, G, S, and R torpedo launchers have one PPT in a special launch rack just below the plasma launcher. (Type-F plasma torpedoes carried by fighters in Volume II do not have a PPT.) The PPT can be launched for no energy cost at any time that a real plasma torpedo could be.

(FP6.2) Only one PPT may be fired per launcher during a given scenario and not during the same impulse as a real torpedo from the same launcher. (Both could be fired during the Plasma Torpedo Launch Phase in the Cadet's Game.) A PPT can only simulate the type of torpedo that would be fired by its specific launcher.

(FP6.3) The PPT moves on the board, follows its target, absorbs phaser damage, etc., and operates in all ways as a plasma torpedo, except that upon reaching its target it does not explode but simply disintegrates (doing no damage to the target or anything else). The obvious function of a PPT is to make engaging a plasma-armed ship more challenging since it introduces some uncertainty as to just what has been fired and how soon another torpedo could be fired.

(FP7.0) PLASMA SHOTGUN (See Volume II)

(G0.0) SHIP'S SYSTEMS

(G1.0) GENERAL RULES

Ships include many systems (primarily electronic) which are used to perform the assigned missions. Most systems are defined in this section; weapons and certain other systems are defined separately.

(G2.0) CONTROL SYSTEMS

Each ship contains several control systems. These represent the ability of the captain to control his ship. If all control systems are inoperable (destroyed), then the ship is considered to be "uncontrolled;" see (G2.2).

(G2.1) DEFINITION

The following systems are control systems: bridge, emergency bridge, auxiliary control, and flag bridge. Klingon security stations are considered as control systems for the purposes of repair and boarding party actions, but are not used to control the ship.

(G2.2) EFFECT OF BEING UNCONTROLLED

If all control systems on the ship are destroyed, the following restrictions apply to the ship in all subsequent turns.

(G2.21) One is added to the turn mode at all speeds. The ship cannot make high energy turns (C6.0), make quick reverses (C3.53), change speed in mid-turn (C12.0), use EM (C10.0), or perform emergency deceleration (C8.0).

(G2.22) Tactical maneuvering (C5.0) is allowed only in the last half of any given turn (after half of the impulses have elapsed).

(G2.23) The ship may fire weapons at only one target in any given turn. All firing by the ship (both firing direct-fire weapons and launching seeking weapons) in any given turn must be done in a single impulse. This may be any impulse, however. Fire at no more than two seeking weapons (by one firing of one weapon each) within three hexes of the ship is not included in this limit.

(G2.24) The ship may not use tractor beams (G7.0), use labs to identify drones (G4.2), use ECCM (D6.3), launch wild weasels (J3.0), use any scout functions (G24.0), or lay or sweep mines (M0.0).

(G2.25) The ship may not use Aegis (D13.0), DERFACS (E3.62), or UIM (D6.5) fire control.

(G2.26) The ship may not use stasis field generators (G16.0) or displacement devices (G18.0).

(G3.0) HULL

The various boxes marked "hull" represent various non-critical parts of the ship. These include such things as crew quarters, gyms, bowling alleys, storage, swimming pools, machine shops, libraries, etc. While damage in these areas is not particularly desirable, it does not materially affect the ship's ability to participate in combat. (They can be repaired later, after the crisis has passed.) In practice, hull hits are "free" hits.

(G4.0) LABS

The laboratory boxes indicate the ability of the ship to conduct scientific experiments and gather information. In the "monster" scenarios, these labs can be used to gain victory points. In combat with other ships, however, they in effect become just free hits; exceptions, see (G4.2) and (D14.0).

(G4.1) SCIENTIFIC RESEARCH

The primary operation of labs in scenarios is the scientific investigation of a monster. The chart below is used to determine the amount of information gained about the monster on each turn. During the turn, the player should record the closest approach of his ship to the monster. The chart is based on the distance from the monster at closest approach.

ROLL	RANGE										
	0	1	2	3	4	5	6	7	8	9	10
1	10	9	8	7	6	5	4	3	2	1	0
2	9	8	7	6	5	4	3	2	1	0	0
3	8	7	6	5	4	3	2	1	0	0	0
4	7	6	5	4	3	2	1	0	0	0	0
5	6	5	4	3	2	1	0	0	0	0	0
6	5	4	3	2	1	0	0	0	0	0	0

At the end of each turn, the player must determine how much information he has gained about the monster. This is determined using the chart above. Noting the range at his closest approach to the monster and rolling a single die, the player obtains a result from the chart. This number, multiplied by the number of functioning lab boxes on his SSD at the end of the turn, is the amount of scientific information gathered about the monster. Scientific shuttles (J2.212) and probes (G5.0) may assist in obtaining information.

(G4.2) IDENTIFYING DRONES WITH LABS (Advanced)

Each lab box on board a ship, if it is undertaking no other action on that turn, can make one attempt to identify a drone. The player owning the ship rolls a single die, and if the result is greater than the range from the ship to the drone, then the attempt is successful and the player controlling the drone must identify it completely.

(G4.3) LAB SUBSTITUTIONS

A ship without labs, including ships that lost them in combat or never had them, can use one of its control spaces (G2.0) as a lab. This does not interfere with its ability to function as a control system.

(G4.4) OTHER LAB FUNCTIONS

(G4.41) Labs can be used for emergency damage repair, see Volume II.

(G4.42) Labs cannot be used to distinguish between plasma torpedoes, enveloping plasma torpedoes, and pseudo-plasma torpedoes.

(G4.43) Cloaked ships cannot use their labs to detect or study anything outside of the ship, but could use them for emergency damage repair.

(G5.0) PROBES

NOTE: This section has been moved to page 45 (after G10). While this is a minor inconvenience, it allows several other sections to be contained on a single page. This will make future updates of this rulebook considerably more efficient.

We thank you for your understanding and cooperation.

(G6.0) SECURITY STATIONS AND KLINGON MUTINY

Unlike other ships in the game, the Klingon starships include in their crews numerous individuals of "subject races." Normally over half of the crew is composed of such individuals. While most of the "subjects" are not slaves, they are not considered to be "politically dependable," and the security stations on each ship keep a constant watch on these crewmen.

(G6.1) SECURITY STATIONS

Hits designated by the DAMAGE ALLOCATION CHART as "flag bridge" hits will be scored against the security stations of a Klingon ship.

(G6.2) HOW MUTINY CAN OCCUR

If all security stations are destroyed, there is a possibility that the crew will mutiny and successfully take control of the ship. This is determined by a die roll. When the last security station is knocked out, a die is rolled immediately to determine if a mutiny has broken out. If it has not, then at the end of that turn, and at the end of all subsequent turns until a mutiny is staged, a die must be rolled. On a die roll of "1," the mutiny has occurred. When the mutiny occurs, roll a second die to determine if the security troops on board have been able to retain control or if the ship has been seized by the crew. On a die roll of "1," "2" or "3," the mutiny has been put down. On a die roll of "4," "5" or "6," the mutiny has been successful.

(G6.21) While there is nothing to prevent the Klingon player from transferring boarding parties around between his ships, the presence of more or fewer boarding parties has no effect on the chance of a mutiny happening or on its success since the boarding parties themselves are largely non-Klingon troops and would be as likely to mutiny as the crew of the ship.

(G6.22) For every fourth enemy (enemy of the Klingons, not counting mutineers) boarding party on board (not counting those enemy or Klingon boarding parties conducting "hit and run" raids), subtract 1 from the die roll when determining if the mutiny has occurred (a result of less than 1 is considered to be 1) and add 1 to the die roll when determining if it was successful.

(G6.221) If the ship is size class 2, this effect is caused by every sixth enemy boarding party.

(G6.222) If the ship is size class 4, this effect is caused by every second enemy boarding party (size class 5 ships cannot mutiny).

(G6.223) In the case of a starbase, which is size class 1, this effect is caused by every tenth enemy boarding party on board.

(G6.23) If all control spaces on the ship have been destroyed before a mutiny has been declared, subtract 1 from the die roll when determining if it occurs and add 1 to the die roll when determining if it was successful.

(G6.24) If the mutiny occurs and is put down, do not roll on subsequent turns for mutiny. Any crewmen who might have tried it are most likely dead.

(G6.25) The owning player of the ship has the option, should a mutiny occur, of allowing it to be successful automatically, but retaining positive control of the boom section (G12.0). Assume 1/3 of the crew and boarding parties are in the boom.

(G6.3) EFFECTS OF A MUTINY

If the mutiny occurs and is successful, the following actions occur.

(G6.31) No further mutiny die rolls are made.

(G6.32) The ship cannot move or fire weapons. The non-Klingon beings among the crew are never taught these skills. If the mutineers seize control during the turn (as opposed to at the end), the ship continues moving for the rest of the impulse procedure but cannot turn or fire (it cannot sideslip). (The Klingon D6 Battlecruiser *Destruction*, which was taken over by mutineers in Y170, was able to steer for Federation Space because two Federation spies, trained to operate the equipment, were aboard.) If using plotted movement, the ship follows the plot.

(G6.33) The "crew" notifies the ships of the opposing player that they wish to surrender. Unless the ship is subsequently recaptured or destroyed, or towed away by the Klingons, the ship is considered to be captured (by the enemies of the Klingons) for victory conditions.

(G6.4) POSSIBILITY OF THE OFFICERS MAINTAINING PARTIAL CONTROL

The "loyal" members of the crew (mostly officers in the command module at the end of the boom) may have managed to retain control of the bridge area. Determine this by die roll. A "1" or "2" means the bridge has been captured by the crew. Otherwise, the officers have maintained control of the bridge. Note that if the officers allow the mutiny to be automatically successful, they automatically retain control of the boom (G6.25).

Certain options are then open to the officers (who remain under the direction of the Klingon player).

(G6.41) The officers may attempt to activate the self-destruction device. This is successful only on a die roll of "1." Refer to rule (D5.53). Self-destruction may be attempted only one time per turn under these circumstances. If successful, the boom automatically escapes by (D5.69).

(G6.42) The officers may separate the boom from the rest of the ship and attempt to return to friendly space (C7.3). In fleet actions this becomes important, as the boom section may be able to escape independently (G12.0).

(G6.5) CAPTURING A MUTINOUS SHIP

Once the mutineers have seized control of the ship, either player may attempt to regain control.

(G6.51) The non-Klingon player may use transporters (G8.0) to place a skeleton command crew on board. This skeleton crew will be able to operate all systems with the exception of the weapons (see Annex #7D for specific definition). Coded safety interlocks make it all but impossible for any non-Klingon to fire the weapons without destroying the ship. This skeleton crew must consist of at least the specified minimum number of crew units (G9.41) and must be drawn from the opposing player's ships. The Klingons could also transport crew units aboard, but will regain the loyalty of all surviving units when and if control is reestablished by boarding party combat.

(G6.52) Both players may use transporters to attempt to place boarding parties (D7.0) on the ship to capture or defend it.

(G6.53) After the mutiny is over (either successfully or unsuccessfully), the winning player (the non-Klingon player would represent the mutineers) rolls a single die. This number is the number of boarding parties remaining on the ship (the rest having been destroyed in the fighting). These boarding parties are all loyal to the winning player.

(G6.6) OTHER EFFECTS OF MUTINY

(G6.61) If mutiny occurs in a monster scenario, the ship disengages by (C7.4). It can be assumed that one officer is being coerced to operate the navi-computers. The scenario is over at that point.

(G6.62) After the mutiny is over, assume that 2/3 of the crew units on board at the time the mutiny began have survived; the remainder died in the fighting.

(G6.7) NOTE ON KLINGON SHIPS

All Klingon ships (except PFs or when noted) have security stations. In most cases where a standard ship is modified for Klingon use, this addition will be noted. In other cases (freighters, free traders, minelayers, etc.) it can be assumed that two separate security stations are added. There is no change in BPV; the chance of a mutiny is cost enough.

(G7.0) TRACTOR BEAMS

Tractor beams are magnetic force beams that are used to retrieve small objects and tow starships.

(G7.1) GENERAL RULE

(G7.11) Tractor beams may be used at trans-light speeds.

(G7.12) They may be activated during any impulse of a turn. Once attached, they can be released during any impulse. Once they are released, they cannot be reused on that turn.

(G7.13) Each tractor beam on a given ship may only be used once each turn.

(G7.14) There are no firing arcs for tractor beams (they all may be used in any direction).

(G7.15) One unit of energy is required to operate each of a ship's tractor beams.

(G7.2) USE OF TRACTOR BEAMS

(G7.21) Tractor beams may be used to tow crippled starships off the map. This restricts the movement of both ships (the tower and the towed).

(G7.22) Tractor beams can be used to land shuttles.

(G7.23) Tractor beams can be used to attach your ship to an enemy ship for tactical purposes.

(G7.24) Planets cannot be tractor beamed, but large meteors can be (see scenario (SH3.0)). Asteroids cannot be tractor beamed (they represent fields of hundreds of asteroids).

(G7.25) Bases cannot be tractor beamed by a moving ship. While a ship could not tow a base with a tractor beam, it could establish one and use it to pull itself to the base at a speed of one hex per turn by using the rotation system (G7.7). A ship could also pull itself to a planet or asteroid by this method. Note that this rule prohibits the famous "Gorn Decel Maneuver" wherein a ship grabs a convenient base (or planet) to bring itself to a halt.

(G7.26) Tractor beams cannot be used to hold a plasma torpedo.

(G7.27) Objects held in a tractor beam cannot be forced into contact with another unit.

(G7.271) A tractor beam cannot be used to rotate, move, tow, or push mines. However, see (M8.1).

(G7.272) A tractor beam from a friendly ship cannot be used to tow or push a seeking weapon, see (G7.52).

(G7.273) On a fixed map, a tractor cannot be used to force a ship off the map.

(G7.28) When a ship disengages by acceleration, all tractor beams generated by that ship or attached to it are automatically broken.

(G7.3) OPERATIONS

Gaining a tractor beam hold on another ship or object is referred to as gaining a tractor link to the ship or object. This may be attempted during any impulse, but if a tractor link is made, it must be re-established at the start of each turn or it is lost. It is not mandatory to attempt to re-establish a tractor link. Once a tractor link is established, it can only be broken by applying "negative tractor beam" (G7.42). It cannot be broken by the application of speed. It could be voluntarily released (G7.12) by the ship operating it.

(G7.31) RANGE: Tractor beams may only be used against ships or other objects in adjacent hexes or in the same hex; exception, see (G7.6). If a tractor link is made, the tractored object will follow the tractoring ship (maintaining a parallel course) for as long as the tractor link is maintained.

The courses are parallel in relation to the map grid, not in relation to each other. If a ship that is holding a object in a tractor changes facing, the held object does not "swing" through a 60° arc to maintain the same orientation.

In the event that a tractor is established between two opposing ships, the tractored ship may, but is not required to, attempt to break the tractor. This can be done by applying power to "negate tractor beam" as in (G7.35).

(G7.32) TOWING: This section refers to towing a friendly starship. Operations involving an enemy ship are covered in (G7.36) below. Towing via tractor beam places a considerable strain on the ship. This is reflected by these rules.

(G7.321) When towing a tractored ship or ships, the movement cost per hex is equal to the cost of all ships involved. For example, a Fed DN (1-1/2) towing a scout (1/2) and a CA (1) would have to pay 3 movement points per hex. There is no additional cost for towing shuttles, fighters, or PFs. When being towed by a friendly ship, the towed ship cannot operate its engines for movement; exception (G10.56).

(G7.322) The HET breakdown number is decreased by one for every ship towed (a rating of 4-6 becomes 3-6). If a breakdown occurs, the tractor beam is broken and cannot be restored on the current turn. In addition to the damage resulting from the breakdown, the towing ship takes one point of internal damage, distributed directly by the DAC (D4.21), for each unit of speed. For the remainder of the turn, the towed ship does not move, while the towing ship tumbles (C6.55). Shuttles, fighters, and PFs do not count for purposes of this rule and are not affected by it.

(G7.33) RELEASING A TRACTOR BEAM: If a tractor beam is attached to an object, it can be released voluntarily by the owning player during the Impulse Activity Segment of any impulse in the turn. A ship released from a tractor beam operates normally for the remainder of the turn, moving with a speed equal to that with which it would have had without the beam. At the time of release, the turn and slip modes reset to zero.

(G7.34) DESTRUCTION OF TRACTOR BEAMS: If tractor beam boxes on the SSD are destroyed during the course of a turn to the extent that a ship does not have as many tractor beam boxes as it has tractor beam links established, beams must be voluntarily released until there is a working box (with power supplied to it) for each beam still operating.

(G7.35) NEGATIVE TRACTOR BEAM: One of the primary methods of breaking a tractor beam is to apply power to negative tractor beam. Note that a negative tractor beam is not a special device, but a function of regular tractor beams. A ship must have an undestroyed tractor beam that is not otherwise occupied in order to use negative tractor beam. Ships without tractor beams can apply power to negate tractors without actually having a tractor beam box on their SSD.

A ship can use negative tractor as many times in a turn as it is "captured" by an enemy tractor beam, so long as it has the energy and (except in the case of PFs) at least one working tractor beam box.

(G7.36) TRACTORING AN ENEMY SHIP: These procedures are used to resolve movement when two enemy ships are linked by an active tractor beam. The procedure is used whenever the two ships are linked and for as long as they remain linked. (Note, the procedure can also be used between two "friendly" ships.)

A-Determine the total movement cost of both ships.

B-Determine the speed that each ship would move assuming its current energy allocated to movement and the total movement cost of both ships. This is known as its pseudo-speed.

C-Each ship moves both ships whenever its movement is called for by the impulse chart for its pseudo-speed. However, the impulse power of the smaller ship is ignored. (If the two ships are the same size, ignore all impulse power unless the two ships agree for one of them to use its impulse power.) If both ships are scheduled to move in the same impulse, this is resolved as follows:

1-If the result of both ship's movement is that both ships return to the hexes they began the impulse in, neither moves.

2-If the result is that each ship moves one hex, they move directly to that hex. For example, a ship (in a tractor link) is in hex 1010. It wants to move in direction B, but the other ship wants to move in direction F. The result is to move one hex in direction A. The ship does not move to hex 1110 (or 0910) on its way to 1009, but moves direction there.

3-If the result is that each ship moves two hexes, the larger ship conducts its movement first, then the other does. (If they are the same size, randomly select one of them by a die roll.) For example, a ship in hex 1010 wants to move in direction B, but a larger ship linked to it wants to move in direction A. The ship is then moved one hex in direction A (to 1009), then one hex in direction B (to 1109).

(G7.37) MULTI-TRACTOR ENGAGEMENTS

In the event that two ships tractor a single object, an auction is conducted and the ship with less effective power (as adjusted for range) releases its tractor. The auction can include reserve power, but once concluded cannot be resumed. The losing ship, in effect, loses the power it committed; the winning ship applies that power to holding the ship. This auction is independent of any negative tractor power applied by the object held.

A ship can generate several tractor beams and attach each to a different object (for example, a PF tender recovering its PFs).

(G7.4) TRACTORING A STARSHIP

(G7.41) CONDITIONS: The conditions for tractoring an enemy starship are as follows:

A. The tractoring ship must be in an adjacent hex or the same hex (see (G7.6)), have an operable tractor beam, and have power allocated for it.

B. The tractoring ship must allocate one point of power.

C. The starship being tractored may have allocated power to "negative tractor beam." (If it did not have power allocated for this on the first turn of being tractored, it will surely allocate power to this purpose on the next turn when the tractor must be re-established.) The tractoring starship must have allocated an amount of power equal to the amount allocated to negative tractor beam, plus one point (or more at longer range) in order to maintain the tractor.

Note: A ship or object that has been tractored is NOT considered to be captured for victory purposes until it is actually boarded and captured by (D7.0).

(G7.411) Reserve power can be used for negative tractor beam and to reinforce a tractor beam.

(G7.412) A tractor link cannot be established without a lock-on. However, should a tractor link exists between two ships, both automatically have a lock-on to each other.

(G7.413) Movement is governed by (G7.36).

(G7.42) BIDDING: If a tractor beam was established during a prior turn, then the two ships involved must determine if it is broken at the start of each turn. This is done by an auction during the Energy Allocation Phase. The tractored ship announces how many points of energy it is applying to "negative tractor beam." The capturing ship then announces whether or not it will match this amount. If not, the tractor is broken; if yes, the tractored ship may then increase the amount of power applied to negative tractor beam. The auction continues in this manner until either the tractor is broken or the tractored ship is unable or unwilling to apply more power.

Whatever the result, both ships are required to expend the energy they committed themselves to expend in the auction. This is defined/explained as follows: If, during an auction, a ship bid five units of power, and subsequently lost the auction to a ship that bid six units of power, both ships are required to spend that power. The ship that lost the auction cannot use that power for any purpose; the ship winning the auction has the power it bid (six units in this case) committed irrevocably to that tractor. This commitment extends to the end of the turn.

If the tractoring ship loses the auction, the power it committed is lost irrevocable, and even if the tractor is reattached later with reserve power this energy cannot be reused.

If the tractored ship loses the auction, it can reopen it later with reserve power, in which case the power it committed to negate the tractor remains available for use. If the tractored ship wins the auction, the power committed to negate the tractor remains available for use in defending against another ship trying to gain a tractor link. Whether winning or not, the tractor beam used to channel the negating energy cannot be used to generate a tractor beam later during the same turn, and the negating energy cannot be used for any other purpose.

(G7.5) CAPTURING SHUTTLES AND DRONES

(G7.51) The conditions for capturing an enemy shuttle or drone are as follows:

A. The capturing ship must be in the same or adjacent hex, have an operable tractor beam, and have power allocated to it.

B. The capturing ship must allocate one point of power.

(G7.52) If a drone is tractored, and held until its fuel is exhausted, it is removed from play. If a drone (also suicide or scatter-pack

shuttle) is held in a tractor beam by a ship on the same side as the ship that fired/launched it, it loses its tracking and is removed from the board. (Captured ships are on the side that captured them.) Enemy seeking weapons do not lose tracking. Shuttles used as seeking weapons are not removed from the board until destroyed.

(G7.53) Drones cannot be destroyed by being towed by a tractor beam.

(G7.54) If a shuttle is held in a tractor beam by a ship moving faster than twice the maximum rated speed of the shuttle (ignoring booster packs), the shuttle is destroyed.

(G7.55) An uncrippled fighter can break a tractor beam, however, by performing an HET to face directly away from the tractoring unit (even if already facing in that direction) and moving in that direction at its maximum speed. The tractor is then broken, but the fighter cannot turn until it has traveled at least three hexes in that direction.

(G7.6) EXTENDED RANGE (*Advanced*)

Tractor beams may be operated at up to three hexes range. Twice as much power must be allocated to each tractor for the specific function being used if the range is two hexes, and three times as much at three hexes. To tractor a ship at three hexes, calculate the power required in (G7.41) and triple it.

EXAMPLE: A ship in hex 1212 wants to tractor a ship in hex 1215. As this is three hexes away, the ship must allocate three units of power. Should the tractored ship later use negative tractor beam power, the tractoring ship must use three times as much power to maintain the tractor, plus that required to hold it.

(G7.7) ROTATION (*Advanced*)

A ship holding another object in a tractor beam has some control over its movement. In the case of two ships, the owner of the tractor beam being used controls the rotation, but the smaller of the two ships is the one that is moved by the rotation. If both ships have established tractor beams, the larger ship controls the movement created by rotation. If of equal size, there is no rotation.

(G7.71) A ship held in a tractor beam can be "rotated" one hex per turn, at the start of the turn, after the tractor is re-established. The relative position of the tractored ship to the capturing ship is changed by moving it one hex (it must remain within three hexes of the capturing ship) at the capturing player's option. If moved further away, extra power would be required or the strength of the tractor beam (G7.42) would be reduced.

(G7.72) A tractoring ship may rotate (move) a shuttle, drone, or ship. This refers to the hex it is in, not its facing.

(G7.73) The facing of a ship being rotated is controlled by the player who owns the ship or other object being rotated. Rotation does not change facing. The owning player changes facing by the normal rules (G7.36), including HET and TAC.

(G7.74) An object could be pulled into the same hex as the tractoring ship by this method, or if tractored at extended range, it can be pulled closer to the ship. For example, ship A in hex 0911 is holding ship B in 0811 by tractor beam. Ship A could rotate ship B to hex 0810 or 0912 or pull it into 0911.

(G7.75) Due to gravitational interference, rotation cannot be used to move a ship into a hex containing a planet, asteroid, star, black hole, pulsar, or any other terrain feature.

(G7.8) PULLING AN ENEMY SHUTTLE INTO YOUR SHUTTLE BAY (*Advanced*)

An enemy shuttlecraft or fighter held in a tractor beam and already in the same hex as the tractoring ship can be pulled into one of the tractoring ship's shuttle boxes (if an unoccupied one exists). This counts as the one "rotation" allowed per turn.

(G7.81) If the shuttle has not fired its phasers, disruptors, or fusion beams previously in that turn, it can fire them inside the shuttle bay. Range is assumed to be zero, with half of the hits (round up) scored on shuttle boxes (if available) and the remainder as internal damage. Drones, plasma torpedoes, and photon torpedoes fired inside a hangar bay automatically hit (all counted as internal); but the fighter and the box it occupies is destroyed in the backblast. A fighter/shuttle could fire every turn until destroyed or captured. This firing is conducted within the normal sequence of play. Any shuttle hits must be randomly distributed and might destroy the shuttle itself.

(G7.82) At the end of each turn that any uncaptured enemy shuttle is in the shuttle bay, boarding parties belonging to the ship can attempt to capture it. One or two boarding parties can make the attempt. These boarding parties can participate in no other actions on that turn and can make only one attempt each. Roll one die for each attempt, with a die roll of 1-5 indicating capture of a fighter and 1-4 indicating capture of an admin shuttle. Any other result is "no effect."

(G7.83) If the shuttle has been crippled, it cannot fire any weapons or resist any attempt to capture it with boarding parties.

(G7.84) If there are boarding parties on board the shuttle (friendly to the shuttle, not the ship), they may "board" the ship, in which case this procedure is ignored, and the boarding action resolved normally. If these boarding parties do not board the enemy ship, then modify the die roll against their shuttle by +1.

(G7.841) It is presumed that the shuttle landed during "recover shuttles" and that the boarding party disembarked from the shuttle during "operate transporters" of any later impulse at the owning player's option. The boarding party could return to their shuttle during the "operate transporters" of any later impulse. The shuttle cannot launch during any impulse in which it has taken boarding parties on board. The shuttle cannot launch within 1/4 turn of landing, and under some circumstances may not be able to launch at all. Boarding parties delivered by this procedure cannot be used for hit-and-run raids.

(G7.842) If there is more than one BP on the shuttle, only one can fight to defend the shuttle.

(G7.843) If the boarding parties leave the shuttle, their fate and that of the shuttle are resolved separately. The shuttle cannot fire in support of the marines as it could on the ground in (D15.0).

(G7.85) A shuttle could be ejected at the start of any subsequent turn. This requires one tractor beam. It could escape on its own if it is not held in the bay by a tractor beam.

(G7.86) Boarding parties on the ship could attempt to attack (rather than capture) the shuttle by firing at it with low-powered weapons. Such an attack is made in the Final Activity Segment instead of the attempt to capture the shuttle. Up to four boarding parties may fire at the shuttle; each does one point of damage. The obvious intention is to cripple the shuttle; this method is slower but more certain than attempting to capture it outright.

(G7.9) RESTRICTIONS ON A SHIP HELD IN OR TOWED BY A TRACTOR BEAM

A unit being held by a tractor beams, or holding another unit by tractor beams, is under certain restrictions. These restrictions do not apply to a ship being towed by a tractor beam if that ship is the one maintaining the tractor link AND if the ship being towed is larger than or equal in size to the ship it is holding (and being towed by) AND if the two ships are not on the same side.

(G7.91) A ship being held cannot fire its weapons or use its tractor beams against any ship except the one to which it is linked by tractor beams. This applies to the firing of seeking weapons, including drones or a seeking (suicide or scatter-pack) shuttle. Note that the restriction is against "ships" not "units," so a ship held in this manner can fire at drones, plasma torpedoes, and shuttles.

(G7.92) A ship being held cannot use erratic maneuvers.

(G7.93) If being towed or held, the ship can use tactical maneuvers, HETs, or its normal turn mode (G7.36) to control its own facing.

(G7.94) A ship being held cannot launch shuttles, fighters, or PFs.

(G7.95) A ship being held cannot transfer power to any other ship including the towing/holding ship. See (R1.10)

(G7.96) The systems and shields of two ships joined by a tractor beam are not combined (unless they are directly attached, as in docking or a tug/pod arrangement).

(G7.97) A ship being held may be fired at separately by enemy ships, and if it is destroyed, it is considered to explode (D5.0).

(G7.98) A ship being held in a tractor beam cannot cloak or use a WW since the tractor beam is, in effect, a huge arrow pointed at the ship. Previously-launched WWs still work.

(G8.0) TRANSPORTERS

Most starships in the game contain transporters which are used to move personnel and equipment from one starship to another over short distances. Transporters may be used in this game to transfer officers, evacuate crews, and/or transport boarding parties.

(G8.1) GENERAL RULES

(G8.11) Transporters are capable of picking up people and moving them to their location or of transporting people at the location of the transporter to another location. There does not have to be a transporter unit on both ends of the transfer. Transporting may be done during any impulse, but each transporter may be used only once per turn. This is done during the Impulse Activity Segment. See (B2.3).

(G8.12) In order to use transporters, the given ship must have undestroyed transporter boxes on its SSD sheet.

(G8.13) It requires one unit of energy to operate up to five of a given ship's transporters. If a ship has 6-10 transporters, two units of energy must be allocated if all are to be used. When using fractional accounting, each transporter requires 1/5 energy point.

(G8.14) The maximum range of transporters is five hexes.

(G8.15) Transporters can never be used to beam enemy personnel or objects (including shuttle pilots, cloaking devices, etc) without their permission (due to the special security systems involved). A hit-and-run raid, however, could result in captured crew units being transported.

(G8.2) THE EFFECT OF SHIELDS ON TRANSPORTERS

(G8.21) Transporters will not function through shields. Transporters work on a direct line from ship to ship. To determine which shield must be dropped or destroyed in order to use transporters, use the same rules of sighting as are used for direct-fire weapons.

(G8.22) Players may, at their option, voluntarily drop any specific shield to facilitate the use of transporters, but the shield in question must be dropped for the entire turn. Note: See the alternative time period in (D3.51).

(G8.23) General shield reinforcement will block the use of transporters, even through shields that are voluntarily dropped or destroyed by damage. If a player announces that he is trying to transport boarding parties onto an enemy ship, and the target ship still has general reinforcement shielding power available, then the attempt fails with no loss or damage to either side. However, as each transporter may only be used once in a given turn, no further attempt could be made with that specific transporter until the following turn. Note that reinforcement can be dropped, as shields can, under (G8.22).

(G8.24) In the event that the line of sight passes exactly through the junction of two shields, either may be dropped by the owning player to facilitate the use of transporters. If enemy boarding parties are trying to board such a ship, use the same procedures as determining the shield that would be hit.

(G8.3) OPERATIONS

(G8.31) Each transporter can transport two crew units, or one boarding party, or one object; see transporter bombs (M3.0). In an emergency situation (when a ship is being completely evacuated), each transporter could carry four crew units.

(G8.32) As each boarding party is one half of a crew unit, each transporter could transport four boarding parties, but not into a tactical situation. Thus, if two or more boarding parties are transported by the same transporter, they cannot be used in combat during the turn of transporting although they could become casualties. In an evacuation procedure, each transporter could move eight boarding parties.

(G8.4) CAMPAIGN FUNCTIONS

In some campaign games, players may wish to assume that they personally are on board a given ship. (The logical extension of this is that if that ship is destroyed, they cannot participate further in the game. While this works well enough in large multi-player games, in one-on-one games, it is, of course, pointless.) Using transporters, it is possible to "beam" yourself from a doomed ship to one that (you hope) will survive the scenario.

(G9.0) CREW UNITS

(G9.1) ASSIGNMENT

Each ship type is assigned a number of "crew units," each representing about 10 people (or whatever).

(G9.11) At their option, players may keep track of crew units for victory points. At the time the ship is destroyed, all crew units still on board perish.

(G9.12) When transferring crews from ship to ship, add any crew units taken from one ship to the amount carried by the ship they are transferred to. Example: at the start of a given turn, one ship has 32 crew units, while another has 31. During the course of the turn, 4 crew units are transferred from the second ship to the first. At the end of the turn, the first ship will have 36 crew units, and the second will have 27.

(G9.13) When evacuating a ship, crews may be transferred to another ship, a base, or a planet. One crew unit may also be placed in (or transported to) a shuttlecraft. In effect, shuttles may act as a sort of transporter.

(G9.14) One administrative shuttle may carry one crew unit (J2.211). A shuttle could carry two (or perhaps even three) crew units, but this would place them in extreme discomfort and strain the life support systems on all but the shortest journeys, and any violent maneuvering (or being hit by any weapons) would result in serious injuries to the crew units since there are not enough places to "strap in." These situations are outside of the scope of the game and can be handled by the players in a manner suited to the situation at hand.

(G9.15) Crew units are assigned by the MASTER SHIP CHART.

(G9.16) As an optional procedure, assume that each crew unit killed in combat (on a ship that is not destroyed) scores 1/4 BPV point (added to the opponent's score), and that each crew unit saved (by friendly forces) from a ship that was destroyed reduces the points received (by the opponents) for destroying it by 1/4 point.

(G9.2) CASUALTIES

(G9.21) Every tenth internal hit scored on a ship kills one crew unit.

(G9.22) The last crew unit and the last two boarding parties (in effect, two crew units) cannot be destroyed by hits scored against the ship. (There would almost always be some survivors.) Monsters that attack crew units directly (rather than by damaging the ship) are exempt from this rule.

(G9.3) RECORD KEEPING

It should be noted that the number of crew units on a given ship includes the boarding parties and deck crews. Two boarding parties or deck crews equal one crew unit. It is desirable to keep track of which crew units on a given ship are boarding parties, which are deck crews, and which are general crew.

EXAMPLE: A Kzinti CV has 50 crew units. Of these, 10 represent the 20 boarding parties and 6 represent the 12 deck crews. If the ship were to receive 53 internal hits, five of the crew units would have been killed. In addition, five boarding parties would also be killed, but since the first four boarding party casualties (D7.2) are not counted, only one is killed. In addition, five fighter boxes were destroyed, killing five deck crews. The combined boarding party and deck crew casualties represent three more crew units killed for a total of eight. After receiving this damage, the ship has 42 crew units, of which 9-1/2 represent the 19 boarding parties and 3-1/2 represent the 7 remaining deck crews.

(G9.4) MINIMUM CREW

All ships require a certain number of crewmen to be operated, even at a minimum level.

(G9.41) **REQUIREMENTS:** The minimum crew for each ship depends on the size of its original crew, as follows:

Original crew	Minimum crew
1-4	1
5-8	2
9-12	3
13 +	4

If the crew of a ship is reduced below this level by enemy action or by evacuation, or if the skeleton crew beamed aboard a captured ship is less than the specified size, it is considered to be "undermanned."

(G9.42) **RESTRICTIONS:** If a ship is undermanned, it cannot operate any equipment except power producing systems (engines, APR, batteries), sensors, scanners, and shields. It can move, but maneuverability is affected; the turn mode is increased by one. Each crew unit on board can operate one undestroyed systems box on the SSD (a weapon, tractor beam, lab, etc.). One crew unit can be assigned to "movement" and conduct all normal movement, turning, and sideslips, but a second unit would be required to perform an HET. If no crew unit is assigned to movement, the ship can move but cannot turn or sideslip.

(G9.43) **OTHER REQUIREMENTS:** Boarding parties cannot be counted toward the skeleton crew requirements. Since the last two boarding parties cannot be destroyed by damage scored on the ship, it might be possible for the ship to have only boarding parties remaining. In this case, the owning player may disband any or all of the last two boarding parties (convert them to general crew units) to satisfy this requirement.

(G9.44) **UNCONTROLLED STATUS:** The effects of being undermanned are not cumulative with being uncontrolled (G2.2). The more severe penalty applies in each case.

(G9.45) **CAMPAIGN EFFECTS:** In the case of a Federation heavy cruiser with a normal crew of 430, only about 40 are actually required to operate the ship. The remainder include the security personnel (who guard things and provide boarding parties), engineers (who repair things that break down or wear out, or perform preventive maintenance to keep that from happening), and scientists (who conduct experiments and make up landing parties to survey newly discovered planets). While a ship might be able to complete a battle with only a few dozen crewmen, it could not then proceed on a multi-year survey mission.

(G9.451) Ships with less than 2/3 of their normal crew (including boarding parties in the original and remaining crew) cannot conduct planetary survey operations. This has little effect in Star Fleet Battles, but can affect the actions of the ships in other (as yet unpublished) games.

(G9.452) Ships with less than 1/2 of their original crew (not counting boarding parties in the original or remaining crew) conduct (D9.4) repairs with an assumed maximum damage control rating of "2" regardless of the actual damage control rating, and no repairs to the damage control track can be made.

(G10.0) THE THOLIAN WEB DEVICE

The Tholians are known to operate a highly developed tractor beam system generally referred to as the "web." This device is used both to capture enemy ships and tactically to restrict movements and maneuvers. No counters are provided for web hexes. Players may utilize various unused counters for this purpose. Web counters are provided in SFB Volume II and in the Star Fleet Reinforcements pack.

(G10.1) TYPES OF WEBS

The device can be used to form either of two types of web: linear or globular.

(G10.11) A linear web extends between two anchor points. These may be asteroids or ships (including, possibly, the ship or ships that laid the web).

(G10.111) If formed between or by two ships, they must begin in adjacent hexes and move apart in a straight line. Later if one ship (or both ships) enters an asteroid hex, the web may be anchored to the asteroid by simply laying a web in the asteroid hex.

(G10.112) If one ship lays the web, it must begin doing so in an asteroid hex, anchoring one end of it to that asteroid. Other object (see below) can be substituted for the asteroid. Note that asteroids can, in some cases, be destroyed (SH3.43), but this does not reduce their effectiveness as a web anchor because a sack of rocks is, in this case, just as effective as one large one.

(G10.113) If, at any time, the web is not anchored on both ends, it dissolves. Note that the complete destruction of a ship is required to eliminate it as an anchor.

(G10.114) A web cannot be anchored to a planet that has an atmosphere. A web can be anchored to a planet or moon without an atmosphere by the same procedure as anchoring to an asteroid.

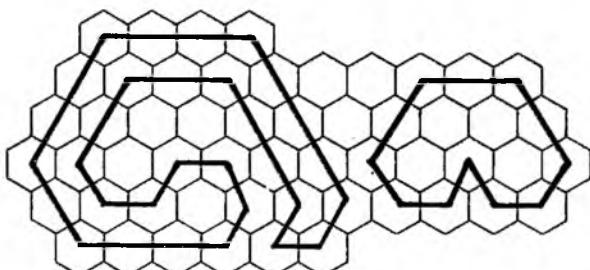
(G10.115) The web must be laid in a straight line. A regular pattern of sideslips (3A, SS-B, 3A, SS-B) will be considered as a straight line, as will the straightest practical chain of hexes between two points. The web cannot be bent to touch itself at any point; each hex can only be adjacent to two other hexes, and those two hexes cannot be adjacent.

(G10.12) A globular web is laid in a circle and is anchored to itself.

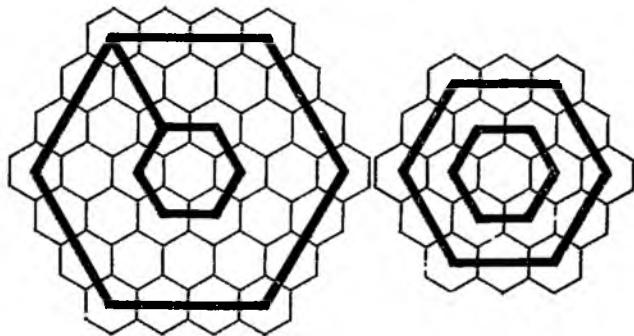
(G10.121) Two ships must be used to lay a globular web. They must begin in adjacent hexes and move to form a circle of the web (for example, hexes 0804, 0905, 1005, 1006, 1007, 0908, 0808, 0708, 0607, 0606, 0605, 0705 form a globular web).

(G10.122) A globular web cannot contain two or more loops.

(G10.123) A globular web can be a circle or an oblong, but cannot contain convex angles (viewed from inside). When tracing the web in a clockwise manner, the web can only make right-hand turns, not left-hand turns. The webs shown below are illegal.



(G10.124) Two separate globular webs cannot touch each other. The two webs shown in the illustration below are illegal.



(G10.2) CONSTRUCTION OF WEBS

(G10.21) STEPS: There are two steps to the construction of a web. The first is the actual laying of the web, and second is reinforcing it. Both steps require that the laying ship or ships have at least one operable web generator on board (of each ship).

(G10.211) To lay web in a given hex, the laying ship moves into it and expends six units of energy (from any source). Web is then said to have been laid in that hex. All hexes of a given web must be adjacent to at least one other hex of that web (a globular web would, of course, have every one of its hexes adjacent to two and only two other hexes).

(G10.212) To reinforce a web, a given ship must be either in a hex of that web or adjacent to it. Any amount of energy (assuming it is available) may be added to the web as reinforcing energy. Any Tholian ship with an operable web generator may be used to reinforce any web.

To add reinforcing energy to a web, the reinforcing ship must be adjacent to or in it during any impulses in which power is added. No more than four units of energy may be added to a web as reinforcement during each impulse of a given turn by a single ship.

NOTE: The limit of four units of energy assumes the normal 32 impulse turn. If a different impulse chart is in use, a different amount of power can be added.

Number of Impulses in the Turn	Number of units of power that can be added
32	4
24	5
20	6
16	8
12	10
10	12
8	15
6	20

The reinforcing energy is credited to web strength at the end of the impulse in which it is added. Maintenance is added in the same way. The owning player must designate and announce how much of the energy added on a given impulse is reinforcement and how much is maintenance.

(G10.22) RESTRICTIONS: Webs may not cross over or connect, or they are considered a single web. Globular webs may not include more than a single loop. They need not be perfectly circular. Any two adjacent web hexes are considered to be connected. Webs cannot be moved.

(G10.23) CONSTRUCTION CONDITIONS: A ship can lay several hexes of web in a given turn, limited only by power. If a ship lays two or more hexes of web during a turn, they need not be in consecutive hexes of the ship's movement but must satisfy other rules of web construction.

(G10.3) STRENGTH OF WEBS

The strength of a web is a function of the energy used to reinforce it and its size. (The initial laying of the web does not provide it any strength.) The maximum strength of any one web is 35; this limit does not increase with any advanced technology.

(G10.31) PROCEDURE: Total the amount of energy added to the web as reinforcement, and divide by the number of hexes in the web, ignoring all fractions. This is the strength of the web. The ignored fractions are not discarded; they may be accumulated and recalculated. For example, 23 units of energy have been added to a 10-hex web. Since $23/10$ is 2.3, the strength of the web is 2 (the 0.3 is ignored). At a later time, if eight units of energy have been added, the calculation is $31/10$, giving a strength of 3.1 or 3.

(G10.32) IMPROVEMENTS: The Tholians continued work on their web technology and made improvements over the years.

(G10.321) By Y160, they had made improvements that resulted in a more efficient method of adding energy to their webs. In scenarios after that time, the strength of the web is equal to 1.5 times the strength calculated in (G10.31), ignoring any fractions.

(G10.322) The Tholians made another breakthrough in Y175. After that time, the strength of the web is double that calculated in (G10.31), ignoring any fractions.

(G10.33) STRENGTH: The strength of a web will vary over time as more energy is added to it and as it dissipates. Energy must be allocated at the start of the turn (or be reserve energy); any allocated but unused energy is lost.

For example, a web five hexes long might have a strength of three at the start of a turn. During that turn, a ship moves adjacent to it on impulse 4 and remains there for four impulses (since its speed does not require it to move for that many impulses). During that period of time, 16 energy factors could be added. Thus, the web had 15 energy points at the start of the turn and now (end of impulse 7) has 31. The strength of the web at this time is six. Later (impulse 9), a second ship moves by and spends two impulses adjacent to the web. It adds only six factors of energy (it can't spare more), bringing the web to 37 (strength 7) at the end of impulse 10. A fast moving enemy ship enters the web on impulse 12 and is trapped. It is moving at a speed of 24, so it will take it until impulse 22 to have expended 7 movement points. During that time, other Tholian ships arrive and add more power. The original reinforcing ship returns on impulse 14 and stays by the web, but it has only 9 units of power to add (46, strength 9 at the end of impulse 16). A BW arrives on impulse 20. The enemy will be free on impulse 24 unless more energy is added. The BW adds 4 units on impulse 20, making the total 50 (strength 10, escape on impulse 26). It then adds 4 units on impulse 21 (54, still strength 10, still escapes on 26). The BW then adds 3 units (the last it can, due to power limits) on impulse 22. Total is now 57, and strength is 11. The enemy ship will escape the web on impulse 27 unless another ship arrives to add more power to the web.

(G10.4) MAINTENANCE OF WEBS

(G10.41) Webs must be maintained, or they diminish in power. One unit of energy must be added to the web for each three web hexes included in the web on each turn, or the web will lose one point of strength per turn until it completely disappears. This power is in addition to any power used for construction. Any Tholian ship with an operable web generator may provide maintenance power for any Tholian web. The ship providing the maintenance power must be adjacent to or in a web hex and may also be providing reinforcement at the same time.

(G10.42) After Y160, one unit of energy is sufficient maintenance for five hexes of web. After Y175, web diminishes only one-half point per turn and one point of energy can maintain 10 hexes of web.

(G10.5) THE EFFECT OF WEBS ON MOVEMENT

(G10.51) The web is used to trap enemy ships or to restrict their movement. Any ship (other than Tholian) which enters a web hex must expend during a single turn a number of movement points equal to the strength of the web or it cannot leave that web hex. The ship then comes to a complete stop for the remainder of the turn.

(G10.52) Shuttles, fighters, and seeking weapons move through a web using the same procedure. If the strength of the web exceeds their speed, they remain trapped. A ship or shuttle caught in a web could make tactical sub-light maneuvers or tactical warp maneuvers.

(G10.53) Tholian ships and shuttles may move through webs without expending extra energy. Ships captured by or allied to the Tholians do not have this benefit. Tholian ships can voluntarily forego this benefit, presumably to make themselves harder to drag out of their webs.

(G10.54) If a ship moves through a web by expending the requisite power, the web itself is not affected. All of the energy to break through a web must be expended on the same turn. If a ship is caught in a web and cannot expend sufficient movement points in a single turn to escape, it cannot move out and cannot carry over movement points expended on one turn to the next turn to satisfy this requirement.

(G10.55) If a ship (or a base, FRD, or shuttle) is in a web hex, anything launched or undocked from it is caught by the web until it expends enough power to escape, as if it had entered the web hex from a non-web hex. This also applies to ships undocking from bases or FRD's.

(G10.56) One ship can attempt to pull another ship from a web with tractor beams by either of the following procedures:

(G10.561) The two ships can attach a tractor beam between themselves and operate as per (G7.32). If they have enough power to expend, they will be moving across the board during the last portion of the turn. This rule obviously cannot be used if the web is stronger than 30.

(G10.562) The two ships in adjacent hexes (one in the web and one out of it) can attach a tractor beam between themselves and expend an amount of power (not movement points) equal to the strength of the web. This power can come from any source. The result is that the ship in the web is pulled into the hex of the ship outside of the web during the movement segment of the last impulse of the turn.

(G10.57) A ship trapped in web cannot use EM. It can use EW, HET, and TAC. It can turn in accordance with the turn mode for the speed based on the movement points it is generating, even though it is not actually moving.

(G10.58) A ship cannot disengage by (any means) while trapped in a web hex, or when completely surrounded by web hexes. It must break free of the web hex before it can disengage.

(G10.6) THE EFFECT OF WEBS ON COMBAT

(G10.61) No direct-fire weapons may be fired through a web hex. Direct-fire weapons MAY be fired into or out of web hexes. Note that a ship may fire direct-fire weapons from a web hex into an adjacent web hex. If the strength of the web is zero, this rule does not apply.

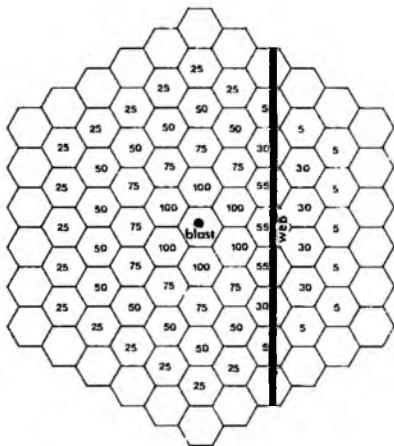
(G10.62) Tholian ships may fire their phasers (not other weapons) through their own web hexes. The number of damage points scored by each phaser that hits is reduced by one for each hex between the firing ship and the farthest web hex that the line of fire passes through or into. Ships captured by or allied to the Tholians do not have this benefit. This rule also applies to Tholian phaser-equipped captor mines.

(G10.7) OTHER EFFECTS OF WEBS

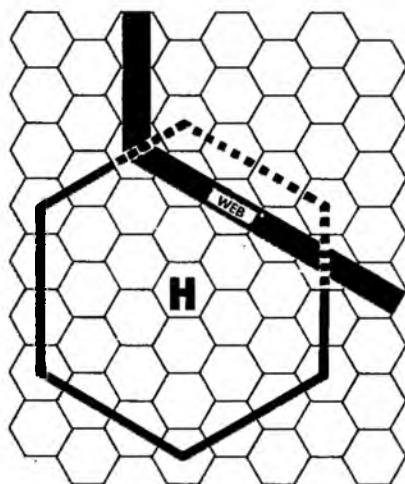
The following rules apply to webs with a strength of greater than zero.

(G10.71) Transporters and tractor beams cannot function through web hexes. They may function into or out of web hexes. They may be used between two adjacent web hexes, or between two non-adjacent web hex so long as the intervening hexes are not web hexes.

(G10.72) When a self-destruction blast occurs near a web, the blast may enter the web hex but it will lose one point of its strength for each strength point of the web. The strength of the blast in hexes on the other side of the web is reduced by the strength of the web. For example, a 100-point self-destruction blast is in hex 0909. A 20-point web is in hexes 1101-1125. Hex 0708 receives 75 damage points, while hex 1109 receives 55. Hex 0509 receives 25 damage points, while hex 1309 receives 5. The web is unaffected by the blast. This rule also applies to explosion (self-destruction) blasts.



(G10.73) An expanding sphere cannot be generated into or through a web hex. If such hexes are present, the portion of the expanding sphere that would otherwise be in or beyond the web simply does not exist.



(G10.74) Webs have no effect on power absorber panels.

(G10.75) Web affects variable pulsars and black hole gravity waves as it would self-destruction. A web cannot be laid within 10 hexes of a black hole but is otherwise unaffected by it. Ships trapped in a web might be pulled through it if the speed caused solely by the black hole was sufficient to overcome the strength of the web.

(G10.76) If a mine detonates in a web hex, it has its full effect in that hex and is otherwise treated as a self-destruction explosion. Similarly, a mine detonating adjacent to a web would be treated as in self-destruction (G10.72).

(G10.8) TACTICAL IMPLICATIONS OF WEBS

The Tholians have been known to maneuver asteroids around their bases as anchors for webs. Laying webs around these stations thus renders them invulnerable to most weapons, unless the attacking ships allow themselves to be trapped in the web so that they can fire out of the web hexes. In some cases several layers of web are placed around a base. Forces attacking such bases must place themselves into the outermost layer of the web so that they can attack (and destroy) the ships maintaining that web. The procedure is somewhat similar to peeling an onion, and equally as unpleasant.

(G5.0) PROBES

Probes are instrument packages used to gather scientific information. Probes can be used against certain types of space monsters, such as (SM2.0) or as emergency weapons. The "probe" results in (SM2.5) are resolved as (G5.3). In most cases, the probe box on the SSD is just another free hit.

(G5.1) GENERAL RULES

(G5.11) Probes have a maximum range of six hexes.

(G5.12) Unless specifically stated otherwise in the ship description, all launchers carry five probes. The box on the SSD is the launcher.

(G5.2) INFORMATION

Probes launched for informational purposes cost one unit of energy each turn for two turns to launch. The second turn of charging may be the turn of launching. When a probe is launched, it gains 20 factors of "information," as detailed in that scenario. Only one probe may be armed or launched at a time for each launcher on the ship. If not launched on the second turn of arming, the first turn of arming is lost and the second turn of arming is considered to be the first turn of a new two-turn cycle.

(G5.3) EMERGENCY WEAPONS

Probes may be launched at ships or monsters as anti-matter bombs.

While the probe launcher could be used as such (using the procedure above), it is intended for use as a scientific tool. It can only be fired as a weapon if one (or more) of the following conditions are met.

1. If the ship is crippled.
2. If the enemy forces outnumber the friendly forces in the current scenario by 50% of their combat BPV (based on the current situation).
3. If directed to use it by the scenario.
4. If the ship pays a three-point penalty for each such firing.

(G5.31) Anti-matter probes have a warhead strength of 8 and are considered a direct-fire weapon.

(G5.32) They are armed by allocating two units of warp energy on two consecutive turns; the weapon MUST be launched on the second turn. Energy must come from warp engines. Only one probe may be armed at a time (by each launcher), and if a probe is being armed for firing as an anti-matter bomb, no information/research probes may be launched. If energy is not allocated on the second turn, arming is aborted and the energy allocated on the first turn is lost. The same probe could be armed again, or used as a scientific device, on a later turn.

(G5.33) While probes may be launched in any direction, anti-matter bombs may only be launched directly ahead (in the row of hexes extending directly ahead of the ship). Exception: A probe on a base can be fired (as a weapon) in any direction; it is not restricted to the straight hex rows. This is a true 360° firing arc.

(G5.34) To determine if the probe has hit its target, roll a single die. If the result is greater than or equal to the range from the ship to the target, the probe has scored a hit. The probe can be fired at a range of zero.

(G5.35) There is no overload, mine, or proximity function for this "weapon."

(G5.36) If a ship has two or more probe launchers, the use of one of them as a weapon has no effect on the others.

(G11.0) SUPER-INTELLIGENT COMPUTERS *(Optional)*

All the fleets depicted in the game have, at one time or another, experimented with "super-computers" capable of running starships without human assistance. All these experiments failed because the complexities of the programming exceeded the intelligence of the human programmers. All fleets are currently experimenting with building computers capable of programming the larger computer. Should such a research program ever be completed, and a "super-computer" installed in a starship, then the ship (when depicted in the game) would use the following modified rules.

(G11.1) ADVANTAGES

(G11.11) The player operating the computer ship fills out his Energy Allocation Form AFTER the other players have announced their speed and after the Initial Activity Phase. The computer ship performs all of its actions through the Initial Activity Phase at that point.

(G11.12) The computer ship uses free movement (C1.31); all other ships in the scenario must use some form of plotted movement. Plotting their movement eight impulses in advance is acceptable.

(G11.13) A computer ship can perform EM (at half the normal cost) without the (C10.41) penalty for firing its weapons. The computer has no effect on (C10.5).

(G11.14) A computer ship can perform HET's with a -1 die roll shift on all such turns it makes.

(G11.15) A computer ship can change speed in mid-turn (C12.0); other ships in the scenario cannot.

(G11.2) CREWS

(G11.21) Computer-controlled ships are treated as if they had an outstanding crew. (See (G21.0) in Volume II.) The effects of computers and outstanding crews are not cumulative; either can be used.

(G11.22) Computer ships have normal (human or whatever) shuttle crews, deck crews, boarding parties, and fighter pilots.

(G11.23) A ship operated by the computer does not need as much crew. Reduce the crew to 1/3, but retain all boarding parties and deck crews. Life-support can function at minimum levels and costs no energy. A computer-operated ship is not penalized by (G9.42), but is subject to (G9.45).

(G11.24) Crew casualties on a computer ship are scored on every 30th point of internal damage. Boarding party casualties are scored as on non-computer ships.

(G11.25) There can be no mutiny on a computer ship

(G11.26) Hits on control spaces (except emergency control) do not cause crew casualties under non-violent combat.

(G11.3) DESTROYING THE COMPUTER

(G11.31) If all control boxes on the ship, with the exception of emergency bridge boxes, are destroyed, the computer is destroyed and ceases to function. At that point, treat the ship as if it were a non-computer ship. The computer is not connected to the Emergency Bridge; crewmen are stationed there in case of emergencies.

(G11.32) The computer cannot be attacked directly by boarding parties or hit-and-run raids.

(G11.33) Destroyed control boxes which are repaired during the scenario do not function as computer boxes.

(G12.0) SHIP SEPARATION *(Optional)*

Certain ships are able to voluntarily separate into two or more parts. Usually this is done as an emergency survival mechanism, not for tactical gain.

(G12.1) RACES

The ships of various races are able to separate their ships into sections. These are detailed here.

(G12.11) KLINGON SHIPS: Most Klingon ships can separate the forward section, known as the "boom," from the remainder of the ship. The rear section then becomes unstable and cannot move, but the boom is a self-contained spaceship and can be used to escape from the area. Naturally, the boom is occupied by the captain, senior officers, and female personnel of impeccable genetic qualities.

This is usually done if the ship has been taken over by mutineers (assume the officers have retained control of the boom), or if the ship is about to be captured or destroyed.

Boom impulse engines cannot be used for movement unless the boom is separated.

The following Klingon ships may separate their boom sections: B10, C9, C8, D7, D6, D5, F5, and Tug and their variants.

(G12.111) WARP POWERED BOOMS: The boom of the C8/9 dreadnought includes the center warp section. The C-boom is a fully-operational warp-powered starship. It operates normally and can escape any self-destruction blast without damage. If the warp-powered boom drops its warp engine, it operates as a sub-light boom. The boom of the B10 in Volume II also uses these rules; the B-boom includes the two center engines.

Shields do not function until erected by (G12.35).

Star Fleet Intelligence has learned that some Klingon dreadnoughts (the B refits) have an ADD in a compartment at the base of the boom. This system can only operate or be hit when the boom is detached.

Warp-powered booms and saucers automatically escape self-destruction or catastrophic damage.

(G12.112) SUB-LIGHT BOOMS: Boom separation can be done only if at least one boom impulse engine box has not been destroyed, if one or more control spaces remain undamaged in the boom, and if there are at least a specific number of undestroyed systems boxes in the boom area (including the bridge and engine boxes). This required number is:

B10	16
C8/9	10
D6/7	6
Tug	6
D5	5
F5	4

Note that the B10, C9, and C8 booms would have to drop their warp engines to be considered sub-light booms.

(G12.113) NOTE ON KLINGON-ROMULAN SHIPS: In Romulan ships converted from Klingon designs, the boom may never be separated. (The systems have been removed, not just deactivated.) The boom impulse engine on these ships has been replaced by an APR. It is treated as an APR for damage purposes.

(G12.114) REVISED FIRING ARCS: Discarding the rear hull of the ship improves the firing arcs for the phasers on Klingon booms substantially (since the hull no longer blocks this fire). These modifications are defined as follows:

BOOMS:

B10 (and variants thereof): FA + L becomes LS + RF; FA + R becomes RS + LF. FA-firing phasers are unchanged.

C9, C8 (and variants thereof): LF + L becomes LS; RF + R becomes RS. FA-firing phasers are unchanged.

D7, D6, D5, Tug (and variants thereof): FX phasers become 360°.

REAR HULLS: Waist phasers and any rear-firing are unchanged; wing-mounted phasers gain complete FA firing arc in addition to other arcs they previously had.

(G12.12) FEDERATION SHIPS: Most Federation ships with saucer section can separate them for use as a "space lifeboat."

(G12.121) WARP-POWERED SAUCERS: Federation dreadnought saucer sections may be separated from the remainder of the ship. The center warp engine remains attached to the saucer. If separated, they operate as per (G12.111). Warp-powered booms and saucers must fulfill the same requirements as sublight ones.

(G12.122) SUB-LIGHT SAUCERS: The saucer section of Federation Class I starships can be separated from the remainder of the ship. Ships with this capability include the DN, CC, CA, NCL, DD, DE, FF, SC, GS, and CV (and all variant designs and refits built on these hulls). It might be noted that the intended purpose of the starship designer for this maneuver is to crash land on a planet with surviving crew members, but a desperate captain might use it to escape from an unsuccessful combat situation. All procedures and restrictions are the same, including dreadnoughts (where the center warp engine must be dropped for it to be considered as a sub-light ship). The ship's impulse engines are used for power, as the emergency boom engine would be used in a Klingon ship.

Saucer separation can be done only if at least one impulse engine box has not been destroyed, if one or more control spaces remain undamaged in the saucer, and if there are at least a specific number of undestroyed systems boxes in the saucer (including the bridge and engine boxes). This required number is:

DN, CV	= 10
CC, CA, GS	= 7
NCL, DD, DE, SC	= 5
FF	= 4

(G12.123) REVISED FIRING ARCS: Discarding the warp engines of certain ships improves the firing arcs for the phasers on Federation saucers substantially (since the engines no longer block this fire). The side phasers are now given a full 180° firing arc. LF+L becomes LS; RF+R becomes RS.

(G12.2) (Rule number reserved for later use.)

(G12.3) RESTRICTIONS AND CONDITIONS

(G12.31) If using self-destruction on the turn of separation, use the escape procedure (D5.69). If self-destruction does not take place during the turn of separation, assume that the escape procedure is automatically successful.

(G12.32) If a section separates, then the victory points for the ship are divided, with the amount assigned by the MASTER SHIP CHART assigned to the boom/saucer and the remainder to the remaining section. Opposing tractor beams remain attached to the rear hull.

(G12.33) At the instant of separation (before any self-destruction takes effect), all shields on both the separated section and the main hull cease to operate.

(G12.34) If a section is separated from the main hull, it may not be rejoined.

(G12.35) After three turns, warp-powered booms (and saucers) may (at the owner's option) create shields of 20 in all directions. Sub-light booms (and saucers) can erect shields of 5 boxes.

Damage scored on shields prior to separation is NOT applied to the minimum (5-box) shields. Klingon penal booms do not count as "warp powered" booms for this rule. There is no energy cost for operating these minimum shields.

EXAMPLE: A Federation dreadnought has received 27 hits on shield #6 and 14 hits on shield #2. Shield #1 has been destroyed. After separation shields are reestablished. On the new shields, #1 and #6 are completely down, while #2 has only 6 boxes. All could be repaired up to their "full" strength of 20.

(G12.36) Boom counters are provided on the counter sheet for the convenience of the players. While their most obvious use is a dreadnought booms, they may be used for those of other ships.

(G12.37) Klingon DN booms and Fed DN saucers may drop the warp engines attached and be considered the same as other booms. Note that the high electronic signature of the warp engines makes it impossible for these booms to use sublight evasion without dropping the warp engines.

(G12.38) Sub-light sections can attempt to escape by sub-light evasion (C7.3). It might be noted that the concept of "escaping" or "evading" enemy ships by this maneuver is based, in large part, on the reduced sensor signature of a smaller ship without shields or warp engines (both of which create strong sensor images).

(G12.4) OPERATIONS

Separated sections must be adjusted to operate as starships. These adjustments are as follows.

(G12.41) All boxes on the damage control track with a number higher than 2 are eliminated on sub-light sections. All boxes higher than 4 are eliminated on warp-capable sections. Any previous damage is not erased.

(G12.42) A number of excess damage boxes equal to one half (round fractions down) of the original number are marked as destroyed. Any such boxes previously destroyed can be counted in satisfying this requirement. These do not count against the boom; it is not crippled.

(G12.43) The first box on the sensor track is marked destroyed (even if it already has been), and every second box (including destroyed boxes) down the track is also destroyed (except the last box). The same procedure is followed for the scanner track.

(G12.44) Sub-light booms and saucers operate life support, fire control, and shields without any energy cost.

(G12.5) REMAINING SECTIONS

The sections remaining after the boom or saucer separates operate as follows.

(G12.51) They remain on the board, and all seeking weapons targeted on them remain so targeted.

(G12.52) They cannot move by warp power (unstable frame) or fire weapons. They have no shields.

(G12.53) They can take all other actions that any other ship can.

(G12.54) After two complete turns (64 consecutive impulses) have elapsed, the rear section can raise minimum (5-box) shields (even if shields had previously been destroyed or damaged) and can fire phasers (maximum range 5 hexes), drones (can guide them to targets within five hexes only) and anti-drones. It can move under impulse power. Rule section (G12.4) applies to independent rear hulls.

(G12.6) DROPPING WARP ENGINES

(G12.61) Any ship, including a warp-powered boom or saucer, can drop its warp engines at the start of any turn, before the Energy Allocation Phase.

(G12.62) Note that Federation ships without secondary hulls (NCL, DD, SC, FF, and variants thereof) are actually conducting this operation rather than saucer separation, but are included in (G12.2) to define the rules governing the saucer itself. In the case of Catastrophic Damage (D5.6), these types of Federation ships could not "escape" because they have no major element to leave behind.

(G12.63) Note that dropping a ship's warp engines will probably improve the firing arcs of its weapons. This must be determined, however, on an individual basis.

(G12.64) The movement cost (for purposes of towing) is the same for a ship with and without its warp engine.

(G12.7) ADDITIONAL CONDITIONS AND RESTRICTIONS

(G12.71) Klingon ships that have not separated can take the Emergency Boom Impulse Engine out of service. This is done during the Energy Allocation Phase of each turn; to take this engine out of service simply note this fact and do not use power from that engine on that turn. The engine can only be brought back into service at the start of a later turn, or when the boom separates. The engine cannot be destroyed (by damage, hit-and-run raids could destroy it) while out of service. (Note: Only Klingon ships get this benefit; Federation and Romulan ships cannot do this.) The boom warp engines on penal ships can also use this rule. Multi-box engines must be entirely shut down or left entirely active.

(G13.0) THE CLOAKING DEVICE

Romulan ships (and some others) may be equipped with this device, which makes detection of the ship almost impossible. However, while the ship itself cannot be seen, the effect of its magnetic field on light from the background of stars can be seen and will give at least a general idea of where the ship is.

(G13.1) OPERATION OF THE CLOAKING DEVICE

The cloaking device is operated by these rules.

(G13.11) The owning player designates that the cloaking device is operating and pays the cost of this operation, during the Energy Allocation Phase of each turn.

(G13.12) When the cloaking device is operating, the ship remains on the map, but an unused counter is placed on top, upside down, to mark it. See (G13.61). Special "cloaked" markers are included in the *REINFORCEMENTS* package.

(G13.13) The cloaking device cannot be used during any impulse in which weapons are fired by the cloaked ship. Conversely, weapons cannot be fired by the cloaked ship during any impulse that the cloaking device is operating.

(G13.14) The cloaking device is either "on" or "off" for the entire turn. It is turned on during the Energy Allocation Phase of a given turn and may be turned off or left on during the Energy Allocation Phase of the following turn or turns. If the device was on during the previous turn, and it is to be on during the current turn, then its operation is considered to be continuous. (i.e. the position of the cloaked ship is not revealed at the end of each turn.)

(G13.15) All units docked inside or to a larger unit (e.g. ships docked inside a base or fighters in a ship's hangar) are considered to be cloaked if the larger unit is cloaked. The smaller units do not pay a cloaking cost in this case. These smaller units could cause the cloaking device to be voided by performing any of the actions listed in (G13.4). Note that the tractor beams used to hold a ship in a docked position do not void a cloaking device.

(G13.16) The cloaking device is not on the SSD and cannot be destroyed in combat. It could be destroyed, but not captured, by a hit-and-run raid. If the ship is captured (or in danger of being captured) the owner can try to destroy the device. His chances of doing so are the same as those of destroying his ship (D5.0).

(G13.2) COST OF OPERATION

The ships that have the cloaking device and the cost for using the device are shown in (G13.21).

(G13.21) CLOAKING DEVICE COST CHART

1	= Warbird
2	= Centurion, Buccaneer, other PF (without packs); (4)
4	= Centurion, Buccaneer, other PF (with packs); BS; (3)
5	= Romulan KE4R; all other escorts
6	= Romulan KF5R, KF5RS, WE, SE, FE, WH, Pelican, Falcon CH; Orion R, DR, Slaver; all other frigates; (2)
8	= Skyhawk (all types); all destroyers
10	= Orion CR; FRD; All light cruisers
15	= King Eagle
18	= SparrowHawk (all types); All war cruisers
20	= KR, KRC, KRT; Orion CA, Sal, CYL, PFT; All heavy or Command cruisers; BATS; FireHawk, SuperHawk
24	= KillerHawk
30	= Condor; DNs; (1)
50	= Starbase

Note that this chart includes all ships capable of using the device from Volume I and Volume II. While most ships are not officially capable of using the device, generalized costs of operation are provided for player-designed modifications. Refits and variants are the same cost as the basic ship.

Note that Andromedan ships cannot be equipped with cloaking devices.

(G13.22) If a ship shuts down (does not use power) or has dropped its warp engines, it can cloak for a lower cost based on its size class. Size classes are shown on the above chart in parentheses. For example a DN (which is size class 2) could cloak for six points if its engines were shut down. Note that there is a "(2)"

on the 6-point line, indicating that a size class 2 ship with its warp engines shut down would require six points of energy to operate its cloaking device.

(G13.3) COMBAT AGAINST CLOAKED SHIPS

Ships operating cloaking devices are more difficult to hit with weapons. Generally, firing ships cannot lock-on to cloaked ships. In some special circumstances, firing ships may lock-on to cloaked ships, but the effect of their fire may still be reduced.

(G13.31) COMBAT WITHOUT A LOCK-ON: Seeking weapons cannot function without a lock-on and are removed from play.

Direct-fire weapons are penalized because of the poor fire-control solution available. Because there is no lock-on, double the true range to the target (in hexes). The effect of the cloaking device is to add five additional hexes. (Actual range $\times 2 + 5 =$ Effective range.) The result is considered to be the effective range. Roll dice and determine damage as per normal combat, then adjusted by (G13.34).

See (G13.34) for additional conditions.

(G13.32) COMBAT WITH A LOCK-ON: If a ship maintains a lock-on to a cloaked ship, direct-fire combat is resolved exactly as in (G13.31) except that the range is not doubled. (Actual range + 5 = effective range.)

Seeking weapons can be fired if a lock-on is retained, but are (like direct-fire weapons) adjusted by (G13.34).

See (G13.34) for additional conditions.

(G13.33) RETAINING A LOCK ON: If a firing ship had a lock-on to the cloaked ship before the cloaking device was activated, or if the firing ship is able to achieve a lock-on while the cloaking device is operating (G13.4), there is a possibility that the lock-on can be retained. Note that, if a ship enters a scenario cloaked, it cannot be locked-onto unless it voids its cloak by some means or drops it.

(G13.331) The attempt to retain lock-on is made at the start of the turn (or on the impulse after the cloaking device is activated if it is activated during the turn, or when fade-out is completed) after the target ship announces that it has cloaked (or remained cloaked). This probability is determined with the following formula:

Probability of keeping lock-on = S - (EW adjustment) - RF - 4 + SF

The player controlling the firing ship rolls a single die. If the resulting number is equal to or less than the probability number determined by the equation, the lock-on has been retained.

The terms of the equation are defined as follows:

S = Sensor rating of ship trying to lock-on

EW = Electronic warfare adjustment

RF = range adjustment factor as shown below

SF = speed adjustment factor as shown below

EW Adjustment: Use the electronic warfare procedure, but if the result is negative, determine the result on the chart and apply it to the equation as a negative number.

Range Adjustment Factor = RF		Speed Adjustment Factor = SF	
True range	RF	Speed of Cloaked Ship	SF
0	-1	0	-2
1-4	0	1	0
5-10	1	2-4	1
11-15	2	5-8	2
16-20	3	9-11	3
21-30	4	12-13	4
31-40	5	14	5
41+	6	15+	6

Speed includes any tactical maneuvers paid for.

(G13.332) A new die roll is made whenever conditions (as defined in the equation) change. However, if a lock-on has been retained, a new die roll is not made if conditions (the modifiers to the equation) show an *improved* chance of retaining the lock-on. For example, if the cloaked ship dropped its ECM, the equation would actually improve in favor of the other ship, and no new die roll would be required. A new roll is not required at the start of each turn unless conditions change.

(G13.34) COMBAT CONDITIONS AGAINST CLOAKED SHIPS

(G13.341) DIRECT-FIRE WEAPONS: For all direct-fire weapons, use the effective range to determine the probability of a hit. For phasers, fusion beams, tractor-repulsor beams, use the effective range to determine the damage caused by the weapon. For disruptors, plasma torpedoes, hellbores, plasmatic pulsar devices, and photon torpedoes, use the true range to determine the damage caused by a hit. Note that weapons with a specified minimum range (e.g. photon torpedoes) cannot be fired if the true range is less than the stated minimum, even if the effective range is greater than the stated minimum. In all cases, the adjustment chart (G13.344) is used to adjust the effectiveness of the fire.

Overloaded direct-fire weapons may be fired at a cloaked ship even if the effective range is beyond their (overloaded) range limit, so long as the true range is within their (non-overloaded) range limit. Note that feedback for overloaded weapons functions entirely based on true range.

(G13.342) SEEKING WEAPONS: If a seeking weapon enters the hex occupied by the cloaked target ship, there is a substantial probability that it will not be able to find the target. Use (G13.344) to determine the damage caused.

(G13.343) PHASED CLOAKING: When using phased cloaking (G13.63) but the ship has not completed its fade-out, or has just started its fade-in (i.e. the effective range is no longer doubled but some adjustment is added to the range), use the chart in (G13.344), but add the penalty hexes to the die roll and then subtract five from the die roll. The unmodified chart is used only when the ship has completed its cloaking operation.

(G13.344) COMBAT VS. CLOAK FIRE ADJUSTMENT CHART

Roll one die to determine the actual result of each individual weapon. Note that in the case of a narrow salvo, a single die roll is used for the entire volley.

Die Roll	Result
1 or 2	Weapon does normal damage
3	Weapon does 1/2 damage
4	Weapon does 1/4 damage
5 or 6	Weapon does no damage

(G13.4) LOSING THE EFFECT OF A CLOAKING DEVICE

There are several ways in which a cloaked ship could lose some of the benefits of being cloaked. If the cloak is voided, the position of the ship is revealed (G13.61) and other ships can gain a lock-on to it (except as noted). Note that these enemy ships must roll immediately (before they fire) to retain the lock-on. Also note that even if a lock-on is gained and retained, the five-hex penalty and (G13.344) adjustment is retained. If a lock-on existed before the effect was lost, a new die roll to retain it is not required.

In many cases, enemy ships will have several impulses to gain and retain a lock-on. In such cases, the ship could roll for continued lock-on under (G13.331) during each of the these impulses. If a lock-on is gained and retained during one such impulse, the ship is not required to roll again on the subsequent opportunities.

If the ship voids its cloaking device by any of the procedures noted, it still cannot fire weapons until the device is deactivated. This is because the ship's active sensors are deactivated. It does not have a lock-on to any other unit.

(G13.41) A cloaked ship may launch shuttles and PFs. While this would give away its location (G13.61), enemy ships still could not "lock-on" to the cloaked ship. A cloaked ship cannot pick up shuttles or PFs without being detected. The ship would have to broadcast a homing signal for the shuttles and PFs (verbally announced by the player), and this signal could be detected and used for targeting. A cloaked ship can be locked onto during the impulse in which it picks up a shuttle and during the impulse before and after the impulse in which the pick up is made. Note (F2.6). In such cases, the ship could roll for continued lock-on under (G13.33).

(G13.42) A cloaked ship exposes its position (and can be locked onto) during the impulse that it uses transporters and during the impulse after it does. (Transporters can only be used to a friendly ship that is also operating a transporter to receive the beam.) A cloaked ship cannot be boarded by transporters unless it can be locked onto.

(G13.43) A cloaked ship is exposed (and can be locked onto) if it maintains a previously established tractor beam or is tractored by another ship (even if that other ship is cloaked or a friendly ship). Tractors used to hold a ship in a docked position do not count for this purpose.

(G13.44) A cloaked ship is presumed to be using a powerful form of ECM and may expend additional energy for ECM. It cannot use ECCM unless the device is deactivated. ECM cannot be loaned to a cloaked ship, except during the fade-in/fade-out period. A cloaked ship can receive ECM from natural sources.

(G13.45) If a cloaked ship enters a web hex, it is trapped by the web in the normal manner. A cloaked ship trapped in a web hex can be locked onto.

(G13.46) If a cloaked ship (or PF) docks inside (or to) any other unit (including one that is cloaked), it must drop its cloaking device (or complete phase-in) on the impulse before docking is established. This also voids the cloaking device of the larger unit at the time of docking (G13.41). A ship (or PF) that is undocking cannot cloak until after it is completely undocked, but the act of undocking does not affect the cloaking device of the larger unit.

(G13.47) Boarding parties on board a cloaked enemy ship cannot assist in detecting or locking onto it. If using (G13.61) the boarding parties can broadcast the specific hex that the ship is in.

(G13.48) A cloaked ship operates against asteroids exactly as an uncloaked ship, except that during any impulse when it takes asteroid damage it can be locked on to.

(G13.5) OTHER EFFECTS OF THE CLOAKING DEVICE

Use of the cloaking device has certain other effects.

(G13.51) A cloaked ship cannot gain or retain a lock-on against any object. A cloaked ship cannot fire seeking weapons (even those with ATG) or guide those already launched. A cloaked ship cannot fire direct-fire weapons. Scout functions (except G24.28) will not operate on a cloaked ship. These restrictions apply while the cloaking device is operating or until phase-in is complete or after phase-out begins.

(G13.52) Ignore the cloaking device when calculating the range for self-destruction and mine blast effects. The cloaking device has no effect if the ship is caught by a nova sun (SM5.0), other than denying your opponents the chance to watch your destruction.

(G13.53) All animal monsters ignore all effects of the cloaking device. Using their animal "sixth senses" and instincts, they can still detect a cloaked ship accurately enough for their weapons and other effects.

(G13.54) A cloaked ship cannot launch a WW while the cloaking device is operating, but may do so during the phase-in/phase-out periods.

(G13.55) A ship with a cloaking device entering a mined hex (or one with transporter bombs) has a reduced chance of detonating the mines (since the mine's electronic "feelers" can't be touched by the ship). In such cases, add three to the die roll, but a die roll of "1" always means an explosion, regardless of modifiers. (This effect exists only after fade-out is complete and before fade-in begins.) If there is an explosion, and the cloaked ship survives it, it can be locked onto in the impulse in which the explosion occurred. A cloaked ship cannot detect or sweep mines while the cloaking device is operating or until phase-in is complete or after phase-out begins.

(G13.56) Labs on a cloaked ship may not gather any information while the cloaking device is operating or until phase-in is complete or after phase-out begins. Labs may not gather information about a cloaked ship.

(G13.57) An ESG ignores the effects of a cloaking device and damages cloaked ships normally. If a cloaked ship is damaged by an ESG, it can be locked-onto during the impulse the damage is taken. A cloaked ship cannot operate an ESG while the cloaking device is operating or until phase-in is complete or after phase-out begins.

(G13.58) The range of a mauler is not adjusted for the effective range, but uses the true range only. Maulers cannot fire at a cloaked ship unless they have a lock-on. When firing with a lock-on, the adjustment in (G13.344) is not used. Instead, roll one die. A result of 1-3 indicates full effect (at true range); a result of 4-6 indicates a complete miss.

(G13.59) A cloaked ship cannot use erratic maneuvers while the device is operating. It can use EM during the fade-in/fade-out period, but must stop doing so before the fade-out is complete and before the die roll is made to retain a lock-on.

(G13.6) ALTERNATE CLOAKING DEVICE PROCEDURES (Optional)

(G13.61) HIDDEN MOVEMENT (Optional)

The counter representing the cloaked ship is removed from the board, with the ship's position recorded secretly by the owning player.

(G13.611) Combat is conducted in accordance with the rules above. A non-playing moderator may be required for the system to function properly.

(G13.612) The opposing player may, twice per turn, require the owner of the cloaked ship to reveal which of the opposing ship's shields faces the cloaked ship.

(G13.613) If a lock-on has been retained, the player owning the cloaked ship must reveal, during the Activity Segment of each impulse, the true range between his ship and the opposing ship and which shield of the opposing ship is facing the cloaked ship. This is done for each opposing ship which has a lock-on.

(G13.614) Seeking weapons move on the board normally. The owner of a seeking weapon moves it and the owner of the cloaked ship tells him if the hex entered is farther away from the cloaked ship than the hex just left. If it is, the weapon is returned to the original hex and the procedure is repeated. The seeking weapon could use an HET if necessary.

(G13.615) When using (G13.63), the counter is not removed from the board until fade-out is completed, and is returned when fade-in begins.

(G13.62) EXPERIENCE IN TRACKING CLOAKED SHIPS (Optional)

To account for the ability of enemy ships to "learn" how to detect the cloaked ships (by adjusting their instruments and discovering just what to look for), the following procedure can be used. Add 10 (not 5) to the range (G13.31) on the first firing attempt, and reduce this penalty by one for each previous turn during which the firing ship (not player or side) fired at and scored damage points on the cloaked ship with direct-fire weapons in this scenario. This penalty is adjusted specifically for each firing ship and each cloaked ship it is firing at. The penalty can never be reduced below three hexes. This rule can be used with (G13.633) and (G13.634) by simply using the current rating (e.g. 10) in place of the standard 5-hex penalty. The fade-in/out will still take five impulses (so far as the cloaked ship is concerned); the penalty will increase/decrease one point per impulse, with its maximum rating just before lock-on is lost (or just after it is regained). The chart below (see G13.633) assumes a ship at a true range of 3 hexes that turns the cloaking device off on impulse 9 and back on during impulse 20.

Penalty	Impulse	9	10	11	12	13	14	15	20	21	22	23	24	25	26
3	Eff Rng	9	6	5	4	3	3	3	3	3	3	4	5	6	9
4	Eff Rng	10	7	6	5	4	3	3	3	3	3	4	5	6	10
5	Eff Rng	11	8	7	6	5	4	3	3	4	5	6	7	8	11
6	Eff Rng	12	9	8	7	6	5	3	3	5	6	7	8	9	12
7	Eff Rng	13	10	9	8	7	6	3	3	6	7	8	9	10	13
8	Eff Rng	14	11	10	9	8	7	3	3	7	8	9	10	11	14
9	Eff Rng	15	12	11	10	9	8	3	3	8	9	10	11	12	15
10	Eff Rng	16	13	12	11	10	9	3	3	9	10	11	12	13	16

(G13.63) PHASED OPERATIONS (Commander's Level)

Players interested in the most advanced uses of the cloaking device may use this rule, which allows the device to be turned on and off during any portion of any turn.

(G13.631) OPERATION: The cloaking device can be turned on or off at any point during the turn, but certain restrictions apply.

(G13.632) ENERGY COST: The owning player must have paid the full cost of operating the cloaking device during the Energy Allocation Phase of the turn.

(G13.633) DEACTIVATING THE CLOAKING DEVICE: If the device is operating, the owning player may announce that it has been turned off during the Impulse Activity Segment of any impulse. At that point, the device is off, and the ship may be locked-onto by enemy ships. However, the ship itself may not lock-onto any enemy ship or fire/launch any weapons until the fifth subsequent impulse. For example, if the ship dropped its cloak on impulse 10, it could not fire/launch weapons until impulse 15.

During the five-impulse period when the device is being turned off, the ship "fades" onto the tracking scopes of other ships. This is reflected by decreasing the effective range from any other firing ship to the cloaking ship by one hex for each of those impulses. Note that when the device is on, the effective range is increased by five hexes. This effect phases out this five-hex penalty over five impulses. Thus, in the example above, a ship three hexes from the cloaking ship would fire at the following ranges on the impulse indicated:

IMPULSE	9	10	11	12	13	14	15	16
EFFECTIVE RANGE	11	8	7	6	5	4	3	3

The drop over the first impulse represents the loss of the "double range" effect of the cloaking device.

(G13.634) ACTIVATING THE CLOAKING DEVICE: If the device is not operating, the owning player may announce that it has been turned on during the Impulse Activity Segment of any impulse. However, the device does not become active until five impulses AFTER the ship has dropped its lock-ons to other ships, fired/launched weapons, or committed any other action described under (G13.4). Further, from the time that the announcement is made, the ship is under the restrictions of (G13.5). For example, the ship announces on impulse 20 that it is activating its cloaking device. The ship is under many of the restrictions of the device immediately, but does not gain all of the benefits until the beginning of impulse 25.

During the five-impulse period when the device is being turned on the ship "fades" out of the tracking scopes of other ships. This is reflected by increasing the effective range from any other firing ship to the cloaking ship by one hex for each of those impulses. Note that when the device is on, the effective range is increased by five hexes. This effect phases in this five-hex penalty over five impulses. Thus, in the example above, a ship three hexes from the cloaking ship would fire at the following ranges on the impulse indicated:

IMPULSE	19	20	21	22	23	24	25
EFFECTIVE RANGE	3	4	5	6	7	8	11

Note that the sudden increase on impulse 25 represents the doubling of the true three-hex range when the cloaking device becomes effective.

(G13.635) RESTRICTIONS: When using this system, the cloaking device can be turned on and off one time (each) per turn.

(G13.636) OTHER CONDITIONS

(G13.6361) If the device is activated or deactivated near the end of a turn, the effect carries over into the next turn.

(G13.6362) The activation or deactivation of the device, once begun, cannot be cancelled. The only exception would be if sufficient power was not available due to damage (as adjusted by C2.3 or at the start of a new turn). So long as enough power is available, the cloaking device will have priority over all systems except life support.

(G13.6363) If a cloaked ship does not allocate energy for cloaking, it fades in during the first impulses of that turn. It does NOT become fully uncloaked immediately.

(G14.0) TUGS AND PODS

Tugs are capable of carrying various types of pods. When doing so, the combination operates under special rules. Note that some races use pallets or cargo packs; these are in all respects functionally identical to pods.

(G14.1) OPERATIONS

When a pod is attached to a ship, it becomes a part of that ship for ALL purposes. The shields, sensors, scanners, damage control, and excess damage are all combined. See exceptions in ship descriptions in Volume II and later. Power may be transferred freely between the ship and pod and in fact is not calculated separately. Any hits scored may be distributed among the combined ship as the owning player sees fit.

(G14.2) RESTRICTIONS

Carrying one or two pods (or the equivalent weight of three pods if one is a "double weight" pod) can increase the movement cost and turn mode of the tug. These restrictions are shown on the TUG LOADING CHART, see annex.

(G14.3) RELEASING A POD

(G14.31) A tug may release a pod during the Impulse Activity Segment of any impulse of any turn, so long as the speed of the tug is 0 or 1 for that turn. The pod counter is placed in the same hex and from that time operates independently.

(G14.32) If released at a speed higher than one, score one point of internal damage to the pod and to the tug for each unit of the tug's speed. This is not cumulative with (C6.562).

(G14.33) If all boxes on the SSD of a pod are destroyed, the pod is automatically dropped immediately (see exception below); it does not explode. It can be released at any speed without damaging the tug; it cannot serve as a WW. The turn mode of the ship improves (in most cases) immediately, while the movement cost is reduced to the appropriate figure at the start of the next turn. A ship is not required to release a destroyed pod. (It might be worth towing to a repair yard). Any independent pod not otherwise designated is assumed to have one excess damage box.

(G14.4) ATTACHING A POD

A tug may attach a pod during the Impulse Activity Segment, so long as the speed of the tug and pod are both 0 and the tug or pod has at least one working tractor beam with power applied. Both must have the same facing and be in the same hex.

(G14.5) PROPORTIONAL CASUALTY DISTRIBUTION

When detaching an undestroyed pod, any crew unit casualties previously scored can be distributed between the pod and tug at the owner's discretion, unless the separation occurred involuntarily, in which case casualties must be distributed between the tug and pod in proportion to the original crews of each.

(G14.6) PSEUDO-POD

(G14.61) This is not a true pod, but an imitation intended to deceive the opposing player. The tug appears to be carrying a pod (of any type that the owning player cares to name), but actually is not. A pseudo-pod is an inflated light metal construct designed to appear as and give the electronic signature of a real pod. The purpose might be to convince a pirate or enemy fleet that an empty tug is really a battle-tug or carrier-tug, or is carrying valuable cargo. In no case can an enemy determine that the pseudo-pod is not a real pod except by boarding it or scoring damage on it. The player must designate before the scenario begins what type of pod the pseudo-pod is designed to look like.

(G14.62) The pseudo-pod does not affect the movement cost or turn mode of the tug, although turning at the radius assigned to an empty tug would expose the deception. A pseudo-pod is destroyed by the first damage point scored on "cargo".

(G14.63) A pseudo-pod can be towed by a ship, or detached to operate independently. It cannot move or take any action, but cannot be distinguished from a real pod. It will still appear as if it is real. It will appear to have the appropriate shields, although of course it does not and it would be destroyed (when detached) by the first damage point scored on it.

(G14.64) Boarding parties transported onto a pseudo-pod are not harmed (they float inside the hollow shell) but report the deception. They can be transported elsewhere at a later time. Hit-and-run raids would also reveal the deception.

(G15.0) ORION PIRATES SPECIAL RULES

Because of their precarious political position, Orion ships are operated with a considerably different doctrine than ships of actual battle fleets. These benefits apply only to ships that begin the scenario under Orion ownership. (In a campaign, an overhaul at a base would be required to convert them.)

(G15.1) NO SURRENDER

An Orion ship will never surrender (although it could be captured by boarding parties). When an Orion ship has no operable weapons and cannot disengage, the Orion ship will self-destruct rather than risk capture. Note that Orion ships have a nuclear suicide bomb shown in (D5.2).

(G15.2) DOUBLE ENGINES

Orion ships (only) can double the energy output of their warp engines. (This applies only to original construction Orion ships as in R8.0, and does not include freighters operated by Orions.) However, on each turn that this is done, one warp engine box is marked as destroyed. (There are some exceptions listed in the ship descriptions.) There is no special procedure for doing this. The owning player simply doubles the number on line 1 of his Energy Allocation Form and circles it for reference. This action must be announced (see Annex #2). The loss of one engine box occurs at the end of the turn.

(G15.21) All Orion ship types can double their engine output. However, each engine is doubled (or not doubled) individually. Each ENGINE that doubles its output loses one box. Thus, a CR could lose two engine boxes per turn, a CA three.

(G15.22) LR/DR-class ships and Buccaneer PFs can lose only one engine box per turn through this procedure, even if both warp engines and the impulse engine are doubled. If the Buccaneer doubles the output of its booster packs, the packs are completely destroyed at the end of the turn.

(G15.23) Orion ships can also double the output of their impulse engines. In the case, one impulse engine box is marked off if any or all of the impulse engine boxes run at double output.

(G15.24) Orion ships can use double output to disengage, but are not required to use it in calculating the required power.

(G15.25) The doubling of engine output does not increase the power of a self-destruction explosion.

(G15.26) An Orion ship cannot generate more than 31 movement points (even using engine doubling), even to penetrate a web or escape from a black hole.

(G15.27) Engine boxes lost due to doubling count as damage for purposes of (S2.22).

(G15.28) Orions in captured ships cannot double the engines of those ships. Captured Orion ships cannot double their engine output. Orion Bases cannot double their power output.

(G15.3) CLOAKING DEVICES

Virtually every type of equipment in known space (with the significant exceptions of Andromedan and Tholian equipment) has found its way into the hands of the pirates, and the cloaking device is no exception. Orion ships may operate cloaking devices; their BPV is increased by 30% (PFs by 100%).

(G15.31) The cost of operation is shown in (G13.21).

(G15.32) If the warp engine output is doubled, the power required to operate the cloaking device is also doubled due to the brighter electronic signature that must be masked. If only one engine is doubled, the cost of cloaking is increased by 50% if the ship has two engines, 33% if it has three.

(G15.4) OPTIONAL WEAPONS MOUNTS

Many Orion ships have boxes on their SSD's that are marked with an *****. This indicates an optional weapons mount, which can include any ONE of the weapons listed in Annex #6B. The BPV of the ship is increased by the stated amount in each case. The costs assume a LS or RS firing arc for wing mounts and an FA firing arc for centerline/forward mounts. Swivels are available for plasma torpedoes based on Annex 6A.

(G15.5) LABS

Orion ships can use their control spaces as labs (G4.3).

(G15.6) GRAVITY LANDING SYSTEM

All Orion ships have a gravity landing system to land on planets or asteroids. See (P2.432). Most are also capable of other landing systems listed in (P2.43).

(G16.0) STASIS FIELD GENERATORS

(Commander's Level)

The Klingons have experimented with installing these devices in their battlecruisers and dreadnaughts. Basically, a stasis field stops time for anything inside of it. Anything trapped inside of a stasis field cannot move until the field is released, but conversely nothing can be done to anything trapped in such a field since nothing (logically) can happen while time is stopped. Other fleets have experimented with these devices, but have not used them operationally.

The Klingons use the device for two tactics. One is to pin an enemy ship while other Klingons move into position to deliver concentrated fire. The other is to protect a friendly ship that is observed to be in a disadvantageous position.

(G16.1) PROCEDURE

The SFG can be activated in any impulse. The SFG has a FA firing arc and a maximum range of 5. It will generate a stasis field around one object (ship, drone, etc, NOT the entire hex) within that arc. The range limitation applies to true range, not the adjusted range. A ship generating a stasis field can drop the field during any impulse.

(G16.2) ENERGY COST TO OPERATE

The cost to generate a stasis field is 5 energy points on the first turn. The cost to maintain it increases by 5 energy points per turn (10 on the second turn, 15 on the third, etc.).

(G16.21) Two different objects in the same or different hexes (but both within the firing arc) may be placed in stasis. The cost is double the cost of holding a single ship, plus two extra energy points per turn. Similarly, three ships could be held in stasis at a cost of triple the normal cost plus three extra units of energy per turn. These separate fleets need not be generated at the same time.

(G16.22) Energy used to charge a stasis field generator cannot be held and is lost if not used on that turn.

(G16.3) RESTRICTIONS

During the time that the stasis field is operating, the generating ship is restricted in its activities.

(G16.31) The generating ship cannot move or be moved; it cannot be towed by tractor beams. If this occurs, the stasis field is broken. It could make tactical maneuvers so long as it keeps the target ship in its FA firing arc.

(G16.32) It may conduct other activities.

(G16.33) The SFG can generate up to three fields at a time (G16.21). It can drop any one of them, but cannot reuse that field until all fields have been dropped. After releasing the last field, another may not be generated for three turns.

(G16.4) EFFECT

While a ship is inside of a stasis field, it is "frozen in time." It does not move or conduct any activity; nothing can happen to it.

(G16.41) A ship trapped inside a stasis field takes no damage from any source during the time it is trapped. No weapons may be fired into the field (they would detonate against the field, damaging nothing).

(G16.42) A tractor link is broken if either the tracting or tracted ship is placed in stasis. A tractor beam cannot be attached to a ship in stasis.

(G16.43) Nothing can be transported onto or off of a ship in stasis.

(G16.44) If the SFG is destroyed in combat, all of its fields are released immediately.

(G16.45) A ship that is already in stasis cannot be placed in another stasis field.

(G16.46) Any units docked to or inside a unit in stasis are also assumed to be in stasis.

(G16.5) INSTALLATION

No specific ship was designed or built by the Klingons for the stasis field generator. Several classes of ships were modified to carry it. These include the D7 (designated D7A when in this configuration) and the C9 (C9A).

(G16.51) On the D7A, the SFG replaces the three forward phaser-II mounts. There is only one SFG, but it takes three damage points (phaser, non-directional) to destroy it.

(G16.52) On the C9A, the SFG replaces the forward drone racks. It takes two damage points (drone) to destroy it.

(G16.53) The SFG is carried by several ships in Volume II. Installation details are shown in the individual ship specifications.

(G16.54) If a ship generating a stasis field is, itself, placed in stasis, the field it was generating is released.

(G16.55) A wild SWAC cannot attract additional weapons while in stasis, but weapons already tracking it continue to do so and will resume its activities when released. See (J3.5) for the special effects of stasis fields on a wild weasel.

(G16.6) OTHER CONDITIONS AND RESTRICTIONS

(G16.61) Planets, meteors, asteroids, starbases, battle stations, and base stations cannot be placed in stasis.

(G16.62) The Tholian web is unaffected by stasis fields, although if a ship laying the web or reinforcing it is trapped in a stasis field, it cannot continue that function (but can continue to hold one end of the web) until it is released. An SFG cannot be projected across a web; laying one is a way to break the field. It could be projected into or from a web hex.

(G16.63) Monsters may be placed in stasis.

(G16.64) If a ship is placed in stasis while generating an ESG field, the field ceases to function until the ship is released.

(G16.65) Two ships with SFG's cannot put each other in stasis simultaneously. If two opposing ships try, each player rolls two dice (roll again in case of a tie) and the higher number is successful in putting the other ship in stasis. Legendary weapons officers can affect this die roll.

(G16.66) A ship held in stasis cannot be moved by a black hole (P4.0); the ship moving it can be. If the ship generating the field is pulled out of the effective range, the field is dropped.

(G16.67) The presence of a ship trapped in a stasis field within a given hex has no effect on anything else in that hex.

(G16.7) RELEASING A SHIP FROM STASIS

A ship (or other object) is released from stasis when the field is dropped. (It could be dropped for a variety of reasons.) When dropped, the released ship is under certain restrictions. These are based on two factors. The first is the effect of the stasis field. (The crew does not know they were in stasis, they simply note that other ships around them have suddenly jumped to new positions.) The second is that the ship is out of the regular time sequence and must be adjusted.

(G16.71) Once released from a stasis field, a ship cannot be put in stasis again for at least 1/4 turn.

(G16.72) A ship held in stasis and then released will probably be out of sync with the rest of the ships. It executes the next four impulses based on the energy allocation (and movement plot, if any) written before it was placed in stasis. At the end of the fourth impulse, the owning player may completely re-write his energy allocation (and movement plot, if plotted movement is in use) for the remainder of the current turn. This is under two restrictions. The first is that any energy already expended during the current turn must be allocated for. The second is that the ship's movement rate (speed) is based on the total energy expended over an assumed entire turn, regardless of how much of the turn actually remains, and is subject to the speed change restrictions. See examples on page 31A.

(G16.73) When released from stasis, the ship (or other unit) may not fire weapons or use transporters or tractor beams for 1/8 turn since the fire-control computers must re-acquire their targets. The ship may fire direct-fire weapons at seeking weapons within three hexes targeted on itself. Remember that the unit in stasis has no memory of the experience and no objective means of detecting it. To them, it seems as if surrounding objects suddenly jumped to new positions.

SYNOPSIS OF VOLUME II

(G17.0) REPAIR SYSTEMS

(G18.0) ANDROMEDAN DISPLACEMENT DEVICE

(G19.0) ANDROMEDAN SATELLITE SHIP OPERATIONS

(G20.0) ANDROMEDAN ENERGY MODULES

(G21.0) CREW QUALITY

(G22.0) LEGENDARY OFFICERS

(G23.0) EXPANDING SPHERE GENERATORS

(G24.0) SCOUT FUNCTIONS

(H0.0) POWER SYSTEMS

(H1.0) GENERAL RULES

The operation of starships in this game is primarily based on electrical power. Ships generate power from their engines and reactors and expend power for movement, shields, weapons, and other activities. Batteries can be used to temporarily store surplus power and deliver it when needed.

The rules below describe the power producing systems of the ships. Note that some systems (such as photon torpedoes) and functions (such as movement faster than a speed of 1) require the expenditure of warp power.

(H2.0) WARP ENGINES

Warp engines are the primary power source of most of the ships in the game. They use the reaction between matter and anti-matter to produce tremendous amounts of energy. They are the only power source that can move the ship at trans-light speeds (more than one hex per turn).

(H2.1) Each box in the cluster of boxes on the SSD which are marked "warp engine" represents one unit of power. For example, the warp engines of the Federation cruiser can each produce 15 units of power. The Kzinti strike cruiser's three engines only produce 9 units of power each. The Gorn cruiser's engines produce 16 units of power each.

(H2.2) Some activities, such as arming photon torpedoes or moving at trans-light speed REQUIRE that the specific energy used in that activity be warp engine energy.

(H2.3) Some units (primarily bases) have a "warp reactor." This cannot be used for movement, but can be used for general power and for specific weapons (e.g. photon torpedoes) that require warp power. It is considered a "center engine."

(H2.4) While warp power is primarily used for movement, players are not required to use some, or any, of their warp power for this purpose.

(H3.0) IMPULSE ENGINES

Impulse engines are nuclear/ion engines, not unknown in the late 20th Century. They can produce tremendous amounts of power, but cannot move the ship faster than the speed of light. Their power may be, and usually is, used for other purposes.

(H3.1) Each box in the cluster of boxes on the SSD marked "impulse" represents one unit of power.

(H3.2) Impulse power can be used for any function that does not require warp power. Players are not required to use some of it for movement.

(H3.3) If all impulse engines are destroyed, the ship can still move by warp power. Remember that the equation for speed includes the number of warp engines boxes used for movement (adjusted for ship's mass) plus (possibly) one movement point provided by one impulse engine. If a given ship doesn't have impulse engines remaining, its speed is limited by whatever warp power it has.

(H4.0) AUXILIARY POWER REACTORS

Most ships in the game are equipped with auxiliary power reactors (APR's). These are conventional nuclear reactors of advanced design.

(H4.1) Each APR box on the SSD represents one unit of power available from the auxiliary power reactors.

(H4.2) Reactor power can be used for any purpose not specifically requiring warp engine power.

(H5.0) BATTERIES

These are conventional storage batteries, though of advanced design.

(H5.1) Each box on the SSD marked "battery" or "BTY" represents the capability to store one unit of energy for later use.

(H5.2) All batteries of all ships are presumed to be fully charged at the beginning of all scenarios.

(H5.3) Batteries may be drained when extra energy is needed and charged when extra power is available. No battery may hold more than one unit of energy. The use of batteries in this respect is more fully covered in the energy allocation rules (B3.0).

(H5.4) A battery cannot be discharged unless the energy is being used for something in the Energy Allocation Procedure. Note that, if a player wishes to discharge batteries, he is not required to take the full amount of output from his engines or reactors, so he could discharge batteries by this means. However, note that battery power cannot be used for certain purposes (such as movement).

(H6.0) PHASER CAPACITORS

All ships have a "phaser capacitor." This is a special storage battery that is equal in capacity to the total amount of power required to fire each of the ship's phasers one time, rounded to the next higher whole number. For example, the Federation CA, with six phas-I, has a phaser capacitor of 6; the Kzinti CV, with 5 phas-I and 11 phas-III has a phaser capacitor of 11 ($5 \times 1 + 11 \times 0.5 = 10.5$, which is rounded up to 11).

(H6.1) Energy can be held in the phaser capacitor from one turn to the next, and can be withdrawn during any impulse to fire the ship's phasers. It can never be withdrawn for any other purpose; exception see (C1.321).

(H6.2) Energy can be added to the phaser capacitor during the Energy Allocation Phase, but note that the total energy in the capacitor cannot exceed the capacity of it.

(H6.3) If a phaser is destroyed, an equivalent portion of the phaser capacitor is also destroyed. Naturally, players may consider the uncharged elements to be destroyed first.

(H7.0) RESERVE POWER

Ships may use their batteries as a source of reserve power. It should be noted that previous research, which had indicated that reserve power only became available at a certain point in history, has been found to be in error. All ships may use reserve power at all times.

(H7.1) OPERATIONS

A battery may be discharged at any time, even during the middle of a turn, at the option of the owning player. Such discharges may be, but aren't required to be, planned on the Energy Allocation Form. Note, however, that if reserve power is used to activate some system during the turn (say, electronic counter measures or reinforced shielding) this takes effect from that point until the end of the turn. It is not retroactive to the beginning of the turn, nor does it carry over into the next turn. One point of power allocated to ECM will provide that ECM strength for the entire turn, but a unit of reserve power added to the ECM during the turn will, by definition, produce only a part of a turn's ECM. This is the penalty for the flexibility gained.

(H7.2) USE OF RESERVE POWER

Power from batteries may be used to reinforce a specific shield, operate transporters or tractors, energize weapons, or operate other systems. Reserve power may be used to reinforce a specific shield after enemy weapons have resolved their fire against that shield.

(H7.3) RESTRICTIONS

Even with reserve power, a given system cannot be operated more often than the rules allow. For example, a given phaser can only fire once per turn. It can fire with power from reserve power or from the capacitor, and if it requires more than one unit of power, it could draw one from each source. But it could not fire twice with power from capacitors the first time and batteries the second.

Example: A Federation CA has all four batteries remaining, and each of them is holding one unit of power. During the turn, an unexpected opportunity to fire phasers at an enemy ship is presented. Power had not been allocated for this fire, but the Federation player can draw it (two units) from two of the batteries. This requires an adjustment of the battery records, but it was not listed on the energy form. Later in the same turn, the enemy ship fires on the CA, delivering a minor four points of damage to the forward shield. This shield had been reinforced specifically with two units of power. This negates two of the four hits. Rather than accept the other two points of damage onto the front shield, the Federation player elects to discharge his reserve power (the two remaining points in the batteries) into the front shield, canceling the other two points of damage. Thus, none of the damage is permanent.

(H7.4) RESERVE WARP POWER

Those systems which require the expenditure of warp power (such as overloading photon torpedoes just before firing them) can use the reserve power system only under the following conditions.

(H7.41) Some of the power output of the warp engines must be left unallocated during the Energy Allocation Procedure. This cannot be more than the number of discharged batteries on the ship.

(H7.42) Unused reserve warp power must be used to recharge the batteries at the end of the turn.

EXAMPLE: A Federation CA, which has four batteries, could discharge them

(for systems that don't require warp power) during the Energy Allocation Procedure, but leave four units of warp power unallocated. (It can be presumed that the other 26 are used for movement, photon torpedoes, etc.) These four unallocated warp power points can thus be used for any purpose that reserve power can be used for, plus they can be used for those operations specifically requiring warp power (such as overloading the photon torpedoes).

(J0.0) SHUTTLECRAFT AND FIGHTERS

Shuttlecraft are small (10 meters long) spaceships carried inside the larger starships. Their primary purpose is administrative, carrying personnel, supplies, equipment, mail, etc. from the ship to other ships or the surface of planets. In combat situations, however, these craft are often used for many other purposes.

In later years, highly developed armed shuttlecraft (termed "fighters") were often used to increase a ship's firepower.

Volume I includes the standard shuttlecraft, often known as "administrative shuttles" or "utility shuttles," and the Kzinti AAS fighter. Volume II, Volume III, and Supplement #1 include many more fighters.

The term "shuttle" (which is interchangeable with "shuttlecraft") includes both "administrative shuttles" and "fighters." Administrative shuttles are the large, box-like transport shuttles used to carry personnel and perform other tasks; fighters are single-seat attack craft designed only for combat.

(J1.0) GENERAL RULES

Shuttlecraft are not ships, but a separate type of unit. They operate within a different set of rules, which are presented here.

(J1.1) ENERGY

Shuttles do not fill out an Energy Allocation Form. They do not require energy to move or fire their weapons or to perform any other function.

(J1.2) MOVEMENT

The movement rules for shuttles are considerably simpler than those for ships.

(J1.21) SPEED: Shuttles are assigned a maximum speed based on their type. They may move at any speed up to this maximum, but must announce their speed at the start of each turn and remain at this speed for the entire turn. If no speed is announced, the maximum speed is assumed.

(J1.22) ACCELERATION: A shuttle may accelerate by up to one-half of its maximum movement (round up) at the start of a given turn (up to its maximum speed). It may be launched at its maximum speed. It may decelerate by any amount. A shuttle or fighter can use emergency deceleration, but it gains no shield benefit.

(J1.23) TURN MODE: All shuttles have a turn mode of 1 at speeds 1–11, a turn mode of 2 at speeds of 12–23, and a turn mode of 3 at speeds of 24 and higher.

(J1.3) COMBAT

All shuttles are capable of participating in combat.

(J1.31) Shuttles carry weapons as specified by the rules on their types.

(J1.32) Shuttles can be fired at by any weapons. As they do not have SSD sheets, however, damage is not distributed or allocated, but simply recorded for each shuttle. Each type of shuttle has a specified "destruction point," that is, a number of points of damage that will destroy it. When the number of points of damage scored on a given shuttle equals or exceeds this destruction point, the shuttle is destroyed and removed from the game.

(J1.33) Shuttles are considered "crippled" when the number of damage points scored on them equals 2/3 of their destruction point. (Round fractions to the next larger whole number; a shuttle destroyed by 8 damage points is crippled by 6.) When a shuttle is crippled, its maximum speed is reduced to ½ of its rated maximum and it must drop all of its weapons except for phaser-III or phaser-G weapons. (Note that built-in weapons are not actually dropped overboard, they simply fail to function.)

(J1.4) RECORD KEEPING

Each box on the SSD represents one administrative shuttle or fighter. (In some cases the boxes on the SSD are differentiated as to one type or the other; in other cases the number of each type is shown in the ship specification in section R.)

(J1.41) When a shuttle is launched, the corresponding box on the SSD is marked with a dot (or any other convenient mark) indicating that the shuttle has been launched. The number of undestroyed boxes on a SSD will indicate the carrying capacity of the ship, while the number of boxes without special marks will indicate the number of shuttles still on board. When a shuttle hit is scored, the owning player may score it against a shuttle box that contains a shuttle (destroying the shuttle and the capacity to operate it) or one that does not, at his option.

(J1.42) Players with access to the technical materials of the various ships will note that in many cases the number of shuttles on the SSD is lower than the number shown in the technical materials. The reason is that only the number on the SSD are kept ready for service, and only that number can be operated, at any given time. The rest are in storage. Several hours are required to bring a shuttle in cold storage up to operating conditions, and even then, hangar space precludes doing this unless one of the "in use" shuttles has been lost. All ships are presumed to have these extra shuttles stored aboard. The number of extra shuttles is shown on the MASTER SHIP CHART.

(J1.5) LAUNCHING SHUTTLES

A given shuttle bay (group of shuttle boxes on the SSD) may not launch or recover more than one shuttle during any given impulse or two consecutive impulses, except as specified herein or in the individual ship descriptions. Note that a ship can launch OR recover a shuttle, it cannot do both at the same time.

(J1.51) NUMBER OF SHUTTLE BAYS: A shuttle bay can consist of one or more shuttle boxes. Each bay is a separate compartment (i.e. room) on the ship designed to service, launch, and recover shuttles. The number of bays on a ship may be apparent from the SSD, but specific information is given in the technical details for each ship and in the special chart in Annex #3A (Supplement #1) showing information on carriers.

(J1.52) DIFFERENT IMPULSE CHARTS: This rule was written for the 32-impulse chart. If using the 20-impulse chart, each bay may launch one fighter/shuttle per impulse, but no more than four in any five consecutive impulses. If using the 10-impulse chart, each bay may launch one fighter/shuttle on a given impulse, two on the next, one on the next, and so on. If using the 6-impulse chart, three shuttles may be launched per impulse.

(J1.53) BALCONY AND TRACK SYSTEM: All Gorn warships and the Federation CV are equipped with a "balcony and track" system. Shuttles/fighters may be moved from the bay onto a balcony (on Gorn ships this is usually on the wings) outside the ship by a mechanical track system. Movement from this outside track to and from the hangar bay is limited by (J1.5), but any number (up to the ship's limit) may be landed on or launched from this balcony during a given impulse. This system allows strike groups to be launched and recovered quickly. If the ship disengages by using trans-31 speed, all shuttles/fighters on the outside balcony are destroyed. If the ship takes damage while fighters/shuttles are on the outside balcony, each "hull" hit (only aft hull on the Fed CV) destroys one shuttle/fighter (instead of one hull box), but no chain reactions will occur. Shuttles/fighters on the balcony cannot fire, and enemy shuttles/fighters cannot land or be brought down on the balcony. Shuttles on the balcony cannot be prepared for special missions (WW, suicide, S-P) or rearmed by deck crews.

(J1.54) HYDRAN LAUNCH TUBES: Most Hydran ships (see Volume II) are equipped with special launch tubes, allowing them to launch several and recover one shuttle from each bay simultaneously (on the same impulse). Specific information for each ship is given in the technical notes for each ship.

(J1.55) THOLIAN EXTERNAL BAYS: The Tholian Black Widow-class CVL (Volume II) and CVA (Supplement #1) carry their fighters in individual external bays. Thus, these ships can launch and recover all of their fighters simultaneously, but cannot launch and recover a shuttle from the same bay within two impulses. Tholian carriers cannot drop mines or bombs from their external bays.

(J1.6) RECOVERING SHUTTLES

Shuttles can be recovered (that is, taken back aboard a ship) either by being hauled aboard by a tractor beam or by landing on the flight deck under their own control.

(J1.61) LANDING ABOARD: A shuttle may only land aboard a ship under its own power if both the ship and the shuttle are in the same hex and both are moving at the maximum speed of the shuttle or less. Note that this procedure is used to land aboard friendly ships; it can only be used to land aboard enemy ships if one or more of the shields (just which one is irrelevant) and all general reinforcement is down. In the case of an enemy ship, this may involve blasting the doors open or crashing through them; this can be assumed to have happened without any special procedures by the players. Only manned shuttles (those with a crew on board) can land aboard by this procedure. Suicide or WW shuttles cannot land by this (or any) method.

(J1.62) LANDING VIA TRACTOR BEAM: A ship can recover a shuttle using a tractor beam, regardless of the relative speeds of the ship and shuttle, if all of the following conditions are met:

1. The ship has a working tractor beam, power has been supplied to it, and the tractor beam is not being used for any other purpose during that turn.
2. The ship is not moving at more than twice the maximum speed of the shuttle.
3. The ship has an available (empty) shuttle box in one of its bays.

(J1.621) PROCEDURE: The tractor can be attached to the shuttle at a range of three or fewer hexes; this requires additional power (G7.6). At the instant the tractor is attached, the shuttle's engines are shut down and the ship controls the shuttle. The shuttle moves in the same direction and speed as the ship (paralleling its course) and can be pulled one hex closer to the ship (by the ship) each impulse during the Impulse Activity Segment. It can be pulled aboard on the impulse it is pulled into the hex with the ship.

(J1.63) SHUTTLES LANDING ON ENEMY SHIPS: This can occur by either a shuttle (presumably one carrying marines) landing aboard (J1.61) an enemy ship or being pulled on board an enemy ship. This is resolved by (D7.6).

(J1.7) RANGE LIMITATIONS

Shuttles are very short-ranged compared to ships, leading to certain limitations.

(J1.71) Shuttles may not disengage by acceleration (C7.1), but can disengage by separation (C7.2).

(J1.72) Shuttles remaining in play after all friendly ships have been destroyed, captured, or forced to disengage, and those that disengage by separation, are presumed to be destroyed if there is not a planet, base, or ship somewhere relatively close.

(J1.73) Shuttles will not normally be the only unit in fleet scenarios because of their range limits. There must be a carrier, base (of some type), or planet with launch/base facilities present for shuttles to be there in the first place. Scenarios such as (SH9.0) are set within a few million miles of a base station. While dash pods (J5.0) can extend their range, shuttles are still quite limited in their range when compared to starships.

(J1.8) OTHER SHUTTLE RULES

(J1.81) Shuttles on captured ships are considered to be captured, but cannot be launched during the remainder of the scenario because of coded safety interlocks.

(J1.82) In the Cadet's Game, shuttles are destroyed if they are on board a ship that is destroyed. In the standard game, each shuttle on board a ship that is destroyed, or activates self-destruction, has a chance to escape by (D5.61).

(J1.83) Shuttles may self-destruct or surrender just as ships may, should the tactical situation warrant. Under normal circumstances, the situation would only warrant such action if the shuttle was damaged to within two points of destruction, or there were no remaining friendly ships within cruising range. Historically, most shuttle and fighter pilots have chosen to surrender (after destroying their craft), and with a few notable exceptions have been treated fairly as prisoners of war. Shuttles that self-destruct or are destroyed do not cause an explosion.

(J1.84) Seeking weapons may not be fired at a shuttle on the impulse (or phase) in which the shuttle was launched.

(J2.0) ADMINISTRATIVE SHUTTLES

Almost all starships in the game have boxes on their SSD sheets marked "shuttle." Each of these boxes holds one administrative shuttle. Some ships in future volumes have fighters in some of these boxes. A special multi-role shuttle introduced in Supplement #1 (R1.93) is often used.

(J2.1) GENERAL

All administrative shuttles are identical, regardless of the race using them. (This is a generalization for the purpose of simplicity, but within the game the various types of administrative shuttles are operationally identical.)

(J2.11) All administrative shuttles have a maximum speed of six hexes per turn.

(J2.12) All administrative shuttles have a turn mode of 1.

(J2.13) All administrative shuttles are armed with a single phaser-III.

(J2.14) All administrative shuttles are destroyed by the sixth damage point scored against them.

(J2.2) MISSIONS

Administrative shuttles may be used for several missions.

(J2.21) STANDARD administrative shuttles may be used for transport, reconnaissance, and combat duties.

(J2.211) An administrative shuttle, in its standard configuration, can carry one crew unit (G9.0) or two boarding parties (D7.0). In an emergency situation, it could carry twice this many people for short trips, but would not be able to unload them into a combat situation. For example, a shuttle could be used to rescue four marine boarding parties from a hostile situation, but could only unload them in a safe area (such as the starship).

(J2.212) In monster scenarios, an administrative shuttle could be used to gain additional information about the monster. Each administrative shuttle on the board counts as one "lab" box, but at the range of the shuttlecraft, not the range of the ship.

(J2.213) Administrative shuttles can be used for combat purposes. Each carries a phaser-III and can be used to provide additional protection from seeking weapons or enemy shuttlecraft. In a close-range ship-to-ship duel, however, they cannot be expected to survive for long. They can fire their phaser once per turn.

(J2.22) SUICIDE SHUTTLES: For this use the shuttle is unarmed and unmanned. It is loaded with a high yield anti-matter bomb, which has a force of 18 damage points should it reach its target. It is otherwise considered to be a seeking weapon and moves by (F2.0). It has unlimited endurance. Suicide shuttles count as drones against the limits of drones on the map (FD5.311).

(J2.221) In order to launch a suicide shuttle, the launching ship must expend three energy points per turn for three turns. The third turn can be the turn of launching. If not launched on the third turn, it costs one point of energy per turn to keep it on board. The energy to arm suicide attack shuttles must come from warp engines. The energy to hold it on board can come from any source.

(J2.222) Administrative shuttles, minesweeping shuttles (Volume II), multi-role shuttles (Supplement #1), and SWAC shuttles (Volume II) can be used as suicide shuttles. Fighters cannot be used.

(J2.23) WILD WEASELS: Administrative shuttles can be used as wild weasels, electronic shuttles designed to give the appearance of a ship and distract approaching weapons. Because wild weasels are a very complicated section, they are explained below under a separate rule heading (J3.0).

(J2.24) SCATTER-PACK SHUTTLES: Administrative shuttles can be loaded with drones and sent out (under robot pilots) as, in effect, multi-warhead missiles. See (FD7.0) for rules on this procedure.

(J2.3) SUB-LIGHT SHUTTLES: Romulan shuttles before the Klingon Treaty have a speed of one. Some Warbirds continued to carry these old style sub-light shuttles for years afterwards, until new models were available (R4.90).

(J3.0) WILD WEASELS (ADVANCED)

In some situations there are so many seeking weapons targeted on a ship that the situation becomes untenable. There are too many to destroy or evade, and they are too close to disengage. In these cases the solution is to equip a shuttle with electronic equipment so that it will appear, to the rather limited electronic brains on the seeking weapons, to be the ship. While a wild weasel (WW) is functioning, the ship is limited in its ability to move and fire because this would alert the seeking weapons that they were tracking the wrong target. For this use the shuttle is unarmed and unmanned. It has no warhead and will not explode. Wild weasels ONLY affect seeking weapons.

(J3.1) OPERATING CONDITIONS

(J3.11) WILD WEASEL: The shuttle must be launched in a preset direction, at any speed up to six, and will not turn at any time.

(J3.12) ARMING A WILD WEASEL: To arm a WW, one unit of energy must be allocated on the turn of launching and the immediately previous turn. A WW can be kept in the bay and continuously supplied with energy so that it will be ready on a moment's notice. However, if energy was allocated to a shuttle for use as a WW, the shuttle cannot be used for any other purpose on that turn.

(J3.13) RESTRICTIONS ON THE LAUNCHING SHIP: The ship which launches the wild weasel, for as long as the wild weasel is on the map and homing weapons are targeted on it, may move at a speed of no more than four and may not fire weapons. If the launching ship moves at a greater speed, or fires weapons, the wild weasel is voided (J3.4). If launching a wild weasel, the tracking system must be turned off, all lock-ons are lost, and all seeking weapons in flight are lost. Previously fired seeking weapons which have ATG do not require the ship to maintain a lock-on and can continue to function without voiding the WW.

(J3.14) SUBSTITUTE FOR A WILD WEASEL: A tug could drop a pod and use it in the same manner as a WW. What the pod lacks in electronics, it makes up for in size of target. Doing this requires the same energy and preparation as an actual WW. If the pod survives this use, it could be picked up later by either side.

(J3.2) EFFECT OF A WILD WEASEL

At the instant that a WW is launched, all seeking weapons targeted on the ship begin to follow the WW, not the ship. All seeking weapons launched with that ship as a target while an undestroyed and unvoided WW is on the board will not accept the ship as a target, but instead follow the WW.

(J3.21) A WW can be destroyed by one of the seeking weapons homing on it or by enemy direct-fire weapons. It could also be destroyed by other means such as an asteroid, planet, or minefield. If the WW is hit and destroyed, turn the counter over. All seeking weapons currently following the WW will continue to home in on this hex, where they will explode. If another ship is in that hex at the time the seeking weapons arrive, that ship will be damaged by the arriving weapons (J3.3). Seeking weapons fired after the wild weasel has been destroyed are not distracted by it.

(J3.22) A WW will cease to function, and all seeking weapons targeted on it will immediately return to their original targets, if it is voided (J3.4) or if the owning player voluntarily declares it to be inactive. In such case, the shuttle continues to move in the same direction and at the same speed until it is destroyed or recovered by tractor beam. If recovered by an enemy, it is worth 10 extra victory points. If recovered by a friendly ship, it can be reused for any administrative shuttle mission.

(J3.23) If a ship has an unvoided WW on the board, it gains the benefit of six points of ECM without expending any energy. Any ECM points gained from other sources are added to these points.

(J3.3) COLLATERAL DAMAGE

A ship in the same hex as a wild weasel during an impulse when weapons strike the WW (even a previously destroyed WW) is damaged by the effect of the weapons. This is the only instance where weapons targeted against one ship may damage another ship. Weapons hitting a WW do not actually hit it but are detonated by the electronic field. Their energy is released into space instead of being inflicted on a ship, which makes the hex a very dangerous

location. To determine the amount of damage scored on the ship, total the number of hits scored on the WW and consult the chart below. To determine which shield was hit, roll a die. The die roll result yields the shield number directly.

(J3.31) WILD WEASEL COLLATERAL DAMAGE CHART

HITS ON WW	HITS ON SHIP
1 - 2	0
3 - 4	1
5 - 6	2
7 - 10	3
11 - 18	4
19 - 28	5
29 - 40	6
41 - 55	7
56 - 75	8
76 - 95	9
96 +	10

(J3.4) VOIDING A WILD WEASEL

In addition to the restrictions of (J3.13), several activities could result in "voiding" the WW. If the WW is "voided," it is removed from the board and all weapons following it return to following the original target.

(J3.41) The launching of a seeking weapon by the same ship during the same launch phase (Cadet's Game) as the launching of a WW, or while a WW is operating, constitutes the firing of a weapon and voids the WW.

(J3.42) If the launching ship is more than 35 hexes from its WW, the WW is void.

(J3.43) A ship that has launched a WW can use ECM but not ECCM while the WW is operating. If it uses ECCM, the WW is void.

(J3.44) A ship can drop mines while using a WW but cannot place them by transporter. If it uses a transporter to place mines, the WW is void. A ship cannot detect or sweep mines without voiding the WW.

(J3.45) Tractor beams previously established could be maintained without voiding the WW, but no new ones could be established. The ship cannot lay, maintain, or reinforce webs.

(J3.46) Operating a transporter voids a WW. Operating an ESG voids a WW.

(J3.47) Operating a stasis field generator voids a WW launched by the operating ship. If the stasis field is applied to the WW, the WW is voided before the field is applied.

(J3.5) HOLDING A WILD WEASEL IN STASIS

If a WW is trapped in a stasis field (by other than the launching ship), its functions are suspended immediately and all weapons following it return to following their original target. When the WW is released from the field, it is treated as if it has been launched at the instant of release if it is within six hexes of the originally launching ship (otherwise it is void). Any activities that would have "voided" the WW which were conducted while the field was operating do not void the WW unless they are continued or repeated after the WW is released. If the WW is more than six hexes from the original launching ship at the instant of release, the WW is voided immediately.

(J4.0) FIGHTERS

Certain advanced shuttlecraft are used as "fighters" within the game universe. Volume I presents only one fighter, the Kzinti AAS, which is described in (R5.91). Certain rules, however, apply to all fighters.

(J4.1) MOVEMENT

Fighters have certain advantages in movement over normal shuttles.

(J4.11) All fighters may make tactical warp maneuvers instead of their regular movement. In such cases, they would not move but could turn whenever movement was called for.

(J4.12) All fighters can make one (and only one) high energy turn during each turn. Fighters never roll for breakdown.

(J4.13) Fighters make use emergency deceleration, but gain no shield benefit. Instead, they may begin tac warp maneuvers.

(J4.2) COMBAT

Drone-carrying fighters may carry any of the drone types listed in (FD2.1). If the attack shuttles are not equipped with guidance electronics, drones launched by shuttles are considered to have been launched by the carrier. If the shuttles have guidance electronics, each may only guide a number of drones equal to the number it can fire. (The twin seat shuttle could be designated as a special electronics ship capable of controlling up to 12 drones.) If a shuttle that is controlling one or more drones is destroyed, the carrier may assume control of the drones (if doing so is within its own capabilities).

(J4.21) All fighters must have their target in the FA firing arc to have a lock-on for purposes of firing drones. The target may be in any of the fighter's arcs for purposes of guidance.

(J4.22) A carrier can assume guidance control of any of the drones launched by its fighters (FD5.33). All ships are limited in their ability to control drones and cannot exceed this limit. The ship could release the guidance of one or more drones to accept control of others.

(J4.3) OPERATIONS

(J4.31) Fighters carrying seeking weapons may not launch them during the Drone and Shuttlecraft Launch Phase (Cadet's Game) in which they themselves are launched. If using the "launch on any impulse" rules (the standard rules), these weapons cannot be launched until half of the turn has elapsed, i.e. the first 3, 5, 10, or 16 impulses. They could fire them on impulses 4, 6, 11, or 17, assuming the shuttles themselves were launched during the Impulse Acitivity Segment of impulse #1.

(J4.32) Fighters may not fire direct-fire weapons or lay web within $\frac{1}{4}$ turn of being launched.

(J4.33) If a fighter launches, fires weapons, and lands all within the same turn, it cannot launch on the next turn, nor can it count the turn on which it launched and landed as the "landing turn" for purposes of reloading. For example, a fighter that launched during impulse 4 of turn 7, fired a drone on impulse 21, and landed back on the CV on impulse 29 could not launch on turn 8 and would be considered to have landed on turn 8 for reloading purposes.

(J4.34) Fighters may change speed, begin using EM, make a high energy turn, or drop chaff immediately after launching.

(J4.4) ADDITIONAL RULES ON FIGHTERS

(J4.41) Fighters may not be used for suicide missions (27.5), scientific research (27.4), or as wild weasels.

(J4.42) Fighters may not be boarded by boarding parties (33.0).

(J4.43) Fighters are "single seat" ships, carrying only the pilot. Shuttle #12 on the counter sheet is a "twin seat" version, carrying two crewmen. This is in accordance with Kzinti doctrine; all carriers operated by all races have one two-seat fighter in each group of 12 (or fewer) fighters on board. The one twin-seat fighter allows a certain amount of training to be carried out while on patrols and also allows some flexibility. On longer missions a special navigator can be carried (with special equipment), and on other occasions a special observer or officer can be taken on missions. The twin seat attack shuttle has no special function or capability in game terms, but players may wish to designate it as the leader of the fighter group or for some other special mission (such as guiding drones).

(J4.5) DOGFIGHTING

Fighters may always fire at anything that is in the same hex as they are. This reflects "dogfighting." Note that a drone launched in this case would hit before there was time to fire at it, but it might be distracted by "chaff" (D11.0) dropped during the same Impulse Activity Phase. Note this rule can be replaced by (J7.0) in Supplement #1.

(J4.6) CARRIER OPERATIONS

Most fighters are carried by specially designed ships (carriers) or operate from bases. It should be noted that most fighter types can be carried by most ships, but they are usually restricted to special carriers. This is because of the need for administrative shuttles on starships (for utility and reconnaissance missions) and the lack of special maintenance facilities on most starships. Players should be aware that the deployment restrictions observed by the various fleets are for a reason, and that even though this reason is outside the scope of the game, it should not be ignored. Ships going on dangerous special purpose missions might, however,

be loaded with fighters instead of some, but not all, of their regular shuttles. During earlier times (1942), for example, Army bombers were launched from a Navy carrier. But it was only done once, and for a very special mission, and the Navy carrier could not operate her own aircraft in her own defense while carrying the bombers.

Note that in the later days of the General War, most escorts assigned to carrier groups, and many other ships, carried one or two fighters.

(J4.7) SUPPLIES FOR FIGHTERS

Carriers that operate fighters carrying drones are presumed to have a supply of drones on board. These drones are used to rearm the ship's fighters. The Kzinti CV has 150 "spaces" of spare drones for its fighters. The drone storage capacity of other carriers (introduced in Volume II, Volume III, and Supplement #1) is shown in Annex #3A.

(J4.71) Stored drones (including those in the ready racks) are kept inert by having their detonators removed. They will not explode and do not increase the strength of the ship's final explosion.

(J4.72) Drones held in ready racks count as part of the ship's storage. They will not explode in a chain reaction.

(J4.73) Federation ships have a "photon freezer" to supply photon torpedoes for their A - 10 attack shuttles; Romulan, ISC, and Gorn ships have stasis boxes to store extra plasma-F torpedoes. These are explained in Volume II.

(J4.8) REARMING FIGHTERS

Fighters may return to their carrier (or any carrier) during the course of a scenario to pick up more drones (or other weapons).

(J4.81) DECK CREWS: All carriers (of any race) have a number of "deck crews" equal to the number of fighters carried.

(J4.811) Deck crews are destroyed by hits on fighter boxes. (Every hit on a fighter box destroys one deck crew.) Calculate the number of deck crews at the start of each turn. Consider the number of deck crews functional at the start of each turn to be the number operating throughout the turn.

(J4.812) When evacuating a ship, deck crews can be ignored since they are counted as part of the regular crew units. If transferred specifically as such, two deck crews are equal to one crew unit.

(J4.82) REARMING PROCEDURE: Each deck crew can perform one operation each turn. An operation can consist of moving a drone from storage to a ready rack, loading a drone from a ready rack onto a fighter, loading another weapon from a prepared storage area onto a fighter, or repairing one point of damage to a fighter.

(J4.821) Loading one drone onto one shuttle during one complete turn constitutes an operation. Drones which occupy two spaces take two operations, i.e. they take two turns to load (or two deck crews for one turn). Two deck crews may work on a given fighter at the same time.

(J4.822) Each shuttle box that originally contained a fighter that can carry drones is presumed to have a "ready rack" to store reloads. This is a mechanical assembly that could be considered a cross between a gun rack and a forklift. Fighters cannot have drones reloaded unless these drones are already stored in the ready rack. Deck crews must move reloaded drones from storage (J5.1) to the ready rack. Moving one (one-space) drone from storage to a ready rack constitutes one operation. Normally, a carrier keeps the ready racks filled but the fighters unloaded. When a strike is needed, the fighters are loaded with drones and launched. The status of a given carrier's fighters is shown by the weapons status (S4.0).

(J4.823) Loading takes an entire turn. A shuttle recovered about half way during turn 4 would have to wait out the rest of that turn in the bays, spend all of turn 5 loading (presuming that enough deck crews and drones on ready racks are available), and could be launched on turn 6.

SYNOPSIS OF FUTURE VOLUMES

(J5.0) WARP BOOSTER PACKS (Volume II)

(J6.0) PILOT QUALITY (Volume II)

(J7.0) DOGFIGHTING (Supplement #1)

(M0.0) MINE WARFARE

(M1.0) GENERAL RULES

Volume I of the *COMMANDER'S EDITION* of SFB includes a rudimentary section on space mines which is solely concerned with the nuclear mines carried by certain older Romulan ships. Volume II includes a much more extensive section on mine warfare, including various types of mines, minefields, and minesweeping. The rules included in Volume I are designated (M2.0) and (M3.0); those in Volume II begin with (M4.0). Sections (M2.0) and (M3.0) are superseded and replaced by the rules in Volume II.

Note that "detecting" a mine is not the same as running into it (and causing it to explode). Detecting and sweeping mines is covered in Volume II.

(M2.0) ROMULAN NUCLEAR SPACE MINES

Romulan Warbird and War Eagle type ships each carry one nuclear space mine (NSM) which they can use in attempts to damage or destroy enemy ships. Note that while each ship carries only one mine, more could be carried if the players agreed in advance to do so. This would allow players to experiment with different tactical systems.

Within this section, the terms "mine" and "NSM" are interchangeable.

(M2.1) LAYING

A ship carrying a mine can drop it during any impulse of any turn. If using plotted movement, this action, including the specific impulse and hex, must be plotted in advance. If using free movement, plotting is not required. When dropped, the mine is assumed to be in the same hex as the ship that dropped it. A mine counter is placed in that hex.

(M2.2) CONDITIONS

Once dropped, the mine cannot be moved, picked up, disarmed, or tractor beamed. The mine cannot be destroyed, unless it detonates when a ship passes near it. Once dropped, the mine is neutral in all respects. It will detonate against any ship, including the one that dropped it or a ship on the same side as the one that dropped it.

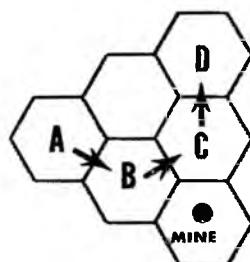
(M2.3) ARMING

The purpose in dropping a mine is to damage a passing enemy ship. Before the mine can explode, however, it must be armed. Arming takes place automatically at the instant that the ship which dropped the mine moves away from the mine by two hexes. (That is, the ship is no longer in the same hex as the mine or in a hex adjacent to the mine.)

(M2.4) DETONATION

If any ship moves into a hex containing an armed NSM, or adjacent to a hex containing an armed NSM, there is a chance that the mine will explode. To determine this, roll a single die. If the result is less than the ship's speed, the mine has exploded. If the result is greater than or equal to the ship's speed, the NSM has been detected in time and avoided; it does not explode.

(M2.41) The possibility of a mine explosion is resolved when the ship enters a hex adjacent to or containing an active mine. Should the mine become active while a ship is in such a hex, no detonation is possible. Only entering a hex will cause a detonation. Note that a ship moving near a mine may enter several hexes adjacent to it and must roll for a possible detonation each time.



MOVEMENT FROM A TO B OR FROM B TO C MIGHT DETONATE THE MINE, BUT MOVEMENT FROM C TO D COULD NOT.

(M2.42) A die roll result of "1" always results in the explosion of the mine.

(M2.43) Only movement into a hex containing or adjacent to a mine can cause a detonation. Leaving such a hex, appearing in such a hex (by displacement device), or performing a tactical maneuver or high energy turn in such a hex will not cause detonation.

(M2.44) Whenever a given movement action has the possibility of triggering several different mines, roll separately for each mine in a randomly selected order. Each unit can only cause one mine to detonate for each hex of its movement, even if several mines are in the same or adjacent hexes. Once one mine has been detonated by one ship, it cannot detonate any other mines.

(M2.5) RESOLVING EXPLOSIONS

If a NSM explodes, it will damage all units in the same hex as the mine and all units in hexes adjacent to the mine. (A mine explosion is not the same as a ship explosion, which reaches out much further.) The mine causes 35 points of damage to the shield facing the mine hex. If the ship is in the mine hex, the mine is presumed to damage the forward (#1) shield, unless the ship is moving in reverse, in which case it will damage the #4 shield.

(M2.51) If a mine explodes, it will damage all objects within range, even if some of them are "friendly" to the mine, and even if those friendly objects are not the ones that caused the mine to explode; see (M2.54). Each mine explosion is resolved as a separate volley.

(M2.52) Ships which are not moving (and thus could not set off the mine) are still damaged if they are in hexes adjacent to or occupied by the mine when it explodes.

(M2.53) If a ship sideslips into a hex and sets off a mine, the shield facing the hex entered takes the damage, not the #1 (or #4) shield.

(M2.54) An exploding mine will not destroy, damage, or detonate other mines within the range of its blast.

(M2.55) The explosion of mines will not damage a plasma torpedo.

(M2.6) SECRET PLACEMENT (OPTIONAL)

When a mine is dropped, the player dropping the mine records the hex number that it was dropped in. He does not place a counter in that hex. Whenever a ship moves into a hex adjacent to a mine hex, the player controlling the mine announces this fact and the possibility of detonation is resolved by die roll. The player controlling the mine need not announce which hex the mine is actually in unless it explodes. In such case, the written record of the mine's location must be exposed to verify its location.

(M2.7) SHIPS CARRYING NUCLEAR SPACE MINES

The following Romulan ships carry NSM's.

(M2.71) The Warbird and War Eagle each carry one NSM, which is included in their BPV.

(M2.72) The other "old Romulan" ships (Volume II) including the Pelican, Falcon, War Hawk, Chickenhawk, Scout Eagle, Freight Eagle, etc., all carry one NSM, which is included in their BPV.

(M2.73) The "Klingo-Romulan" ships (including the KR and KF5R in this volume and other Klingon ships used by the Romulans in later volumes) can carry one NSM, but this costs three points in section B of the Standard Victory Conditions (S2.2).

(M2.74) The "new Romulan" ships (Volume II) including the SkyHawk, SparrowHawk, and Condor can carry NSM's as per (M2.73).

(M2.75) The Romulan small Q-ship carries one NSM, which is included in its BPV.

(M2.76) The Romulan large Q-ship carries two "mine racks," each of which holds four NSM's. The mines on the Romulan large Q-ship are not included in its BPV; each costs three points. (Each mine in a rack could be replaced by two transporter bombs; see (M3.0).) Each mine rack can drop one mine per turn; the racks are destroyed on shuttle hits.

(M2.8) VOLUME II

If players are using the Volume II rules for other areas, but retaining these mine rules (i.e. not using the advanced rules), the following additional rules are in force.

(M2.81) Mines can be moved by displacement devices.

(M2.82) Mines can be kept from exploding if held in a stasis field.

(M2.83) Mines will explode if hit by an expanding sphere.

(M2.84) If a ship with PA panels detonates a mine, the damage points are applied to the PA panels on the front of the hull (assuming the ship was moving forward). Damage in excess of what the PA panels can absorb is resolved as internal hit points.

(M3.0) TRANSPORTER BOMBS (OPTIONAL)

Transporter bombs operate in much the same way as nuclear space mines (M2.0). The bombs are much smaller, however, causing only 10 points of damage when detonated, and can be placed by transporters. In Volume II, transporter bombs are classified as small explosive mines.

(M3.1) All ships may carry transporter bombs. Players should agree, before beginning a scenario, if they are carrying transporter bombs and how many. Twelve per ship are recommended. All must be purchased (one point each) through step B of the Standard Victory Conditions (S2.2). Bombs carried on board a ship are not represented on the SSD and cannot be detonated while on board. Bombs cannot be detonated by enemy boarding parties.

(M3.2) Bombs may be placed by transporters (G8.0) in any hex not occupied by a ship, planet, or shuttle. This creates tactical limitations, in that transporters only work over a distance of five hexes, and a shield must be dropped to transport them. Each transporter can transport one bomb per turn and, if used to transport a bomb, cannot transport anything else on that turn.

(M3.21) Transporter bombs can also be dropped (like a nuclear space mine can be) in the same hex as the (laying) ship without dropping a shield. A ship can drop one from each of its shuttle bays.

(M3.22) Transporter bombs cannot be placed inside an enemy ship or unit.

(M3.3) Once placed, a bomb operates as a space mine, with the exception of the smaller warhead. The obvious tactical use of the bombs is to deposit them directly in front of an enemy ship. The requirement to drop a shield to do this makes the placement of bombs a risky operation. If you place a transporter bomb adjacent to your own ship, it operates as in (M2.3).

NOTE: The superscript "N" is not used in Volume I.

NOTE: The superscript "O" is not used in Volume I.

(P0.0) PLANETS, ASTEROIDS, AND OTHER NAVIGATIONAL HAZARDS (ADVANCED)

(P1.0) GENERAL RULES

Space is, of course, largely composed of empty or nearly empty volume. However, certain "terrain" features (planets, asteroids, etc.) do exist and become important elements of the game.

(P2.0) PLANETS

(P2.1) GENERAL RULES

Planets are solid objects ranging from a few thousand to a hundred thousand kilometers or more in diameter. Generally, they block fire and movement. Also, units can (sometimes) land on planets. Bases can be installed on planets.

(P2.2) TYPES OF PLANETS

Within *STAR FLEET BATTLES* there are basically three types of planets: class-M planets (such as Earth), small moons, and gas giants. These are described in this section.

(P2.21) CLASS M PLANETS: This type of planet (two counters are included in the game) completely fills one hex.

(P2.211) No weapons may be fired through a hex containing a class M planet.

(P2.212) Ships cannot enter a hex containing a class-M planet unless they are in the act of landing on it (P2.4) or executing "low flight" (P2.423). Note, however, that only certain ships can land on planets. Entering a planet hex by any other means results in a crash landing (P2.321).

(P2.213) Most planets of this size have an atmosphere, but some do not. Unless it is specified in the scenario that a class-M planet does not have an atmosphere, it is assumed to have one. The atmosphere is presumed to be the outermost 100 kilometers of the hex (which is 10,000 kilometers across). This has an effect when units that are landing (or have landed) on the planet are engaged in combat. A shuttlecraft in the planet's hex might be physically on the surface or flying through the atmosphere.

(P2.22) GAS GIANTS: This type of planet (similar to Jupiter or Saturn) has a hard rocky core and a thick atmosphere.

(P2.221) Gas giants come in various sizes. The counter is used to mark the center of the planet. Jupiter would be 14 hexes across, Saturn 11 (its rings would be 27 hexes across at their outside diameter), Uranus 5 hexes, and Neptune 4.

(P2.222) The outermost ring of hexes of gas giants 7 hexes or more in diameter is considered to be atmosphere. Ships can enter and maneuver through the atmosphere, but are under certain restrictions. Also, the ring of hexes immediately inside this atmosphere ring is considered to have the type of atmosphere of a class-M planet. See (P2.6) below.

(P2.223) Many, if not most, gas giants have "rings" (such as the spectacular rings of Saturn) surrounding them. These rings extend a specified number of hexes (those of Saturn would extend 8 hexes from the planet's surface in all directions). Ships are not penalized for moving through ring hexes, but firing through one or more ring hexes is considered to be the same as firing through a single hex of asteroids (P3.33). Any seeking weapon moving through ring hexes takes damage equal to moving through one hex of asteroids for each turn that it moves through the ring hexes. This is resolved at the end of the turn or just before the weapon hits its target.

(P2.224) Ships cannot enter a hex containing a gas giant unless they are in the act of landing on it (P2.4) or executing "low flight" (P2.423). Note, however, that only certain ships can land on planets. Entering a planet hex by any other means results in an immediate crash landing (P2.431).

(P2.23) SMALL PLANETS AND MOONS: Small airless planets (similar, perhaps, to Titan, Pluto, Mercury, or Earth's Moon) do not completely fill the hex they are in.

(P2.231) Ships (and other objects) entering a small planet hex have a probability of colliding with the planet based on their speed as follows:

SPEED	SAFE	COLLISION
1	1 - 6	-
2 - 14	1 - 5	6
15 - 22	1 - 4	5 - 6
23 - 27	1 - 3	4 - 6
28 - 31	1 - 2	3 - 6

If a collision occurs, treat it as an immediate crash landing (P2.321). Otherwise, the ship must begin the landing procedure. There are no modifiers to the die roll.

(P2.232) Small moons between two ships have a 50% chance of breaking the lock-on. If broken, roll for a new lock-on in the Activity Segment of the first impulse that the line of sight is clear.

(P2.3) EFFECT OF PLANETS ON COMBAT

Weapons cannot be fired "along the edge" of a hex containing a planet.

(P2.31) There is no practical way in which a ship could destroy a planet. Small asteroids and moonlets could be destroyed using procedures of (SH3.43).

(P2.32) If a planet occupies a hex that is directly between two ships (that is, a line drawn from the center of each hex passes through any part of, but not along the edge or through a corner of, a hex containing a planet, or part of a planet), the two ships cannot maintain a lock-on to each other. If drones guided by the ship are in flight when the lock-on is lost, they are removed from play. In this case, during the Activity Segment of the first impulse after the obstacle has passed, roll again for a lock-on. NOTE: Small planets have only a 50% chance of breaking the lock-on (P2.232). Roll for this every impulse that the planet is in the direct line between the ships. If the lock-on is broken, it cannot be re-established until the planet is out of the direct line.

(P2.33) Seeking weapons with their own guidance (ATG and I-SH drones, plasma torpedoes) lose their target if a planet comes between them and that target. They acquire the planet as their new target and proceed to hit it. They will strike and explode on the planet. If it is a friendly planet to one player, this may result in considerable loss of life and property and should be suitably penalized. One victory point per point of warhead strength may be used if no other penalty is specified.

(P2.34) A planet between the seeking weapon and the ship controlling it does not cause the weapon to lose tracking. It receives its instructions by sub-space.

(P2.35) The effects of firing from a planetary surface, to a planetary surface, and through an atmosphere are given in (P2.5). That section also provides rules for firing at a unit that has landed on an airless planet.

(P2.4) LANDING ON PLANETS

It is possible for all ships and shuttles to land on planets, although in most cases this results in destruction of the unit.

(P2.41) PROCEDURE: Units landing on planets (or asteroids) use the following procedure:

1. The unit must end its turn in a hex adjacent to the planet.
2. On the next turn, it moves into the hex containing the planet at sub-light speed.
3. On the next turn, it is "descending."
4. On the next turn, it lands. (See, however, types of landings (P2.43).)

Taking off from a planet is conducted by the following similar procedure.

1. The first turn is spent parked on the planet.
2. The second turn is spent "climbing" through the atmosphere (still in the planet hex).
3. The third turn is spent moving one hex (sub-light) out of the planet hex. Thereafter, it moves normally.

(P2.42) MODIFICATIONS TO THE PROCEDURE: In several cases, modifications to this procedure are required by the circumstances.

(P2.421) In the case of planets without an atmosphere, the turn of "climbing" or "descending" is skipped. These rules can be used to land on asteroids and moons.

(P2.422) In the case of gas giants, one "descending" (or "climbing") turn must be spent in each "atmosphere" hex before reaching the surface and landing.

(P2.423) A unit can enter a planetary surface hex (remaining in the atmosphere) without landing by conducting steps 1, 2, and 3 of the procedure above. This might be done by a ship trying to get closer to a surface target or trying to gain some of the shielding benefits of the atmosphere.

(P2.43) TYPES OF LANDINGS

Ships can make safe controlled landings (which do not damage the ship and which allow it to take off again) or uncontrolled (i.e. "crash") landings.

(P2.431) CRASH LANDINGS: Unless otherwise specified, ships landing on planets (or asteroids) are destroyed by the procedure. This would usually be done only if the ship was badly crippled and a crash landing on a planet was the only chance that some of the crew would survive. In this case, there is a 50% chance for EACH crew unit to survive. (Roll for each crew unit separately; 1 – 3 indicates survival.) Certain ships, notably most Orion ships and Federation saucers, have a better chance of survival (1 – 5). Ships with the bonus are listed in annex #7B. The survival of the crew units while on the planet is outside the scope of *STAR FLEET BATTLES*. Wreckage and the survivors are presumed to be located on the hexside where they landed. It can be presumed that any necessary procedures (such as dropping the warp engines or shutting down the reactors) are performed by the crew without special attention by the players.

(P2.432) GRAVITY LANDING SYSTEM: Certain ships may make a safe, controlled, landing using their tractor beams as an anti-gravity system. Ships capable of this are listed in Annex #7B. Landings by this method do not damage the ship, and it can take off again later. If no working tractor beams (with power applied) are available, this system cannot be used. The system requires an amount of power (from any source) equal to the cost of moving five hexes for every turn of the landing procedure.

(P2.433) AERODYNAMIC LANDING SYSTEM: Certain ships may make a safe, controlled, landing without the use of any power. Ships capable of this are listed in Annex #7B. Landings by this method do not damage the ship, and it can take off again later. Naturally, this type of landing is only possible in an atmosphere.

(P2.434) POWERED LANDINGS: Certain ships may make a safe, controlled, landing using their normal engine power. Ships capable of this are listed in Annex #7B. Landings by this method do not damage the ship, and it can take off again later. Powered landings can be made with or without atmosphere.

(P2.5) EFFECTS OF AN ATMOSPHERE ON COMBAT

If a target is located in an atmosphere, the accuracy of units firing at it is reduced. This is generally given in terms of ECM (electronic counter measures, or jamming) points. Note that this system can still be used even if the electronic warfare section (D6.3) is not being used for other purposes. Simply use the EW rules, but assume that the effect of an atmosphere is the only source of ECM and that there is no ECCM.

(P2.51) TARGET IN AN ATMOSPHERE: When a unit is in an atmosphere (as part of a landing or take-off, or moving through the atmosphere of a gas giant), one point is added to its ECM. This point can be offset by ECCM except with scouts.

(P2.52) TARGET ON A PLANET: When a target (other than a planetary base) is on a planetary surface, it gains two points of ECM plus one point for every hex of atmosphere that is between it and the unit firing at it. ECCM can be used to offset this type of ECM. Note that, if a unit is on a planet without an atmosphere, it still gains the benefit of two points of ECM due to the "ground clutter." In this case, the owning player may designate which of his shields is facing the ship firing at it.

(P2.53) FIRING FROM A PLANET: When any firing unit (other than a planetary base) is on a planetary surface, the target of its fire gains the effect of two points of ECM. This ECM can be overcome by ECCM. A planetary base does not suffer this penalty.

(P2.54) FIRING THROUGH AN ATMOSPHERE: Firing weapons through an atmosphere degrades their performance. The specific effect depends on the weapon. The atmosphere of a small planet counts as one hex of atmosphere for this purpose. For gas giants, count each hex of atmosphere between the firing ship and the target, including (if appropriate) the hex occupied by the firing ship and the target. These restrictions apply to weapons fired "up" from the surface, "down" from space, and from one atmosphere hex to another. Two ships in the same atmosphere hex are treated as being at a range of one, and weapons fire is considered to be through one hex of atmosphere.

(P2.541) For phasers and fusion beams, add one to the die roll for each hex of atmosphere. An adjusted die roll greater than the highest number on the chart (usually 6 or 12) is considered to be that number.

(P2.542) For photon torpedoes, Hellbores, plasmatic pulsar devices, web casters, maulers, and anti-matter probes, reduce the strength by 25% (of the original strength) for each hex of atmosphere. Round fractions down when calculating the loss.

(P2.543) Disruptor bolts lose one point of warhead strength for each hex of atmosphere.

(P2.544) Plasma torpedoes and T/R beams count each hex of atmosphere as five hexes for range purposes.

(P2.545) Drones must enter an atmosphere using the shuttlecraft rules, but time spent in an atmosphere hex does not count against their duration.

(P2.546) Expanding sphere generators and stasis field generators do not function through an atmosphere.

(P2.547) Self-destruction and mine explosions do not extend through an atmosphere. Planets block the effects of self-destruction blasts; if a planet is between a unit and the blast, the unit suffers no damage from the blast.

(P2.6) STRUCTURE OF PLANETS AND ATMOSPHERES

The existence of a planet, particularly one with an atmosphere, in a hex causes certain complications to the normal operation of the game.

(P2.61) HEX SIDES: All units in a planetary surface hex (whether landed or in an atmosphere) must be designated as to the "hex side" that they occupy. This designates the specific area of planetary surface that they are on (or over). Note that this is not done with asteroids, only with planets.

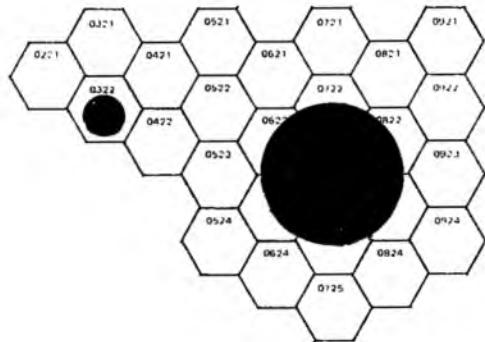
Note the illustrations below. A shuttle in hex 0421 plans to land on the planet in hex 0322. If it enters the planet hex directly from 0421, the shuttle will be automatically designated as being in hex 0322 facing hex side 0421.

The terminology used to reflect this is: 0322/0421A, where the first number is the hex number of planet's hex, the second number is the hex side it is facing, and the letter indicates if the unit is in the atmosphere (A) or had landed (L).

If the shuttle in 0322/0421A proceeds to land on the planet, it MUST land on 0322/0421L. The shuttle could move, taking an entire turn and moving through the atmosphere, to an ADJACENT hex side (such as 0422 or 0321). Thus a shuttle in the atmosphere at 0322/0421A has the options of landing in 0322/0421L, moving to 0322/0422A or 0322/0321A, or moving back to 0421. Similarly, a shuttle that has landed on 0322/0421L which later takes off can only move to 0322/0421A.

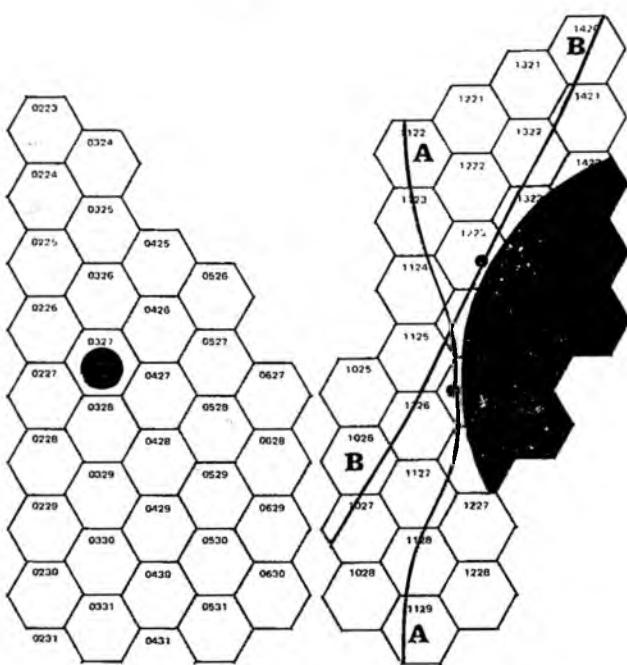
This is a bit more complex in the case of a larger planet, but only marginally so. Note that an Orion Slaver in 0621 could move to 0622/0621A or to 0722/0621A. From 0622/0621A it could:

land in 0622/0621L, move to 0622/0522A, move to 0722/0621A, or return to 0621. Note also that due to the two dimensional nature of the game no ship could move into hex 0723.



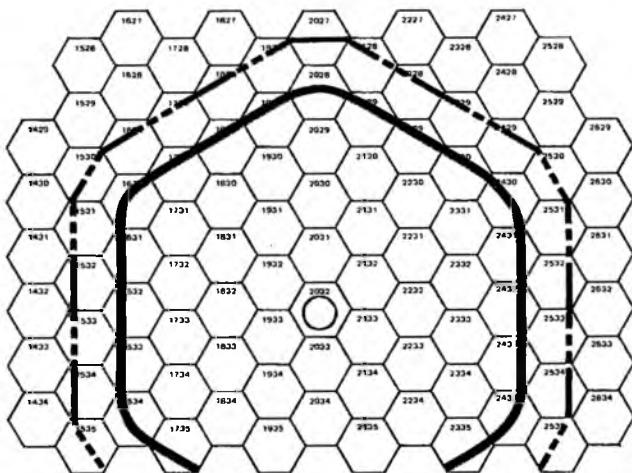
(P2.62) FIRING ARCS: The firing arcs of units on a planetary surface (or in low atmosphere) are, basically, 180°. This arc also determines which enemy units can fire at that unit.

Note in the illustration below the firing arc for a base in 0327/0426L. Any unit in the arc could fire at, or be fired at, a base in 0327/0426L. In the case of a larger planet, the same 180° rule applies. A base in 1225 (either side) would have the firing arc designated by A; the firing arc of a base in 1223 is designated by B.



(P2.63) ATMOSPHERE DEPTH: The depth of the atmosphere is critically important in determining both combat and movement aspects of planetary combat. In the case of a class-M planet, or a gas giant six hexes or less in diameter, the atmosphere is considered to be within the planet's surface hex(es). No "straight line" operation can involve more than one "hex" of atmosphere.

In the case of deep atmospheres on larger gas giants, this becomes somewhat more complicated. Note the large gas giant shown in the illustration below. As it has a diameter of 11 hexes, the outer row of hexes (1532 and 2329, for example) are considered to be atmosphere hexes.



A unit in hex 1532 would not need to designate a hex side, because it is not in a planetary surface hex. Fire between hexes 1432 and 1631 would cross two atmosphere hexes. Fire between hexes 1434 and 1631 would cross three atmosphere hexes. (Moving along the border between an atmosphere and non-atmosphere hex does not count as an atmosphere hex.)

Movement from hex 1532 to the planet's surface would be conducted exactly as it would if 1532 was not at atmosphere hex, as in (P2.61) above, except of course, that the unit would have taken a turn to reach 1532.

(P2.7) BASES ON PLANETS

Base stations, battle stations, and starbases can be installed on planetary surfaces. In this case, certain modifications apply. (P2.71) Ships dock at the base by landing on the planet in that base's hex side. Ships unable to land on planets may not dock at bases on planets.

(P2.72) All of the base's weapons can fire anywhere in the 180° arc defined above for fire from planets.

(P2.73) The base's shields are modified. A base in hex 1225 would have two shields (one made by combining 1, 2, and 3; the other by combining 4, 5, and 6), each covering half of the arc. A base in hex 1223 would have three shields (1+2, 3+4, 5+6).

(P2.74) A base on a planet cannot cloak.

(P3.0) ASTEROIDS

Asteroid belts are common navigational hazards and are portrayed in STAR FLEET BATTLES by these rules. Asteroid counters are provided in the game.

(P3.1) LAYOUT OF AN ASTEROID FIELD

Unless different procedures are specified in the scenario, use this system to set up an asteroid field. Place one asteroid counter in each of the following hexes: 0505, 0713, 1007, 0522, 0730, 1024, 1905, 2113, 2407, 1922, 2130, 2424, 3322, 3513, 3807, 3305, 3530, and 3824. Roll one die for each counter and move it in the indicated direction one hex. This establishes the position of the asteroid counters. All hexes within two hexes of an asteroid counter are assumed to contain asteroids and are referred to as asteroid hexes.

(P3.2) EFFECT OF ASTEROIDS ON MOVEMENT

For every asteroid hex entered by a starship, weapon, or shuttle, a die must be rolled to see if a collision has taken place. The chart below gives the results in terms of hit points on the forward shields.

DIE ROLL	SPEED	1 - 6	7 - 14	15 - 25	26 +
1		0	0	0	0
2		0	0	0	5
3		0	0	3	10
4		0	2	6	15
5		0	6	10	20
6		0	10	15	30

(P3.21) If the ship is moving forward, the #1 shield is damaged; if the ship is moving in reverse, the #4 shield receives the damage. Sideslip (C4.0) has no effect on this determination.

(P3.22) Nimble ships (C11.0) subtract one from the die roll when rolling for asteroid damage. A final result of less than one is considered to be one.

(P3.23) A ship could launch a drone, plasma torpedo, or shuttle and follow it into the asteroid hex. Also, one ship could follow another, or one weapon could follow another. This is under certain restrictions. The following units must be "friendly" toward each other, and either in the same hex or adjacent hexes. Ships using this procedure cannot do EM. In this case, the order that the units are traversing the asteroid hex is listed, and only the first unit rolls for possible damage. All following units receive no damage. If the first unit is destroyed in a given hex, the next unit must roll for possible damage in that hex.

(P3.24) Asteroids will damage plasma torpedoes. (They are one of the few non-phaser items that will.) In this case, the chart would yield "phaser hits"

(FP1.6). Plasma torpedoes can follow or lead other units (P2.23).

(P3.25) Any ship may fire its weapons into an asteroid hex that it is about to enter for the purpose of clearing a path and reducing the damage resulting from rapid movement through such hexes. Note that this is completely different from firing a weapon through an asteroid hex at another ship. Any weapon can be used for this purpose.

(P3.251) Each point of damage scored on an asteroid hex will reduce the amount of damage to the ship resulting from entering that hex by one point. Note that the amount of damage to the ship is highly variable, and since all fire into an asteroid hex must be conducted during previous impulses, the player will not know until entering the hex and rolling a die if the fire was actually necessary or beneficial.

Example: A cruiser fires one type-I phaser into an asteroid hex and scores 8 points of damage to the asteroids. On the next impulse, the ship enters the hex and rolls for asteroid damage. The die roll indicates 10 points of damage. This is reduced to 2 by the phaser fire. The cruiser then fires a second phaser into the next hex on his intended path and scores 4 points of damage to the asteroids. Entering the hex on a later impulse, the die is rolled and indicates no asteroid damage. The second phaser was thus wasted. There is no carry-over to other hexes.

(P3.252) Seeking weapons could be used to lead a ship through the asteroid hex (P3.23) or could be targeted on a specific asteroid hex. A Kzinti ship, for example, could fire four drones, targeting each of them onto a different hex of its intended course through the asteroid field. (Those that pass through an asteroid hex might be damaged by it (P3.2).) This tactic has a side effect of broadcasting your intended course to your opponents. It can also be used to deceive opponents as to your intended course.

(P3.253) One ship cannot fire weapons at asteroids to clear a path for another ship.

(P3.254) Units cannot perform EM (C10.0) while following another unit through an asteroid hex or while using weapons to reduce the effect of asteroids.

(P3.26) A unit takes no damage from asteroids for the act of leaving an asteroid hex. Hence, a seeking weapon launched in an asteroid hex that immediately moves out of it would suffer no damage.

(P3.3) EFFECT OF ASTEROIDS ON COMBAT

The presence of several million tons of rock (broken into pieces of various sizes) can have various effects on combat.

(P3.31) Asteroids do not affect lock-on.

(P3.32) Seeking weapons passing through asteroid hexes may be damaged by the asteroids (P3.23).

(P3.33) In the case of direct-fire weapons, each asteroid hex between the firing ship and the target provides to the target the benefit of one point of ECM. This can be countered by ECCM.

(P4.0) BLACK HOLE

One of the most treacherous navigational hazards in space is a "black hole" (or hypermass), a star that has collapsed inward until its matter is so dense (and hence, its gravity so great) that even light cannot escape. Within *STAR FLEET BATTLES*, the effect of a black hole is to make all ships move toward a designated hex (where the black hole is located) on certain impulses, even if the ships do not wish to do so. They are being pulled toward the black hole hex by powerful gravity forces.

(P4.1) PROCEDURE

Movement in response to a black hole is governed by the chart below. During the specified impulses, all ships (including cloaked ships) within the specified range are moved one hex closer to the black hole hex.

Impulses	Ships within this range are moved 1 hex toward the black hole hex
every	2 hexes
2, 5, 8, 11, 13, 16, 19, 22, 24, 27, 29, 32	5 hexes
5, 11, 16 22, 27, 32	10 hexes
11, 22, 32	20 hexes
32	30 hexes

(P4.11) During each of the stated impulses, all ships within the stated range are moved one hex closer to the black hole hex. For example, a ship nine hexes from the black hole hex would be moved one hex toward it during both the 5th and 11th impulses (and several others) of the turn.

(P4.12) Movement by a black hole does not change the ship's facing.

(P4.2) EFFECT OF A BLACK HOLE

(P4.21) Any ship entering the hex of a black hole is immediately destroyed. This results in a burst of radiation equal to the explosion force of the ship. This burst is resolved by (P5.22) below.

(P4.22) Seeking weapons are affected by (P4.1) above. Additionally, if the target is within 10 hexes of the black hole it gains the benefit of two points of ECM.

(P4.23) Direct-fire weapons cannot be fired if the line of sight (the direct line between the center of the firing unit's hex and the center of the target's hex) passes within two hexes of a black hole.

(P4.24) If the line of sight passes within 10 hexes of the black hole, the target gains the benefit of two points of ECM.

(P4.25) A black hole cannot be put in stasis.

(P4.26) An expanding sphere cannot be generated into a hex within five hexes of a black hole.

(P5.0) VARIABLE PULSAR

Another major menace to navigation is the variable pulsar, which periodically emits a burst of hard sub-space radiation causing major damage to all ships in the area. If a pulsar is called for in a scenario, it is placed into a specific hex. If used in a scenario designed by the players, it should be assigned a specific hex.

(P5.1) PROCEDURE

The pulsar emits a burst of radiation during a randomly selected impulse of a randomly selected turn.

(P5.11) TURN SELECTION: The pulsar automatically emits a burst on the first turn of the scenario. After each burst, roll one die to determine how many turns later the next burst will occur. A result of "1" indicates that the next burst will be on the immediately following turn.

(P5.12) IMPULSE SELECTION: At the first of each turn during which an outburst is scheduled to occur, roll six dice and total the results. A result of: 33 is considered to be 2; 34 is considered to be 3; 35 is considered to be 4; and 36 is considered to be 5. The final result is the impulse on which the pulsar emits its outburst. Thus, the outburst cannot happen on the first impulse.

(P5.2) EFFECT OF THE PULSAR

The pulsar has a base strength (determined below) which is reduced with range from the pulsar.

(P5.21) BASE STRENGTH: At the time the pulsar emits an outburst, roll one die and multiply the result by 10. This is the base strength of the pulsar.

(P5.22) RANGE EFFECT: The distance from the pulsar to each target has an effect on the strength as follows:

0 - 5 hexes	= 100% strength
6 - 10 hexes	= 75% strength
11 - 20 hexes	= 50% strength
21 - 50 hexes	= 25% strength

(P5.23) DAMAGE: Each unit within 50 hexes of the pulsar receives a number of damage points equal to the appropriate percentage of the base strength. These are scored on the shield facing the pulsar. When calculating the amount of damage, round fractions of 0.499 down and those of 0.500 up.

(P5.3) OTHER EFFECTS

(P5.31) Cloaking devices, wild weasels, SWACs, and EW will not protect a ship from the effects of the pulsar.

(P5.32) Direct-fire weapons cannot be fired into or through a variable pulsar hex.

(P5.33) Plasma torpedoes are affected by variable pulsars.

(P5.34) Any unit entering the hex of a variable pulsar is destroyed.

(P6.0) NEBULAE

Large gas clouds are located in various parts of the galaxy. These have various effects, which are reflected by these rules. The gas clouds are highly charged with electrical power and swept by turbulence.

(P6.1) Nebulae are several maps across. Thus, if a given scenario is to take place within a nebula, the entire map will be considered to be inside the nebula, and ships will be unable to leave the nebula.

(P6.2) All ships within a nebula automatically have nine points of ECM provided by it.

(P6.3) Shields only function at minimum level in a nebula.

(P6.4) Fighters and shuttles are automatically destroyed if launched inside a nebula.

(P6.5) During the Movement Segment of impulses 5, 15, and 26, all ships move one hex in a random direction (determined by die roll) and have their facing changed to a new direction (determined by die roll).

(P6.6) The following systems will not function at all within a nebula: chaff, tractor beams, webs, cloaking devices, stasis field generators, expanding sphere generators, displacement devices, scout functions, mines, ATG, and dogfight drones.

(P7.0) THE WYN RADIATION ZONE

The WYN star cluster is surrounded by a zone of intense radiation. Ships passing through this zone (i.e. entering or leaving WYN territory) suffer from various deleterious effects, which are reflected in these rules. These rules are used during the first turns of certain specifically designated scenarios.

(P7.1) Engine power is reduced as follows: (Round fractions of .5 or more up.)

Turns 1 - 4 each warp engine box produces only 0.5 units of power.

Turns 5 - 6 each warp engine box produces only 0.75 units of power.

Turns 7 and later the engines operate normally.

(P7.2) A ship's sensor rating is reduced as follows:

Turns 1 - 3 maximum of 2.

Turns 4 - 6 maximum of 3.

Turns 7 - 8 maximum of 4.

Turn 9 maximum of 5.

Turn 10 and later normal.

Each ship rolls for lock-on at the time it wishes to fire. Each ship may make only three such attempts per turn before turn 10. Note that the maximums are unaffected by application of ECCM power.

(P7.3) Ships emerging from the WYN radiation zone (such as Orion pirates returning from trading missions) also suffer the effects of the radiation.

(P7.4) Ships entering the WYN radiation zone are expecting combat immediately (it's the only chance the WYN's have to defeat them) and may have all weapons at status III.

(P7.5) Fighters and fast patrol craft may not penetrate the zone unless carried by ships. Fighters may not be launched until the fifth turn after the scenario begins. Fast patrol craft are considered to have been affected as ships have been.

NOTE: The WYN radiation zone is used only with Volume II, but is presented here for efficiency of publication.

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(Q0.0) THE SUB-LIGHT GAME (The First Romulan War)

(Q1.0) GENERAL RULES

The sub-light game is, functionally, an entirely separate and different game from the rest of *STAR FLEET BATTLES*. It represents the First Romulan War, which was fought approximately 100 years prior to the time shown in the rest of the game. The sub-light game can also be used to play scenarios from the early pre-warp drive wars between the Kzintis and Klingons.

This set of rules is not as fully developed as *STAR FLEET BATTLES* itself. Many areas, such as mines, planets, scenarios, etc., are not covered. Players should adapt the trans-light game to meet these needs. In time, an entire game or supplement on this subject may be produced covering these areas.

(Q2.0) MOVEMENT

The scale of the game is changed to reflect the slower movement rates. A movement rate of 20 hexes per turn would represent the speed of light, but no ship in this game may move faster than six hexes per turn. Movement, functionally, is done exactly the same as in the normal game, but a separate chart has been provided. One unit of impulse power is sufficient for speeds up to three hexes per turn, and two units of impulse power are sufficient for speeds of four to six.

(Q2.1) SUB-LIGHT GAME MOVEMENT CHART

6	5	4	3	2	1
1	—	—	—	—	—
2	1	1	1	—	—
3	2	2	—	1	—
4	3	—	2	—	—
5	4	3	—	—	—
6	5	4	3	2	1

(Q2.2) HIGH ENERGY TURNS: Ships in the sub-light game can make high-energy turns. The cost is two units of impulse energy; the chance of breakdown for all ships is 5–6; standard +2 modifiers apply for the first HET each scenario by each ship. The effect of breakdown is three internal hits randomly distributed on the ship.

(Q2.3) TACTICAL MANEUVERS: Ships in the sub-light game can make up to three tactical maneuvers in each turn. Each can turn the ship up to three hex sides, and each costs one point of impulse power.

(Q2.4) DISENGAGEMENT: Ships in the sub-light game can only disengage by distance.

(Q2.5) ERRATIC MANEUVERS: Ships in the sub-light game may not use EM.

(Q2.6) OTHER: Ships in the sub-light game do not pay for fire control or life support.

(Q3.0) COMBAT

There are two primary weapons used in the sub-light game: lasers and atomic missiles.

(Q3.1) LASERS

The main weapon used in the sub-light game is the laser beam. This is used just as phasers are used in the normal game. The laser, however, uses an entirely different combat chart. Each laser, if it hits, will score one point of damage, regardless of the range, so the chart below simply shows the number required (on a die roll) to secure a hit. One unit of energy is sufficient to power up four lasers on a given ship.

RANGE	0–1	2–4	5–7	8–10	11–15
Hit	1–5	1–4	1–3	1–2	1
Miss	6	5–6	4–6	3–6	2–6

(Q3.2) ATOMIC MISSILES

Almost all ships in the First Romulan War carry atomic missile launchers.

(NOTE: Use drone counters to represent atomic missiles. Players should borrow drone counters from the Klingons and Kzintis.)

(Q3.21) Players should add boxes to the SSD's to represent the atomic missile launchers. These are destroyed on "drone" hits.

Each launcher has four missiles and can fire one missile per turn. (Q3.22) Atomic missiles have a speed of 12; they move two hexes each impulse. They have an endurance of three turns. They are seeking weapons and follow their targets as per (F2.0).

(Q3.23) Atomic missiles do four points of damage if they hit.

(Q3.24) Atomic missiles in flight are destroyed by one point of damage and could also be destroyed by another missile.

(Q3.25) Each ship carries eight reload missiles for each rack (which can be reloaded onto any rack). One or two missiles can be reloaded onto a rack during one turn, but the rack cannot be fired during the turn it is being reloaded.

(Q3.3) ELECTRONIC WARFARE

Players may use the electronic warfare rules (D6.3) in the sub-light game if they wish. Fighters and atomic missiles are presumed to have three points of ECCM.

(Q3.4) SPECIAL DAMAGE RULES

Ships in the sub-light game move using impulse power exclusively. In the sub-light game, two "impulse engine" hits are required to destroy each impulse engine box on the SSD. The first such hit is marked with a slash. The second hit on that box is marked by making the slash an "X" or any other convenient means. A "half destroyed" impulse engine functions normally, but only one impulse engine box per ship can be considered "half destroyed" at a given time.

(Q3.5) DAMAGE ALLOCATION CHART

The following special DAMAGE ALLOCATION CHART can be used for the sub-light game. It is used in the same manner as the standard DAC, but uses only one six-sided die.

1	Armor	Hull	Sensor	Control	Any Wpn	Excess Damage
2	Armor	Hull	APR	Impulse	Any Hit	Excess Damage
3	Armor	Hull	Shuttle	Laser	Control	Excess Damage
4	Armor	Hull	Lab	Missile	Control	Excess Damage
5	Armor	Hull	Btly	Impulse	Any Hit	Excess Damage
6	Armor	Hull	Scanner	Control	Any Wpn	Excess Damage

(Q4.0) SYSTEMS AVAILABLE

As the sub-light game takes place considerably before the normal game, many systems are not available.

(Q4.1) SYSTEMS NOT AVAILABLE

The following systems and abilities are not available in the sub-light game and should be eliminated from any ships used in this game: probes, torpedoes, plasma torpedoes, warp engines, tractor beams, transporters, boarding parties, emergency deceleration, cloaking devices, drone racks, and (with certain exceptions noted below) shields. Phasers are not available, but are usually replaced by lasers.

(Q4.2) REPAIR

Ships in the sub-light game can use damage repair. During each turn, one unit of power can be allocated to damage control. This produces a number of "repair" points equal to the highest undestroyed number on the damage control track (at the start of that turn). Points are produced in the Initial Activity Phase using energy allocated during the Energy Allocation Phase and can be

used to repair certain systems noted below. While points can be accumulated over several turns, they must be accumulated toward repair of a specific (i.e. one) destroyed box on the SSD. The repair of a system is complete when the required number of repair points has been accumulated. Left-over points on the final turn of accumulation can be used for the repair of another system. Completed repairs take effect in the Final Activity Phase of the turn in which the repair points are produced. ONLY systems (boxes) destroyed prior to the start of a turn can be repaired during that turn.

(Q4.21) SUB-LIGHT GAME DAMAGE REPAIR COST CHART

Cost	System
1	Damage point on shuttle or fighter
5	Atomic missile launcher
6	Battery, lab
10	Laser
15	½ destroyed impulse engine
20	APR, bridge (any), sensor, scanner
30	Impulse engine

Repaired missile launchers must still be reloaded using (Q3.25). It is possible to perform repairs during a sub-light scenario (but not in the normal game) due to the different time scale. Hull and armor cannot be repaired during a scenario.

(Q4.3) DAMAGE CONTROL BETWEEN SCENARIOS

The ships in the sub-light game may use the procedures of (D9.4) between scenarios.

(QR0.0) SHIPS AVAILABLE

(QR1.0) GENERAL RULES

Certain ships are available in the sub-light game. These are organized according to race below. Note that ships included in Volume II are listed here for the sake of production efficiency. **(QR1.1) SHUTTLECRAFT:** Sub-light shuttles have a speed of three, a turn mode of 1, and one laser each (360°). The laser is limited to a range of five hexes. Sub-light shuttles are destroyed by the second laser hit point. These shuttles can be used for suicide, wild weasel, and scientific research.

(QR1.2) BASE STATIONS: A version of the base station is available for use. Use the base station SSD, eliminate the listed systems, add 20 armor, add 4 atomic missile launchers (total of 48 reload missiles available), change all phasers to lasers.

(QR2.0) FEDERATION SHIPS

(QR2.1) CRUISER: The Federation light cruiser is available in this game. Eliminate the systems listed in (Q4.1) and use the phaser boxes as lasers. Add two additional APR boxes. Add two atomic missile launchers. Turn mode is 2.

(QR2.2) HEAVY CRUISER: An early version of the Federation heavy cruiser is available in this game. To convert the SSD for the CA to this type, eliminate the secondary hull and all systems listed in (Q4.1), EXCEPT that the CA may operate its shields at "minimum" setting. The Federation "early" CA has four APR boxes (carried in pods of two boxes each) and two shuttles. When the ships were converted to warp power, these pods were removed, which is why the CA has no APR. Add four atomic missile launchers. Turn mode is 2.

(QR3.0) KLINGON SHIPS

Klingon (and Kzinti) ships are provided, allowing players to recreate scenarios from the early Klingo-Kzinti wars.

(QR3.1) EARLY D6: An early version of the D6 was available. Eliminate the systems listed in (Q4.1), add four APR, change phasers to lasers, change disruptors to atomic missile launchers. Turn mode is 2. The early D6 can operate its shields at minimum level.

(QR3.2) EARLY FRIGATE: An frigate design was available. To approximate this ship, take the SSD for the F5, eliminate the systems listed in (Q4.1), add two APR, change phasers to lasers, change disruptors to atomic missile launchers. Turn mode is 1. The early F5 had no shields, but had five boxes of armor. This approximates

an early frigate design that was scrapped after warp engines were developed.

(QR4.0) ROMULAN SHIPS

(QR4.1) ROMULAN WARBIRD: The Romulan Warbird is available in this game. Use the SSD from the basic game. Eliminate the systems listed in (Q4.1); use the phaser boxes (from the War Eagle) as lasers. Add two atomic missile launchers. Turn mode is 1. **(QR4.2) ROMULAN WARHAWK (Volume II):** An early version of the Warhawk was used by the Romulans during this period. To make this conversion, take the Warhawk SSD and eliminate the systems listed in (Q4.1). Replace the phasers with lasers. Add two atomic missile launchers. Turn mode is 1. The Warhawk carries 5 fighters and 15 extra atomic missiles (in addition to its own reloads). The deck crews are capable of loading five missiles (one on each of five fighters) each turn.

(QR4.3) ROMULAN EARLY FIGHTER (Volume II): The Warhawk carried an early version of the "Gladiator" fighter. It moves at a speed of nine (two hexes in impulses 2, 4, 6) and is otherwise the same as a sub-light shuttle. It has one laser (FA) limited to a range of five hexes and carries one atomic missile. Players should adapt the trans-light rules for other functions of these fighters.

(QR5.0) KZINTI SHIPS

(QR5.1) EARLY CRUISER: This ship was an early design scrapped after warp power became available. To approximate it, take the SSD for the strike cruiser, eliminate the systems listed in (Q4.1), add three APR, change the phaser-I's to lasers, change each pair of phaser-III's to one laser (two in the center), replace the drone racks with atomic missile launchers, add ten armor. Turn mode is 2.

(QR5.2) EARLY FRIGATE: This ship was basically identical to the current frigate (with the changes noted here), and the first warp-powered ships in Kzinti hands were early frigates converted to the current design. Take the SSD for the frigate, eliminate the systems listed in (Q4.1), add one APR, change all phasers to lasers, change all drone racks to atomic missile launchers, add five armor. Turn mode is 1.

(QR6.0) GORN SHIPS

(QR6.1) GORN SUB-LIGHT BATTLESHIP: This ship type was used only during the first Gorn-Romulan War, when all ships were sub-light. Unlike other fleets, the Gorns scrapped these ships rather than having them rebuilt to use warp technology. The SSD represents the ship equipped with lasers and atomic missiles. Turn mode is 3.

(QR6.2) GORN DESTROYER: A ship similar to the Gorn destroyer was used in the first Gorn-Romulan War. To approximate this ship, using the SSD for the Gorn destroyer, eliminate all systems listed in (Q4.1), add five armor, change all phasers to lasers, add two atomic missile racks. Turn mode is 2.

SUB-LIGHT GAME -- MASTER SHIP CHART

Race	Class	Crew	BPV	Turn	Rule
Fed	CA	20	100	2	QR2.1
Fed	CL	14	80	2	QR2.2
Klin	D6	18	100	2	QR3.1
Klin	FF	10	80	1	QR3.2
Rom	WB	15	80	1	QR4.1
Rom	WH	17	90	1	QR4.2
Rom	Ftr	-	5	1	QR4.3
Kzn	CS	20	110	2	QR5.1
Kzn	FF	10	80	1	QR5.2
Grn	BB	30	110	2	QR6.1
Grn	DD	12	75	1	QR6.2
	Sht1	-	2	1	QR1.1
	BS	30	100	-	QR1.2

(R0.0) STARSHIP TYPES AND CLASSES

STAR FLEET BATTLES includes literally hundreds of ships, and more are being added continually through expansions, supplements, etc. The Boxed Commander's Edition includes several dozen types, which are described here.

(R0.1) This rules section is numbered somewhat differently from the other sections. Each race is assigned a number (for example, the Federation is "R2"), and each ship is assigned a consecutive number within that series. Note that (R2.13) is not the third minor point concerning (R2.1) as it would be in other rules sections, but is the 13th starship in the Federation Order of Battle. The consecutive numbering of the starships within each race is, with some exceptions, the order in which the ship was introduced to the game, not the order of size or importance.

In cases where it is necessary to subdivide a rule on a given ship class, letters are used. Thus, (R1.1) deals with starbases, and rules (R1.1A) and (R1.1B) are subdivisions of that rule.

Ships are numbered consecutively within the section. Fighters are assigned numbers in the nineties; the Kzinti fighter given here is (R5.91). All Kzinti units begin with R5; all Kzinti fighters are R5.9-. Fast patrol ships are numbered in the eighties. General fleet modifications (that update many ships) are assigned numbers in the seventies.

The regular format of the Commander's Edition will also be slightly changed within this section. Because of the small amount of material concerning each race and their ships, it is impractical to begin each race on a separate page. In Volume II and later Volumes, these pages will be replaced, the material expanded, and each race will begin on a separate page.

(R0.2) COMMANDER'S SSD SHEETS

The SSD sheets provided with this game are adequate for all purposes. In order to include as many ships as possible, two or three ships have been combined on some of the SSD sheets, using a combination of minor changes and shaded boxes.

Players may wish to acquire sets of the COMMANDER'S SSD SHEETS, which are available separately. In these, each ship has its own unique SSD, and each SSD includes all of the weapons tables needed for that ship. This will greatly reduce the need to reference the rulebook when playing. Also, each of these special SSD sheets includes check off boxes for crew units, boarding parties, ammunition, etc.

(R0.3) DEFAULT VALUES

Unless specifically stated otherwise, players should assume that each ship:

1. Accelerates by 10 or to double its current speed, whichever is greater.
2. Has no drone storage for use by fighters.
3. Has one set of reloads for its drone racks (if it has drone racks).
4. Can fire one drone per drone rack per turn (if it has drone racks).
5. Can control a number of drones equal to its sensor rating.

(R0.4) GENERAL DESCRIPTION OF SHIP CLASSES

Ships in this game come in a variety of classes that are, to a large extent, standardized throughout all races. A general description of these classes and their assigned role is given here for purposes of increased understanding.

The standard ship of all fleets is the HEAVY CRUISER (or CA). This ship is large and powerful enough for virtually every mission except fighting a dreadnought. These ships are used for routine patrols of the frontier and interior. They are large enough to have a full range of equipment, yet small enough to be operated efficiently. Some heavy cruisers are fitted with increased communications, weapons, and command facilities and called COMMAND CRUISERS. These are used in peacetime to command fleets and in wartime to command independent squadrons.

The smaller and less powerful LIGHT CRUISERS (CL) conduct much the same missions as heavy cruisers but are less capable. They are cheaper to build, however, (generally about 20-33% cheaper) and many important missions are within their capabilities. The Klingons did not build light cruisers, finding it more efficient to continue construction of the obsolete D6 class for this purpose. The Federation, primarily for budget reasons, refitted a class of old sub-light heavy cruisers with warp engines and used them as CL's.

All cruisers are designed for both peacetime and wartime operations. Their peacetime missions include patrols, scientific research, exploration, maintaining contact with outposts, etc. They are designed with large fuel capacities, crews, research facilities, and supplies (for long voyages) to fulfill this peacetime role. The WAR CRUISERS (variously called CW for "war cruiser," CM for "medium cruiser," NCL for "new light cruiser," and other names) are designed to fulfill only the wartime roles of the heavy and light cruisers, sacrificing range, crew comfort, and non-military capabilities. The various war cruiser classes are presented in Volume II.

In the opposite vein, RESEARCH CRUISERS are designed primarily for the peacetime missions of exploration and investigation at the expense of full military capabilities. These ships are presented in Volumes II and III.

The various carriers (CV being a standard cruiser-sized carrier, CVA a larger one, CVL and CVE being smaller ships) are, in fact, nothing more than specially built cruisers designed to operate a number of specially built shuttles. These shuttles are used in combat to support the carrier. The shuttle group of the Kzinti CV (the only carrier in Volume I) can increase the ship's drone and short-range phaser firepower by 100%.

The heavier DREADNOUGHTS are designed as extremely large cruisers with increased weapons and defenses. They really do not have much more investigation/exploration capability than a cruiser does and spend most of their time docked at starbases waiting for a war to start. While excellent in combat they are too expensive to operate on a regular basis.

The smaller ships include, in decreasing order of size, DESTROYERS, FRIGATES, and ESCORTS. These are used on missions where a cruiser is not required or available and to support cruisers in a combat situation. Because of their cheaper construction, many are built. A squadron of three cruisers facing a squadron of one cruiser, two frigates, and two escorts (which cost almost the same to build) would be outgunned by 10-20%, to say nothing of being outmaneuvered by the more flexible force. The smaller units, however, would be destroyed faster in combat.

(R0.5) MINIATURES

Starline 2200 Miniatures are available for many of the ships in STAR FLEET BATTLES. Examining these fine miniatures will provide a good deal of information and understanding as to the operation and construction of the ships.

(R0.6) DEFINITIONS

The term "unit" includes ships, bases, shuttles, fast patrol ships, and seeking weapons.

The term "ship" refers to all ships in the game.

"Bases" are governed by the same rules as ships, and are (technically) considered to be a special sub-classification of ships (those that don't move). The few exceptions, where rules for ships do not apply to bases, are obvious or clearly marked.

"Fast patrol ships," included in Volume II and various called fast patrol craft, gunboats, PFs, and pseudo-fighters, are a special sub-classification of ships.

Shuttles are never included in the rules for ships, and include both administrative (or utility) shuttles and fighters.

All ships are assigned a "size class" to reflect their relative size. There are seven assigned size classes, which are (in general):

Size class 1 = star bases

Size class 2 = dreadnoughts and other larger ships

Size class 3 = cruisers (heavy, light, etc.)

Size class 4 = destroyers, frigates, escorts, etc.

Size class 5 = fast patrol ships

Size class 6 = shuttlecraft and fighters

Size class 7 = drones and mines

(R1.0) GENERAL UNITS, USED BY ALL PLAYERS

(R1.1) STARBASES

The largest type of base, starbases are normally deployed deep within friendly territory as major bases for fleet operations and training. Major repair and overhaul centers are located at starbases. The destruction of a starbase would normally mean the collapse of an entire sector of the owner's empire. No invading enemy can leave a starbase in its rear, because an entire fleet can hide safely under the protection of its weapons.

An SSD sheet for a basic starbase is included in Volume I. SSD sheets for starbases of the various races are not included; players must modify the basic SSD sheet accordingly. Items marked ★ refer to a future volume and can be completely (and safely) ignored for the time being.

(R1.1A) MODIFICATIONS TO CENTRAL CORE

On Klingon and Tholian bases the Flag Bridge is considered Bridge. Klingon bases include two Security stations. Some Klingon Starbases are modified to include two stasis field generators. These have a 360° arc and are hit on phaser hits.

Point Defense Weapons:

- 3 ADD (Federation, Klingon, Kzinti)
- 3 Phaser-III 360° (Romulan, Gorn, Tholian, ISC)
- 3 Phaser-G 360° (Hydran)
- none (Lyran)

Federation units on the Romulan border had phas-III rather than ADD. In a campaign where those bases might have to fight drone-armed Gorns, this decision would be left to the Federation player.

(R1.1B) MODIFICATIONS TO SECONDARY MODULES

Repair boxes are considered cargo in Volume I.

Install the following in each secondary module to create a starbase of the designated race:

- | | |
|----------|---|
| Fed: | 2 Photon, (1 P-G in modules 1, 3, 5) |
| Gorn: | 1 Plasma-R, 1 P-III |
| Hydran: | 1 Hellbore, 1 Fusion ★
(1 P-G in 3 of the 6 modules) |
| ISC: | 1 PPD, 1 Plasma-F, 1 P-III★ |
| Klingon: | 1 Disr, 1 Drone, 1 Scry, 1 P-III, UIM
(UIM controls the weapons in that pod only.) |
| Kzinti: | 1 Disr, 1 Drone, 1 P-III |
| Lyran: | 2 Disr, 1 ESG★ |
| Romulan: | 1 Plasma-R, 1 P-III |
| Tholian: | 2 Disr, 1 Web, 1 P-III
(Later, the 2 disruptors were replaced by one web caster in half of the modules.) |

All of these module weapons have a 240° firing arc, as per the SSD. The sensor, scanner, damage control, and excess damage ratings of all starbases are as shown on the SSD.

(R1.1C) ADDITIONAL SPECIFICATIONS

The shields of starbases were increased to 70 (each) by Y170 (BPV 700) and to 80 each by Y180 (BPV 750).

Starbases have six external docking positions (one between each secondary module). Ships cannot dock at these positions; they are for modules. Each can dock one cargo pod and one other pod or module. Bases will often have hangar bay modules (R1.4), PF docking modules (R1.16), or power modules (R1.17) docked to these positions. The most common arrangement is four fighter modules and two power or PF modules. These can dock any type of pod that is used by the owning race's tug, but these pods cannot operate.

Normally, 4-6 police ships, 1-2 frigates or destroyers, and 1 light cruiser were permanently assigned to the starbase under control of the base commander. These are not included in the base's BPV and are included in the fleet order of battle (U3.2). Major fleet elements, under control of the fleet commander, would normally be found at or near the starbase during peacetime.

All drone racks have 16 spaces of drones (no reloads). All anti-drones have 30 rounds of ammunition (no reloads).

The BPV of a starbase does not include the fighters, PFs, or ships assigned to it, nor does it include the hangar modules attached to it or cargo pods docked at it.

The Orions and WYN★ do not, apparently, have starbases.

(R1.1D) DAMAGE PROCEDURE FOR STARBASES

When a volley of hits penetrates one of the shields of a starbase, use the following procedure for each damage point in turn.

1. Determine what system was hit.

2. Apply the hit (if possible) to the module facing that shield.

2A. Note that hull hits on a module, after the hull boxes of that module are destroyed, are applied to the ships inside that module. These hits are resolved separately as a hit on the #1 shield of the ship. If they penetrate, roll to allocate them.

3. If there is no system of that type remaining in that module, the hit penetrates into the main body of the starbase where it is scored on the system called for. Note, however, that hits reaching the main body first strike armor. The upper row of armor boxes is struck by hits on shields 6-1-2, the lower hits on shields 3-4-5. If the appropriate section of armor has been completely destroyed, the hit is scored on the system originally called for.

4. If there is no system of that type in the main body, move to the next column on the DAMAGE ALLOCATION CHART and repeat all of the steps above.

(R1.1E) INFORMATION IN VOLUME II

This information refers to future volumes.

All Starbases have scout functions and Aegis.

After Y178, most starbases had six PFs (in a PF docking module). The Federation, which had no PFs, responded by using six hangar modules, and modifying one secondary module to include 12 fighter boxes and a 6-box photon freezer at the cost of that module's ability to dock ships. The repair boxes of that module can be used to repair fighters (if they are in that module), but not ships. Normally, a Federation SBF included three fighter squadrons, totaling 12 F-14, 18 F-18, and 18 A-10. In many cases F-18s were substituted for some of the F-14s. Normally, F-16s were based at battle stations, but some were based at starbases during some periods. Two SWACS were usually available, based in the secondary module that has the fighter bay (replacing the admin shuttles in that bay).

(R1.2) BATTLE STATIONS

By Y160, all base stations on national borders had been replaced with the more powerful battle stations. Virtually all borders are guarded by a network of battle stations. An SSD is provided for a battle station; modify it according to the following data to produce the specific battle station of any race.

(R1.2A) MODIFICATIONS TO THE CENTRAL CORE

The battle station SSD includes blank boxes for weapons.

These are listed below by race:

- | | |
|----------|---|
| Fed: | 2 Photon Torp, 2 ADD |
| Gorn: | 1 Plasma-R, 2 P-III |
| Hydran: | 1 Hellbore, 1 Fusion, 2 P-III★ |
| ISC: | 1 PPD, 2 P-III, 1 Plasma-F★ |
| Lyran: | 2 Disruptor, 1 ESG★ |
| Klingon: | 1 Disruptor, 1 Drone, 3 Security, 2 ADD,
1 UIM (that can control all weapons on the station) |
| Kzinti: | 1 Disruptor, 1 Drone, 2 ADD |
| Orion: | 2 ADD, 2 option mounts |
| Romulan: | 1 Plasma-R, 2 P-III |
| Tholian: | 2 Disruptor (later 1 web caster), 2 P-III |
| WYN: | 2 ADD, 2 option mounts. ★ |

All of these systems have 360° firing arcs.

(R1.2B) MODIFICATIONS TO SECONDARY MODULES

Repair is considered cargo in Volume I.

Orion battle stations replace the phaser-IVs with phaser-Is. Orions do not have the phaser-IV weapon.

Hydrans replace the two phaser-III in each module with one gatling phaser.

Lyrans have one ESG in each secondary module.

Tholians have one web generator in each module.

Klingons have one UIM in each secondary module; it can control all of the weapons on the station.

(R1.2C) ADDITIONAL MODULES

Battle Stations have three external docking positions (one between each secondary module). Ships cannot dock at these positions; they are for modules. Each can dock one cargo pod and one other pod or module. These normally included two hangar bay modules and four cargo pods. Later one cargo pod was often replaced with a PF docking module. Battle Stations can dock ships to their tractor beams as per (C13.0).

(R1.2D) ADDITIONAL SPECIFICATIONS

The weapons in the modules have a 240° firing arc. The sensor, scanner, damage control, and excess damage ratings of all battle stations are as shown on the SSD.

Normally 1-2 police ships and a frigate or destroyer would be permanently stationed at the battle station. These are not included in the station's BPV but are included in the Fleet Order of Battle (U3.2).

All drone racks have 16 spaces of drones (no reloads). All anti-drones have 30 rounds of ammunition (no reloads).

The shields of most battle stations were increased to 40 by Y180 (increasing the BPV to 260).

The BPV of a battle station does not include the fighters, PFs, or ships assigned to it, nor does it include the hangar modules attached to it or cargo pods docked at it.

(R1.2E) INFORMATION FOR VOLUME II

All battle stations have scout functions and Aegis.

After Y178, most races based 6 PFs (in a hangar bay module) at each battle station. The Federation, which had no PFs, responded with additional hangar modules.

(R1.3) BASE STATIONS

Base stations were originally deployed along most national boundaries, but by the time of the General War they were outclassed. During the General War, base stations would only be found in the interior, operating as regional headquarters and supply bases. As the war ebbed and flowed across the borders, many a base station commander suddenly found himself on the front line.

An SSD for a basic base station is included. Players must make the following modifications to create the specific base station for each race.

(R1.3A) MODIFICATIONS TO THE CENTRAL CORE

Point Defense Weapons:

- 2 ADD (Federation, Klingon, Kzinti)
- 2 Phaser-III 360° (Romulan, Gom, Tholian, ISC)
- 2 ADD or 2 Ph-III or 1 each (Orion, WYN)
- 1 Phaser-G 360° (Hydran)
- 2 ESG (Lyran) *

Klingon base stations have two security stations.
Tholian base stations have one web generator.

(R1.3B) PRIMARY WEAPONS

The base station's primary weapon (360°, mounted in core) is listed below for each race:

Fed:	Photon Torpedo
Gom:	Plasma G-II
Hydran:	Hellbore *
ISC:	PPD *
Klingon:	Disruptor Bolt, UIM (can control all weapons on the station)
Kzinti:	Drone Rack
Lyran:	Disruptor Bolt *
Orion:	Option mount
Romulan:	Plasma R
Tholian:	Disruptor Bolt
WYN:	Option mount *

(R1.3C) ADDITIONAL MODIFICATIONS

Orions have 1 phaser-I in place of each pair of phaser-IVs. The Orions do not have phaser-IVs.

Repair is considered cargo in Volume I.

(R1.3D) ADDITIONAL SPECIFICATIONS

Normally 1-2 small ships (frigate, police) were assigned directly to the station (not under fleet control but included in fleet OB).

Battle Stations have three external docking positions (one between each secondary module). Ships cannot dock at these positions; they are for modules. Each can dock one cargo pod and one other pod or module.

By Y170, the shields of base stations had been increased to 30 (BPV 150); by Y180 they had been increased to 35 (BPV 155).

All drone racks have 16 spaces of drones (no reloads). All anti-drones have 30 rounds of ammunition (no reloads).

The BPV of a base station does not include the fighters, PFs, or ships assigned to it, nor does it include the hangar modules attached to it or cargo pods docked at it.

(R1.3E) INFORMATION FOR VOLUME II

All base stations have scout functions.

After Y178, most races based three or six PFs (in a hangar bay module) at many of their base stations; many had only fighters for local defense. Some Federation base stations had as many as three hangar bay modules. Generally, most base stations had one hangar module and two cargo pods.

(R1.4) HANGAR BAY MODULES

By the time of the General War, the need for additional protection and firepower had forced most bases to be equipped with fighters. To simplify construction, all races built hangar bay modules and attached them to their bases.

(R1.4A) Each hangar bay module includes six shuttle (fighter) boxes, two cargo boxes, one tractor beam box, and one hull box. All hangar bay modules have six deck crews. Hangar bay modules are considered part of the central core of the base. The BPV of fighters operating from bases are not included in the BPV's of those bases.

(R1.4B) Federation hangar bay modules have a two-box photon freezer.

(R1.4C) Romulan hangar bay modules have 2 stasis boxes per module for Plasma-F's, which can be recharged.

(R1.4D) The Gorns and Lyrans did not build fighters, but purchased fighters (the Gorns from the Federation and the Lyrans from the Klingons) for local defense and assigned them to base stations.

(R1.5) SMALL FREIGHTERS

This design is typical of the many small freighters operated by all races. It is, basically, a cargo pod with small engines and a small crew cabin added. The four hull boxes can be destroyed on either forward or aft hull hits. The ship cannot disengage by acceleration (C7.1) and cannot accelerate by more than three movement points per turn.

(R1.6) LARGE FREIGHTERS

Similar to the small freighter, the large freighter is two cargo pods with larger engines and facilities. Within its limits, it approaches the full range of starship capabilities. The six hull boxes can be destroyed on either forward or aft hull hits. The ship cannot disengage by acceleration and cannot accelerate by more than four movement points per turn.

(R1.7) Q-SHIPS

All fleets, having had trouble with pirates (not to mention conventional warships on commerce raiding missions during wartime), have constructed and operated Q-ships. These are specially modified freighters equipped with heavy weapons but designed to appear as normal freighters.

(R1.7A) No SSD's are provided in Volume I for Q-ships; players must make rather extensive modifications to the SSD's of the freighters. (SSD's were printed in issue #4 of NEXUS magazine.) This conversion is given in terms of converting the large freighter to the large Q-ship. Data for converting the small freighter to a small Q-ship is given in parenthesis ()�.

Remove 30 (15) cargo boxes and all weapons. Add 11 (5) to each shield, 2 (1) transporter, 16 (8) boarding parties, 9 (4) APR, 2 (2) tractor beams, 2 (2) battery, 7 (3) armor, and 1 (1) shuttle. On both sizes, add one "6" box to the sensor track, one "0" box to the scanner track, and one "4" box to the damage control track. Weapons are as follows:

FEDERATION (large): 2 phas-I LS, 2 phas-I RS, 2 photon FA, 1 phas-III 360°, 1 phas-III RA.

FEDERATION (small): 1 phas-I LS, 1 phas-I RS, 1 photon FA, 1 phas-III 360°.

KLINGON (large): 2 phas-II FX, 2 phas-II RA, 2 disr FA, 2 drone, 1 ADD, 1 phas-II 360°.

KLINGON (small): 1 phas-II FX, 1 phas-II RA, 1 disr FA, 1 drone, 1 phas-III 360°.

ROMULAN (large): 1 phas-I LS, 1 phas-I RS, 1 phas-I FX, 1 phas-I RA, 2 plasma-F RA, 2x mine rack.

ROMULAN (small): 1 phas-I 360°, 1 plasma-G RA, carries a NSM.

KZINTI (large): 3 phas-III 360°, 2 phas-I 360°, 2 drone, 1 ADD, 4 fighter.

KZINTI (small): 1 phas-I 360°, 2 drone, 2 fighter.

GORN (large): 2 phas-I LS, 2 phas-I RS, 1 phas-I FA, 1 phas-I RA, 2 plasma-F RA.

GORN (small): 1 phas-I LS, 1 phas-I RS, 1 plasma-F FA, 1 phas-III 360°.

THOLIAN (large): 2 phas-I FX, 2 phas-I RA, 2 disr FA, 2 web, 1 phas-III 360°, 1 phas-III RA.

THOLIAN (small): 1 phas-I FX, 1 phas-I RA, 1 disr FA, 1 web, 1 phas-III 360°.

HYDRAN (large): 2 fusion LS, 2 fusion RS, 2 phas-G 360°, 2 stinger fighter and shuttle bay.

HYDRAN (small): 1 fusion LS, 1 fusion RS, 1 phas-G 360°, 1 stinger fighter and shuttle bay, 1 phas-III 360°.

LYRAN (large): 2 phas-II FX, 2 phas-II RA, 2 disr FA, 1 phas-II 360°, 2 ESG.

LYRAN (small): 1 phas-II FX, 1 phas-II RA, 1 disr FA, 1 phas-III 360°, 1 ESG.

(R1.7B) SPECIAL Q-SHIP RULES

Q-ships appear as normal freighters and cannot be detected as Q-ships until one of the following events:

They erect their shields at full (Q-ship) strength.

They fire any of their non-standard weapons.

They are boarded.

Whenever a Q-ship is hit by weapons of any type, the owning player has the option of revealing his status as a Q-ship at that point. If this is done, the Q-ship can immediately fire its weapons, BEFORE the effects of incoming fire are resolved but AFTER the number of damage points scored is known. (This violates the normal sequence of play.)

(R1.7C) Q-ships can accelerate by five movement points per turn, and can disengage by acceleration.

(R1.91) ADMINISTRATIVE SHUTTLE

This unit is more fully described in the section on shuttles (J0.0).

(R2.0) THE UNITED FEDERATION OF PLANETS

(R2.1) FEDERATION BACKGROUND: The United Federation of Planets is the only major political unit that is not dominated by a single race of beings. (The WYN in Volume II and the ISC in Volume III also fit this description.) Several races (Human, Vulcan, Orion, Andorian, Rigelian, Alpha-Centauran, Cygnan, etc.) hold seats on the ruling council, two dozen other planets are affiliate members, and colonies or stations have been established on a thousand other planets. Most ships are manned 90% by one race with the other 10% being a mixture of all others.

The Federation is probably the most idealistic of all the empires. Federation ships never attack without warning, and while the Federation has fought wars with all of its neighbors, it has never started one. The Federation has negotiated boundaries with all of its neighbors and has never sought to expand them militarily.

Economically, however, the Federation is the most aggressive race in the game. Federation merchant ships are found almost everywhere during peacetime, and the "neutral zones" between the Federation and its neighbors abound with Federation colonies set up within the strict letter of the relevant treaties.

The Federation has treaties of alliance or friendship with the Kzintis and Gorns and mutual non-aggression pacts with the Klingons and Romulans. The Tholians indicate that they feel the best treaty is to simply never have contact.

(R2.2) DREADNOUGHT (DN): The "space battleship" of Star Fleet, the dreadnought is the largest and most powerful Federation ship in volume I. It is 50% more powerful than any cruiser, but is slightly inferior to most other dreadnoughts. Each fleet is commanded by an admiral in a dreadnought, but during peacetime the dreadnought is usually docked at a starbase. The 18 hull boxes in the saucer are hit on "forward hull" hits; the six in the rear section are hit on "aft hull" hits.

(R2.3) COMMAND CRUISER (CC): The command cruiser is an improved version of the standard heavy cruiser. Normally, the admiral commands his fleet from a command cruiser during peacetime. Command cruisers (most fleets have similar ships) are marginally better in firepower and 25% superior in command, control, and communication facilities as compared to CA's. The shaded boxes on the SSD function normally on the command cruiser. The 12 boxes in the saucer are "forward hull;" the four in the rear section are "aft hull."

(R2.4) HEAVY CRUISER (CA): The workhorse of Star Fleet, the Federation heavy cruiser is probably the most balanced all-around starship in the game. The SSD for the heavy cruiser is combined with that of the command cruiser. Simply ignore the shaded boxes to convert the CC to the CA. The 12 boxes in the saucer are "forward hull;" the four in the rear section are "aft hull."

(R2.5) LIGHT CRUISER (CL): The CL is a rebuilt hull that is over 100 years old. These ships originally fought in the First Romulan War. When warp power was developed, 30 of these ships were converted to use it. They formed the backbone of Star Fleet for two decades, before enough heavy cruisers came into service to assume that role. This ship is equipped with armor (D4.9), which was used before the more efficient shields were developed. All hits that penetrate the shields are scored on the armor, not by the DAC, until all armor is destroyed. The six hull boxes in the

(continued on next page)

forward half are hit on "forward hull" hits; the six in the rear half are hit on "aft hull" hits. Many of these ships were converted to other types (escort cruisers, minesweepers, survey ships, hospital ships, etc.) during their service; these conversions are shown in future volumes.

(R2.6) DESTROYER (DD): The destroyer was designed as a smaller and less expensive stablemate to the CA, but was less successful. While it carries cruiser armament, it lacks the engine power of a cruiser, making full (i.e. overloaded) use of its photon torpedoes impractical. The shaded boxes are fully operational on the DD. The 10 hull boxes can be hit on either forward or aft hull hits.

(R2.7) SCOUT (SC): Built on a destroyer hull, the scout was designed to be the electronic eyes and ears of the fleet. The name can be confusing. The ship does not actually move ahead of the fleet, but uses its long-range sensors and scanners to search farther than other ships can. The shaded boxes on the SSD are converted to special sensors, the full use of which is explained in Volume II. These are hit on the same hits as the systems they replace. The 10 hull boxes can be hit on forward or aft hull hits.

(R2.8) FLEET TUG (TT): Used by Star Fleet to transport priority military and government cargoes (civilian freighters being adequate for other loads), the tug is a full-fledged starship capable of defending itself from attack. The 12 hull boxes can be hit on forward or aft hull hits unless the tug is towing a starliner or battle pod, in which case these are hit on forward hull hits and the hull boxes in the pod are hit on aft hull hits. The Federation tug can carry one or two pods. The movement cost chart lists "tug +3" because the battle pod (R2.10) weighs twice as much as a regular pod.

(R2.9) STARLINER POD (SL): The starliner is designed for the transportation of 665 personnel (more with crowding). Too expensive to use for colonization, it usually carries relief crews to isolated stations. The starliner pod is capable of independent operations at sub-light speed. If detached, the 22 hull boxes can be hit on either forward or aft hull hits. If attached to a tug, these 22 boxes are hit on aft hull hits; those on the tug are considered forward hull in this case.

(R2.10) BATTLE POD (BP): As tugs cost as much as cruisers to build, competition between the fighting and logistical elements of the fleet for construction funds is fierce. To partially offset this, battle pods were constructed and held in storage at starbases. A tug carrying a battle pod (the combination being called a "battle tug" and listed separately on the MASTER SHIP CHART) is operationally similar to a DN or CA. Thus, an expensive peacetime transport can be converted in hours to a serviceable warship. The battle pod weighs twice as much as other pods and counts as "two pods" for purposes of movement cost and turn mode. The 10 hull boxes can be hit on either forward or aft hull hits. If attached to a tug, these 10 boxes are hit on aft hull hits; those on the tug are considered forward hull in this case. Some battle pods were improved to the BP+ configuration by converting their APR to warp reactors, which allowed them to fire their photon torpedoes while separated from the tug. This conversion can be calculated from Annex #6A, which lists the cost of converting each APR box to a warp reactor box.

(R2.11) CARGO POD (CP): There are actually several types of cargo pod (liquid, bulk, container, pallet, dry bulk, etc), but all are functionally identical. Cargo pods are simply cargo boxes; there is no crew or other function. When on a tug, any "aft hull" hits can be scored on cargo boxes of the pod. When detached, any hits on the pod are scored as cargo hits.

(R2.70) FEDERATION "+" SHIP UPDATES

Beginning about Y165, the Federation began updating its ships in order to maintain its military forces at a level sufficient to deter attack. Due to budget restrictions and a short-sighted attitude by the civilian administrators (who failed to foresee the coming General War), only about 20% of the fleet had been updated by the time the war began. The update program was accelerated after Y171.

The revision, which was applied to several different classes, includes the following modifications:

1. Install one type-G drone rack.
2. Install two APR boxes.
3. Install two phaser-III's (360° mountings).

These modifications increase the BPV of the ships by 12 points. The upgraded ships are known as, for example, the CA+ and DD+. The following ship classes received this refit: CA, DD, SC.

The following classes received a modified version of this refit (without the APR boxes), which increased their BPV by 8 points: CC, CL, Starliner pod, Battle pod, Tug, Pol.

The CV and GS both received two type-G drone racks, increasing their BPV by 10 points.

The NCL received two phas-III (one LS, one RS), increasing its BPV by 4 points.

Two similar conversions, the FFG (an upgrade of the FF) and DN+ (and upgrade of the DN) are shown under separate headings (in Volumes II and III) as they were more serious reconstructions of the ships in question. Ships refitted under this program cannot be modified by (S3.3).

(R3.0) THE KLINGON EMPIRE

(R3.1) KLINGON BACKGROUND: The Klingon Empire arose on the ruins of a previous one (known only as "The Old Kings") of which the Klingons had been a subject race. The Old Kings used Klingons primarily in their starship crews, and when the Kings disappeared (legend has it they left to avoid the death of the Galaxy, since stars in the core were already falling into a gigantic black hole), the Klingons quickly picked up the pieces. The Klingon Empire includes at least 12 planets with native sentient races, all of them subservient to the Klingons themselves. Almost 60% of all Klingon Empire starship crewmen are non-Klingon.

The Klingon forces include the Deep Space Fleet (DSF), which is the regular Navy, and the Internal Security Force (ISF). The ISF, which operates only small ships (up to F5), is a combined police, customs, tariff regulation, border patrol, safety and rescue, and anti-piracy force, which is also assigned the duty of watching the various subject planets for signs of rebellion. The ISF is inferior (in military, political, and social standing) to the DSF; it is definitely not a KGB-style secret police force. (A secret political police unit is known to exist.)

All Klingon ships, unless otherwise noted, can fire a number of drones each turn equal to one-half of the number of drone rack they have, rounded to the next higher number.

(R3.2) C-9 DREADNOUGHT (C9): This class (and the very similar C8) was designed for extended operations; it is proportionately much larger than the D7. The C9 was designed for use primarily on the Federation border; the C8 being designed for use on the Kzinti border. (The C8 has more but smaller phasers, providing improved defense against drones.) The SSD shows the C8; the following minor changes are needed to convert it to the C9: change the forward two drone rack boxes to cargo; change the two wing phaser-II boxes to one phaser-I (each side); eliminate the one waist phaser-II on each side; change the two waist phaser-III boxes on each side to phaser-II's. The 12 hull boxes in the boom section are hit on "forward hull" hits; the 20 hull boxes in the rear hull are hit on "aft hull" hits.

A variant of the C9, the C9A, has a stasis field generator in place of the two forward drone racks. See (G16.52).

(R3.3) C-8 DREADNOUGHT (C8): This class is 98% similar to the C9, and was designed for use on the Kzinti border. When the Federation began using fighters, most of the C9's were converted to the C8 configuration. The 12 hull boxes in the boom section are hit on "forward hull" hits; the 20 hull boxes in the rear hull are hit on "aft hull" hits.

(R3.4) D-7 BATTLECRUISER (D7): This is the standard cruiser of the Klingon Deep Space Fleet. Less expensive than most other heavy cruisers, it lacks the full range of scientific capabilities (reflected in the game by having fewer lab boxes) and crew living conditions are spartan. The four hull boxes in the boom are hit on "forward hull" hits; the seven in the larger section are hit on "aft hull" hits. The shaded boxes function normally on the D7.

(R3.5) D-6 BATTLECRUISER (D6): This ship was the original Klingon standard cruiser until it was replaced by the more powerful D7. No SSD is provided for this ship; players must make relatively minor changes to the SSD for the D7. These changes are: eliminate the wing phaser-II's (which are shaded), reduce the maximum range of the disruptors to 22 hexes. The four hull boxes in the boom are hit on "forward hull" hits; the seven in the larger section are hit on "aft hull" hits. In later years, many D6-class ships were converted to carriers or tenders, or transferred to the Romulans. It should be noted, however, that one of the four shipyards building D6/7 class ships never converted to D7 production and continued to produce D6's until almost the end of the General War. It should be noted that the Klingons did not produce a "light cruiser" design. (Much later, a D5-class of "light battlecruisers" was produced; but this type is more properly a "wartime construction cruiser" or "war cruiser.") The D6 may have been kept in production to supply ships for the "light cruiser" or "destroyer" roles, as this may have been considered less expensive than designing two new classes.

(R3.6) F-5 FRIGATE (F5): This class was used for a multitude of patrol and escort duties. The shaded boxes function normally on the F5. The two hull boxes in the boom section are hit on "forward hull" hits; the five hull boxes in the rear hull are hit on "aft hull" hits. While an outstanding frigate design, the lack of a "destroyer" in the Klingon fleet meant that F5 frigates were often used in situations too difficult for a ship of their size but too unimportant for a cruiser. The standardization on a single class, rather than building both frigates and destroyers, did improve the efficiency of construction.

(R3.7) E-4 ESCORT (E4): This ship was used for convoy escorts and, to some extent, police and border patrols. During wartime they were absorbed into the main battle fleets. The SSD for this ship is combined with that of the larger F5; simply eliminate the shaded boxes to use it as an E4. The two hull boxes in the boom section are hit on "forward hull" hits; the four hull boxes in the rear hull are hit on "aft hull" hits.

(R3.8) D-7A BATTLECRUISER (D7A): This is a special modification of the D7. The three phaser-II boxes in the forward hull are eliminated and replaced with a stasis field generator. This generator is damaged on phaser hits; three hits are required to destroy it. All other information is the same as the D7.

(R3.70) KLINGON "B" REFITS

In an effort to keep its ships up to date, and in response to the development of the Hellbore, the Klingons conducted a series of refits on their ships after Y165. This series, which was applied to several classes, increased their combat performance considerably. The refit includes the following items:

1. Installation of one ADD
2. The ability to launch one drone per rack per turn
3. Increase shields 3-4-5 to equal 2-6.

The C-9, C-8, and D-7 classes all received the above refit plus DERFACS, as did the D-6, on which the disruptor range was increased to 30. The F-5 and E-4 received the standard B refit. The Tug and D-5 (and the unfinished B-10) were not given any refit. All variants (e.g. D-6PFT, F-5M) received the same refit as the standard type. The refit increases the BPV of the C-8/9 by 6 points, the D-7 by 8 points, the D-6 by 11 points, and the F-5/E-4 by 4 points.

(R4.0) THE ROMULAN STAR EMPIRE

(R4.1) ROMULAN BACKGROUND: The Romulans are the most aggressive of the several empires. Their territory includes even fewer habitable planets than the Gorns, and no sentient races. The Romulans seem to honestly believe that they are destined to rule the Galaxy and are constantly working toward this end. Unfortunately (for their plans) their military power is probably the

most feeble of the major races. The main strength of the Romulan Fleet (and the only ships capable of operating very far from their own territory) are Klingon ships sold or leased to them by virtue of the Treaty, and Romulan Warbirds that are converted to War Eagles with Klingon warp pods. Before the treaty, the Romulan Fleet was considered only a particularly savage nuisance. While they could obliterate entire worlds, their sub-light ships could not penetrate deeply into Federation or Gorn Territory. Warp power has greatly expanded the threat of war from the Romulans.

(R4.2) WARBIRD (WB): The Romulan "Warbird" class is an old type from more than 100 years before the main timeframe of *STAR FLEET BATTLES*. These ships were used during the First Romulan War, and some remain in use. (The shields are a recent improvement not used during the First Romulan War.) Note that the shaded boxes on the SSD sheet are eliminated from the Warbird. Both forward and aft hull hits can be scored on any of the hull boxes on the SSD. Note that this ship has armor; all hits that penetrate the shields are scored on the armor until it is destroyed. The cloaking device is installed. This ship carries one NSM, which is included in its BPV. The torpedo is type-R.

When Klingon technology first became available, many Warbirds were refitted as WB+ ships, which have the four phasers and the transporter, but not the warp engines of the WE.

(R4.3) WAR EAGLE (WE): The ships of this class are 100-year-old Warbirds converted to use warp power and modern equipment. Note that the SSD for the Warbird and War Eagle are combined; the shaded boxes represent equipment added to the Warbird to convert it to a War Eagle. Note that this ship has armor; all hits that penetrate the shields are scored on the armor until it is destroyed. There is only one group of six hull boxes; these are destroyed by both "forward hull" and "aft hull" hits. The shaded boxes function normally on the War Eagle. These ships are critically undersized and, despite the improvement to the War Eagle class, are not capable of standing up in combat to another cruiser. However, when operating in groups and able to surround the enemy, they are assured of at least one plasma hit and are able to defeat most opponents. Usually, one good blast from any heavy cruiser is enough to cripple a Warbird or War Eagle. Their one saving grace is the cloaking device, allowing the ship to move to close range, fire, and then evade reprisal. This ship carries one NSM, which is included in its BPV. The torpedo is type-R.

(R4.4) KLINGON-TYPE BATTLECRUISER (KR): In Y159 the Klingons began supplying advanced ships and technology to the Romulans. The most important ships supplied were nine older D6 battlecruisers. While these were strictly second-rate ships to the Klingons, they were at the time the most powerful ships in Romulan hands. No SSD is provided for this ship; players must make relatively minor changes to the SSD for the D7. These changes are as follows: eliminate the wing phasers and one disruptor bolt box from each engine pod. The security stations were changed to hull boxes; the drone racks are changed to shuttle boxes. The three forward phaser boxes are considered to be type-I phasers; the four waist phasers remain as type-II. The two remaining disruptor bolt boxes are type-G (later upgrade to type-S); type-G is assumed in the BPV) plasma torpedoes. They do not have swivel mounts (unless installed as a player-modifications). The cloaking device is installed.

(R4.5) KLINGON-TYPE FRIGATE (KF5R): During the period when the D6's were delivered, 15 F5 frigates were also transferred to the Romulans. These were converted into plasma-armed frigates to support the larger ships. No SSD is provided for this ship; players must make relatively minor changes to the SSD for the Klingon F5. These changes are as follows: convert the drone rack to a shuttle box; change the security box to hull box; eliminate both disruptor boxes; add one plasma-G torpedo (upgradable to type-S), fixed to fire directly ahead (FA target tracking). There is no counter for this ship in Volume I; use the Klingon F5 counters. Counters are provided in Volume II. The cloaking device is installed.

(R4.60) OLD SUB-LIGHT SHUTTLE: The Romulans, who continued using sub-light ships far longer than any other race, retained some of their old sub-light shuttles for many years. These were carried by the Warbird-class ships before the Klingons provided

warp technology, and by many of the War Eagle class ships during the transition. The sub-light shuttle moves at a speed of one hex per turn, has no weapons, cannot be used for any special purpose (VVW, science, S-P, suicide, etc.), but otherwise operates as a standard administrative shuttle. A Warbird is assumed to be carrying sub-light shuttles; it costs one point per shuttle to switch to standard administrative types. All other Romulan ships are assumed to have administrative shuttles.

(R5.0) THE KZINTI HEGEMONY

(R5.1) KZINTI BACKGROUND: The Kzinti Hegemony was originally composed only of the Kzinti Homeworlds and a number of nearby habitable systems. Since expanding to its current size, the Hegemony has gained control of several planets with native sentient races, but does not allow individuals of those races to leave their planets. The Kzintis trade with these races, and occasionally smugglers have dealings with them, but they have no spacefaring capability of their own. Late in the time period of the game, the Kzintis signed a treaty with the Federation. This was primarily at the suggestion of the Federation in an attempt to balance the Kzintis against the Klingons.

(R5.2) STRIKE CRUISER (CS): This ship was the standard cruiser of the Kzinti fleet until most of them were converted to the later "battlecruiser" design (see below). It relies on drones for its primary armament. The 5 hull boxes in the forward section are hit on "forward hull" hits; the 12 in the main hull are hit on "aft hull" hits. The shaded boxes function normally on the CS, BC, and CC.

(R5.3) BATTLECRUISER (BC): During Y160 the Kzintis overhauled one of the strike cruisers and modified it to this improved configuration. The design proved so successful that, by the end of the next decade, all strike cruisers in service were converted to battlecruisers. All strike cruisers finished after Y164 were completed as battlecruisers. There is no SSD for this ship; use the C - 14 refit listed in (R5.70). The 5 hull boxes in the forward section are hit on "forward hull" hits; the 12 in the main hull are hit on "aft hull" hits.

(R5.4) COMMAND CRUISER (CC): This ship is a specially modified battlecruiser with improved communications and command facilities. There is no SSD for this ship. Players must make the following relatively minor changes to the SSD for the CS: install all of the C - 14 revisions; change the two 360° phaser-III's to phaser-I's; add two APR; install P/F mech-links on the two forward tractors; replace the standard drone racks with type-G drone racks. The 5 hull boxes in the forward section are hit on "forward hull" hits; the 12 in the main hull are hit on "aft hull" hits.

(R5.5) LIGHT CRUISER (CL): This ship was designed to support the heavy cruisers and replace them on less critical missions. The SSD for this ship is combined with that of the larger CS; simply eliminate the shaded boxes. The five hull boxes in the forward section are hit on "forward hull" hits; the eight in the main hull are hit on "aft hull" hits. The Kzintis, who lacked a proper destroyer (and their frigate was too small for most of the traditional frigate missions) used this ship extensively.

(R5.6) CARRIER (CV): This ship is the only one in Volume I that uses the old "wet navy" concept of an "aircraft carrier." (Many more carriers are in Volume II.) Players should be warned that fighters in *STAR FLEET BATTLES* are not as powerful (relative to the ships) as those of 20th Century Earth. Fighters are designed primarily for "firepower augmentation," that is, to provide some extra weapons for the carrier in combat. This ship can control twice as many drones as its current sensor rating and can assume control of the drones fired by its fighters. It carries 12

fighters and 3 administrative shuttles, has 12 deck crews, and can store 150 spare type-I drones (or the equivalent space in other types). Even without its fighters, it is easily the most powerful Kzinti ship before the advent of the Space Control Ship (see Volume II). The 5 hull boxes in the forward section are hit on "forward hull" hits; the 16 hull boxes in the rear section are hit on "aft hull" hits.

(R5.7) STRIKE CARRIER (CVS): At the start of the General War, most of the existing CV's were given the C - 14 refits. The resulting ship was known as a "strike carrier."

(R5.8) FRIGATE (FF): This ship was designed for escort and patrol duties. The three hull boxes in the forward section are hit on "forward hull" hits; the six hull boxes in the rear section are hit on "aft hull" hits. While a natural enemy of the Klingon frigate, the Kzinti frigate is not powerful enough to defeat it unless commanded by a superior captain. The advent of faster drones did much to improve this situation. The frigate was the basis of several variant classes, including scout, minesweeper, and long-range drone types. See Volume II.

(R5.70) KZINTI C-14 FLEET REFITS: Beginning in Y160, the Kzintis refitted many of their CS and CV-class ships with improved weapons. This refit pattern is known collectively as the "C - 14 refit." To apply this refit, players must make the following relatively minor changes to the SSD for the ship in question: (a) increase the one disruptor on the left side to two disruptors with firing arcs of FA + L; (b) increase the one disruptor on the right side to two disruptors with firing arcs of FA + R; (c) change the firing arcs of the left phaser-I to FA + L; (d) change the firing arcs of the right phaser-I to FA + R; (e) increase each warp engine to 10 boxes.

(R5.91) AAS FIGHTER: The advanced attack shuttle is the only "fighter" included in Volume I. It carries a single phaser-III (FA firing arc) and two type-I drones. It has a speed of 8, is destroyed by the 8th damage point scored against it, can make one HET per turn (without cost), can fire one drone per turn, and is otherwise operated as specified in the rules on shuttlecraft. The fighter must have the target in its FA arc to fire a drone at it.

(R6.0) THE GORN CONFEDERATION

(R6.1) GORN BACKGROUND: The Gorn Confederation consists of three sentient races (all developed on separate planets but are so nearly identical they must have come from common stock) joined into a single political unit. Their area of space includes relatively few habitable planets and, apparently, no native sentient races. The Gorns first met the Federation in war, but this was quickly settled when it became apparent that it had been a misunderstanding. Later, it was found that the Gorns were constantly having armed disagreements with the Romulans concerning the borders, and an Alliance was formed. The Federation-Gorn Alliance seems to be the only one that is based on mutual trust and respect, and a common desire to end all military aggression. Other Alliances (Federation-Kzinti, Romulan-Klingon) are based on political expediency.

(R6.2) HEAVY CRUISER: This is the standard "workhorse" cruiser of the Gorn Fleet. It has two plasma-G torpedoes. The left one is aimed 60° to the left of forward; the right one 60° to the right. These may be upgraded to swivel mounts. The four hull boxes in the forward disk are forward hull; the four in the rear disk are aft hull; the eight in the center can be checked off on either forward or aft hull hits. The shaded boxes function normally in the CA.

(R6.3) LIGHT CRUISER (CL): The CL was designed by the Gorns to use as many components of the CA as possible. While this made construction easier, the ship is not optimally balanced for its mission. Nevertheless, it is a good ship for most situations. Note that there is no SSD for the CL; certain boxes on the SSD of the Gorn CA are shaded; these shaded boxes are eliminated to convert the SSD for the CA to that for the CL. Note that, in this case, the four hull boxes in the straight section are "aft hull;" the eight hull boxes in the rear disk are not on the CL.

(R6.4) DESTROYER (DD): The Gorn destroyer combines powerful weapons on a small hull. It has a single type-G torpedo. The two hull boxes in the forward disk are hit on forward hull hits; the six in the main section on aft hull hits.

(R6.70) GORN "+" REFITS: After Y170, the Gorns refitted most of their ships that carried type-G torpedoes with type-S torpedoes, all of which were mounted on swivel mounts. These ships are shown on the MASTER SHIP CHART as CA+, CL+, etc.

(R6.71) GORN "F" REFITS: After Y175, the Gorns refitted many of their ships with two plasma-F launchers (one LS 180° swivel, the other RS) and two phaser-III's (one LS, the other RS) to provide increased protection from fighters and fast patrol ships. Ships with this revision (which all have the "+" refit) are known as, for example, CLF or DDF. The CA, when modified to this configuration, was called the battlecruiser or BC. The refit was applied to some DN, CA, CL, DD, and TT-class ships, and raises their BPV by 14 points.

(R7.0) THE THOLIAN HOLDFAST

(R7.1) THOLIAN BACKGROUND: The Tholians are not native to our galaxy, but migrated here from another. They are the survivors of a race that once dominated their native galaxy, the exact location of which is unknown. The subject races of the former Tholian Empire rose in a galaxy-wide revolt some 200 years ago, overthrowing the Tholian dictators. The Tholians of our galaxy are the descendants of a group that escaped the debacle and managed, by means yet unknown, to bring their planet (which was a provincial capital) with them. They settled on the edge of our galaxy at the end of the spiral arm that includes the Klingon homeworld. The Klingons had claimed this territory (and the Federation had tacitly accepted the claim), but had never occupied it. The Tholians now claim it as their own and defend it fiercely, which explains the considerable hatred between them and the Klingons.

The Klingons could probably crush the Tholian Holdfast at will, but have been unable to spare enough ships to do so without dangerously weakening their other frontiers. Also, the Federation has announced that it will not tolerate "aggression" against the Tholians. This would presumably involve Federation fleets operating in neutral or Klingon territory, since foreign forces are not welcome inside the Holdfast. The Tholians have denounced Federation assistance and declared strict neutrality, but are fully aware that their survival in a crisis would depend on Federation assistance. The Tholians are masters of playing off one side against the other; the first principle of war taught in their academy is "Let's you and him fight."

The Tholians suspect that some of their former subjects may be looking for them, and want to avoid becoming noticeable. No evidence of such search missions was known to the Federation prior to the General War. The Andromedans have definitely been ruled out. It is not known if the searchers are operating in a clandestine mode, haven't searched this far yet, or aren't searching at all. The Tholians aren't taking chances.

The Klingons, in an effort to keep pressure on the Tholians without starting a war with the Federation, maintain a strong squadron of ships in the area and create "incidents" on a regular basis. Klingon ships are rotated through this squadron for combat training.

The Tholians never attack anyone and venture into neutral territory only rarely. There is no pirate activity inside the Holdfast and no smuggling across its border. Incidents with the Romulans have been reported, but by and large the Romulans prefer to leave the Tholians alone; the Romulans have enemies enough.

During the General War (Y168-Y185) the Tholians became considerably more cooperative with the Federation and its allies. During one period, Gorn and Kzinti ships were allowed into the Holdfast to assist in its defense. (Federation ships were excluded because the Tholians did not want to provide any more information than necessary to their most powerful neighbor.) During one period a small Tholian force was sent into the Federation (see Operational Cavalry, scenario SH11) to assist in an attack on the Klingons.

The use of "webs" by the Tholians is thought to stem from the advanced electromagnetic systems that they developed to move an entire planet. All other Tholian weapons are identical to existing Federation or Klingon types. It is not known if these are copies or native to the Tholian race.

The Tholians use only ships with hulls the size of the PC-class (or with two or three of them welded together) because the only

forging facilities they have are those of the former provincial capital. Such a facility was never intended to build heavy starships. Larger ships were presumably built at a few centralized shipyards.

This points out the single most important facet of the Tholians. They are not an entire race, but only a group (albeit over a billion individuals strong) of refugees. There is simply no one available who knows how (or has been able to figure out how) to design a forge to cast larger hull plates. The Tholians have electronic gear that they can build but do not know how to repair, weapons that they can understand and maintain but do not have the skills to build, and automatic machinery that can turn out copies of devices that they could never design.

(R7.2) PATROL CRUISER (PC): When the Tholians arrived in our galaxy (Y797), their only shipyard was unable to build anything larger than this ship, which was considered a frigate in their own galaxy. While highly maneuverable and packing a good punch (four phaser-I's), it is slower than other ships and has no rear firing weapons. It does have web generators, which are used to capture or slow down enemy ships. Fighting from behind webs, these ships successfully protected the Holdfast for almost 60 years, until the heavier "cruiser" design (Volume II) appeared. The seven hull boxes can be hit on forward or aft hull hits.

(R7.3) IMPROVED PATROL CRUISER (PC+): This is a minor modification to the standard PC, replacing the web generators with phaser-III's (one firing LS, the other RS) and with a larger impulse engine (three boxes instead of two). It is otherwise identical to the PC.

(R7.4) DESTROYER (DD): With considerable difficulty (and perhaps with clandestine Federation technical support and certainly with captured Klingon disruptors that they have been able to copy), the Tholians succeeded in modifying a few of their PC-class ships to this drastically improved model. No SSD is provided for the DD; players must make relatively minor changes to the SSD of the PC as follows: reduce the hull to five boxes; add one disruptor (FA + L) to the left side and another (FA + R) to the right side in place of the removed boxes; increase each engine to eight boxes; increase the shields to 27 boxes each; add one phaser-III to the left (LS) and one to the right (RS); increase the shuttle bay to two boxes; increase the number of tractor beams to two boxes. The five hull boxes can be hit on forward or aft hull hits. An SSD was printed in *Nexus* #6.

(R8.0) THE ORION PIRATES

(R8.1) ORION BACKGROUND: The Orion Pirates are difficult to describe as a political entity. Orion is a member of the Federation, and one of the most economically aggressive, both within and outside Federation territory. Officially (according to the Orion Government, anyway), the pirates are simply individual privateers and criminals, many of whom are not even Orions, with no formal organization.

It is believed that the original Orion Pirates were a clandestine arm of the Orion government, using ships provided to them and manned by regular officers and crewmen of their own fleet. Since the early years, however, the Orion Pirates have extended their operations to cover most of the known areas of the Galaxy. The pirates are organized into clans, each controlling all pirate operations in a given area. Many ships are operated by each clan, and many other ships are independent of all clans. These independent ships "lease" an operations area from a clan lord and purchase their needed supplies, weapons, and maintenance from clan facilities.

(R8.2) RAIDER LIGHT CRUISER (CR): The Orion Raider is equivalent to the light cruiser of most fleets. It is an excellent ship for its purpose: attacking cargo ships. While most pirates prefer to prey on unprotected ships, this vessel can defeat or disable most escorts. The SSD shows the typical weapons fit for ships operating in Klingon or Federation territory. The photon and drone boxes on the SSD are, in fact, optional weapons mounts (G15.4). The two boxes on the wings cannot carry Hellbore or PPD weapons. These boxes have firing arcs of LS (for the left one) and RS (for the right one), except for plasma-F torpedoes, which have swivel mounts (FA + R/FA + L). The six hull boxes can be hit on either forward or aft hull hits. The CR has two points of ECM built in (due to its "stealth" design), which function at all times without any energy cost. The ship also has a built-in nuclear suicide bomb; see (D5.2).

(S0.0) SCENARIOS

(S1.0) GENERAL RULES

The game *STAR FLEET BATTLES* includes several scenarios, each representing a battle situation in which the players will use their ships, weapons, and skills to defeat an opponent. The term "scenarios" is synonymous with "situations" and "battles" in this sense. There are several type of scenarios, as will be explained below.

(S1.1) SCENARIO ORGANIZATION

Scenarios, for the most part, are presented in a set format. (This format is also used for scenarios presented in the supplements and future volumes, *NEXUS Magazine*, Captain's Log magazine, and other places.) This format is explained below.

(S1.0) SCENARIO TITLE

Each scenario has a title that identifies the battle it portrays. Included here is background information about the battle, often describing the situation and what you are trying to accomplish.

(S1.1) NUMBER OF PLAYERS

Most scenarios are designed for two players, but some are designed for one and others for three or more. In this section, each player is identified; this identification is then used throughout the scenario.

(S1.2) INITIAL SET UP

This section will give the starting position (or area of arrival) for all units (and anything else, such as a planet) involved in the scenario. Included will be not only location but also speed, direction, and the status of each ship's weapons.

In all cases, where a speed is stated for the ships on the previous turn

(the turn before the scenario began), the maximum possible speed of the ship may not be exceeded. If a scenario calls for a ship to have been moving at a speed faster than it can move, players should adjust the stated speed downward to this limit.

(S1.3) LENGTH OF SCENARIO

In most cases, the scenario ends when one player's forces have either been destroyed or forced to leave. This is not always the case; if it is not, directions will be given.

(S1.4) SPECIAL RULES

Many scenarios include special rules that reflect the tactical situation.

(S1.5) VICTORY CONDITIONS

This section will describe how to determine who won the scenario.

Depending on the scenario, other sections of rules may be provided. These include:

ORDER OF BATTLE VARIATIONS: In many cases the scenario can be played many times with different forces. How a Klingon ship, with its distinctive weapons arrangements, handles a situation or opponent may be substantially different from how a Federation ship handles it.

BALANCE: In some scenarios, suggestions on how to balance the scenario between players of unequal skill are given.

TACTICS: If the situation is unusual, advice on tactics may be provided. Note that this is only a guide for the first time you play the scenario; you will develop your own tactics to suit your own style of play.

INTEGRATION WITH FUTURE VOLUMES: As the *COMMANDER'S EDITION* of *STAR FLEET BATTLES* goes to press, there are plans to produce a second and third volume. These will add new ships, weapons, rules, and scenarios to the game. Should you choose to acquire an expansion volume, you will doubtless want to include many of the newly provided ships in scenarios you are familiar with. Information is included in many scenarios of this first volume as a guide to integrating the future volumes into your gaming.

Note that players should feel free to design their own scenarios or to modify the scenarios shown here to suit their own tastes.

(S1.2) SCENARIO TYPES

The scenario section is one of the exceptions to the alphanumeric rules numbering system. The "S" superscript is used to designate general rules pertaining to all scenarios. The scenarios themselves, however, are divided into four categories, each defined by a different 2-letter superscript and numbered independently. Should a future expansion volume create a new category, a unique two-letter superscript will be assigned to it.

GENERAL Scenarios are those that represent a type of battle that occurred frequently during the universe history. These scenarios do not represent a single battle, but many battles happened along the lines shown. The superscript for these scenarios is "SG."

HISTORICAL Scenarios represent specific battles that occurred between specific people and ships on a specific date during the universe history. Historical scenarios can be modified into general scenarios by substituting non-historical participants. For example, players might play a historical battle between the Klingons and Federation, but substitute the Kzintis and Lyrans to determine how their technology would have functioned in that environment. The superscript for historical scenarios is "SH."

MONSTER Scenarios are those in which one of the participants is not a starship, but a creature of some type that lives in space. The superscript is "SM" for monster scenarios.

SUB-LIGHT Scenarios refer to those set in the pre-warp power universe, before ships could exceed the speed of light. The superscript "SS" is used for sub-light scenarios. There are no sub-light scenarios in Volume I.

It should be noted that scenarios also appear in two publications. Scenarios in *CAPTAIN'S LOG*, the official magazine of *STAR FLEET BATTLES*, are designated "SL" while those appearing in *NEXUS* (a general gaming magazine published by Task Force) are designated "SN."

(S2.0) VICTORY CONDITIONS

Players may use this system to score some of the scenarios with this game, or in determining a balanced force for a game.

(S2.1) BASIC POINT VALUE: All ships are assigned a basic point value (BPV), as shown on the MASTER SHIP CHART.

(S2.11) The BPV of a ship includes its administrative shuttles, but does not include mines, fighters, or P/F's.

(S2.12) The BPV of some ships is shown as two numbers (A/B). In these cases, the first number is the "Economic BPV," which reflects the cost of building the ship and its relative value. The second number is the "Combat BPV," which reflects its relative combat power.

(S2.2) STANDARD VICTORY CONDITIONS: The use of these values in the basic victory system is as follows:

A — Before the scenario begins, both players total the "Combat BPV" of their ships. The player with the lower total scores points equal to the difference between the two if none of his units disengage or surrender by the end of turn 2.

B — In volume II, players are given the option of "purchasing" extra weapons or other equipment by paying victory points to the enemy.

C — After the scenario is over, each player scores points based on the "Economic BPV" of the opposing ships on a ship by ship basis using the percentages shown in (S2.21).

When using the MODIFIED VICTORY CONDITIONS ignore step A and use only steps B and C.

(S2.21) In determining victory in multi-ship scenarios, use the following percentages:

For scoring any internal damage	=	10% of BPV
For forcing a ship to disengage	=	25% of BPV
For crippling an enemy ship	=	50% of BPV
For destroying an enemy ship	=	100% of BPV
For capturing an enemy ship	=	200% of BPV
Only one of the above (the greatest)		may be scored for each

enemy ship in play. Round fractions of 1/2 or more up; 0.499 or less down.

If using (D3.6), ignore the 10% for "any internal hits."

EXAMPLE: A Federation CC is fighting a Klingon D7 in scenario (SG1.0) THE DUEL. The BPV of the CC is 137; that of the D7 is 117, so the Klingon player scores 20 points. The Federation player also purchases some additional weapons and equipment (14 points worth), so the Klingon player scores an additional 14 points. In the course of the scenario, both players scored internal damage on the enemy. The Klingon ship was crippled (S2.3), but the Federation ship disengaged to avoid being hit by several Klingon drones. Thus, the Federation player scored 58 points for crippling the D7; The Klingon player scored 34 points for forcing the Federation ship to disengage, plus the 34 points he received for play balance. The score is thus 68 to 59 in favor of the Klingon ship, which thereby won the scenario. Since this score (68/59) is 115%, the Klingon won a marginal victory (S2.3). Note that while the Klingon ship was badly damaged, it did force a much more powerful ship to leave the area. Had it been the Klingon ship that disengaged, however, the score would have been 59 to 48, a victory for the Federation.

(S2.22) In the case of Orion Pirates, these percentages are:

Internal damage	= 10%	Destroyed	= 100%
Forced disengage	= 0%	Captured	= 500%
Crippled	= 50%		

Damage from Orion engine doubling does not count for purposes of "scoring internal damage."

(S2.23) For fighters and shuttles the percentages are (retain all fractions in the case of fighters and shuttles):

Internal damage	= 25%	Destroyed	= 100%
Over half damage	= 50%	Captured	= 100%

(S2.24) In the case of all of these percentages, round any fractions of 0.500 or more up to the next higher number, those of 0.499 down to the next lower one. Exception: See (S2.23).

(S2.3) LEVELS OF VICTORY

To determine the level of victory, divide your score by that of your opponent, express the result as a percentage, and consult the following table:

PERCENTAGE	LEVEL OF VICTORY
500% +	ASTOUNDING VICTORY
300%-499%	DECISIVE VICTORY
200%-299%	SUBSTANTIVE VICTORY
150%-199%	TACTICAL VICTORY
110%-149%	MARGINAL VICTORY
91%-109%	DRAW (tie)
67%-90%	MARGINAL DEFEAT
50%-66%	TACTICAL DEFEAT
33%-49%	BRUTAL DEFEAT
20%-32%	CRUSHING DEFEAT
19%-	DEVASTATING DEFEAT

In the example given above, the Klingon player scored a "marginal victory" in the first case, and suffered a "marginal defeat" in the second. If any score is less than one, assume it to be "one."

(S2.4) CRIPPLED SHIPS: A ship is assumed to be crippled when it has:

A: 10% or less of its original warp engines undestroyed.

B: 50% or more of its interior boxes destroyed. This does not include shields, armor, sensors, scanners, damage control, or excess damage.

C: Any excess damage hits (except from an "any hit" card in the Battle Damage: Code Red system scored on excess damage when other systems are available for the hit to be scored on).

D: All of its control spaces destroyed.

E: All of its weapons destroyed.

Only one of these conditions need be met to consider a ship crippled, not all five. The definition of weapons for condition "E" is given in Annex #7D. Note that this definition of a crippled ship is used for victory conditions (S2.2), emergency life support, and other uses. Also note that this applies to ships and bases only, not to fighters or shuttles.

(S3.0) BALANCING SCENARIOS

The problem of producing a balanced scenario (one that gives both sides a fair chance to win) is compounded by different levels of skill and styles of play among gamers. To compensate for these things, which are beyond the control of the game and scenario designers, players may wish to make modification to certain scenarios in order to improve their balance. This can be done by modifying the scenario, by equipping the ship with improved weapons, or by modifying the ship.

(S3.1) MODIFYING SCENARIOS

No all-encompassing rule is possible in this regard, but certain basic principles can be used as a guide.

The easiest way to modify a scenario is to exchange one of the ships shown in the set-up instructions for a larger one or a smaller one. Another alternative would be to apply several points of random, or carefully selected, damage to one of the ships.

Other alternatives include limiting a ship's ability to accelerate, limiting its top speed, restricting its maneuvering room by requiring it to remain in a certain area, or placing terrain features that may be more advantageous to one side than the other.

One more subtle approach is to give the stronger player an additional ship, but one that is weak (such as a freighter) or badly damaged in an (assumed) earlier battle. This ship will be more of a liability than an asset.

Another possibility is to "spot" an opponent a number of points, which are added to his score at the end of the turn.

There are many more ways in which a scenario can be modified. Usually, the fairest way to approach it is for one player to propose a scenario and its modifications, and then for the other to choose which side he wants to play.

(S3.2) IMPROVED WEAPONS

Annex #6 lists several systems that can be modified to balance a scenario. Most of these are "ammunition" rather than modifications to the ship itself. For example, a ship could equip itself with transporter bombs, extra boarding parties, or (if it is a carrier) with extra deck crews allowing its fighters to be rearmed more quickly. The point values from Annex #6 are used in Section B of the Standard and Modified Victory Conditions.

(S3.3) MODIFYING SHIPS

Players can make certain modifications to their ships to balance scenarios or create a special purpose ship. Starbases can receive the same modifications as size class 2 ships. PFs cannot be modified except as noted in the published rules. Note that, from time to time, ship modifications may be published which exceed the limits specified in this rule section. The game design staff, with access to more information, are able to determine the feasibility of such variants.

(S3.31) Annex #6A lists the point value of various weapons and other systems which can be used to modify the ships presented in the game. It should be noted that the use of foreign technology may be strictly limited by the participants in a campaign game. When using the Standard Victory Conditions, this modifies the BPV of the ship for steps A and C. When using the Modified Victory Conditions, this only counts for step C. Note that changes in drone speed change the BPV of the ship, while changes in drone type are accounted for in Step B.

(S3.32) Modification of ships is under certain restrictions. The BPV of the ship may not be increased by more than 20%. (If the BPV of the ship is 50 or less, the maximum change is 10 points. If the BPV of the ship is 150 or more, the maximum change is 30 points.) No more than four boxes (not counting shields, sensor, scanner, or damage control) may be added to the SSD of a ship of size class 2; no more than three boxes may be added to a ship of size class 3; and no more than two boxes may be added to a ship of size class 4. No more than four weapons (see Annex #7D) can be added to a ship of size class 2 or 3; no more than three weapons can be added to a ship of size class 4. These are net changes after removing systems as shown below. The total value of new systems added, including those that replace old systems, cannot exceed 30% of the ship's BPV. (If the BPV of the ship is 50 or less, the maximum change is 15 points. If the BPV of the ship is 150 or more, the maximum change is 45 points.) No more than 10% of the hull or cargo boxes of a ship may be converted to other systems.

(S3.33) Systems may be removed from a ship to make room for additional modifications. In that case, the point value of the old system is deducted from the ship's BPV and the point value of the new system is added. The ship's BPV might actually be less after modifications are complete, but it cannot be reduced by more than 10% in any case. No more than 10% (round fractions down) of the hull boxes may be removed or converted.

(S3.34) Note, in the case of ships with modification (such as the Fed CA/CC or Rom WB/WE), these modifications can be purchased on a box-by-box basis even if doing so violates the limits. However, ships of different classes combined for the convenience of the SSD sheet (such as the Kzinti CS/CL) are not included in this condition.

(S3.35) The following systems can be removed or added, but cannot be replaced with anything else if removed: damage control, sensor, scanner, ability to control drones equal to double sensor rating, warp engines.

(S3.36) Certain systems are large and count as two boxes when adding, removing, or replacing boxes: plasma-S, plasma-G, expanding sphere generator, plasmatic pulsar device, web caster, stasis field generator.

A type-R plasma torpedo counts as four spaces when adding or removing weapons.

Phaser-IVs count as two spaces, but can never be installed on anything but a base. Phaser-IIIs count as 1/2 of a space when they are removed, but as a full space when added.

(S3.37) ADDITIONAL RESTRICTIONS

(S3.371) Damage control is per point, a box with "6" in it costs six points to add and counts as one box.

(S3.372) When replacing a shuttle with a fighter, the two-point cost includes the ready rack and one deck crew. The value of the shuttle is deducted from the cost of the fighter (or MRS), but is not deducted from the cost of ready racks or an F-rack.

(S3.373) The addition of modules (PF, hangar, power, etc) to a base is not within the limits specified under (S3.32), but any modification of those modules is under the limits specified.

(S3.374) If shuttles are added to a ship, the first two are not considered within the "no more than four weapons" limit; others are. If shuttles are replaced by F-racks, the racks are included within the "four weapons" limit (S3.32).

(S3.375) Any percentage increase (as in crew quality or a cloaking device) is not limited by (S3.32). The increase is calculated on the value of the ship after all other modifications.

(S3.4) BIDDING

One of the most fascinating approaches involves "bidding." Generally, one player designs a scenario (or uses or modifies a published one), and then invites other players (possibly including himself) to "bid" on taking one side. Exactly what is being bid will be specified in the scenario. For example, one player might suggest a scenario involving a convoy and a pirate ship. The players would then bid on the basis that they will take the pirate if given so many points to modify the pirate's ship. The player who submitted the low bid would then take the pirate and use a number of points equal to his bid to modify the ship before the scenario begins. Bidding can also be used by specifying one side of a scenario (and the victory conditions), then holding an auction to determine who will play the other side. The low bidder then buys his entire force (including modifications) with the points that he bid.

(S4.0) WEAPONS ARMED STATUS

Life on a starship has been described as "six months of boredom and six minutes of stark, screaming, terror." This rather romantic description is very accurate. Starships may patrol for months or years without ever being called upon to use their weapons. The scenarios that players of the game play or create represent the "few minutes of action" that follow months of patrolling.

Because of this situation, starships simply do not patrol with their weapons "loaded." Besides being expensive in terms of power (and hence fuel) and hard on the maintenance crews (who have enough to do), it is outright dangerous. (Even on a starship, safety is a top priority.) Thus, a ship entering a scenario will not likely have all (or perhaps any) of its weapons armed.

In some cases, for reasons given in the scenario introduction, the ship may have had a warning that action was expected, and this is reflected in the instructions. For example, a ship attacking a base knows exactly where its target is located (the base has been there for decades) and hence knows exactly when it will go into action. The base, which hasn't seen an enemy ship in years, has no particular reason to know that TODAY is THE DAY that the enemy will attack.

(S4.1) ARMING STATUS

For game purposes, a ship is presumed to have its weapons armed to one of the following levels, known as the ship's "WEAPONS STATUS."

WEAPONS STATUS 0: Phasers not energized, no energy in phaser capacitors, no torpedoes (or other multi-turn arming weapons) loaded. No scatter-pack, wild weasel, or suicide shuttles may be prepared. Drone racks and plasma-F launchers (or plasma-F holding boxes) are loaded. No energy may be stored in ESG systems. Carriers may have two of their fighters armed with drones (but no other reloadable weapons), but no other fighters may be armed with any reloadable weapons.

WEAPONS STATUS I: Phasers may be energized, but otherwise the same as Status 0.

WEAPONS STATUS II: Phasers may be energized and the capacitors fully charged, prior turns arming (but not the last turn) for multi-turn arming weapons may be assumed to have been completed on turns prior to the start of the scenario, energy may be stored in systems designed to hold it, one administrative shuttle may be prepared for a special role. Carriers may have completed two turn's activity by their deck crews, and two of their fighters may be launched and placed on the board within two hexes of the carrier.

WEAPONS STATUS III: Same as Weapons Status II, plus all fighters may be armed; all administrative shuttles may be prepared for special roles. Multi-turn arming weapons may be assumed to be fully armed and are being held in their launch tubes; in this case holding energy must be allocated on the first turn. Note that weapons which cannot be held (e.g. Plasma-R torpedoes) cannot be completed to this point.

Note that at all levels of a ship's weapons status, the owning player may elect to have some or all of his weapons armed to a lower status for tactical reasons.

(S4.2) DETERMINING STATUS

In general scenarios players may roll to determine the weapons status of their ships. (In historical, and some other, scenarios it is specified.) The purpose of the rule is to simulate the above-described fact that a ship would not waste energy keeping weapons warmed up for months or years just in case an enemy happened to show up. This would only happen if the enemy was detected.

(S4.21) Each player rolls a single die. One die is rolled for the entire fleet, but it may be modified on a ship by ship basis depending on certain conditions. In this case, one ship of a fleet might have weapons armed while another didn't.

(S4.22) The die roll is increased by one (these effects are cumulative) if:

- The ship has a legendary captain or weapon officer.
- The ship has an "outstanding crew."
- This ship has scout functions (G24.0). (This effect counts for the entire fleet.)
- The ship is Orion (they always expect trouble).

(S4.23) The die roll is reduced by one (these effects are cumulative) if:

- The ship has a "poor" crew.
- The ship has a sensor rating less than six.

(S4.24) The effects of (S4.22) and (S4.23) will offset each other if both apply. The final result can be no more than +2 and no less than -2.

(S4.25) The final, adjusted, die result determines the weapons armed status as per the chart below:

DIE ROLL	WEAPONS STATUS
less than 3	0
3-4	I
5-6	II
7-8	III

(S4.3) RESTRICTIONS AND CONDITIONS

(S4.31) This "armed" condition can be used to balance the scenario.

(S4.32) Prior turns arming allowed by weapons status II or III cannot include overload energy. For example, a Federation ship with WS-II cannot claim to have expended 6 points per tube overloading its photon torpedoes on the turn before the scenario began.

(S4.33) See (G23.23) for rules concerning ESGs.

(S5.0) LOCAL CONDITIONS *(Optional)*

In order to introduce some variation to the scenarios of a campaign game (or regular gaming), players may choose to use the chart below to determine the "Local Conditions" in the area of their scenario. This will produce a random "terrain" feature that will prevent the scenarios from all being more or less the same.

(S5.1) LOCAL CONDITIONS CHART

At the start of each scenario, roll two dice (either player can do the honors, or each player can roll one) and use the total to determine the local condition from the chart below.

- 2-BLACK HOLE
- 3-NEBULA
- 4-PLANET AND MOON
- 5-WANDERING MONSTER
- 6-ASTEROID BELT
- 7-EMPTY SPACE
- 8-OLD MINEFIELD
- 9-PIRATE
- 10-GAS GIANT
- 11-VARIABLE PULSAR
- 12-ROLL AGAIN, TWICE

(S5.2) EXPLANATION OF RESULTS

Each result from the chart creates certain special conditions, which are described as follows:

2-BLACK HOLE: A Black Hole (P4.0) is located in hex 1720.

3-NEBULA: The scenario takes place inside a Nebula (P6.0).

4-PLANET AND MOON: A class-M planet (P2.21) is in hex 2420. A small moon is in hex 1514.

5-WANDERING MONSTER: A monster is in hex 2220. Roll one die to determine which monster is present:

- | | |
|----------------|-----------------|
| 1-Planet | Crusher (SM1.0) |
| 2-Space Amoeba | (SM2.0) |
| 3-Moray Eel | (SM3.0) |
| 4-Cosmic Cloud | (SM4.0) |
| 5-Sun Snake | (SM5.0)★ |
| 6-Mind Monster | (SM6.0)★ |

* These are in Volume II. Players who do not have that volume should use (SM3.0) instead. Players may wish to use the two monster tables from (U2.11).

The scenario is then resolved with the monster unfriendly to both players. Scenario (SG9.0) can be used to resolve it by a different means.

6-ASTEROID BELT: Set up an asteroid belt (P3.1).

7-EMPTY SPACE: No local conditions, simply an empty map. When not using the local conditions rule, most scenarios are of this type.

8-OLD MINEFIELD: Set up an asteroid belt (P3.1), but in this case the asteroid counters do not represent asteroids but nuclear space mines (M2.0) of an old minefield. The minefield is neutral. Each mine hex includes one large mine set to trigger on ships of size 4 or larger and one small mine set to trigger on units size 5 or smaller.

9-PIRATE: A pirate CR is in hex 2020, unmoving, weapons status III, all extra energy in general shield reinforcement. At the start of each turn, before the Energy Allocation Phase, both players roll one die. Each keeps a running total of his die rolls. When the total die rolls of one player exceed those of the other by 10 (or by some other number if mutually agreed) the pirate ship automatically and immediately joins (comes under the control of) that player.

Alternatively, if the pirate is fired on by either player, the other player immediately and automatically assumes control of the pirate and the die roll procedure is dropped. In any event, the pirate ship will disengage (C7.4) at the end of any turn in which it is crippled. It should be noted that attacking the pirate is a worthwhile option, since crippling it (with a surprise blow) would score 43 points. If both shoot at the pirate simultaneously, it joins the player who scored the least amount of damage.

If this condition appears in scenarios involving pirates, assume the pirate to be of a different clan.

10-GAS GIANT: A Gas Giant (P2.22) is located in hex 1815. Roll one die to determine the radius; consider a die roll of "1" or "2" to be "3". (If the die roll is 3, the planet would extend from 1515 to 2115 and from 1812 to 1818.) The outer ring (example, hex 1812 above) is atmosphere (P2.6). Rings two hexes wide surround the planet; there is a one hex gap between the planet and rings. (In the above example, hex 1811 would be clear, hexes 1810 and 1809 would be ring hexes.)

11-VARIABLE PULSAR: A Variable Pulsar (P5.0) is in hex 1720.

12-ROLL AGAIN, TWICE: This creates two overlapping conditions. Roll again, twice, and use both results except that:

- another "12" is ignored.
- In the event of a Black Hole, ignore the other result.
- If both #4 and #10 are rolled, ignore #4.
- In the event of a Variable Pulsar, ignore the other result unless it is a Black Hole.

(S5.3) RESTRICTIONS AND CONDITIONS

Certain conditions and restrictions must be applied to this system.

(S5.31) If terrain is specified in the scenario, do not use the local conditions system.

(S5.32) If a base is specified for the scenario, ignore conditions 2, 3, 5, 8, 9, and 11. If the base is within three hexes of a planet (or ring), the owner of the base must move it to any hex (of his choice) that is four hexes from the planet.

(S5.33) Ships specified to set up in specific hexes may be moved (by the owning player) up to six hexes in any direction to avoid conflict with one of the local conditions.

(S6.0) DEFEATING MONSTERS

Monster scenarios (SM) often use the chart below to determine victory over the creature.

DIE ROLL HOW TO DESTROY MONSTER

- 1 Monster can be destroyed by a suicide shuttlecraft.
- 2 Monster can be destroyed if held in a tractor beam.
- 3 Monster can be destroyed by 200 points of damage from any weapons.
- 4 Monster can be destroyed by a probe (G5.3).
- 5 Insufficient data. Accumulate 100 more points of information and roll again.
- 6 Communication established with Monster. It becomes friendly and you are not required to destroy it.

If you have scored more than 50 points of damage on it, you lose the scenario.

(SG0.0) GENERAL SCENARIOS

The scenarios in this section can be adapted to almost any race at almost any time period. They represent typical situations which occurred countless times during the period of the game.

(SG1.0) THE INTRODUCTORY SCENARIO (THE DUEL)

This scenario depicts typical cruiser actions in deep space. For whatever reason, two hostile cruisers have come into contact, and all attempts to peacefully resolve the situation (whatever it is) have failed.

(SG1.1) NUMBER OF PLAYERS: 2

(SG1.2) INITIAL SET UP: One Federation cruiser in hex 0730, facing A, was at speed 15 on previous turn. One Klingon D7 battlecruiser in hex 4203, facing E, was at speed 15 on previous turn. (Note that any two ships of relatively equal size can be substituted for those shown.)

(SG1.3) LENGTH OF SCENARIO: The scenario proceeds until one ship is either destroyed, captured or has disengaged. In a historical context, destruction or capture of an enemy ship would be extremely rare. In an actual battle, the first ship to take serious damage would disengage.

(SG1.4) SPECIAL RULES: Both ships are at weapons status II.

(SG1.5) VICTORY CONDITIONS

Enemy ship captured: DECISIVE VICTORY, Captain will become Admiral in 1 to 3 years; First Officer will be made Captain at end of cruise; crewmen share in prize money; significant gain in knowledge of enemy technology.

Enemy ship destroyed: SUBSTANTIAL VICTORY, same as above, but no prize money or gain in technology.

Enemy ship crippled: TACTICAL VICTORY, decoration for valor in action and a reputation for being a "tough fighter."

Enemy ship disengages: MARGINAL VICTORY, Commendation from Fleet Command, veiled comments about your inability to win a decisive victory.

If your ship was crippled, then the victory is reduced by one level.

If a ship disengages without being crippled, the captain receives a commendation (based on his report of how much MORE damage he scored on the enemy ship before "enemy reinforcements" arrived). If a ship disengages after being crippled, the captain will face a review board but will probably be exonerated (although if this happens too often, he will probably be promoted to a desk job or forced to take "early retirement"). Thus, a player who disengages will actually receive the same reward as the player who did not. Of course, both players will know who actually played better.

(SG1.6) VARIATION: Players may, at their option, substitute other ships into the scenario, or increase the number of ships. If more ships are used, the extra ships should be deployed within three hexes of the first ship. Any two ships (or one large one vs. two small ones) can be used in this scenario. The Klingon and Federation dreadnoughts and the Kzinti carrier should match against each other rather well. Players should also explore the world of the smaller ships: frigates, destroyers, escorts. These are quite powerful ships in combat with each other. (Klingon frigate captains are always looking for a chance to distinguish themselves. Where do you think Klingon battlecruiser captains come from?)

(SG1.7) INTEGRATION WITH FUTURE VOLUMES: Volume II (and later volumes) of the Commander's Edition of STAR FLEET BATTLES includes many new ships which could be used in a duel situation.

(SG2.0) FLEET ACTION

Fleet actions are rare events (outside of wars) in the history of this section of the Galaxy. Most combat has been between individual ships. However, on occasion some particular incident or situation (a contested planet, a pirated freighter, a raid by a lone cruiser that must be avenged, etc.) sets the stage for a meeting of the fleets.

(SG2.1) NUMBER OF PLAYERS: There are two sides in this battle. Any number of players may participate as two teams. The ships of each side may all be operated by a single player, one player may operate each one, or each player may operate two or three ships.

(SG2.2) INITIAL SET UP: Force "A" sets up in any hex or hexes with first digits of "01" through "04." Force "B" sets up in any hex or hexes with first digits of "38" through "42." Facing is at the option of the owning player. Speed last turn for all ships was 10.

(SG2.3) LENGTH OF SCENARIO: The scenario continues until all ships on one side have been captured, destroyed, or have disengaged.

(SG2.4) SPECIAL RULES: All ships are at weapons status II.

(SG2.5) VICTORY CONDITIONS: Use the Standard Victory Conditions.

(SG2.6) ORDER OF BATTLE VARIATIONS: Any of the following forces may be used as Force "A" or Force "B":

FEDERATION: 1xDN, 1xCA, 2xCL -or- 1xCC, 2xCA
-or- 1xCC, 1xCA, 2xCL -or- BT + 2xCL -or-
BT, 3xDD -or- DN, CA, DD, SC -or- CC, CA, 3xDD
KLINGON: 1xD7, 3xD6 -or- 3xD7 -or- C8/9, D7, D6, F5
-or- 2xC8/9, 2xF5 -or- 2xD6, 2xF5, 2xE4
KZINTI: 1xCS, 3xCL -or- 2xCS, 2xCL -or- CV, 3xCL
-or- CV, CS, 3xFF
ROMULAN: 4xWB -or- 3xWE -or- 3xKR -or- 1xKR, 2xWE, 2xWB
GORN: 2xCA, 2xCL -or- 3xCA -or- 2xCA, 3xDD
-or- 2xCA, CL, 2xDD

Players may, and should, feel free to experiment by using different combinations of ships. Alternatively, some substitutions could be allowed. In a battle between the Federation and Romulans, for example, a Gorn CA could be substituted for a Federation CA.

(SG2.7) INTEGRATION WITH FUTURE VOLUMES: Players in possession of Volume II (or a later volume) of the Commander's Edition will note that many more ships (and several more races) are available, creating an almost limitless number of combinations. By the time the average player has mastered Volume I and proceeded to Volume II, he will be well able to build fleets by point values and will have no need of proposed fleet lists.

(SG3.0) BASE DEFENSE

Along the frontiers of all the races in the game are outpost stations. These provide early warning of intrusion, in addition to being bases for patrols. In the event of war, the first action of an invading enemy fleet must be to destroy the bases opposing it. Even during times of relative peace, an enemy force might cross a border to attack or destroy a base. This could be done simply as a "war of attrition" or to create an opportunity for smuggling or infiltration.

(SG3.1) NUMBER OF PLAYERS: 2; the "friendly" player who operates the base and the ships that arrive to rescue it, and the "hostile" player who operates the ships attacking the base.

(SG3.2) INITIAL SET UP: One base station in hex 2215. Up to three "hostile" ships (maximum BPV of 225) enter the map on turn one in any hex starting with 42. One or more "friendly" ships (maximum BPV of 135) enter on a later turn. (Note that, for beginning players, possible forces are listed below.) Facing is at the option of the owning player. Speed on previous turn was 10 for enemy force and maximum for friendly ship, which enters on any hex starting with "01".

(SG3.3) LENGTH OF SCENARIO: The scenario continues until the base is destroyed or captured, or the three hostile ships are destroyed, captured, or forced to disengage.

(SG3.4) SPECIAL RULES

(SG3.41) The friendly player draws a card from a deck of playing cards (eliminate all cards from 5 through Ace, leaving only 2-4). The card drawn will show the turn of arrival. It is kept secret until the turn of arrival, then shown to the opposing player.

(SG3.42) The attacking ships are at weapons status II; the defending ships are at weapons status III; the base is at weapons status I.

(SG3.5) VICTORY CONDITIONS: For the friendly player:

Each enemy ship captured:	7 points
Each enemy ship destroyed:	5 points
Each enemy ship crippled:	3 points
Each enemy ship disengaged:	0 points
If his own ship is crippled:	-2 points
Loss of his own ship:	-4 points
If the base is crippled:	-6 points
Loss of base:	-12 points

Victory is determined simply by the point total. A positive score indicates a "friendly" player victory, while a negative score indicates an "enemy" victory.

(SG3.6) ORDER OF BATTLE: The table below provides the players with a selection of forces for both the side "friendly" to the base and the "enemy."

RACE	FRIENDLY PLAYER	ENEMY PLAYER
Federation	1xCA	1xCA + 1xCL -or- 1xCC + 1xDD
Klingon	1xD6	1xD7 + 1xD6 -or- 1xD6 + 2xF5
Romulan	1xWE or KR	3xWB -or- 1xKR + 1xWE
Kzinti	1xCS	1xCS + 1xCL -or- 1xCV + 1xFF
Gorn	1xCA	1xCA, 1xCL
Orion	--	3xCR
Tholian	2xPC	--

The CV does have its fighters. These forces can be altered to produce a balance of forces suitable to the players.

(SG3.7) VARIATION: Use a battle station instead of a base station, and either increase the attacking force or use cards 3-8 from the deck.

(SG3.8) INTEGRATION WITH FUTURE VOLUMES: In Volume II players will find rules on minefields, which would make the scenario more interesting but require a more powerful attacking force. Rules to operate fighters from bases are found in (R1.4), but most fighters are in Volume II or Supplement #1.

(SG4.0) BASIC PIRACY

In this scenario, one player will be operating a convoy and the other a single Orion Pirate Raider. The convoy player will select his forces from the list below.

(SG4.1) NUMBER OF PLAYERS: 2; the convoy player, who may be of any race except Orion, and the Orion player.

(SG4.2) INITIAL SET UP

CONVOY: From three to six freighters, one each in hexes 2316, 2117, 1918, 2519, 2320, 2121. One escort (if desired) within three hexes of any freighter. All heading in direction B, speed 6, weapons status 0.

PIRATE: One Orion CR cruiser enters on any map edge, heading and previous speed at discretion of owner, weapons status III.

(SG4.3) LENGTH OF SCENARIO: The scenario lasts until all ships belonging to one player have been destroyed, captured, or have disengaged.

(SG4.4) SPECIAL RULES

(SG4.41) Use a floating map.

(SG4.42) All ships of the convoy must remain together. Every ship must be within 10 hexes of every other ship of the convoy (not counting ships captured by the Orion).

(SG4.43) On turn 6 begin rolling a die once each turn, before the Energy Allocation Phase. When a "1" is rolled, discontinue rolling. This indicates that the SOS messages have been received and the relief force has arrived (on that turn). This relief force, which is friendly to and operated by the convoy player, consists of one cruiser (or two frigates or destroyers) of the same race as the convoy. It arrives in any hex 35 hexes from the nearest convoy ship, facing, speed, and weapons status at the option of the owning player.

(SG4.44) The convoy player may have an escort. This is the smallest warship or police ship available (non-PF) from his race. He must pay a penalty (see below) of 1/3 of the BPV of this escort.

(SG4.45) The convoy player may include a Q-ship in his convoy. He must pay a penalty equal to the BPV of the Q-ship if one is included. Note that the special Q-ship rules must be used whether one is in the convoy or not to avoid giving away the fact.

(SG4.5) VICTORY CONDITIONS: The convoy player receives 10 victory points for each large freighter and 5 for each small freighter that he had in his convoy. Any penalties for Q-ships or escorts are deducted. After the scenario is completed, add victory points from the Modified Victory Conditions to determine victory. However, if the Orion ship is captured, the game is automatically won by the convoy player.

(SG4.6) INTEGRATION WITH FUTURE VOLUMES: Volume II includes several additional pirate ships, escorts, and freighters. These could be added to the scenario.

(SG5.0) DUEL WITH A PIRATE

This scenario uses the basic concepts of (SG1.0) but is specifically geared to combat with an Orion Raider.

The Orion player will use a CR cruiser (players may consider modifying it to suit a particular opponent). The "police" player has a choice of:

Federation light cruiser, Klingon D6, Kzinti light cruiser, Gorn light cruiser, or Romulan War Eagle.

Use the Modified Victory Conditions.

INTEGRATION WITH FUTURE VOLUMES: Orion heavy cruisers and light raiders are provided in Volume II; other Orion ships will appear in future volumes. Any of these, matched against a suitable opponent, can provide an interesting challenge.

(SG6.0) PURSUIT INTO THE ASTEROIDS

In this scenario a Navy cruiser is pursuing a Pirate towards its home base.

(SG6.1) NUMBER OF PLAYERS: 2; the "navy" player and the "pirate" player.

(SG6.2) INITIAL SET UP: Deploy asteroids using the system outlined in (P3.1).

Pirate: One CR in hex 0517, heading B, speed on last turn 31, weapons status III.

One base station in hex 4017, weapons status I.

Naval: One heavy cruiser (any type) in hex 0327, heading B, speed on last turn 31, weapons status III.

(SG6.3) LENGTH OF SCENARIO: The scenario lasts until all units of one player have been destroyed, captured, or have disengaged.

(SG6.4) SPECIAL RULES: See asteroids (P3.0).

(SG6.5) VICTORY CONDITIONS: The Orion player scores 1 point if the cruiser disengages, 2 if it is crippled, 5 if it is destroyed, and 10 if it is captured. The Navy player scores 1 point if the CR is crippled, 3 if it is destroyed, and 10 if it is captured. He scores 4 if the BS is crippled, 20 if it is destroyed or captured. The player with the higher score wins.

(SG6.6) INTEGRATION WITH FUTURE VOLUMES: Orion heavy cruisers and light raiders are provided in Volume II; other Orion ships will appear in future volumes. Any of these, matched against a suitable opponent, can provide an interesting challenge.

(SG7.0) THE PIRATES GO FOR BIG GAME

On many occasions, a Pirate cruiser operated in a particular sector long enough to attract the attention of main fleet units. Usually this marked the end of the Pirate Captain's career, as few Raiders could stand up to the heavy cruisers of the battle fleet. On a few occasions, however, when things just happened to work out right (or were made to work out right), a heavy cruiser in hot pursuit could find itself facing not one but two or even three Pirates and a stiff fight.

(SG7.1) NUMBER OF PLAYERS: 2; the Pirate player and the Navy player.

(SG7.2) INITIAL SET UP

Orion forces: CR #1 in hex 2219, facing D, speed 31.
CR #2 in hex 0725, facing B, speed 4.

CR #3 in hex 3625, facing F, speed 4.

Naval forces: One cruiser (any type) in hex 2203, facing D, speed maximum.

Note: All ships are at weapons status III.

(SG7.3) LENGTH OF SCENARIO: The scenario lasts until all ships belonging to one player have been destroyed, captured, or have disengaged.

(SG7.4) SPECIAL RULES: None.

(SG7.5) VICTORY CONDITIONS: The Pirate player scores 1 point if the cruiser disengages, 5 if it is crippled, 10 if it is destroyed, and 20 if it is captured. The Naval player scores 2 points for each Pirate crippled, 6 for each Pirate destroyed, and 30 for each Pirate captured. (You can only score points for a given ship one time.)

(SG7.6) INTEGRATION WITH FUTURE VOLUMES: The various Orion ships provided in Volume II can be substituted for CR#2 and CR#3. Suggested are: One CA -or- four light raiders -or- one salvage cruiser carrying fighters or P/F's.

(SG8.0) ASSAULT ON A STARBASE

The most practiced military action, and one that has seldom occurred, is the assault on a starbase by a main battle fleet. Endless debates are carried on in the command schools and service academies of all of the fleet as to the capability of fleet forces to destroy one of the "indestructible" starbases. The few actual assaults, some of which have been successful, are endlessly analyzed.

One of the problems in such an assault is that the attacking forces cannot be a major part of the battle fleet since such a huge force would attract too much attention in its assembly areas. There is also the matter of risking too many ships in one operation and a large force getting in its own way in the assault.

(SG8.1) NUMBER OF PLAYERS: 2; the attacking player and the defending player. (The attacking force may be broken into several smaller units, each requiring a player).

(SG8.2) INITIAL SET UP

Starbase player: One starbase in hex 2217, weapons status II (long-range sensors detected the attackers).

Attacking player: One main battle fleet (select from list below) arrives on any map edge (or edges) on turn 1, at any speed selected by the owning player.

Federation: 2xDN, 4xCA, 4xCL, 4xDD

Klingon: 2xC8/9, 3xD7, 6xD6, 3xF5

Kzinti: 2xCV, 5xCS, 5xCL, 4xFF

Gorn: 4xCA, 6xCL, 6xDD

Romulan: 4xKR, 6xWE, 6xKF5R

Weapons status III.

Add to the attacking force:

1. Suicide attack force: 2 small freighters, 1 large freighter, equipped with robot pilots. The freighters are set on pre-established courses (recorded in advance by the attacking player). If a freighter enters the same hex as the starbase, it explodes (the cargo holds are loaded with thionite) with a force of two units of damage for each undestroyed cargo box on their SSD.

2. Marine assault force: 50 boarding parties divided among two small freighters or on board other ships. Each freighter has 5 of its cargo boxes changed to transporters.

(SG8.3) LENGTH OF SCENARIO: The scenario ends when the starbase is destroyed or captured, or when all assaulting ships have been destroyed, captured or have disengaged.

(SG8.4) SPECIAL RULES: The starbase rotates 60° every eight impulses.

(SG8.5) VICTORY CONDITIONS: Use the Modified Victory Conditions (S2.2).

(SG8.6) ORDER OF BATTLE VARIATIONS: It would be possible that two races might join forces to attack a starbase. In such a case, each force of the alliance would use half of the specified main fleet in the attack.

(SG8.7) INTEGRATION WITH FUTURE VOLUMES: Disregard fleet organization and allow the attacking player to choose points of ships from his fleet list. Use the standard victory system instead of the one given. A much more elaborate version of the scenario was in issue #4 of Nexus magazine, including minefields, fighters, etc.

(SG9.0) A VERY SPECIAL ALLY

This scenario represents a situation that is not covered by "the book." Investigating a report of a new monster in an outlying sector, a captain finds his target is being investigated by an enemy ship.

(SG9.1) NUMBER OF PLAYERS: 2 (Each player commands a starship. The monster moves by automatic rules.)

(SG9.2) INITIAL SET UP: Use any of the monster scenarios, but add a second starship. In the case of scenario (SM5.0), ignore the research base. One ship is in 0101, facing C; the other is in 4030, facing F. Both are at maximum speed, weapons status II.

(SG9.3) LENGTH OF SCENARIO: Until one or both starships are destroyed or have disengaged.

(SG9.4) SPECIAL RULES: Players accumulate research points as per (G4.1) in addition to attacking the monster itself and the enemy starship. Research shuttles are fair game and choice targets.

(SG9.41) When a player accumulates 200 points of information, he may consult chart (SM4.5) to determine how he can destroy the monster. (This chart is used no matter which monster is involved.) Result #6 is changed to read "The monster cannot be destroyed." This chart is not consulted by die roll, but by drawing one die-cut counter from six upside-down and shuffled counters which are numbered "1" through "6." (Players may make such a set from blank counters or use six of the "drone" counters.) The first player to reach this information level picks one of the counters and then places it (after noting the number) upside down in any convenient place. When the other player has accumulated this level of information, he may see the counter previously picked. (This insures that both players discover the same "only way" to kill the monster.) If the ship controlling the monster is destroyed, the owning player can maintain control of the monster from a shuttlecraft (if one of his is on the mapsheet). If his ship and all shuttles are destroyed, the monster returns to its randomly wandering nature.

(SG9.42) At the start of any turn after accumulating 200 points of information, either player (or both if they both have that much information) may roll a die in an attempt to establish communication with the monster. This die roll is increased by one for every 20 points (or any fraction thereof) of damage scored on the monster by that player. It is decreased by one for every 25 points of "information" in excess of 200 accumulated by that player. If the adjusted die roll is equal to or less than "1," the player has established communication with the monster. Should both players establish such communication during the same turn, neither player has communication and they must roll again on the next turn. Should either player disengage or be destroyed, the scenario is over and further communication die rolls are not made. Successful communication by one player blocks the other player from attempting to gain communication.

(SG9.43) Upon establishing communication with the monster, a player controls it. Within its own rules, the player will direct where the monster is to go and when it is to attack. (Exception: The Space Amoeba (SM2.0), Mind Monster (SM6.0) and Cosmic Cloud (SM4.0) "attack" because of the nature of their beings. They cannot decline to attack a ship subject to attack under their rules. A player controlling such a monster is effectively limited to moving the monster in such a way as to keep his own ship outside of its lethal radius and to try to get the enemy ship inside that radius.) The Moral Eel (SM3.0), Sun Snake (SM5.0), and Planet Crusher (SM1.0) can all move and fire weapons as if they were a ship (within their own specific rules on movement and combat).

(SG9.5) VICTORY CONDITIONS: Use the Standard Victory Conditions (S2.2), but neither player gets any points for killing the monster.

(SG9.6) TACTICAL ADVICE: There are several options in this scenario, but they boil down to two sets of choices. First, a player can decide to close with the monster and attempt to gain information (and control), or he can avoid contact (and any chance of gaining control). The second set of options is to either fire at the monster or at the enemy ship. If your opponent moves close to the monster, consider firing at him in the hope that he will collapse when attacked from two sources. If he keeps away, consider maneuvering just a little closer to the monster than he is so that you will gain more information than he does, while keeping your weapons firing at him.

(SH0.0) HISTORICAL SCENARIOS

(SH1.0) SABOTAGE

While on a special mission during Y161, the Federation cruiser *Kongo* was suddenly confronted by a Klingon battlecruiser. Fearing possible interference with his mission, Captain Phillip Kosnett ordered the warp engines brought to full power and discovered that they had been sabotaged! The first officer and chief engineer began frantic repairs as the enemy cruiser closed in for the kill.

(SH1.1) NUMBER OF PLAYERS: 2, the Federation player and the Klingon player.

(SH1.2) INITIAL SET UP

Federation CA in hex 0823, facing B, speed 1, weapons status 0. Klingon D7 in hex 0405, facing D, speed max, weapons status III.

(SH1.3) LENGTH OF SCENARIO: Until one ship is destroyed or captured, or has disengaged.

(SH1.4) SPECIAL RULES

(SH1.41) The warp engines of the Federation ship have been damaged by sabotage. They cannot be used, for any purpose, until repaired. Repairs can be accomplished in one of two ways.

(SH1.411) On each turn, the Federation player rolls a single die and records the result. When the total of these die rolls equals 23, his warp engines are repaired and operate normally.

(SH1.412) Instead of making the die roll, the Federation player may on any or all turns order the chief engineer to try to "crash start" the engines. In this case a die is rolled, and if a "1" is the result, the engines start immediately. However, if any other number is rolled, the attempt has failed and the engines are still inoperable. In this case the die roll result is NOT added to the total. The player MUST state, BEFORE rolling the die, which method he is using.

(SH1.413) These die rolls are made at the very start of the turn, before energy allocation. No die rolls are made on turn 1.

(SH1.414) Players should consider having a referee roll for the repairs in secret, not telling either player the result until repairs are accomplished. Crash starts are rolled by the player as per the normal rules.

(SH1.5) VICTORY CONDITIONS: Use the Standard Victory Conditions (S2.2). The Federation player starts at a significant disadvantage. This scenario can be used between two opponents of unequal skill or ships of widely varying strength.

(SH1.6) VARIATIONS: Any ships may be used in this scenario.

(SH2.0) THE SURPRISE REVERSED

Through effective intelligence (and a bit of luck), Captain Anthony J. Stocker of the Federation heavy cruiser *Lexington*, on frontier patrol near the Romulan border, learned that the Romulans intended to launch an undeclared war. As predicted by the intelligence forces, a Romulan task force appeared on schedule, just across the neutral zone. Stocker knew that they would not launch their attack for several hours. He judged that they were anticipating total surprise and were not fully alert and decided on a bold maneuver: cross the border immediately; destroy or cripple as many of their ships as possible; and then escape at full speed, falling back on the nearest base station. While this maneuver was technically an act of war, Stocker considered that to be irrelevant under the circumstances.

(SH2.1) NUMBER OF PLAYERS: 2; The Federation player and the Romulan player.

(SH2.2) INITIAL SET UP

Neutral Zone from hex 0126 to 4205 (one hex wide).

Federation CA in hex 0621, heading B, speed 10, WS III.
Romulans: KR in hex 1820

WE in hex 1720

KF5R in hex 1821

WB in hex 1620

WB in hex 1722

All Romulan ships heading B, speed 1, WS 0.

(SH2.3) LENGTH OF SCENARIO: The scenario continues until all ships belonging to one player have been captured, destroyed, or have disengaged.

(SH2.4) SPECIAL RULES

(SH2.41) The Romulan ships must obey certain restrictions until they are "released." They may not move faster than one hex per turn, arm any weapons, launch any shuttlecraft or other weapons, use erratic maneuvering, operate electronic warfare systems, make high energy turns, or operate their shields at other than "minimum" level. They cannot reinforce shields; operate tractors, reserve power, transporters, or cloaking devices; and only half of their boarding parties (round fractions up) are available for use.

(SH2.42) The Romulan ships are "released" as follows: At the end of the turn during which the Federation ship entered the Neutral Zone OR fired at any Romulan ship, a die is rolled for each ship. If the die roll is a "1" or "2," the ship is "released" for the next turn and may operate normally. If the die roll is "3," "4," "5" or "6," the ship is not released. Note that even after a ship is released, it will still have to arm weapons and build up speed. Unreleased ships roll again at the end of each turn.

(SH2.43) Administrative shuttles may not cross the Neutral Zone before ship #1 does.

(SH2.5) VICTORY CONDITIONS: Use the Modified Victory Conditions (S2.2), except that the Federation ship is not penalized for disengaging.

(SH2.6) ORDER OF BATTLE VARIATIONS: Ships of any race can be substituted on either side. The table below provides the players with a selection of forces for each side. Two different races should be used. For the purposes of this chart, the Federation ship (above) is "Ship #1," the Romulans are "Force #2."

RACE	Ship #1	Force #2
Federation	CA or CC	Would never launch surprise war
Klingon	D6 or D7	1xD7, 2xD6, 2xF5
Romulan	WE or KR	1xKR, 2xWE, 2xWB
Gorn	CA	1xCA, 2xCL, 2xDD
Kzinti	CS or CV	1xCV, 1xCS, 1xCL, 2xFF

Use the same set-up hexes. If there is a carrier in Force #2, roll one die and subtract three from the result (less than 0 is 0). This is the number of fighters that may be placed on the board (within four hexes of the carrier) as a combat space patrol. These fighters are released immediately if Ship #1 fires across or enters the Neutral Zone. Fighters from Ship #1 may cross the Neutral Zone before the ship, but the release rules can be triggered by these fighters as if the ship itself had attacked.

(SH2.7) INTEGRATION WITH FUTURE VOLUMES: Ships in Volume II may be used in this scenario as follows:

RACE	Ship #1	Force #2
Federation	NCL	Would not launch surprise war
Klingon	D5	1xC8/9, 3xD6
Romulan	SpH-A or	Condor, 2xKR, 2xKF5R Condor, 2xSpH, 2xSkH
Gorn	HDD	1xDN, 1xCA, 1xCL, 2xDD or HDD
Kzinti	CM or BC	1xSCS, 2xCM, 2xFF
Tholian	C	1xD, 1xBW, 1xC, 2xPC
Hydran	R or D	1xPal, 1xRan, 1xLan, 2xHunter
		Horsmn or Trv 1xPal, 1xDra, 1xKni, 2xCuir
Lyran	CA or CW	1xLion, 1xTiger, 1xJag, 2xLpd

Obviously, many other combinations of ships could be used.

(SH2.8) TACTICS: Select an enemy ship, cross the border at a speed that will allow you to be behind him at a range of one hex at the end of the turn, and hit that ship with overloaded weapons in a concentrated volley. Do not overlook the potential of your administrative shuttles (used in a suicide mode). If using the small mines from Volume II, scattering these ahead of the Romulan ships can provide additional firepower. If more than one uncrippled Romulan ship is released at the end of a turn (including any released on prior turns), fire your last volley, turn for the border, and disengage.

(SH3.0) THE COMING OF THE METEOR

In Y160 a massive meteor was spotted headed for the industrial colony on Pollux IX. The Federation cruiser *Kongo*, under the command of Captain Phillip Kosnett, was dispatched to avert the disaster. When *Kongo* arrived on the scene, however, Kosnett discovered that a Klingon frigate was shepherding the meteor.

(SH3.1) NUMBER OF PLAYERS: 2; the Federation player and the Klingon player.

(SH3.2) INITIAL SET UP

One class-M planet in hex 3020.

One small moon in hex 2015.

Federation CA in hex 4209, heading E, speed max, WS II.

Klingon F5 in hex 2016, heading C, speed 1, WS I.

(SH3.3) LENGTH OF SCENARIO: The scenario continues until the asteroid hits the planet or enters a hex beginning with "32."

(SH3.4) SPECIAL RULES

(SH3.41) On the first impulse of each turn, the meteor moves one hex in direction C. If, in doing so, it enters a hex containing a ship or shuttle, that unit is destroyed. (In this case, the explosion blast would count as damage to the asteroid.)

(SH3.42) A starship could "tow" the asteroid, hoping to move it out of (or back into) the path toward the planet. To do this, the ship must spend at least one-half of a turn adjacent to the meteor, facing away from it, and with power applied to one tractor beam. The meteor is moved into the ship's hex (and the ship is moved forward one hex) at the instant these conditions are satisfied. A given ship can only move the meteor once per turn. The effect of this movement is solely to move the meteor onto a path parallel with its original path; the meteor still moves one hex in direction C each turn regardless of what the ships do to it.

(SH3.43) The meteor cannot be destroyed, but it could be "broken up" into smaller fragments by weapons fire. If 400 points of damage is scored on the meteor, it breaks up into fragments. Replace the moon with an asteroid counter. Suicide shuttles, drones, and ships crashing into it (use self-destruction) all count towards this total. If shattered, the meteor can still be towed; all fragments remain in the same hex.

(SH3.5) VICTORY CONDITIONS

The planet is inhabited by one million sentient residents. Their survival is the only basis for determining victory.

If the meteor enters the planet hex, the planet is totally destroyed and all inhabitants perish.

If the meteor passes through a hex adjacent to the planet, fragments strike the planet and 900,000 of the inhabitants perish.

If the meteor passes within 2 hexes of the planet, smaller fragments strike the planet and 100,000 of the inhabitants perish.

If the meteor is reduced to asteroids, and they strike the planet, 900,000 of the inhabitants perish.

If the meteor is reduced to asteroids, and they pass through a hex adjacent to the planet, small fragments cause 100,000 of the inhabitants to perish.

(SH3.6) VARIATIONS: Virtually any starships, including those from Volume II or Volume III, can be substituted for the ships given in (SH3.2).

(SH3.7) BALANCE: The scenario could be balanced to suit individual players by increasing or decreasing the distance between the planet and the meteor. Players might "bid" for this distance, with the low bidder taking the Federation ship and the distance between the planet and meteor equal to his bid.

(SH4.0) CRUISE DRONES

During the Klingo-Kzinti War of Y158, a Klingon border station needed a critical replacement part for its tracking sensors. This part (which weighed several tons) was loaded onto a small freighter and dispatched toward the border under escort of a frigate. Reaching the front lines, the frigate and freighter managed to evade several attempts at interception. Finally, with their goal in sight, the ships felt secure. The Kzintis launched one last attempt to destroy the ship, using their new "long-lance" type III-XX cruise drones.

(SH4.1) NUMBER OF PLAYERS: 1 (the drones appear and move by automatic rules).

(SH4.2) INITIAL SET UP: The player places a small freighter in hex 0110 and an F5 frigate in hex 0108. Their heading is at the player's option. Their speed on the last turn was 4, weapons status I.

(SH4.3) LENGTH OF SCENARIO: The scenario lasts until the freighter leaves the map from a hex in the 4200 row or is destroyed.

(SH4.4) SPECIAL RULES

(SH4.41) The map is fixed; it does not float.

(SH4.42) Each turn, from 2 to 12 "cruise drones" (type-III-XX) appear on the upper map edge (roll two dice to determine the number). Use the Kzinti drone counters and use them in numerical sequence. As each turn's drones appear, place the first one in the hex ending with "01" in the same column as the freighter and place the others in hexes ending with "01" moving toward the higher numbered side of the map. Example: If the freighter was in hex 1415, and three drones were to appear, they would be placed in hex 1401, 1501, and 1601.

(SH4.43) Odd numbered drones are targeted on the freighter, even numbered ones on the frigate.

(SH4.44) The freighter is limited to a maximum speed of 4 because of its delicate cargo.

(SH4.45) The drones do not require guidance and are not affected by electronic warfare. (As an alternative, assume an ECCM rating of 3.)

(SH4.46) The drones are slow (i.e. have a speed of 8).

(SH4.5) VICTORY CONDITIONS: If the freighter leaves the map from a hex in the "4200" column with at least 10 undestroyed cargo boxes, the player wins the scenario. Any other result is a loss.

(SH4.6) VARIATIONS: A large freighter could be substituted for the one in the scenario. Any small starship could be used as an escort. If fast drones are used, a cruiser should be assigned as escort and a maximum of six drones per turn used.

(SH4.7) INTEGRATION WITH FUTURE VOLUMES: Other civilians ships (such as an Armed Priority Transport or Federation Express) could be substituted for the freighter. Fast drones could be used with an Aegis escort.

(SH5.0) ATTACK SHUTTLE GROUP #26

Shortly after the introduction of the attack shuttle carrier, a particularly cunning Klingon officer (Lieutenant Commander Ar-dak Kumerian, commanding the frigate "*Vigilance*") reasoned that, since the attrition rate on attack shuttles was on the order of 25%, there must be a source of extra shuttles somewhere in the Kzinti supply system. Taking his frigate on a long circuit around the lead Kzinti elements, he found what he was looking for: freighter FV-41, carrying attack shuttle group #26, a back-up unit for the CV "*Sabre*," flagship of the Kzinti 3rd Field Force.

(SH5.1) NUMBER OF PLAYERS: 2; the Kzinti player and the Klingon player.

(SH5.2) INITIAL SET UP

Kzinti player: One small freighter in hex 2217, facing direction E, speed on previous turn 4, weapons status 0.

Klingon player: One F5 class frigate, in hex 4025, facing F, speed on previous turn 12, weapons status I.

(SH5.3) LENGTH OF SCENARIO: The scenario continues until all units belonging to one player have been destroyed or captured, or have disengaged.

(SH5.4) SPECIAL RULES

(SH5.41) Mark 12 of the cargo boxes on the freighter "shuttle." The freighter is carrying 12 attack shuttles (one complete group) and, beginning on the second turn, can launch two of them per turn. The shuttles cannot be armed with drones.

(SH5.5) VICTORY CONDITIONS: The Klingon player scores one point for each shuttle destroyed. If the freighter is captured with shuttles still on board, the Klingon player scores two points for each of those shuttles. The Kzinti player scores 6 points if the Klingon ship is crippled, 15 if it destroyed. The player with the greater total of points wins the scenario.

(SH5.6) VARIATIONS: Any frigate or destroyer could be substituted for the Klingon ship.

(SH5.7) INTEGRATION WITH FUTURE VOLUMES: Fighters from any race could be substituted for the Kzinti fighters. An auxiliary carrier (from supplement #1) could be substituted for the freighter. A CVL or CVE could be substituted for either ship.

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(SMO.0) MONSTER SCENARIOS

(SM1.0) THE PLANET CRUSHER

(Monster #1)

(The Creature that ate Sheboygan III)

From a distant corner of the Empire comes word that some "thing" is destroying entire planets. It is the size of several large ships and seems to be either a living thing or perhaps some massive ship sent on a raid by one of the hostile races.

(SM1.1) NUMBER OF PLAYERS: 1 (the monster is controlled by a set of automatic rules).

(SM1.2) INITIAL SET UP

The Planet Crusher (Monster #1) in hex 0230.

One planet (Sheboygan III) in hex 2502.

One or more ships in hexes 4214, 4215, 4216, or 4217. Facing is at the option of the player. Speed on previous turn was maximum for the ship type. Weapons status I.

(SM1.3) LENGTH OF SCENARIO: The scenario continues until either the monster has destroyed the planet or the starships have destroyed the monster.

(SM1.4) SPECIAL RULES

(SM1.41) The monster moves by special automatic rules. As his "mission" is to destroy the planet, the monster will always move (unless distracted by the ships) toward the planet. In cases where the monster may move into either of two hexes (both of which are "toward" the planet), the player may roll a die (odd numbers going left and even numbers going right), toss a coin, or simply alternate.

(SM1.42) The monster has a speed of 6 hexes per turn.

(SM1.43) If, at the beginning of any impulse, a starship is within two hexes of the monster, the monster will begin to follow the starship. If two or more starships are within this "detection" range, the monster will follow the closer one. If two are at the same range, the monster will follow the larger one. If both are the same size, decide by die roll or continue following the one most recently followed.

(SM1.44) On the first impulse that the monster "detects" (is within 6 hexes of) a starship, it will fire its "weapon." This operates as a phaser, but uses the special chart below:

Die roll	1	2	3	4	5	6
Damage	40	30	20	10	5	1

Range has no effect on the result, but the weapon is limited to a range of six hexes. If the monster is within range of the planet, it will fire at the planet. The monster can fire its weapon only once per turn. Exception: the monster will always fire its weapon at a starship when it (the monster) begins to follow that starship. The monster will also fire its weapon at any plasma torpedo (operates as a phaser) that moves within two hexes. The weapon has a 360° field of fire.

(SM1.45) The monster has a turn mode of "0," it can move in any direction regardless of its prior movement.

(SM1.46) The monster is equipped with the close-in defense system (E6.0).

(SM1.47) If the monster moves adjacent to the planet, it will cease movement, unless it moves to follow a starship.

(SM1.48) The Planet Crusher is not distracted by fighters, shuttles, or P/F's. It will not follow them.

(SM1.5) VICTORY CONDITIONS: The monster wins if it can inflict 200 points of damage on the planet. The player wins if he can inflict 200 points of damage on the monster (at which point the monster is destroyed). The player may, at his option, use the victory conditions from (S6.0) in this section.

(SM1.6) ORDER OF BATTLE VARIATIONS: Players should feel free to use any ships, or combinations of ships in this scenario. The objective is, over a number of playings, to be able to stop the monster with ANY of the ships given in the game. (After all, no one ever knows what kind of ship will be available if needed, and the best captains can use any class of ship to its best advantage.)

(SM1.7) SHIP SIZE ADJUSTMENTS: Whenever playing this

scenario, and especially when using it as part of the Captain's Game (U2.0), the strength of the monster is adjusted to the ship used by the player by the following equation:

$$N = \frac{V}{125} \times 200$$

where N is the number of points that must be scored on the monster to destroy it and V is the BPV of the ship being used.

(SM2.0) THE SPACE AMOEBA (Monster #2)

Patrolling scout ships have reported an unknown being moving in a nearby sector of the Empire, and a single cruiser is sent to investigate. Upon locating the alien, the crew of the cruiser determines that it is harmful and must be destroyed. However, neither the ship's veteran science crew, nor the computers, can determine what will destroy the monster. The captain orders his ship in closer to investigate.

(SM2.1) NUMBER OF PLAYERS: 1 (the monster moves by automatic rules).

(SM2.2) INITIAL SET UP: The Space Amoeba (Monster #2) is placed in hex 2117. A single starship enters the map from any map edge. Speed on the previous turn was 10.

(SM2.3) LENGTH OF SCENARIO: The scenario continues until the monster has been destroyed or the starship has been destroyed or has disengaged.

(SM2.4) SPECIAL RULES

(SM2.41) The monster moves with a speed of 4, but moves in a totally random pattern. During each impulse that monster is to move, roll a single die, and move the monster in that direction according to the numbered directional display printed in the lower left-hand corner of the map.

(SM2.42) The starship may fire weapons at the monster, recording the cumulative amount of damage scored for possible use later.

(SM2.43) The primary operation in this scenario is the scientific investigation of the monster. Refer to the lab rules (G4.1) for instructions in gathering information.

At the end of each turn, the player must determine how much information he has gained about the monster and how much damage the monster has done to his ship. This is determined using the chart (G4.1). The number from the chart, multiplied by two, is the number of damage points scored on the ship by the monster. (Shuttles sustain one damage point at the end of any turn during which they were, at any point, within 10 hexes of the monster.) Scientific shuttles (J2.21) and probes (G5.0) may assist in obtaining information.

(SM2.5) VICTORY CONDITIONS: The monster wins if the starship is destroyed or disengages (in the campaign game, a disengaged ship, after repairing, would return to find two such monsters, the original having divided). The player wins if he can accumulate 400 points of scientific information, use this information to determine just what will destroy the monster, and then destroy the monster. Once he has accumulated the required points, roll one die and consult the table in (S6.0).

(SM2.6) ORDER OF BATTLE VARIATIONS: As in scenario (SM1.0), the players are encouraged to use all classes of ships in this scenario, the object being to be able to destroy the monster with any type of ship.

(SM2.7) SHIP SIZE ADJUSTMENTS: Whenever playing this scenario, and especially when using it as part of the Captain's Game (U2.0), the strength of the monster is adjusted to the ship used by the player by the following equation:

$$N = \frac{V}{125} \times 400$$

where N is the number of points of information that must be accumulated in order to determine what will kill the monster and V is the BPV of the ship being used.

(SM3.0) THE MORAY EEL OF SPACE (Monster #3)

The terror of the depths of space! A creature half a kilometer long, living in hard vacuum and eating starships for breakfast (literally) is reported in a remote sector. A starship is sent to destroy the monster.

(SM3.1) NUMBER OF PLAYERS: 1 (the monster moves by automatic rules).

(SM3.2) INITIAL SET UP: The Moray Eel of Space (Monster #3) is in hex 2217. A starship (any class) enters on turn one from any edge, speed on last turn 10, weapons status I.

(SM3.3) LENGTH OF SCENARIO: The scenario continues until the monster is destroyed or the starship is destroyed or has disengaged.

(SM3.4) SPECIAL RULES

(SM3.41) The monster has a speed of 6 and a turn mode of 0.
(SM3.42) If the starship is within 10 hexes, the monster will follow the ship as a seeking weapon would.

(SM3.43) Because of the maneuverability of the monster, the weapons of the ship cannot hit it if fired from beyond 2 hexes, or if the ship is moving faster than 4 hexes per turn.

(SM3.44) The monster attacks the ship by "biting" (with plasma tipped teeth) when it is in the same hex as the ship. The effect of the "bite" is shown on the table below:

DIE ROLL	1	2	3	4	5	6
DAMAGE	20	18	15	12	10	5

The damage is scored directly on the ship; shields are ignored. The monster can attack any given target only once per turn but could attack a different target each impulse.

(SM3.45) The starship MUST use pre-plotted movement, not free movement (C1.31).

(SM3.46) The monster may move at double its normal rate on a given turn. Roll one die at the start of each turn (after movement has been plotted for the starship). If the result is "1," the monster will move, for the remainder of that turn only, at a speed of 12.

(SM3.47) The Moray Eel of Space cannot be held or towed by a tractor beam.

(SM3.48) The Moray Eel has a close-in defense system (E6.0).

(SM3.5) VICTORY CONDITIONS: The monster is destroyed when it has received an unknown number of hit points. After scoring 200 points of damage, the starship player rolls a die. If the result is "1" the monster has been destroyed. If not, the starship player may roll the die again at the end of any impulse in which at least 10 additional points of damage are scored (NOT once for each 10 points, once on each impulse when at least 10 points are scored). If the die roll is a "1," the monster is destroyed.

(SM3.6) VARIATIONS: As in other "monster" scenarios, the player may use any starship.

(SM3.7) SHIP SIZE ADJUSTMENTS: Whenever playing this scenario, and especially when using it as part of the Captain's Game (U2.0), the strength of the monster is adjusted to the ship used by the player by the following equation:

$$N = \frac{V}{125} \times 200 \quad I = \frac{V}{125} \times 10$$

where N is the number of points of damage that must be scored on the monster before the die rolls can begin, I is the number of damage points that must be accumulated for each additional die roll, and V is the BPV of the ship being used.

(SM4.0) THE COSMIC CLOUD (Monster #4)

An unknown entity is destroying shipping in the Sigma Draconis Sector. The Fleet responds by sending a starship. Weeks later, it is found floating in space, the entire crew dead from unknown causes. Another starship is sent to investigate.

(SM4.1) NUMBER OF PLAYERS: 1 (the monster moves by automatic rules).

(SM4.2) INITIAL SET UP: The Cosmic Cloud (monster #4) is placed in hex 2217. A starship (any class) enters on any map edge, speed on previous turn 10, weapons status I.

(SM4.3) LENGTH OF SCENARIO: The scenario lasts until the monster is destroyed or the starship is destroyed or has disengaged.

(SM4.4) SPECIAL RULES

(SM4.41) The monster moves with a speed of 4, but moves in a totally random pattern. During each impulse that monster is to move, roll a single die, and move the monster in that direction according to the numbered directional display printed in the lower left-hand corner of the map.

(SM4.42) The starship may fire weapons at the monster, recording the cumulative amount of damage scored for possible use later.

(SM4.43) The monster produces a field that has the effect of killing crew units; the exact cause is unknown. At the end of each turn, the chart below is used to determine how many crew units have been killed. The range given is the closest approach of the ship to the monster during the turn just ending. If the shields are not operating at full power, losses are doubled.

DIE ROLL	RANGE	0	1	2	3-5	6-10
1		4	4	4	3	2
2		4	3	3	3	1
3		3	3	3	2	0
4		3	3	2	1	0
5		2	2	1	0	0
6		1	1	1	0	0

(SM4.44) The ship uses the lab rules (G4.1) to accumulate information about the monster.

(SM4.5) VICTORY CONDITIONS: The monster wins if the starship is destroyed or disengages. The player wins if he can accumulate 400 points of scientific information, use this information to determine just what will destroy the monster, and then destroy the monster. After accumulating the required points, roll one die and consult the table in (S6.0).

(SM4.7) SHIP SIZE ADJUSTMENTS: Whenever playing this scenario, and especially when using it as part of the Captain's Game (U2.0), the strength of the monster is adjusted to the ship used by the player by the following equation:

$$N = \frac{V}{125} \times 400$$

where N is the number of points of information that must be accumulated in order to determine what will kill the monster and V is the BPV of the ship being used.

NOTE: The superscript "T" is not used in Volume I.

(U0.0) CAMPAIGN GAMES (Advanced)

(U1.0) GENERAL RULES

Campaign games consist of a series of scenarios that are played one after the other. The outcome of each scenario will have an effect on all succeeding scenarios. Between scenarios, ships are presumed to stop at a starbase or other facility for repairs and replacements. These repairs and replacement are described by this section.

(U1.1) DAMAGE REPAIR

Repair of combat damage is governed by (D9.4), campaign repairs.

(U1.2) REPLACEMENTS

(U1.21) All lost crew units and boarding parties are completely replaced after the end of each scenario.

(U1.22) Each ship receives one replacement shuttle after each scenario. If needed, the ship can draw other shuttles out of reserve, or return a shuttle to the reserve. If a ship already has a full complement of administrative shuttles, the replacement shuttle is lost and cannot be regained.

(U1.23) Each carrier receives a number of replacement fighters equal to 1/2 of its original complement (not counting spares) at the end of each scenario. (Round fractions of 1/2 up to the next whole number.) The carrier can draw fighters from its internal spares, and store fighters in the reserve (up to its listed maximum). Any surplus replacements are lost.

For example, a Kzinti CV has 12 fighters plus 3 spares. If it lost eight fighters during one scenario it would then have four plus three spares. Since it receives replacements equal to half the originals (six in this case), and can draw two out of its spare storage, it would then have twelve fighters plus one spare. It if only lost three fighters during the next scenario, it could replace them from the six new ones, and put two of the new ones in storage, but would then lose the sixth replacement because there is no room for it.

(U1.24) All damage to all shuttles and fighters is completely repaired after each scenario.

(U1.25) Carriers may interchange shuttles and fighters during the replacement process, using some of the space for one type for the other.

(U1.26) Legendary officers (see Volume II) killed in combat cannot be replaced. Those that have been injured are presumed to have recovered.

(U1.27) P/F tenders receive two replacement P/Fs after each scenario, but can never have more than they are designed to carry. Other ships that carry P/Fs (e.g. the D7C, Lyran Lion) receive one replacement P/F after each scenario, but can never have more than they were designed to carry.

(U1.3) RESUPPLY

(U1.31) The ship is presumed to be completely resupplied with food, spare parts, etc., at the end of each scenario. These consumables are not within the scope of the game, and players can presume the ship's crew is taking care of these details.

(U1.32) All drone racks, drone storage, probe launchers, ADD's, transporter bombs, mines, pseudo-plasmas, etc., are completely reloaded.

(U1.33) (Optional) In a campaign such as (U3.0), players are allowed 1,000 points to purchase better drones (the speed is assumed based on the time of the campaign), more boarding parties, MRS shuttles, etc. Thus, a player might have an unlimited supply of type-IF drones, but only 100 type-IVF heavy drones to last during the entire campaign.

(U1.4) OVERHAUL

Once during the entire campaign, the player can have his ship "overhauled." This repairs all damage, but does not replace lost shuttles. There is a bonus for not using this overhaul in the Captain's Game.

In the Star Fleet Defense game (U3.0) this limitation does not apply. A ship can be sent for an overhaul as often as the owning player may choose. However, the owning player cannot send more than one ship of size class 2, more than four ships of size class 3, and more than six ships of size class 4, to overhaul during the same round. He may send up to the maximum number from each size class at the same time.

(U2.0) THE CAPTAIN'S GAME

This campaign game is intended to test your abilities as the captain of a single starship. This campaign game is excellent for play at a tournament or convention. Selecting any ship in the game, you must play nine scenarios in the specific order given. This campaign represents the typical amount of combat action a ship and its captain would see in a period of about 5 years (of peacetime; wartime is much more active).

(U2.1) The following scenarios comprise the Captain's Game:

1. (SG1.0) COMBAT AGAINST A SINGLE ENEMY SHIP
2. (SM1.0) THE PLANET CRUSHER (or Chart #1 below)
3. (SG1.0) COMBAT AGAINST A SINGLE ENEMY SHIP
4. (SM2.0) THE SPACE AMOEBA (or Chart #1 below)
5. (SG3.0) BASE DEFENSE
6. (SM3.0) THE MORAY EEL OF SPACE (or Chart #2 below)
7. (SH2.0) THE SURPRISE REVERSED
8. (SM4.0) THE COSMIC CLOUD (or Chart #2 below)
9. (SG5.0) DUEL WITH A PIRATE

(U2.11) ALTERNATIVE FOR VOLUME II

Players using Volume II may expand the number of monsters available by use the charts below. Roll one die to determine which monster to use. Players without the issues of Captain's Log or Nexus may substitute Chart #1 for Chart #2. Players might wish to select four monster scenarios for the campaign, or have each captain roll for his own monsters as they are required.

MONSTER SELECTION CHART #1

- 1 (SM1.0) THE PLANET CRUSHER
- 2 (SM2.0) THE SPACE AMOEBA
- 3 (SM3.0) THE MORAY EEL OF SPACE
- 4 (SM4.0) THE COSMIC CLOUD
- 5 (SM5.0) THE SUNSNAKE
- 6 (SM6.0) THE MIND MONSTER

MONSTER SELECTION CHART #2

- 1 (SM7.0) SPACE DRAGON
- 2 (SN7.0) A STONE'S THROW
- 3 (SL5.0) THE DEATH PROBE
- 4 (SL49.0) THE COMBINING OF ARASTOZ
- 5 (SL55.0) ESCAPE FROM THE ENERGY MONSTER
- 6 (SH3.0) THE COMING OF THE METEOR

(U2.2) Players choose a ship of a given race and use it in all nine scenarios. The opponents for scenarios 1, 3, 5, and 7 are shown on the chart below. One or more opponents must be found to play the opposing ships.

Player's Ship	Scenario #1	Scenario #3	Scenario #5	Scenario #7
Fed CA	Klin D7	Kzin CS	Gorn CA	Rom KR + 2xWE + 2xWB
Klin D7	Fed CA	Gorn CA	Rom WE	Kzin CC + 2xCL + 2xFF
Gorn CA	Klin D7	Kzin CS	Fed CA	Rom KR + 2xWE + 2xWB
Kzin BC	Rom KR	Gorn CA	Fed CA	Klin D7 + D6 + 3xF5
Rom KR	Kzin CS	Klin D7	Fed CA	Gorn CA + CL + 3xDD

(U2.3) ALTERNATIVES

Any class of ship can be used for the campaign, although the opponents should be of the same class (consider the Kzinti CV a DN for this purpose). Note that a Kzinti CS with speed-32 drones and a Kzinti BC with speed-8 drones are interchangeable in this campaign.

One interesting project, which will take some organization, is for a local club of five people to each take a ship (from a different race) and play the various scenarios against each other. In the case of the duels this is straightforward. In the Base Defense scenario, players toss a coin to see who will be the attacker and who will be the defender. The attacker gets only his own ship; use a base station. In the Surprise Reversed scenario, each player should play against a player that is not participating in the cam-

paign, or against one of the other players who is not using his campaign ship. Players of the Captain's Game can only be the defender (i.e. the side played by the Fed cruiser). Note that a player not participating in the campaign should play the pirate CR against all five opponents.

(U2.4) HOW TO WIN

Players score points in each of the nine scenarios based on their performance. The total of these points determines the level of success during the captain's 5-year mission. The method of scoring depends on the scenario type.

MONSTER SCENARIOS:

Monster destroyed or contact established	= 5 pts
Ship disengages without destroying monster	= 0 pts

DUEL SCENARIOS:

Enemy ship destroyed, own ship crippled	= 3 pts
Enemy ship destroyed, own ship not crippled	= 5 pts
Enemy ship crippled, own ship not crippled	= 3 pts
Enemy ship received more damage	= 1 pt
Enemy ship captured, own ship not destroyed	= 7 pts
Pirate ship captured	= 9 pts

BASE DEFENSE:

Points scored as per (SG3.5)

SURPRISE REVERSED:

As per (SH2.5): Marginal or lower	= 0 pts
Tactical Victory	= 2 pts
Substantive Victory	= 4 pts
Decisive Victory	= 6 pts
Astounding Victory	= 9 pts

BONUS for not using your "overhaul" (U1.4)

= 5 pts

If the player's ship is destroyed or captured in any scenario, he loses 25 points and begins the next scenario with a brand new ship of the same class. Klingon ships that mutiny in monster scenarios disengage immediately, then return to player control. Klingon ships that mutiny in combat are captured. Note that only one of the listed point scores can be received for each scenario.

The fate of the player is determined by the total points he has achieved.

Less than 10 pts = court-martialed and executed for treason *

10-20	= quietly retired at end of cruise
21-25	= promoted to a desk job
26-30	= assigned to teach at the academy
31-50	= continued in command of his ship
51-65	= promoted to commodore
66+	= legendary captain, left in command (he's too valuable to promote)

* except in the Federation, where there is no capital punishment.

Obviously, if five players are playing the game competitively, the final scores will determine the winner.

(U2.5) ALTERNATIVES AND VARIATIONS

Players may chose to modify their campaign by substituting one or more scenarios for the scenarios listed above. Some of the scenarios that would be suitable for this purpose are:

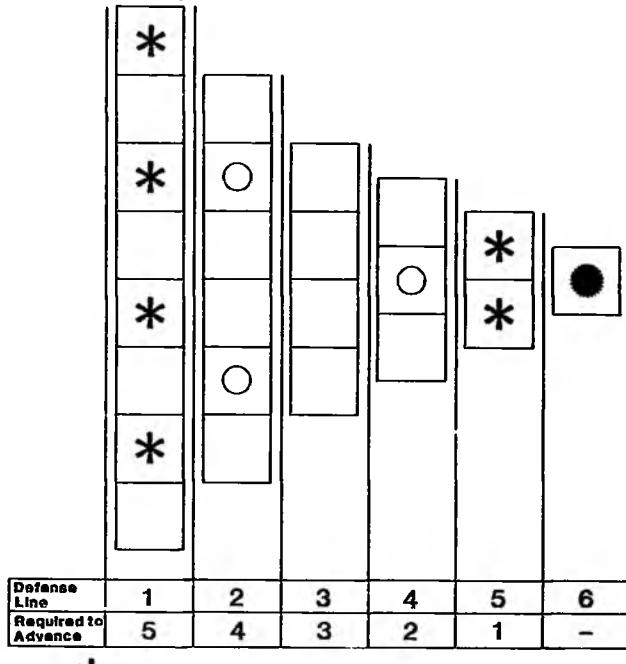
- (SH7.0) RESCUE THE HOSTAGES
- (SN2.0) THE STASIS BOX
- (SN10.0) ARES IS DOWN!
- (SL4.0) DIPLOMATIC IMMUNITY
- (SL23.0) TREASURE SHIP
- (SL28.0) LANDING PARTY
- (SL32.0) NEGOTIATE! (Delete FF and two PCs)
- (SL41.0) RESCUE
- (SL44.0) THE DERELICT
- (SL56.0) BLACK HOLE MANIA
- (SL59.0) RAID ON A MINING PLANET
- (SL61.0) RAID ON A FARMING PLANET
- (SL62.0) WITNESS FOR THE PROSECUTION
- (SL66.0) THE FLAWED TRAP (Delete Pol and LR)

(U3.0) THE STAR FLEET DEFENSE GAME

This campaign simulates a major interstellar war between two opposing races. It is played as a series of scenarios reflecting the invasion of one empire by another. One player assumes the role of the attacking player; the other is the defending player.

(U3.1) CAMPAIGN MAP

The STAR FLEET DEFENSE GAME is organized into scenarios by the sketch map below.



The map is organized in a series of "defense lines." Note from the map that the first defense line is divided into eight sectors, the second into six, and so on. Also note the placement of starbases, battle stations, and the home planet. The home planet of the defending race is in hex 2215 of the one scenario in the sixth defense line. Bases are in hex 2215 of their respective scenarios.

(U3.2) FORCES AVAILABLE

Each player determines his available forces from the chart below, which lists the strength of each fleet. It should be noted that this fleet strength chart is for the purpose of this campaign only, not a complete list of every ship in service.

FEDERATION: 6xDN, 6xCC, 15xCA, 12xCL, 15xDD, 6xSC, 3xBT
 KLINGON: 4xC9, 2xC8, 24xD7, 24xD6, 24xF5, 16xE4
 ROMULAN: 9xKR, 15xKFSR, 20xWE, 10xWB
 GORN: 8xCA, 12xCL, 18xDD
 KZINTI: 1xCSV, 3xCV, 2xCC, 4xBC, 6xCS, 12xCL, 20xFF

(U3.2) (Volume II) A more complete Order of Battle is included in Volume II. The Gorns and Romulans have no fleets deployed on the ISC border because at the time of this OB they are unaware of that race. When the ISC appeared, the Gorns and Romulans withdrew ships from their other fleets to secure that border.

The Federation could use no more than two-thirds of its forces against either the Klingons or Romulans, and no more than one-third against either the Kzintis or Gorns. The Klingons could use no more than two-thirds of their fleet against the Federation, and no more than one-half against the Kzintis. The Romulans, being rather fatalistic, could use their entire fleet against either the Federation or Gorns. The Gorns, having deep buffer zones of planetless stars, could use their entire fleet against the Federation or Romulans. The Kzintis would be able to use three-fourths of their fleet against the Klingons or Federation. These combinations are based on geography; non-historical opponents could be used.

Romulan Warbirds can ONLY be used in the first defense line on the attack; they can be used on any defense line in defense.

The defending player must place half of his ships in reserve at the start of the campaign.

When dividing fleets, each type (e.g. CA) must be divided evenly on the lines shown. For the Kzintis, three-fourths of their fleet includes 1 CVS, 2 CV, 1 CC, 3 BC, 5 CS, 9 CL, and 15 FF.

In Volume II and future volumes, this list will be updated in Annex #7C.

(U3.3) CAMPAIGN FORMAT

The campaign is played in several "waves," each representing the scenarios played on one defense line. Each wave consists of three steps:

1. Organization
2. Scenarios
3. Post-scenario reorganization

Each of these steps is described below.

Each player's forces are divided into two groups: "forces available" and "reserve." Additionally, certain ships may be detached to guard or screen bases. At the start of the campaign, the attacking player will have all of his forces in the "forces available" pool. The defending player will have half of his ships in the "reserve" pool and half in the "forces available" pool.

(U3.31) ORGANIZATION: Both players divide up their available forces into a number of groups equal to the number of sectors in that defense line (eight in the first wave). Each group is assigned to a given sector. No more than six and no less than two ships (not counting bases) may be assigned to each sector; any unused ships are placed in the reserve. (The attacking player may assign a total of eight ships if the scenario includes an enemy starbase.) This is all done secretly. Both players expose their deployments simultaneously, thereby establishing the scenarios of that wave.

(U3.32) SCENARIOS: The scenarios are based on (SG2.0) FLEET ACTION. If there is a base in the scenario, it is placed in 2215. The scenario is then resolved normally. Each scenario cannot end until all units belonging to one player have been destroyed, captured, or forced to disengage. Weapons status (S4.0) should be used in every scenario. Local conditions (S5.0) can also be used.

(U3.33) POST-SCENARIO REORGANIZATION: This step is different for the attacker and defender. The defender resolves his reorganization first.

(U3.331) DEFENDER: The defender reorganizes his fleet according the following steps:

1. Determine if the enemy has advanced (U3.41). If not, skip to step #4.
2. Determine if any bases have survived in the defense line just resolved.
3. Assign ships to remain with bases left behind (U3.42).
4. Add all ships in reserve to available forces.
5. At the player's option, send some of the ships in the available forces pool for overhaul. These are repaired as per (U1.4) and placed in reserve.
6. Conduct post-scenario repair, resupply, and reloading as per (U1.1), (U1.2), and (U1.3).

This completes the post-scenario reorganization step for the defender.

(U3.332) ATTACKER: The attacking player reorganizes his fleet according to the following steps:

1. Add all ships that remained on the board at the end of their scenarios to available forces.
2. Add all ships in reserve to available forces.
3. Add all ships that disengaged to the reserve forces.
4. At the player's option, send some of the ships in the available forces pool for overhaul. These are repaired as per (U1.4) and placed in reserve.
5. Conduct post-scenario repair, resupply, and reloading as per (U1.1) (U1.2), and (U1.3).
6. Assign ships from the available forces pool to screen bases left behind (U3.42).

This completes the post-scenario reorganization for the attacking player. Play then resumes with the next defense line (if the attackers advanced) or the previous line is repeated (if the attackers did not advance).

(U3.333) LEGENDARY OFFICERS, ELITE CREWS

If players are using the optional rules in (G21.0) and (G22.0), these procedures are used.

(U3.3331) In the campaign, if a ship manned by an outstanding crew is destroyed (even if some or all of the crew is saved), the effect of the crew is lost and cannot be regained. The survivors cannot be transferred to another ship.

(U3.3332) If a ship manned by a poor crew participates in three scenarios, scoring damage on at least one enemy ship in each scenario, the crew is raised to the status of a normal crew. (There is no provision for raising a normal crew to outstanding status.)

Ships taken from mothball storage (Volume II) automatically have poor crews. The Klingon ships with poor crews in the original OB are the "J" penal ships. Nothing can be done with a poor crew except trying to raise its status in combat.

(U3.3333) Legendary doctors and marines can be transferred between ships without restriction or penalty. All other legendary officers cannot be transferred between ships unless their ship has been destroyed (and presumably the officer survived). Legendary officers can be transferred from one ship to another by transporter or shuttle, but except for (U3.333) cannot function on a different ship during a scenario.

Should a legendary officer survive the destruction of his ship (by transferring to another ship, or by ship separation), he must remain in the reserve fleet for one round, then can be assigned to a new ship. Legendary officers being reassigned in this manner must be assigned to a ship of the same type and class (if not, they lose their status), and must be assigned to a ship that does not have a legendary officer if one is available. Legendary officers from the same ship can be kept together or split up during such a transfer.

(U3.3334) If the ship is overhauled, refitted, or converted, the crew and officers retain their status.

(U3.3335) Separated ship sections can be rebuilt to their full status by remaining in the reserve section for three rounds. Alternatively, they can participate in combat at their current (dismembered) status.

(U3.4) CAMPAIGN RULES

(U3.41) ADVANCE: The object of the game is for the attacking player to penetrate all six defense lines and destroy the enemy's home planet. The attacking player cannot do this unless his forces advance, that is, move forward to the next defense line each wave. The attacking player cannot advance unless his ships are the only ones remaining on the board at the end of a certain number of the scenarios in each defense line. The number of required scenarios is shown in the illustration in (U3.1). If no advance is possible, the current defense line must be replayed in the next round.

Should it occur that the defending player is the last to have ships on the board in every scenario in a given defense line (or all but one scenario on Defense Line #2 or #3, or all but two scenarios on Defense line #1), the attacking player actually retreats one defense line; that is, he must replay the previous defense line. For example, the attacking player "loses" all three scenarios in the fourth defense line. During the next wave, the third defense line will be used. If bases had been left behind in a defense line that is being used again, those bases remain active and the ships left behind with them (or screening them) are fully repaired and added to the available forces pool.

In the final battle (Defense Line #6), each player can use up to 12 ships. Any unused ships remain in reserve awaiting developments.

(U3.42) BASES LEFT BEHIND: If a base (U3.1) is not destroyed in a given defense line, and the attacking player advances, the base is left behind in the enemy rear. Defending ships may be assigned to remain with it. The enemy must assign four ships if it is a battle station (six if it is a starbase), plus one ship for every ship left behind with the base by the defending player, to screen the base. These ships are not available to the players unless the attacking player retreats to this defense line at a later time. The attacking player then has the option of playing a scenario using those ships to attack the base, or simply declaring the base to be "screen" (effectively ignoring the situation). If he elects to attack, the scenario is played along with the current round of scenarios.

(U3.43) CAPTURED SHIPS (Optional Rule): If a ship is captured by the enemy during one of the scenarios, certain adjustments are made. The friendly ships which participated in that scenario are designated as an "advantaged fleet." This advantaged fleet must participate in the next round as a fleet in one specific scenario, except that two ships may have been added to the fleet. (If the fleet included at least three ships at the end of the scenario in which an enemy ship was captured, one of these ships could be transferred out of the fleet.) The capturing player has two choices as to how to use his advantage in that scenario. Only one "advantaged fleet" can be created for each scenario of a given round in which one or more enemy ships was captured. The advantage lasts only during the next wave. Since each round has fewer scenarios than the last, if every scenario in a given round results in the capture of an enemy ship, some "advantaged fleets" will have to be broken up.

(U3.431) ADVANTAGE OPTION #1: On the first turn that weapons are fired by the advantaged fleet, every fourth hit scored will count as an internal hit, not a shield hit. The captured ship is removed from the game and not used in that scenario. If you are already using (D3.6), count the fourth and fifth hits out of each five as internals.

(U3.432) ADVANTAGE OPTION #2: The captured ship is used to "infiltrate" the enemy fleet. The non-advantaged player sets up his ships in any hex not within 10 hexes of a map edge. All must be facing the same direction at the same speed (less than 10) and can have all weapons armed. The advantaged player then sets up his ships. The captured ship (which is fully operational - it can fire its weapons - within the limits of repairs made by damage control) is placed adjacent to one enemy ship. The other ships of the advantaged fleet are placed in any hexes more than three hexes from the nearest enemy ship. All ships of the advantaged fleet can have all weapons armed and can be placed with any facing at any speed less than 10. The scenario then begins, with the first impulse representing the instant at which the non-advantaged fleet discovered the trick. The non-advantaged fleet may not fire weapons during the first impulse.

(U3.44) EXHAUSTION: After 20 rounds, exhaustion of resources becomes a factor with the attacker's forces, which are operating far from their home bases. Beginning with the post-scenario reorganization after the 20th round (and after all subsequent rounds), all attacking ships have a maximum assumed damage control rating of "2" for purposes of (U1.1) repairs under (D9.4). Also, when a ship is sent for overhaul, roll one die. If the result is 1-3, the ship is placed in reserve. If the result is 4-6, the ship remains in overhaul until the next round, when the die is rolled again.

After 30 rounds, these conditions apply to the defender.

(U3.45) HOW TO WIN: Victory for the attacking player is defined as destroying the enemy home planet. To accomplish this (or, more correctly, to render it uninhabitable) he must score at least 200 points of damage on each of the six hex sides. All such damage must be scored during a single scenario.

Victory for the defending player is defined as winning six of the eight battles on Defense Line #1. This will probably require stopping the enemy at some deeper defense line, forcing him to retreat to Defense Line #1, and then defeating him on that line.

Should a single defense line be played four consecutive times, without the attacker being able to advance or the defender being able to force him to retreat, the war is declared over. The attacker retreats two defense lines, and then abandons any further defense lines which have uncaptured defending bases. The attacker is assumed to have taken any defense lines he then occupies as conquered territory.

EXAMPLE: The Klingon player has tried four times to penetrate Defense Line #4, but has failed, winning only a single scenario each time. The war is then declared to be over. The Klingon player retreats to Defense Line #2. However, because he never captured one of the starbases on this line, he must retreat further to defense line #1. He is then assumed to have captured the territory represented by that defense line.

NOTE: The superscript "V" is not used in Volume I or Volume II.

(W2.0) MINIATURES RULES

(W1.0) GENERAL RULES

These rules are primarily intended to leave the game system and rules from *STAR FLEET BATTLES* intact, but to adapt them to the use of miniatures. These miniatures can be used in one of two ways. The easiest is to obtain the special *STARLINE 2200* hex sheets, which have large (1.25") hexes to accommodate the miniatures. If you chose to use this system, you can dispense with the remainder of these miniatures rules.

The alternative is to use a blank tabletop. (Floors are workable but care must be taken to avoid stepping on the ships.) Such a surface does not have a hex grid. There are two major changes to be made, both of which result from discarding the hex field. Ship location, and hence movement, is based on a point (the center of the stand) and a heading (the direction that the miniature ship is pointing), rather than on a hex and a facing. Shields and weapons firing arcs remain the same in relation to the ship (60° arcs), but their orientation is now based on the actual heading of the ship, and not the arbitrary hex grid. The stands provided with *Starline 2200* ships are imprinted with information from another game; this information can be ignored. A small cardstock "stand cover" is provided which should be slipped over the stand before the ship is mounted.

Each ship (or other unit) should be identified as an individual for reference to its respective SSD sheet and energy allocation form. This can be done by attaching a small piece of paper with a name or number, or by painting the specific name or number directly on the ship.

(W2.0) MOVEMENT

For purposes of movement, the hex grid system is replaced by an unmarked surface, a series of turn gauges, and a ruler or measuring tape. Eliminating the hex grid immediately complicates movement, but the advantages of a "free" movement system may equal or even outweigh its disadvantages. This is a matter of personal taste and what you are used to; players would gain considerable benefit from being adept at both systems.

Players will find an entirely new set of tactics are required. On a hex grid, some ships must "wiggle" a full 60° to bring all of their weapons to bear. With the "free" movement of miniatures, a turn of a few degrees may be enough. This is obviously more realistic, and obviously more trouble.

You will need several items of game equipment to use the miniatures movement system. These include a set of turn gauges (which are included in the *COMMANDER'S EDITION*) and a ruler or measuring tape. You may also find use for a long straightedge or a few feet of string or thread. Players may obtain a free set of these turn gauges by sending a stamped self-addressed envelope to Task Force (Z6.0) and requesting them.

You must decide what scale you will use for your miniatures gaming; that is, you must decide how many inches of your clear table will be equal to 10,000 kilometers (one hex of the boardgame). A scale equal to that of the miniatures (1/3788) is out of the question, since each hex would be over a mile and a half across. To use the *Starline 2200* miniatures, a minimum scale of 1.25" = 10,000 kilometers = 1 hex is necessary. This, to represent the area of the standard boardgame map, would take an area about 40x48". In order for each increment to completely hold one ship, a scale of 3.5" is necessary; but that makes the playing area of the standard hex map about 9x11 feet. For several ships to occupy the same "hex," a scale of 6" or more is necessary, but obviously unwieldy. For purposes of these rules, a scale of 2" = 10,000 kilometers = 1 hex will be assumed. This requires a playing area about the size of a ping-pong table. Should the battle begin to "wander" off of the side of the table, use the same procedures as in the boardgame.

A movement gauge can be made from a simple straight piece of cardboard marked off at 2" intervals. To move, simply align the gauge line on the stand cover (the line between 2 & 3 and 5 & 6) with one of the marks on the movement gauge or one of the turn gauges. Then, keeping the gauge in place, move the ship so that the gauge line aligns with the next mark on the gauge.

When turning, select the turn gauge equal to your turn mode at your current speed. Align one of the marks on its outer radius with the gauge line of your ship, and then, holding the gauge in place, move the ship along the gauge so that the gauge line aligns with the next mark. Note that the "turn mode" function in the boardgame is used to approximate circles of different sizes with hexagons of different sizes. Since we can use true circles with miniatures, it is not necessary to move any "straight" increments between successive "turn" increments. You may use a larger turn gauge than the one called for by your speed, but never a smaller one. Vessels with a turn mode of zero may move in a straight toward any point from their previous turn.

Remember, when moving or turning, that your "true" location is the exact center of the stand, and that the ship is radically out of scale. The "heading" of the ship is considered to be the line on the stand cover between RF/LF and RR/LR firing arcs.

Turn gauges for the 2" increment scale are provided with these rules. Players should photocopy these, paste them down to heavy cardboard, and cut them out. It may be useful to make several sets so that each player, or each ship, can have one to use. The turn gauges may be enlarged or reduced, so that a different scale can be used. Most print shops or blueprint supply stores can provide this service for a nominal fee.

(W3.0) COMBAT

On the die-cut cardstock stand cover you will find two sets of markings. One, in white, denotes shield facing. The other, in blue, denotes firing arcs. Relative to the ship, these function basically the same as in the boardgame. To determine which weapons bear on the target, run a string or straightedge between the stand posts from the firing ship to the target ship, and observe which arc on the stand cover the "line of sight/line of fire" is in. Note that the shield facing the enemy (and hit by his weapons) is also determined by this method. Remember to use the center of the base, not the weapon on the miniature. For the time being, firing arcs can be assumed to be the same as shown on the firing arc. At a later time, Task Force or Amarillo Design may publish "true" firing arcs rated in specific degrees, which will require the use of protractors to determine precise angles. Note that certain "true" firing arcs (such as the 180° FA arc on Federation ships) can be readily used with the existing base covers.

To determine range, measure the distance between the stand posts of each ship. If using a tape measure, you will have to divide the inches by your scale to convert to increments. Round fractions of .500 up, and those of .499 down. Players may find it easier to make a special "range stick" marked directly in their increments. Either method will give you the range in increments, which can be entered on the charts directly.

Shuttles docking at their home ship and seeking-weapons reaching their targets must be able to actually reach the center of the target ship's stand.

When using miniatures, use the procedure in (C1.31) to determine who actually moves his ship first.

(W4.0) SMALL SHIPS

Shuttles, fighters, drones, plasma torpedoes, etc. operate using the same principles as ships. Until miniatures for seeking-weapons and shuttles are made available, players will have to make do with substitutes, counters being suitable and immediately available.

SPECIAL SCENARIO FOR MINIATURES

(SN6.0) BORDER INCIDENT

In Y160 the alliance between the Federation and the Gorns was three years old. To counter it, the Romulans had entered into an agreement with the Klingons that resulted in delivery of several KR and KF5R ships. The first of these were in service with operational units late that year, when the Romulans created an incident designed to test their new ships in battle — a battle balanced well in their favor. An old "Warbird" ship attacked a Federation outpost and then fled into the Neutral Zone, drawing a Federation CA after it. The new Romulan ships Proconsul and Tribune were waiting in ambush, and the first test of these new ships seemed well under control. Unfortunately, it did not go according to plan.

Note: This scenario has been specially designed to accompany a special assortment of five miniatures being offered as a set. Klingon D7 and F5 ships are used for the KR and KF5R.

(SN6.1) NUMBER OF PLAYERS: 2; the Romulan player and the Alliance (Federation and Gorn) player.

(SN6.2) INITIAL SET UP: This scenario is designed to be played either with miniatures on a blank table, with miniatures on Starline 2200 hex sheets, or with counters on the standard map.

(SN6.21) SET UP WITH MINIATURES (BLANK TABLE)

Designate a point as the center of the battle area. Designate directions of North, South, East, and West (which need not necessarily be aligned with the world.)

The Romulan Warbird is 6" North and 4" West, heading Southeast, speed 1, weapons status III.

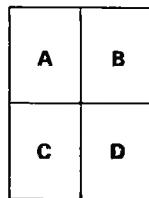
The Federation CA is 30" North and 24" West, heading Southeast, speed 12, weapons status III.

On turn 3, the Romulan KR (*Proconsul*) and KF5R (*Tribune*) enter on the map edge within four inches of 30" South and 40" East, speed max, weapons status III, heading Northwest.

On turn 4, a Gorn DD (under command of the Federation player) arrives at a point 30" North and 40" East, heading Southwest, speed max, weapons status III.

(SN6.22) SET UP WITH MINIATURES (HEX SHEETS)

Deploy the four Starline 2200 hex sheets as shown.



The Romulan Warbird is in hex 1215A, heading toward hex 1316A, speed 1 (sublight). The torpedo is in any state of arming selected by the Romulan player. The Federation CA is in hex 0101A, heading toward 0201A, speed 12, weapons status III. On turn 3, the Romulan KR (*Proconsul*) and KF5R (*Tribune*) enter on the map edge within two hexes of 1619D, speed max, weapons status III, heading toward hex 1519D. On turn 4, a Gorn DD (under command of the Federation player) arrives in hex 1601B, heading toward 1502B, speed max, weapons status III.

(SN6.23) INITIAL SET UP (COUNTERS)

Use the standard mapsheet.

The Romulan Warbird is in hex 1215, heading C, speed 1 (sublight), weapons status III.

The Federation CA is in hex 0101, heading C, speed 12, weapons status III.

On turn 3, the Romulan KR (*Proconsul*) and KF5R (*Tribune*) enter on the map edge within two hexes of 4229, speed max, weapons status III, heading F.

On turn 4, a Gorn DD (under command of the Federation player) arrives in hex 3201, heading E, speed max, weapons status III.

(SN6.3) LENGTH OF SCENARIO: The scenario continues until all ships belonging to one player have been captured, destroyed, or have disengaged.

(SN6.4) SPECIAL RULE: The Warbird has a cloaking device installed; the other Romulan ships do not.

(SN6.5) VICTORY CONDITIONS: For this scenario, the BPV of the ships is as follows:

Fed CA	10
Rom KR	10
Rom KF5R	6
Rom WB	3
Gorn DD	6

Players score victory points as per the Modified Victory Conditions.

(SN6.6) VARIATION: The Romulan player could substitute a KE4R (Volume II) for the KF5R. While this type was not historically available at this time, it would allow experimentation with the type-F torpedo.

(Z0.0) NOTES AND INFORMATION

(Z1.0) DESIGNER'S NOTES

There is considerable difficulty in doing a game on a subject where the "historical" data consists of some 100-odd hours of film, several novels, and a wide variety of semi-official "technical" data. In putting all of this into a game format, one must first consider that any "battles" shown in the films are not the only battles ever fought and are most likely to be the most unusual battles. Then the designer must construct a game system which will provide good results for "average" battles, and yet still account for the "unusual" ones.

In a historical game one can expect different sources to at least agree in their basic concepts. The real world is reasonably consistent. But in fiction in general, and this subject in particular, that consistency is simply not there. Not only do the later "add on" materials disagree considerably with the film in some cases, the various sections of the film disagree considerably with each other. The ancient bane of science-fiction writers (the speed of light and the distances to be covered) strikes home particularly hard in his universe, where we find that at maximum possible speed the ship could not cover the "five year mission" in anything less than 250 years. But if a game was to be done, all of these conflicts had to be resolved—compromised with each other to create a realistic and yet playable game system. In this game the designer has assumed the film to be correct (even where it contradicts itself) and tried to work in the other material as consistently as possible.

The designer began his work on this game by analyzing the ships. The basis of the game was the Federation heavy cruiser. In using it in the game, it was found to have certain weak points which should have been accounted for. The designer's solution was to create the "command cruiser." The dreadnought existed as a set of external blueprints and was easily enough factored into the game.

Problems began when the designer turned his attention to the Klingon battlecruiser. There exists a set of semi-official blueprints for this ship, but the blueprints do not agree with the film in key areas. The blueprint Klingon is literally bristling with phasers. These, of course, were never used on film. While rumor has it that the draftsman added them "because they looked good," the designer felt that he had to work them into the game. The solution came from another item on the blueprints, which indicated that the Klingons carried radar-homing drone missiles (also never used on film). The phasers were declared to be "defensive" phasers intended to protect the ship from drones. The relatively short range and low power neatly explained why they were never used on film. The unusual firing arcs of these phasers (all can fire to the rear, but less than half to the front) seemed to support this. But who was using drones against the Klingons?

The Kzintis were mentioned in some of the later films, and it seemed logical to use them for this hypothetical drone-using race. The few mentions of them in the novels (which do not cover the same incidents as the films) indicated that the Kzintis were near the Klingons and had previously fought them. The Kzinti strike cruiser was created by the designer as a balanced ship that was at the extreme end of the "drone technology" spectrum.

The Romulan blueprints (by the same draftsman that did the Klingons) also did not agree with the film. On film, Federation officers made the flat statement that the ship they were fighting used only "impulse" power and was purely sub-light. The blueprints show a warp-capable ship. To be sure, the idea of a sub-light ship in the film was rather ludicrous (it would have needed 50 years to cross the "Neutral Zone"), but the designer felt bound to honor the film. The blueprints were used as the basis of the War Eagle class. (The designation of "Warbird" for the sub-light ship was invented by the designer and Lou Zocchi in a phone conversation in 1977.) The War Eagles make a good deal of sense. After the Klingon treaty provided the Romulans with warp technology, older Warbird hulls would be pulled into stardocks

for refit. For similar reasons, the Federation light cruiser was designed as a counter-part to the Warbird, and the sub-light game created to use them. The silhouettes on the counters caused another problem. The ship on the film has an identical silhouette to that of the warp-speed cruiser in the blueprints. The solution was to use this for the Warbird and to add "auxiliary warp pods" for the War Eagle.

The blueprints provided a considerable amount of technical data on the "plasma torpedo," but this, unfortunately, caused more problems than it solved. The blueprints showed that the War Eagle was just barely capable of firing one. Using any realistic mathematical model, the Warbird could not possibly fire such a weapon. The designer felt obligated to honor the film, and the plasma torpedo is factored for the Warbird. All things considered, it probably would have been much easier to ignore the film and use the blueprints. But despite the fact that the most enthusiastic fans probably have the blueprints, it was obvious that far more people would have seen only the film. Playtesting of the War Eagle (which is far less hopeless than the Warbird) showed that the addition of phasers (which do not appear in anything but this game) make the ship much more effective.

The Gorns presented other problems. While the designer insisted on including them (primarily to provide a variety of cruisers), there was very little information on them. Physically impressive and personally fearless, they seemed particularly loath to stand up and fight a Federation cruiser. This could indicate a severe shortage of ships, or perhaps an honest desire to avoid bloodshed. Their ships were created (by the designer) to show a mix of Federation and Romulan technology and a penchant for ground combat (hence the large number of shuttles).

The Tholian patrol cruiser is basically that used in Lou Zocchi's earlier set of miniatures rules. The improved patrol cruiser and destroyer are more effective ships built on the same hull.

As to the game system itself, the designer felt that the basis had to be individual ships. This brought on the rather thorough "energy allocation" system. Careful analysis of the films demanded a proportional movement system to depict the warp-speed dogfights that are common in individual battles. The rest of the game more or less fell into place, using game mechanics to create the "feel" and the "flavor" of the films technology.

(Z1.1) NOTES ON THE COMMANDER'S EDITION

Most of the necessary comments about how this volume came to be have been made elsewhere in it, but it is a designer's prerogative to have a last word about his work.

The intent of this has been to lay a firm foundation on which the *STAR FLEET UNIVERSE* can reach its destiny. I think that we have accomplished that goal, and then some. My personal thanks goes to the Committee and playtesters, without whom I could not have completed, or even begun, this work. It is not perfect, but it is far better than it was, and it is in a form designed from the start to be expanded, revised, and improved.

If I could be allowed a prediction, the most asked question (or most loudly voiced complaint) about Volume I from veterans of SFB will be: "Why didn't you include everything from the expansions?" The answer is rather simple: "We did, and it's called Volume II."

The purpose was always to produce a complete rulebook, but *TASK FORCE* had also planned to include it in the boxed game, effectively transforming it to the Commander's Edition. That boxed game, in order to be kept below the maximum shelf price for a game in today's market, could not include the expansions. So the decision was made to complete first the work on that portion of "the new rulebook" that would go into the boxed game. This is what we have done, and work has not stopped on bringing the remainder of the game up to date.

We could have, I suppose, held up this volume until the rest was ready, but even so, the two volumes will cost you the same total price they would have and would reach the market at the same time that Volume II will. (Game designers cannot complete massive projects overnight; this volume took six months and Volume II will take five more.) So you had a choice of getting half of the new rulebook now an half later, or all of it later. The total price would be the same in any event. We think we that we made the right choice for you.

—Stephen V. Cole, Professional Engineer, Designer

(Z2.0) ADVICE ON TACTICS

While tactics are a product of resources and the situation, there are some basic concepts that are common to most situations.

When first entering a combat situation, it is generally a good idea to begin arming weapons that will take some time to prepare. Long-range sniping with phasers and disruptors may be used to liven up the first few turns, but a minimal amount of energy used to reinforce the forward shields will prevent this from causing any permanent damage.

Concentration of fire, both by a single ship or a fleet, is probably the single most important concept. To score any permanent shield damage, you must score enough hits to overcome reinforcement. To score any interior damage, you must overcome one of the shields. The most devastating attack any ship can launch is a combination of its phasers and heavier weapons directly onto one enemy ship and onto one of his shields during a single impulse. If this shield has previously been destroyed or weakened, so much the better. (It is generally a good idea to take a slightly longer-ranged or less advantageous shot at a damaged shield than a closer shot at an undamaged one.) This will permanently destroy that shield and cause severe internal damage. A ship with its forward shields down cannot effectively close the range with its opponent and must fight a "retreating" battle behind his rear shields (or fly into combat backwards, which is not very effective).

Klingon drones, when used against Federation ships, lessen the effect of the powerful Federation type-I phasers, as the Federation ships must use powerful phasers to knock out small drones.

Kzinti ships call for entirely different tactics. Without a heavy offensive punch from direct-fire weapons, their primary ability to destroy an enemy requires overwhelming him with drones (so many that all can't be hit and some must get through). One way to do this is to launch one wave toward the target, follow them closely, and add a second wave on the next turn (thereby putting the maximum number of them in the target area at the same time). This requires careful timing and shrewd tactical skill. Captains who can win with Kzinti ships have earned some bragging rights. The Kzinti CV lends itself to even more interesting tactics. One possibility is to launch a wedge of fighters, which in turn launch a wedge of drones. The result is a powerful ship with two or three dozen "little brothers." Cleaning up the drones and fighters is a little like stepping on ants—you just can't get them all. Another tactic (that requires more skill) is to use the fighter group as an "artificial" starship. After all, it takes 96 hits to destroy it (12 x 8), and it has 12 phasers, not to mention drones. The carrier could then circle its opponent and drive it back into the fighters.

Ships armed with plasma torpedoes again require new tactics. The plasma torpedo is the single most powerful weapon in the game—if properly employed. Firing from behind an enemy ship that is just working up to full speed will do little more than encourage him to leave (which he is probably doing anyway). If the range is even close to the difference in speed, you either won't catch him at all, or will do so only at the end of the torpedo's run, when its power is diminished sharply. The best time to release a plasma torpedo is directly in front of an opponent who is going too fast to brake and reverse direction. The only thing that he can do is reinforce the front shields, fire all his phasers at the torpedo at the last instant, and pray. Even with considerable luck, the torpedo will smash the front shield. The only real defense against a plasma torpedo is to avoid being in its primary short range firing arc, which makes tackling a plasma torpedo armed starship a tedious operation.

Using shuttles (even Kzinti fighters) in a dogfight creates an interesting situation. While they improve the offensive power of the ship (by the type III phasers they carry) and its defense (by drawing fire), they have the effect of tying a starship to a speed at which they can keep station. Otherwise they end up being left behind. The life expectancy of shuttle crews is not great.

Every player of *STAR FLEET BATTLES* should have the chance to participate in an attack on a starbase, perhaps as a club project. The various tactical principles stated above apply, but it should be obvious that plasma torpedoes will be a particularly effective weapon. The firepower of a starbase, however, is more than capable of crippling at least one ship per turn, so don't waste any time once you have gotten started.

Boarding parties add more new dimensions to tactics. If one shield can be knocked down, the marines can swarm aboard, knocking out security stations (causing Klingon mutiny) and heavy weapons (this may be the best way to deal with plasma torpedoes). Players should also experiment with the smaller ships of the games, particularly with the frigates. These ships require special handling and thought, as they are not just miniature starships, but have seriously different ratios of firepower to protection.

And, as a last word, a brief mention of speed is in order. Zipping around the map at warp 3 may be fun, but it leaves little power for fighting. The best dogfight speeds are the fastest ones to permit a turn mode of 2 (or perhaps 1 or 3). This allows adequate maneuverability, sufficient speed, and plenty of power.

(Z3.0) NOTICE TO NEW PLAYERS OF SIMULATION GAMES

Due to the subject matter of this game, many people will have purchased it as their first venture into simulation gaming (i.e. "wargames" or "adventure games"). The designer's (and the company's) best wishes go out to these people, who are entering a new and fascinating hobby. However, these people should be cautioned that *STAR FLEET BATTLES* is relatively complex as games go and may be simply too much for them to master. If you simply cannot master the game mechanics, or cannot understand what you are supposed to be doing, please do not give up! It is suggested that you return to the store where you purchased this game and ask the manager if he can put you in touch with other people who are playing it. (Alternatively, a contact system is operated by Amarillo Design, write and ask for details.) These people will be able to show you how the game works and can also show you other games in this hobby that may interest you. Games are available on almost any historical, fantasy, or science-fiction subject.

As an alternative, there are any number of inexpensive introductory games on the market. Try one of these, and after you have mastered it, return to *STAR FLEET BATTLES*. The designer strongly recommends another game that he designed: *STARFIRE*. This game costs about one-third of what the *COMMANDER'S EDITION* of *STAR FLEET BATTLES* costs. While it was never intended to serve as an introductory game for *STAR FLEET*, by the very nature of its subject (starships shooting at each other), it is similar in concept and far simpler (it has less than 20% as many rules). Players who have mastered *STARFIRE* will have little difficulty in moving up to *STAR FLEET BATTLES*. Alternatively, your store manager may be able to suggest other games. Go to him and list the science fiction and fantasy areas that interest you. He should be able to provide you with games, from a variety of companies and at a variety of price levels, on many of these areas.

(Z4.0) DESIGN CREDITS

The *COMMANDER'S EDITION* of *STAR FLEET BATTLES* is the third edition of this rulebook. As such, credits for design and development must reflect both those who originally worked on this game, those who participated in its continual expansion, and finally those who worked to create the Commander's Edition.

(Z4.1) CREDITS FROM THE ORIGINAL EDITION

Game Design	Stephen V. Cole
Game Development	Barry Jacobs
Developmental Playtesting.	David W. Crump, Leslie H. Dixon
Production	Allen D. Eldridge
Graphics: Counters	Allen D. Eldridge
SSD sheets	Allen D. Eldridge, R. Vance Buck, Steve Wilcox, Stephen V. Cole
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(24.2) CREDITS FOR DEVELOPMENT AND EXPANSION

The Commander's Edition has developed from its predecessor versions over a period of 4 years. Some of the people involved in this development include: Stephen G. Wilcox, Barry A. Jacobs, Eric Kuniholm, Mike Hillsgrave, Mike Thompson, Craig L. Carey, the Rev. Ron Wheeler, Mark Moody, Ken Hart, Richard Kerr, and Kenneth Tucker. Specific design credits are as follows:

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Drone rack types	Mike Thompson
Enveloping Plasma Torpedo	Graeme Cree
Mass-based Movement system	Mike Hillsgrave
Pseudo-Pod.....	Allen D. Eldridge
Q-Ships	Barry Jacobs
Miniatures rules adaptation	Richard Kerr & Stephen G. Wilcox

(24.3) CREDITS FOR THE COMMANDER'S EDITION

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Consultants	Lou Zocchi, Franz Joseph
Production.....	Allen D. Eldridge
Cover Art	Gary Kalin

Special recognition goes to: John Railing, who prepared a comprehensive index of the old rules that proved invaluable in preparing this rulebook; Charles V. Hayes, who painstakingly retyped all four of the old rulebooks, integrating all of the errata and changes, and sent a copy to the Bureau without asking for any reward; and to Mike Thompson, who gave up a holiday weekend to fly to Amarillo and help complete the second draft.

This product would not have been possible without the tireless work of the Committee, who are listed above as developers. These five people have dedicated the last year of their lives to this rulebook, without any thought of reward. Should you meet one of them at a convention, thank him for his work. He deserves it.

(25.0) THE STAR FLEET UNIVERSE

STAR FLEET BATTLES is only one game from the *STAR FLEET UNIVERSE*, an integrated and (eventually) comprehensive system of games portraying the universe on various levels and scales.

The *COMMANDER'S EDITION* is a total redesign of the previous *DESIGNER'S EDITION*. Several products from the Designer's Edition are still available and will remain so until they are withdrawn for conversion to the Commander's Format. Most notably, Expansions #1, #2, and #3 add more than a hundred ships, two dozen scenarios, and four new races to the game, and virtually double the size of the rulebook. Early in 1984, Volume II of the Commander's rulebook (which includes all of the remaining material from these expansions) will be released. This volume, and the eventual Volume III, are designed to be separated into their component pages and integrated into this rulebook in a suitable ring binder.

To add additional material to the game, a series of Supplements are planned. The first of these (Supplement #1: Fighters and Shuttles) is already available. These supplements are also designed to be integrated in a ring binder with this rulebook.

All *STAR FLEET UNIVERSE* products are designed and created by Amarillo Design Bureau and are produced and distributed by Task Force Games. Spare parts (counters, SSD sheets, etc.) are available for a nominal charge from the Bureau; send a stamped self-addressed envelope (address is given below) for a price list.

Play aids, such as the *BATTLE DAMAGE: CODE RED* fast damage resolution system, the *COMMANDER'S SSD BOOKS*, and the *SHIP'S COMPUTER* software program are also developed by Amarillo Design Bureau and released by Task Force.

To support the *STAR FLEET UNIVERSE*, three publications are produced and distributed by the designer and/or publisher.

CAPTAIN'S LOG appears several times each year. Each issue includes a major piece of fiction designed to illustrate the *STAR FLEET UNIVERSE*, along with about two dozen new scenarios. *CAPTAIN'S LOG* is available through better hobby and game stores everywhere; it not available by subscription. *CAPTAIN'S LOG* is edited by Amarillo Design Bureau and is produced and distributed by Task Force Games.

NEXUS magazine, which covers many broad areas of gaming, includes a substantial section on *STAR FLEET BATTLES* and the *STAR FLEET UNIVERSE* in each issue. A typical issue might include SSD's for new ships, a scenario, a section on tactics, history, rules questions (with the answers), and new rules sections, along with news about gaming events and new products. *NEXUS* is a product of Task Force Games; Amarillo Design Bureau provides the *STAR FLEET* material for each issue. To subscribe to *Nexus* send \$10 for one year (6 issues) to Task Force Games. If after 1983, write for current subscription rates.

STARLETTER, an informal newsletter produced by Amarillo Design Bureau, includes rules changes, errata, product announcements, and playtesting information. For a free sample copy, send a stamped self-addressed envelope to Amarillo Design Bureau (address below).

To add visual imagery to the game, Task Force produces the *STARLINE 2200* line of 1/3788 scale miniatures. (The Federation CA is 3" long.) Rules for using these miniatures are included in the Commander's Edition; ask your hobby store to show you these finely detailed starship models.

More products will be appearing for the *STAR FLEET UNIVERSE* at frequent intervals. Watch for them!

(26.0) COPYRIGHT AND PUBLISHER'S INFORMATION

STAR FLEET BATTLES — THE COMMANDER'S EDITION, was created by Amarillo Design Bureau and published by Task Force Games, 1110 N. Fillmore, Amarillo, Texas, 79107 (telephone 806-376-6229). Dealer inquiries are welcome. Hobby and game stores, please write on your letterhead and ask for a list of qualified wholesalers, or call Task Force and ask for a salesman from one of the wholesalers to call on you. Task Force products are available to individuals in retail stores and from several direct mail companies. Products are not directly available to stores or individuals from Task Force Games; please do not order from TFG. If your store does not carry Task Force Games products, send us his name and address and we'll have our wholesalers contact him.

Questions, comments, suggestions, new ships or scenarios, fiction, and other expansion material for the *STAR FLEET UNIVERSE* should be sent only to Amarillo Design Bureau, Box 3012, Amarillo, Texas 79106. All correspondence should include a stamped self-addressed envelope if you wish to receive an answer or evaluation of your submission. Your return envelope MUST bear enough postage to cover the return of your questions (about four pages to one 20-cent stamp). (Foreign customers should enclose International Reply Coupons or unused stamps from their country.) It is imperative that you place your name and address on every page of your submission. Do not put questions and expansion material on the same sheet. Put each rule, scenario, or ship on a separate sheet. When sending questions, phrase each one so that it can be answered with a yes or no, a brief answer, or by circling one of several choices. All future expansions and other products for the *STAR FLEET UNIVERSE* will be prepared by ADB; all questions relating to existing products will be answered by ADB.

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ANNEX #7A COLOR OF COUNTERS

Blue on White	= All fleets
Black on Blue	= Federation
White on Black	= Klingons
Black on Red	= Romulans
Black on White	= Kzinti
Red on White	= Gorn
White on Red	= Tholians
White on Blue	= Orions
White on Green	= Hydrans (Vol II)
Black on Green	= Andromedans (Vol II)
Green on Yellow	= Lyrans (Vol II)
Red on Yellow	= WYN (Vol II)
Black on Yellow	= Interstellar
	Concordium (Vol III)

ANNEX #7D LIST OF SYSTEMS DEFINED AS "WEAPONS"

The following systems are always defined as weapons: phasers, photon torpedoes, plasma torpedoes, disruptor bolts, fusion beams, drones, anti-drones, maulers, tractor-repulsor beams, Hellbores, plasmatic pulsar devices, web casters. The following systems are considered "weapons" for purposes of (D9.43) damage repair: expanding sphere generator, stasis field generator, displacement device.

The following systems are considered "weapons" for purposes of (S2.4E), crippled ships: probes, shuttlecraft, fighters, P/F's.

The following systems are considered "weapons" for purposes of (S3.3), modifying ships: expanding sphere generator, stasis field generator, displacement device, probe.

The following systems are considered "weapons" for purposes of (C6.547), recovery from breakdown: expanding sphere generator, stasis field generator, displacement device, probe, shuttlecraft, fighter, P/F.

The following systems are considered "weapons" for purposes of (G6.51), mutiny: expanding sphere generator, stasis field generator, displacement device, probe, shuttlecraft, fighter, P/F.

ANNEX #7E HIT CONVERSION CHART

Certain systems are scored as hit when certain other types of hits are scored. These are as follows:

HIT FROM CHART	SCORED ON
Flag Bridge	Security Station, web generator, displacement device
Drone	Power absorbers, plasmatic pulsars, web casters, Hellbore, anti-drones
Torpedo	Tractor-repulsor beam, fusion beams, disruptors
Hull	Repair
Cargo	Repair
Shuttle	Fighter

ANNEX #9 COST OF REPAIR CHART

System	Repair Cost
ADD	3
APR	4
Battery	2
Bridge (any control)	6
Cargo	1
Damage Control (per point)	3
Damage point on fighter or shtl	1
Damage point on SWAC	2
Displacement Device	25
Disruptor: range 40	10
range 30	8
range 22	7
range 15	5
range 10	4
Drone rack (any)	3
Expanding Sphere Gen	15
Fusion Beam	6
Hellbore	15
Hull	1
Impulse Engine	5
Lab	5
Mine Rack	4
PA Panel	5
Phaser-I	5
Phaser-II	4
Phaser-III	2
Phaser-IV	10
Phaser-G	6
Photon Torpedoes	8
Plasma-F	5
Plasma-G	10
Plasma-R	20
Plasma-S	15
Plasmatic Pulsar	15
Probe	3
Repair Box	6
Sensor	10
Scanner	10
Shield	2
Shuttle Bay	2
Stasis Field Gen	20
Special Sensors	15
Tractor Beam	3
Tractor-Repulsor	5
Transporter	3
Ubitron Interface	4
Warp Engine	10
Web	6
Web Caster	15

ANNEX #7B

SHIPS ABLE TO LAND ON PLANETS (Updated through Volume II)

The following ships can use the Gravity Landing System: All Orion Ships, Tholian PC, PC+, BW, DD.

The following ships can use the Aerodynamic Landing System: Romulan WB, WE, WH, CH, Falcon, Pelican, Freight Eagle, Scout Eagle; Orion Slaver, CA, CR, Sal, CVL, PFT, DR, LR; all fighters.

The following ships can land under full power: All ships capable of aerodynamic landings; all fast patrol (P/F) craft; all shuttles.

The following ships receive the 1-5 bonus when forced to crash land: All ships that can land under full power plus Federation saucers.

ANNEX #7C FLEET ASSIGNMENTS — See (U3.2)

ANNEX #5 ABBREVIATIONS

A HULL	Aft hull
ADD	Anti-drone drone
APR	Auxiliary power reactor
AS	Attack shuttle
ATG	Active Terminal Guidance
AUX CON	Auxiliary control
B	Boom (detached from Klingon ship)
BATS	Battle Station
BATSF	Battle Station with fighter module
BC	Battlecruiser
BP	Battle Pod
BPV	Basic Point Value
BS	Base Station
BSF	Base Station with fighter module
BT	Battle Tug
BTTY	Battery
C8 & C9	Classes of Klingon dreadnaughts
CA	Heavy cruiser
CC	Command cruiser
CL	Light cruiser
CM	Medium Cruiser
CR	Raider cruiser (Pirate)
CS	Strike cruiser
CV	Attack shuttle carrier
CVA	Heavy attack carrier
CVE	Escort Carrier
CVL	Light Carrier
CW	War Cruiser
DISR	Disruptor bolt
DD	Destroyer
DE	Destroyer Escort
DERFACS	Disruptor extended-range fire attenuation control system
DF	Drone Frigate
DFD	Direct-fire drone
DN	Dreadnaught
D6 & D7	Classes of Klingon BC
ECCM	Electronic Counter-Counter Measures
ECM	Electronic Counter Measures
EM	Erratic Maneuvering
EM BRIDGE	Emergency bridge
EMER BRIDGE	Emergency bridge
EW	Electronic Warfare
E4	Class of Klingon Escort
ES	Escort
F5	Class of Klingon frigates
F	Freighter
FA	Forward firing arc
FF	Frigate
FFG	Frigate, improved Federation type
F HULL	Forward hull
FX	Forward expanded firing arc
HET	High Energy Turn
KE4R	Klingon escort in Romulan service
KF5R	Klingon frigate in Romulan service
KR	Romulan ship (Klingon design)
L	Left firing arc
LF	Left forward firing arc
LR	Left rear firing arc
LS	Left side firing arc
NSM	Nuclear Space Mine
P	Pod (Federation)
PC	Patrol Cruiser (Tholian)
PHAS	Phaser
PHOTON	Photon torpedo
R	Right firing arc
RA	Rear firing arc
RF	Right forward firing arc
RR	Right rear firing arc
RS	Right side firing arc
RX	Rear expanded firing arc
S	Shuttle (or shuttlecraft)
SB	Starbase
SC	Scout
SCRTY	Security station
SHTTLE	Shuttlecraft
SF	Scout Frigate
SkH	SkyHawk, class of Romulan ship

SpH	SparrowHawk, class of Romulan ship
SSD	Ship's Systems Display
TORP	Torpedo (photon, plasma, or disr.)
TRAC	Tractor beam
TRANS	Transporter
TT	Transport tug
UIM	Ubitron Interface Module
WEB	Web generator (Tholian)
W EN	Warp engine
WB	Warbird
WE	War Eagle

**ANNEX #6
PLAY BALANCE COST CHART**

Cost	Weapon or function value
1	Each transporter bomb (limit 12)
3	Each nuclear space mine (limit 2)
3	Each sensor mine
3	Each small captor mine
6	Each large captor mine
1	Add DM switch to one mine
1	Add control to one mine
0.5	Each extra boarding party (limit 10)
0.5	Each extra deck crew
0.5	Replace one I drone with II
1	Replace one I drone with III
0	Replace two I drones with one IV
0.5	Replace two I drones with one V
0.5	Add active terminal guidance to a drone
0.5	Improve one drone to -M
1	Improve one drone to -F
1	Improve one drone to MW
0.5	Improve one drone to double endurance
0	Replace one I drone with probe drone
1	Replace one I drone with ECM drone
1	Each extra drone

**ANNEX #6A
SHIP MODIFICATION COST CHART**

Cost	Weapon or system value
Replacements	
1	Replace one A drone rack with B drone rack
1	Replace one A drone rack with C drone rack
2	Replace two A racks with one D rack
2	Replace one A drone rack with E drone rack
2	Replace one A drone rack with G drone rack
2	Replace one shuttle with one F drone rack
2	Replace ADD with G rack
2	Replace one admin shuttle with ftr (+BPV of fighter)
5	Replace plasma-G with plasma-S
1	Replace APR with warp reactor
2	Replace A rack with G rack (F racks can be replaced for the same cost as A racks)

Basic Equipment List	
1.5	ADD
2	APR
1	Battery
1	Cargo
3	Control (any)
1	Damage Control
5	Disruptor (range 30)*
4	Disruptor (range 22)*
3	Disruptor (range 15 or less)*
4	Drone rack type A
8.0	Expanding Sphere Gen
2.0	Fusion Beam†
8.0	Hellbore*
1	Hull
3.0	Impulse Engine 2.0 Mine Rack
2	Lab
2	Phaser-I†
1.5	Phaser-II†
1	Phaser-III†
4	Phaser-IV§ (not allowed on ships)
3	Phaser-G†
5	Photon Torpedoes*
3	Photon Freezer box

2	Plasma-F reload box
4	Plasma-F§
10	Plasma-G§
20	Plasma-R*
15	Plasma-S§
15	Plasmatic Pulsar Device
1	Probe
1	Shields (cost for six boxes, max 30 boxes)
15	Stasis Field Generator
0.5	Tractor Beam
1	Transporter
4	Warp Engine
3	Web
15	Web caster

§	120° firing arc, swivels available
†	120° arc, for 180° add 25%, for 360° firing arc double cost
‡	120° arc, for 180° add 25%, larger arcs not available
*	120° firing arc, not expandable

Conversions and Improvements

3	Plasma swivel mounts for G or S
2	Plasma swivel mounts for F
5	Install scrambler on ship
1	Install P/F link on tractor beam
15	Cloaking Device (minimum 10)
5	Ubitron Interface Module
3	DERFACS fire control system
2	Add one "6" box to sensor track
2	Add one "0" box to scanner track
3	Improve drone control to a number equal to sensor track
5	Improve drone control from equal to double the sensor track
3	Ability to use emergency deceleration (Federation uses for free)
4	Ability to use positron flywheel

Crew and Officer options

25	Legendary Captain
15	Legendary Engineer
15	Legendary Weapons Officer
8	Legendary Navigator
8	Legendary Marine Major
6	Legendary Science Officer
3	Legendary Doctor
-20%	Poor Crew
+50%	Outstanding Crew
+50%	(of ftr BPV) for Ace pilot
-33%	(of ftr BPV) for Green pilot
+50%	Computer operated ship

Penalties for special use

3	Firing probe as weapon when not normally allowed (one time penalty)
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ANNEX #8B
ORION PIRATE OPTIONAL WEAPONS MOUNT CHART

Photon Torpedo	= 0
Plasma-F Torpedo	= 1
Disruptor	= 0
Phaser-I	= 0
Phaser-II	= -0.25
Phaser-III	= -0.50
Phaser-G	= 2
ESG	= 1*
Fusion Beam	= 0
Hellbore	= 2
PPD	= 2*
Drone Rack A	= 0
Drone Rack B	= 1
Drone Rack C	= 1
Drone Rack E	= 1
Drone Rack G	= 2
ADD	= 0
Stasis F G	= 2*
Plasma-G	= 2*
Plasma-S	= 4*
Web Caster	= 3*

* Requires two adjacent centerline optional mounts.

ANNEX #2

STANDARD GAME SEQUENCE OF PLAY

This sequence of play lists almost every action that can be taken during the turn, in the EXACT order than they occur. These actions must be taken in the SPECIFIC order listed here. This list is complete through Volume II and Supplement #1.

1. ENERGY ALLOCATION PHASE

Resolve direction after tumbling.
Ships drop warp engines; P/F's drop warp packs.
Tractor/Negative-tractor auction.
All players allocate energy in accordance with the rules.
Plot self-destruction.
Orions announce if they are doubling their engine output.

Reattach pods to a tug.

Labs attempt to identify drones.

SWAC/Scouts attempt to divert drones.

Launch wild weasels; SWACS go wild.

Launch plasma torpedoes and pseudo-plasma torpedoes.

Deploy drones from MW drones and scatter-pack shuttles.

Launch drones and suicide shuttles.

Launch probes (for information, not as weapon).

Resolve direct-fire seeking weapons.

Drop chaff.

Activate/de-activate expanding sphere generators.

Activate/de-activate stasis field generators.

First die roll for mutiny.

Operate transporters.

Conduct "hit and run" raids.

Challenge enemy shuttles to a dogfight.

Fighters may drop warp booster packs.

Recover shuttlecraft, fighters, fast patrol ships.

Move shuttles between hangar and balcony.

Launch shuttlecraft, fighters, fast patrol ships.

Move shuttles between shuttle bay and balcony.

Drop pods from a tug.

Resolve ship separation.

Lay mines (other than by transporters).

Announce emergency deceleration.

Roll to determine new facing of tumbling ships.

2. SPEED DETERMINATION PHASE

All players announce their speed.
The controller prepares his charts.

C. DOGFIGHT RESOLUTION INTERFACE (Only on certain impulses)

Fighters carrying booster packs may drop them. Resolve any resulting separations.

Announce intent to separate by breakaway and resolve any resulting separations.

Determine advantage and resolve any resulting separations or surrenders.

Launch dogfight drones.

Drop chaff.

Fire weapons at drones launched above if allowed by firing arcs.

Resolve phaser fire between fighters in the dogfight.

Determine if dogfight drones or drones coming from outside of the dogfight hit their targets (or just what they did hit), and resolve damage.

Resolve any collisions or separations resulting from (J7.6621).

5. INITIAL ACTIVITY SEGMENT

Tractor rotations.
Assign boarding parties as guards.
Ships undock from bases and FRD's.
Movement into or through atmosphere.
Landing or taking off from planets.
Drop shields to facilitate transporters.
Roll for variable pulsar to determine when pulsar will emit outburst.

6. IMPULSE PROCEDURE

A. MOVEMENT SEGMENT

Move playing pieces in accordance with black hole rules (P4.1).
Movement caused by nebula (P6.5) on certain impulses.
Determine which playing pieces will move in this impulse.
Move those playing pieces scheduled to move in accordance with the rules.
Resolve breakdowns.
Resolve escapes under catastrophic damage rules.
Resolve actions of ESG's (including interaction of ESG's and mines).
Resolve damage from enveloping plasma torpedoes.
Resolve damage from seeking weapons.
Resolve damage from asteroids.
Resolve damage from mines.
Resolve explosions from destroyed units (if any) and any resulting ship separations.
Roll for possible critical hits.
Resolve deceleration by damage (C2.3).
Release ships from stasis field generators or tractor beams if these systems were destroyed in this segment.
Announce intention to adopt/drop pursuit plotting.
Challenge dogfight.
Emergency deceleration takes effect.

D. DIRECT-FIRE WEAPONS SEGMENT

All players secretly and simultaneously decide what direct-fire weapons to fire and the targets of these weapons.

All players announce their planned weapons fire.
Direct fire weapons are resolved. Resolution is assumed to be simultaneous.

Resolve escapes under catastrophic damage rules.

Resolve explosions from destroyed units (if any) and any resulting ship separations.

Roll for possible critical hits.

Release ships from tractor beams of stasis field generators if these systems were destroyed in this segment.

E. POST COMBAT SEGMENT

Roll for the possibility of UIM breakdown.
Resolve use of displacement devices.
Announce starting or stopping of erratic maneuvers.

7. FINAL ACTIVITY PHASE

Roll for mutiny.
Resolve boarding party combat.
Ships dock at bases or FRD's.
Roll for critical hit repair.

8. RECORD KEEPING PHASE

Resolve repair of shields by damage control.
Transfer power from PA panels to batteries.
PA panels dissipate power to space.
Orions record loss of engines from double output.
Determine information from labs based on closest approach to the monster (or other object of study).
Record drone racks, ready racks, and fighters reloaded by deck crews.
Record weapons and equipment loaded on fighters by deck crews.
End of turn. Begin a new turn at the start of the sequence.

=====
MASTER SHIP CHART -- COMMANDER'S STAR FLEET BATTLES

Ship Type	G9.0 Unts	D7.0 Brdg Prts	S2.1 BPV	C6.5 Break Down	C2.12 Move Cost	J1.42 Spare Shttl	R0.6 Size Class	C3.3 Turn Mode	Rule Nbr
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THE FEDERATION STAR FLEET (R2.0)

DN	50	14	180	3-6	1.5	4	2	E	2
DN+	52	14	205	3-6	1.5	4	2	E	17
CX	46	14	268	5-6	1.0	4	2	D	S2
CC	45	10	137	5-6	1.0	3	3	D	3
CA	43	10	125	5-6	1.0	3	3	D	4
CV	49	10	172/150	5-6	1.0	2+4	2	D	13
GS	45	12	140/120	5-6	1.0	2	3	D	16
GS(CVL)	44	6	133	5-6	1.0	1+2	3	D	16
CL	37	8	93	4-6	0.75	2	3	C	5
CLS	40	10	105/90	4-6	0.75	3	3	C	N6
ECL	40	6	90	4-6	0.75	4	3	C	15
NCL	36	8	116	4-6	0.67	2	3	C	18
NSC	32	8	120/100	4-6	0.67	2	3	C	19
NECL	38	8	120	4-6	0.67	2	3	C	20
DD	20	6	94	3-6	0.5	1	4	C	6
DE	22	4	92	3-6	0.5	3	4	C	14
DEA	22	4	98	3-6	0.5	3	4	C	23
SC	19	6	68/30	3-6	0.5	1	4	C	7
MS(CL)	30	6	94/80	4-6	0.75	2	3	C	21
Tug	22	2	88/60	2-6	1	1	3	1	8
BT	30	10	168	2-6	1.5	1	2	E	10
CVT	42	6	148/90	2-6	1.5	2+4	2	E	22
P-CV	20	4	60/30	-	A	1+4	4 ^o	-	22
P-SL	4+30	2	48/20	-	A	-	4 ^o	-	9
BP	8	8	88/45	-	A	-	4 ^o	-	10
P-C	0	0	14/10	-	#	-	-	-	11
Pol	6	2	40	6	0.33	1	4	A	12
PolCVE	12	2	60	5-6	0.5	1+2	4	B	24
DN Scr	30	8	90	2-6	0.5	-	4 ^o	C	-
CA Scr	20	5	60/20	-	A	-	4 ^o	-	-
S-Qship	6	4	40	2-6	0.33	-	4	D	-
L-Qship	12	8	81	2-6	0.5	-	4	D	-

=====
THE ORION PIRATES (R8.0)

CA	30	16	127	5-6	1.0	2	3	B	3
CRX	22	14	180	6	0.67	2	2	A	S2
CR	20	12	86	6	0.67	2	3	A	2
Sal	36	20	112/90	4-6	0.67	2	3	C	4
CVL	38	18	130/90	4-6	0.67	2+2	3	C	6
PFT	36	18	130/90	4-6	0.67	2	3	C	9
Slv	12	8	83/60	3-6	0.25	1	4	D	5
LR	12	8	68	6	0.33	1	4	AA	7
DR	12	8	68	6	0.33	1	4	AA	8
Bucnr	3	1	20/40	6	0.2	-	5	AA	81
BS	40	10	200/75	-	#	2	3	-	-

Ship	Crew	BP	BPV	BD	Move	Spare	Size	Turn	Rule
THE KLINGON DEEP SPACE FLEET (R3.0)									
B-10	81	32	316	2-6	2.0	2+2	2	E	17
C-9	62	24	213	3-6	1.5	2	2	D	2
C-8	60	24	211	3-6	1.5	2	2	D	3
C-8V	66	20	235/200	3-6	1.5	2+6	2	D	28
DX	46	20	267	5-6	1.0	2	2	B	S2
D-7	45	14	117	5-6	1.0	1	3	B	4
D-7A	45	14	127	5-6	1.0	1	3	B	8
D-7C	47	16	139	5-6	1.0	2	3	B	N5
D-6	44	14	113	5-6	1.0	1	3	B	5
D-6CV	45	8	106	5-6	1.0	1+2	3	B	21
D-6PFT	44	8	109	5-6	1.0	1	3	B	22
D-5	40	8	102	5-6	0.67	1	3	B	23
D-5A	40	8	110	5-6	0.67	1	3	B	24
AD-5	40	8	120	5-6	0.67	1	3	B	29
F-5	22	8	71	4-6	0.5	-	4	A	6
F-5S	20	6	75/60	4-6	0.5	-	4	A	20
F-5M	20	6	75/60	4-6	0.5	-	4	A	27
F-5CVL	24	6	90/70	4-6	0.5	1+2	4	A	30
E-4	14	6	55	4-6	0.33	-	4	A	7
E-4A	14	6	60	4-6	0.33	-	4	A	25
E-3	12	5	42	4-6	0.33	-	4	A	18
E-3A	12	5	48	4-6	0.33	-	4	A	26
G-2	10	4	46	5-6	0.33	-	4	A	19
G-1	3	1	20/38	6	0.2	-	5	AA	81
Tug-A	20	7	125/110	3-6	1.0	1	3	11	9
Tug-B	18	3	106/70	3-6	1.0	1	3	11	10
CV(T)	40	13	158/139	3-6	1.0	1+4	3	E	16
P-H5	10	3	14/12	-	#	0+2	-	-	15
P-C1	0	0	14/10	-	#	0	-	-	11
P-P2	3	1	28/15	-	#	-	-	-	12
P-T3	3+20	40	42/30	-	Δ	-	4°	-	13
P-B4	10	6	31	-	#	1	-	-	14
B-Bm	18	8	125	2-6	1.0	-	3°	C	-
C-Bm	12	6	75	2-6	0.5	-	4°	C	-
D-Bm	9	4	58/30	-	Δ	-	4°	-	-
F-Bm	6	3	35/20	-	Δ	-	4°	-	-
S-Qship	5	5	41	2-6	0.33	-	4	D	-
L-Qship	10	10	83	2-6	0.5	-	4	D	-

THE WYN AUXILIARY FLEET (R12.0)

Orn CR	19	10	86	6	0.67	2	3	A	2
Lyr DD	24	4	93	6	0.5	1	4	B	3
Kz FF	22	4	90	5-6	0.33	2	4	A	4
K1 G2	10	4	54	5-6	0.33	-	4	A	5
WYN AxC	8	4	65	3-6	0.33	-	4	C	6
WYN AxCV	8	2	75/50	3-6	0.33	0+2	4	C	7

Ship	Crew	BP	BPV	BD	Move	Spare	Size	Turn	Rule
THE KZINTI BATTLE FLEET (R5.0)									
SSCS	70	30	245	4-6	1.5	3+6	2	E	24
SCS	65	24	215	4-6	1.5	3+3	2	E	11
CVA	65	20	215	4-6	1.5	2+6	2	E	25
CV	50	20	147	5-6	1.0	3+3	3	E	6
CVS	50	20	160	5-6	1.0	3+3	3	E	7
CVL	40	15	117	5-6	1.0	2+2	3	C	9
CVE	30	10	89	5-6	0.67	1+2	3	B	10
CSX	41	18	264	5-6	1.0	3	2	C	S2
CC	44	20	135	5-6	1.0	2	3	C	4
BC	40	16	124	5-6	1.0	2	3	C	3
CS	40	16	116	5-6	1.0	2	3	C	2
CM	33	12	110	5-6	0.67	1	3	B	19
CL	30	10	84	5-6	0.67	1	3	B	5
FF	20	6	62	5-6	0.33	1	4	A	8
AFF	20	6	70	5-6	0.33	1	4	A	20
DF	21	4	74	5-6	0.33	1	4	A	23
SC	18	4	75/55	5-6	0.33	1	4	A	18
PFT	30	8	75/65	5-6	0.5	1	3	B	22
MS	18	2	70/45	5-6	0.33	1	4	A	21
Tug	28	8	114/90	4-6	1.0	2	3	¶	12
P-C1	0	0	14/10	-	#	-	-	-	13
P-H2	11	4	19/12	-	#	0+2	-	-	14
P-B3	12	8	37	-	#	-	-	-	15
P-SD4	6	6	24/20	-	#	-	-	-	16
P-T5	3+20	40	31/20	-	Δ	-	4°	-	17
Needle	3	1	20/37	6	0.2	-	5	AA	81
Fi-Con	3	1	30	6	0.2	-	5	AA	82
MRN-ABJ	3	1	30/37	6	0.2	-	5	AA	83
MRN-C-H	3	1	30	6	0.2	-	5	AA	83
S-Qship	6	6	30	2-6	0.33	-	4	D	-
L-Qship	12	12	62	2-6	0.5	-	4	D	-

THE LYRAN BATTLE FLEET (R11.0)

DN	62	22	203	3-6	1.5	2	2	D	2
BC	52	20	142	4-6	1.0	2	3	C	3
CA	42	12	133	5-6	1.0	1	3	C	4
CX	45	12	272	5-6	1.0	1	2	C	S2
CV	44	10	135	5-6	1.0	2+4	3	C	12
CW	34	10	115	5-6	0.67	1	3	B	N5
CL	34	9	92	5-6	0.67	1	3	C	5
DD	26	6	79	6	0.5	1	4	B	6
SC	25	6	80/60	6	0.5	1	4	B	9
MS	22	4	80/60	6	0.5	1	4	B	8
PFT	28	4	80/50	6	0.5	1	4	B	10
FF	18	4	63	6	0.33	1	4	A	7
AF	18	4	70	6	0.33	1	4	A	11
Tug-P	34	6	121/102	3-6	1.0	-	3	D	N6
Tug-C	40	10	138/124	3-6	1.0	1	3	D	N6
Pal-Bt	20	12	50/60	-	#	-	-	-	N6
Pal-C	-	-	28/20	-	#	-	-	-	N6
Pal-TT	4+40	80	50/30	-	Δ	-	4°	-	N6
Pal-PFT	20	4	40/30	-	#	-	-	-	N6
P/F	3	1	20/37	6	0.2	-	5	AA	81
Fi-Con	3	1	20/25	6	0.2	-	5	AA	12
S-Qship	5	5	41	2-6	0.33	-	4	D	-
L-Qship	10	10	83	2-6	0.5	-	4	D	-

Ship	Crew	BP	BPV	BD	Move	Spare	Size	Turn	Rule
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THE GORN CONFEDERATION FLEET (R6.0)

DN	62	24	220	4-6	1.5	4	2	E	11
CX	48	18	260	5-6	1.0	3	2	D	S2
CA	46	16	141	5-6	1.0	3	3	D	2
CV	36	8	120	4-6	0.67	2+4	3	D	16
CL	32	8	107	4-6	0.67	2	3	D	3
HDD	32	12	105	5-6	0.67	1	3	C	12
BDD	24	8	85	5-6	0.5	1	4	C	N6
DD	20	6	68	4-6	0.5	1	4	C	4
SC	20	6	70/55	4-6	0.5	1	4	C	13
PFT	20	4	70/55	4-6	0.5	1	4	C	14
MS	20	4	70/55	4-6	0.5	1	4	C	15
Tug	23	4	96/44	2-6	1	2	3	1	5
P-C	0	0	15/10	-	#	0	-	-	6
P-T	2+40	80	60/30	-	Δ	2	4 ^o	-	7
P-SL	2+20	6	40/20	-	Δ	1	4 ^o	-	9
P-M	17	6	45/96	-	#	0	-	-	8
Pter PF	3	1	20/40	6	0.2	0	5	AA	81
S-Qship	6	5	25	2-6	0.33	0	4	D	-
L-Qship	12	10	80	2-6	0.5	0	4	D	-

THE IMPERIAL ROMULAN FLEET (R4.0)

DN	60	20	224\$	5-6	1.5	2	2	E	6
KRX	42	16	275	5-6	1.0	1	2	B	S2
KR	40	10	132\$	5-6	1.0	1	3	B	4
KRT	20	6	140/128\$	3-6	1.0	1	3	1	N6
SpH-A	36	10	125\$	5-6	0.67	1	3	B	14
SpH-B	38	8	125/110\$	5-6	0.67	1+2	3	B	15
SPH-Bv	42	8	131/120\$	5-6	0.67	1+4	3	B	29
SpH-C	40	10	130/114\$	5-6	0.67	1	3	B	16
SpH-D	32	6	110\$	5-6	0.67	1	3	B	17
SpH-E	38	6	113\$	5-6	0.67	1	3	B	18
SpH-F	32	6	120\$	5-6	0.67	1	3	B	19
SpH-G	24+40	5+80	143/110\$	5-6	0.67	1	3	B	20
SpH-H	34	8	124/100\$	5-6	0.67	1	3	B	N6
WE	20	5	100\$	5-6	1.0	-	3	D	3
SE	18	4	110/80\$	5-6	1.0	-	3	D	12
FrtE	16	2	90/50\$	5-6	1.0	-	3	D	N6
F-Pal	-	-	10	-	#	-	-	-	N6
WH	20	5	87/60\$	5-6	0.5	1+1	4	D	7
CH	21	4	90/55\$	5-6	0.5	1	4	D	13
MS	14	5	72/40\$	4-6	0.5	1	4	D	8
MA	12	2	88\$	4-6	1.0	0	3	D	9
WB	15	5	45\$	5-6	Δ	0	3	-	2
SkyH-A	22	8	102\$	6	0.5	-	4	A	21
SkyH-B	24	6	92\$	6	0.5	0+2	4	A	22
SkyH-C	24	6	93\$	6	0.5	0	4	A	23
SkyH-D	20	6	95\$	6	0.5	2	4	A	24
SkyH-E	22	8	105\$	6	0.5	1	4	A	25
SkyH-F	22	8	110/90\$	6	0.5	1	4	A	26
SkyH-G	20+20	4+40	107/92\$	6	0.5	2	4	A	27
SkyH-H	18	6	93/85\$	6	0.5	1	4	A	28
KF5R	20	5	78\$	4-6	0.5	0	4	A	5
KF5RS	18	4	85/60\$	4-6	0.5	-	4	A	11
KE4R	13	4	60\$	4-6	0.33	-	4	A	10
Cent PF	3	1	20/44\$	6	0.2	0	5	AA	81
S-Qship	5	4	40	2-6	0.33	0	4	D	-
L-Qship	10	8	80	2-6	0.5	0	4	D	-

Ship	Crew	BP	BPV	BD	Move	Spare	Size	Turn	Rule
THE THOLIAN DEFENSE FLEET (R7.0)									
D	45	14	175	4-6	1.0	2	2	C	5
CX	36	10	215	5-6	0.75	1	2	B	S2
C	34	10	120	4-6	0.75	1	3	B	6
CVA	40	8	141	4-6	0.75	1+4	3	B	9
DD	18	8	80	5-6	0.50	-	4	A	4
PC+	14	6	65	5-6	0.5	1	4	A	3
PC	12	5	59	5-6	0.5	1	4	A	2
BW	20	6	65	5-6	0.5	1+2	4	A	7
PFT	20	6	70	5-6	0.5	1	4	A	8
Arac PF	3	1	20/38	6	0.2	0	5	AA	81
S-Qship	5	4	41	2-6	0.33	0	4	D	-
L-Qship	10	8	83	2-6	0.5	0	4	D	-

THE ROYAL HYDRAN FLEET (R9.0)									
DN	54	18	170	4-6	1.5	3+4	2	D	4
XR	37	14	220	5-6	1.0	2+3	2	C	S2
XD	38	14	250	5-6	1.0	2+1	2	C	S2
CVA	40	10	140/105	5-6	1.0	2+6	3	C	15
CA(R)	35	12	93	5-6	1.0	2+3	3	C	2
CA(D)	36	14	130	5-6	1.0	2+1	3	C	8
CL(H)	30	10	83	5-6	0.67	1+2	3	B	10
CL(T)	31	12	112	5-6	0.67	1	3	B	11
CV(U)	26	6	108/85	6	0.5	2+4	4	B	17
DD(L)	22	8	67	6	0.5	1+2	4	B	3
DD(K)	23	10	90	6	0.5	1	4	B	9
DE(AL)	22	8	90	6	0.5	1+2	4	B	16
MS	20	4	75/65	6	0.5	2	4	B	14
PFT	24	6	78/40	3-6	0.67	1	3	D	12
Sc	12	4	44/26	6	0.33	1	4	A	5
Hnt	10	6	48	6	0.33	1	4	A	6
A-Hnt	10	4	54	6	0.33	1	4	A	13
Cuir	10	6	65	6	0.33	1	4	A	7
Tug	22	6	110/70	4-6	1.00	2	3	C	N6
Pal-C	-	-	14/10	-	#	-	-	-	N6
Pal-FS	10	6	50/90	-	#	-	-	-	N6
Pal-TT	4+40	80	30/20	-	#	1	-	-	N6
Pal-SD	10	4	25	-	#	-	-	-	N6
Pal-Com	10	6	40	-	#	-	-	-	N6
Pal-Ftr	2	-	15	-	#	-	-	-	N6
Harrier	3	1	20/37	6	0.2	-	5	AA	81
Hellion	3	1	24/42	6	0.2	-	5	AA	82
S-Qship	5	5	25	2-6	0.33	0	4	D	-
L-Qship	10	10	55	2-6	0.5	0	4	D	-

MOVEMENT COST AND TURN MODES FOR TUGS									
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TUG CLASS	0 PODS	1 Pod	2 PODS	3 PODS
Federation	1 D	1 D	1.5 E	2.0 F
Gorn	1 D	1 D	1.5 E	2.0 F
Klingon	1 D	1 D	1.0 E	-
Kzinti	1 D	1 D	1.0 E	-
Hydran	1 C	1 D	-	-
Romulan KRT	1 D	1 D	1.0 E	-
Romulan FE	1 D	1.3 D	-	-
Lyran	1 D	1 D	-	-

Ship	Crew	BP	BPV	BD	Move	Spare	Size	Turn	Rule
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THE ANDROMEDANS (R10.0)

Dom	38	20	360	5-6	1.5	0	2	D	2
In	24	10	200	6	1.0	0	3	C	3
Cb	14	8	90	6	0.5	0	4	A	4
Term	10	4	110	6	0.5	0	4	A	6
Co	10	4	70	6	0.33	0	4	A	5

ALL FLEETS (R1.0)

SB	250	50	600	-	#	6	1	-	1
BATS	100	24	200	-	#	4	2	-	2
BS	60	12	120	-	#	2	3	-	3
FBay	7	-	10	-	#	0+2	-	-	4
FRD	80	12	200/50	-	Δ	2	2	-	10
Cargo PF	3	1	20	6	0.2	-	5	AA	82
Scout PF	3	1	30/20	6	0.2	-	5	AA	81
S-AxCV	10	2	75/50	3-6	0.33	0+2	4	B	13
L-AxCV	20	4	120/80	3-6	0.67	2+4	3	B	13

CIVILIAN SHIPS (R1.0)

F-L	2	-	61/18	1-6	0.5	-	4	B	6
F-S	1	-	26/12	1-6	0.33	-	4	B	5
Armd Pr	4	2	75/20	3-6	0.20	-	4	C	8
Fed Ex	3	1	70/18	3-6	0.10	-	4	AA	11
Free Trd	3	2	70/22	4-6	0.5	1	4	C	9

§ includes cloaking device

Δ this is a sub-light ship

° when detached

¶ see tug chart

does not move

The rule reference number refers to the rule number in Section R that provides explanatory information about the ship. In many cases, these references will be found in Volume II or Supplement 1. In the case of new ship designs provisionally published in Nexus, these are listed according to the issue of Nexus in which they appeared (e.g. N6). All X-ships are included in Supplement #2. All bases are in (R1.1) -(R1.3). All Q-ships are in rule (R1.7).

The movement cost designation of 0.33 is considered to be 1/3; the movement cost designation of 0.67 is considered to be 2/3.

Note: This chart includes all ships released to date. Many errors in previous editions of this chart have been corrected; this list is now official and supercedes all previous lists. No ship's BPV includes its fighters, P/F's, satellite ships, or mines; all include their admin shuttles. Split BPV's are economic/combat ratings. The Spare Shuttle column is read as: admin shuttles+fighters. In the crew/boarding party columns, any figures shown as "+" are ground troops being transported, not a regular part of the ship's crew. If a specific tug+pod combination is listed (e.g. Fed BT) the combination factors must be used, NOT the sum of the individual factors. If no combined listing is shown, simply add the relevant factors.

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STAR FLEET BATTLES MASTER WEAPONS CHART

TYPE I OFFENSIVE PHASER TABLE

Die Roll	Range 0	2	3	4	5	6-8	9-15	16-25	26-50	51-75
Die Roll	0	1	2	3	4	5	6-8	9-15	16-30	31-50
1	9	8	7	6	5	4	3	2	1	1
2	8	7	6	5	4	3	2	1	0	0
3	7	5	4	4	4	3	1	0	0	0
4	6	4	4	4	4	3	2	0	0	0
5	5	4	4	4	3	3	1	0	0	0
6	4	4	3	3	2	2	0	0	0	0

TYPE III POINT DEFENSE PHASER TABLE

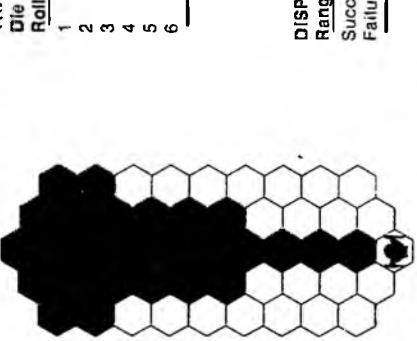
Die Roll	Range 0	1	2	3	4-8	9-15	16-30	31-50
Die Roll	0	1	2	3	4-8	9-15	16-30	31-50
1	6	5	4	3	2	1	1	1
2	6	5	4	4	2	1	2	2
3	6	4	4	4	1	1	3	3
4	5	4	4	3	1	0	4	4
5	5	4	3	3	0	0	4	4
6	5	3	3	0	0	0	5	4

TYPE IV HEAVY PHASER TABLE

Die Roll	Range 0-3	4-5	6	7	8	9	10	11-13	14-17	18-25	26-40	41-70	71-100
Die Roll	0	1	2	3	4	5	6	7	8	9	10	11	12
1	20	20	15	15	12	11	10	8	6	5	4	3	2
2	20	20	15	15	12	11	9	8	6	4	3	2	1
3	20	20	15	15	12	11	10	8	7	5	4	2	0
4	20	15	15	11	10	9	8	6	4	3	1	0	0
5	15	12	10	9	8	7	5	3	2	0	0	0	0
6	15	10	9	8	7	6	5	3	2	0	0	0	0

PLASMA TORPEDO WARHEAD STRENGTH TABLE

Range	0-5	6-10	11-12	13-14	15	16-18	19	20	21-23	24	25	26-28	29	30
Range	0	1	2	3	4	5-8	9-15	16-22	23-30	31-40	41-50	51-60	61-70	71-80
Type R	50	50	35	35	35	25	25	25	20	20	10	5	0	-
Type GII	30	30	22	22	22	15	15	15	10	5	1	0	0	-
Type G	20	20	15	15	15	10	5	1	0	0	0	0	0	-
Type F	20	15	10	5	1	0	0	0	0	0	0	0	0	-



DISPLACEMENT DEVICE TABLE

Range	0	1-2	3-15	16-22	23-31	32-50
Range	0	1	2	3	4	5
Success	-	1-5	1-4	1-3	1-2	1
Failure	1-6	6	5-6	4-6	3-6	2-6

MAULER RANGE ADJUSTMENT CHART

Range	Damage Scored	0-1	Double the energy discharged	2-5	Equal to energy discharged	6-10	One-half of energy discharged
Range	0	1	2	3	4	5	6
HIT (standard)	NA	1-5	1-5	1-4	1-4	1-2	1-2
HIT (with UIM)	NA	1-5	1-5	1-4	1-4	1-2	1-2
HIT (DERRACTS)	NA	1-5	1-5	1-4	1-4	1-3	1-3
HIT (overload)	1-6	1-5	1-5	1-4	NA	NA	NA
HIT (overload/UIM)	1-6	1-5	1-5	1-5	NA	NA	NA

ANTI-DRONE TABLE	Range 0	1	2	3	4+
HIT #	-	1-2	1-3	1-4	-
HIT #	-	1-2	1-3	1-4	-

FUSION BEAM TABLE

Range	0	1	2	3	4	5-8	9-12	13-30
Range	0	1	2	3-4	5-8	9-12	13-30	1
HIT (Standard)	NA	1-5	1-5	1-4	1-4	1-3	1-3	1
HIT (Proximity)	NA	NA	NA	NA	NA	NA	NA	NA
HIT (Overload)	1-6	1-5	1-5	1-4	1-4	1-3	1-3	1-4

PHOTON TORPEDO CHART

Range	0-1	2	3-4	5-8	9-15	16-22	23-40
Range	0-1	2	3-4	5-8	9-15	16-22	23-40
HIT #	11	10	9	8	7	6	5
Base Damage	20	17	15	13	10	8	4
Overload Damage	30	25	22	19	0	0	0

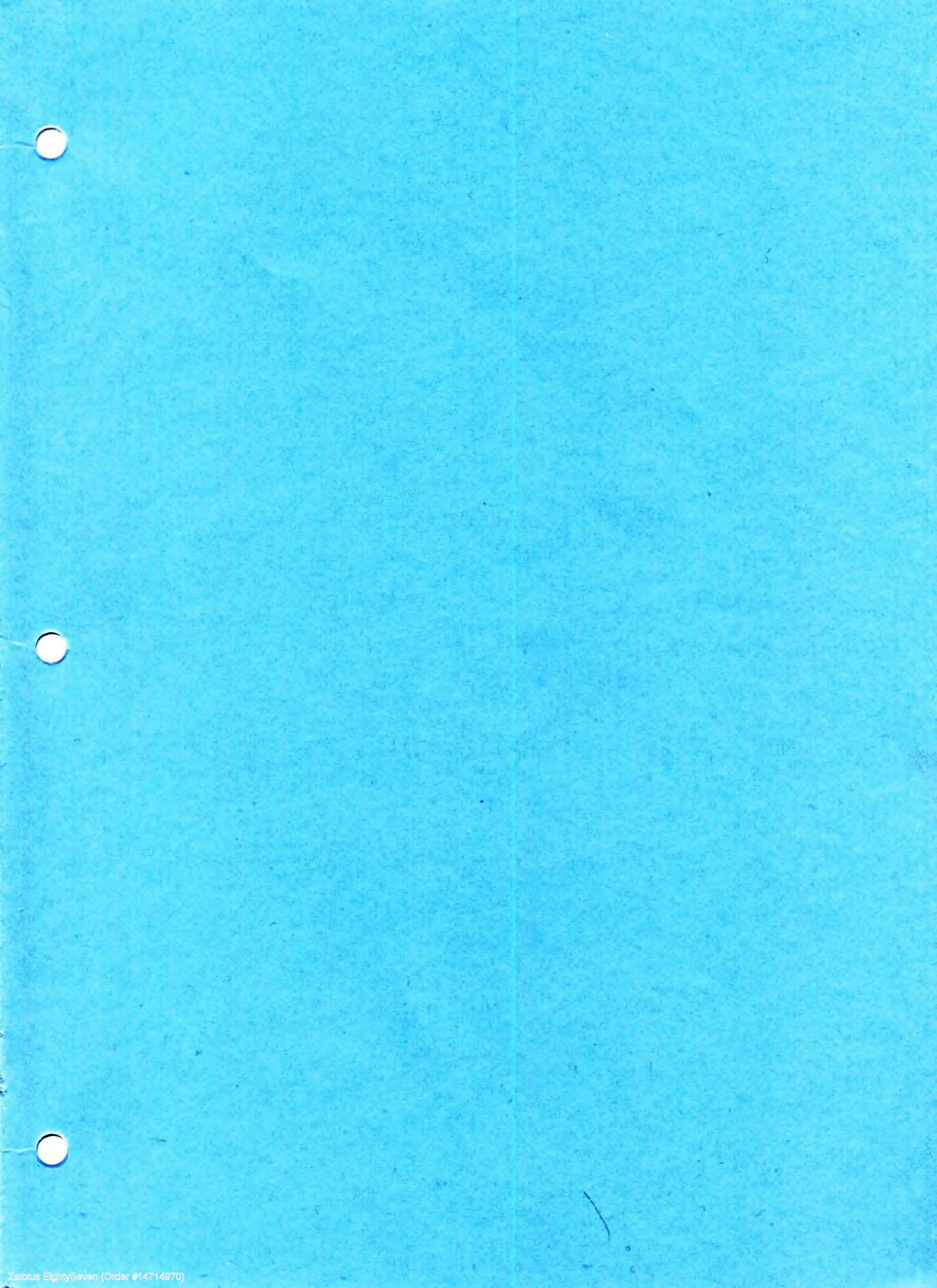
D4.21 DAMAGE ALLOCATION CHART

Die Roll	A	B	C	D	E	F	G	H	I	J	K	L	M
2	<u>Bridge</u>	<u>Flag Bridge</u>	<u>Sensor</u>	<u>Damage Control</u>	<u>A Hull</u>	Left W En	Trans	Tractor	Shuttle	Lab	F Hull	Right W En	Excess Damage
3	<u>Drone</u>	<u>Phaser</u>	Impulse	Left W En	Right W En	A Hull	Shuttle	<u>Damage Control</u>	Center W En	Lab	Battery	Phaser	Excess Damage
4	<u>Phaser</u>	<u>Trans</u>	Right W En	Impulse	F Hull	A Hull	Left W En	A P R	Lab	Trans	Probe	Center W En	Excess Damage
5	<u>Right W En</u>	A Hull	Cargo	Battery	Shuttle	<u>Torp</u>	Left W En	Impulse	Right W En	Tractor	Probe	Any Weapon	Excess Damage
6	F Hull	Impulse	Lab	Left W En	<u>Sensor</u>	Tractor	Shuttle	Right W En	Phaser	Trans	Battery	Any Weapon	Excess Damage
7	Cargo	F Hull	Battery	Center W En	Shuttle	A P R	Lab	Phaser	Any W En	Probe	A Hull	Any Weapon	Excess Damage
8	A Hull	A P R	Shuttle	Right W En	<u>Scanner</u>	Tractor	Lab	Left W En	Phaser	Trans	Battery	Any Weapon	Excess Damage
9	<u>Left W En</u>	F Hull	Cargo	Battery	Lab	<u>Drone</u>	Right W En	Impulse	Left W En	Tractor	Probe	Any Weapon	Excess Damage
10	<u>Phaser</u>	<u>Tractor</u>	Left W En	Impulse	A Hull	F Hull	Right W En	A P R	Lab	Trans	Probe	Center W En	Excess Damage
11	<u>Torp</u>	<u>Phaser</u>	Impulse	Right W En	Left W En	F Hull	Tractor	<u>Damage Control</u>	Center W En	Lab	Battery	Phaser	Excess Damage
12	<u>Aux Control</u>	<u>Emer. Bridge</u>	<u>Scanner</u>	<u>Probe</u>	<u>F Hull</u>	Right W En	Trans	Shuttle	Tractor	Lab	A Hull	Left W En	Excess Damage

COMMANDER'S LEVEL CONSOLIDATED TURN MODE CHART

TURN MODE	SEEKING WEAPONS	FIGHTERS SHUTTLES	AA	A	B	C	D	E	F
1	2-32	2-11	2-8	2-6	2-5	2-4	2-4	2-3	2-3
2		12-23	9-16	7-12	6-10	5-9	5-8	4-6	4-5
3		24+	17-24	13-19	11-15	10-14	9-12	7-10	6-9
4			25+	20-26	16-21	15-20	13-17	11-14	10-13
5				27+	22-28	21-27	18-24	15-20	14-17
6					29+	28+	25+	21-29	18-23
7								30+	24-29
8									30+

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STAR FLEET BATTLES COMMANDER'S RULEBOOK



MADE IN USA



SSD SHEETS

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AMARILLO DESIGN BUREAU

STAR FLEET BATTLES COMMANDER'S EDITION

VOLUME I

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THIRTY TWO IMPULSE MOVEMENT CHART

	SHIP SPEEDS																															
	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3	2	2	2	2	2	2	2	2	2	2	2	—	—	—	—	—	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	
4	3	3	3	3	3	3	3	3	3	—	2	2	2	2	2	2	2	—	—	—	—	—	1	1	1	1	1	—	—	—	—	
5	4	4	4	4	4	4	4	—	3	3	3	3	3	—	—	—	2	2	2	2	—	—	—	1	—	—	—	—	—	—	—	
6	5	5	5	5	5	5	—	4	4	4	4	—	3	3	3	3	3	—	—	2	2	—	—	—	1	—	—	—	—	—	—	
7	6	6	6	6	6	—	5	5	5	5	—	4	4	4	—	—	3	3	—	—	2	—	—	—	1	—	—	—	—	—	—	
8	7	7	7	7	7	6	6	6	6	—	5	5	5	5	4	4	4	4	—	3	3	—	2	2	—	1	—	—	—	—	—	
9	8	8	8	—	7	7	7	—	6	6	—	5	5	5	—	4	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	
10	9	9	9	8	8	8	—	7	7	—	6	6	—	5	5	—	4	4	—	3	—	—	2	—	—	—	—	—	—	—	—	
11	10	10	—	9	9	—	8	8	—	7	7	—	6	6	—	5	—	—	4	—	—	3	—	—	2	—	—	1	—	—	—	
12	11	11	10	10	10	9	9	9	8	8	—	7	7	—	6	6	—	5	—	—	4	—	—	3	—	—	—	—	—	—	—	
13	12	12	11	11	—	10	10	—	9	—	8	8	—	7	—	—	6	—	5	—	—	4	—	—	2	—	—	—	—	—	—	
14	13	13	12	12	11	11	—	10	10	9	9	—	8	—	7	7	—	6	—	5	—	—	3	—	—	—	—	—	—	—	—	
15	14	14	13	13	12	12	11	11	—	10	—	9	—	8	—	7	7	—	6	—	5	—	4	—	—	—	—	—	—	—	—	
16	15	15	14	14	13	13	12	12	12	11	11	10	10	9	9	8	8	—	7	—	6	—	5	—	4	—	3	—	2	—	1	
17	16	—	15	—	14	—	13	—	12	—	11	—	10	—	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
18	17	16	16	15	15	14	14	—	13	—	12	—	11	—	10	—	9	8	—	7	—	6	—	5	—	—	—	—	—	—	—	
19	18	17	17	16	16	15	—	14	13	13	12	—	11	—	10	—	—	8	—	7	—	—	—	4	—	—	—	—	—	—	—	
20	19	18	18	17	—	16	15	15	14	—	13	12	—	11	—	10	9	—	8	—	6	—	5	—	3	—	—	—	—	—		
21	20	19	19	18	17	17	16	—	15	14	—	13	12	—	11	—	—	9	—	—	7	—	—	—	—	—	—	—	—	—		
22	21	20	—	19	18	—	17	16	—	15	14	—	13	12	—	11	10	—	—	8	—	6	—	4	—	—	2	—	—			
23	22	21	20	20	19	18	—	17	16	—	15	14	—	13	12	—	12	—	10	9	—	7	—	5	—	—	—	—	—	—		
24	23	22	21	21	20	19	18	—	18	17	16	—	15	14	13	—	12	11	—	—	9	8	—	6	—	3	—	—	—	—		
25	24	23	22	—	21	20	19	—	17	16	—	15	14	13	—	12	11	—	—	10	—	—	7	—	—	—	—	—	—	—		
26	25	24	23	22	—	21	20	19	18	—	17	16	15	—	—	13	12	11	—	—	8	—	—	4	—	—	—	—	—	—		
27	26	25	24	23	22	—	21	20	19	18	—	17	16	15	14	—	—	—	—	10	9	—	—	5	—	—	—	—	—	—		
28	27	26	25	24	23	22	—	21	20	19	18	—	17	16	15	—	14	13	12	11	—	—	7	6	—	—	—	—	—	—	—	
29	28	27	26	25	24	23	—	22	21	20	19	18	17	16	—	—	—	—	—	—	9	8	—	—	—	—	—	—	—	—	—	
30	29	28	27	26	25	24	23	—	22	21	20	19	18	17	16	—	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

TWENTY IMPULSE MOVEMENT CHART

TEN IMPULSE MOVEMENT CHART

SHIP SPEEDS											
20	19	18	17	16	15	14	13	12	11	10	9
8	7	6	5	4	3	2	1	10	9	8	7
1	-	-	-	-	-	-	-	-	-	-	-
2	1	1	1	1	1	1	1	1	1	1	1
3	2	2	2	2	2	2	2	2	2	2	2
4	3	3	3	3	3	3	3	3	3	3	3
5	4	4	4	4	4	4	4	4	4	4	4
6	5	5	5	5	5	5	5	5	5	5	5
7	6	6	6	6	6	6	6	6	6	6	6
8	7	7	7	7	7	7	7	7	7	7	7
9	8	8	8	8	8	8	8	8	8	8	8
10	9	9	9	9	9	9	9	9	9	9	9
11	10	-	9	-	8	-	7	-	6	-	5
12	11	10	10	9	9	8	-	7	-	6	-
13	12	11	11	10	-	9	-	8	-	7	-
14	13	12	12	11	10	-	9	-	8	-	7
15	14	13	12	12	11	10	-	9	-	8	-
16	15	14	13	-	12	11	10	-	8	-	7
17	16	15	14	13	-	-	11	10	9	-	8
18	17	16	15	14	13	12	-	-	9	8	7
19	18	17	16	15	14	13	12	11	10	-	9
20	19	18	17	16	15	14	13	12	11	10	9

IMPLESES

SHIP SPEEDS											
10	9	8	7	6	5	4	3	2	1	10	9
1	2	3	4	5	6	7	8	9	10	11	12
1	-	-	-	-	-	-	-	-	-	-	-
2	1	1	1	1	1	1	1	1	1	1	1
3	2	2	2	2	2	2	2	2	2	2	2
4	3	3	3	3	3	3	3	3	3	3	3
5	4	4	4	4	4	4	4	4	4	4	4
6	5	5	5	5	5	5	5	5	5	5	5
7	6	6	6	6	6	6	6	6	6	6	6
8	7	7	7	7	7	7	7	7	7	7	7
9	8	8	8	8	8	8	8	8	8	8	8
10	9	9	9	9	9	9	9	9	9	9	9
11	10	-	9	-	8	-	7	-	6	-	5
12	11	10	10	9	9	8	-	7	-	6	-
13	12	11	11	10	-	9	-	8	-	7	-
14	13	12	12	11	10	-	9	-	8	-	7
15	14	13	12	12	11	10	-	9	-	8	-
16	15	14	13	-	12	11	10	-	8	-	7
17	16	15	14	13	-	-	11	10	9	-	8
18	17	16	15	14	13	12	-	-	9	8	7
19	18	17	16	15	14	13	12	11	10	-	9
20	19	18	17	16	15	14	13	12	11	10	9

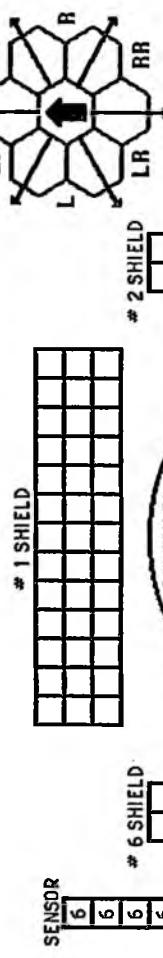
IMPLESES

ENERGY / MOVEMENT COST CONVERSION CHART

MOVEMENT COST	DESIRED SPEED											
	1	2	3	4	5	6	7	8	9	10	11	12
1/3	1	1	2	2	3	3	4	4	4	5	5	6
1/2	1	1	2	2	3	3	4	4	5	5	6	7
2/3	1	2	2	3	4	4	5	5	6	6	7	8
3/4	1	2	3	3	4	5	6	6	7	8	9	10
1-1/2	2	3	5	6	8	9	11	12	13	14	15	16

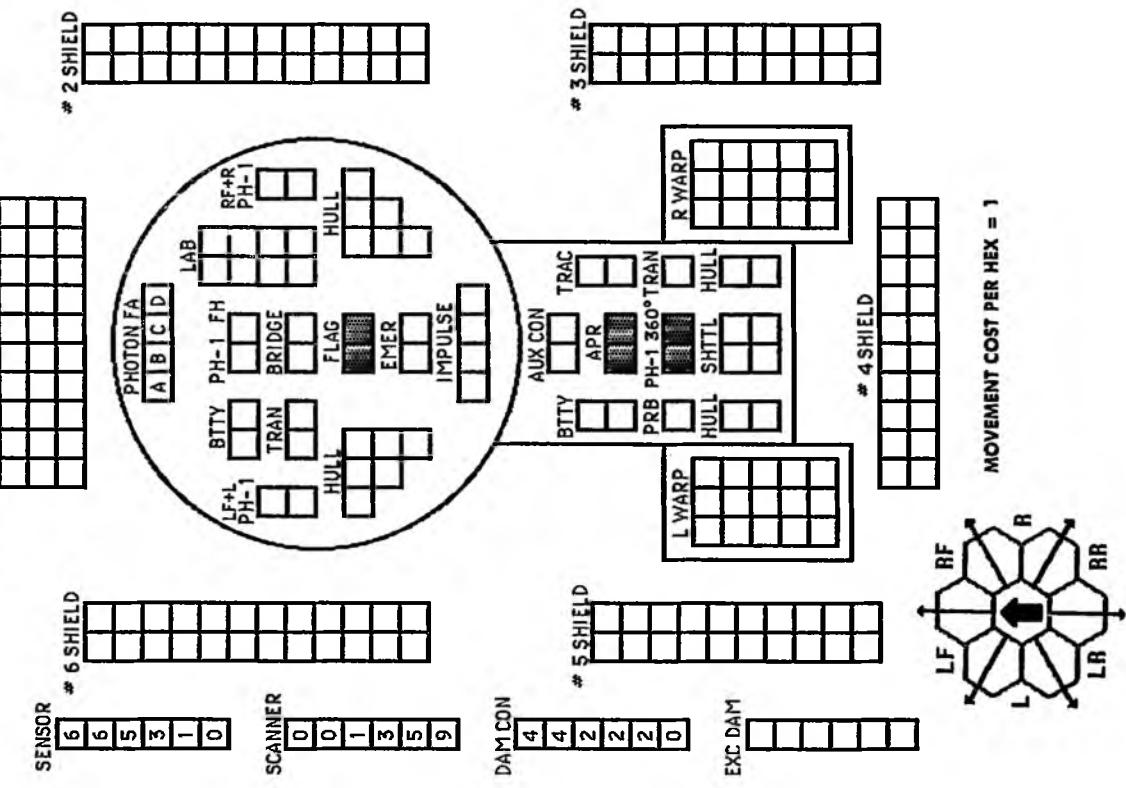
Cross-index the movement cost of the ship with the desired speed to determine energy required. Note that this chart is used for Warp energy only.

FEDERATION DREADNOUGHT



FEDERATION COMMAND CRUISER

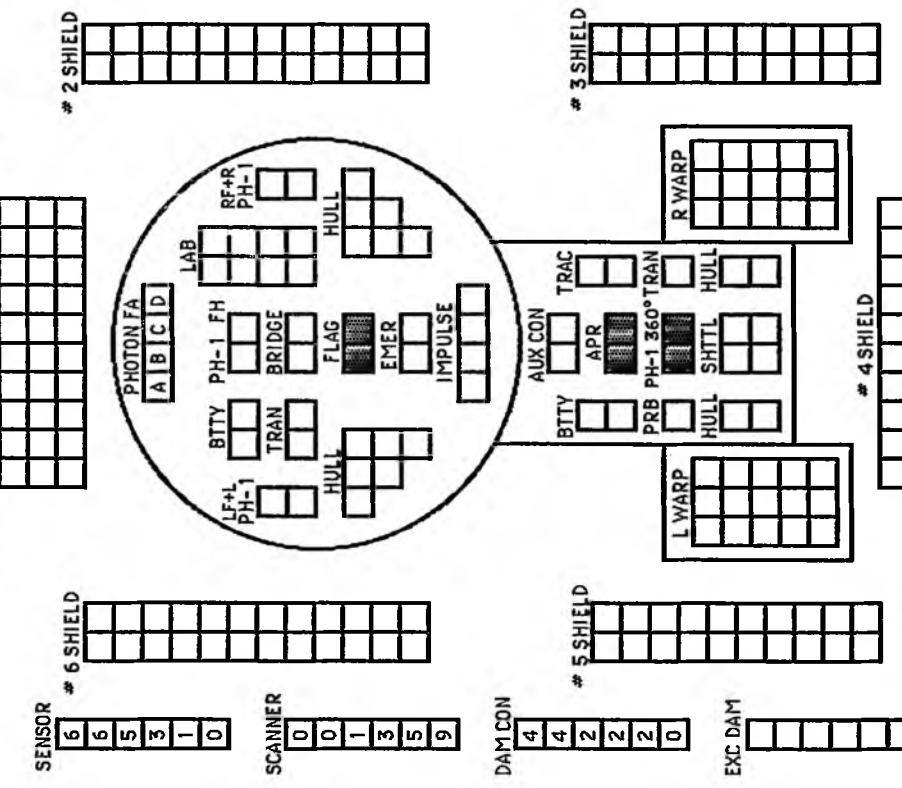
FEDERATION HEAVY CRUISER



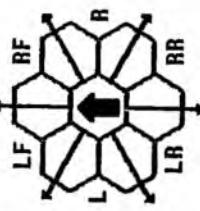
MOVEMENT COST PER HEX = 1 1/2

FEDERATION COMMAND CRUISER

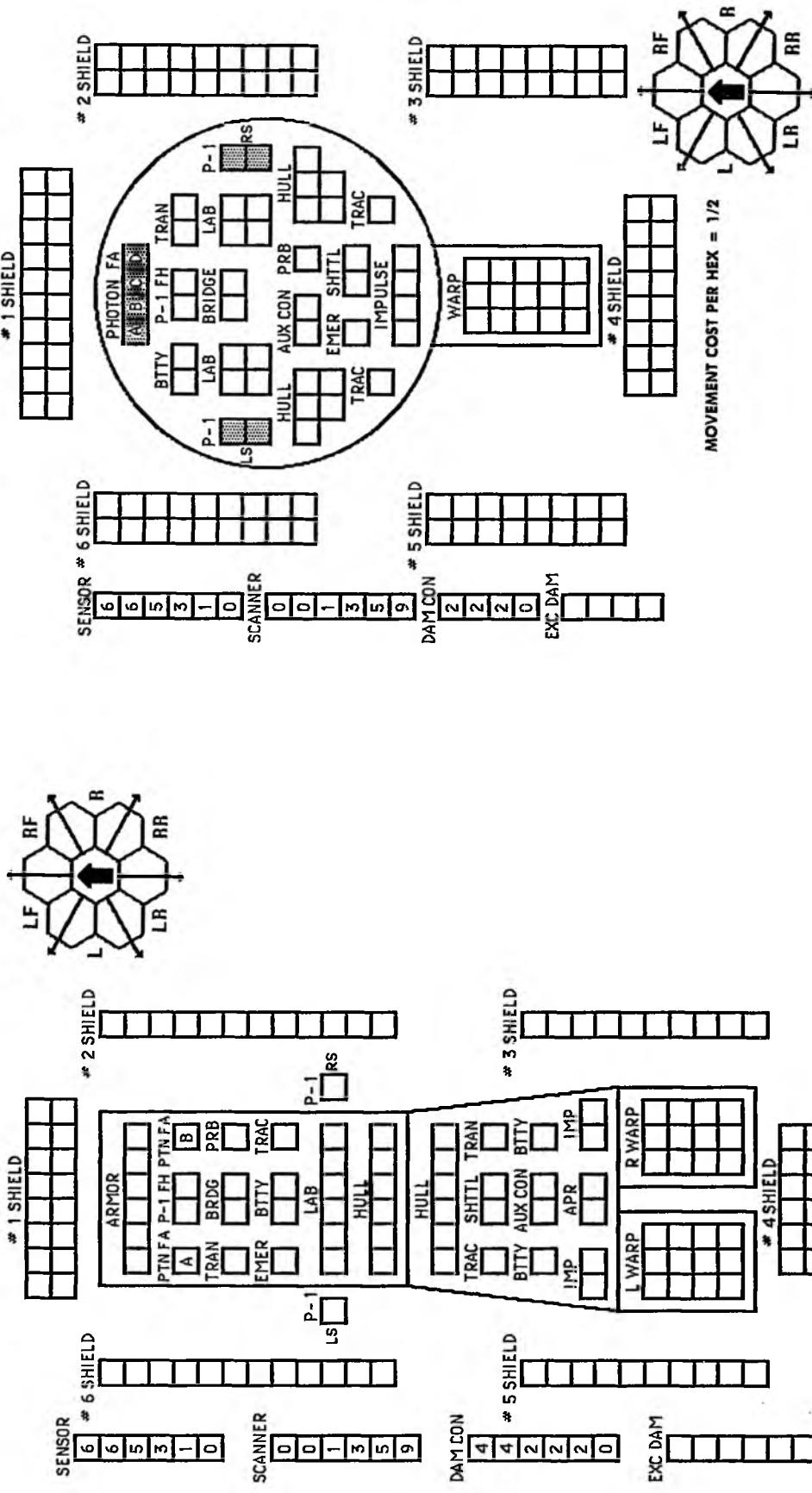
* 1 SHIELD



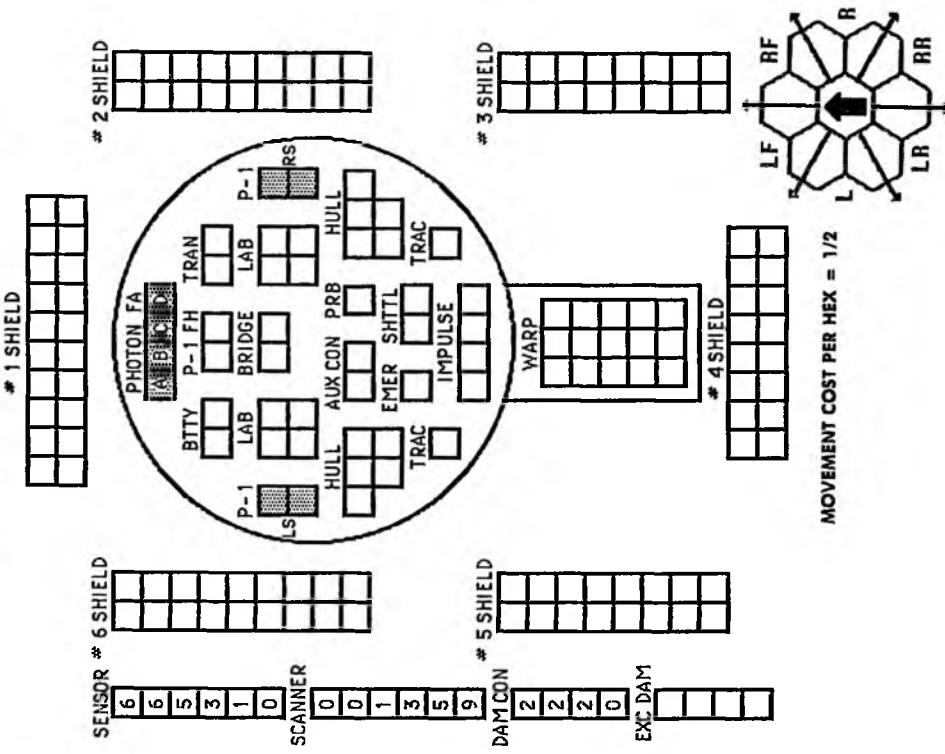
MOVEMENT COST PER HEX = 1



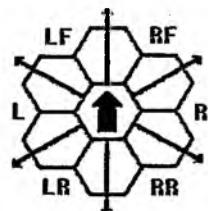
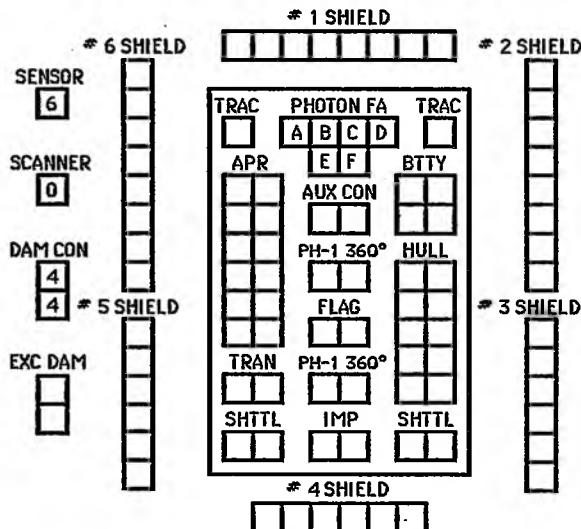
FEDERATION LIGHT CRUISER



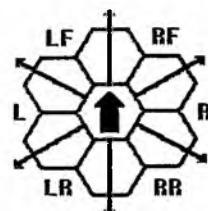
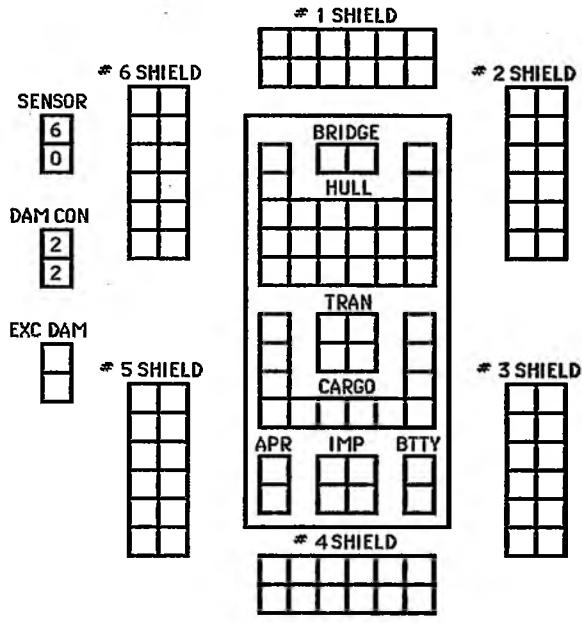
FEDERATION SCOUT FEDERATION DESTROYER



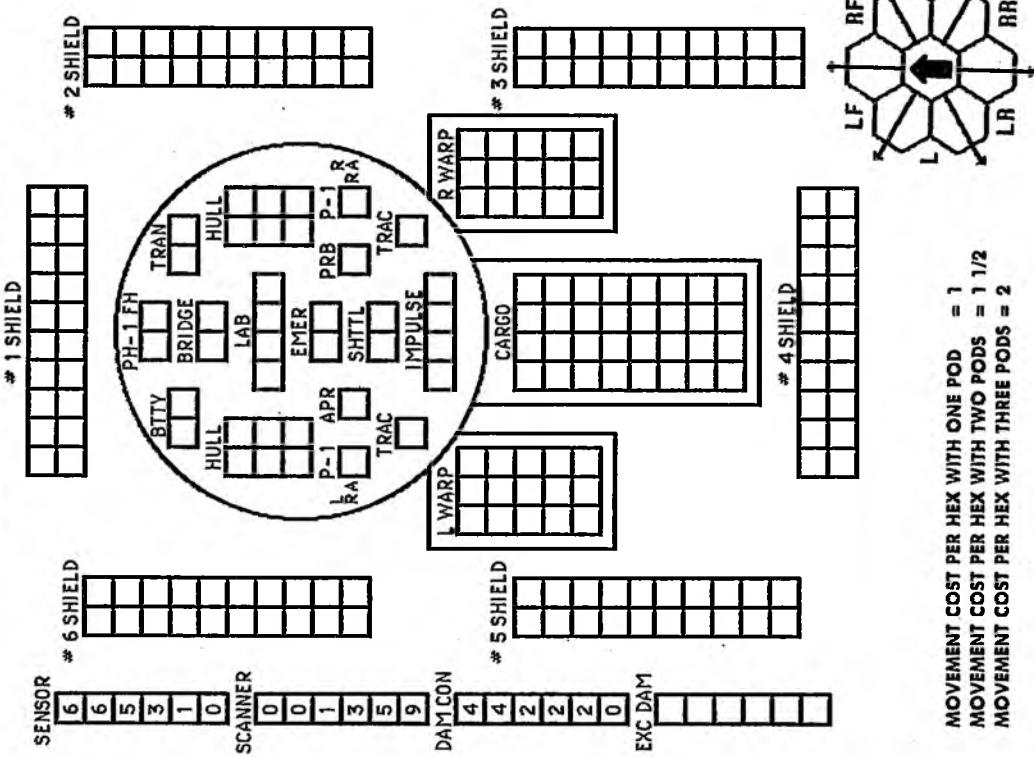
FEDERATION BATTLE POD



FEDERATION STARLINER

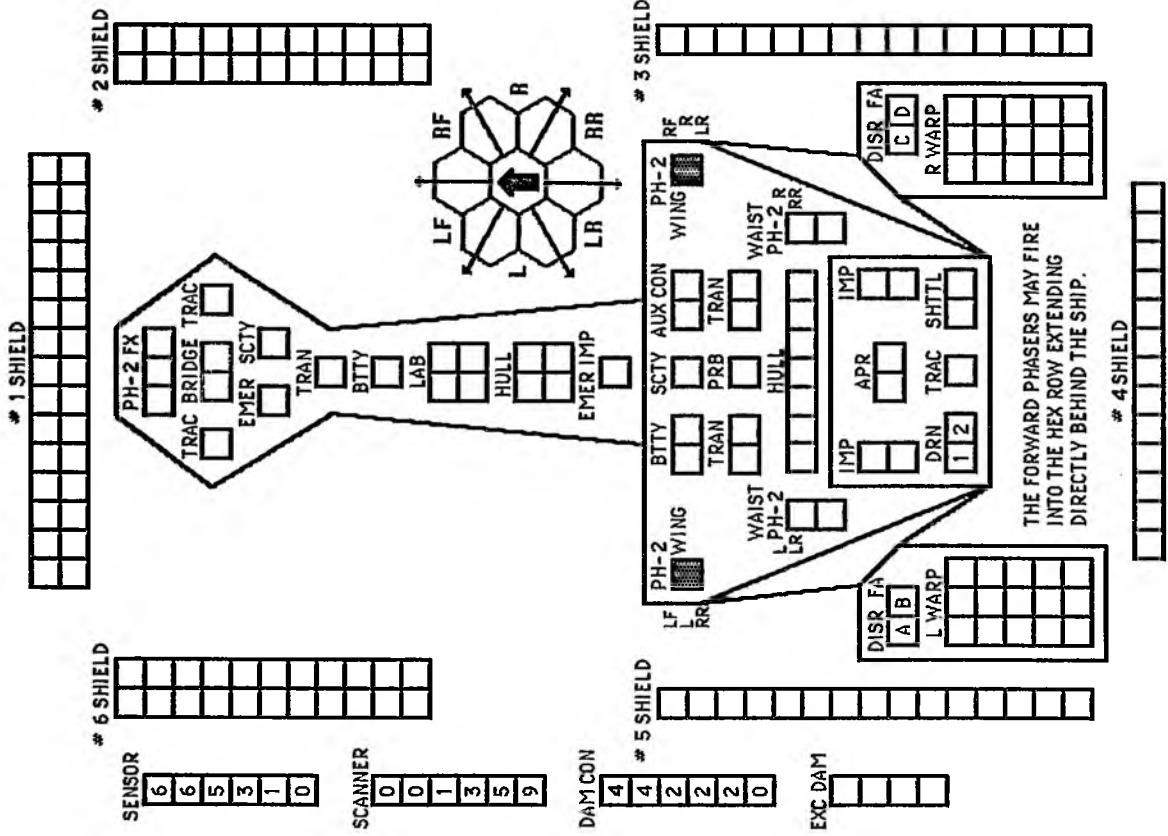


FEDERATION TUG

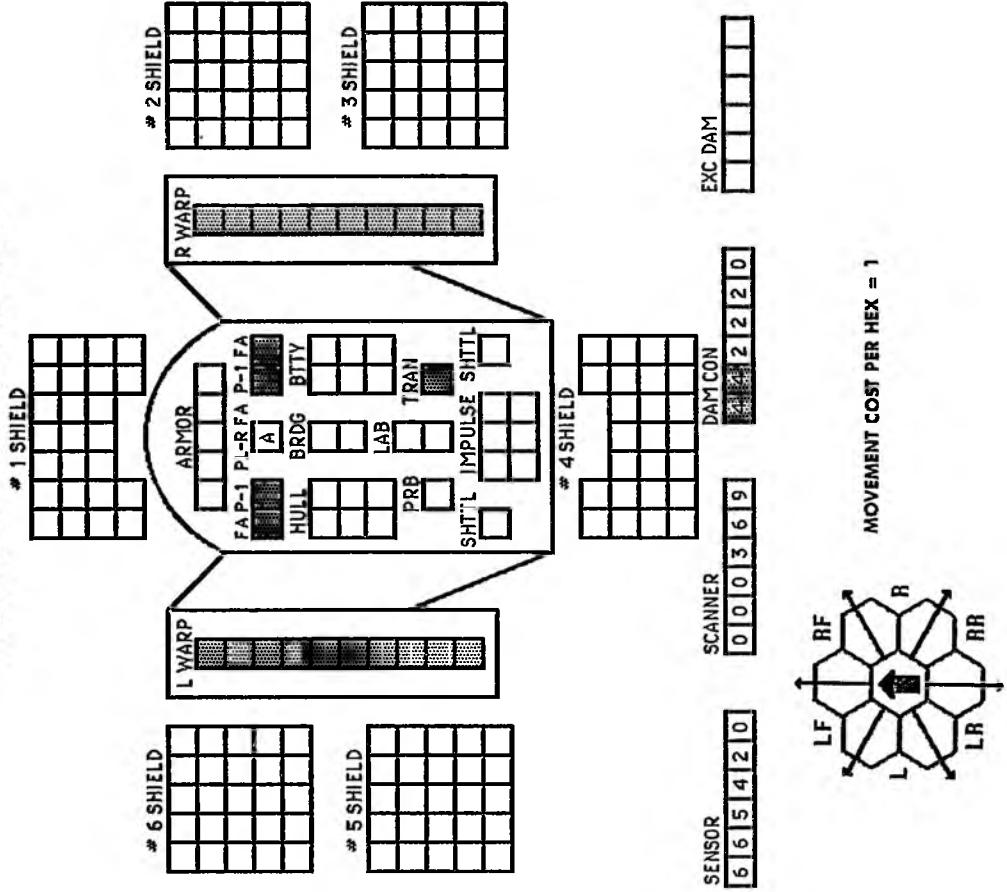


MOVEMENT COST PER HEX WITH ONE POD = 1
 MOVEMENT COST PER HEX WITH TWO PODS = 1 1/2
 MOVEMENT COST PER HEX WITH THREE PODS = 2

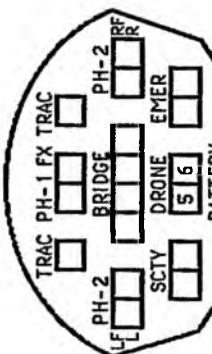
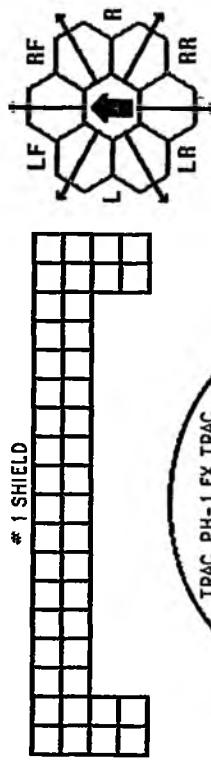
KLINGON BATTLECRUISER (D7 OR D6) ROMULAN KR CLASS



ROMULAN WAR EAGLE ROMULAN WARBIRD



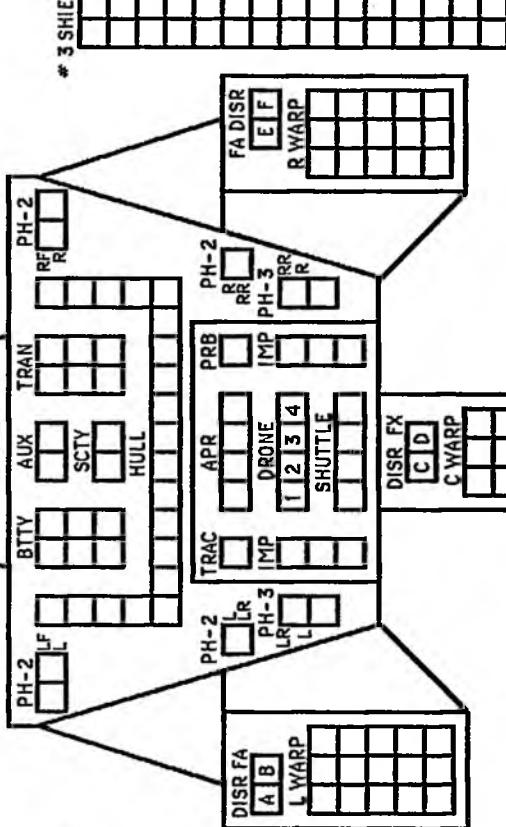
KLINGON C-8/C-9 DREADNOUGHT



SENSOR 6 6 6 5 3 2 - 0
SCANNER 0 0 0 1 2 3 5 9
DAM CON 6 6 4 4 2 2 2 0

SENSOR 6 5 3 0
SCANNER 0 - 3 # 5 SHIELD

6 SHIELD

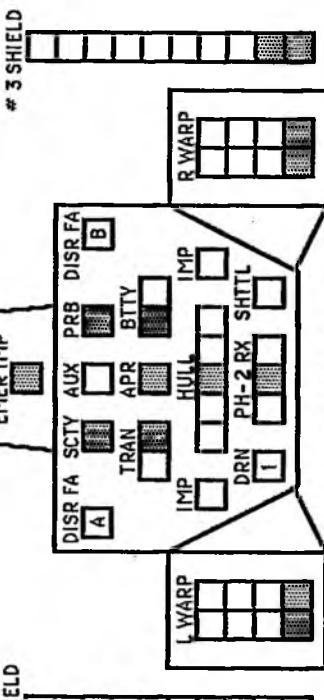
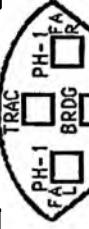


5 SHIELD

MOVEMENT COST PER HEX = 1 1/2

4 SHIELD

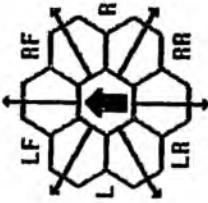
KLINGON E-4 ESCORT KLINGON F-5 FRIGATE ROMULAN KF5R CLASS



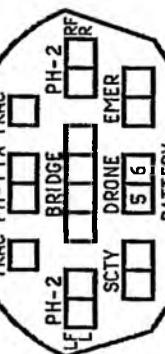
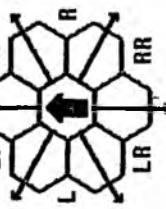
3 SHIELD

4 SHIELD

MOVEMENT COST PER HEX = 1/2

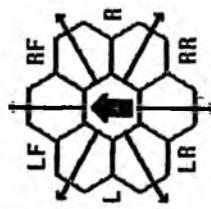


4 SHIELD



SENSOR 6 6 6 5 3 2 - 0
SCANNER 0 0 0 1 2 3 5 9
DAM CON 6 6 4 4 2 2 2 0

6 SHIELD

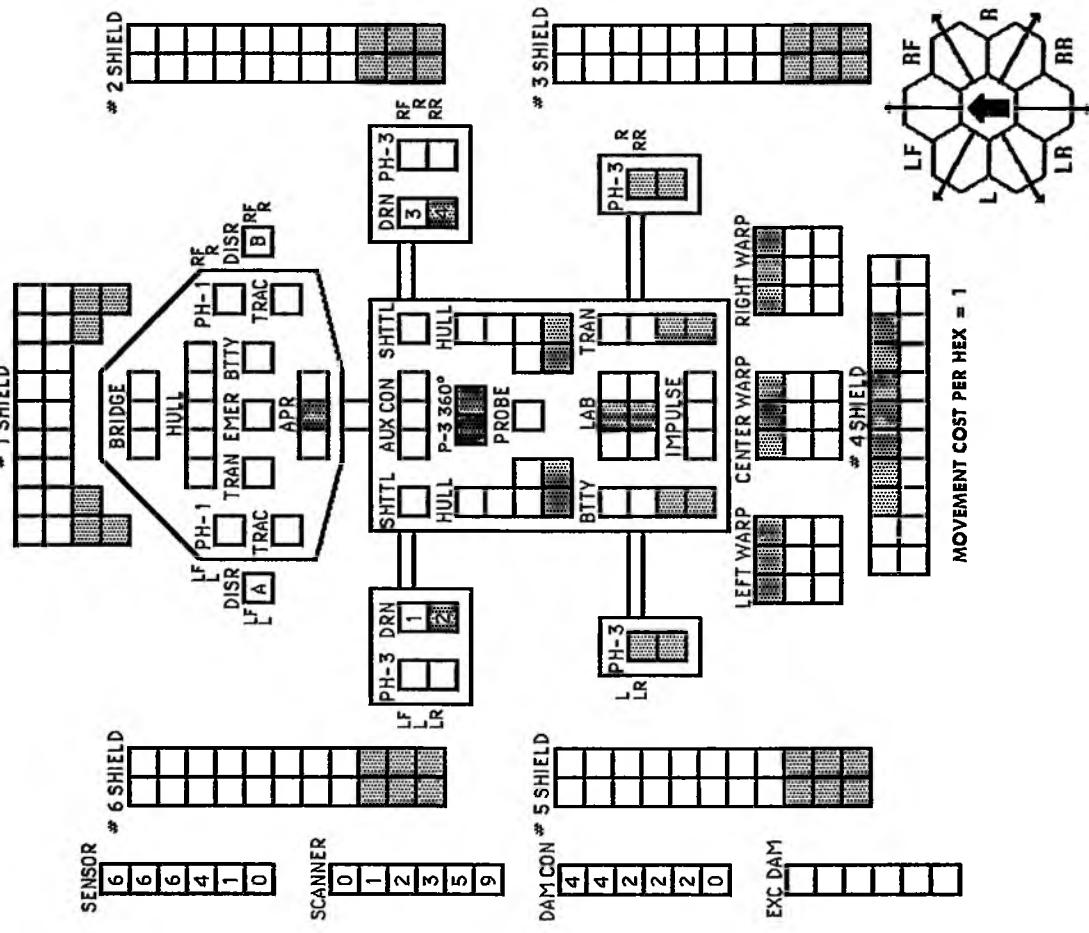


SENSOR 6 6 6 5 3 2 - 0
SCANNER 0 0 0 1 2 3 5 9
DAM CON 6 6 4 4 2 2 2 0

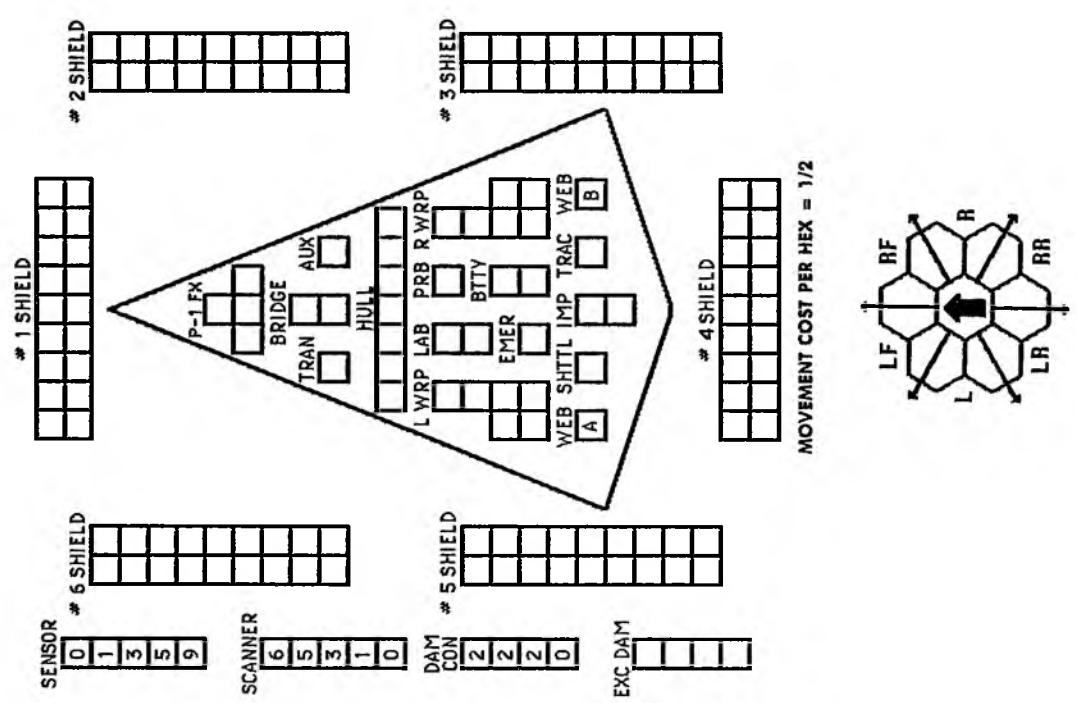
6 SHIELD

KZINTI STRIKE CRUISER

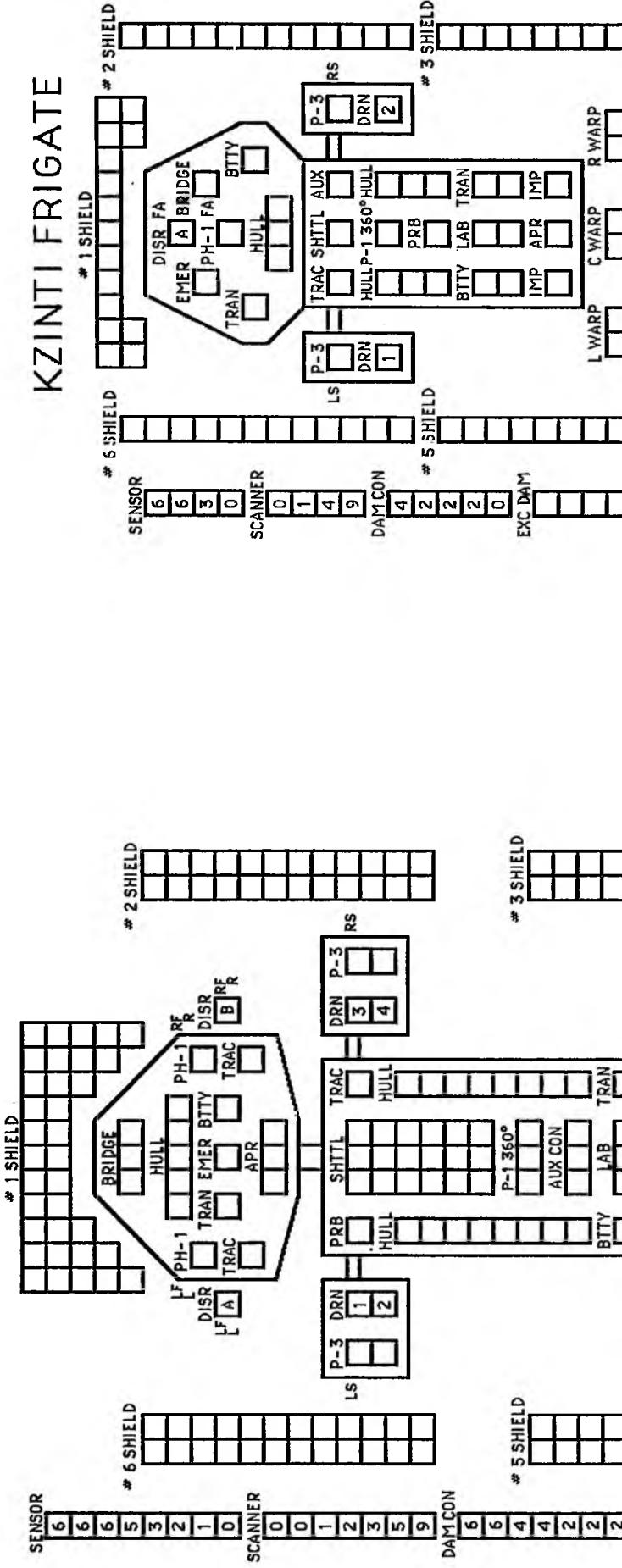
KZINTI LIGHT CRUISER



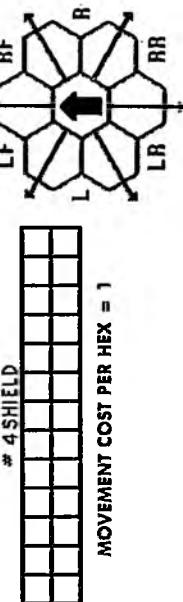
THOLIAN PATROL CRUISER



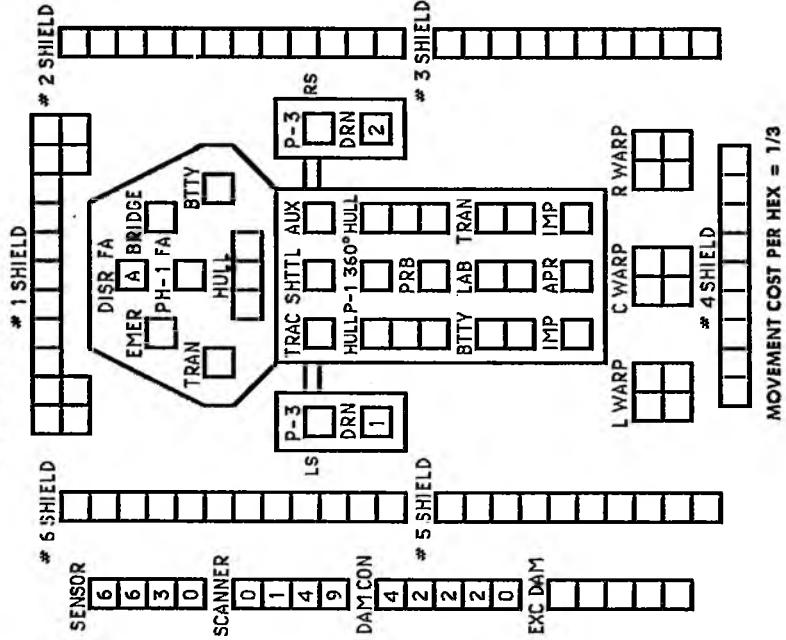
KZINTI ATTACK SHUTTLE CARRIER



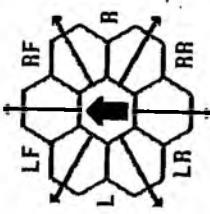
MOVEMENT COST PER HEX = 1



KZINTI FRIGATE



MOVEMENT COST PER HEX = 1/3



1

GORN HEAVY CRUISER

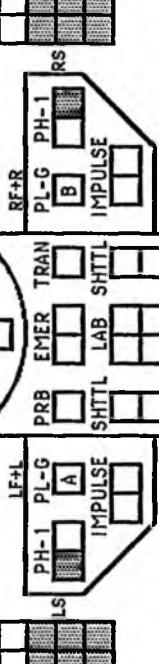
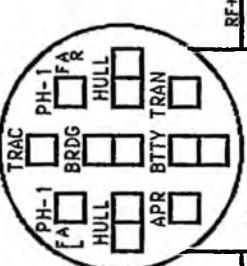
GORN LIGHT CRUISER

1 SHIELD

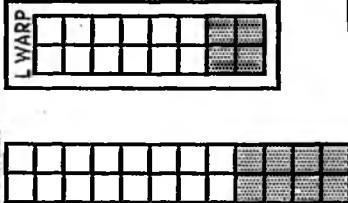


SENSOR # 6 SHIELD

2 SHIELD

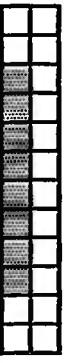


5 SHIELD

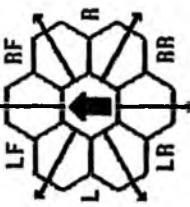


DAM CON 4 4 2 2 0 EXC DAM

4 SHIELD

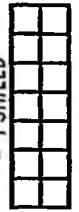


MOVEMENT COST PER HEX = 1



GORN DESTROYER

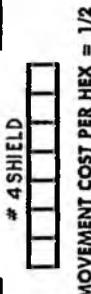
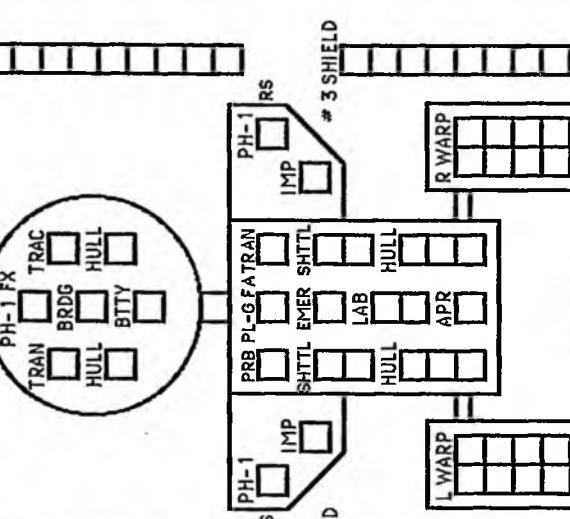
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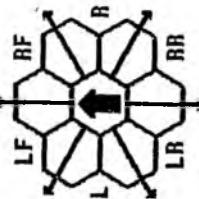
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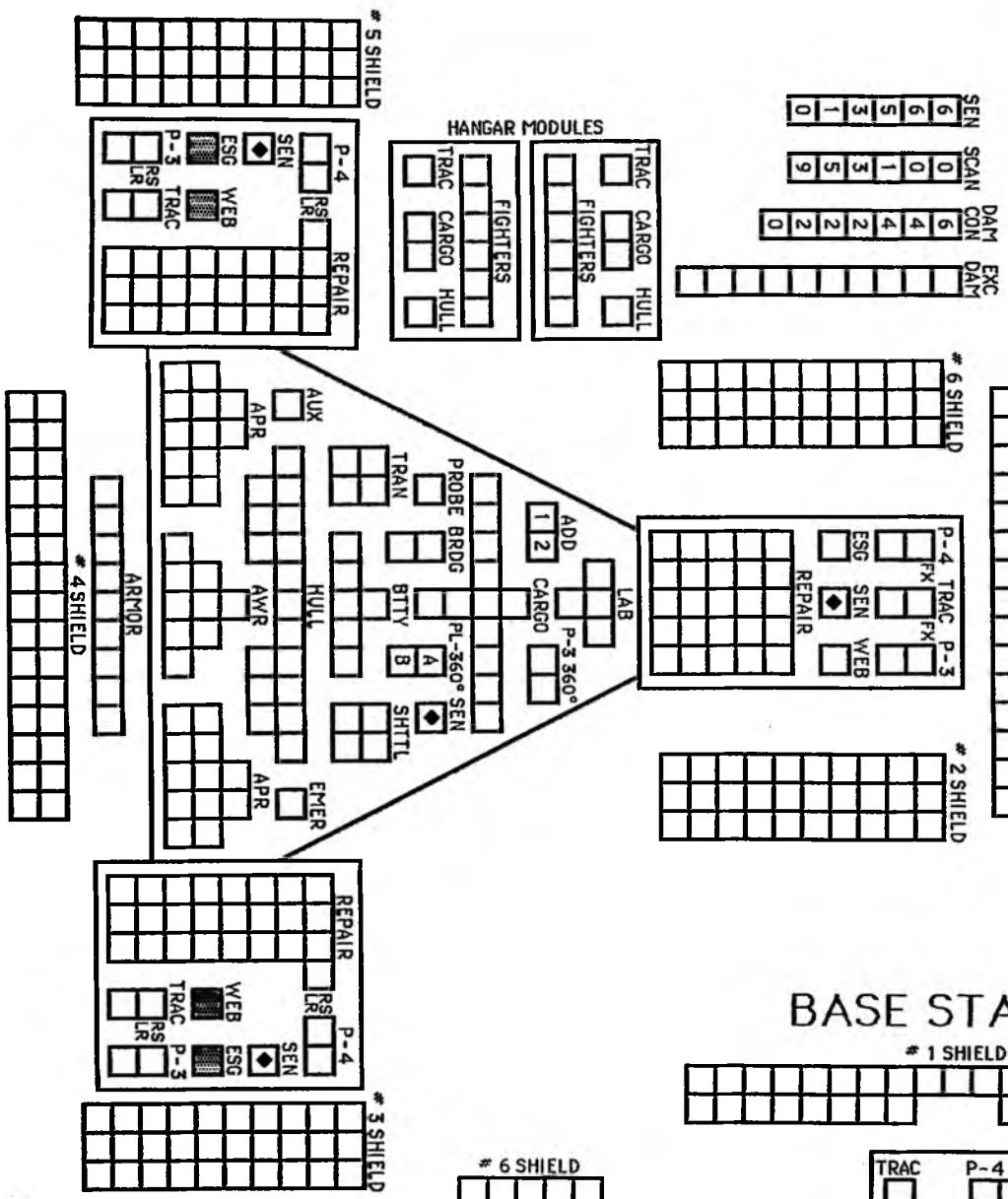
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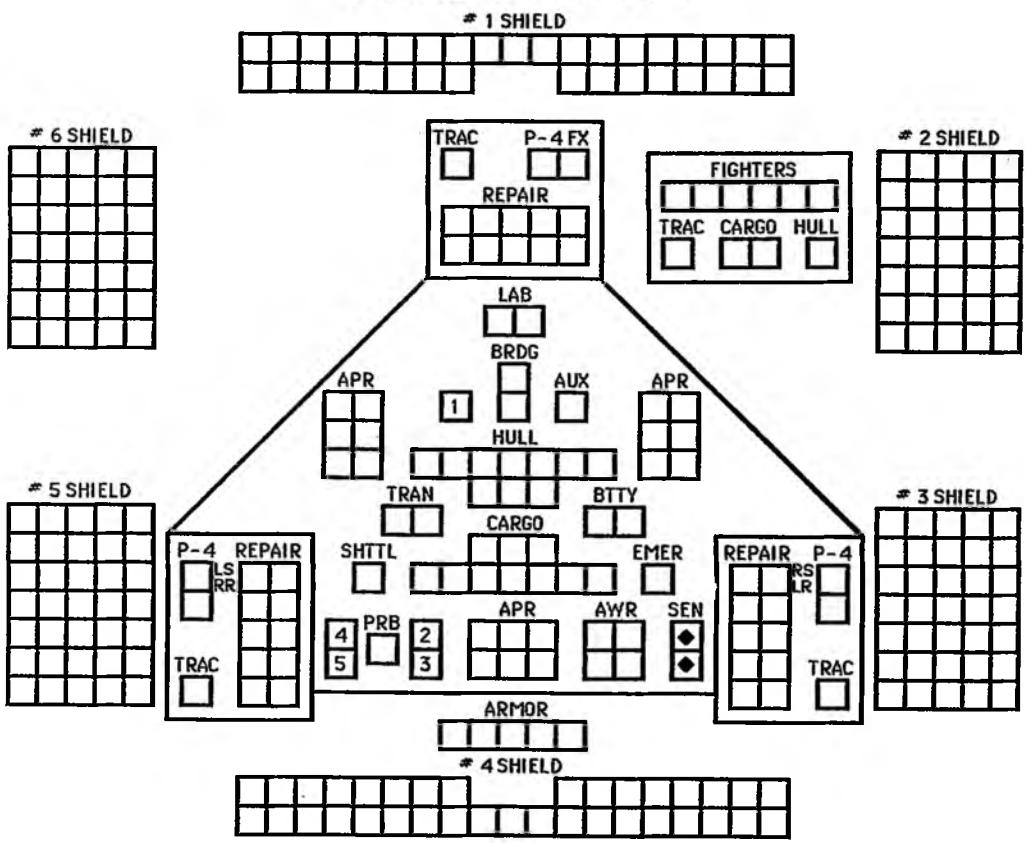
MOVEMENT COST PER HEX = 1/2



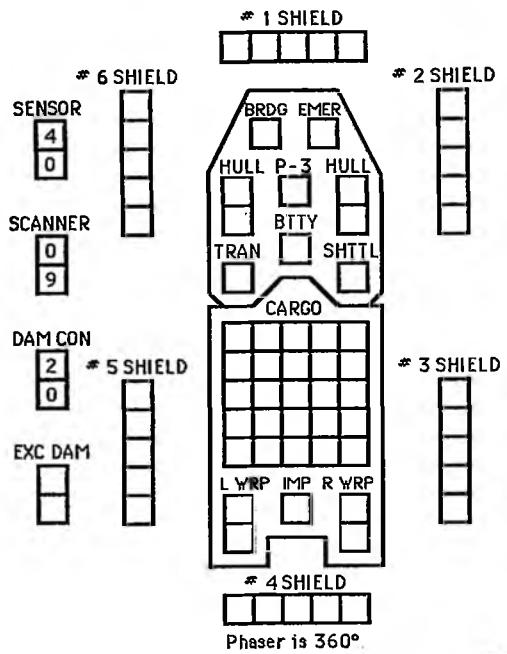
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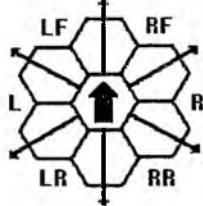
BASE STATION



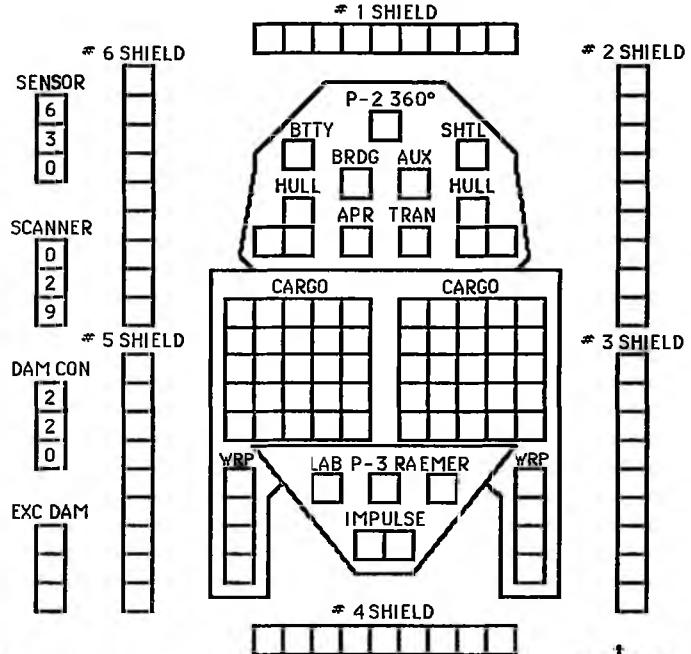
SMALL FREIGHTER



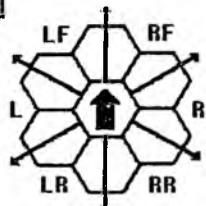
MOVEMENT COST PER HEX = 1/3



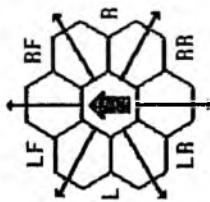
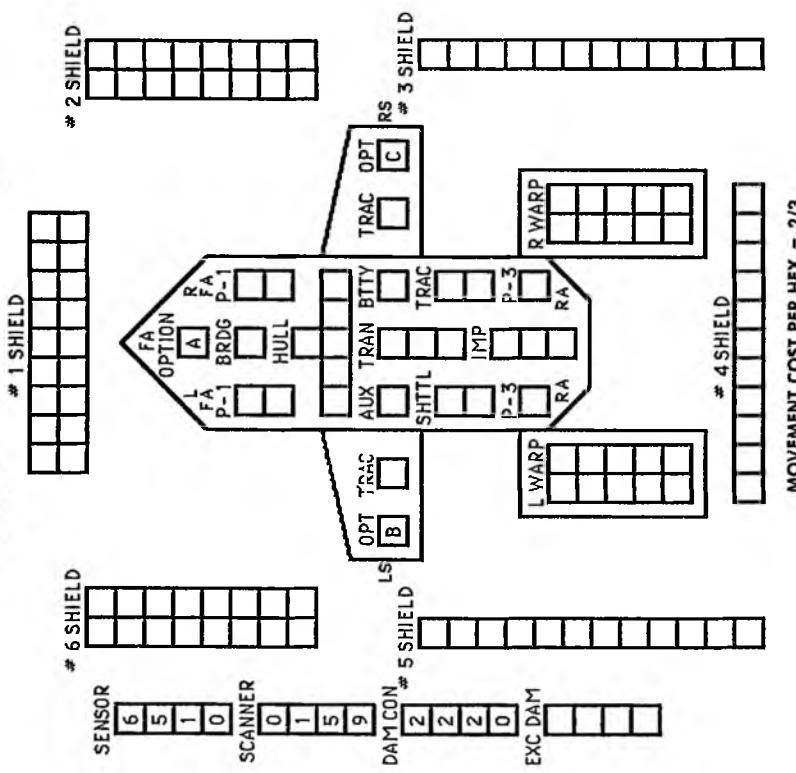
LARGE FREIGHTER



MOVEMENT COST PER HEX = 1/2

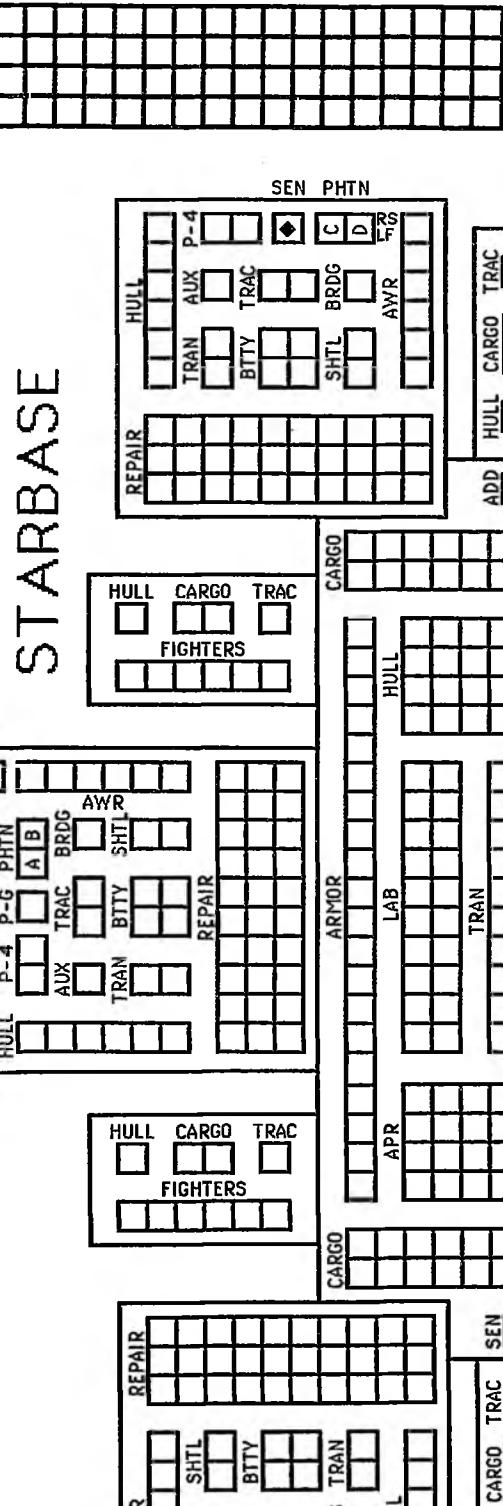


ORION PIRATE RAIDERS

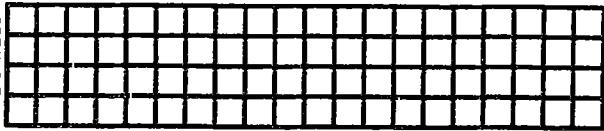


1 SHIELD

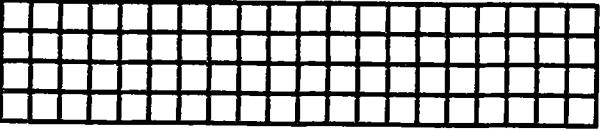
SEN



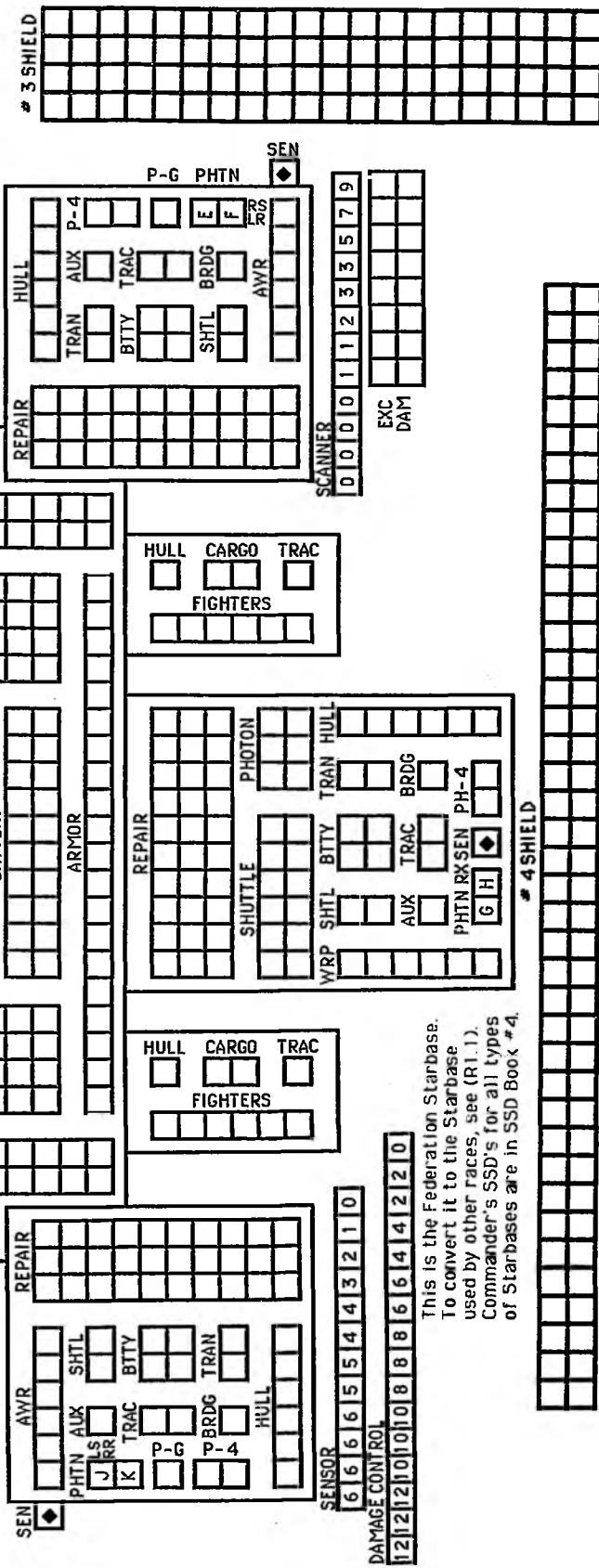
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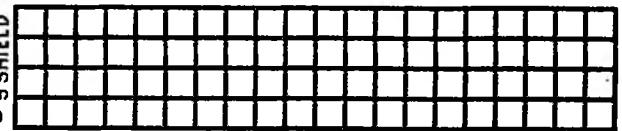
6 SHIELD



3 SHIELD

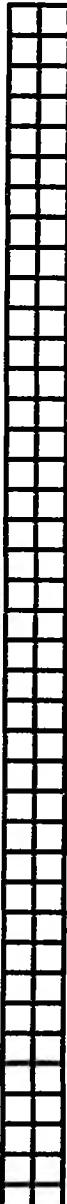


5 SHIELD

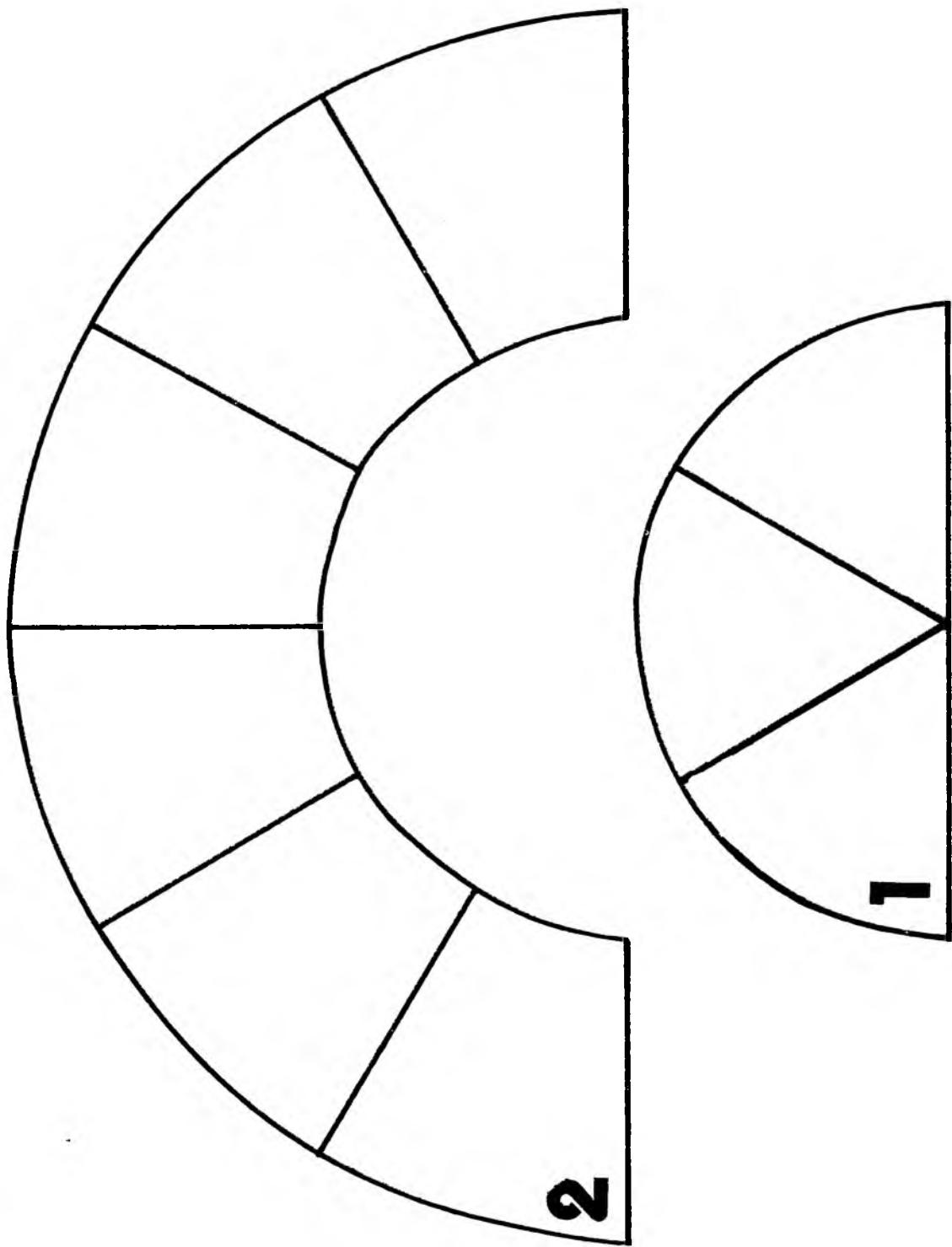


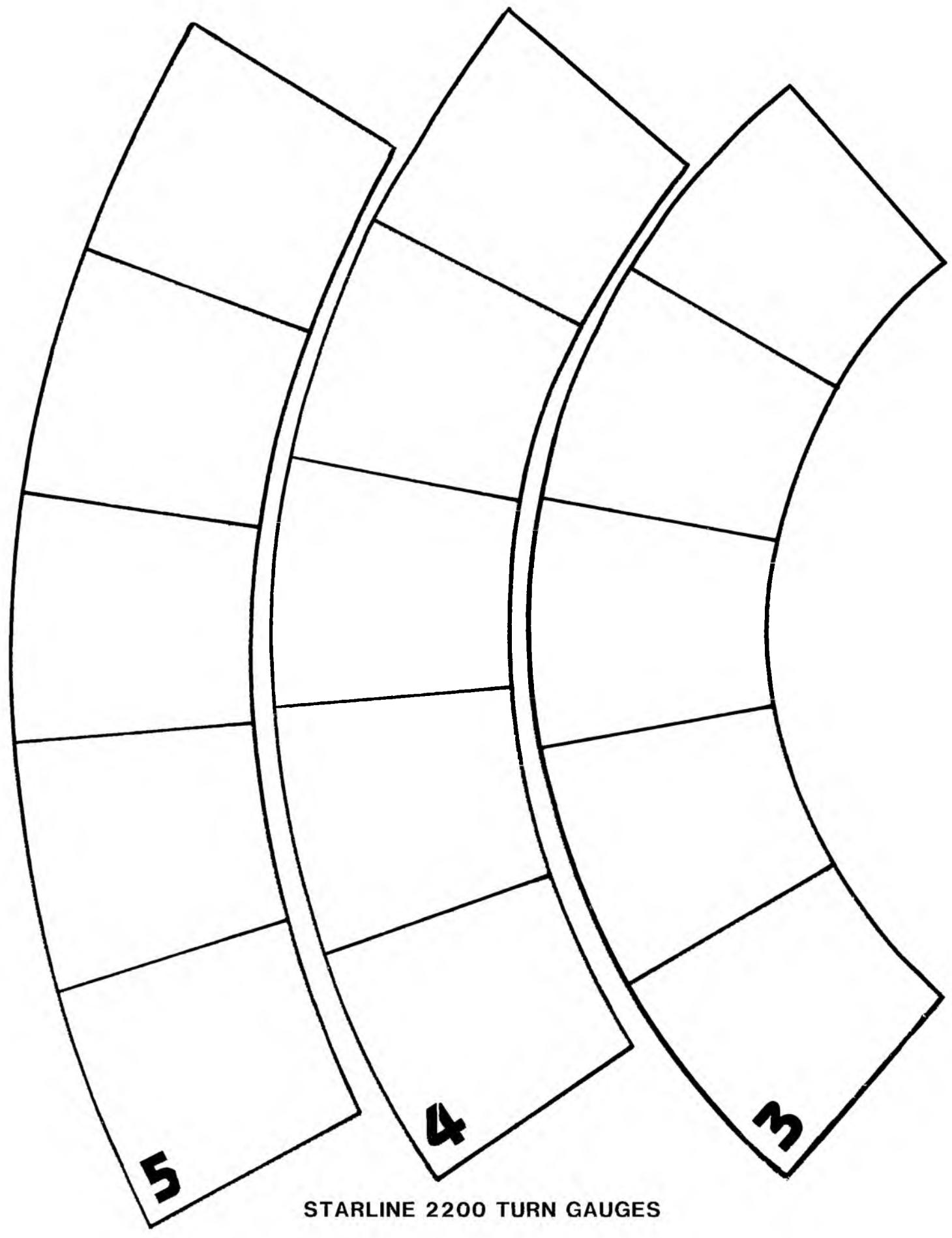
This is the Federation Starbase.
To convert it to the Starbase
used by other races, see (R1.1).
Commander's SSD's for all types
of Starbases are in SSD Book #4.

4 SHIELD



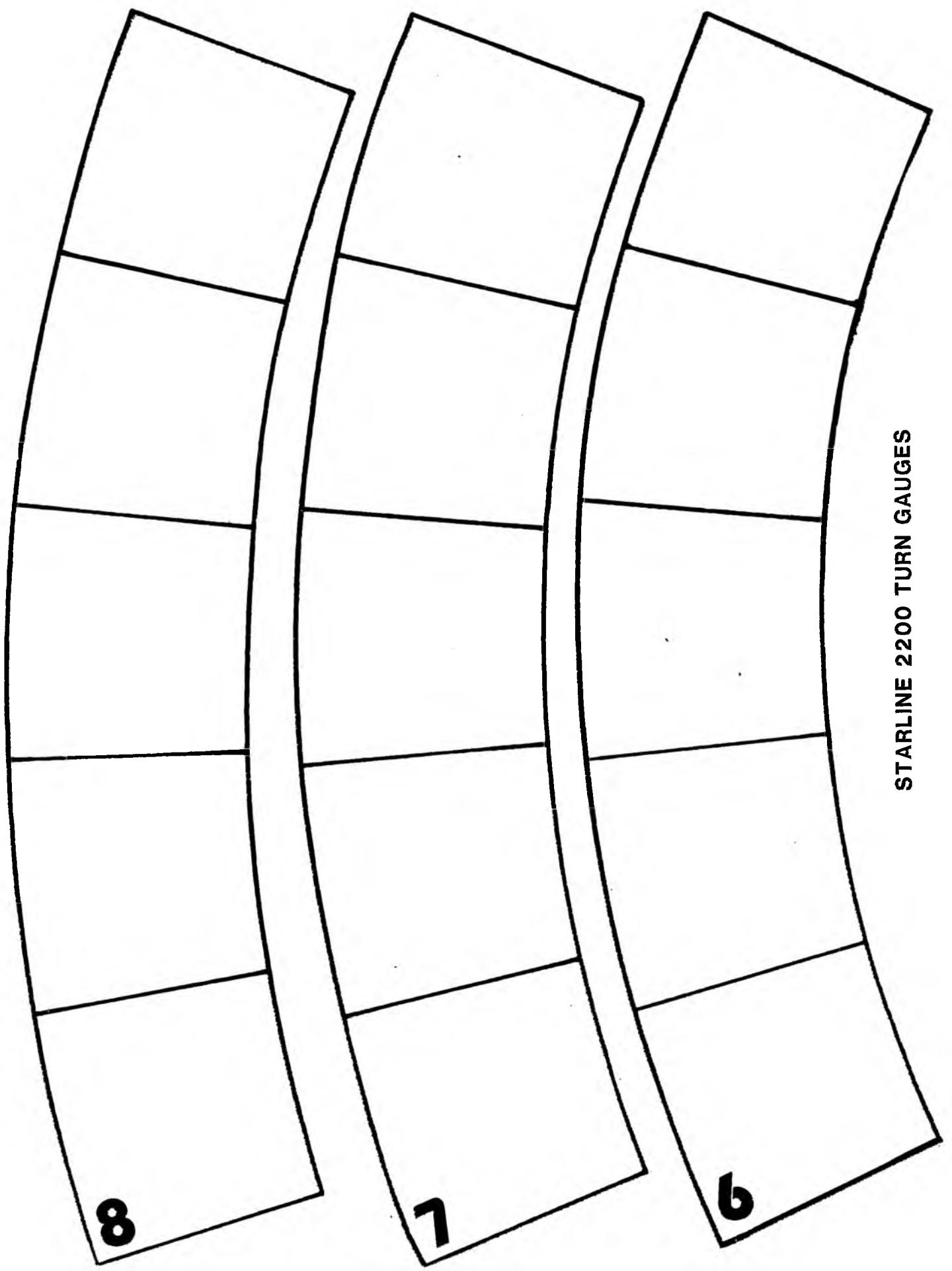
STARLINE 2200
TURN GAUGES





STARLINE 2200 TURN GAUGES

STARLINE 2200 TURN GAUGES

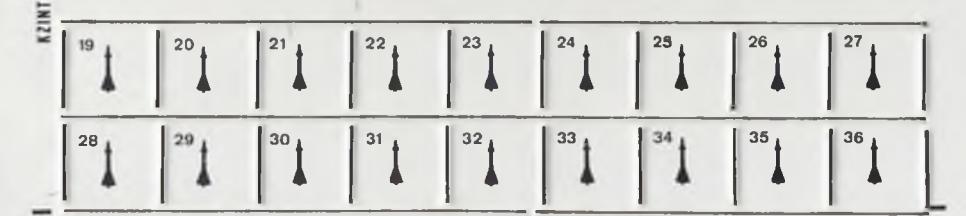


ENERGY ALLOCATION

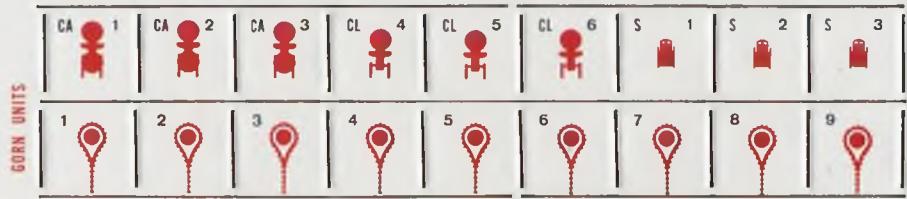
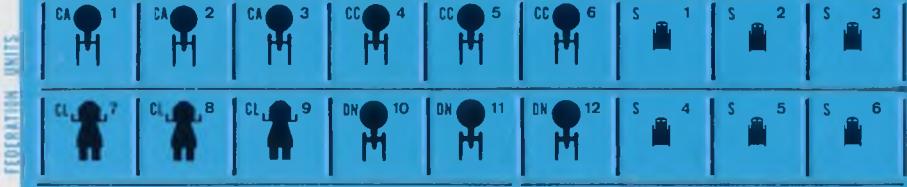
LINE #	SYSTEM	TURN									
		1	2	3	4	5	6	7	8	9	10
1	WARP ENGINES										
2	IMPULSE POWER										
3	REACTOR POWER										
4	TOTAL POWER										
5	BATTERIES AVAILABLE										
6	BATTERIES DISCHARGED										
7	LIFE SUPPORT										
8	FIRE CONTROL SCANNERS										
9	PHASERS										
10	TORPEDOES — A										
	— B										
	— C										
	— D										
11	SHIELDS										
12	GEN. SHIELD REINFORCEMENT										
13	REINFORCE SHIELDS — 1										
	— 2										
	— 3										
	— 4										
	— 5										
	— 6										
14	MOVEMENT										
15	DAMAGE CONTROL										
16	RECHARGE BATTERIES										
17											
18											
19											
20	TOTAL POWER USED										
21	BATTERIES DISCHARGED										
	MOVEMENT PLOT:										

STARFLEET BATTLES

2

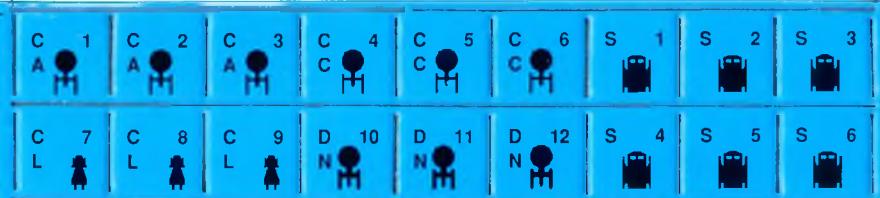


STARFLEET BATTLES

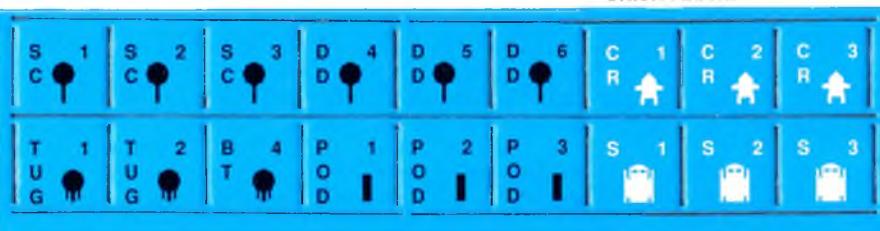


STAR FLEET BATTLES — VOLUME I — SHEET 1 OF 2

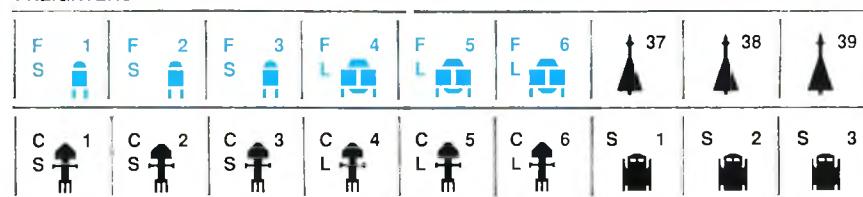
FEDERATION



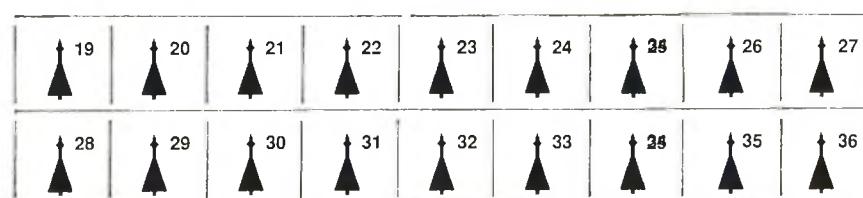
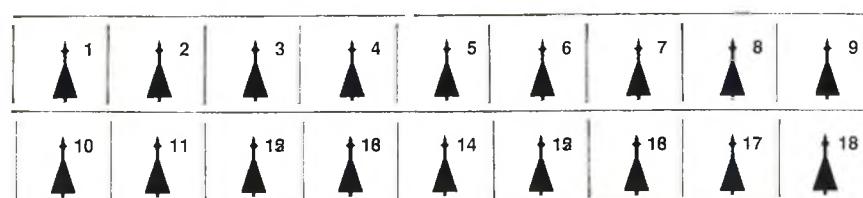
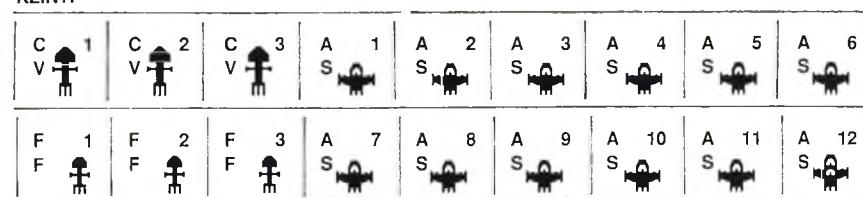
ORION PIRATE



FREIGHTERS



KZINTI



STAR FLEET BATTLES — VOLUME I — SHEET 2 OF 2

KLINGON



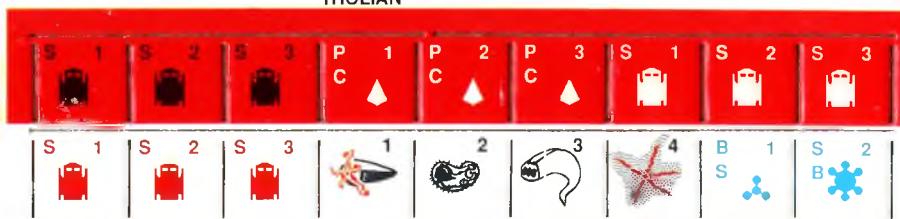
ASTERIODS



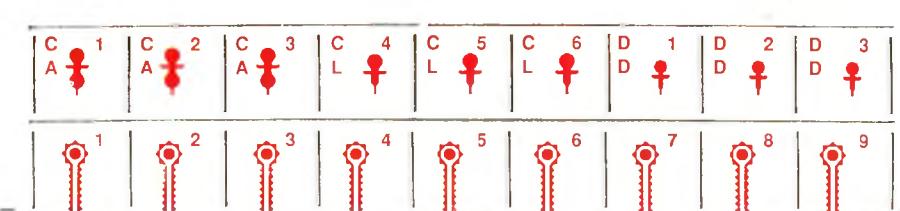
ROMULAN



THOLIAN



GORN



MONSTERS

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BASES

Zaxxus EightySeven (Order : 14711970)

ENERGY ALLOCATION FORM

©1987 ADB

SHIP / COUNTER:	1	2	3	4	5	6	7	8	9	10
1. WARP ENGINE POWER										
2. IMPULSE ENGINE POWER										
3. REACTOR POWER										
4. TOTAL POWER AVAILABLE										
5. BATTERY POWER AVAILABLE										
6. BATTERY CAPACITY DISCHARGED										
7. LIFE SUPPORT										
8. ACTIVE FIRE CONTROL										
9. CHARGE PHASER CAPACITORS										
10. HEAVY WEAPONS	A									
OR SENSOR CHANNELS	B									
OR OTHER EQUIPMENT	C									
	D									
	(1) E									
	(2) F									
	(3) G									
	(4) H									
11. ACTIVATE SHIELDS										
12. GENERAL REINFORCEMENT										
13. SPECIFIC REINFORCEMENT	1									
	2									
	3									
	4									
	5									
	6									
14. ENERGY FOR MOVEMENT										
HET										
EM / BRAKING ENERGY										
15. DAMAGE CONTROL										
16. RECHARGE BATTERIES / RESERVE WARP										
17. TRACTOR / NEGATIVE TRACTOR										
18. TRANSPORTERS										
19. ECM										
ECCM										
LABS										
CHARGE WILD WEASEL / SUICIDE SHUTTLE										
CLOAKING DEVICE / SFG										
20. TOTAL POWER USED										
21. BATTERY POWER USED										
PHASER CAPACITORS CHARGED										
PHASER CAPACITORS USED										
MOVEMENT PLOT / NOTES										

STAR FLEET BATTLES

VOLUME 1 ADDENDA

This booklet comprises the Addenda for Volume I of the Commander's Edition of STAR FLEET BATTLES. This Addenda includes additional rules, rules changes, corrections of mistakes, explanations, and clarifications to the rules in the Volume I rulebook. You will need to study this material and incorporate it (figuratively) into your Volume I rulebook in order to have a complete game.

This Addenda was taken directly from the Consolidated Addenda in Captain's Log #4 and, as such, includes numerous references to material in Volumes II and III, as well as Supplements 1, 2, and 3. These references can generally be ignored unless you add these other products to your game. If you do, you will doubtless want to acquire Captain's Log #4 as it includes many additional pages of rules changes for those other products.

The rule number sub-scripts indicate the status of the material.
a = additional material for this rule
n = new rule
m = modifies existing rule
r = replaces existing rule

(A0.0) INTRODUCTION: No addenda.

(B0.0) HOW TO PLAY THE GAME

(B1.0) GENERAL RULES: No addenda.

(B2.0) SEQUENCE OF PLAY

(B2.3a) This list is not in the same order as Annex #2 or the list in (B2.2). This rule is an explanation, not a procedure. The correct sequence is given in Annex #2. Note that several minor additions are listed in the rules section for the appropriate system.

(B3.0) ENERGY ALLOCATION

(B3.1a) ITEM #7: Annex #6A provides, as an optional rule, a penalty for using Emergency Life Support when not eligible to do so. Also note that Legendary Captains (G22.22) can use Emergency Lift Support at all times.

(B3.4n) A ship is never obligated by the rules to expend all of the power it can generate. If a ship leaves part of its power output unallocated, it is simply assumed that the engine/reactor is running at a lower output. This unallocated energy cannot be used for reserve power unless allocated under (H7.4).

(C0.0) MOVEMENT

(C1.0) GENERAL MOVEMENT RULES

(C1.31a) ORDER OF PRECEDENCE: The following chart shows the correct order in which to move units which are moving in the same impulse. Units in the same category move in order of their turn modes (at current speed), largest to smallest. Units perform HETs during the step where they move. The chart is used in plotted movement to resolve tac maneuvers.

1. Monsters move.
2. Ships move.
3. Nimble ships move.
4. Fighters and shuttles move.
5. Seeking weapons move.
6. Bases rotate.
7. Ships make tactical maneuvers.
8. Nimble ships make tactical maneuvers.
9. Fighters make tactical maneuvers.

(C1.31a) The intended direction of movement (forward or reverse) must be recorded on the Energy Allocation Form when using free movement. If no direction is indicated, forward is assumed. An announcement is required at the point of speed declaration.

(C1.32a) Units, not merely ships, can use the various forms of plotted movement, including pursuit, station keeping, and evasion. Units cannot plot pursuit on a probe drone under friendly control.

(C1.321m) This portion of this rule dealing with energy plot changes was completely replaced by (D22.0) in Nexus #15.

(C1.3221a) This rule can be used to adopt or drop Evasion or Station Keeping plot.

(C1.324n) LEVELS OF PLOTTING

There are several "levels" of plotted movement. Under the more restrictive levels, all movement-based actions must be plotted. Under the more liberal levels, many actions can be made freely. Note that the various forms of Segmented Plotting are variations of all levels, not a level themselves. Also note that Energy Allocation and Movement Plotting are related but not the same. Allocating energy for a High Energy Turn is not the same as plotting to make such a turn at a specific point.

C: LIBERAL PLOTTED MOVEMENT: Same as C1 below, but allows the unplotted use of HETs (with the balance of the move-

ment plot "rotated" by the appropriate amount) or when converting to evasion plot.

C1: STANDARD PLOTTED MOVEMENT: Plot all movement (including HETs) hex by hex only for ships (including PFs). Shuttles and fighters are not plotted. Allow ships to change between pursuit, station-keeping, and evasion plotting according to the rules.

C2: OPTIONAL PLOTTED MOVEMENT: Same as C1, but changes between pursuit, station keeping, and evasion plotting must be plotted. Note that this option must be specified with D1 and E below. For example, a tournament might use "Level E plotting, with option C2 but not option D2."

D1: PLOTTED SHUTTLE MOVEMENT: Same as C1, but the movement of shuttles must be plotted. This level allows launch and recovery of shuttles at any point, with the movement for the rest of the turn plotted at the time of launch.

D2: OPTIONAL SHUTTLE MOVEMENT PLOTTING: Same as C1, but also requires that the launch, recovery, and movement of shuttlecraft (including fighters) be plotted. Note that this is a multi-level option as is C2.

E: RESTRICTED MINE PLACEMENT: Same as D1, but also requires that the placement of mines (by transporter or by laying) be plotted. As the use of transporters requires dropping a shield, the player can voluntarily cancel the plotted laying of mines by transporter if he does not wish to drop the shield.

ALWAYS PLOTTED: The following items are always plotted at all levels: Damage control, guards. Note that the speed of the ship is always plotted; the ship must always have a legal speed plot. This plot cannot include the anticipated effects of Emergency Decel.

NEVER PLOTTED: The following items are never plotted at any level: Firing weapons, launching seeking weapons (including SP and Suicide Shuttles), probe launch, transporters (except mines and where noted), hit-and-run raids, dropping shields, disengagement by acceleration, launching wild weasels, cloaking, deceleration due to damage, and emergency deceleration.

(C1.7n) RAMMING AND COLLISIONS

There is no provision in Star Fleet Battles for ramming or colliding with another unit. No rules for this will ever be added to the game. Ramming is prohibited; accidental collisions are so unlikely as to be considered effectively impossible. (Note that docking, landing shuttles, and seeking weapons are not considered to be ramming.)

(C2.0) ENERGY COST OF MOVEMENT

(C2.12a) Note that this restriction (generating 30 movement points) includes all possible conditions, such as towing or breaking through webs. Note that HETs and EM are rated in movement points, but are not included in this limit.

(C2.18n) A ship cannot, at any given point in time, use more warp power for movement than it has available. This restriction is in addition to the basic restrictions on total movement points expended. For example, a ship (with 30 warp boxes, some impulse boxes, and a movement cost of one) cannot use a high energy turn or erratic maneuvering while moving at a speed of 31, even if the ship is plotted to move at a lower speed during a different part of the turn (expending fewer than 31 total movement points).

Note carefully that some ships can generate more than 30 points of warp movement. Examples include most war cruisers (which can generate 36 warp movement points). Also, some ships have many impulse engines and could use these for erratic maneuvering. See (C2.12) and (C10.11).

This rule covers movement-related expenditures. Warp energy used for non-movement purposes (e.g. photons) is considered as a separate function. For example, a Federation ship could move part of the turn at speed 30 (and part at a lower speed) and still arm photons.

The intent of this rule is solely to prevent a ship from making HETs or other warp-movement functions from being performed at top speed. This rule should not be interpreted beyond this purpose.

(C2.25n) Energy paid for high energy turns or erratic maneuvering is not included in calculating acceleration. It is not included in calculating how much faster a ship can go this turn than the last turn, and is not included in calculating the speed of the ship on the previous turn.

(C2.3r) This section has been replaced by (D22.0) in Nexus #15.

(C2.4n) DEFINITION OF SPEED

The speed of a unit is the number of hexes that the unit moves during a turn, assuming no mid-turn speed changes. In such case, speed is defined as the rate of movement at any point, assuming that the current rate were conducted over an entire turn.

(C2.41) For purposes of acceleration, the movement point cost of High Energy Turns, Tactical Maneuvers, and/or Erratic Maneuvering is not considered to be movement.

(C2.42) For purposes of cloaked ships, or speed restrictions to avoid cancelling a wild weasel, the movement point cost of High Energy Turns, Tactical Maneuvers, and/or Erratic Maneuvering is considered to be movement and is added to the Practical Speed (C2.45) in hexes as if it had been used to produce movement costs. This is because the electronic signature of the engines is based on the movement energy they are producing, not on how it is being used.

Note that this takes effect only if the energy is actually used. If a ship plots a high energy turn, the cost of this maneuver (equal to five hexes of movement) is not added to the ship's speed until the maneuver is actually made, at which point it would be added to the ship's effective speed (which may vary). The cost of an HET is included in the speed of the cloaked ship only for any die rolls made on the impulse in which the HET is made. Note that an HET effectively voids a WW in most cases.

The cost of tactical maneuvers is added to the speed for the remainder of the turn at the time the maneuver is made.

(C2.43n) Stopping (reducing speed to zero) or reversing direction resets the count for both the turn mode and side slip mode to zero.

(C2.44n) A ship which has been in a hex at speed zero must move at least one hex straight ahead before it can turn (assuming, as specified in C3.0, that it is moving faster than one hex per turn; this may require several hexes if the ship is moving at any significant speed). It cannot turn before moving out of the hex.

If the ship is moving in reverse, it will be able to turn after moving the appropriate number of hexes straight to the rear.

Seeking weapons have the ability to perform an HET and may do so to face a nearby target. (For example, in the case of a fixed plasma torpedo launcher or a target that passes near the launching ship.) Also, the ship could perform an HET or normal turn to face such a target. Other "launched objects" (drones, shuttlecraft) are initially placed on the board facing in a given direction and then move directly forward on their first impulse. There is no contradiction here. The term "other" is in opposition to the comment on plasma torpedoes, not the rules on seeking weapons in general.

(C2.45n) The speed of the ship, for purposes of WW restrictions, is based on the movement cost and energy applied (i.e. the "speed" at which the engines are running; their electronic "brightness") regardless of other conditions. (Also see C2.42.) Movement that is created or impaired by outside effects (black holes, webs, other terrain effects, etc) is not considered. This is defined as Practical Speed. Note, however, then some functions (C2.42) are added to the Practical Speed for purposes of a WW or cloaked ship. Unused energy held as reserve warp power is not included in calculating any version of the ship's speed.

EXAMPLE: If a ship is moving at a (practical) speed of 4, but its movement during the turn includes one additional hex caused by a black hole directly ahead, the ship has moved 5 hexes but as the practical speed is still 4 the WW is not voided. If, however, the ship was moving at a practical speed of 5 away from the black hole, with the movement effects of the hole "slowing" it to 4, the WW is still voided.

(C2.46n) Units towing other units (G7.36) have both an Effective Speed (the number of hexes actually moved), their individual Pseudo-Speed (the speed they maneuver the combined ships at) and their Practical Speed (how fast they would be moving if the tractor link and other outside factors did not exist).

Effective speed is used for purposes of mines, asteroids, dust, recovering fighters, destroying objects by towing them at high speed, collisions with small moons, docking, and web damage.

Pseudo speed is used for purposes of (G7.36) and turn modes.

Practical speed is used for WW, cloaking, acceleration, (C2.45), and reversing direction.

(C3.0) TURNING AND TURN MODES

(C3.33n) A ship moving at a speed of one (not using tactical maneuvers) moves on impulse #32. It can turn 60° and move one hex directly ahead.

(C3.51m) The correct reference is (C12.3).

(C3.52a) (Clarification and resolution of conflicting interpretations.) Braking energy reduces the ship to a speed of zero, from which point it can accelerate within its normal limits in the opposite direction. If the ship was moving at a speed of 5 on the prior turn, it would pay five points of braking energy, and then could accelerate to a speed of 10 (in the opposite direction). Also note that braking stops a positron flywheel (reduces it to zero).

Note that the braking energy required is based on the cost of movement, not on the number of hexes of movement. The braking energy counts as movement for purposes of cloaks or WWS during the impulse in which it is applied (impulse #1 if braking between

turns).

(C3.6a) Such a breakdown is treated the same as any other; the ship stops (or tumbles). If it tumbles, this is at the speed and in the direction of the movement before attempting the reverse.

(C3.61n) A ship cannot perform a quick reverse within 1/4 turn of an HET or another quick reverse.

(C3.71a) The rotation rate can be set by the player before the scenario, but cannot be changed during the scenario.

(C4.0) SIDESLIP

(C4.34n) You cannot combine a sideslip with a turn or HET.

(C5.0) TACTICAL MANEUVERS

Tactical maneuvers are resolved on the "speed 4" (or 3, or 2) column regardless of any speed changes the ship may have made.

(C5.1a) Sub-light and Warp tactical maneuvers may be used by the same ship in the same turn, but not on the same impulse. In this case, the warp-tac maneuvers would be made as normally scheduled, and the sub-light-tac could be made at any point in the turn when it was eligible. They are NOT combined; four warp-tacs and one sub-light would not be resolved on the speed-5 column, but on the speed-4 column with one extra tac.

(C5.11a) "...after the first impulse during which counters are moved, or after impulse #5, whichever is sooner."

(C5.13n) ZERO-ENERGY TURNS: A ship which has no power allocated to any movement function can make one tactical maneuver per turn without power cost. This tac can only be made on impulse 32. (This represents the nominal effect of the ship's attitude thrusters, which are normally used for docking purposes. They operate on puffs of compressed gas, as earlier spacecraft did.) This does not count as a tac for (P8.43).

(C5.43n) Bases cannot make tactical or warp tactical maneuvers.

(C5.44n) Tactical maneuvers are not movement per se, and will not result in asteroid damage or mine detonations. They do count, however, as movement under a cloak (G13.331).

(C5.5n) COMBINING TAC MANEUVERS AND MOVEMENT

It is possible, by using the Emergency Deceleration (C8.0) or Changing Speed in Mid-Turn (C12.0) rules to use movement and tactical maneuvers during the same turn.

(C5.51) After coming to a halt with emergency deceleration, a ship can use tactical maneuvers. These can be paid for during energy allocation, or made with reserve warp power.

(C5.52) If at speed zero during part of a turn, the ship can make tactical maneuvers during that period. These must be paid for during energy allocation or made with reserve warp power.

This section refers to mid-turn speed changes and to plotting a speed of zero at the first of the turn. Note specifically that a ship could plot a low speed in the first part of a turn, then speed zero with tactical maneuvers in the middle of the turn, followed by movement at a low speed (acceleration limits) during the final portion of the turn.

(C5.53) In either case (C5.51 or C5.52), the ship can use sub-light and/or warp tactical maneuvers.

(C5.531) Sub-light maneuvers can only be paid with allocated energy; they cannot be made with reserve power. A sub-light maneuver could, however, be made at any point after speed is reduced to zero.

(C5.532) The ship can make its first warp tactical maneuver four impulses after coming to a stop; thereafter it can pay for another (or earn a previously paid for) warp tac maneuver eight impulses after making the previous one. This paid/earned maneuver can be used at any time until the end of the turn or until the ship resumes normal movement; if not made by then it is lost. This is an exception to the normal Tactical Warp Maneuver sequencing, which uses the speed 4 (or 3 or 2) column.

(C5.54) The ship could also use an HET if reserve power was available, or if it had been previously allocated. This could be done immediately after stopping.

(C6.0) HIGH ENERGY TURNS

(C6.12a) The specific impulse of the HET must be specified.

(C6.32a) A ship need not have fulfilled its turn mode to make an HET.

(C6.36a) An HET may not be performed within 1/4 turn of a previous HET, or a quick reverse; see (C3.61).

(C6.38n) During the impulse that a ship performs an HET and for 1/8 of a turn thereafter, the ship cannot: dock, be docked with, dock or undock PFs, launch or land shuttles.

(C6.41r) is superseded by (F2.8).

(C6.51a) Any modifiers applied to the breakdown rating (crew quality, first use, etc.) also apply to the possibility of pod separation. The die roll is made after the ship changes facing. A unit cannot

voluntarily break down.

(C6.52a) Note that this adjustment is once per SCENARIO and NOT once per TURN. Each ship can do this once, not each fleet.

(C6.521a) Nimble Orion ships do not get both benefits. Orion PFs act as PFs, not as Orion ships. Note that Orion PFs do not get a double nimble bonus, but only a single bonus (K1.23).

(C6.522a) This also applies to Q-ships.

(C6.523n) There is no adjustment to the breakdown rating for speed.

(C6.542m) "...including AT LEAST 1/4 of the boarding parties and 1/4 of the deck crews) and..." The full crew unit casualties must be scored, and cannot include the last crew unit. Note that in the case of a ship with few crew units and many boarding parties (e.g. a troop ship) the ship may lose no crew but dozens of boarding parties.

(C6.549n) Breakdown does not affect a cloaking device.

(C6.552a) Such a ship cannot use Emergency Deceleration to stop tumbling; see (G2.21).

(C6.555a) Note that this damage occurs only one time, not on every subsequent impulse.

(C6.556n) A ship that tumbles into an atmosphere hex without a planetary surface comes to a stop immediately. It must roll for breakdown again upon entry to the hex, but cannot tumble.

If there is a planetary surface in the hex, the ship crashes (i.e. is destroyed without any chance of survivors).

(C6.56a) This rule applies only to pods. This applies to any ship carrying a real pallet, cargo pack, or pod (not a pseudo pod). It does not include "internal" cargo.

(C7.0) DISENGAGEMENT

(C7.12a) The body of this rule is renumbered (C7.121); the title remains under the original number.

(C7.122n) If held in an enemy tractor beam, expending energy for movement (even if not actually moving) satisfies the requirement. The act of disengaging breaks the tractor.

(C7.123n) A ship can only disengage by acceleration while moving forward. A ship cannot disengage by acceleration if the area directly ahead is blocking terrain (asteroids, minefield, large planet, etc.).

(C7.124n) The term "maximum possible speed" as used in the first sentence of (C7.11) does not include any energy spent for life support, shields (not reinforcement), or fire control. The ship may make these expenditures and then calculate its maximum speed based on the remaining energy. Note that this does not apply to calculating the ship's original movement-capable warp power, 50% of which must be available (i.e. undestroyed) to complete disengagement.

(C7.23n) A ship must be more than 100 hexes from an enemy scout ship (with operating and unblinded special sensors) in order to disengage by separation.

(C7.24n) Disengagement by separation does not break tractors.

(C7.33n) A ship without any impulse engines cannot disengage by sub-light evasion.

(C7.34n) This can only be attempted once per turn, at the end of the Final Activity Phase.

(C7.35n) Disengagement by evasion does not break tractors.

(C8.0) EMERGENCY DECELERATION

(C8.1a) Emergency deceleration can only be used to stop. It cannot be used to simply reduce speed. The energy released is not reserve power and is not treated as such. It can only be used for the shields as described in the rule.

(C8.11a) Note specifically that the procedure deals with power, and not with movement points or points of shield reinforcement.

(C8.22n) A ship that has used EmDecel cannot, during the remainder of that turn, use reserve power to move. NOTE: This was modified by (C5.5).

(C8.23n) A ship using EM which subsequently uses Emergency Deceleration loses the effects of EM at the point when the ship stops and does not gain extra shielding for EM energy.

(C8.24n) A ship may not move out of the hex it stopped in by Emergency Deceleration during the same turn in which it decelerated, however, tactical maneuvers and high energy turns are allowed (C5.51).

(C8.25n) Emergency deceleration modifies an existing legal movement plot and cannot, itself, be plotted. Even if the player plans to use Emergency Deceleration and knows precisely when and where he will do so, he must still plot and allocate energy for a full-turn of legal movement. It is, for example, specifically illegal to pay for only five movement points, move at speed 31 for the first six impulses, and then use ED.

(C8.26n) Ships in an atmosphere can perform emergency

deceleration if there is no other restriction.

(C8.3a) Emergency deceleration is allowed to Federation ships in compensation for their photons torpedoes, which are the only weapons requiring warp energy. If, within a given campaign, all ships are allowed to use Emergency Deceleration, the APRs on the Federation ships should be considered to produce warp power without any change in the BPV.

(C8.4n) EFFECT ON POSITRON FLYWHEEL

The use of emergency deceleration stops the positron flywheel. If a ship has used emergency deceleration, it cannot use any speed prior to that point as the basis for flywheel computations.

(C9.0) POSITRON FLYWHEEL

A positron flywheel cannot use any speed which the ship used before the scenario started. It can only use a speed at which the ship moved during the scenario. NOTE: This rule is officially classed as "experimental" and is not considered in balancing other rules. It should never be used in competitive gaming, at least not as a player-selected option.

(D.0) COMBAT

(D1.0) GENERAL COMBAT RULES

(D1.5n) FRIENDLY FIRE

There are some cases under which a unit may be compelled to fire on a friendly unit. This is known as "friendly fire," a term that indicates the origin (not the nature) of the firepower involved. To prevent player abuse, there are several restrictions on this procedure. Units may not fire upon a friendly unit except in the cases listed below. (Note that the target unit may be manned or unmanned.)

(D1.51) A friendly unit may be fired upon if it is eligible for self-destruction (D5.51).

(D1.52) A friendly unit may be fired upon to prevent its capture. This is defined as one or more of the following conditions:

(D1.521) The unit is in danger of being captured by boarding. To qualify for this, it must satisfy all of the following requirements.

A. Be within transporter range of at least one enemy ship with available boarding parties.

B. Have at least one destroyed shield facing enemy ships.

C. Have enemy boarding parties on board equal to 75% of its own boarding parties (round fractions up).

(D1.522) Other friendly units are disengaging and the unit in question is unable to disengage. In this case, all friendly units must, after firing at the unit, proceed to disengage in an expeditious manner.

(D1.523) The unit is held in an enemy tractor beam and is unable to break free after at least one complete turn of attempting to do so, including using all reserve power and the maximum available power (not counting weapons, shields, fire control, and life support) during an Energy Allocation Phase auction.

(D1.53) Friendly seeking weapons can be fired upon without restriction, except that a friendly scatter-pack shuttle which is fired upon (by friendly fire) loses its tracking and goes inert.

(D1.54) A friendly wild weasel may not be fired upon at any time because of the battle computer interlocks.

(D1.55) A friendly SWAC shuttle or wild PF is treated as a ship for purposes of friendly fire.

(D1.56) Ships cannot fire at themselves, launch seeking weapons at themselves, or guide seeking weapons toward themselves. Ships cannot allow their own weapons to explode in the launch tubes. (You might want to do it, but your torpedo crews do not appreciate your motives.)

(D2.0) FIRING ARCS

(D2.32a) The hexes marked "-" are deleted in this revised firing arc. The ship CANNOT fire into the adjacent hex in direction 6 because the arc is too narrow to establish a firing solution.

(D2.33a) The following ships also have the expanded forward phaser firing arcs (with limited rear-firing) for their forward phasers: C7, F5L, Cadet ship (optional), Tug (only if no pods are carried), and all variants thereof.

(D2.34a) Some ships have F-plasmas in LS or RS mounts, rather than LP or RP. These can track targets in the LS or RS arcs, and can fire in directions 5 or 6 (LS) and 2 or 3 (RS). This is primarily an anti-fighter defense weapon, set in this arc to avoid a blind-spot at the tail.

(D3.0) SHIELDS

(D3.33a) Enemy sensors (assuming they have a lock-on) are capable of telling if a ship's shields are at full or minimum levels.

(D3.34a) General reinforcement can be used so long as the shields are operated at at least minimum level, even if no shield boxes remain. Note that ships which do not have shields (for example, Andromedans) cannot use either type of shield reinforcement.

(D3.34n) General and specific reinforcement are independent of each other. A ship is not required to operate one type in order to operate the other type. The ship is required to use any general reinforcement points before using specific reinforcement for purposes of absorbing damage.

(D3.5a) A ship can drop its general reinforcement, either to facilitate the use of transporters or under (D22.0). If a shield is dropped, any specific reinforcement to it is also dropped. If raised again on the same turn, the reinforcement is restored unless previously cancelled. A ship cannot drop part of its General Reinforcement (G8.23).

(D3.51a) This has become the standard procedure and is no longer regarded as an optional rule. The transporters can only function in a direct line-of-sight through the down shield; see (G8.21).

A ship cannot enter a scenario with a shield already dropped unless this is specifically allowed or required by the scenario rules. The ship could, of course, drop a shield on the first impulse.

(D3.52n) A ship that did not allocate power to its shields during Energy Allocation cannot raise them (with reserve power) until 1/4 of a turn has elapsed since the start of the turn (or since the shields were dropped during the prior turn).

(D3.53n) A ship can drop and raise more than one shield at the same time by this procedure. Shields can be raised and dropped independently; they need not all be dropped or raised at the same time so long as each one is operated within the limits required.

(D3.54n) The ability to detect a dropped shield requires a lock-on.

(D3.6a) If the volley destroys a shield, the "leaked" damage points (before the shield is destroyed) are combined with the "excess" points (remaining after the shield is destroyed) in a single volley.

EXAMPLE: 45 points of damage are scored on a 30 point shield. The first 36 points destroy 27 points of the shield and 9 points "leak" as internal damage. The next three points the destroy of the shield; the six "excess" points which are added to the 9 "leaked" points for a single 15-point volley.

(D4.0) DAMAGE ALLOCATION

(D4.322a) For the purposes of this rule, the priority (for establishing the best type of phaser) is: special sensors that replaced phasers, phaser-IV, phaser-I, phaser-G, phaser-II, phaser-III.

(D4.324a) An "any weapon" hit can only be taken on a weapon box on the ship portion of the SSD. It cannot be scored on a boarding party, crew unit, deck crew, cloaking device, shuttle damage point, or ammunition (individual probe, drone, PPT, etc.) track.

An "any weapon" hit MUST be scored if there is a system on the ship which can be scored by that damage point, including non-weapon systems which are destroyed on weapon hits (for example, PA panels destroyed on drone hits). The "voluntary" nature of such action is limited to the fact that an actual weapon could be destroyed instead. If the non-weapon systems are the only qualifying system boxes on the ship, the damage point MUST be scored there.

(D4.33a) When marking hits on these tracks, the HIGHEST number on the track (on the top or left end, not necessarily a larger number) is the one that is marked. Players cannot select another (presumably lower) number on that track to mark. The boxes on the various tracks must be destroyed (by the DAC) in order, from best to worst (top to bottom or left to right).

(D4.5a) The result on die roll 16 should be "7" not "6."

(D5.0) SELF DESTRUCTION

(D5.12a) The force of the explosion is calculated after the damage is resolved.

(D5.15n) There are some cases in which the ship could be required to complete its energy allocation form. These include:

(D5.151) If there is a possibility that self-destruction may not be successful (mutiny, etc.).

(D5.152) A computer-controlled ship asks for the speed. The form must be completed normally so that the question can be answered.

(D5.153) The ship is in a tractor auction. In this case, the ship cannot bid more than six points of power or more power than it has.

(D5.154) The player is required to reveal his EA form.

(D5.2a) SELF-DESTRUCTION CALCULATION

Line E: Note that dropped warp engines or separated sections do not count as "originally there" for this calculation.

Line H: The term "The warhead strength of a plasma torpedo..." should begin on a separate line. This is the total warhead strength. Only plasma torpedoes (except F and D launchers) completed in prior turns and held or completed with allocated power on the current turn (for an explosion) or prior turn (for self-destruction) are counted for the explosion strength. Plasma torps in launch tubes that were destroyed in the previous 7 impulses (or the current impulse) are also counted for this line of the calculation.

The one point per drone represents the detonators and is used regardless of the size or type of drone on the rack.

Line I: Note that this is one point total not one point per mine. It refers to the detonators, which are stored separately, the total explosive force of which is only nominal.

(D5.51a) This restriction cannot be violated simply for the purpose of destroying nearby enemy units in the resulting explosion.

(D5.6) CATASTROPHIC DAMAGE: This section was replaced by (D21.0) in Volume III. All errata has been included in that section. The existing rules for this function are essentially unusable and should be considered void.

(D6.0) FIRE CONTROL SYSTEMS

(D6.11a) It is not possible to drop lock-on only to selected targets.

(D6.133n) Fighters and shuttles have an assumed sensor rating of 6. If crippled, this is reduced to 3.

(D6.134n) Plasma torpedoes and ATG drones have an assumed sensor rating of 6.

(D6.14.n) ACTIVE FIRE CONTROL (Standard Rule)

Ships (and other units, all of which are considered ships for the purposes of this section) continuously use their sensors to analyze the surrounding area and locate various items of interest, including potential threats and targets. This system is generally referred to as "fire control" but is used for much more than simply firing weapons.

NOTE: This is the system activated by the one point paid for "fire control" during Energy Allocation. Active fire control has always been a part of the game (all units have it), although it was an assumed or inherent rule. This rule effectively changes nothing, but it does explain why certain rules work the way that they do.

(D6.141) MODES: The fire control system can be in "active" or in "passive" mode. Passive fire control is formally covered in (D19.0); active fire control is covered in this section. In active mode, the fire control system transmits signals that reflect from nearby objects, and uses high intensity analysis to gain information about those objects. In passive mode, the fire control system transmits nothing; it analyzes energy signals emitted by surrounding objects or reflected from the energy background. The active mode is more accurate (and many systems cannot function with only the passive mode), but also makes the ship easier to see and target. Active mode generates a lock-on (although the lock-on could be prevented by cloaks, terrain, or other factors) while passive fire control can never have a lock-on. As is noted in (D19.0), passive mode is used by ships trying to make themselves less noticeable (e.g. those using cloaks or wild weasels, or those hiding in asteroid fields or atmospheres.). It is also used by ships which are required to discontinue active mode.

(D6.142) RESTRICTIONS ON PASSIVE MODE: If the fire control system is not in active mode, the ship cannot fire weapons or launch/guide seeking weapons except as may be allowed in (D19.0). The ship can use ECM but not ECCM. If the fire control system is not in active mode, the ship cannot use any of the following systems except as may be specified by (D19.0): DERFACS, Stasis Field Generators, Tractor beams, Transporters, or UIMs. An existing tractor link can be continued without active fire control. Transporters can be used for evacuation under (D21.0) without AFC.

(D6.143) CHANGING MODES: Fire control can be changed from the active to passive mode (and vice versa) during the lock-on step of any impulse. A ship can switch its fire control system to passive mode immediately. The point of power required (for Active FC) is paid at the time of the announcement. It can be reserve or allocated power. If it is switched to active mode (also known as being "activated") again later in the turn, no additional energy is required. If energy is not allocated, the AFC system can be activated with reserve power or power could have been allocated in anticipation of switching to active mode. Reactivation requires four impulses (1/8 turn); the ship cannot use active fire control until this period has elapsed from the declaration that fire control is being activated. (i.e. The player announces on impulse #4 that he is activating his active fire control system. The system is considered to become active on impulse #8.) If the system is in passive mode during one turn and placed in active mode on the next turn, it will still require the four impulse activation period.

(D6.144) EFFECT ON CLOAKS: When a ship (so equipped) activates its cloaking device, it must immediately place the fire control system in passive mode. Note in (D19.0) that even the passive mode will not be fully functional when cloaked. The fire control system is in passive mode during the fade-out period and while the ship is cloaked. Switching the system to active mode will void the cloaking device, however, there is no effect if the system is activated at the same point where the cloak is deactivated. In this case, the four impulses required to reactivate the system will exactly coincide with the fade-in period. As a practical matter, it is impossible to activate the fire control system without deactivating the cloaking device.

NOTE: Cloaked ships activate their fire control scanners when beginning fade-in and deactivate them when beginning fade out. There is no additional penalty in this rule for cloaked ships; this rule in

fact explains why cloaked ships operate as they do. A cloaking ship cannot use passive fire control to fire, launch, or guide weapons during the fade-in/out period. The cloak restrictions supersede the PFC restrictions.

(D6.145) **EFFECT ON WILD WEASELS:** When a ship launches a wild weasel, it must immediately place the fire control system in passive mode. Note that firing weapons or taking certain other actions, even though allowed by the passive firing mode, will void the wild weasel immediately. Switching the fire control system to active mode will void the wild weasel immediately, except during the "explosion period", see (J3.2112). Outside of the explosion period, activating the fire control immediately voids a WW. A ship on passive FC can receive ECM from lending or a WW.

(D6.146) **EFFECT OF SENSOR RATINGS:** A ship with a sensor rating of less than six allocates power for fire control (during energy allocation or with reserve power) and then rolls a die. If the die roll is greater than the sensor rating, the fire control system does not function in active mode during the turn (the energy is lost); it can function in passive mode. A new die roll is made at the start of the next turn (if another point of power is allocated), and if successful the system becomes active immediately (without the four impulse delay). This explains, rather than modifies, the existing rules that such ships cannot gain a "general" lock-on.

(D6.3a) ELECTRONIC WARFARE

(D6.314r) Electronic Warfare points (ECM and ECCM) can come from any or all of the following four sources:

1. Points received for power expended by the ship, known as "self-generated" points. The total of both ECM and ECCM cannot exceed the highest unchecked box on the sensor track (usually 6). Note that the total is 6; a ship cannot have 6 ECM and 6 ECCM at the same time. Fighter EW pods are not included; see (J4.98).

2. Points built into the unit and received automatically. These are listed in (D6.393) and (D6.394), and are not included in any other limit (except PFs, the built-in points of which ARE included in #1 above). Orion-PF ECM "Stealth" points are not under #1.

3. Points received from natural causes, such as asteroids, erratic maneuvering, atmospheres, and certain zones.

4. Points loaned to the unit by another unit (Volume II and III).

NOTE: While there is no overall limit, 36 net EW points produce the maximum possible effect. Cloaking has some aspects of a higher EW total, but is handled under its own special rules.

(D6.315r) The electronic warfare status of each unit can be adjusted each impulse as part of the Fire Decision Step. This is done simultaneously by all players, and is simultaneous with the decision on what weapons to fire; use written orders and expose them simultaneously if necessary. Certain involuntary adjustments, such as terrain, and certain secondary affects resulting in adjustments, such as starting or stopping EM, are done at other points as covered in the respective rules.

The changed EW status takes effect immediately for the current Direct Fire Weapons Step and remains in effect (unless changed) for the remainder of the turn. Changes in the EW status can include:

A. Dropping some or all of the ECM or ECCM points. These dropped points are then irrevocably lost. Note that a ship may have been forced to drop some EW points by (D22.0).

B. Increasing ECM or ECCM with reserve power. Increases can only be done with reserve power; a player cannot allocate additional points to these functions and activate them later.

Note that because of the timing of this EW status adjustment, a player effectively cannot increase ECM in response to enemy increases in ECCM (or vice versa) before weapons are fired, nor can he cancel weapon fire after learning the new enemy ECM level. For example, a ship cannot allocate extra power for ECM after an enemy announces that weapons are firing because the EW adjustment step comes before fire is announced.

(D6.316r) As the ship has a limit on the total EW points, it may drop some or all of its self-generated (category #1) ECM to use additional ECCM and vice versa. This may be done during any impulse (D6.315) without regard to the amount of time since a previous adjustment.

EXAMPLE: If ECM is dropped on impulse 7 so that ECCM can be increased, and later on impulse 11 ECCM is dropped so that ECM can be increased, the ECM points dropped in impulse 7 are not restored, but would have to be replaced with reserve power.

(D6.34a) The ECCM of the guiding ship, plus any ECCM from the weapon itself, is used in determining the effect of this chart. The guiding ship cannot provide ECM to the weapons.

(D6.35r) **EFFECT ON DIRECT-FIRE WEAPONS:** Electronic warfare produces a die roll shift; see (E1.8).

(D6.37a) Note that after a tractor beam is attached, a lock-on (to the tractored ship) is automatic.

(D6.391a) This refers to the effects of a WW or wild SWAC on seeking weapons. The ECM points produced for ships by Wild Weasels do not protect the shuttle itself.

(D6.5m) **UBITRON INTERFACE MODULES:** UIMs are used only with disruptors. They are not used with phasers or any other weapons. The original rule included phasers and photons only for use on the early versions of the Klingon X-ships. With the publication of Supplement #2 this use and reference became obsolete.

(D6.52a) UIMs cannot be repaired during a scenario. They can be repaired between scenarios using the campaign repair system; assume a UIM to be equal to one weapon for this purpose.

(D6.54a) The weapons controlled by that UIM when it burned out may not fire for one complete turn. Other weapons linked to standby UIM systems may not fire with UIM control for 1/4 turn but are under no restriction if fired without UIM control.

NOTE: As UIMs cannot be repaired during a scenario, the earlier listing of it on the cost of repair chart is an obvious error.

(D6.56n) The following Klingon ships have the UIM as standard equipment: starbase, battle station, C9, C8, D7C, F5L.

(D7.0) BOARDING PARTY COMBAT

(D7.1a) Ground troops being carried are included in the ship's BPV and can be used as boarding parties.

(D7.2a) If two or more players (all on different sides) have boarding parties on a ship that is damaged, all take casualties by this procedure.

(D7.31n) **MULTI-SIDE COMBAT:** In the event that three players have boarding parties in one ship (area, GCL, or whatever), and no two are allied, the situation is resolved as follows:

Each player divides his boarding parties into three groups, one to fight each of the two opposing players and a non-fighting reserve. (One or two of the three groups could have zero strength.) This is done secretly (in writing) and simultaneously; the distributions are then revealed simultaneously. Three separate actions are then resolved (simultaneously in game terms). If, for example, player A's force sent to fight player B destroys all of the forces sent against him, excess casualties are resolved against player B's other forces.

If there are four or more non-allied players in the location, the same principle is involved with fewer troops. Note that there is no tactical reason to hold troops in the reserve, as those troops cannot cause enemy casualties but can be scored by the enemy. There may, however, be a political reason to withhold the troops, based on the assumption that the enemy will send no troops against you.

(D7.53n) When captured, a ship immediately:

 drops guidance of all seeking weapons (if not assumed by other units of the originally-owning race, and if unable to guide themselves, the weapons are removed from play);

 ceases to operate SFGs;

 ceases to perform repairs or to reload fighters;

 ceases to operate EW or scout systems;

 It no longer "leads" formerly friendly units through asteroids. The arming of multi-turn weapons ceases; the firing of a PPD ceases. Any WW, SP, or SS shuttles in the bay or on the balcony become inactive.

Other effects are as per the rules. As the ship is now an "enemy" unit, it loses the ability to control command-detonated mines. A captured Tholian ship loses the ability to move and fire through webs.

(D7.54n) The capturing player can operate the following systems only: engines, control spaces, APR, batteries, cloaks, labs (scientific research only), transporters (not T-bombs), shields, ECM, movement (except EM, HET, Emer-Decel), tractor beams, pod detachment. He can operate his own shuttles that are on the captured ship.

(D7.55n) The capturing player cannot operate the following systems: weapons (any weapon listed in any part of Annex #7D), shuttles/ fighters, mines, ECCM, scout channels, super-intelligent computer, self-destruct, shuttles, certain movement functions (EM, HET, quick reverse, emer-decel, nimble) The capturing player cannot use aegis or labs to identify drones, separate sections, drop warp engines, double Orion engines, or use Tholian abilities or equipment.

NOTE: A captured ship may be released from some or all of these restrictions after the scenario is over.

(D7.81a) Hit and Run raids can only be conducted against the best (top/left) undestroyed box on the sensor, scanner, or damage con tracks. Guards there cannot be killed by damage to the system.

(D7.82a) When trying to capture a person or object, the result "target destroyed and BP returned safely" is read "target captured and BP returned safely."

(D7.834n) Guards do not count in the boarding party calculations under (D7.4). They can be ordered by the owning player to leave their posts and participate in combat during the Energy Allocation Phase, but would have to be re-posted under rule (D7.83) before they counted for (D7.831). **CONTINUED**

Guards do not count as undestroyed boarding parties for (D7.5). When the ship is captured, all guards are transferred to boarding party status, and may attempt to regain control of the ship. (D7.835n) The specific box on the SSD to which each guard is assigned, and the specific box being attacked, must be specified. In cases (such as shuttle bays) in which the owner has not specifically recorded which box contains which unit, determine randomly which items are in each box.

(D7.836n) There is no provision for placing guards on board a shuttlecraft, scatter pack, suicide shuttle, or wild weasel.

(D7.84n) Two or more raids cannot be made by the same player (race, side, team) on a single box within a period of 1/8 turn.

(D7.85n) Hit and run raids can destroy, but not capture, a cloaking device (G13.16), or a DERFACS or UIM fire control system.

(D7.86n) After a hit and run raid against a specific system, the owner of the defending ship may (but is not required to) assign or transfer guards to that system or other systems of that specific type (including all type of phasers as a single type) immediately after the H&R step in which the raid was conducted.

(D8.0) CRITICAL HITS: (No addenda.)

(D9.0) DAMAGE CONTROL

(D9.0a) Two points of power in (D9.2) damage repair will repair one shield box, not all of the damage to one entire shield.

(D9.2a) If the DC rating is reduced during the turn, energy applied at the start still counts for that turn. Reserve power cannot be used for shield damage repairs.

(D9.44a) Excess damage, sensor, and scanner, are treated as non-power/weapon/control hits for this rule.

(D9.45n) Cloaking devices and UIMs destroyed during the previous scenario are replaced if the ship has access to a repair facility.

(E0.0) DIRECT FIRE WEAPONS

(E1.0) GENERAL RULES

(E1.22n) The presence of a unit in the same hex as the target, or in a hex in between the firing unit and the target, has no effect. Fire is never blocked by such a unit, and the unit is never damaged by the fire. (Ships are small things compared to hexes 6,000 miles across.)

(E1.23n) Direct-fire weapons cannot damage several targets with the same shot. This includes targets in the same hex and targets in a row in several separate hexes.

(E1.5a) Delete "less than" from the first line.

(E1.6a) Note that a narrow salvo must all be fired at the same instant, i.e. during the same impulse and all must be committed to fire before the die is rolled. Of course, a given ship could fire more than one narrow salvo at the same target on a given turn.

(E1.7a) The die roll modifications on this chart are replaced by ECM points. A die roll modification of +1 is considered to be two ECM points; a die roll modification of +2 is considered to be four ECM points. These are considered as points from a natural source, not included in the self-generated or received from lending limit. Heavy fighters use the Administrative Shuttle column.

(E1.8n) DIE ROLL MODIFIERS

There are several rules which can produce die roll modifiers.

NOTE: This section, which is functionally identical to (D6.35) but which includes modifiers produced by sources other than ECM, replaces the operating sections of (D6.35).

(E1.81) The primary source of die roll modifiers is electronic warfare, which includes numerous effects. Recent editions and revisions have made an effort to convert all previous modifiers to EW equivalents.

(E1.82) The Legendary Weapons Officer (G22.7) has a die roll modifier of -1 for direct-fire weapons. This modifier is combined with any other modifiers to determine the single combined modifier.

(E1.83) For probability-of-hit weapons (photon, disruptor, hellbore, plasma bolt, plasmatic pulsar wavelock), positive modifiers (e.g. +1) are simply added to the die roll. If the result is more than the "to hit" numbers, the weapon misses.

(E1.84) In the case of "range of effect" weapons (phasers, fusion beams, TR beams), a positive modifier is added to the die roll. If the result exceeds the highest number on the chart (usually 6), take any additional shifts by moving to the highest numbered result on the next higher range column (one column per shift).

EXAMPLE: Nine ECM points have produced a die roll modifier of +3 applied to the firing of a phaser-I at range 3. The die roll is 4, which would normally result in 4 damage points. Two of the three ECM shifts are used to raise the die roll from 4 to 6, the third is used to increase the range to the next column (range 4). The adjusted result is two points of damage (die roll 6, range 4). If the original die roll had been 2, the final result would be die roll 5, range 3. If the original die roll had been 6, the final result would be die roll 6, range 6-8.

(E1.85) Maulers have a "to hit" number of 1-12 with two dice. Roll two dice and add the modifier. A result of 13 or more is a miss.

(E1.86) A negative die roll modifier cannot reduce a die roll below 1. If there is a negative modifier (e.g. -1 from a legendary officer) and the die roll is 1, the modifier is ignored. Do NOT shift to a lower range column.

(E2.0) PHASERS

(E2.25n) Note rule (G24.34), which allows any unit to fire phaser-I or phaser-II weapons as phaser-III's for increased short-range defense. This rule does not imply that a phaser-I or phaser-II could fire twice during as a phaser-III during the same turn.

(E2.32n) If an energized phaser is not fired for 25 turns, it must be energized again before it can fire. If no additional power is allocated, or if the phasers are not fired, for a period of 25 consecutive turns the phasers become non-energized. The firing of any phaser keeps all energized.

(E3.0) DISRUPTOR BOLTS

(E3.51a) This rule does not mean that an overloaded disruptor can be held until the next turn and then fired as a standard disruptor. It cannot be held at all, and must be fired or the energy is lost.

(E3.55n) Reserve power can be used to overload a disruptor.

(E3.62a) DERFACS cannot break down (as UIM can). This system is available (at no cost) to all disruptor-armed ships with a range of 30 or more in Y168 (Klingon ships Y165, Lyrans Y167).

(E4.0) PHOTON TORPEDOES

(E4.22a) Partially armed photons (armed one turn) cannot be held.

(E4.41a) Overloading can be done in 1/2-point increments. Applying 4.5 points total energy produces a 9-point torpedo; 5.5 points produces 11 points, 6.5 points produces 13 points, 7.5 points produces 15 points. Feedback for these fractional overloads is based on the next higher strength weapon (7.5 = 8). The hold cost is equal to the next larger size.

(E5.0) ANTI-DRONES

(E5.4a) ADDs cannot fire type-IS drones while the ship is doing EM.

(E5.6a) Note the +1 shift if the ship is doing EM.

(E5.7a) Anti-drones are considered 1/2-space items for reloading purposes. There is apparently an error, as E-racks can't fire ADDs.

(E5.8n) Anti-drones cannot be placed in a SP shuttle or MW drone.

(E6.0) MONSTER CLOSE-IN DEFENSE SYSTEM

(E6.2a) In this case, "crippling" would destroy a crippled shuttle.

(E6.3a) MCID cannot fire through black holes, pulsars, or stars. It can fire through atmospheres or small moons.

(E6.4n) ALLOCATION

(E6.41) If the monster is operated by a player, he may designate the targets of the three firings of the MCIDS.

(E6.42) If the monster is operated by automatic rules, the three firings per impulse are directed at the "most threatening targets." This is defined in a priority system as: 1-Drones that will hit the monster on the next impulse; 2-Fighters within range, in the order of range; 3-Drones within range, in the order of their range.

(E6.43) The MCID system cannot be used against any target not specifically listed here. For example, it cannot fire at mines, asteroids, other monsters, or planets.

(F0.0) SEEKING WEAPONS

(F1.0) TYPES OF SEEKING WEAPONS

(F1.1) (First two paragraphs of existing F1.0).

(F1.2) (Third paragraph of existing F1.0)

(F1.3) CONTROL OF SEEKING WEAPONS

(F1.31) SHIPS (with certain exceptions) can control a number of seeking weapons (drones, plasma torpedoes, pseudo plasma torpedoes, scatter packs, suicide shuttles) equal to their sensor rating. Those ships without drones or plasma torpedoes can control weapons equal to one half of their sensor ratings. (Ships with player-added racks have full sensor control rating.) Some ships are noted as able to control weapons equal to double their sensor ratings. Scouts can use a sensor channel to control additional weapons. This procedure operates as defined in (FD5.3), but applies to all seeking weapons of which a given ship has control.

(F1.32) FIGHTERS can control their own seeking weapons (excepting type-IS drones) or transfer this control to another unit.

(F2.0) SEEKING WEAPON MOVEMENT

(F2.11) SECRET TARGETING (ADVANCED)

When a seeking weapon is launched, the owning player is not required to reveal the target of the weapon. He must, however, record the target in writing (on an index card or piece of scratch paper) and place this record face down on the table. (Players may develop their own alternatives for this procedure. The point is that both players must be satisfied that the record has not been changed after launch.) The record is revealed when the weapon reaches the target, or when the weapon is identified by labs or Aegis.

(F2.8a) As the HET counts as the movement for that impulse, it counts against the range of a plasma torpedo (as one hex).

(F2.9a) The specific launch tube/rack of a seeking weapon is not revealed unless required by (D17.0).

(FD0.0) DRONES

(FD1.0) GENERAL RULES

(FD1.21n) This rule number includes the third and fourth sentences of the original (FD1.2). Drones must have their target in their FA arc when launched.

(FD1.22n) This rule number includes the fifth and sixth sentences of the original (FD1.2)

(FD1.23n) Drones cannot be set to run at a lower speed than that listed in (FD2.1). The mass-produced engines are designed to run at a specific speed for a specific period of time.)

(FD1.7n) EXPENDED DRONES: Drones which have reached the limit of their range, or which have lost their targets, or for which tracking was discontinued under (FD5.35) without their own on-board guidance, immediately come to a stop and are removed from play during the subsequent Resolve Damage From Drones step.

(FD2.0) TYPES OF DRONES

(FD2.225n) When upgrading speed and exchanging sizes of drones, take the least expensive result.

(FD2.226n) Type-1S drones cost 1/2 each; their speed upgrades cost 1/2 the normal amount (based on Type-1 upgrade costs).

(FD2.42a) Drone racks are reloaded by assigned crew units, not by deck crews. The reload rate cannot be increased.

(FD2.451n) Reload drones are held in storage. If a given rack has two type-1 and one type-IV drone (and equal reloads), the player cannot declare that the two type-IV drones are in the rack while the 4 type-1 drones are in reload storage. The player could voluntarily change this through the reloading procedure, but this would have to be done during the scenario by taking the rack out of operation to unload and reload the drones.

(FD2.452n) The reload drones are presumed to be of the same cost (or lower) as the drones in the rack (on a drone by drone basis), but might be of a different type. Thus, a MW drone might be in the rack while an fast drone was in the reload storage.

(FD2.54a) Dogfight drones score 2 points of damage on size class 4 and larger targets (ships, bases, monsters). Dogfight drones score 4 points of damage on size class 5 targets (PFs, interceptors, GBDPs). Dogfight drones score 8 points of damage on size class 6 and size class 7 targets (shuttles, large shuttles, mines).

(FD3.0) TYPES OF DRONE RACKS: No addenda.

(FD4.0) FIRING RATES

(FD4.22a) This specific rule has precedence over the general rules (S3.3) for improving the drone control ability of a ship. The only means of improving drone control on an Orion ship is that given in this rule, i.e. OAKDISC.

(FD5.0) METHODS OF CONTROL

(FD5.24r) ATG drones have an assumed sensor rating of six. An ATG drone that is not controlled by a ship will roll for its own attempt to retain lock-on (G13.33). If an ATG drone is controlled by a ship, the ship rolls to retain a lock-on. If this fails, the drone is released from control and can immediately roll its own attempt to retain lock-on.

(FD5.25a) The type-IIIXX drones activate their ATG system as in (FD5.21) or (F4.3). Prior to that point, they may be guided by the launching unit (toward a specific target). From the point at which they acquire a lock-on to their target, they are treated as an ATG (FD5.2) drone and if they lose tracking are removed from play.

(FD5.3a) The player cannot change the drone's target after launch.

(FD5.31a) Anti-drones do not count against this limit.

(FD5.35n) A unit guiding a drone can discontinue guidance at any point. If the drone has its own guidance capability (e.g. ATG) and is within the range limit, it continues toward the target, but without the ECCM benefit of the guiding ship. (It cannot be commanded to go inert.) If the drone does not have its own guidance, it is rendered inert and removed from play.

(FP0.0) PLASMA TORPEDOES

(FP1.0) GENERAL RULES

(FP1.13a) A launcher that can be loaded under the applicable WS could be downloaded at the start of the scenario.

(FP1.14n) Reserve power can be used, on the last turn of arming, to increase the power of a plasma torpedo. This can never be in excess of the capability of the launcher. For example, a plasma-S launcher receives 2 points of power on turn 4, two points on turn 5, and three points on turn 6. This would normally make the torpedo held by the launcher a plasma-G. However, during a later part of turn 6, the owning player could add reserve power and increase the torpedo to a plasma-S. He could not increase it to a plasma-R because the launcher cannot handle that weapon.

(FP1.141) This could be used to increase a previously held torpedo, but the resulting torpedo cannot be held past the end of that turn.

(FP1.142) This procedure cannot be used to increase a plasma-F torp, or to create an EPT version of a plasma torpedo.

(FP1.143) This procedure can be used to arm a torpedo that has been postponed by the rolling delay (FP1.22) concept. If two points had been allocated on turn 1 and two points on turn 2, and then only two points were allocated on turn 3, the energy from turn 1 is not lost; the torpedo can be completed with reserve power during a later portion of the turn. The turn 1 energy will be lost if the torpedo is not completed by the end of turn 3.

(FP1.22) If the launcher is in its third (or later) turn of arming (using the rolling delay system), the arming can be completed with reserve power. The torpedo must then be fired before the end of that turn. If otherwise eligible, the arming procedure can be started with reserve power. Note that the new section (FP1.9) effectively changes some details of the rolling delay procedure described.

A torpedo held by rolling delay can be completed as an EPT during the Energy Allocation Phase (not by reserve power), but such arming is irrevocable and the torpedo must be fired on that turn.

(FP1.24n) If not fired on the third turn, the torpedo can be held for the appropriate energy cost (FP2.5). If the holding energy is not paid, the torpedo is ejected. There is no 8-impulse holding period.

(FP1.31n) (Advanced) The type of torpedo is not revealed, but the apparent warhead strength is revealed. Type-F and type-G torpedoes will be indistinguishable until they have traveled six hexes.

(FP1.7a) If the 8 impulse time period (in which the torpedo can be fired from the destroyed tube) extends into the next turn, it can be fired then and no holding energy need be paid. The PPT of a destroyed tube can also be fired during this interval. If a launch tube on a cloaked ship is destroyed, the ship will have to uncloak to fire the torpedo at a target. If still cloaked, the torpedo will be ejected. (Note exceptions: Plasma-F.)

(FP1.84a) Mines (except phaser captors) will not accept plasma torpedoes as targets; see (M4.221) and (M2.48).

(FP1.88n) The section of rule (FD1.2) that deals with designating targets also applies to plasma torpedoes.

(FP1.9r) ARMING WITH RESERVE POWER

Reserve power may be applied to a plasma torpedo held in the launch tube to complete its arming. The following restrictions apply.

(FP1.91) Reserve power can be used to supply the additional energy required to complete the arming of a torpedo held by rolling delay. This modifies (FP1.22) in that the first turn's energy is not lost until the end of the third turn of normal loading.

EXAMPLE: A ship with a type-S launcher could pay two points of energy on turn one, two points on turn two, and two points on turn three. During any impulse of turn three it could pay one point from reserve power to complete the arming of a type-G torpedo or two points to complete the arming of a type-S.

(FP1.92) Reserve power cannot be allocated to complete the arming of an enveloping plasma torpedo or of a plasma shotgun.

(FP1.93) Reserve power (not allocated power) can be used during the launch/fire step for accelerated arming of type-G, type-S, or type-R torpedoes. During the second turn of arming these weapons (with two energy points allocated on the first turn and two on the second turn), two points of reserve power can be applied to produce a type-F plasma torpedo. This torpedo must be launched/bolted immediately upon the application of the reserve power. Type-F launchers cannot be armed by this method.

(FP1.94) If energy is not allocated at the start of a turn to continue the arming of a plasma torpedo or to hold that torpedo, the torpedo is lost immediately. Application of reserve power later during the turn cannot restore the torpedo.

EXAMPLE: Type-S torpedo launcher A receives two points of power on turn one and two points on turn two. It receives no allocated points, however, on turn three. The uncompleted torpedo is lost immediately and cannot be recovered by allocating reserve power.

(FP1.95) A player cannot allocate reserve power to a launcher to substitute for the holding or arming energy required for the subsequent turn. A player could not allocate reserve power on turn two as a substitute for the allocated power required on turn three.

(FP2.0) TYPES OF PLASMA TORPEDOES

(FP2.2a) The comment that ships armed with type-G torpedoes can fire type-S simply by allocating additional energy is incomplete and incorrect. This is not a player option, but is an upgrade/refit requiring a BPV adjustment specified in the refit section for that race. In addition, some type-G torpedo launchers are non-upgradable.

(FP2.4) PFs armed with type-F plasmas can recharge them. A plasma-F torpedo held in a type-F launcher is in stasis; it cannot explode. The player cannot change this by paying holding energy in order to allow the torpedo to explode under (D5.2).

(FP3.0) FIRING ARCS AND LAUNCHERS

(FP3.2a) The target must be in the torpedo's FA arc at launch (i.e. when the torpedo is placed on the board).

(FP4.0) PLASMA TORPEDO GUIDANCE

(FP4.2a) The ship can retain (and/or transfer) control of a plasma torpedo in order to provide increased ECCM. If control is released by the ship (or broken), the torpedo then assumes its own guidance.

(FP4.4a) Plasma torpedoes are treated as ATG drones (FD5.24) for purposes of retaining lock-ons to cloaked ships.

(FP5.0) ENVELOPING PLASMA TORPEDOES

(FP5.2) Since the warhead strength is higher, it will take more phaser damage to destroy an EPT than a standard torpedo.

(FP5.3) If the target has no shields, simply resolve the warhead strength as a single volley without the phaser restriction (D4.321). The note concerning Andromedans is superseded by (D10.14a).

(FP5.5n) RECOGNITION (Clarification): Enveloping plasma torpedoes are immediately identifiable as EPTs because of their increased warhead size. Pseudo plasma torpedoes cannot be set to appear as enveloping plasma torpedoes.

(FP6.0) PSEUDO-PLASMA TORPEDOES

(FP6.1a) The pseudo plasma torpedo can be fired at any point in the sequence of play and under any conditions at which a real torpedo could be fired, assuming that a real torpedo was armed. It is not necessary to have a real torpedo armed in the tube to fire the pseudo torpedo. A ship that had been so heavily damaged that it could not arm a torpedo could still fire a pseudo plasma torpedo, assuming that it had such a torpedo available.

(FP6.2a) The PPT can be fired after the launcher is destroyed under the same conditions as a real torpedo.

(FP6.3a) The impact of a PPT on anything reveals that it is not a real torpedo. Even if one or more PPTs and one or more real plasma torpedoes hit the same target at the same time, the owner must reveal which was a PPT and which was a real torpedo.

(G0.0) SHIP'S SYSTEMS

(G1.0) GENERAL RULES: No addenda.

(G2.0) CONTROL SYSTEMS

(G2.21a) The restrictions can only take effect at the start of a turn.

(G2.22a) Tacs in the first half (imp 1-16) of the turn (and the energy) are lost. If under these restrictions, the ship allocates power for tactical maneuvers as usual, but loses any such maneuvers (and the energy for them) scheduled to take place in the first half of the turn.

(G2.23a) ADDs are not affected by being uncontrolled.

(G2.27n) The ship cannot benefit from a positron flywheel.

(G3.0) HULL: No addenda.

(G4.0) LAB

(G4.2a) A successful lab attempt to identify a drone reveals its exact type (including speed, ATG if present, and endurance), and its target. The lab will also reveal previous damage.

While labs cannot be used to identify a plasma torpedo as being real or a pseudo-plasma, they can identify the target of the torpedo.

Shuttles can be identified by labs. A successful attempt reveals if the shuttle is manned or unmanned and if it is following a seeking course (seeking weapon, not pursuit plotting), but not if it is carrying drones or a suicide bomb. It will reveal the target of a seeking shuttle.

(G4.3a) The control system assumes lab capabilities at the start of the first turn during which the ship has no lab. One (and no more than one) control space can be used as a lab for EDR.

(G4.44n) Labs do not require power for scientific research or for identifying drones.

(G5.0) PROBES

(G5.2a) Probes launched for information cannot be fired at, displaced, placed in stasis, moved by transporter, or held in a tractor.

Probes launched for information cannot cross a web.

This rule (G5.2) covers probes used against monsters or in scientific investigations. In such cases, the ship must be within six hexes of the object being investigated, and there must be a clear and direct path free of obstacles (webs, ESG fields, planets, etc.) between the ship and target.

(G6.0) SECURITY STATIONS; MUTINY: No addenda.

(G7.0) TRACTOR BEAMS

(G7.323n) If the ship being towed is in an atmosphere, restrictions apply. The ship cannot be towed more than one hex during a turn (on impulse 32 only) if the first hex entered is an atmosphere hex. If the towing ship tries to tow the ship at a faster rate of speed, the tractor link is broken. If the first hex entered (by towing) during the turn is outside the atmosphere, there is no restriction.

(G7.324n) See rule (C2.46) to determine the turn mode and acceleration limits.

(G7.33a) If a tractor link is voluntarily released, it cannot be re-established between those two units within 1/4-turn.

(G7.35a) Negative tractor beam (including that created by reserve power) can be applied at the instant a tractor is applied.

The sentence "Ships without tractor beams..." applies to both those ships which never had tractors and those whose tractors have been destroyed.

Any ship can use Negative Tractor at any time. If the ship has an undestroyed tractor beam which has not been used during the turn, the NT energy will use this channel and that tractor will not be available for use as a tractor during the remainder of the turn. (It could be used for NT later during the same turn.) If, however, the ship does not have an available tractor (never did have, all have been used for tractors, all have been destroyed, or a combination of these) it can then use NT without involving a tractor beam.

CLARIFICATION: Energy allocated (except by auction) to tractors can be used during the turn for positive or negative tractor purposes. However, once a given point of power is applied to one function or the other, it cannot be changed.

(G7.36a) If this movement results in moving directly from one atmosphere hex to another (except impulse 32) the tractor link is broken.

(G7.36-C-3a) Note that the ships cannot move more than one hex in one impulse. In this case, the larger ship moves both ships on the current impulse, and the second hex of movement (caused by the smaller ship) is conducted on the next impulse. (If both are the same size, toss a coin.) If further movement is scheduled for that next impulse, that movement is delayed one impulse so that the movement delayed from the previous impulse can be conducted sequentially. If the tractor link is released before an owed movement point is conducted, it is simply lost.

(G7.37a) In the event of a tie, both beams fail and all energy is lost.

(G7.41Ca) Note that the effective strength of the tractor beam (as adjusted for range) must EXCEED, not merely equal, the strength of the negative tractor force applied.

(G7.414n) If a tractor link is established during a turn, an immediate auction is conducted using reserve and allocated power. The player establishing the link is not required to reveal how much power he has allocated until it is used in bidding. Note, however, that negative tractor energy can be reused against later links, but active tractor energy is lost once the link is broken or released.

(G7.52a) SP and suicide shuttles are not removed; they cease to move and will not release or explode.

(G7.54a) The shuttle is not destroyed simply by being held. When the ship moves (and by doing so attempts to drag the shuttle along) the shuttle is destroyed in the hex where it was before the movement.

(G7.6a) Note that because of the inefficiency, one point of negative tractor power will cancel three points of tractor energy from a ship three hexes away. Also, in such a case, the ship trying to force the link would have to use six points of power (two effective points) to overcome one point of negative tractor energy.

(G7.81a) Roll normally for weapon's fire; do not assume maximum damage due to the can't miss situation. If the weapon cannot fire at range zero, use the range one column. The following weapons (photons, disruptors, plasma torpedoes, drones) automatically and immediately hit, but the result destroys the shuttle without otherwise reducing the damage scored on the ship. ADD's score one point of damage. Type I-S drones score two points of damage.

(G7.94a) A ship held in a tractor beam can fire a probe as a weapon under (G7.91), but cannot use a probe to gain information. Bases are not under this restriction. See (FD7.46) for additional data.

(G8.0) TRANSPORTERS

(G8.11a) A given transporter cannot be used twice (on two consecutive turns) within 1/4-turn.

(G8.23a) A minimum of one point of shield power (not energy) is required to block transporters. This includes general reinforcement.

(G9.0) CREW UNITS: No addenda.

(G10.0) THE THOLIAN WEB

(G10.114a) A web cannot be attached to an object on the surface of a planet with an atmosphere, or to an object in an atmosphere.

(G10.116n) Any Tholian ship (including PFs) can serve as a web anchor so long as the ship has a crew unit on board (with or without a web generator). The ship can enter a web hex and simple announce it is assuming web anchor duty, or another Tholian ship can move into its hex while laying web and anchor it to the ship. Ships laying web serve as the anchor of that web unless an until they pass this duty to another unit. Certain shuttles can serve as anchors of zero-strength webs. A valid web anchor point (ship, shuttle, PF, asteroid) in a web hex cannot be tractored, even in a zero-strength web.

(G10.117n) If a section of web has several anchors, and one of them is destroyed or releases itself, the web section will collapse immediately unless it can exist as a valid web without that anchor. (e.g. if there is an anchor to either side of the destroyed anchor, they can hold the section. If the end anchor is destroyed, the web will immediately collapse from that point to the next anchor.)

(G10.33a) This example is changed by (G10.59) in Volume III.

(G10.33a) The specific unit that provides the reinforcing or maintaining energy need not be announced.

(G10.41a) Several ships could provide the required power during one or more consecutive or non-consecutive impulses.

(G10.51a) A ship trapped in a web is not "stopped" for purposes of using an SFG. The ship must cease generating movement points.

(G10.52a) If a seeking weapon enters a web hex that also contains its target, the weapon strikes the target immediately (as it would if the web were not there).

(G10.53a) This ability can never be transferred to non-Tholians. A Tholian ship, captured and operated by another race, will not have this capability. This includes freighters, monitors, auxiliaries, etc. A Tholian unit can voluntarily "forgo" this ability. Such a unit announces it is "forgoing" is passage ability at the end of the movement segment of any impulse and can reverse this at any time after 1/4-turn.

(G10.55a) A WW launched by a ship trapped in a web will function, but the ship will probably receive some collateral damage due to the lack of time for the WW to move away. Collateral damage from a WW will damage everything in the hex (except where noted), even if the hex is a web hex. Two units in the same web hex can dock (assuming that they could do so in a non-web hex).

(G10.562a) This procedure can be used if the ship outside the web is an enemy ship. If the enemy ship cannot break the tractor link, the situation is resolved as follows:

If the trapped ship is expending more movement points than the enemy ship, the enemy ship is pulled into the web hex.

If the enemy ship is expending more movement points than the trapped ship, and the total movement points of both ships is more than the strength of the web, the trapped ship is pulled out of the web.

If the enemy ship is expending more movement points than the trapped ship, and the total movement points of both ships is not more than the strength of the web, neither ship moves.

(G10.59n) This rule will be found after (E12.7) in Volume III.

(G10.62a) If several layers of web are crossed, use the one farthest from the firing ship. This ability can never be transferred to non-Tholians. A Tholian ship, captured and operated by another race, will not have this capability. In the original rule, delete "or into."

(G10.64n) Tholian web does not block any scout functions.

(G10.65n) Non-Tholian probes (for information or as weapons) can be fired into or out of a web hex, but not through one.

(G10.71a) Ships can be rotated into but not out of web hexes.

(G10.77n) The case of a cloaked ship being exposed in a web (G13.45) cannot be used as an analogy. Entering a web hex does not affect passive fire control (D19.0), silent running (D17.75), wild weasels (J3.0), ECM (D6.3), hidden ships (D20.0), and does not provide a lock-on for a ship that failed to achieve one (D6.12).

(G11.0) SUPER-INTELLIGENT COMPUTERS: (No addenda.)

(G12.0) SHIP SEPARATION

(G12.62a) The reference should be (G12.12) not (G12.2).

(G12.72n) When selecting ships for a battle on a point basis, players may not select separated sections. Klingon booms and Federation saucers cannot be voluntarily chosen for use in a scenario.

(G12.8n) DISTRIBUTION OF NON-SSD ITEMS

The cloaking device (if any) is in the boom/saucer section.

The UIM is a device located in the boom section. DERFACS is a computer software/hardware system in the boom section. If the boom in question has disruptors these fire control systems can be used.

The transporter bomb storage is in the rear hull of Klingon and Neo-Tholian ships and in the saucer of Federation ships.

Drone storage not otherwise designated is assumed to be evenly divided between the various drone racks. On carriers, this storage is in the section with the shuttle bay.

(G13.0) CLOAKING DEVICE

(G13.16a) If an active cloaking device is destroyed, the ship begins fading in immediately.

Note that this could cause an exception to (G13.636).

A ship cannot destroy its own cloaking device while the device is operating. If not operating, destruction can be attempted once at the start of each turn, with a 1-4 chance of success (1-5 if a legendary captain or engineer makes the attempt).

(G13.17n) A planet cannot be cloaked.

(G13.331a) There is some confusion caused by the word "or". The various options depend on the rules used. If using (G13.14), you roll at the start of the turn when the ship is cloaked. If using (G13.631) without the fade-out rules, then roll when the device is activated. If using the fade-out rules, roll after fade-out is completed.

Tactical maneuvers count as movement. HETs (if used) count as 5 hexes of movement.

(G13.332a) Note that in this equation, and in (G13.333), a new roll is made only if the result of the equation changes, not if minor elements change. For example, a change from two to three ECM points would not change the net ECM shift, and as such would not cause a new die roll.

(G13.333n) REACQUISITION OF LOCK-ON: After a lock-on (to a cloaked ship) has been lost, the uncloaked ship may make an attempt to re-acquire the lock-on at the start of each turn, and any point in the turn when the conditions as defined under (G13.331) improve. The attempt is resolved by this equation:

$$\text{Probability of Reacquiring Lock-on} = S - (EW) - RF + SF - 10$$

Note that this equation is similar to that in (G13.331) but the numerical factor is increased. As a practical matter, a lock-on could only be re-acquired by a scout that was very close to a ship moving at high speed under cloak. This procedure is also used to acquire a lock-on to a ship that enters the scenario cloaked.

(G13.334n) If self-guiding seeking weapons (SGSW, i.e. plasma torps and ATG drones) are not controlled by a ship, they make their own attempt to retain a lock-on; they have no outside ECCM. If they are controlled by a ship, they do not make their own attempt, but have a lock-on automatically if the ship does. If the ship tries and fails the SGSWs are released and can immediately make their own attempt.

(G13.341a) When firing overloaded weapons at a cloaked ship at an effective range that is beyond the maximum range for that weapon in overloaded mode (and assuming that the true range to the target is within the maximum range of the weapon), resolve it as follows:

In the case of "probability of hit" weapons (photons, disruptors, PPDs, and hellborens) use the probability of a hit at the effective range, even if beyond the overload range limit. If a hit is scored, use the damage that would be scored at the true range.

In the case of "range of effect" weapons (phasers, fusion beams) determine the non-overloaded damage at the effective range, then increase this damage by the overload rating (50% or 100% as applicable). For example, a fusion beam fired at a true range of 2 would have an effective range of 9. A die roll of 3 yields 2 damage points, increased to 3 points by the overload.

Note that (G13.344) is also used to reduce the damage.

(G13.344a) This table is used in place of, NOT in addition to, the effects of any ECM shift. Cloaking is a very gross effect which effectively destroys the basis on which the ECM shifts are calculated. The cloak is the maximum possible effect. ECM ensures that the cloak will work, but cannot increase its effect. During the fade-in/out periods, ECM is used normally and the chart is not used.

Apply the percentage to each weapon individually, not to the sum of each weapon type.

(G13.45a) The web must have a strength of at least 1; unformed free-standing webs do not expose cloaked ships.

(G13.49n) Atmosphere does not void the cloaking device. The slight disturbances of the atmosphere are more than offset by degraded sensors on the searching ships.

(G13.55a) A cloaked ship is exposed and can be locked onto during the impulse in which it is inside the 7-hex area of a mine explosion. As with all units in such a blast area, a cloaked ship is damaged by an explosive mine detonated by another unit.

Cloaked ships are not exposed by ship explosions or damage from weapons.

(G13.633a) In this rule, and others in this section, the term "may be locked onto" is used. The "may be" element reflects the die roll that all units must make to lock onto anything. If the unit's sensor rating is six, this is automatic. Then you must roll to retain the lock-on.

(G13.6362r) (*Rules Change*) The player can stop/reverse the fade-in or fade-out process at any point, but the ship must then fade back out (or in) the same number of impulses. The decision must be made at the cloaking device step of the impulse. The action counts as the only fade-in and fade-out allowed during that turn. The ship cannot stop at a point partially faded-in/out and await developments, but must either complete the process or reverse it. If this is done, the ship does not pay for a second activation of the cloaking device.

EXAMPLE: A Warbird turns its cloaking device off on impulse 10, fading in during impulses 11 and 12. During the movement portion of impulse 13, Fed reinforcements arrive and the Romulan player decides to cloak again. Reversing his fade-in, the ship fades out on impulses 13 and 14, and is fully cloaked on impulse 15.

(G14.0) TUGS AND PODS

(G14.1a) See the note at the end of the Master Ship Chart. When determining the values of a tug+pod combination, simply add the two BPVs, crew units, and boarding parties. However, if the specific combination is listed separately on the table (e.g. Fed Battle Tug, Klingon CVT) that listing, not the combined total, must be used.

(G14.11n) The cost of raising the combined shields is the same as the cost of raising only the tug's shields. (Note that some battle/carrier tugs are rated as a larger size class, costing more energy to raise their shields.) The pod's shields can be left inactive to deceive an opponent, but take 1/4 turn to raise after intention to raise those shields is announced. Note that when combining the sensor, scanner, and damage control ratings of the tug and pod, the undestroyable "residual" rating (zero or nine) is not added; if both have such a box only one is used by the combined unit.

(G14.4a) NOTES ON POD ARRANGEMENTS

While an intriguing ideapods cannot be mounted backwards.

(G15.0) ORION PIRATES SPECIAL RULES

(G15.2a) The ship is not required to allocate all of the power produced from doubling the engines, but any unallocated power is lost. It cannot be used as reserve power.

(G15.21a) The box destroyed by the doubling process is in addition to combat damage. An engine box destroyed in combat during the turn cannot be used to satisfy this requirement. If the entire engine is destroyed during the turn, the penalty is meaningless and ignored.

(G15.26a) Energy spent for HETs is not movement and not limited by the speed. The ship could move 31 and perform these maneuvers.

(G15.41n) The following items can be placed in an optional weapon mount: Weapons listed in Annex #8B, batteries, APR, AWR, labs, cargo, tractor beams, transporters, probe launcher. Additionally, those mounts in the main hull (not wings) of Orion ships can include transporters, repair, or hull. Mounts in the main hull cannot include mech-tractors, but could include tractors. None of the non-weapon options changes the BPV of the ship.

(G16.0) STASIS FIELD GENERATORS

(G16.21m) "...separate FIELDS need not be generated..."

(G16.34n) If the generating unit is displaced, the field is broken.

(G16.35n) The generating ship must have a lock-on to the target to place it in stasis.

(G16.4a) Note specifically that the SFG field does not capture an entire hex, only one object/unit inside that hex.

(G16.47n) The unit in the field cannot be displaced.

(G16.61a) Drones, plasma torpedoes, shuttles, and mines can be placed in a stasis field.

(G16.66a) This rule, a specific case, is an exception to (G16.31).

(G16.73a) These effects are caused by the failure of the active fire control mode (D6.14). The distorting effects of the stasis field cause the system's active mode, which is suddenly getting an entirely different set of sensor returns, to assume that a failure has occurred and shut down, switching the system to the passive firing mode. However, for purposes of some targets (i.e. shuttlecraft or seeking weapons, as stated) within three hexes, the system remains within an active mode. The restriction on seeking weapons "targeted on" the ship is changed to "approaching" the ship.

(H.0) POWER SYSTEMS

(H1.0) GENERAL RULES: No addenda.

(H2.0) WARP ENGINES: No addenda.

(H3.0) IMPULSE ENGINES

(H3.4n) Regardless of movement cost, one unit of impulse power will move the ship one hex.

(H4.0) AUXILIARY POWER REACTORS

(H4.3n) Certain ships have AWR (Auxiliary Warp Reactors) instead of or in addition to the more common APRs. These include ships modified by players, the general APR/AWR conversion applied to many Fed ships, and some more modern ships. This warp power cannot be used for movement-related functions (including HETs). AWRs are damaged on APR hits, except as may be noted (e.g. bases).

(H5.0) BATTERIES: No addenda.

(H6.0) PHASER CAPACITORS

(H6.2a) Note specifically that the capacitors have an absolute limit. All energy to fire phasers must come from the capacitors (not directly from power sources), and energy cannot be allocated to the capacitors unless they have the capacity to receive it. I.E. If the capacitors are still full from the previous turn, no power can be allocated to phasers. Reserve power is presumed to flow to the phasers through the capacitors. If the capacitors are full, it is assumed that power was drawn from them and then replaced with reserve power.

(H6.4n) Power can only be held in a capacitor for 25 turns. If the power is not used in that time, it is lost and cannot be recovered. The capacitor could, however, be recharged without penalty.

(H7.0) RESERVE POWER

(H7.2a) Reserve power can (within the limits of the rules) be used to:

Increase the amount of ECM or ECCM.

Raise shields, increase their level, or reinforce them.

Operate active fire control.

Fire weapons which can be armed in one turn.

Overload weapons otherwise ready to fire.

Complete a plasma torpedo held with rolling delay.

Increase the power in the capacitors of weapons that use them.

Provide power for tractors, or transporters.

Begin arming a Wild Weasel.

Make an HET (H7.4 only).

(H7.3r) RESTRICTIONS ON RESERVE POWER

(H7.31) (repeat of existing H7.3)

(H7.32) Multi-turn arming weapons (or systems) can begin arming with reserve power, but cannot do so on a turn during which the weapon has been fired (or ejected). There is an exception in (E11.23).

Reserve power cannot be used to continue multi-turn arming begun in a previous turn because if energy was not allocated at the start of the turn, the arming sequence was aborted.

(H7.33) Reserve power can be used to increase electronic warfare levels (within other limits), but this can only be done in the Fire Decision Step. It cannot be done between the point when direct-fire weapons fire is announced and the point when it is resolved. It cannot be done between the point when a seeking weapon enters the target's hex and when the explosion of that weapon is resolved.

(H7.34) Reserve power can be used to raise or reinforce shields, or provide general reinforcement. This can be done after a transporter action has been declared and before it is resolved or completed. Reserve power cannot be used to raise shields after damage has been scored and before it is resolved.

(H7.35n) Reserve power cannot be used for Damage Control or Emergency Damage Repair.

(H7.36n) Unused reserve power remains in the batteries (or goes to the batteries in the case of reserve warp power). The player could channel this power into the phaser capacitors (without firing the phasers). This redirection of reserve power takes place in the record-keeping phase before the PA panel step.

(H7.4n) Reserve Warp Power can be used for HET, and to increase speed.

(H7.42m) "...reserve warp power CAN be used to..." See (H7.36).

(H7.43n) Batteries can be drained during the energy allocation phase of a given turn and then dedicated to reserve warp power on that same turn. This is, in fact, standard procedure.

(H7.44n) Players are not required to announce the use of reserve warp power to increase the speed of the ship (or the number of Warp TACs). The increase in speed will be noticed, but could come from original allocations.

(H7.45n) Power from AWRs cannot be used for movement or movement-related functions (EM, HETs, TACs, etc).

(H7.46n) If the battery is destroyed before the power is used, the reserve power (warp or non-warp) is lost.

(H7.47n) Reserve Impulse Power uses the same procedures as Reserve Warp Power, but is limited to impulse functions, such as EM.

(H7.5) USE OF RESERVE POWER FOR WEAPONS

(H7.51) Reserve power can be used to complete the arming of a plasma torpedo that is being held by rolling delay. (The comments in FP1.22 regarding the loss of the first turn's power were written before the reserve power concept was added to the game system.) Reserve power cannot be used to convert an armed plasma torpedo into an enveloping plasma torpedo or plasma shotgun. See (FP1.9).

(H7.52) Reserve power can be used to provide overload energy to a weapon about to be fired (assuming that the weapon has an overload function). This includes additional overload energy to a weapon, such as a photon, with variable overload levels.

(H7.53) Reserve power cannot be used to arm a weapon during the same turn that the weapon was fired. Reserve power can only be used to arm a weapon which has not been fired on that turn, or to overload a weapon.

(H7.6n) CONTINGENT RESERVE POWER

(H7.61) For increased flexibility, players can use the contingent reserve concept. Under this procedure, part of the energy cost of a desired action is paid during Energy Allocation, with the remainder supplied by reserve power only when and if the action is performed. This includes: HET, EM, weapons, etc. EXAMPLE: A ship requires five points of power to perform an HET. The player allocates three points, and supplies the other two points from reserve warp (non-AWR) power only when he is ready to perform the HET.

(H7.62) If the reserve power is not supplied, the power allocated for that function is irrevocably lost.

(H7.63) This procedure cannot be used for functions which require continuous power supplies. For example, you could not allocate part of the operating cost of an operating cloaking device because without full power the device would immediately cease to function and the ship would be exposed. Similarly, the ship cannot pay part of the cost of holding a torpedo, because if the entire cost is not paid the torpedo will be ejected.

(H7.64) Note that Contingent Reserve power does not escape the provisions of weapon overloading rules. Allocating power to partially overload a weapon irrevocably results in an overloaded weapon, which cannot (unless so stated, as in the case of photon torpedoes) be fired unless the full amount of energy is provided (presumably by reserve power), and cannot be un-overloaded. Thus, this procedure cannot be used by a player who is uncertain if the target will come into overload range, as the weapons would be limited to that range with the first point of allocated overload power.

(I0.0) THE LETTER "I" IS NOT USED IN THE SFB RULES SYSTEM.

(J.0) SHUTTLECRAFT

(J1.0) GENERAL RULES

(J1.33a) In the case of crippled shuttles, those weapons with a 360° arc remain functional. This takes effect immediately after the step in which the damage was received. The shuttle can control seeking weapons (if it could before it was crippled), but cannot perform HET.

(J1.34n) A shuttle can be fired at on the impulse it is launched by any weapon that follows shuttle launch in the sequence of play.

(J1.5a) Shuttles can be launched facing in any direction.

(J1.53a) A ship can launch/land shuttles from/onto the balcony at any speed it could launch/land them from the hangar. It can move shuttles between the hangar and balcony at any speed up to 31.

Any shuttles on the balcony when the ship disengages by acceleration (exceeding speed 31 in the process) are destroyed.

Scatter-packs can be held on the balcony, suicide shuttles and wild weasels cannot. The targeting of SPs held on the balcony can be determined on the impulse of launch.

(J1.61a) A suicide shuttle hauled into a shuttle bay will explode. The explosion is applied first to destroy every undestroyed box in the shuttle bay, and then resolved as internal damage. No phaser direction restriction.

(J1.621a) Enemy shuttles cannot be pulled at one hex per impulse. No shuttle can be pulled at this rate through/into an atmosphere, asteroid, web, planet, moon, black hole, pulsar, or nebula hex.

(J1.63a) The reference (D7.6) should be instead be to (G7.8).

(J1.631n) If friendly and enemy shuttles are aboard a ship, and shuttle bay damage is scored on that ship, the players must determine randomly (by die roll) which shuttle box was damaged.

(J1.632n) Shuttle bay hits scored by a shuttle inside an enemy shuttle bay cannot be scored on that shuttle unless it is the last undestroyed shuttle on the ship.

(J1.633n) Shuttles landing on an enemy ship can land in "destroyed" shuttle boxes. That box can then absorb another hit (J1.631), but is still not a functional shuttle box.

(J1.64n) OVERCROWDING: Shuttles can land on a ship in excess of its nominal shuttle capacity. This allows a ship with its normal full load to accept a shuttle from another ship (for example, carrying a senior officer on an inspection tour). A ship can land one excess shuttle if it has 1-3 undestroyed shuttle boxes, or two excess shuttles if it has four or more. This is determined in the case of each bay for ships with more than one bay. Tholian external bays cannot be used for this purpose. Excess shuttles cannot be refueled or used for any special purpose. A ship cannot begin a scenario with excess shuttles except in the case of a published historical scenario.

(J1.65n) CRASH LANDING: Shuttles can land in an already occupied shuttle box, but this action results in the crippling of both shuttles. If the shuttles are friendly to the ship, the owning player decides where to land them. If they are enemy shuttles, the specific box used (assuming that no empty boxes are available) is determined randomly by numbering the boxes and rolling a die. However, no box can hold more than two shuttles until all boxes hold at least two. If a third shuttle is landed in a box, it destroys all other shuttles in that box and is itself crippled. Previously crippled shuttles are destroyed but in either case their occupants can debark immediately as boarders. This action would only be taken in desperation (due to its cost) but might be used to recover the shuttles of a lost carrier or to bring on more friendly boarding parties when a ship was in danger of being captured. Alternatively, it might be used by enemy shuttles landing by (J1.61), presumably to deliver boarding parties.

(J1.85n) The economic BPV of all shuttlecraft and fighters is equal to one-half of the combat BPV listed on the Master Fighter Chart.

(J2.0) ADMINISTRATIVE SHUTTLES

(J2.15n) The fact that a given shuttle is a suicide or SP type is not revealed until it releases its weapons. See also (G4.2). The fact that a given shuttle is a suicide or SP type is revealed when the shuttle is destroyed. The fact that the shuttle is unarmed under (J2.22) or (FD7.45) would be reported as a "normal shuttle."

(J2.2a) A player is required to identify as such an admin shuttle used as a WW, but not one used as a scatter pack or suicide shuttle.

(J2.223a) If holding power is not applied to the SS, it is immediately disarmed but cannot be used on that turn.

(J2.224n) If the target of a suicide shuttle is destroyed, the shuttle stops and its weapon is deactivated except for purposes of capture by a boarding party transported to the shuttle.

(J2.225n) Suicide shuttles cannot be targeted on a plasma torp.

(J2.226n) Unmanned shuttles can be launched as suicide shuttles without a weapon. No energy cost or preparation is required. A shuttle with no bomb stops when it reaches its target and goes inert.

(J2.227n) If the controlling ship cuts the tracking, the shuttle goes inert and stops; the bomb is ejected. The shuttle could be recovered.

(J2.241n) A shuttle CAN be fired at on the impulse of launch by any weapon that follows shuttle launch in the sequence of play.

(J2.242n) SP shuttles cannot release their weapons until 1/4 turn has elapsed since their launch (and other conditions are fulfilled).

(J3.0) WILD WEASELS

(J3.11a) A WW can be launched on a pre-set course. Up to three turns of directional instructions can be recorded; when the end of those instructions is reached, the WW will repeat them. A voided WW is not destroyed, but will continue to execute this course.

A WW could be launched at any speed (this refers to the speed of the WW, not the ship) up to 12 if booster packs are used.

An active WW cannot be held on board the arming ship.

The wild weasel becomes effective immediately on launch. It cannot be launched "tame" and activated later.

(J3.12a) If the charging energy for the previous turn came from reserve power, the ship cannot launch the WW until 32 impulses later. A crippled shuttle cannot be used as a WW. An operating WW on the board continues to function normally if crippled (although possibly at a lower speed). A ship can (is allowed to) have two or more charged or charging WWs in the shuttle bay at any time.

(J3.13a) The ship must suspend its active fire control system (D6.14). See (C2.45).

(J3.14a) Assuming that the pod is manned and equipped for independent operations and fulfills any other restrictions and requirements, it could move, use any of its own systems (including weapons), and even attempt disengagement (presumably by sub-light evasion). A pseudo-pod cannot be used for this purpose.

(J3.15n) A sub-light shuttle (for example, R4.90) can be used as a WW for any ship it would normally be assigned to. Of course, it could not move faster than one.

(J3.16n) Bases can use WWs as ships can. Like all ships, they can only use their own originally assigned shuttles as WWs. Bases are under the additional restriction that WWs launched from ships docked to or in the base will not detract weapons aimed at the base.

(J3.17n) A WW is immediately detectable as such when launched.

(J3.21r) **DESTROYED WW:** A Wild Weasel can be destroyed by one of the seeking weapons homing in on it, or by enemy direct-fire weapons. It could also be destroyed by other means including but not limited to asteroids, planets, or mines. At the instant that the Wild Weasel is destroyed, turn the counter upside down and record the impulse. The Wild Weasel ceases to move at that point.

(J3.211m) **EXPLOSION PERIOD:** For the remainder of the destruction impulse, and for the next four impulses, the WW is in its "explosion period" when its destruction produces a ball of hot gases.

(J3.2111) During this explosion period, the wild weasel continues to produce ECM for the launching ship, and all seeking weapons following the WW continue to do so. Any additional seeking weapons fired at the protected ship (which launched the now-destroyed WW) will accept the WW as their target.

(J3.2112) During the explosion period, the WW can be voided by the actions of the protected ship. Reactivating the fire control system will not void the WW during the explosion period until the system is fully active. Note, however, that the protected ship will require this entire explosion period to reactivate its fire control systems.

(J3.2113) The launching of a seeking weapon by the protected ship will void the destroyed WW during the explosion period.

(J3.2114) The launching of another WW by the protected ship will void the destroyed WW.

(J3.212n) **POST-EXPLOSION PERIOD:** After the explosion period, the WW counter remains on the board. During this period (lasting several turns) the WW is reduced to a pocket of ionized radiation. Any seeking weapons targeted on the WW will continue to move toward it (exploding when they arrive) unless the WW is voided by the protected ship. Any seeking weapons fired at the protected ship during this period will ignore the WW. "Several turns" means long enough for all weapons targeted on the WW to reach the explosion hex. The WW does not generate ECM during this period.

(J3.213n) **COLLATERAL DAMAGE:** Note that seeking weapons exploding in a WW hex produce collateral damage (J3.3). The WW is hit by the full weapon effect, not just the collateral damage.

(J3.214a) **CRASH:** If a wild weasel is destroyed by crashing into a moon or planet without an atmosphere, the weapons following it treat this exactly as if the weasel had been destroyed in a space hex.

(J3.22a) Any ship which recovers a voided WW does not become a WW; the WW does not explode.

(J3.3a) The effect of this rule is lost (after the explosion period) if the WW is destroyed. The six points of ECM are still within the limits given in (D6.392), which restricts a ship from receiving more than six points of loaned ECM including that from scouts, SWACs, WW, etc.

(J3.24n) A WW does not begin functioning until launched.

(J3.25n) If pulled inside a ship's shuttle bay, any weapons following the WW accept the ship as a target and the WW is void.

(J3.26n) Mines treat an unvoided WW as a ship of the size it is simulating, not as a shuttle. ESG's treat a WW as its true size.

(J3.27n) Units firing direct-fire weapons at a WW receive the EW penalty for firing at small targets (E1.7) because the firing unit's computers believe the shuttle is a full-size ship and are more likely to miss it. The six points of ECM does not protect the WW itself.

(J3.3a) **Confirming:** The weapons actually hit the WW just as they would if it was a standard shuttlecraft.

(J3.4a) A destroyed wild weasel CAN be voided; see (J3.21r). In the event a WW is voided, any action taken simultaneously with the voiding act is treated as if the WW is voided. In addition, see (C2.42), (C2.45), (D6.145), and (G24.16) for additional ways to void a WW.

Delete the reference to removing a voided WW from the board; use the rules for recovering a WW.

(J3.43a) The WW does receive ECM from natural sources.

(J3.45a) A ship protected by a WW cannot be tractored. Pre-existing tractors prevent a WW from being launched. The ship launching the wild weasel must release any of its own tractors before launching the WW or the WW is voided immediately.

(J3.46a) Launching a probe (weapon or information) voids a WW.

(J3.48n) A WW is not voided if the protected ship enters a web, atmosphere, special zone, etc.

(J3.49n) A WW is not voided if held by a tractor beam, but like all shuttles can be destroyed if towed at high speed. In that event, destruction of the WW is like any other means of destruction (J3.21); the debris does not continue to move.

(J3.6n) The information from this rule was moved to (J3.22).

(J4.0) FIGHTERS

(J4.0a) Note that the authors were VERY careful to define "fighter" and "shuttle." This has not stopped players from questioning every use of "fighter" to determine if the function in question includes admin shuttles. If it did, the term "shuttle" would have been used.

(J4.2a) Two-space drones cannot be carried. MW-drones can only be carried by fighters so noted in their descriptions.

(J4.23n) A normal fighter (as opposed to an EW fighter or two-seat fighter) cannot accept control of a seeking weapon from another unit.

(J4.31a) This does not affect scatter-packs, which wait 1/4 turn to launch their weapons. It does apply to admin, MRS, and MSS.

(J4.32a) This does apply to admin shuttles, MRS, MSS.

(J4.41a) The reference (27.5) should be (J2.22); the reference (27.4) should be (J2.212).

(J4.42a) The reference (33.0) should be (D7.0).

(J4.7a) The reference to Annex #3A should be to Annex #7G.

(J4.74n) Fighters can be repaired, but not rearmed, if landed in a shuttle box without ready racks.

(J4.811n) Deck crews are killed when the shuttle/fighter box they are working in is destroyed. If several deck crews are working in that box, all are killed. Determine the number of deck crews functioning at the start of each turn; these are considered to function throughout that turn unless killed or involved in a transfer to another bay.

(J4.813n) Deck crews are assigned to a specific shuttle bay and can work on any shuttle within that bay. Deck Crews transferred between two bays are unavailable on the turn the transfer is made.

(J4.821a) Loading a 1/2-space drone or an anti-drone is considered to be 1/2 of a deck crew operation. One deck crew cannot work on two fighters at the same time.

(J4.824a) The reloads for drone racks (including those on a carrier) are presumed to be stored with the last undestroyed rack.

Drones stored for the drone racks or fighters can be used for either. The destruction of stored drones does not produce additional damage or explosions. Repairing a destroyed system does not replace the drones originally stored in it.

(K.0) FAST PATROL SHIPS: Not in Volume I.

(L.0) THE LETTER "L" IS NOT USED IN THE SFB RULES SYSTEM.

(M.0) MINES AND MINE WARFARE

(M1.0) GENERAL RULES: No addenda.

(M2.0) NUCLEAR SPACE MINES

(M2.3a) Note that the mine cannot become active until the ship leaves the area specified, even if the mine is set for a size target that does not include the ship.

(M2.41a) The key factor is "entering a hex within the detection zone." Even if moving away from the mine at the time, entering such a hex qualifies for a die roll to see if the mine has triggered. Note that expending movement points without moving (Tac, HET, while trapped in web) does not detonate a mine. Being rotated by tractor into detection range can set off a mine; roll based on the effective speed.

(M2.46n) Explosive mines will not explode if their target is not within their blast range.

(M2.47n) Cases may arise where two or more ships are in a relatively small area with two or more mines. In as much as the movement of a single ship can only cause the detonation of a single mine, this can become complicated. The procedure is as follows:

- A. For each ship, determine which mines it could detonate.
- B. Place these mines (for each ship) in a random order by rolling a die for each mine and placing the mines in order from the high to low.
- C. Roll for the possible detonation of each mine in order until one mine detonates or all fail to. Repeat the procedure for each ship.

If one ship sets off a given mine, do not delete this mine from other lists. It is possible for two ships to detonate the same mine.

(M2.48n) Plasma torpedoes will not detonate mines.

(M2.76a) While two transporter bombs equal one NS Mine for space purposes, a rack can lay only one mine per turn regardless of size.

(M3.0) TRANSPORTER BOMBS

(M3.21a) The rate is one per turn per bay; no two from one bay within 1/4-turn.

(M3.3a) Like mines, once a transporter bomb is placed it cannot be moved by transporters.

(N0.0) THE LETTER "N" IS NOT USED IN THE SFB RULES SYSTEM.

(O0.0) LETTER "O" IS NOT USED IN THE SFB RULES SYSTEM.

(P0.0) PLANETS, ASTEROIDS AND OTHER NAVIGATIONAL HAZARDS

(P2.0) PLANETS

(P2.231a) Correct reference is (P2.431) not (P2.321).

(P2.423a) See also (P2.8)

(P2.52a) A cloaked ship which lands on a planet or asteroid remains cloaked unless the cloak is voided by some other factor.

The designated shield is used for as long as that unit remains on the planet's surface.

Drones fired at a planet are targeted on specific points or installations. In scenarios where general destruction of the planet is called for, assume that the weapon crews are selecting appropriate cities or industrial areas on the hex side selected by the player.

(P2.547a) An explosion in an atmosphere hex affects only that hex (or hex side if a surface hex).

(P2.548n) Anti-drones can fire into or out of an atmosphere hex, but cannot fire through an atmosphere hex and cannot fire from one atmosphere hex into another atmosphere hex. They can fire along the edge of an atmosphere hex but not between two atmosphere hexes. ADDs on planetary bases are often replaced by ph-III.

(P2.61a) The maximum movement rate in an atmosphere is one hex per turn. See (P2.8).

(P2.7) BASES ON PLANETS (Replaces Original Rule)

Bases of all sizes can be placed on planets. These are known collectively as ground bases. In this case, certain rules apply.

(P2.71) INTERACTION WITH SHIPS

(P2.711) Ships that are able to land on planets can dock at the ground base by landing at the appropriate planetary hex side. Ships unable to land cannot dock at ground bases. Ships which can dock at the ground base can be repaired. No tractor beam is required.

(P2.712) A ground base can tractor a starship. Actually pulling the starship down to the planet's surface (resulting in a crash if the ship is not capable of planetary landings) is possible, but takes much longer than a scenario. Therefore, a ship held in a tractor by a ground base cannot be pulled into a planetary surface hex during a scenario. If the ship is unable to break the tractor beam before the end of the scenario, it is assumed to be captured or destroyed (option of the ship's owner) after the scenario is over. It must have at least one auction opportunity during an Energy Allocation Phase, even if the scenario must be extended one complete turn.

(P2.713) Seeking weapons can be fired at a ground base using ballistic targeting (F4.0), but only from a range of 4 hexes or less. Weapons fired in this manner cannot be distracted by ECM or WW. Drones fired ballistically at ground targets do explode on impact.

(P2.72) WEAPONS

(P2.721) The ground base's weapons have a 180° arc; (P2.62).

(P2.722) Ground bases ignore the effect of atmospheres (P2.54) when firing energy-using direct-fire weapons at targets outside the atmosphere.

(P2.73) DEFENSES

(P2.731) The shields of a ground base are modified.

A base in a hex with two non-planet hex sides (for example hex 1225 in the illustration in P2.62) would have two shields, each of which is three times the normal strength.

A base in a hex with three non-planet hex sides (for example hex 1223 in the illustration in P2.62) would have three shields, each of which is two times the normal strength.

In each case, the shield section on that side provides protection from attack from the adjacent planetary hex.

(P2.732) A ground base could use a Wild Weasel to distract seeking weapons. The WW remains in the hex of the ground base. Otherwise, it is treated as a WW launched by any other base. See also (P2.713).

(P2.733) Enveloping weapons (hellbores and enveloping plasma torpedoes) try to envelop the base, but obviously cannot envelop the entire planet. Their effect is divided into two equal portions. The first is lost (expended on the surrounding landscape); the second is divided equally over the base's shields. Any odd point is expended against the ground.

(P2.734) Ground bases can be targeted by warp-seeking (type-ISH) drones as any base in space could; damage is as per size class of target.

(P2.735) Ground bases cannot project an ESG (Volume II).

(P2.736) Ground bases can use ECM and ECCM normally.

(P2.74) ADDITIONAL RESTRICTIONS

AND INFORMATION

(P2.741) A ground base cannot cloak.

(P2.742) Ground bases cannot perform any form of movement.

(P2.743) The BPV cost of ground bases is equal to bases in space.

(P2.744) Ground bases cannot be displaced or placed in stasis.

(P2.745) Monsters ignore ground bases unless those bases attack the monster. Thereafter, the monster treats a ground base as a ship.

(P2.746) Ground bases can self-destruct. Explosions resulting from self-destruction or destruction in combat cannot leave an atmosphere, but are applied to all units in the ground base's hex. The explosion of a small base would be a minor effect, a base station (or warp-powered size-4 starship) would be slightly more significant. The explosion of a ground BATS (or warp-powered size-3 starship) would be a major effect on the planet, causing significant radiation poisoning downwind. The destruction of a ground star base (or warp-powered size-2 starship) would result in catastrophic ecological effects, destroying the ozone layer (allowing hard radiation to reach the surface), creating clouds that would block sunlight for weeks, and other effects not relevant to the game.

(P2.747) Bases could also be placed on asteroids. Those asteroids sufficiently large to create the same firing arcs as a planet are treated as in these rules. Asteroids of this size must be designated in advance by the scenario. Asteroids small enough to allow the base to operate normally (six shields, weapons arcs as shown) are ignored.

(P2.8) MOVEMENT IN AN ATMOSPHERE

This section compiles various rules on this subject including particularly (P2.423) and (P2.61).

(P2.81) Ships can move in atmosphere hexes without landing. The maximum speed in an atmosphere is one hex per turn. It is simply impossible to go any faster. The maximum speed that can be paid for and/or used is one hex per turn. A ship entering an atmosphere hex must do so by (P2.423).

A ship leaving an atmosphere hex to enter a space hex is not restricted except by acceleration limits or other rules.

(P2.82) Erratic maneuvering is prohibited in an atmosphere.

(P2.83) There is no additional restriction on performing tactical maneuvers, emergency deceleration (C8.26), or HETs in an atmosphere. Such maneuvers are legal in that environment unless otherwise restricted.

(P2.84) If a WW enters an atmosphere, it slows to a speed of one and enters by (P2.423) and continues its plotted course.

(P2.85) Drones launched from a planetary surface move one hex when their speed first calls for movement. If this takes the drone into a non-atmospheric hex, it moves normally thereafter. If not, the drone stops and repeats this procedure on the next turn. Drone range is based (in this case) on the actual number of hexes moved. Calculate the range by multiplying the speed in hexes by the endurance in turns, then subtract the hexes spent moving in the atmosphere. Plasma torpedoes use this procedure, counting each hex as five hexes of their range.

(P3.0) ASTEROIDS

(P3.1a) Hexes within the specified radius of 2 or more asteroid counters do not have "double asteroids" but are the same as other asteroid hexes.

(P3.23a) Wild weasels are treated as the ship they are simulating. However, the WW is destroyed when it receives enough points to destroy the shuttle, not the ship it is simulating.

(P3.24a) A PPT moving through asteroids will take damage (and possibly be destroyed) as a real torpedo would. However, anything following this PPT would not be protected from damage by the PPT. The PPT does not actually suffer the damage, but calculates what damage it would have taken (had it been real) and adjusts its electronic signature to this calculated level.

(P3.33a) This includes the firing ship's hex and the target's hex (1 hex if both are in the same hex). Note that this is ECM, not range.

(P4.0) BLACK HOLES

(P4.1a) No ship can disengage when within 10 hexes of a black hole, or when a black hole is in its FA firing arc.

(P4.25a) A black hole cannot be displaced.

(P4.27n) Transporters cannot be used through or along the edge of a black hole hex.

(P5.0) VARIABLE PULSARS

(P5.13n) These rules cover a randomly-variable pulsar. It is, of course, entirely possible that the pulsar in question is regular, rather than variable, in its cycles. (Such a decision is up to the players.) Since this effect can be tracked from considerable distances, the length of each cycle is well known in advance. It should be selected randomly (the total of several dice is suggested) and thereafter the outbursts will occur regularly at that interval. In all other ways, a regularly-variable pulsar acts as a randomly-variable pulsar.

(P5.33a) Damage to a plasma torpedo is treated the same as damage from phaser fire.

(P5.35n) No ship can disengage if it has a pulsar in its FA firing arc. A variable pulsar cannot be put in stasis or displaced. Transporters cannot be used through a variable pulsar hex.

(P6.0) NEBULAE

(P6.3a) Each PA panel receives one point of energy (equivalent to damage) on the 8th and 24th impulse of each turn. Energy discharge is normal. As with shielded ships, nebula damage cannot produce internal damage. If a panel is full, it does not suffer additional damage or allow nebula damage to enter the ship.

Specific shield reinforcement cannot exceed five points per shield; General reinforcement cannot exceed 5 shield points total.

(P6.4a) Wild Weasels are destroyed before they can begin to function. Second-generation X-shuttles can survive in a nebula as long as they have at least one point of shielding. Drones (other than dogfight drones) fired inside a Nebula function normally.

(P6.5a) This random movement does not affect turn or sideslip modes. Drones and plasmas are affected by this random movement.

(P6.7n) DEGRADED EFFECTS: Many systems are degraded when operating inside a nebula.

(P6.71) When calculating the information received by labs, add three to the true range to determine the effective range.

(P6.72) Probes (fired as weapons or for information) have a maximum range of two hexes.

(P6.73) Drones traveling within a nebula receive 1/4 point of "phaser damage" for every hex entered. Plasma torpedoes receive 1 point of "phaser damage" (1/2 point of warhead reduction) for every hex.

(P7.0) WYN RADIATION ZONE

(P7.6a) The zone is several thousand hexes thick. Weapons cannot be fired through it by ships from the outside.

(R0.0) SHIPS

(R1.0) GENERAL UNITS

(R1.1) STARBASE drone control is double sensor rating (plus possibly one scout channel). The original shields were 50 boxes each. Note that Fed starbases have 12 deck crews in the fighter-equipped module.

(R1.2D) BATS: Original shields were 30 boxes each. 35-box shields BPV = 215; 40-box shields BPV = 230.

(R1.3C) BS: Original shields were 21 boxes each; 30-box shields BPV = 138; 35-box shields BPV 148.

(R1.3Z) ALL BASES: No base can be towed under any circumstances. These units are constructed in place.

Bases can be placed in orbit (P8.0) but are still treated as stationary bases for all effects except where noted. Bases cannot perform erratic maneuvers or emergency deceleration.

(R1.5) SMALL FREIGHTER: The correct sensor rating for all small freighter variants (unless otherwise noted) is 6-0.

(R2.0) FEDERATION SHIPS

The BPV includes the FH phaser arc for all ships able to use it.

(R2.3) CC: The +refit includes 24-box 3-4-5 shields, total cost +10.

(R2.4) CA: The +refit includes 24-box 3-4-5 shields, total cost +14.

(R2.9) SL: When used to carry troops, adjust the BPV by (S3.3).

(R2.70) CL: Refit includes shields 18-18-16-16, BPV +13.

(R4.0) ROMULAN SHIPS

(R4.2) WB+: Add three APR; SSD Books #3 and #3-R are correct.

(R4.3) WE: This ship has one tractor beam, but some copies of the SSD do not show it.

(R5.0) KZINTI SHIPS

(R5.4) CC: This ship can control a number of drones equal to double its sensor rating. The standard drone racks were two type-B and two type-C, not four type-G. The ship has two flag bridge and two bridge boxes. Shield #1 is 30, shield #2/6 is 28.

(R5.6) CV: There is no flag bridge on this ship.

(R5.7) CVS: This ship has one flag bridge.

(R8.0) ORION SHIPS

(R8.1a) Firing arcs for Orion wing option mounts: Photon: FA; Disruptor, fusion: L+LF/RF+R; Phaser: LS/RS; Plasma torps: LP/RP; Drone, anti-drone: 360°; Hellbore, PPD: Not allowed.

(R8.2) CR: Damage control rating is 4-2-2-0.

(Q0.0) SUB-LIGHT GAME

(Q1.0) BASIC RULES: No addenda.

(Q2.0) MOVEMENT: No addenda.

(Q3.0) COMBAT

(Q3.1a) Fractional accounting can be used.

(Q3.26n) All ships can control up to six atomic missiles. Bases can control up to twelve.

(Q3.4a) Shields can take laser hits.

(Q3.5a) The term "control" on the SLDAC refers to a control system, not to damage control.

(Q4.0) SYSTEMS AVAILABLE

(Q4.21a) Shields can be repaired for two points per box.

(Q5.0) This number, mentioned in the index, is for later expansion. It is not currently an active rule.

(QR1.0) SHIPS

(QR1.1a) ...are destroyed by the second damage point...

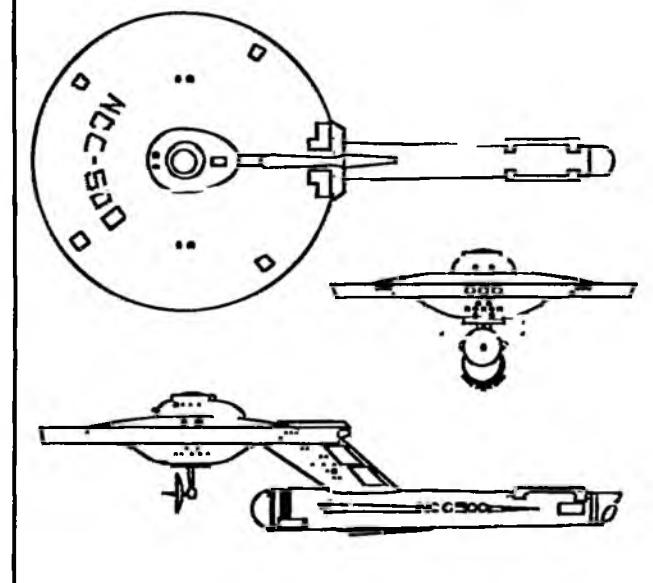
(QR1.11n) Scatter-pack shuttles are possible in this game. Each can carry two atomic missiles, but these must be drawn from the ship's supply. (QR1.12n) Suicide shuttles do six points of damage. Arming them requires two points of power on each of two consecutive turns; warp power is not required.

(QR3.0a) Klingon ships can mutiny. Their booms can separate.

(QR6.0a) The turn modes on the chart are correct.

(QR6.2a) Add one APR to the Gorn sublight DD.

FEDERATION DESTROYER by Gene Cathey



(S0.0) SCENARIOS, VICTORY CONDITIONS, SHIP MODIFICATIONS, AND WEAPONS-ARMED STATUS

(S1.3n) SCENARIO SET UP CONDITIONS

(S1.31) Ships placed on the map at the start of the scenario, or which enter the map during the scenario, are assumed to have fulfilled their turn and sideslip mode provided it is possible for them to have done so.

Exception: Units at a speed of zero have not fulfilled any turn or sideslip mode. Additional exceptions may be stated in various scenarios.

(S1.4n) MAPS

(S1.41) Units specified as arriving at a map edge at the first of a turn are placed in a hex along that map edge before the Energy Allocation Phase.

(S1.42) Units which enter a scenario during a turn (rather than at the start of that turn) must pay for any movement points expending during the portion of the turn before they arrived. For example, a ship moving at speed 16 which arrived (according to the scenario rules) during impulse #17 would still need energy for 16 hexes of movement, not merely the eight hexes moved on the map.

(S1.43) If a wild weasel, or wild SWAC, or wild Scout PF moves off the edge of a fixed map, it is voided and the seeking weapons return to their original targets.

(S1.44n) Hex 2404 on the standard black map is mis-numbered as 2504.

(S2.0) VICTORY CONDITIONS

(S2.2a) In the case of multi-ship (or multi-side) battles, if one ship cripples a target and another destroys it, both get 50% of the BPV.

(S2.4a) This is a summary of the restrictions and conditions applied to crippled ships.

1. Can fire probes as weapons (G5.3).
2. Enemy gets points for crippling (S2.0).
3. Can use emergency Life Support (B3.1).
4. Uses G2.2 for control (only if all control stations destroyed).
5. Loses nimble status (C11.3) if it was nimble.
6. Less effective in tactical intelligence (D17.21).
7. Loss of -2 HET bonus if not already used (C6.522).

(S3.0) BALANCING SCENARIOS: No addenda.

(S4.0) WEAPONS ARMED STATUS

(S4.1-0r) Any fighters may be used, not just drone-armed types.

(S4.1a) WS-III: Under weapon status III, carriers can deploy four of their fighters within two hexes, and formal PF tenders can deploy two of their PFs within two hexes. Drones placed on the map at start may not be placed within three hexes of an enemy unit. Note: See (K2.5) for definition of casual PFTs.

(S4.11a) Note that ships damaged in prior scenarios may not be able to load weapons in higher weapon status conditions. For example, a ship with no warp power might be allowed to have fully loaded photons under WS-III, but would not be able to arm them.

(S4.12a) Under WS-III, the unit may be assumed to have fired drones (one per rack, fewer if firing restrictions apply) on impulse #28 of the previous turn. These drones can be placed on the board within four hexes of the launching unit. This provision is ignored with slow-speed drones.

(S4.22m) It is the navigator, not the weapons officer, who modifies this die roll. He has maneuvered the ship into a favorable position.

(S4.24m) References to (SG4.22/23) should be to (S4.22/23).

(S6.3) INCOMPLETE ENGAGEMENTS: In the event of a second scenario against the same individual monster, any damage to the monster scored in the first scenario would be repaired, but any information gained would still be known. The ship would, however, have to gain an additional 50 points of information to determine that this was the same monster and that no other conditions had changed. These 50 points are then lost, but the points gained in the previous scenario(s) are restored at that point. Accumulation of additional points then begins. If less than 50 points were gained in the first scenario, they are lost and the 50 points to re-identify are not required.

A WORD ABOUT VOLUME II AND VOLUME III

While this Addenda Booklet includes extensive (and potentially confusing references to Volume II and III), it does not by any means include all of the Addenda necessary. Please obtain Captain's Log #4 before trying to use the rules in Volume II and Volume III.

(S6.4) REPEAT ENGAGEMENTS: In the event of a scenario against a monster of the same type as one previously defeated (but not the same individual), the ship must gain 50 points of information to establish that it is the same type of monster. After that, the method of defeating the monster established in the previous encounter is confirmed as still usable on a die roll of 1-5. On a die roll of 6, the previous information is determined to be invalid in this case, and the ship must treat the monster as a new case (with the 50 points gained counting toward the determination required).

ADDENDA FOR SCENARIOS

(SH0.0) HISTORICAL SCENARIOS

(SH4.46m) Drone speed is 12.

(SM0.0) MONSTER SCENARIOS

(SM1.45a) A monster with a turn mode of 0 can move in any direction on an impulse when it is scheduled to move, regardless of its prior movement.

(SM2.43a) The facing shield is the one that was facing the monster at the point of closest approach. Shuttlecraft sustain one point of damage for each turn that they are (at any time) within 10 hexes of the monster; they do not receive damage based on the chart as ships would.

(U0.0) CAMPAIGNS

(U1.0) GENERAL RULES

(U1.21a) Note that as repairs are conducted before the crew is replaced, the penalty under (G9.452) must be enforced.

(U1.28n) Burned out UIMs are replaced between scenarios.

MASTER SHIP CHART

The next (and final) page provides a complete and up-to-date Master Ship Chart for Volume I of the Commander's edition of Star Fleet Battles. The six page "typewriter" version of the Master Ship Chart in Volume I (Revision 0 or Revision 1) should be ignored and/or discarded and replaced with the chart on page 16 of this booklet.

When Volume I was originally released, it was the first step in the transition from the older "Designer's Edition" to the new and current Commander's Edition. Three expansion kits to the Designer's Edition eventually became Volume II, but that did not happen for about a year after Volume I. Because the new Edition included a complete change in the BPV formula and other ancillary factors, and because thousands of players already had the three expansions, it was necessary to include the ships from those expansions (i.e. from Volume II) in the Volume I version of the chart. Three years later, it is doubtful if anyone buying this product still has the old Designer's Edition expansions, so the chart is unnecessarily complicated by about 200 ships that are not in this Volume.

The arcane operation of the printing industry makes it easier and far less expensive (for all of us) to leave those outdated charts in the rulebook and to provide you with a more modern chart in this booklet than it would be to replace the charts in the rulebook. Please forgive the inconvenience. (At least the old charts tell you how many new ships you have to look forward to in Volume III!)

IF YOU STILL DO NOT UNDERSTAND THE RULES TO THIS GAME...

If an exhaustive study of the rules leaves you baffled, but you still aspire to command a starship, may we suggest that you obtain a copy of the Task Force product titled: INTRODUCTION TO STAR FLEET BATTLES. That game was designed as the training manual for the Star Fleet Battles game system. It will take you through the most basic rules in a series of 12 scenarios using the "programmed instruction" technique. In the Introduction product, each scenario introduces only one or two new rules, but builds on everything you learned in the previous scenarios.

LOOKING FOR OPPONENTS?

NEXUS magazine includes a regular Opponents Wanted list for Star Fleet Battles players. Get a recent issue (#15 or later) and check for anyone in your area, and to see how you can obtain a free listing in the next issue so others can find you. Happy Gaming!

MASTER SHIP CHART — COMMANDER'S STAR FLEET BATTLES — VOLUME I

	SHIP TYPE	G9.0 CREW UNITS	D7.0 BRDG PRTS	S2.1 BPV	C6.5 BREAK DOWN	C2.12 MOVE COST	J1.42 SPARE SHRTL	R0.6 SIZE CLASS	C3.3 TURN MODE	RULE NBR	YEAR IN SRVC
BASES & MODULES FOR BASES (R1.0)	SB	250	50	600	-	◆	6	1	-	1	75
	BATS	100	24	200	-	◆	4	2	-	2	160
	BS	60	12	120	-	◆	2	3	-	3	75
CIVILIAN (R1.0)	HBM	7	-	10	-	◆	0+2	-	-	4	168
	F-S	1	-	26/12	1-6	0.33	-	4	B	5	74
	F-L	2	-	61/18	1-6	0.50	-	4	B	6	74
FEDERATION (R2.0)	DN	50	14	180	3-6	1.50	4	2	E	2	168
	CC	45	10	137	5-6	1.00	3	3	D	3	83
	CA	43	10	125	5-6	1.00	3	3	D	4	65
	CL	37	8	93	4-6	0.75	2	3	C	5	63
	DD	20	6	94	3-6	0.50	1	4	C	6	65
	SC	19	6	120/100	3-6	0.50	1	4	C	7	65
	Tug	22	2	88/60	2-6	†	1	3	†	8	72
	BT	50	10	168	2-6	1.50	1	2	E	10	115
	P-SL	4+30	2	48/20	-	△	-	4°	-	9	72
	BP	28	8	88/45	-	△	-	4°	-	10	115
	P-CP	-	-	21/15	-	◆	-	4°	-	11	72
	S-Qship	6	4	40	2-6	0.33	-	4	B	-	74
	L-Qship	12	8	81	2-6	0.50	-	4	B	-	74
KLINGON (R3.0)	C9	62	24	205	3-6	1.50	2	2	D	2	168
	C8	60	24	211	3-6	1.50	2	2	D	3	168
	D7	45	14	117	5-6	1.00	1	3	B	4	83
	D6	44	14	113	5-6	1.00	1	3	B	5	62
	F5	22	8	71	4-6	0.50	-	4	A	6	65
	E4	14	6	55	4-6	0.33	-	4	A	7	65
	D7A	45	14	127	5-6	1.00	1	3	B	8	165
	S-Qship	5	5	41	2-6	0.33	-	4	B	-	74
	L-Qship	10	10	83	2-6	0.50	-	4	B	-	74
ROMULAN (R4.0)	WB	15	5	45	5-6	△	-	3	-	2	33
	WB+	15	5	60	5-6	△	-	3	-	2	158
	WE	20	5	100	5-6	1.00	-	3	D	3	162
	KR	40	10	115	5-6	1.00	1	3	B	4	160
	KF5R	20	5	78	4-6	0.50	-	4	A	5	160
	S-Qship	5	4	40	2-6	0.33	-	4	B	-	161
	L-Qship	10	8	80	2-6	0.50	-	4	B	-	161
KZINTI (R5.0)	CS	40	16	116	5-6	1.00	2	3	C	2	65
	BC	40	16	128	5-6	1.00	2	3	C	3	160
	CC	44	20	135	5-6	1.00	2	3	C	4	107
	CL	30	10	84	5-6	0.67	1	3	B	5	65
	CV	50	20	147	5-6	1.00	3+3	3	E	6	166
	CVS	50	20	169	5-6	1.00	3+3	3	E	7	170
	FF	20	6	62	5-6	0.33	1	4	A	8	65
	S-Qship	6	6	30	2-6	0.33	-	4	B	-	74
	L-Qship	12	12	62	2-6	0.50	-	4	B	-	74
GORN (R6.0)	CA	46	16	120	5-6	1.00	3	3	D	2	69
	CL	32	8	92	4-6	0.67	2	3	D	3	69
	DD	20	6	68	4-6	0.50	1	4	C	4	69
	S-Qship	6	5	35	2-6	0.33	-	4	B	-	74
	L-Qship	12	10	80	2-6	0.50	-	4	B	-	74
THOLIAN (R7.0)	PC	12	5	59	5-6	0.50	1	4	A	2	83
	PC+	14	6	65	5-6	0.50	1	4	A	3	98
	DD	18	8	80	5-6	0.50	-	4	A	4	115
	S-Qship	5	4	41	2-6	0.33	-	4	B	-	150
	L-Qship	10	8	83	2-6	0.50	-	4	B	-	150
ORION (R8.0)	CR	20	12	86	6	0.67	2	3	A	2	117

▲ This is a sub-light ship (speed of 1 in Star Fleet Battles)

◆ does not move under own power (but might be in standard orbit)

° when detached

† 0 or 1 pod (1 D), 2 pods (1.5 E), 3 pods (2.0 F)

Unless otherwise noted, no ship's BPV includes its fighters, transporter bombs, or mines; all include their admin shuttles.

Split BPVs are read economic/combat ratings.

The movement cost designation of 0.33 is considered to be 1/3. The movement cost designation of 0.67 is considered to be 2/3.

The spare shuttle column is read as: admin shuttles + fighters.

The rule reference number refers to the rule number in Section R that provides explanatory information about the ship. All bases and Q-ships are in (R1.0).

If a specific "tug + pod" combination is listed (e.g. Fed BT), the combination factors must be used, NOT the sum of the individual factors. If no combined listing is shown, add the relevant factors.

All Romulan ships include the cloaking device except for freighters and Q-ships. Romulan bases must add 15% to their BPV to pay for their cloaking device. This adjustment is mandatory.

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COULD YOU COMMAND A STARSHIP?

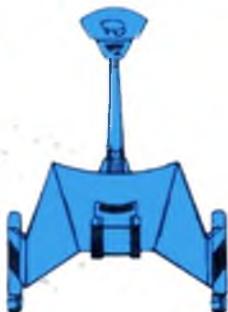
The challenge of starship command: out-thinking, out-shooting and out-maneuvering your opponent in a warp-speed dogfight! Only your skill and cunning can bring you victory as you face other starships, fearsome monsters and unknown aliens.

TYPICAL SHIPS INCLUDED IN THIS GAME



Federation Heavy Cruiser

While reflecting the best balance between combat, exploration and research, this very balance makes it an expensive ship to build and maintain.



Klingon D7 Battlecruiser

Designed primarily as a combat ship, the D7 packs a tremendous punch in its disruptors, drones and phasers, but cannot absorb as much punishment as ships of other races.



Kzinti Attack Shuttle Carrier

Virtually the only ship to use armed shuttles as primary weapons, the Attack Carrier retains full offensive armament and often follows the fighter group into direct combat.

STAR FLEET BATTLES captures the excitement of individual starship combat in deep space. Each player commands one or more starships, and allocates the energy available, fires the weapons and plots movement. Hits are scored on "Ship System Displays" (included), which show the layout of the particular starship's weapons and other systems. Movement and combat are simultaneous, based on preplotted instructions by the players. Although the situations vary, the normal objective of the game is to engage and defeat your opponent's starships while minimizing damage to your own starships.

STAR FLEET BATTLES is the starting set for gaming in the *STAR FLEET UNIVERSE*. Though complete in itself, **STAR FLEET BATTLES** is the gateway to many different gaming possibilities in the "Final Frontier."

Included in **STAR FLEET BATTLES** are:

- ★ The Commander's Rulebook
- ★ 216 die-cut playing pieces
- ★ Large 20 x 24 inch tactical map
- ★ Dice, Charts, Ship System Displays

STAR FLEET BATTLES includes seventeen different scenarios, including solitaire, two player, and multiple player situations. Several scenarios are included for beginning players. Also included are two campaign games for extended game play.

A variety of ships are featured from the Federation, Klingon Empire, Kzinti Hegemony, Romulan Empire, Gorn Confederation, Tholian Holdfast, and the Orion Pirates fleets.

Number of Players: One, Two, or More

Age: 12 Years or Older

Playing Time: Variable, Depending on Scenario
—From One Hour

Complexity Level: Moderate to Advanced
(Introductory Scenarios included)

Game Design: Stephen V. Cole and the
AMARILLO DESIGN BUREAU

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