

The Final Frontier

Starship Combat in the Star Trek™ Universe

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- 2) <http://www.holodeck3.com>
- 3) <http://wolf359a.anet-stl.com> (Thanks to The Wolfpack)
- 4) <http://www.shipschematics.net>
- 5) Tachy can be contacted at: Tachy@3dworlds.org.

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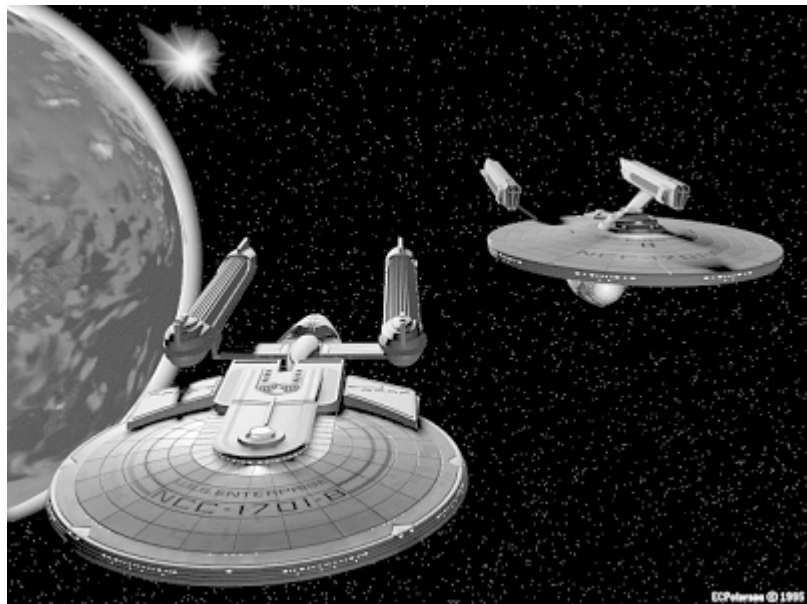
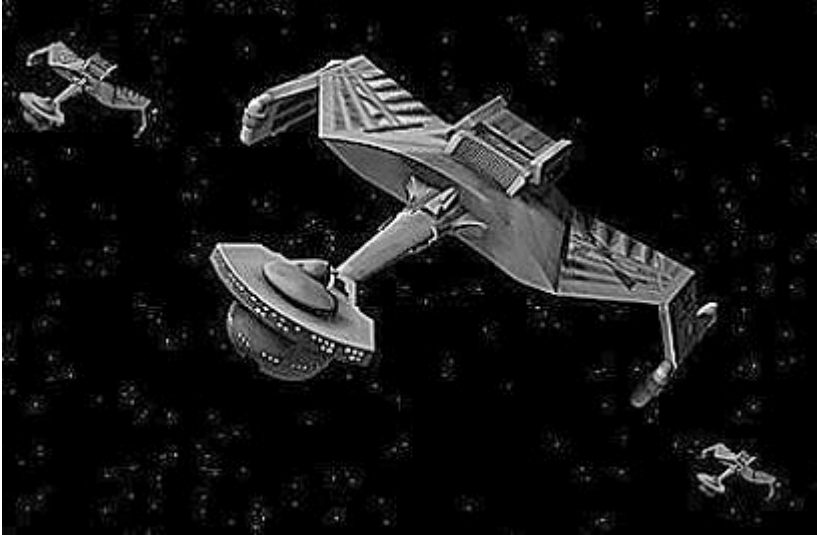
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Images by Eric Peterson/Matt Allen

The Final Frontier

Introduction

Star Trek has sparked the imagination of television viewers and moviegoers for more than 30 years now. The people, the places, and starships of Star Trek are familiar to literally generations worldwide. One reason for the great appeal of Star Trek is its depiction of humanity facing the unknown--Boldly going where no one has gone before. Space is the final frontier, and like the frontier of the old American West, space is fraught with dangers. Pirates, alien life forms, and hostile starships await the unwary star traveler. The Final Frontier is a game of starship exploration and combat set in the Star Trek Universe.

The Final Frontier grew out of our game playing group's dissatisfaction with the way existing Star Trek rules portrayed ship combat. Some were volumes too long, and others were just not realistic--well actually--did not have the feel or flavor of the series and movies. This lack of a Star Trek "feel" is, in a way, easily understood since there are so many contradictions between the series, books, and movies. One source says warp speed combat is not feasible, yet another has ships making warp 7 or warp 9 firing passes with phasers or disruptors. Even what class this ship or that ship is, or was, is sometimes disputed. Even with all of this conflicting information, we stuck to our guns (or phasers if you will) and have created a game that we feel captures the flavor of the ship to ship engagements that have thrilled us all for so long on the big and little screens. You are holding the result in your hands right now.

These rules are meant to be a guide to players and referees on how to handle starship combat. If a player has a good idea that is not covered in the rules, the referee should use common sense and the written rules as guides to determine the outcome. Part of the magic that is Star Trek is the diversity of problems faced and finding their solutions. Encourage players to think through problems, but do not allow them to run roughshod over the established rules.

The sequence of play includes a communication phase. Players should feel free to "role-play" their position as captain. Hail a pirate ship and command it to lower shields before you actually open fire. Order an enemy ship to surrender or prepare to be boarded. This is all part of the fun.

Please note--our game places much more emphasis on the crew than most other space combat games out there. You will take on the persona of a starship captain, and will therefore be responsible for the actions and welfare of your crew. In a battle between equally matched ships, the crew and captain will be what make the difference in the outcome of the battle. This is one of the most enjoyable aspects of the game we feel--the ship and her crew are yours. How they perform will be up to you. So -- Shields up, arm photon torpedoes, and good luck Captain!!



Image By the Wolfpack

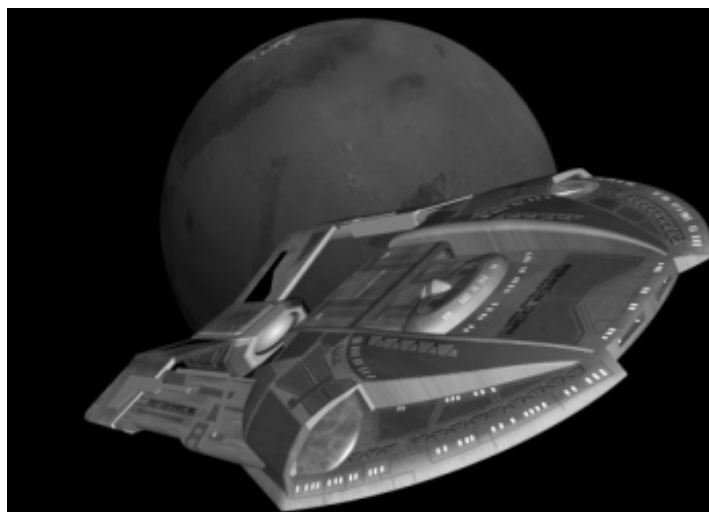


Image by Tachy

Basic Rules and Information

Game Components

The Final Frontier is a game of simulation. There are two things that need to be represented to simulate a battle: The area where the encounter takes place and the participants in the battle. The various items used to simulate the area of space and the ships involved in each encounter are what make up the game components.

Simulating Space

The Mapsheet is used to simulate open space, while counters will be used to simulate starships or other objects in that open space.

The Mapsheet is a hex map that represents the area of space where the battle is taking place. A hex map is a large paper or vinyl map (usually black with a starfield printed on it) that has a grid of hexagons printed on it. The hexagons are used to determine things like a vessel's heading, weapons firing arc, and the range between targets. Each hex is approximately 10,000 kilometers across, and each turn is 30 seconds long. Each turn is divided into three separate 10 second phases.


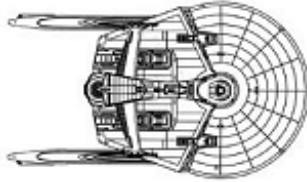
Simulating Obstacles: Cardboard counters or miniatures will be used to represent outposts, asteroids, planets, mines, etc. as needed. What you use will vary depending on what you have available. Make sure that all players understand what object each counter is meant to represent.

Simulating Starships

Starships are represented by a counter or miniature that is placed on the mapsheet. Their capabilities are represented by data found on the ship data sheets for the game.

Starship Counters or Miniatures: Starships will be represented either by cardboard counters or by lead or plastic miniatures, whichever is available to the players. Each ship should have a counter or miniature to represent it and everyone must be clear as to which ship each counter or miniature represents.

Ship Data Sheets: This is the data that represents the capabilities of each ship. The Data Sheets are found in the Ship Data Book, as are instructions on how to read and understand the data found there.

Miranda Class Cruiser	
 	
RACE: United Federation of Planets OVERALL COMBAT RATING: 49.85 ERA: Pre-Next Generation Era	
General Ship Data Size Class: II Damage Control Points: 7 Superstructure Points: 35 Atmosphere Capable: Yes Landing Capable: No Damage Class: C Sensor Class: F/G Cloaking Cost: N/A Rating: Crew Data Crew: 360 Troops: 30 Transporters (6-man): 5	Movement Data Impulse Movement Ratio: 4/1 Thruster Movement Ratio: 3/1 Maximum Impulse Speed: 10 Maximum Thruster Speed: 6 Maximum Acceleration/Decel: 3
Power Data Left Warp Engine Output: 24 Right Warp Engine Output: 24 Impulse Engine Output: 24 Total Power Available: 72 Warp Rating: 9	Weapon Data Beam Weapon Type: Phaser Number of Weapons: 4 Firing Area: 2 f, 2 f/s Firing Chain Columns: Y Maximum Power Allocation: 6 Maximum Power Emitted rate: 2 Damage Modifier: (+3) (0-10) (+2) (0-17) (+0) (0-24) Missile Weapon Type: Photon Number of Weapons: 3 Firing Area: 2 f, 1e Firing Chain Columns: 5 Power To Arm: 1 Damage: 20
	Shield Data Maximum Deflection: 8 Shield Power Cost: 1 Shield Durability: 5 Minimum Damage #: 25 Maximum Absorption: 90 (per shield, per volley)
	Exotic Maneuvers Data Maneuverability: 2 (+20%)
	Ship Rating Information: Defensive Rating: 140.5 Offensive Rating: 35
Pre-Next Generation Era	

(Sample Ship Data Sheet)

Other Game Components

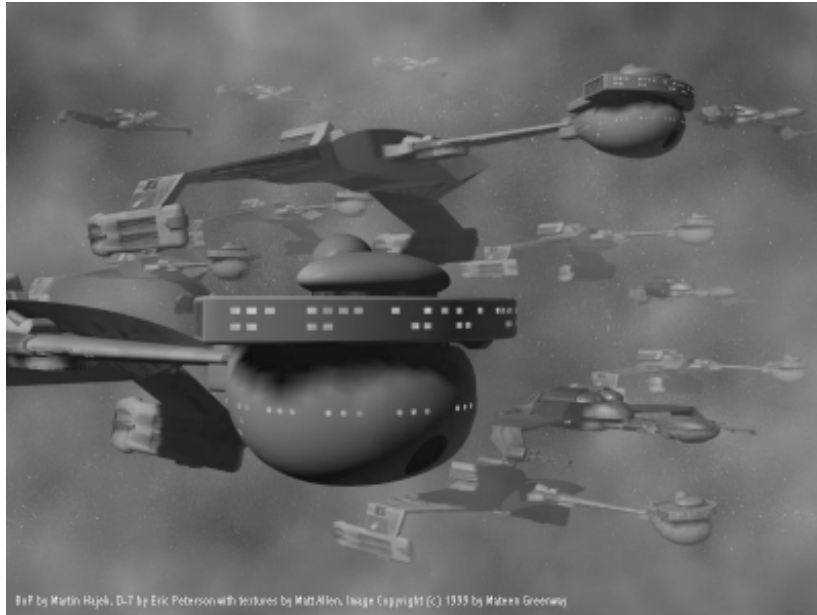
Dice: Dice are used in Final Frontier to determine the outcome of events such as firing weapons, taking damage, and attempting repairs. The dice used the most frequently in the game have 10 sides. Each die is numbered 1 to 0 (0=10). Each roll of a die will generate a random number between 1 and 10. The same dice may also be used to generate random numbers between 1 and 100. Two 10 sided dice rolled to produce such a number are known as percentile dice. If directed to roll percentile dice, have one die designated as the tens die and the other designated as the ones die. For example if the tens die is rolled for a 5 and the ones die for a 3, then you have rolled a 53. If a 0 is rolled on the tens die, and a 6 on the ones die, you have rolled a 06 or 6. If 0 is rolled on both die (a double 0) then you have rolled 100.

Die rolls are often abbreviated as follows: one 6 sided die = 1d6, two 10 sided die = 2d10, etc.

Fire/No Fire counters: This game is one where players act as captains and make decisions on what their ship will do in the situation it is in. To make the situation as realistic as possible, when a captain makes a decision to fire or not to fire, he should not be influenced by what the enemy captain has decided to do in regards to firing or not firing. (Ships can see that another ship has armed weapons, but cannot tell exactly when they will be fired.) To simulate this, players will use the fire and no fire counters to keep their decision secret until everyone has decided what they will do.

Combat tables: These charts and tables give information on to hit numbers, damage locations, and other important information for use in the game. The charts are located at the end of these rules, just before the Scenario section.

Turn Record Sheet: This sheet is one option to keep track of initiative for the turn. Another option would be initiative counters. (See the rules on Initiative for more.)



Mateen Greenway

Setting-up for a Game

Some preparation needs to be made for each game. This is because there are so many factors that can be added to each game of Final Frontier that you play: what races are involved, what ships are involved, obstacles in the area, etc. Detailing all of the variables involved in each battle is known as creating a *scenario*.

The Scenario

The scenario must include the following information:

- a) All groups involved in the combat
- b) What ships are involved
- c) Any obstacles to be found on the board and their locations on the board
- d) The starting locations, facings, and perhaps the speeds of each ship
- e) Crew and officer skill levels (even if just "roll for all skill levels. More on skill levels later)
- f) Any special rules for the scenario, including previous damage, weapons states, etc.
- g) The victory conditions for all sides of the scenario

If you do not understand all of the terms above, do not worry. After you read the rest of the rules you will understand what information needs to be in each scenario you design.

Note that some information in a scenario may not be intended for the players on one side or another to know. For example, a scenario state that one asteroid of an asteroid field on the mapsheet is really a camouflaged outpost, and the outpost cannot be detected until it opens fire. The location of the outpost would be revealed to the side that the outpost belongs to, but not to the other side. Sometimes complicated plots in scenarios will mean that a referee is needed for that game to keep such details secret from one side.

Lastly, with all of the Star Trek graphics and computer fonts, it is easy and a lot of fun to make orders and briefings for each player that tells them what is happening in the scenario.

A beginning scenario titled *One on One* has been provided in order to familiarize players to the rules and various charts. It can be located as the first scenario in the rules section entitled *Scenarios*. This scenario requires that the players read only the core rules (up to page 84) on movement, beam and missile weapons fire. Players are encouraged to read the core rules of the game and play the first scenario. Once familiar with the basics of the game, they should use the rules found under weapons. After a few more games they can experiment with the rules for special technologies, systems, and ships.

Setting up the Playing Board

Once the scenario is defined and all players briefed, it is time to set up the mapsheet. Lay out the starfield mapsheet on a flat surface, such as a table or floor. Each player should find the counter or miniature he will need to play in the upcoming scenario. (Note that although the masculine pronoun he will be used throughout these rules, the female pronoun she is implied in all cases.)

In the case of the beginning scenario, *One on One*, one Federation Miranda class cruiser, and one Klingon K'tinga class cruiser will be needed. Put each counter or miniature in their starting positions on the mapsheet; in this case in the center of the opposite short sides of the mapsheet. Give each captain a *fire and no fire* counter.

Ship Control Sheets

Ship control sheets are used to keep track of the energy made and used by each ship and any damage it takes in the scenario. In the booklet marked *Combat Charts/Ship Control Sheets*, find the ship control sheets for use with Miranda and K'tinga class cruisers for the pre-next generation era, and place the appropriate one in front of each captain. Each set of ship control sheets consists of two separate sheets that are to be marked with a pencil. On these sheets are a series of boxes that players use to record the data necessary to play each turn. How the ship control sheets are arranged and how they are used is described in the next section of the rules.

Each ship that is in a scenario must have a set of control sheets for that ship class used in each scenario. Having to use multiple copies of the same ship classes in the same or different scenarios means that the originals should not be used. Instead, copies should be made or printed out each time a particular control sheet is needed for a scenario.

Ship control sheets for each specific ship class will soon be available on the internet, on disk, and on paper. These sheets are available in Adobe Acrobat (PDF) and Illustrator formats. For more information on ordering these items, E-mail us at thayns@earthlink.net, or visit our web page at: <http://www.sfattc.com> (Short for Starfleet Advanced Tactical Training Center)

Preparing the Ship Control Sheets

This section teaches how to read the ship data and system status that is displayed

on the ship control sheets. It will familiarize you with the sheet's arrangement, what they show, and what the various parts are. Later rules sections will explain how to use each section of the ship control sheets. From this point on, the Federation player on the *One on One* scenario will be used for examples on how to fill out and understand the ship control sheet. It will be helpful to the player to reference a copy of the Miranda class control sheets in order to locate the sections described in the rules and examples.

There are 2 displays that make up the Ship Control Sheets: The Power Allocation Form and the Damage & Combat Display.

Ship Control Sheets have been pre-made for each ship class. If you do not have these available, the information you need to fill these out can be found on the ship data sheets. A completely blank set of Ship Control Sheets has been provided with these rules to allow players to use any of the ships listed in the ship data sheets.

FINAL FRONTIER

IMPULSE ENGINE (24)
Power: 24
Maximum Impulse: 10
Movement Cost: 4/1
Max Acceleration: 3

WARP ENGINES (2)
Power Tech: 24
Warp Rating: 9

PHOTON TORPEDOES (3)
Power to arm: 1
Damage: 20

PHASERS (4)
Type: FTL-BF
Capacity: 6
Emitter: 2

THRUSTERS
Maximum Thruster: 6
Movement Cost: 2/1
Maneuverability: 2 (420%)

SHIELDS
Maximum Deflection: 8
Deflection Level Cost: 1
Densibility Rating: 5
Minimum Damage: 4/ 25
Maximum Absorption: 60

MIRANDA CLASS CRUISER
OCR: 49.38

CREW DATA

CAPTAIN	
SCIENCE OFFICER	
SUNNER	
ICM OFFICER	
MEDICAL OFFICER	
CHIEF ENGINEER	

CREW	TROOPS
300	50
CREW RATING:	

	TURN 1	TURN 2	TURN 3	TURN 4	TURN 5	TURN 6	TURN 7	TURN 8
WARP POWER (48)								
IMPULSE POWER (24)								
TOTAL POWER (72)								
WEAPONS Beam								
Missile								
SHIELDS Forward								
Aft								
MOVEMENT: Impulse/Power Speed								
Thruster/Power Speed								
TRANSPORTER (10 slots)								
CLOAK								
TOTAL POWER SPENT								
INITIATIVE SCORE (Capacity to absorb incoming damage to starboard)								

(The Initiative score is calculated at the start of each turn.)

The first display of the ship control sheets has the title **Energy Allocation Form** at the top. The boxes located in the top right portion of the sheet are used to record the skill levels of the captain and the bridge crew. The information located in the boxes around the side view of the ship is the information needed for allocating energy to the ship's systems. The large section at the bottom of the page is used to track the available power each turn, and to record how that power is allocated each turn.


In the top right corner is the class of the ship the sheet portrays. Make sure this

corresponds to the ship you are supposed to be using for the scenario. Also listed is the Overall Combat Rating (OCR) of the ship. This is a general rating of how well the ship performs in combat.

Ship Class and OCR

MIRANDA CLASS CRUISER
OCR: 49.18

CREW DATA		CREW INFORMATION AND SKILL LEVEL	
CAPTAIN		CREW: 360	TROOPS: 50
SCIENCE OFFICER		CREW RATING:	
GUNNER			
HELM OFFICER			
MEDICAL OFFICER			
CHIEF ENGINEER			



The next area we will look at has a heading of "Crew Data". The first box is marked "Captain". This space is used to record the skill level of the ship's captain. The skill rating is a number between 1 and 100 that denotes the overall skill of the captain at commanding a starship. If specified by the scenario, the captain's skill level is entered here, otherwise it is determined by rolling three 10 sided dice and adding the result together. This number is then added to 45 to produce the captain's skill rating.

The rest of the column of boxes record the ratings for the helmsman, gunner, engineer, science officer, and medical officer. (**Note:** The correct Federation title for a gunner is "Tactical Officer." The Klingon title is "Weapons Officer." We use gunner because this is the primary duty the officer will fulfill in this game. Purists may refer to this officer by their correct title as they see fit. The Medical officer has been included for use in campaign games. He will have little use in tactical situations. For game purposes, the Science Officer is also considered second in command.) If the scenario specifies the ratings of the crew and officers, fill in the boxes as stated. Otherwise, each officers skill level is then determined separately by rolling three 10 sided dice and adding the results to 40. These values are then recorded in the appropriate boxes.

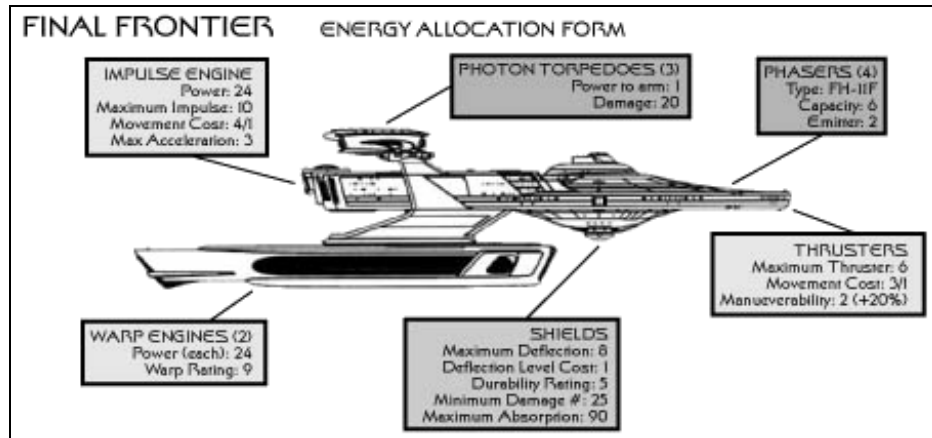
Players then need to determine if the helm or gunner skill levels have any modifiers that come into play when that crewman attempts skill rolls on a d10. The modifiers are determined on the following chart:

Skill level	Bonus
0-15%	-2
16-30%	-1
31-59%	0
60-80%	+1
81-100%	+2

Record any bonuses in the same box as the skill level.

The next group of boxes detail the number of crewmembers and troops carried on the ship. There is also a space to record the skill level of the crew. If a skill level is

specified in the scenario, record the number in the space provided. Otherwise, roll three (3) d10's and add 35 to the results. Record the results in the space provided. The last item in the area of the allocation sheet is a picture that represents the race that produces the ship portrayed on the sheet.



In the top left portion of the allocation sheet is the title of the game, and the title of the sheet. Beneath the titles are boxes that contain a wealth of information about the ship. Please note that if the full color ship control sheets are used the boxes are color coded as follows:

Color	System Type
Yellow	Power Systems
Red	Weapons Systems
Blue	Shields/Control/Superstructure

If the gray scale version is used then related systems will be a like shade of gray.

The order of the boxes may vary, based on the locations that the systems are located on each ship, but the number of boxes and the information contained in them will remain the same. The descriptions below outline in general what information is found in each box (Note that detailed information on what all these entries mean and how they are used will be discussed later in these rules):

Warp Engines: The number in parenthesis is the number of warp engines on the ship. The power rating is the amount of power each warp engine generates. The maximum warp rating is a measurement of how fast the ship can travel at warp speed. Lastly, the Damage Chart is the chart used when the ship takes damage.

Impulse Engine: This boxes gives the amount of power generated by the impulse engine, the maximum impulse speed, the power to movement ratio, and the maximum acceleration value for the ship.

Thrusters: This box details the maximum thruster speed, the power to movement ratio, and the maneuverability characteristics of the ship.

Beam Weapons: This boxes details the type of beam weapons carried by the ship, such as Phasers, Disruptors, etc. It also details the number of weapons and some of the power information for each weapon.

Missile Weapons: This box details the type of missile weapon carried, such as

Photon Torpedoes, Plasma Torpedoes, etc. It also details the number of weapons carried, the power needed to arm each weapon, and the damage causes by a single hit by each weapon.

Shields: This section gives on the power needed to raise the shields and the damage absorption capabilities of the shields.

	TURN 1	TURN 2	TURN 3	TURN 4	TURN 5	TURN 6	TURN 7	TURN 8
WARP POWER (48)								
IMPULSE POWER (24)								
TOTAL POWER (72)								
WEAPONS Beam								
Missile								
SHIELDS Forward								
Aft								
MOVEMENT: Impulse/Power Spent								
Thruster/Power Spent								
TRANSPORTERS & CLOAK								
TOTAL POWER SPENT								
INITIATIVE SCORE								

Capacity to absorb damage is limited by reserve capacity

In the center area of the sheet there is a space to write in the name of the ship. If the name is specified in the scenario then write the name specified in this space, otherwise, choose a name for your ship and write it here.

The large section underneath the name of the ship is used to track the power produced and how that power is used. The first three boxes show how the normal amount of power generated per turn by the warp and impulse engines, as well as the total power produced by the ship. Spaces are provided to keep track of the power actual power produced each turn as the amount changes because of damage and repair to both types of engines.

The fourth box (Weapons) in this section is broken into 2 lines: one for beam weapons and one for missile weapons. These lines keep track of the total amount of power allocated to the ship's weapons. Specific weapons that are armed with this power will be monitored on the Damage & Combat Form.

The fifth box (Shields) is also broken into two lines: one line for the forward shields and one line for the aft shields. These lines are used to keep track of power sent to the shields.

The sixth box (Movement) is broken up into two lines: one for impulse movement and one for thruster movement. The impulse line of the sheet is used to record the impulse movement points of the ship for the turn, and how many points of power were used to generate that movement. The thruster line is used to record the number of thruster movement points and the power used to generate those movement points.

The seventh box (Transporters and Cloak) is the last box split into two lines: One for power and one for power sent to the cloaking device. (If the ship has a cloaking device.)

a) One point of power will activate all of one type of transporters on the ships for a full turn. (For an exception to this rule, see the rules on cargo transporters.) The numbers in parenthesis are the number of transporters and how many men each can transport. For Example, if the numbers listed are (5x6), then the ship has five 6-man transporters. If there are two or more entries in the parenthesis, then there is more than one type of transporter on the ship. An entry such as (3xC) means that the ship has cargo transporters. See the rules on transporters for more information. Transporter range is 4 hexes. (40,000 kilometers)

b) If a ship has no numbers listed in the box next to where the word "Cloak" is, then the ship does not have a cloaking device on it. Ships with a cloaking device will have a fraction (such as 12/6) and a percentage (such as 75%) value listed next to the word "Cloak". In the fraction, the number to the left of the slash is the power needed to cloak the ship completely. The number to the right of the slash is the amount of power that must remain in the cloaking device when the ship de-cloaks to fire. The difference between these two numbers is the power available to be diverted to shields while the vessel is de-cloaked. More on this later in the cloaking device section. The percentage number is the effectiveness of the cloak. The higher the percentage the more effective the cloak.

The next to last box (Total Power Allocated) is used as a check for the player. Add up the total power used by all systems this turn. The total power allocated should not exceed the total power available for the turn.

The last box in the center section (Initiative Score) is used to record the initiative score of the player for the turn. The formula for determining the initiative score is located beneath this box in fine print. This will be explained later in these rules.

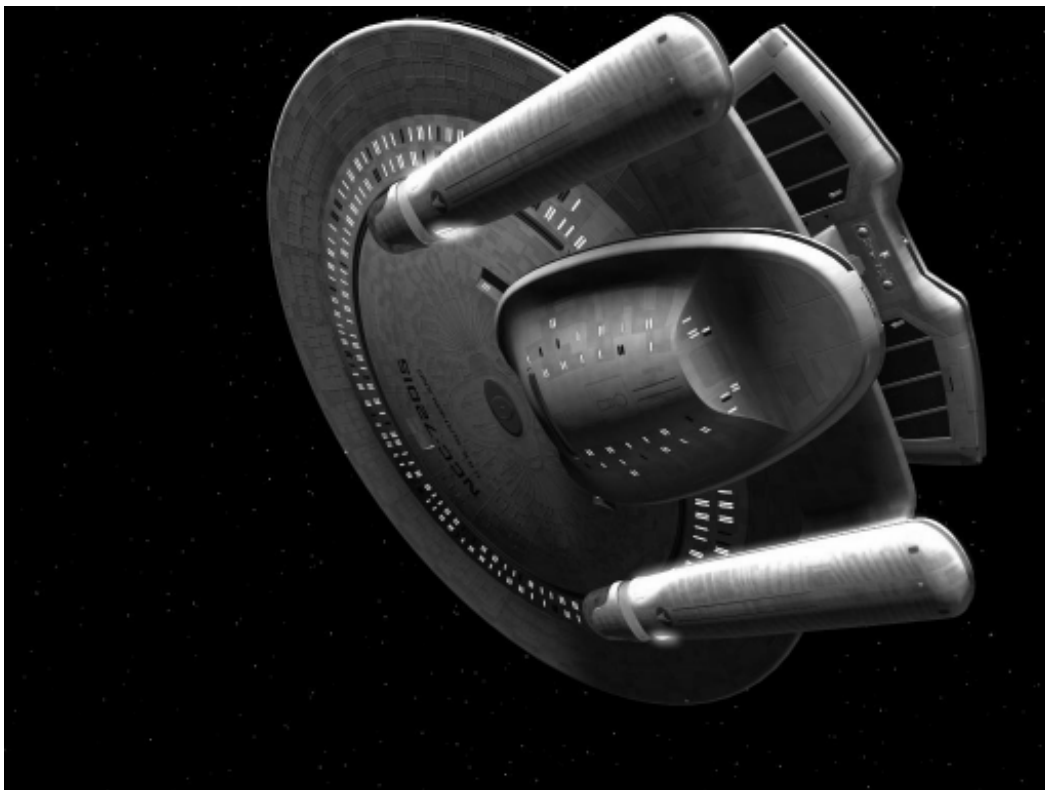


Image by Tachy

The second sheet of the ship control sheets has "Final Frontier" and "Damage & Combat Form" printed in the top left corner of the page. The ship class and the OCR are printed in the top right corner of the page.

FINAL FRONTIER **DAMAGE & COMBAT FORM** **MIRANDA CLASS CRUISER**
OCR: 125.91

The Damage & Combat Form is used to keep track of what weapons have been charged and fired, current shield status, and any damage taken by the ship. As with the Energy Allocation Form, the systems are color coded to help keep track of related systems. The colors used are identical to those used on the Energy Allocation Sheet. The actual layout of the Damage & Combat Form may vary somewhat from ship class to ship class, but all of the items listed below will be present on the sheet:

Beam Weapon Information Boxes

PHASERS

F/S	1	2	3	4
F/S				
1				
2				
3				
4				

Beam Weapon I

Range	To Hit #
0-2	10
3-4	9
5-7	8
8-12	7
13-17	6
18-20	5
21-22	4
23	3
24	2
---	1

Beam Damage Mods:

Range	To Hit #
0-10	(+3)
11-17	(+2)
18-24	(+1)

Missile Weapon Information Boxes

PHOTON TORPEDOES

Turn	1	2	3	4	5	6	7	8
1								
2								
3								

Missile Weapon I

Range	To Hit #
0-2	10
3-4	9
5-7	8
8-12	7
13-17	6
18-20	5
21-22	4
23	3
24	2
---	1

Beam Weapon Information

The first beam weapon related box has several boxes that are divided into 4 smaller boxes. These boxes are used to note which of the beam weapons are powered and

how much power has been fired each phase. How this is done will be explained in the weapons rules later in this book.

The next beam weapon related box is usually labeled "Beam Weapon 1". This box shows the base number that is needed to hit an enemy ship at a given range. A to hit roll is made with a ten-sided die, also called a d10. More will be found on this in the combat section.

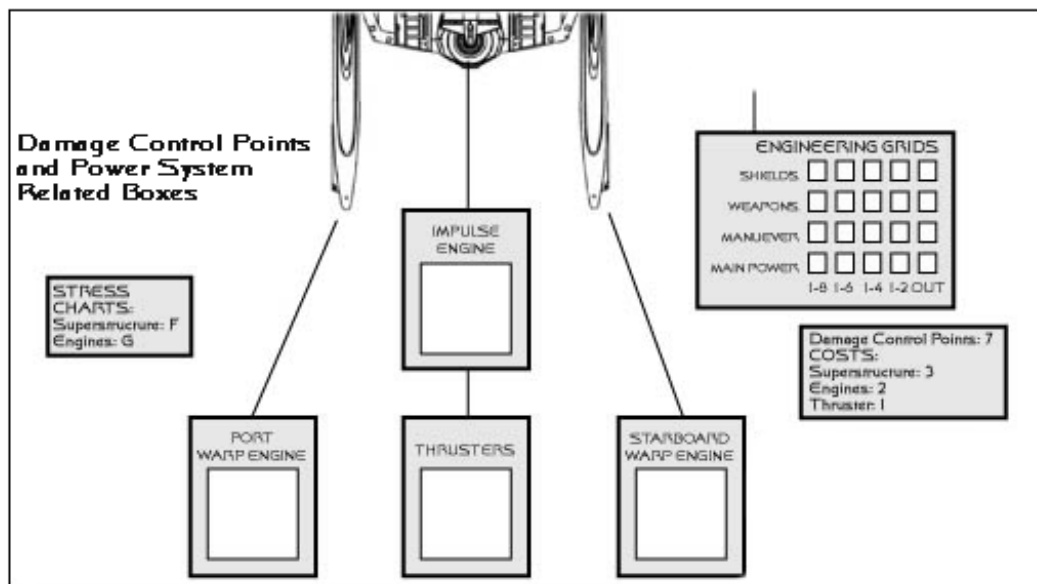
The last beam weapon related box is captioned "Beam Damage Mods". This boxes gives information on extra damage done by beam weapons at different ranges. Again, more can be found on this later in the weapons section of the rules.

Missile Weapon Information

The first missile weapon related box is used to keep track of when the missile weapons are armed and fired each turn. How this is done will be explained in the weapons rules later in this book.

The next missile weapon related box is usually labeled "Missile Weapon 1". This box shows the base number that is needed to hit an enemy ship at a given range. A to hit roll is made with a ten-sided die, also called a d10. More will be found on this in the combat section.

Damage Control Points and Power System Information



The first group of boxes are marked Port Warp Engine, Starboard Warp Engine, Impulse Engine, and Thrusters. These boxes are used to record damage taken to these systems.

The next related box is captioned Engineering Grids. This is used to keep track of hits to the vital power grids of the ship.

Also in this group of related boxes is a box captioned Stress Charts. This shows the stress charts to use when a ship performs maneuvers that place strain on the engines and the superstructure of the ship.

The last box in this group is captioned Damage Control Points. Listed here is how many damage control points the ship has available to it. It also has a reference as to how many points must be used to repair the different systems of the ship. More on repair can be found in the rules section by that name.

Control System Information

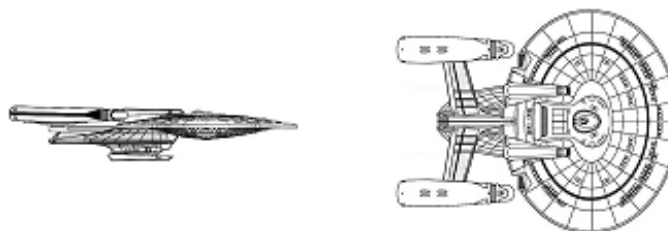
Control System Information									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>BRIDGE</p> <p>HELM <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>WEAPONS <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>SCIENCE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1-8 1-6 1-4 1-2 OUT</p> </div> <div style="width: 45%;"> <p>SENSORS</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1-8 1-6 1-4 1-2 OUT</p> </div> </div>									
<p>AUXILIARY CONTROL</p> <p>HELM <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>WEAPONS <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>SCIENCE <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1-8 1-6 1-4 1-2 OUT</p>									

These boxes are captioned Bridge, Auxiliary Control, and Sensors. These boxes are used to record damage to the control stations of the ship and to the sensors. More on how to record and repair damage will be discussed in the sections by those names found later in this book.

Superstructure Related Information

Superstructure Information																					
SUPERSTRUCTURE:																					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
																		25	33		
CREW CASUALTIES:																					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
																		25	50	75	100

There are two sets of boxes that are used to record damage to the superstructure. The box marked superstructure is used to record damage done to the superstructure also referred to as the hull. The second box is captioned Crew Casualties. Each box in this section represents one percent (1%) of the crew. As the superstructure takes damage, the crew may take casualties. The gray boxes represent levels of casualties that effect the performance of the crew when performing their jobs. See the damage and repair rules for more on this.



Shield Information																											
SHIELD STATUS			Turn 1 Phase			Turn 2 Phase			Turn 3 Phase			Turn 4 Phase			Turn 5 Phase			Turn 6 Phase			Turn 7 Phase			Turn 8 Phase			
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Current Shield %:																											
Max Deflect #:																											
Max Absorption:																											
Total Damage:																											

Shield Diagram

SHIELD GENERATORS

1				
2				
3				
4				
5				
6				

1-6 1-6 1-4 1-2 OUT

Leak Step	Max Absorption	Deflection
1	91-100	8
2	81-90	7
3	71-80	6
4	61-70	5
5	51-60	4
6	41-50	3
7	31-40	2
8	21-30	1
9	11-20	0
10	01-10	0

Shield Information

(Note: The shield rules seem a bit complex at first, but are a main reason the game has the feel of what we see in "Trek" combat. Read the shield rules carefully and you will have no problem understanding how they work)

The boxes in this section are used to monitor the damage to the shields and the shield generators. The box marked Shield Status is used to record the current shield efficiency, maximum deflection number, and maximum absorption available to each of the main shield arcs. These are filled in by placing 100% in the first box, unless a shield efficiency of less than 100% is stated by the scenario, and then by consulting the ship data sheet or the box that references the shield information on the Energy Allocation Form to determine the maximum shield deflection number and maximum absorption available at the start of the game. (Again, unless the scenario has specified a different shield efficiency for the start of the game, at which time the new maximum must be determined as described in the *Damage to Shields* that is found later in these rules.) Also in this section are boxes used to record damage taken by the shields.

The box captioned Leak Step, Max Absorption, Deflection is a chart showing the Leak Step number, Maximum Deflection, and Maximum Absorption for the shields at different shield efficiency levels.

The box captioned "Shields Generators" is used to record damage to the shield generator for each shield arc. The numbers used to designate each shield arc are shown on a chart next to the "Shield Generators" box.

How to fill out all of these boxes will be explained in the appropriate sections of the rules that follow.

Ship Control Sheet Example: The Federation player will have a Miranda class cruiser in this scenario. He therefore makes a copy of the control sheets for a Miranda class cruiser and prepares to fill them out.

First, the scenario is consulted. The player learns that the scenario details his crews' skills, but not his captain's skill level. He begins with the ship control sheet page titled **Energy Allocation Form** and begins to fill in the boxes.

The player begins by filling out the crew data section. The first box is marked "Captain". As no skill is specified in the scenario, a random skill is determined by



Image by Dr. Bob. Used with permission

rolling three 10 sided dice and adding the total of these dice to 45. The player rolls a 5, an 8, and a 4, for a total of 17. Added to 45, this gives a starting skill of 62. This is recorded in the Captain box.


Next, he needs to record ratings for the helmsman, gunner, engineer, science officer, and medical officer. In this case the scenario specifies the ratings as 50 for each of the officers. These values are recorded in the appropriate boxes. If the scenario had not specified these values, they would be determined by random roll as specified earlier in these rules. The specified officer rating offer no d10 bonuses to the helmsman and gunner, so a there is no need to note any bonus in there skill level boxes.

The last box to be filled in here is the crew skill level box. In this case, the scenario specifies a skill level of 48. This number is recorded in the skill level box. . If the scenario had not specified these values, they would be determined by random roll as specified earlier in these rules.

UCR: 49.18

CREW DATA	
CAPTAIN	62
SCIENCE OFFICER	50
GUNNER	50
HELM OFFICER	50
MEDICAL OFFICER	50
CHIEF ENGINEER	50

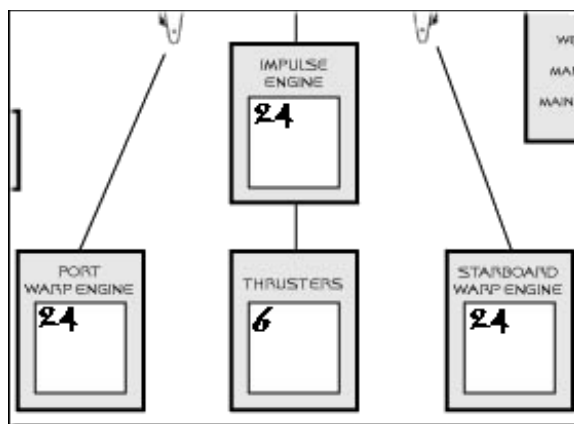
CREW	300	TROOPS	30
CREW RATING	48		



Crew Data Section when filled in

The line above the allocation boxes is labeled "Name". The scenario does not specify a ship name, so the player chooses U.S.S. Valiant. (Note Federation ships use U.S.S., Klingon ships use I.K.V. or I.K.C., Romulans use I.R.V.) This is recorded on the Name line.

Next, he consults the ship control sheet marked Damage & Combat Form. He finds the shield status section of the control sheet. He fills in 100% in the box for turn 1 shield efficiency. This number will fluctuate during combat as the shields take damage. The rest of the boxes in the shield status section are left blank until power has been allocated for the shields this turn.



The player next finds the impulse, warp engine, and thruster boxes and fills in the appropriate numbers in each box. The information needed to fill in the warp and impulse boxes is found in the corresponding boxes on the Energy Allocation Form. The number that is placed in the thruster box is the maximum thruster speed for the ship. This is found in the thruster box on the Energy Allocation Form

The scenario does not specify any previous damage to the ship, so there is no need to fill anything else out on the Damage and Combat Form. Thus, at this point the ship control sheet has been filled out enough to allow play to begin. Players can now follow the sequence of play until one side has emerged victorious.

RULES FOR COMBAT

Sequence of events

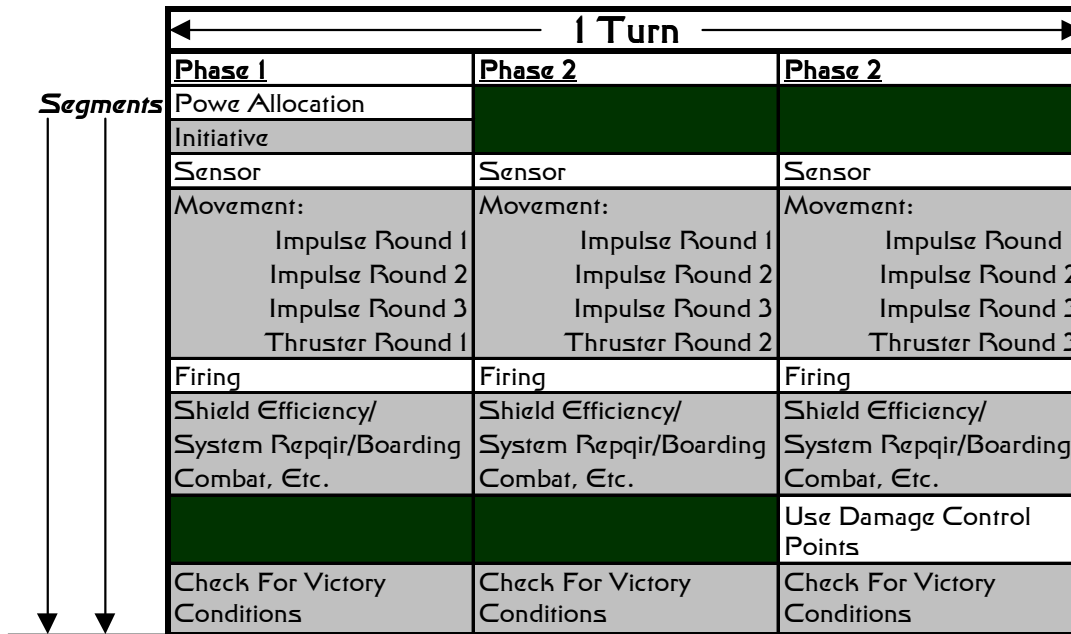
Combat is conducted in turns, and each turn is divided into three (3) phases. (See the General Game Flow Chart below.) Each phase is divided into segments. Some segments take place in all phases while others, like the power allocation segment, only take place on one phase. Take a moment and get familiar with the general flow of the game before you read on. Notice that the chart starts in the top left corner and goes down the first column to the bottom. Once you reach the bottom of the column, then the first phase is over. You then move to the top of the second column and follow it down to the bottom. Once again, when you reach the bottom of the column then the second phase is over. You then move to the top of the third column and to the bottom of the third column. Once the bottom of the third column is reached, then the third phase, and thus the whole turn is over

Now that you understand the general flow of the game, it is time to look in detail at each segment of each phase of the turn. The detailed chart after the general chart shows all of the actions that can take place each segment of each phase. Even though some of the steps may not be necessary in combats between only two captains, or in combats where no ships have cloaking devices, the sequence is presented in full, including advanced rules covered later in this rulebook.



Front View-Akira Class By Dr. Bob. Used with permission

General Game Flow Chart



(Flow of chart is from top to bottom and from left to right)

DETAILED TACTICAL SEQUENCE OF PLAY CHART

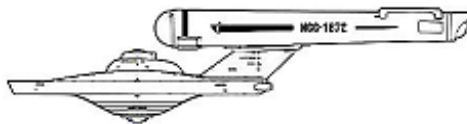
Power Allocation Segment (Phase one only)

1) Each captain determines how much power he will put into each of his shipboard systems and fills out his ship control sheet accordingly. How to power systems is discussed in the section titled *Allocating Power*.

2) Captains whose ships have cloaking devices must announce whether or not the cloaking device is in operation or not. Ships that were cloaked in the last phase of the previous turn and do not power up their cloaking device fade in immediately. After this time, captains may only activate or deactivate the cloak after each impulse movement phase.

Initiative Segment (Phase one only)

3) Players announce their impulse and thruster speeds for the current turn. Captains then roll percentile dice and add their captain's skill rating to the roll. They then modify this total by the modifiers shown on the Initiative Modifier Chart. The captain with the highest total has won initiative. (In case of ties in initiative, the captain with the highest rating goes last. If the ratings are the same, then each captain rolls a d10, with the highest score moving last.) Each player then notes his initiative score on the Energy Allocation Form for his ship. For large battles there is a Turn Record Sheet where the scores can be noted. Numbered counters are issued to captains reflecting their place in the initiative order.



Design by Eric Peterson, TOS Adaptation by Stuart Thayne

Sensor Segment (All phases)

4) Starting with the captain who lost the initiative (Lowest score from step 3 above), each captain may announce a target for their ship's sensors and rolls one 10 sided die (1d10) to determine if a sensor lock has been achieved. Captains wishing to search for cloaked ships or to attempt to identify anomalies do so at this time, but may NOT search for a cloaked ship AND attempt to lock onto a non-cloaked ship in the same sensor segment. Captains that achieved a lock on to a non-cloaked ship on the previous phase need not re-roll, but maintain their sensor lock automatically. Those captains with lock-ons to cloaked ships must roll to maintain their locks using the appropriate table and modifiers.

5) Ships may launch probes. Science officers may assign a new shield arc to probes already on the board. Probes may search for cloaked targets in the sensor segment of the phase that they launch.

6) If the captain rolls a 7 or less (See cloaked ships for exceptions) then a lock on has been achieved. The captain that attained a lock has the option to ask a detailed sensor question at this time, such as "Are your transporters powered?"

7) If a captain has a sensor lock he may attempt called shots in the firing phases that follow--provided he does not violate any movement restrictions that prohibit called shots.

8) The remaining captains roll for lock on as above, in order of initiative, with the captain who won initiative going last.

9) Communications between ships takes place. Notes are written and passed for ship to ship only, and/or general broadcasts are announced to all. Cloaked ships MAY communicate with any other ship or make a general broadcast without giving away their location. Captains may give the order to abandon ship at this time. Captains may order and attempt all the rolls needed to allow a ram at this time.

10) Proximity fuses on photon torpedoes may be added, removed, or adjusted at this time.

Movement Segment (All phases)

11) Those ships using evasive maneuvers must announce that they are doing so.

12) Players determine their speeds for each of the impulse rounds by consulting the movement chart.

13) The players expend impulse movement points equal to the number determined in step 11 above in each impulse movement round. Movement points are executed in order from lowest initiative score to highest initiative score. How points are expended is explained in the rules section on moving the starship (Note: Cloaked ships must announce their speed and move in their appropriate spot, as if they were not cloaked. They will of course only be plotting hidden movement on a separate hexpad, unless a ship has a sensor lock on them.)

14) Players with powered and operational cloaking devices may "fade in" or "fade out" after all three impulse rounds are completed. Any power diverted to or from shields due to cloaking or decloaking is diverted at this time. Ships "fading out" or cloaked ships that have been locked onto this turn may fire decoys in order to break locks. More on this will be discussed in the section on cloaking devices.

15) Players expend their thruster movement points for this phase. This is done in order from lowest initiative score to highest initiative score.

16) After all movement points have been expended, captains may perform a tactical heading change at the possible cost of damage to the engines and superstructure of the ship. (More damage is done the higher the speed of the ship.) Ships that make the required skill check change heading by 1 hexside at this time. Those that fail will change heading in a later segment.

17) After all tactical heading changes have been resolved, any movement caused by a ship not expending sufficient movement points to avoid being drawn closer to a Sun or Black Hole takes place. Any ship entering a hex occupied by a Sun or Black hole is immediately destroyed with the loss of all hands. There is no explosion damage from being destroyed in such a way. And damage done to ships too close to a sun is applied at this time.

Firing Segment (All phases)

18) Each captain places a fire or no fire counter face down next to his/her ship. Any shields extended to cover friendly targets are announced at this time. Fire and no fire counters are then revealed. Boarding parties are beamed to other ships at this time.

19) Players who placed no fire counters remove them.

20) In order of initiative (lowest to highest), the captains who played fire counters declare which weapons fire at which targets. The player who won initiative declares fire last. Captains still with valid sensor locks may announce called shots. Captains may announce delayed fire so they can fire at hits by other ships on a cloaked vessel. Players must announce if they will fire beam weapons or missile weapons first. Captains under fire from older Romulan Plasma Torpedoes must declare if they will try and evade them at this time.

21) Resolve to hit rolls in order of initiative, from the highest initiative to the lowest. Roll for deflection by the shields for each weapon that hits. Roll for location of any damage scored, or apply any successful called shots. Roll for Critical Hits. Damage takes effect *immediately*. Record damage.

22) Repeat step 21 until all captains have fired.

23) Ships that executed a tactical heading change but failed the helm skill check change facing 1 hex side at this time.

Repair/Shield Efficiency Segment (All Phases)

24) New shield efficiency is calculated. New maximum Deflection numbers and maximum absorption levels are determined and recorded for the next phase. Tractor beams are activated or deactivated. Repair rolls for damaged weapons, power grids, etc. are made at this time. Docked Lifeboats disembark crew/troops.

25) Ships wishing to disengage by warping out of the combat area announce their desire to do so now. If the ship meets all requirements for disengaging, then it will warp out during this step of the next phase, and will then be removed from the playing board. (See the campaign rules for what happens to such ships. The tactical game does not take long-term effects of disengaging into account other than in the victory conditions of the scenario.)

26) Boarding Combat is resolved. The player winning Boarding Party Advantage may move troops to different parts of the ship. Boarded and boarding ships may convert crew to militia.

27) If this is the repair segment of the final (3rd) phase of the turn, captains may allocate their damage control points and attempt to repair superstructure damage, damaged engines, etc. Engineers may attempt repair/crew repair support rolls at this time.

28) If this is the repair segment of the 3rd phase of the turn, crew rescued from destroyed ships may be converted to help crew the ship they are on.

Check For Victory Conditions

29) Check to see if one side or the other has achieved its victory conditions for the scenario, or if the conditions set in the scenario to end the game have been met. If so then the game is over. If both sides complete their victory conditions at the same time, then the game is a draw, unless otherwise stated in the scenario. If the conditions needed to end the game have not been met, then go on to step 30 or 31 below.

Continuing the Game

30) Repeat steps 4-26 for phase two.

31) Repeat steps 4-28 for phase three.



Eric Peterson/Matt Allen

Allocating Power

Total Power Units Available

Each ship has several power sources that supply power to each of the ship's systems. Power sources are noted on the Ship Datasheets and Control Sheets as engines or reactors. The total power available to each ship is the total of each of those power sources. Note that while starships have backup battery systems, these are considered to be automatically used by the ship to power backup systems such as emergency life support, sensors, sick bay monitors, etc. Thus, batteries are not used to power movement or combat systems in the Final Frontier system.

In the first phase of each turn, in the Power Allocation Segment, each player must

determine the total power available to him for the turn. To determine the total available power, each player adds up the power available from each power source on the ship. For example, a ship has two (2) warp engines that produce 20 points of power each and an impulse engine that produces 10 points of power. The total power output for that ship would be $20 + 20 + 10 = 50$. This information can be found in the impulse and warp engine boxes on the Damage and Combat Form. The boxes in this section allow the captain to keep track of losses and increases in power due to damage and repair of the engines during combat.

WARP POWER (48)	TURNO1	TURNO2	TURNO3
	48		
IMPULSE POWER (24)	24		
TOTAL POWER (72)	72		

Entering the total power available

As stated earlier, the Total Power Units Available may decrease during combat due to damage inflicted on the vessel's engines by enemy fire. **If this number is reduced to zero (0) during any firing phase, the vessel may no longer perform movement, put up shields, or arm weapons.** It may continue to attempt repairs and may still make sensor searches and roll for sensor locks, and send communications. Transporters may be used for evacuation **ONLY**.



Eric Peterson/Matt Allen

Powering Combat Systems

One of the critical decisions each player will face each turn is how much power to put into each of the three major combat systems: Movement, Shields, and Weapons. Each player will have to evaluate his situation and what he wants to accomplish during the turn, then apply power to the systems in a way that he feels will allow him to complete his goal for the turn. Power is allocated only during the power allocation segment, which takes place only during the first phase of each turn.

Ships not required to use all of the total power available to them on each turn, but

any power not used in one combat turn may not be saved for use in another combat turn. (See Beam Weapons for an exception.)

Once the player has assessed the situation and decided how to allocate power, the record where the power is allocated in the boxes on the Power Allocation Form. Players will note that there is a box toward the bottom of the Power Allocation Form to record the total amount of power allocated each turn. This is used as a double check to insure that no excess power units were allocated this turn.

Allocating Power to Movement:

Movement is very important in combat. Most weapons have restricted firing arc, so a captain must make sure he has enough speed to keep his target in his best firing arc. In addition, speed can allow one ship to maneuver into a spot where an enemy ship can not bring all of its weapons to bear, thus limiting the damage that ship will take. The problem is that movement requires a lot of power so each captain needs to carefully consider how much movement he really needs for each turn.

When power is allocated to movement, the results are that the ship is then granted a certain number of movement points. These movement points are then used during the movement segments to change the position of the ship on the hex mapsheet. Note that the number of impulse movement points generated by a ship is referred to as its speed. For example, if a ship generates four impulse movement points then it is said to be moving at speed 4.

There are two types of movement points that can be generated in the tactical part of The Final Frontier: impulse and thruster movement points. Warp movement is used to allow ships to escape the tactical battle, but has no other use in the tactical game. (It will be used in the campaign game though.)



Eric Peterson/Matt Allen

Impulse movement points are generated by putting power into the impulse engines. This is much more efficient than power put into thrusters, as we will see momentarily. Thruster movement is much less efficient than impulse movement,

but as it is expended after all impulse movement is completed, and can move the ship in any direction, it is tactically very important.

Impulse movement points generated by allocating power to the impulse engines are available in **EACH** of the three movement segments of the combat turn. For example, if a player allocated enough power to provide an impulse movement of 3 movement points, he will have 3 movement points available in **EACH** of the three movement segments of the turn.

Movement points generated by allocating power to the thrusters are **DIVIDED BETWEEN** the three movement segments of the turn. For example, if a player allocated enough power units to generate 3 points of thruster movement, he would divide the 3 points amongst the three movement segments, thus he would have 1 point of thruster movement available in each of the three movement segments. To aid the players in dividing their thruster movement points between the movement segments of each of the three phases, a chart has been included in the tables and chart section that details how many movement points are available during the movement segment of each phase at any given thruster speed.



To generate movement points, the player determines how many movement points of impulse and thruster movement he wants to generate, then multiplies that number by the movement point ratio for that type of movement.

For example, a Federation ship has an impulse movement ratio of 4/1, and a thruster movement ratio of 3/1. The player determines that he wants 6 impulse movement points (speed 6) and 3 thruster movement points. To determine how much power is required to generate these points he would:

- a) Impulse: Multiply 6 (desired impulse speed) times 4/1 (or 4) = 24 points of power.
- b) Thruster: Multiply 3 (desired thruster speed) times 3/1 (or 3) = 9 points of power.

Note that there are no "partial movement points" in the Final Frontier. In other words, if the movement ratio for a ship is 5/1, it takes 5 full points of power to get one movement point. If you allocate only 4 points of power, then you get **NO** movement points at all. Likewise, if you allocate 8 points, you get only 1 movement point. It takes 10 points of power to get 2 movement points. It should be pretty obvious that a player should never allocation partial power to movement, but should always allocate just enough to get the number of movement point desired for the turn.

Acceleration/Deceleration:

Each ship may only increase or decrease its impulse speed by so much per turn. The limit is stated as the acceleration for the given ship class. Thus, a ship with acceleration of 4 could only increase or decrease its impulse movement points by 4

on any given turn. For example, if the ship has a current impulse speed of 6, it could go no faster than 10, and no slower than 2 on the following turn.



Eric Peterson/Matt Allen

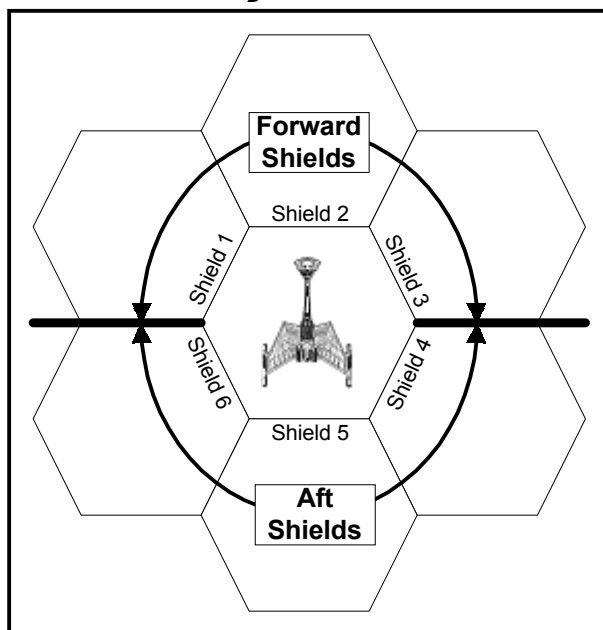
Damage is the only thing that will allow violation of these rules. If a ship loses enough engine power that it can not help violating the deceleration rules, then it may do so as needed, but suffers 1 point of damage to the superstructure for every point over the normal deceleration rate it is forced to decelerate unless the engineer makes a successful skill roll. (See the section on skill rolls for how this is done.) If the skill roll is made, then no damage is taken.

Once again, "speed" for acceleration/deceleration and targeting purposes is defined as the number of movement points generated by the ship, not by the number of hexes moved. If a player has allocated power to generate 4 movement points but holds station for all 4 points (or executes emergency evasive maneuvers), he is still considered to be at speed 4 for targeting and acceleration/deceleration purposes.

Allocating power to the shields:

Shields are basically fields of energy generated by each ship to protect the ship from damage. Captains will normally want to charge their shields to full capacity, but there may be times when this will not be possible or practical so each captain will have to determine how he wants to power his shields each turn.

The shields are divided into 6 shield arcs, and these 6 arcs are combined into 2 main shield arcs. (Forward, consisting of shields 1 through 3, and Aft, consisting of shields 4 through 6.)



Each ship has a group of statistics that define the effectiveness of the ship's shield in battle. The ratings, and a brief description of what each number means are as follows:

Category	Sample Entry	Explanation.
1) Shield Durability	5	This will be used to determine the percentage of shield efficiency lost due to damage. It will also be used to determine the amount of "leak" damage done by each weapons hit. Lastly, this is the percentage the ship gains back to its shield efficiency (see below) when a successful roll is made vs. the current deflection number during the Repair/Shield Efficiency Segment.
2) Maximum Deflection Number	8	This number is the number needed on a d10 to completely deflect a weapon, thus avoiding "leak" damage. This number will change as the shields take damage in combat. The Current deflection number is also used as a target number in order to repair shield efficiency (see below) during the Repair/Shield Efficiency Segments.
3) Power Cost.	2	This is the amount of power that must be allocated for each deflection number. Thus, if the Maximum Deflection number is 8, and the power cost is 2, then it would take $8 \times 2 = 16$ power points to raise either of the main shield arcs to the Maximum Deflection number
4) Minimum Damage level	40	This is the minimum level of damage that can be scored and still allow subsequent hits by other ships to lower the maximum deflection number by 1. (More on this later.)
5) Maximum Absorption	80	This is the maximum damage any one shield can absorb from a single volley. Thus, if 90 points are scored on a shield with a maximum absorption of 80, then 10 points would penetrate the shield. $(90 - 80 = 10)$ This number will vary as the shields take damage.
6) Shield Efficiency	100%	This number represents the current shield capability as a percentage. This number determines the current Maximum Deflection and Maximum Absorption that the shields may be Powered to, as well as how much damage "leaks" through a shield. Shield efficiency can be repaired in the Shield efficiency segment of each phase.

How to raise shields: Power is allocated by main shield arcs, not individually to each shield. Power allocated to determine the Maximum Deflection Number must be allocated separately for each of the two main shield arcs. Thus, if the maximum deflection number is 7, and the power cost is 2, then it would require 28 points of power to raise all six shields to their maximum deflection number. $(7 \text{ (maximum deflection number)} \times 2 \text{ (power cost per deflection number)} = 14 \text{ for each arc; } 14 \text{ (for forward arc)} + 14 \text{ (for aft arc)} = 28 \text{ total power.})$ Note that once a main arc is powered to a certain deflection number and maximum absorption level, all 3 individual shields in that arc are considered to have those maximum deflection and absorption levels.

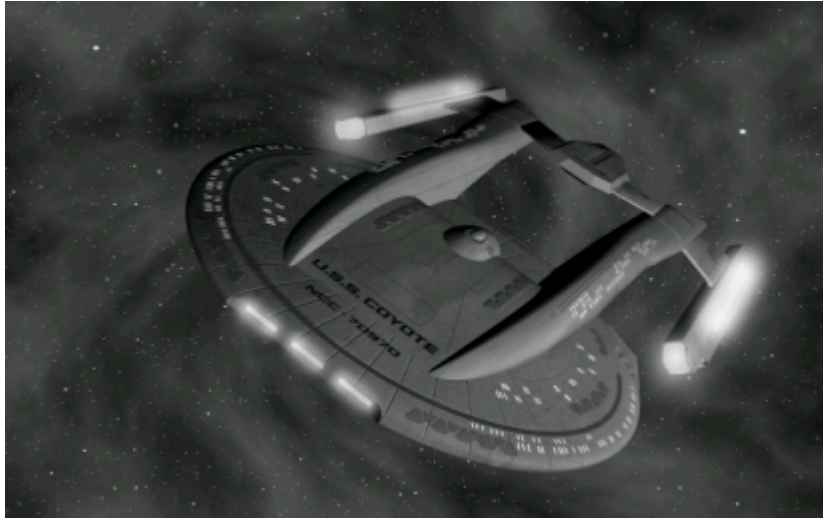


Image by Tachy

Shields do not have to be powered to their maximum available deflection number. Thus, if the maximum deflection number is 8, and the power cost per number is 2, the player may allocate 12 power points and have a deflection number of 6 for the current turn. Note that the maximum absorption level is tied to the deflection number that is generated, i.e. powering shields to a lower than maximum deflection number reduces the maximum absorption number used to the absorption level listed for deflection number the shields are powered to. Thus, if the shields have a maximum absorption of 80 at the maximum deflection number of 7, and the shields are only powered to a deflection number of 6, then use the maximum absorption number listed on the shields status sheet for the deflection number of 6, NOT the maximum shown for deflection number 7. Since there are usually 2 absorption levels for any one deflection number, use the highest maximum absorption level for the given deflection number that the current shield efficiency will allow. Record the deflection level and the maximum absorption level for each main arc in the spaces provided at the top of the shield status display.

If a player wishes to power the shields to a deflection level not listed on the Leak Step Chart found on the Damage & Combat Form, then the player may do so, but will use the next lowest listed deflection number for maximum absorption and for damage level. For example, if the deflection number at 100% efficiency is 8, and the deflection number at the next shield step (80% to 61%) is 6, it is allowable for the player to power the shields to a deflection number of 7, which is not found on the shield status sheet. The shields will have a deflection number of 7, but will use the maximum absorption number as if the shields had only been powered to a deflection number of 6.

Forward and aft shield arcs need not be powered to the same maximum deflection number.

Shield Power example: The captain of a Klingon K'ringa class cruiser is allocating power. He has a maximum deflection number of 8, and a power cost of one (1) per deflection number. The captain has 14 points of power left to allocate. The captain realizes that it will cost 16 points of power to bring both the front and rear main shield arcs to full strength. ($8 * 1 = 8$ for each main arc, $* 2$ for each of the two main arcs = 16 power points.) The captain decides to power the front shields to the maximum deflection number of 8, and use the remaining 6 point to power the aft shields to a deflection number of 6. The player then records these levels in the Shields section of the Energy Allocation Form and Shield Status box of the Damage & Combat Display form.



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Extending Shields:

Ships may extend their shields to cover a damaged ship or to protect an object. The ship or object must be no more than 1 hex in range, and can not have its own shields up. Only 1 ship or object per hex may be protected by any extensions of the shields.

The player extending his shield need only announce that he is doing so in the firing segment of the phase before any actual firing takes place. If the ship is 1 hex away, only the shield that faces the ship to be protected may be extended to cover the other ship. (See page 58 on how to determine shield arcs.) Because of the extra distance the shield is extended, some of the protection of the shield is lost when the shield is extended 1 hex. Specifically, any shield extended 1 hex its current shield efficiency level reduced 35% for determining the maximum deflection and absorption levels for damage that strikes the extended shield during any phase the shield is extended 1 hex. For example, of a shield that has a current efficiency rating of 100% is extended 1 hex, the maximum deflection number and maximum absorption number for the extended shield would be determined as if the that shield had an efficiency of $100\% - 35\% = 65\%$ until the shield is no longer extended. Shots at the protected ship will strike the one extended shield, **REGARDLESS** of the direction the shot came from. When the effective shield efficiency of the ship that extended its shield reaches 0, it no longer protects either of the ships.

If the ship to be protected is in the same hex as the extending ship, then fire at the protected ship strikes the shield that bears to the firing ship, rather than all shots striking only the extended shield as noted above. Treat the shot as if it were targeted on the extending ship, however, if the shield is breached and the target was the protected ship, roll damage on the correct shield arc for the target. **DO NOT** use the shield arc of the extending ship unless it was the target of the shot.

Extending the shields of a ship around another ship in the same hex weakens **ALL** of the shields on the extending ship. All shields have the current shield efficiency reduced by 25% for determining the maximum deflection and absorption numbers, as explained above. Thus, if a ship's shields were at 100% efficiency, 75% effective efficiency until the shields are no longer extended.

Note that the reduction of 35% or 25% normal shield efficiency is in the shield **STRENGTH** only. It does not mean that the player need only allocated 25% or 35% less power to the shields. It does mean the ship must still allocate the normal power points needed to bring the shields up to a certain deflection number. The protection that results is then determined at the reduced efficiency because of the extra distance the shield must be extended.

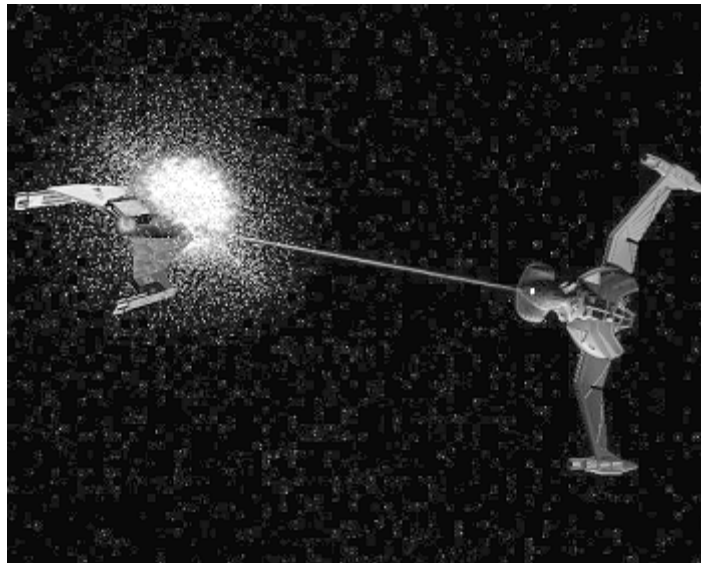
Any damage that leaks while a ship has its shields extended is applied to the ship that is extending its shields, regardless of which ship is targeted. If using the advanced weapons rules, missile weapons that completely penetrate the shields due to a "0" being rolled for the deflection attempt are applied to the target that was fired at, not automatically given to the ship extending it's shields.

Ships being protected by the extended shields of another ship may fire weapons normally.

Allocating Power to Weapons:

*(Note that these "core" rules treat all beam and missile weapons as being the same. Use these rules until you are familiar with the game system. We **HIGHLY** recommend you then use the weapon specific rules found in the weapons section that follows later on in these rules.)*

Power must be allocated to weapons during the power allocation phase or they can not be fired. The two main types of weapons in The Final Frontier are beam weapons and missile weapons. Beam weapons store large amounts of energy and fire it in each phase of the turn while missile weapons store small amounts of power and may only be fired once per turn. More will be addressed regarding the difference between beam and missile weapons later.



Eric Peterson

Each captain needs to decide which of his weapons he wants to power up, and how much power he wants to put into each weapon. Missile weapons must be fully charged or they may not fire, but beam weapons do not need to be fully powered each turn.

Basically, each captain needs to decide which weapons to power based on which arcs they fire in, when he believes he will be within effective firing range, and

keeping in mind what balance he needs to maintain with how much power he will need for the shields and for movement. He then begins to allocate power to each weapon he wished to fire for the turn.

Beam weapons: Beam weapons have a maximum power allocation rating. This is the maximum number of power points that can be allocated to the weapon. Beam weapons also have a maximum emission rate. This is the maximum amount of power the weapon can fire in 1 firing segment. The damage the weapon does is equal to 4 times the power emitted by the weapon plus the range modifier.

For example, on a Galaxy class cruiser the phasers have a maximum power allocation of 6 power units, and a maximum emission rate of 3. If 1 power unit is allocated and emitter (i.e. fired), it will score 4 points of damage, 2 units of power yield 8 points damage, etc., until the maximum emission rate of 3 power units and 12 damage points is reached. The damage modifier is then applied. How this is done is explained in the combat section.

A simple way to remember how beam weapons work is to think of a large tank of water with a hose connected to it. How big the tank is would be like the maximum power that could be allocated to the weapon, i.e. basically how much can the weapon hold. The emission rate would be like the diameter of the hose that is connected to the tank--which would determine how much water is sprayed from the hose in any period of time. The larger the diameter of the hose, the more water that can be released from the tank. Likewise, the higher the emission rating, the more power that can be fired at the target in any one firing segment.

Power for beam weapons may be stored in capacitors from one turn to the next. If any power from a beam weapon is not fired by the end of the turn, then the power carries over to the next turn. Power carried over from one turn to the next should be noted in parenthesis on the Power Allocation Form so that power expenditures

Large space for recording power allocated to the weapon. Power carried over can be noted in parenthesis

Firing Arc

Weapon ID

PHASERS				
1				
2				

Small boxes are used to record the power emitted each phase

for each turn may be accurately verified during and after play. The referee of a game may always inspect the ship control sheet of any player in a game. In games without a referee, the ship control sheets are open to inspection at any time in which a possible discrepancy has arisen. Cloaked ships must show their ship control sheets to other players in this case, but do NOT have to reveal the location of their ship over power allocation disputes. Hopefully all participants will be mature enough to settle disputes in an adult fashion. Willful cheating normally ends the game with victory to the offended party, but inadvertent mistakes can be corrected and play may proceed.

Missile weapons have a set amount of power needed to arm and fire them. In order to arm and fire that weapon, the listed amount of power units must be allocated to the weapon. The damage done is a fixed amount, and is given for each weapon.

For example, a Federation Photon Torpedo, Type 4 lists 1 point of power to arm, and lists 20 as the amount of damage done if it hits its target.

Power used to arm missile weapons does NOT carry over from one turn to the next, but must be reallocated for each turn.

Once the power allocation segment is over, the power settings on the weapons may not be altered unless a weapon is fired or damaged.

Note that each ship may be armed with either beam weapons, missile weapons, or both. Standard beam weapons include weapons such as phasers and disruptors. Most beam weapons are considered virtually identical in how they are powered and how they damage a target. However, some races have special beam weapons. Please read the rules section on any specific weapon your ship may be equipped with.

Complete power allocation example: The Federation Player in the *One on One* scenario mentioned before has completed setting up the game and preparing the portion of his control sheet that deals with crew and captain skills, shield efficiency, and current engine output. He will now allocate power for his first turn. He begins with the Energy Allocation Form for his ship. This informs him that he has 48 warp power units available and 24 impulse power units available. Since the

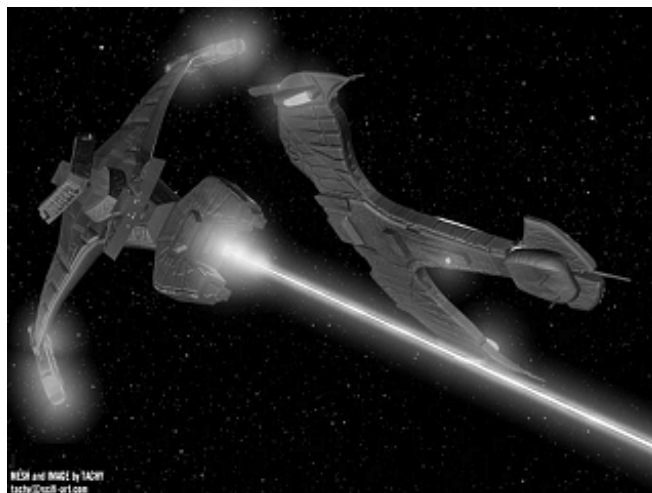


Image by Tachy

scenario did not specify and damage to his ship, and he has not suffered any damage yet in this scenario, he records these numbers in the column of boxes marked "Turn 1" on his ship control sheet. Thus, the Federation Captain has 72 units (these units can also be called points) of power to allocate to the ships weapons, shields, and movement.

The first box on the allocation form is for weapons. The Federation captain consults the Combat and Damage Form and determines that he has 4 phasers and 3 Photon Torpedo tubes that he can arm. As he feels that he will be in weapons range by the movement segment of the third phase of the turn, and since they are the most efficient weapons in terms of power use, he arm his torpedoes first. He consults the firing arc of the torpedo tubes and sees that two fire forward (Ahead) and 1 fires aft (Behind). Consulting the Missile Weapon box above the Beam and Missile Weapons section he sees that it requires 1 power unit to power and fire each tube, and that each torpedo does 20 points of damage. While he does not anticipate allowing the Klingon ship to move into his aft arc, he decides it is worth the one

power unit as insurance in case he is out maneuvered. He charges all 3 tubes, expending 3 power units. He records this in the appropriate boxes by placing an "A" (Armed) in the box of the Photon Torpedo box on the Combat and Damage Form. Subtracting 3 from the remaining 72 power units available, he now has 69 power units left.

PHOTON TORPEDOES									
Tube	1	2	3	4	5	6	7	8	
1	A								
2	A								
3	A								

Firing Arc: 1 & 2: F, 3: A

Marking Missile Weapons as Armed

The player places a 6 in each large box to denote that the weapon has been charged to full power

6	

Marking Beam Weapons as Armed

WARP POWER (48)	TURN 1 48
IMPULSE POWER (24)	24
TOTAL POWER (72)	72
WEAPONS	Beam 24
	Missile 3

Next the Federation captain consults the beam weapon section above the power allocation section of the ship control sheet. This informs him that each of his 4 phasers have a maximum power input of 6 power units and a maximum emission rate of 2 power units. He charges all 4 to the maximum, expending 4×6 or 24 power units to do so. He notes that each weapon is charges to 6 points of power on the Damage and Combat Form. Subtracting 24 units from the 69 still available, the Federation captain now has 45 units of power not allocated.

The next box is the shields box. The Federation captain knows that even on the first turn it is possible to get into weapons range, and wants the maximum shielding possible. First, he allocates the 8 points needed to raise the ships shields to the maximum deflection number of 8 for the front main shield arc. He then allocates 8 more points of power to bring the aft main shield arc to its maximum deflection number of 8. Thus, he has used 16 points of power to bring the shields up to maximum. He records the absorption and deflection numbers that he has powered each of the main shield arcs to on the lines for this purpose on the shield status display. (The maximum allowable absorption and deflection can be found on the chart on the Shield Status Display.) Subtracted from the 45 units available after powering weapons, this leaves 29 points of power unallocated.

The next section of the ship control sheet is the movement section. As the scenario does not specify a starting speed, the Federation captain asses the situation and decides that with the long range between the ships on the first turn, he will need only a moderate impulse speed, and a low thruster speed, as the thruster movement tends to clump at the beginning or end of the turn at lower speeds. The Captain decides on an impulse speed of 4 and a thruster speed of 2. He records these speeds on the right side of the slashes in the boxes for turn 1, then multiplying the desired speed by the movement ratios for impulse and thruster movement, he determines that the requires 4×4 or 16 power units for impulse and 2×3 or 6 units of power for thruster movement. The total cost for his movement for this turn is 22 power units. Subtracting this from 29 power units available leaves him with 7 power units still available.

Note that the Federation player has no cloaking device and does not anticipate beaming anyone over to the Klingon ship this turn, he skips these sections. Having a cloaking device onboard a ship requires the captain to consider additional things

such as if he is going to fade in and attack this turn, how much power he can transfer to his shields if he does, etc.

The Federation sees that he still has seven power points left over, and does not want them to go to waste. So, the captain decides to use the remaining seven units of power to increase his thruster speed to 3 (at a cost of 3 power points) and to increase his impulse speed to 5 (at a cost of 4 points of power). Thus, all 72 units of power have been allocated.

WARP POWER (48)	TURN 1 48
IMPULSE POWER (24)	24
TOTAL POWER (72)	72
WEAPONS Beam	24
Missile	3
SHIELDS Forward	8/8
Aft	8/8
MOVEMENT: Impulse/Power Speed	5/24
Thruster/Power Speed	3/4
TRANSPORTER (if set)	
CLOAK	
TOTAL POWER SPENT	72
INITIATIVE SCORE	

(Values in shaded boxes are allocated to the system.)

In this case, the ship had an even amount of power to allocate. Some ships will not have this advantage, or when in later turns not all of the power allocated to the beam weapons is used, this may not be the case. In such a case, some power may need to be dropped from shields or weapons to increase movement, or vice versa.

For example, a Federation captain has powered all of his systems, but finds that he has 2 power points left over that are not allocated. He has several options for his 2 points of power. He could just not expend them, but then they would be lost, as except for power allocated to beam weapons, power can not be saved from turn to turn. He could drop two power units from the shields, weapons, or one from each and use the resulting 4 power units to increase his impulse speed by one. Another option would be to drop just one point of power from other systems and increase his thruster speed by one. Whatever our captain decides, he

notes this by changing the appropriate power allocation boxes in the current turn column to reflect the correct amount of power allocated to each system.

At this point our Federation captain has allocated all 72 power units available to movement, shielding, and weapons. He is now ready to continue following the sequence of play.



Matzen Greenway

Determining Initiative

Once power has been allocated, initiative is determined. First, each player determines his or her base initiative. (Note: base initiative is recalculated each turn, do not use the same base initiative throughout the game.) To determine the base initiative, each player:

- 1) Rolls percentile dice
- 2) The captain's skill level is added to the roll
- 3) The percentile maneuverability rating of the ship is added to the sum from 2) above

Once base initiatives have been determined, each player announces his impulse speed for the turn. Based on the announced speeds, the following modifiers are applied by each player:

Circumstance	Modifier
Ship has a higher impulse speed than the slowest ship on the board	+5 for each impulse speed faster than the slowest ship
Cloaked, but an enemy ship has a lock on	+5
Cloaked, and no enemy ships have a lock on	+15

Initiative order can be kept on the Initiative Tracking Sheet, and/or by using numbered counters given to the players.

Initiative example: A Klingon K'tinga class cruiser and a Federation Miranda class cruiser are about to engage. Each player determines his base initiative for the turn:

1) The Federation player rolls percentile dice and rolls a 91. He adds his captain's skill rating of 69 to get a score of 160. He then adds the ship's maneuverability rating of 20 to the number for a total of 180.

2) The Klingon player rolls a 47 and adds his captain's rating of 69 for a total of 116. He then adds his ship's maneuverability rating of 30 to the result, for a total of 116 + 30 = 146.



The players then announce their impulse speeds. The Klingon announces his speed as 3 impulse, and the Federation player announces his speed as 4 impulse. The players then consult the Initiative Modifier Chart to determine which modifiers apply to each. In this case, the federation player is 1 impulse point faster than the Klingon, so he adds 5 to his base score of 180 for a total of 185. The Klingon player has no modifiers that apply, as he is the slowest ship. The Federation player has initiative this turn because his

score of 185 is higher than the Klingon's 146.

Sensors

Sensors are the 5 senses of a starship. Normal sensor operations allow the captains to know the speed, location, and identity of other ships and known objects on the playing board. It also allows general information such as if a ship has its

shields up, weapons armed, etc., although not specifically enough to allow another player to know how much power is placed into each weapon. Planets, asteroids and the like may block sensors. Nebulas and dust clouds can also affect sensors. These effects are usually outlined in the given scenario, or can be found in the appropriate rules section.

Sensors are also used to locate cloaked vessels. The procedure for doing this is discussed in the section on cloaking devices.

Lastly, sensors may lock onto targets and thereby determine more detailed information about a target. Some scenarios will require sensor locks on ships or objects as part of the victory conditions of a scenario. Sensor locks allow the ship to make called shots on another ship or target (See the firing weapons section for more on called shots), and to beam boarding parties or crew onto other ships and or objects. Beam weapons that are fired at a target the firing ship has a lock on receive a +1 modifier to the to hit roll. (Note: See the rules on cloaking devices for an exception to the +1 modifier rule.)



Eric Peterson/Matt Allen

A sensor lock allows a captain to know more detailed information about the target ship. A captain may ask the captain of the ship he has a lock on to a detailed question about his ship. He may ask one such question each phase. For example, a captain might ask if the aft weapons are armed, or how much power remains in the port side beam weapons. Without a lock, only the general information listed in the first paragraph of this section need be revealed to an enemy captain.

Unless other modifiers are specified, ships obtain a sensor lock on an object or vessel on the roll of a 7 or less in the sensor segment of each phase. A ship may have a lock on to only 1 ship or object at any one time. Note, however, that a

starship may fire at any number of targets in one turn. (See page 54.) A sensor lock is a more intense scanning mode that allows called shots and transporters to be implemented.

Ships with destroyed or inoperable sensors may not transport crew or boarding parties by using transporters. They may fire weapons, but do so with minuses to hit. (See the damage results section regarding sensor hits for the modifiers to use.)

Players should note that only one sensor roll is allowed per sensor segment. A ship may attempt a lock on, OR search for a cloaked ship, OR maintain a lock on a cloaked ship; it may not do more than one of these in the sensor segment of the same phase. It may however attempt a lock on during the sensor segment of one phase, and search for a cloaked ship in the sensor segment of the next phase, then attempt a lock on to a non-cloaked ship in the sensor segment of the third phase, etc. See the section on cloaking devices for more details on how to search for cloaked ships.

Skill Checks

Whenever a rule calls for a skill check, a player rolls a percentile dice roll as explained in the game component section of these rules under the heading dice. If the number rolled is equal to or less than the skill level the roll was made against, then the results is positive, or in other words the skill roll is "made" or "passed".

A note about skill checks: If an officer fails a skill check, it means that whatever he was trying to do was not accomplished. It does not mean that he gives advantageous modifiers to the other player. For example, if a helmsman executes emergency evasive maneuvers but fails his skill roll, this means that he gets no additional modification of the to hit roll, but it DOES NOT mean that the other player gets any bonus to hit. Similarly, if an engineer on a cloaked ship fails his roll when trying to affect the scan of a searching ship, then this would mean that he gets no helpful bonuses, but he suffered no harmful minuses. Having the crew try to make their best effort during a fight is part of the fun of the game, and reflects the overall Star Trek ideal of always giving ones best effort regardless of the odds. Therefore, unless a penalty as a result of a failed skill roll is specified in a rule section, then there is no harmful consequence for trying.

Moving the Starship

Movement of the starship counter or miniature takes place during the movement segment of each of the three phases of the combat turn. The number of movement points is determined from the power allocated to movement and the movement ratio, as described in the section on allocating power. The following paragraphs detail the movement possible, as well as the amount of movement available each movement segment. Players should reference the movement chart in the Charts and Tables section of the rules.

Valid Starship Movements

For each movement point the ship has generated for the current turn, be it thruster or impulse, the ship may execute any one of a number of movements.

Impulse movement points: Impulse movement may only be carried out in the forward or reverse mode in the movement segment of any one phase. Additionally, it takes one phase to switch over from forward to reverse motion or vice versa, during which the impulse movement generated may only be used to "Hold Station".

(See hold station below.) The thrusters may still be used during the switch over time without any additional restrictions.

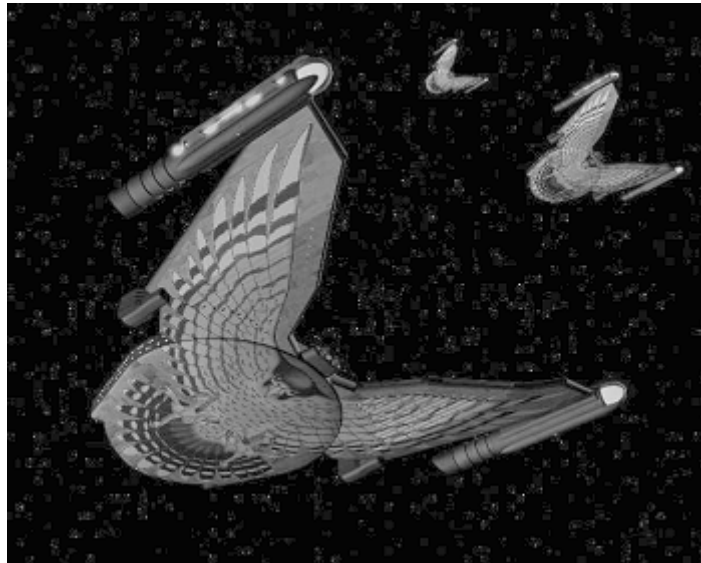
There are 10 different forward impulse movements the starship may perform, each of which costs 1 movement point to execute. Each of these actions is shown on the Movement Point Diagram in the Combat Chart section of these rules. A short explanation for each is:

First of all, the captain may leave the ship in place and not move it at all. This is referred to as holding station.

Secondly, the captain may rotate the ships heading one hexside to the right or left, without moving the ship forward. This is called a heading change.

Next the captain may also move the ship either one or at his option two hexes directly forward, without changing facing. This is known as moving forward.

The captain may move the ship one hex forward, and then make a heading change to the right or to the left. This is referred to as a "turn" to either port(left) or starboard (right).



Eric Peterson

The captain may execute a sideslip to the right (starboard) or to the left (port). This is done by moving the ship two hexes in the row just off the port or starboard bow, while maintaining the same heading.

Lastly, the captain may change the heading of the ship by 2 hexes. Ships smaller than size class 8 may do this with no fear of damage. Ships of size class 8 or higher must make a helm skill roll to avoid damage. If the helmsman of the turning ship makes a skill roll, then the ship takes no damage from the second facing change. If not, the ship may take damage to the superstructure and to the engines, based on how fast the ship is traveling when the heading change is made. To determine how much damage is done, use the following procedure:

- 1) Determine the stress chart columns to be used for the ship making the turn. (The column to be used for each ship can be found on the Ship Data Sheet and on the damage Control Status Display of the Ship Control Sheets).

-
- 2) Determine the stress speed of the ship. This is done by taking the current impulse speed of the ship and adding the number of thruster points available this movement segment. Thus a ship at impulse speed 4 with 1 thruster point available this turn would have a stress speed of $4 + 1 = 5$.
 - 3) Consult the Stress Chart in the column for the ship making the turn. Cross-reference this with the speed of the ship as determined in step 3 above. The number found by doing so is the number of damage points applied to the area specified. Damage from the chart that is applied to the engines is applied to EACH engine, not just one engine. (Note that the Constellation class has 4 engines, 2 left and 2 right. Only apply the damage to 2 warp engines, not to all 4. For example, if 1 extra point to the engines is required, apply 1 point to either of the right engines and 1 point to either of the left engines, for a total of 2 damage points, NOT 1 to each for a total of 4 damage points.) If no damage is called for on the chart, then no helm skill roll will be needed, as there is no additional to be avoided.

For example, a cruiser has stress chart columns of H for the superstructure, and K for the engines. It has a current impulse speed of 5 and one thruster movement point available this turn. This adds up to $5+1=6$. Entering the turn stress chart at speed 6, we see that in column H is a 1, and in column K is also a 1. This means that if the helmsman does not make his roll, the ship will take one (1) point of damage to the superstructure, plus 1 additional point to each of the warp and impulse engines.

Superstructure hits caused by changing heading by 2 hexsides DO NOT cause crew casualties.

There are 4 additional impulse movements a starship may perform while in reverse. It may move one or two hexes directly to the rear, at the captain's option. In addition, it may perform a reverse sideslip to the port or starboard side. These movements are also shown on the Movement Point Diagram. Any heading changes while in reverse must be made by expending an additional movement point.

Thruster movement points: There are only 2 legal thruster movements that may be executed:

- 1) The ship may change heading (facing) 1 hex side to port or starboard
- 2) the ship may move 1 hex in any direction, while maintaining its current heading.

Thruster movement may be forward or reverse, and in any combination thereof without restriction other than the number of movement points available that phase

Movement Allowed Per Segment:

The movement segment of each phase is divided into 4 rounds: three impulse movement rounds and one thruster movement round. To determine the number of movement points the ship will move each round, the player consults the movement chart using the speed that he has allocated for the turn. For example, the chart for speed 6 says that the player will have two (2) movement points available in each round. Players may find it helpful to record these numbers on the Energy Allocation Form in the Movement box.

The total amount of impulse movement is expended over each of the three rounds of each Segment, while thruster movement is executed over the three separate movement phases of the entire turn. Let's consider some examples:

1) A ship has an impulse speed of 6 and a thruster speed of 3. Consulting the move chart we see that impulse speed 6 yields two movement points per round for impulse, and that three movement points yields a movement of one (1) per round for thrusters. Thus, the ship would expend movement point in the following way for the turn:

Phase 1	Phase 2	Phase 3
Impulse Round 1: 2 move points	Impulse Round 1: 2 move points	Impulse Round 1: 2 move points
Impulse Round 2: 2 move points	Impulse Round 2: 2 move points	Impulse Round 2: 2 move points
Impulse Round 3: 2 move points	Impulse Round 3: 2 move points	Impulse Round 3: 2 move points
Thruster Round 1: 1 move point.	Thruster Round 2: 1 move point.	Thruster Round 3: 1 move point.
End of movement for the phase	End of movement for the phase	End of movement for the phase

2) A ship has an impulse speed of 7 and a thruster speed of 2. Consulting the chart we see that the ship will have the 7 impulse movement divided up as 2-3-2 and the thruster speed of 2 will be broken up as 1-0-1. This, the movement for the turn will be:

Phase 1	Phase 2	Phase 3
Impulse Round 1: 2 move points	Impulse Round 1: 2 move points	Impulse Round 1: 2 move points
Impulse Round 2: 3 move points	Impulse Round 2: 3 move points	Impulse Round 2: 3 move points
Impulse Round 3: 2 move points	Impulse Round 3: 2 move points	Impulse Round 3: 2 move points
Thruster Round 1: 1 move point.	Thruster Round 2: 0 move points.	Thruster Round 3: 1 move point.
End of movement for the phase	End of movement for the phase	End of movement for the phase

Movement order:

As stated in the Sequence of Play, movement is executed in order from the ship with the lowest initiative to the ship with the highest initiative. Each ship expends all of its movement points for the current round, then the next ship and then the next, until all ships on the board have expended their movement points for the round. To ease keeping track of which ships have moved, captains may turn their initiative counters over to reflect the fact that they have moved. When all ships have executed their movement points for the current round, then the ship with the lowest initiative score executes its movement points for the next round. He is followed by the ship with the next highest initiative, etc., until all ships have expended all of their movement points for the current movement segment.

For example, say there are three ships in a scenario. They have the following information:

- 1) Ship one has an initiative score of 125, impulse speed of 7, and thruster speed of 3. The impulse speed is divided into 2-3-2, thruster into 1-1-1.
- 2) Ship two has an initiative score of 110, impulse speed of 6, and a thruster speed of 4. The impulse is divided into 2-2-2, and the thruster into 1-2-1.
- 3) Ship three has an initiative of 106, impulse speed of 5, and a thruster speed of 2. The impulse is divided into 1-2-1 and thruster is divided into 1-0-1.

For the first segment then the players would move the following movement points in this order:

Impulse Round 1	Impulse Round 2	Impulse Round 3	Thruster Round 1
Ship 1: 2 move points	Ship 1: 3 move points	Ship 1: 2 move points	Ship 1: 1 move point
Ship 2: 2 move points	Ship 2: 2 move points	Ship 2: 2 move points	Ship 2: 1 move point
Ship 3: 1 move point	Ship 3: 2 move point	Ship 3: 1 move point	Ship 3: 1 move point

After the above moves are done, then movement has been completed for the first movement segment and play moves on to the firing phase.



Image by Tachy

Additional Movement Related Rules

Two or more starships may be in the same hex together, and may fire at each other. (How to do so is explained in the next section-firing weapons.) Normally, ships may neither ram nor collide with one another, however, if the players elect to allow ramming, then the rules in the rule section entitled *Ramming Starships* may be used.

If a ship maneuvers in such a way that it would exit the mapsheet, simply pick up all the ship counters or miniatures and move them back into the center of the mapsheet, keeping their same relative positions. This should not be done if the scenario states that getting off the mapsheet is part of the victory conditions. Additional mapsheets may be purchased to make larger playing areas.

Evasive Maneuvering:

In an effort to avoid being hit, and thus avoid any combat damage, a ship may elect to perform evasive maneuvers. This is rapid random speed and heading changes effected in order to spoil the aim of ships firing at the evading ship. There are actually 2 levels of evasive action in *The Final Frontier*. The first is standard evasive maneuvering.

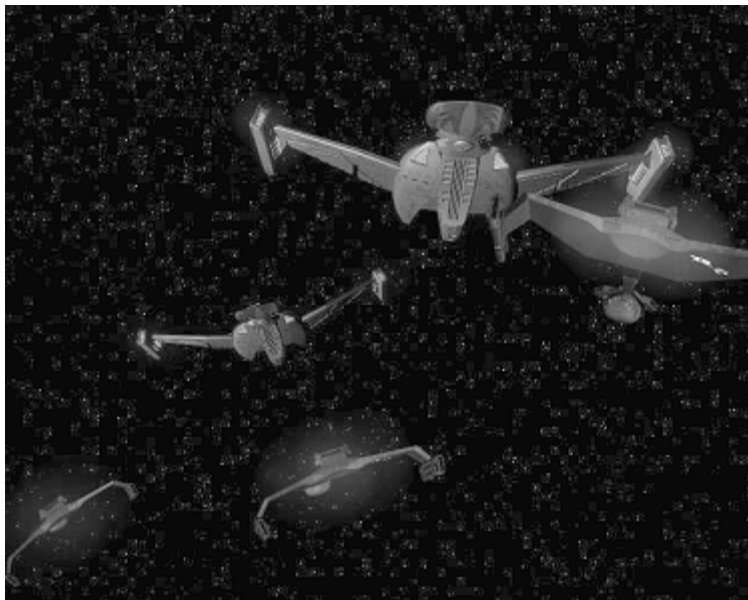
Standard evasive maneuvering consists of the normal evasive patterns a ship makes to present as small a target as it can to enemy ships. This is represented in the game by a maneuverability rating for each ship. How to use the maneuverability rating to determine to hit modifiers will be explained in the section on firing weapons. Standard Evasive Maneuvers are assumed to be done each phase, and

are used with no penalties to a ship's normal movement or its ability to fire a called shot.

The next level of evasive maneuvers is emergency evasive maneuvers. This represents a ship that has gone into an almost totally defensive posture. This is usually done to avoid taking damage that will finish off the ship, or to reduce the chance of taking hits when faced by an overwhelming enemy force.

Players must announce at the beginning of the movement segment of any phase if they are executing emergency evasive maneuvers or not-i.e. they may opt not to execute them in one phase in order to have a better chance of hitting their target, and then execute emergency evasive maneuvers to clear the target area. Speed for targeting or other purposes is equal to the movement points generated by the ship for the current phase.

To execute emergency evasive maneuvers, the player must reduce the current speed of his ship by 1 impulse movement point. If this brings the speed of the ship to less than 0 (i.e. if the ship is at impulse zero (0) to begin with) then the ship may not conduct emergency evasive maneuvers. Thus if a ship has allocated power for 4 impulse points in each phase, it will only have 3 impulse movement points available in the movement segment of any phase that the ship carries out emergency evasive maneuvers. This means that the ship will have to consult the movement table using the slower speed to see what his speed in each round will be while conducting emergency evasive maneuvers.



Eric Peterson

All ships that execute emergency evasive maneuvers may not make called shots, and suffer a -4 to hit on all to hit rolls.

The effects of emergency evasive maneuvering are handled as follows:

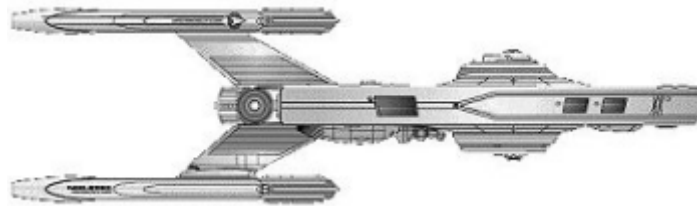
- 1) Add 1 to the evading ship's maneuver rating.
- 2) The captain of the evading ship rolls percentile dice vs. the sum of helmsman's skill and the evasive percentage rating of the evading ship. If he rolls less than

the sum above, he has successfully conducted the evasive maneuvers. For each 10% (rounded up) that he made his skill roll by, the ship's maneuverability rating is increased by 1.

- 3) The firing ship's gunner may try to offset this penalty by rolling against his skill level. If he rolls under his skill level on percentile dice, he has offset the evasive maneuvering of the target ship. For each 10%, rounded down, the gunner reduces the maneuverability rating of the target by 1 point, however, the maneuverability rating of the target may never be reduced below the modified maneuverability rating determined in step one in this manner.

For example, a Federation Eagle class destroyer is attempting to close on a Klingon K'tinga Class cruiser. Knowing the destroyer's shields will not stop a full strike from the Klingon cruiser, the Federation captain executes emergency evasive maneuvers in order to throw off the aim of the Klingon ship.

Step 1: The ship had a speed of 7 for the turn. This is reduced to 6 while the evasive maneuvers are being done. This will reduce the speed for the impulse rounds from 2-3-2 to 2-2-2.



Step 2: The Eagle class has a base maneuver rating of 4. This is increased automatically to 5.

Step 3: Next, the Helmsman makes his skill roll. The Helmsman has a skill of 52, and the ship has a maneuver bonus of 30%. The target number is 52 (Helm Skill) + 30 (Maneuver Bonus) = 82. The player rolls a 61, making the roll by 21%. This rounds up to 30%, or an increase of 3 in the destroyer's evasive rating. This is added to the 5 from step 1 above, for a total of 8.

Step 4: The Klingon counters by rolling against his gunner's skill, which is 58%. He rolls a 45, making the roll by 13%. Rounded down to 10%, this reduces the modified maneuverability by 1, so the result is a maneuverability rating of 7.

Note that since the modifier to the evading ship due to the helm skill roll was 4, the gunner could not have offset more than these 4 points, even had he rolled a 01, rounding to 50% or -5. In other words, the evading ship always gets a minimum increase of one (1) to its maneuverability rating, regardless of how much the gunner makes his roll by.

The evading player rolls his helmsman's skill roll, and at the same time the gunner rolls his skill roll to offset the helmsman's roll. This takes place after the firing captain makes his decision to fire or not, and has declared what weapons will fire. A new skill roll is made by both ships in the firing segment of each phase that a target is executing emergency evasive maneuvers.

Tactical Heading Changes:

After all impulse and thruster movement has been made, captains may elect to perform a Tactical Heading Change. This allows a ship to turn 1 hexside to port (left) or starboard (right). This tight turn puts a strain on the hull and engines, thus causing damage to both. One point of damage is automatically applied to the superstructure of the ship and each warp and impulse engine. (Note that the Constellation class has 4 engines, 2 left and 2 right. Only apply the damage to 2 warp engines, not to all 4.) This damage is regardless of speed. If the helmsman of the turning ship makes a skill roll, then the ship takes no further damage from the Tactical Heading Change. If not, the ship may take more damage to the superstructure and to the engines, based on how fast the ship is traveling when the heading change is made.

To determine how much additional damage has been done, follow this procedure:

- 1) Determine the stress chart columns to be used for the ship making the turn. (The column to be used for each ship can be found on the Ship Data Sheet and the back side of the Ship Control Sheet).
- 2) Determine the stress speed of the ship. This is done by taking the current impulse speed of the ship and adding the number of thruster points available for the movement segment of this phase. Thus a ship at impulse speed 4 with 1 thruster point available this phase would have a stress speed of $4 + 1 = 5$.
- 3) Consult the Stress Chart in the column for the ship making the turn. Cross-reference this with the speed of the ship as determined in step 3 above. The number found by doing so is the number of damage points applied to the area specified. Damage from the chart that is applied to the engines is applied to EACH engine, not just one engine. (Note that the Constellation class has 4 engines, 2 left and 2 right. Only apply the damage to 2 warp engines, not to all 4. For example, if 1 extra point to the engines are required, apply 1 point to either of the right engines and 1 point to either of the left engines, for a total of 2 damage points, NOT 1 to each for a total of 4 damage points.) If no additional damage is called for on the chart, then no helm skill roll will be needed, as there is no additional damage to be avoided.

For example, A cruiser has stress chart columns of H for the superstructure, and K for the engines. It has a current impulse speed of 5 and one thruster movement point available this turn. This adds up to $5 + 1 = 6$. Entering the turn stress chart at speed 6, we see that in column H is a 1, and in column K is also a 1. This means that if the helmsman does not make his roll, the ship will take 1 additional point of damage to the superstructure, plus 1 additional point to each of the warp and impulse engines.

Superstructure hits from Tactical Heading Changes DO NOT cause crew casualties. Ships with a size class of less than 7 NEVER take damage from tactical heading changes.

Ships do not always make a tactical heading change in the movement segment of the phase. When they actually complete the heading change is determined by the skill of the helmsman and the maneuverability of the ship involved.

To determine when the ship makes the heading change, the helmsman must make a skill check to complete the heading change before the firing segment of the current

phase. Divide the helmsman's skill level by 2, add the percentage evasive modifier of the ship, and then roll percentile dice. If the number rolled is less than or equal to the number determined above, then the ship turns right away. If the skill roll is failed, then the turn does not take place until AFTER the firing segment of the current phase.

Ships that execute Tactical Heading changes suffer a -1 penalty on all of their to hit numbers regardless of when the actual change of heading is made.

If a ship is executing emergency evasive maneuvers and also executes an emergency heading change, use the full speed of the ship for determining the damage done, not the reduced speed caused by executing the evasive maneuvers.

Warp Speeds:

Warp speed is used to disengage from a fight. Combat and pursuit at warp speeds is very difficult and dangerous. Such pursuits are basically contests between the captains involved in planning an escape or pursuit strategy, and then how the helmsman and gunner execute the plan. Thus, the skill level of the captain, helmsman and gunner will greatly effect the outcome of any such pursuit.

In order to be eligible to warp out, a ship must meet the following requirements:

- 1) No enemy boarding parties on board
- 2) Total current warp power is at least 1/2 the original warp power output of the ship
- 3) The sensors are functional
- 4) The ship is not being protected by another ship or base that has extended its shields around the ship that is warping out.

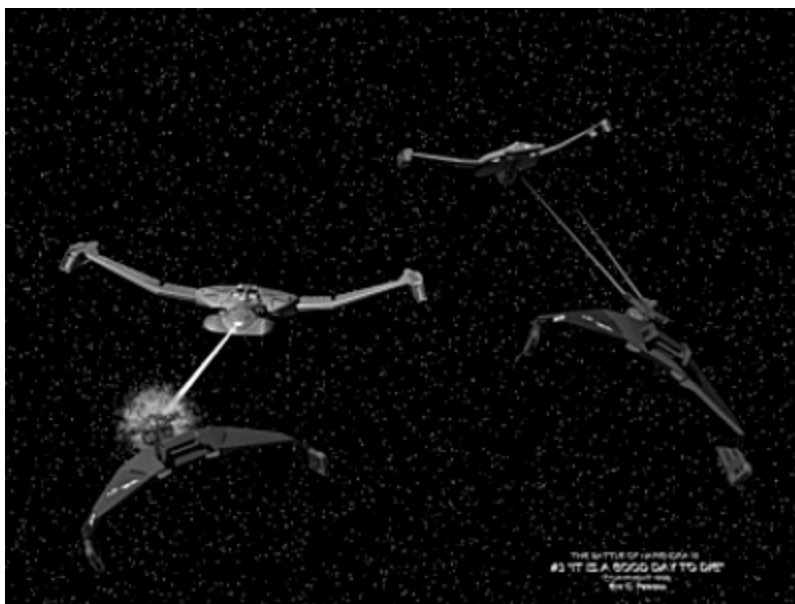
A captain of an eligible ship that wishes to warp out from a fight announces he is doing so after the firing segment of the phase, as shown on the sequence of play chart, step #23. Play then continues as normal into the next phase. As long as none of the restrictions above are violated during that phase, then the captain may warp off the board in step #23 of the following phase.

In non-campaign settings, unless the players wish to use the more advanced campaign warp rules, a ship that warps out of the fight automatically escapes. (Advanced players may wish to use the campaign warp speed rules--it adds to the fun!! The warp rules for campaigns can be found in later in these rules.)

Most scenarios will state that the captain that warps out of the fight has lost the fight, or that the ships forcing a ship to warp out from a fight get a certain number of victory points.

Firing Weapons

Weapons are fired in the firing segment of each phase. All weapon armed in the power allocation phase may be fired in any firing segment of any phase of the combat turn. Each Missile weapon/tube may only be fired once per combat turn. Beam weapons may fire in multiple firing segments, depending on the power allocated and the emission rate chosen by the firing ship.



Eric Peterson

For example, a beam weapon that is charged to 4 points of power, with an emission rate of 2 can be fired in a large variety of ways: 1) 2 equal shots of 2 power points in the firing segment of each of 2 phases, 2) One shot of 2 power units in the firing segment of one phase and one power unit shot in the firing segment of each of the other 2 phases, 3) one shot at one point of power in the firing segment of each of the three phases, with one power point carrying over to the next turn, 4) no power fired at all, so all 4 points carry over, etc.

A weapon is considered armed when the Ship Control Sheet has been marked to show that power has been allocated to arm it. To keep track of which weapons have been fired during the firing segment of each phase, simply record the amount of power units fired by a beam weapon in the appropriate box of the three small boxes provided in the beam weapon section of the Damage & Combat display. Missile weapons may simply have the letter A in the missile weapon box of the Damage & Control display slashed through to note that the weapon has been fired. This will leave no room for question about which weapons have or have not been fired. Unused power in beam weapons carries over to the following turns, but power allocated to unused missile weapons does not.

Indicating Intentions to Fire:

Weapons fire is resolved in order of initiative, from highest to lowest score. However, the orders to fire are given at the same time. What each captain does should not be an influence to the decisions to fire or not. Thus, each player decides if he wants to fire any weapons this phase and then places a *fire* or *no fire* counter near his ship to indicate his decision.

After all counters have been placed, and any shields extensions have been made, the counters are turned over. *No fire* counters may be removed at once since those ships will not fire this phase. *Fire* counters will then be resolved in order of initiative. After a ship has fired, the captain removes the *fire* counter. A ship may not fire any of its weapons unless the captain has laid down a *fire* counter in the firing segment of that phase.

Picking a target:

The first step in firing weapon is to pick a target. There are two major factors that restrict which targets a ship may fire at. These factors are the range to the target and the firing arc of the weapons on the firing ship. In some games, where planets or other obstacles are present, having a clear line of sight to a target will also have to be determined before a captain decides to fire. How to do this is detailed in the section on **Obstacles**.



Image by Eric Peterson/Dale McKee

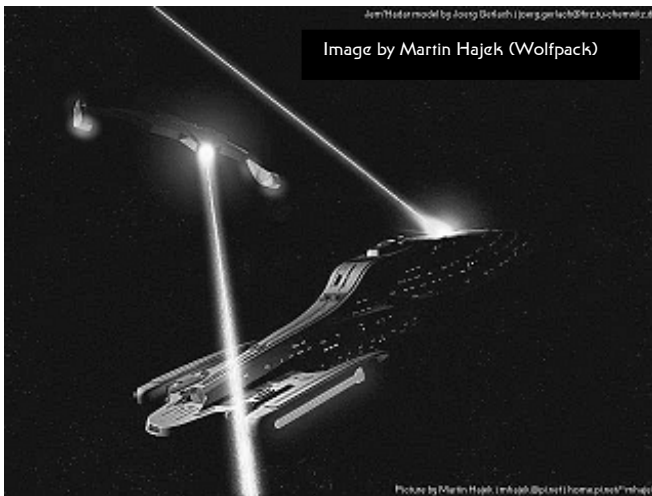
Range:

Each weapon has a maximum range. Any target for that weapon must be within that maximum range for it may not be fired out. To determine if a ship is in range of any particular weapon, follow these steps:

- 1) Determine the range to the target. The range between the firing ship and the target defined found by counting from the firing ship's hex to the hex the target is in. The hex the firing ship is in is not counted. (Thus, ships in the same hex as the firing ship are at range "0".) The hex the target is in **IS** counted.
- 2) Consult the to hit charts on the Damage & Combat form. Look at the range column. If there is a range listed there that includes the range to the target, then the target is within range

Beam Weapon 1	
Range	To Hit
0-3	10
5-6	9
8-9	8
10-11	7
12-13	6
14-15	5
16-17	4
18-20	3
21-24	2

For example, a Miranda class cruiser wants to fire at two B'rel class scouts. The player counts the range off to one as 30 hexes, and the range to the other as 16 hexes. First, he checks for his beam weapons. Looking at the to hit chart on his Damage & Combat form he sees that range 16 is listed on the chart (entry for ranges 16-17), but range 30 is not. (The last entry is for range 21-24, and 30 is greater than 24.) This means that he may be able to fire at the B'rel at range 16, but will not be able to fire at the B'rel at range 30 with his beam weapons. The then does the same thing with his missile weapons, and again the results are that the B'rel at range 16 is within the range of his missile weapons, but the B'rel at range 30 is not within range.



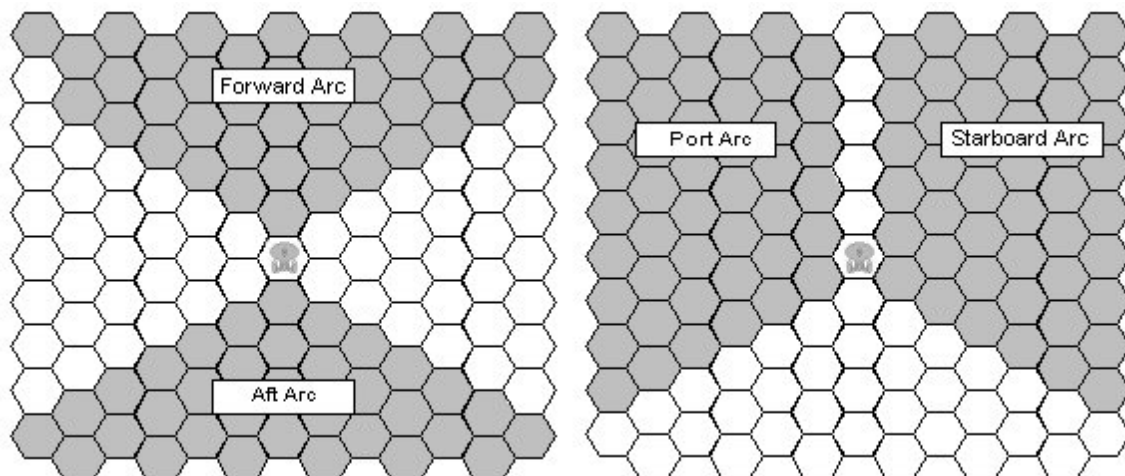
Firing Arcs:

Each weapon has a firing arc. The arc depends on the type of weapons mount and where it is placed. Basically, the firing arcs list the direction that each weapon or a group of weapons may fire, so only targets that fall within each weapon's firing arc may be fired at. The ships data charts and the ship control sheets give the firing arcs for each weapon.

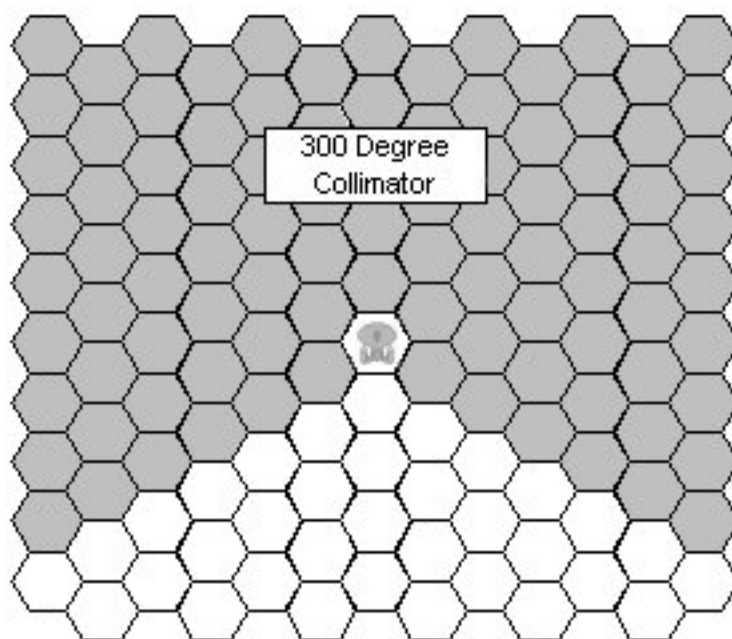
There are four (4) basic firing arcs for most ship weaponry: Forward (front), port (left), starboard (right), and aft (rear). On the data sheets and control sheets, these are respectively abbreviated as f, p, s, and a. Note that these firing arcs are given relative to the firing ship's heading.

Ships in the same hex may fire at each other. To determine the firing arc, simply move both ships one hex in reverse of their current heading, determine the appropriate arc that bears, then return the ships to the hex they started in. If any ships in the same hex also have the same heading, the ship with the highest initiative is considered to be behind the ship with the lower initiative **UNLESS** the higher initiative ship(s) entered the same hex the other ship(s) is (are) in by using a backward thruster or impulse movement to enter the hex, **AND** no other movement was performed by either ship after the backward movement. In other word, a ship that moves backwards into a hex with no other movement by either ship may not be considered behind the other ships or ships in the same hex.

The Firing Arc Diagrams below (these are also found in the charts and tables section) illustrate the 4 basic firing arcs.



Some weapons are able to fire in to more than one of the basic arcs. For example, a weapon with an arc listed as f/p means it may fire into all the hexes in the forward and the port firing arcs. (A tip for remembering which directions starboard and port are: Port and left have the same number of letters.)



Some weapons have special firing arcs. A weapon with a firing arc listed as having a 360-degree may fire in any direction. Weapons listed as firing into certain shield arcs will use the shield arc chart to determine if a weapon bears on a target. Note that those hexes that fall halfway into the firing arc are considered to be OUT of the arc of the weapon. Finally, a weapon marked as having a 300 degree Collimator ring may fire in any hex but those in the aft firing arc. More about collimator rings will be discussed in the next section.

Declaring Targets:

Once each captain that placed a fire counter on the board has determined what targets are in range and in what firing arcs, they must declare what targets they will fire at. The captains declare their targets in reverse order of initiative, or in other words the captain that lost initiative declared his target first and the captain that won the initiative declares his targets last.

Each captain must declare which targets he is firing at and which weapons will be fired at each target. Once a captain has declared his targets and the first captain has begun to roll for hits he may not change targets, nor may he change which weapons he is firing. (The exception to this is if his ship takes damage that would prevent him from firing any or all of his weapons.) Even if the target a captain has declared that he will fire all his weapons at was destroyed earlier in the same firing segment, he may not choose a new target, and thus the energy is expended but no damage is scored.

Players are allowed to fire different weapons at different targets in the same firing segment. Weapons not listed as collimator mounts have independent fire controls, and may fire at the same or different targets. Collimator rings may fire the weapons in the mount at the same or different targets in any combination desired. For example, the Galaxy class starship has 10 phasers mounted in a collimator ring. They could fire 1 phaser at 10 different targets, or fire all 10 at 1 target, or any combination in between. Remember that sensor locks are only required to execute

called shots, or to fire at cloaked ships. (See the section on cloaking devices.) A lock is not required to fire a normal shot at a non-cloaked target.

Scoring a Hit with a Weapon

Once all captains have declared their targets, they begin to fire. Weapons are fired and damage is resolved in order of initiative-i.e. one captain fires his weapons and resolves damage before the next captain fires his weapons.

All weapons, with the exception of the Ferengi Pulsar described later in these rules, must make a successful to hit roll in order to score damage on a target. To determine if a hit has been scored, the captain must roll one 10 sided die (d10) and roll less than the to hit number required.

To determine the required hit number:

- 1) Consulting the base to hit number on the to hit chart for each weapon being fired. To determine the base to hit number, cross-index the range with the Firing Chart (found on the ship data sheet). For example, a phaser is listed as firing chart Y. The range to the target is 6 hexes. Cross reference chart Y along the top with range 6 along the side. Consulting the chart, the base to hit numbers are 1-8. This means that a (d10) roll of any number but a 9 or 10 would score a hit on the target. For the player's convenience, the base to hit numbers are also listed on the Damage & Combat Form.

The base to hit number will be modified by different circumstances. This first is target speed relative to the firing ship's speed. Compare the number of impulse movement points that are available to the firing and target ships. If the firing ship is faster, it receives a modifier of -1 to the to hit number for every 2 impulse movement points faster (round down) it is moving than the target. If it is slower than the target, it received a -1 to the to hit number for every 2 impulse movement points slower it is (round down), plus one additional point for targeting a faster ship. If the two ships are moving at the same impulse speed, then there is no speed modifier.

The second main consideration in modifying the to hit number is the relative maneuverability of the target. Each ship has a maneuverability rating. This represents the size of the target, and its ability to change heading quickly in order to avoid being struck by enemy weapons, as well as how easily it can bring its own weapons to bear.

To determine the effect maneuverability has on a target, use the following procedure:



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- 1) Subtract the targets maneuverability from that of the firing ship.
- 2) If the result is a positive number, or zero (0), then there is no penalty to hit.
- 3) If the number is a negative number, then that is the penalty to hit that is used.

For example: A Galaxy class Battlecruiser and a Klingon B'rel class scout are trading fire. The Klingon captain fires first. He subtracts the maneuverability of the target (2), from his maneuverability (5), for a result of 3. Since this is greater than or equal to zero (0), then there is no maneuverability penalty used when the Klingon captain fires. When the Federation captain fires, he subtracts the maneuverability of the target (5) from the maneuverability of his ship (2), for a total -3. Thus, the Federation will have a -3 maneuverability penalty when firing at the Klingon ship.

If a ship has a speed of zero impulse and zero thruster, then the maneuverability of the ship is reduced to zero (0). This is also true if the ship loses its maneuver grid or the helmsman is disabled and the ship can not maneuver.

The base maneuver rating of a ship will be modified at times by emergency evasive rolls and by the skill level of the helmsman. (The d10 bonus for the helmsman's skill level is added to the ship's maneuver rating.) These two modifications to the ship's maneuverability are used only when the target is being fired at, NOT when the evading ship is firing.

For example, the Galaxy class and B'rel class from the example above are trading fire, and this time the Galaxy had a helmsman with a +1 rating, then unfortunately for the Galaxy, there would be really no change in the to hit number. This is because if the B'rel (maneuver 5) fires at the Galaxy (maneuver 2 + 1 for the helmsman = 3), the result is still $5 - 3 = 2$, a positive number, and so there is no modification to the to hit number. If the B'rel has a good helmsman though, the situation is quite different. In that case, the Galaxy (maneuver 2) fires at the B'rel (maneuver 5 + 1 for the helmsman = 6) $2 - 6 = -4$, and the to hit modifier is now -4 instead of -3.

There are other things that will change a to hit number, such as cloaked ships, the skill of the firing gunner, battle damage, tactical heading changes, etc. Captains should use the to hit modifier chart as a quick reference aid in applying all modifiers needed.

Once the modified to hit number is determined, the captain rolls 1 die. If the number is equal to or less than the modified to hit number, then the weapon has hit the target. Roll for each weapon fired at a target before resolving damage.

Rolling a 10:

A roll of 10 on a to hit roll is considered a possible miss, even if the modified to hit number is 10 or greater. To determine if the shot hits, roll the d10 over for each to hit roll that was a 10 and consult the following chart:

Original modified to hit number	Second d10 roll to score a hit
10-11	1,2
12-13	1,2,3,4
14+	1,2,3,4,5,6

Determining the Amount of Damage Done by a Hit

Once it is determined that a hit has been scored on a target, then it must be determined what damage has been scored on the target.

Determining beam weapon damage: For beam weapons, the amount of damage scored is based on the number of power points emitted. Unless otherwise noted on the ship data sheet, beam weapons deliver 4 points of damage for every power unit emitted to the weapon. (Note: The hypothetical ships included in the ship data charts do 5 points damage per power unit fired. This is not noted on the ship datasheets.) The amount of damage scored by missile weapons is always constant, and is listed on the ship data sheet and the Power Allocation Form.

Damage Modifiers: Beam weapons do more damage at close ranges because the beam loses focus as it travels. This means that they have a damage modifier based on range. Missile weapons keep their energy contained until they hit, so they do not normally have damage modifiers. (See proximity fuses for photon torpedoes in the advanced weapons rules for an exception.)

Damage modifiers are listed on the ship datasheet and the ship control sheets with a listing such as +4 (0-2). . The number in front of the parenthesis is the Damage Modifier. The numbers in the parentheses give the range in which the damage bonus is applied. In this case, the listing indicates that a bonus of 4 damage points is added to any target that is hit at a range between zero (0) and two (2) hexes.

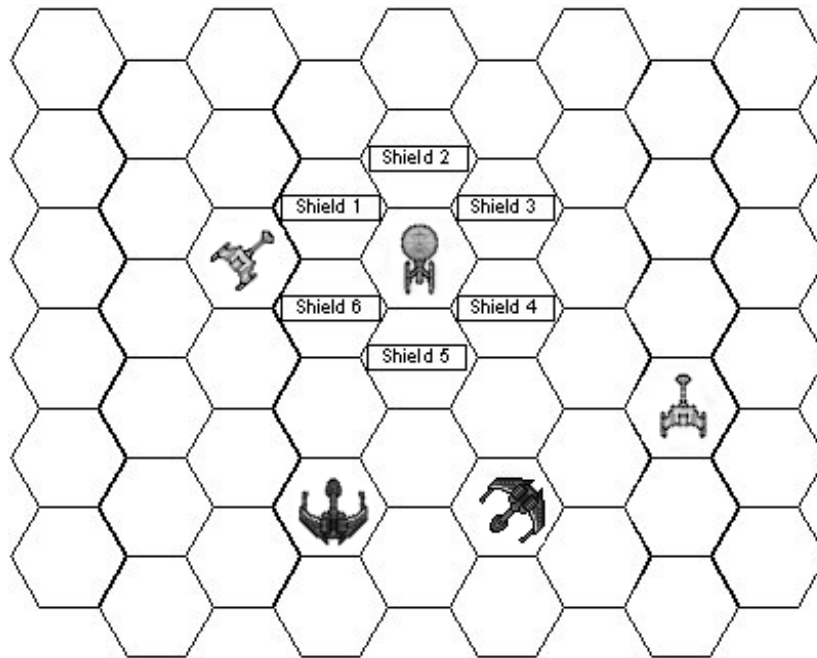
The damage modifier is added to the base damage that was determined by the amount of power emitted by the weapon. Note, however, that when a ship only fires 1 power unit in the firing segment of a phase, and if the emission rate of the weapon is greater than 1, then the damage modifier is reduced by 1 at all ranges.

For example, if a weapon were fired at an emitter rate of 3 points of power, it would do a base of 12 points of damage. If the Damage Modifier listing above is used, and the target is within 0 to 2 hexes, the actual damage would be 12 (Damage from the emitted power) + 4 (Damage Modifier) = 16 total damage points. If the same weapon fired only 1 power point in a firing segment, the damage would be 1 (power emitted)* 4 (damage points per power point emitted) = 4 +3 (range modifier for up to range 2 is +4, but this is modified by -1 because only 1 point of power was emitted from a weapon with an emitter of greater than 1) = 7 points of damage.

Determining Which Shield Was Hit:

The next step in resolving which shield was struck by the hit(s). As explained in the section on powering shields, there are six (6) shield arcs for each ship. (The shields arcs are shown on the Combat and Damage Display form) When a target is hit, the captain of the target must determine which of these shields was hit. To do this, draw an imaginary straight line from the center of the firing ships hex to the center of the target ship's hex. The shield arc struck is the one where the imaginary line crosses into the target ship's hex. If a firing ship is on the line between two shield arcs it is the target ship captain's choice of which of the two shields is struck. In cases where ships are on the line of a shield arc, the captain must take both the beam weapons and missile weapons on the same shield. He may NOT choose to take part of the damage on one shield and part on the other shield. Whichever shield is chosen must take all of the damage scored. If two ships are on the shield arcs line, then the captain MAY choose to take the full damage from on ship on one shield, and the full damage from the second ship on the other shield.

Lets look at some examples. In the Diagram on the below, the first Klingon on the right hits shield number 4 because he is in that shields arc. Continuing in a clockwise motion, the next two Klingons hit shield number 5 because they are in those shield arcs. The Klingon ship on the left lies on the line between the number 1 and number 6 shields, and so the Federation captain may chose which of the two shields it will strike.



Determining Damage:

Now that the shield arc has been determined, the effects of the damage must be worked out. Damage can be done to a target in several ways, but is usually the result of overpowering or overloading the targets shields. To determine if damage is done to a ship, follow the procedure below:

- a) Determine if the hits by the firing ship score more damage points than the maximum absorption level of the target. If this happens, any damage in excess of the maximum absorption level of the ship causes damage to the target ship, and should be handled as outlined in the section on determining the area of the ship that has been hit. (Scoring damage in this way is referred to as "blowing through the shields", or "blow through damage" for short.)

For example, if the damage done by a ships salvo is 120 points of damage, and the maximum absorption number of the target is 80, then 40 points of damage would penetrate the shields and cause damage to the target. ($120 - 80 = 40$)

Note that the Maximum absorption number is per VOLLEY, not the total for all shots by separate ships at the target. For example, a ship has a maximum absorption level of 80. Two enemy ships fire at the ship and hit the same shield. The first scored 75 points, and the second scored 110 points of damage. Since 75 is less than 80, the damage from the first ship does not penetrate the shields and does not score damage to the ship. (The player would roll for leak damage though, as outlined in the next section.) The second hit would score $110 - 80 = 30$ points of damage by penetrating the shields. (The player would then roll for leaks caused by the hits stopped by the shields.) Note that the full 80 points of maximum absorption were used for each hit.

Make sure to keep track of what order the weapons were fired in. This is because beam and missile weapons distribute damage in different ways, thus requiring the players to determine if the damage that penetrated was beam or missile weapon damage, or some of both.

- b) Determine if any hit has caused damage to “leak” through the shields. The weapons used by starships cause the release of massive amounts of energy. This will sometimes overload ship systems or cause structural damage to the ship, even though the shields have not technically been penetrated. (Thus, we see consoles exploding on the bridge while the shields are still up.) To determine if a hit has caused a leak, use the following rules:
- 1) The target ship totals the damage done by the incoming salvo, subtracting any damage that penetrated the shields due to the damage being more than the maximum absorption number, as outlined above.
 - 2) The target ship divides this total by the shield durability rating.
 - 3) The results from step 2) is subtracted from the shield efficiency listed on the shield status display at the beginning of the phase-i.e. if the shields start at 85% at the beginning of the phase, always subtract a salvo’s number from 85%. More on this later.
 - 4) The target ship consults his ship’s shield data sheet with the adjusted shield efficiency, and determines the deflection number for that salvo.
 - 5) The target ship rolls 1 d10 for each weapon that hit. (Collimators fired in bursts should roll for each weapon in the burst that hits.)
 - 6) If the d10 number rolled is less than or equal to the deflection number, then the full damage of the hit is stopped by the shields. If not, then some of the damage has leaked through the shields. (Be sure the player rolling vs. the deflection number states what weapons he is rolling against before he rolls. This will avoid conflicts as to which weapons caused the leak damage.)
 - 7) To determine how many points leak through the shield, divide the damage done by all of the hits that leaked by the shield durability rating as listed at the beginning of the current phase. Multiply this by the shield efficiency step listed on the shield status display. (81-100% = step 1, 61-80% = step 2, 41-60% = step 3, etc.)
 - 8) Divide the total leak damage into 5 point groups and determine the hit locations normally. Consider all leak damage as beam weapon hits for causing damage to systems, i.e. superstructure hits are scored at one half damage.
 - 9) Crew Casualties caused by leaks are always determined at one half of the damage done.

Note that if the original total leak damage taken from a hits that are not deflected is less than the shield durability rating of the target ship, even though a leak has been scored, no actual damage is applied to the ship. For example, if a ship has a shield durability rating of 8, and a 6 point disruptor hit scores a leak, no leak damage can be done to the ship, since 6 is less than 8.

SHIELD EXAMPLE: A Klingon K’ringa class cruiser is fired on by a Miranda Class Federation Cruiser. The Miranda Fires 4 phaser banks and 2 photon torpedoes. The Federation player rolls well, and 3 of the phasers hit, as do both photon torpedoes. The Klingon player consults his shield status for the current phase. The Klingon has his deflection at the maximum of 8 for his shields. His shield durability rating is 5. He has taken damage earlier, and his shield efficiency is at 85% at the beginning of this phase. The Klingon follows the steps above to resolve the hits as follows:

-
- 1) Divides the total damage taken (3 phasers at 11 each + 2 photons at 20 each = 73 damage points) by 5. This results in $73/5=14$.
 - 2) Subtract the results from the starting shield efficiency for the phase. Thus $85 - 14 = 71$.
 - 3) Consulting the shield status display of the K'tinga, we see that 71% gives a deflection number of 7. The Klingon player rolls a d10 against the deflection number (7) for each of the 5 hits, rolling for the beam weapons first, then the photons. The player rolls a 10, 4, 10, 5, and a 2. Only the 10's are over 7, so the rest are completely stopped by the shields.
 - 4) To determine how much damage the 2 phaser hits that leaked do, divide the total damage (22) by the shield durability rating (5) to get $22/5=4.4$ which rounds down to 4. Since 85% is at the Step 1 shield level, the leak damage is 4 (the base leak damage) * 1 (The step level) = 4 points each. This will be allocated in a single group of 4 points.

Damage that leaks through a shield must score a full 5 points of damage in order to damage vital systems. If a leak group of less than 5 points, the damage is applied to the superstructure instead as if it were beam weapon damage.

Continuing the example above, then the 4-point block would be applied to the superstructure instead. (Only 2 points of damage would be marked, as beam weapon damage to the superstructure is at $\frac{1}{2}$ actual damage, so $\frac{1}{2}$ of 4 is 2.)

Note that damage that is being divided in half for any purpose is always rounded down unless specifically listed as being rounded up in the rules.

Hits by multiple ships on the same target:

A ship that is hit by more than one enemy ship during the same fire phase tends to have more damage leak through the shields, due to the added strain placed on the shields and the ships systems. To reflect this, each ship has a Minimum Damage Rating.

Ships that fire at a target that has been hit by another ship in the firing segment of the same phase reduce the deflection number by 1 **IF** the damage done by the previous ship equals or exceeds the minimum damage level of the target ship.

Thus, if the minimum damage rating of the ships shields is 40 points, the previous ship that fired and hit the target ship this phase must have scored at least 40 points of damage in order for the current ship to get the -1 modifier to the deflection number. This penalty does not effect the maximum absorption number of the target ship.

This penalty is cumulative during the fire segment of the current phase, as long as all of the previous ships firing on the target scored damage at least equal to the minimum damage number.

Damage To Shields:

Shields weaken as they absorb damage. Often in the movies and television shows, characters are heard to say, "Shields down to 85%" or something along those lines. The shields damage rules are used to reflect this gradual weakening of the shields.

Whenever the shields are hit, it reduces their efficiency. To find out by how much, use the following procedure:

1) Determine the amount of damage done by all weapons hits this phase.

(Note that the numbers used in the above steps can not be more than the maximum damage the shield could stop--i.e. if a shield could only stop 60 points of damage before it collapses, and takes 80 points of damage; use 60 points of damage to determine the new efficiency, not 80.) Damage that penetrates a shield due to a leak **IS** used to calculate the amount of shield efficiency lost.

2) Divide the damage sum from step one (1) above by the shield durability rating of the ship hit.

The resulting number is the percentage lost in shield efficiency. (Round the efficiency lost down.) The maximum deflection number and maximum absorption level of the ship is then limited to the new efficiency rating. The new efficiency rating is calculated at the end of the phase, not after each ship fires.

There is no limit to how much shield efficiency can be lost by a ship in any phase or turn. (Bases are an exception to this rule. See the section on bases for details.)

For Example: A Federation player turns his counter over, revealing a fire counter. He announces that he will fire 2 photon torpedoes first, then 4 phaser banks at a K'tinga Class cruiser. The Federation player rolls a 1 and a 2, for two solid hits with his torpedoes. These score 20 points each for a total of 40 points on the K'tinga's #4 shield. The Federation player then fires 4 phasers, hitting with all 4 of them. At this range they score 11 points each, for a total of 44 damage points. The total damage scored is 84 points. Since the maximum absorption number for the K'tinga is 85, (Shield efficiency at 90-100%), the shields have just barely held. Deflection numbers are then rolled and any damage scored is applied. To determine the damage done to the ships shield efficiency, total the weapon damage THAT DID NOT penetrate the shields by exceeding the maximum absorption level. In this case, the number is 84 points. Divide the points of damage the shields absorbed by 5, which is the shield point ratio of a K'tinga, to get 16.8, which rounds down to 16. This means the K'tinga loses 16% shield efficiency, lowering it to 84%. The Klingon player, assuming no more damage is scored on his shields during this phase, then cross references the new efficiency of 84% with the new deflection and maximum absorption numbers on the chart found on the shield status display. This yields a deflection of 8 (same as before), and an absorption number of 75. This means that unless repaired, these will be the maximum deflection and absorption numbers for his ship on the next phase/turn.

Shield efficiency is recalculated during the Repair/Shield efficiency segment of each phase. Shield efficiency can be repaired. See the damage control section for how to effect these repairs.

Advanced Rule: There is an advanced rule later in this book that allows ships to exceed their deflection numbers. See that section for a review on the effects and dangers of doing so only after becoming familiar with the basic shield rules.

Damage Results:

Once it is determined how much damage has penetrated the shields, be it by leak damage or blow through, the captains need to determine where the damage has been scored on the target ship. To do determine the areas hit, the firing captain must:

- 1) Determine how many damage rolls to make.
- 2) Roll a d10 for each block and use that roll to determine the location of the damage scored.

Determining the number of damage rolls to make

Missile weapons explode and spread the damage over several areas. To simulate this, divide the damage done by missile weapons onto blocks of 5 points of damage, and roll one location for each block, or partial block of damage that penetrated the shield. The result of damage is described below.

Beam weapons cause heavy damage in a specific area of the ship. They this tend to burn through systems and then score damage to the hull of the ship. To simulate this, only one hit location is rolled per beam weapon hit, however, if a beam weapon hit of more than 5 points is determined to hit an area other than the Superstructure, Bridge, Engineering, or Engines, (i.e. sensors, thrusters, weapons) then the first 5 points damage the system in question, while the rest is applied as superstructure damage. (This may be seen as the beam weapon burning through the system hit, then further into the hull.) This burn through does not apply to Engineering hits, due to the size of the engineering decks. As shown on the damage location explanations, beam damage to the superstructure is halved, rounding down. This applies to this “burn through” damage as well.



Damage Location:

Once the number of rolls to be made has been determined, then the proper number of d10's are rolled and the results are read on the damage table. (See the section on called shots for an exception to this procedure.)

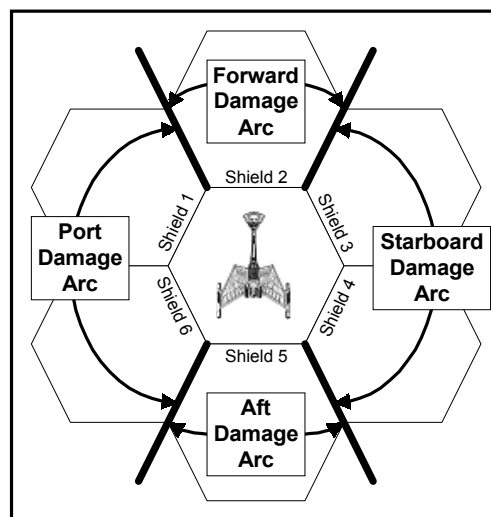
The Damage table begins with a main damage chart. This determines if the hit has just been to the superstructure or to a system on the ship. The listings on the main chart are as follows:

D10 Roll	Results
1-2	Weapons or defensive systems have been hit. These include things like beam weapons, shield generator, cloaks, etc.
3-4	Power systems hit. These are hits to the warp engines, impulse engines and thrusters.
5-8	Superstructure hit. These are hits to the integrity of the ship. Note that rolling an 8 gives a chance for a critical hit. (See the rules for critical hits.)
9-0	Command/Control system hits. These are areas like the Bridge and Engineering.

Hits to the superstructure do not require any further location rolls. To resolve superstructure hits, use the following rules:

Record the damage by crossing off boxes on the Superstructure track of the Damage & Combat Form. Beam weapons hits to the superstructure have the amount of damage done halved and rounded down (To a minimum of 1 damage point per hit). For example, a 10 point beam weapon hit scores only 5 damage points to the superstructure. When a ship is reduced to zero (0) superstructure hits, it can no longer move or fire, but the shields will still function. Ships with negative superstructure points may explode--see the section on ship explosions that follows the repair section. Damage to the superstructure may be repaired in a later Repair/Shield efficiency segment. The crew also suffers casualties. See the section on crew casualties.

Hits to the other systems of the ship require one or more additional rolls. What table is rolled on depends on what shield arc has been hit. Roll on the chart for the damage arc the ship was hit on. The diagram below shows which shields are in the Forward, Aft, Port and Starboard arcs.



For example: A ship is hit on shield number one by three 11 point beam weapon hits on shield arc one (I). Three d10's are rolled: one for each hit. The numbers rolled are 3, 6, and 0.

The 3 is a power system hit. This requires a roll on the power systems chart. Since shield 1 is in the port damage arc, a d10 is rolled and the port/starboard arc chart is used. The number rolled is a 7, thus scoring a 1/2 damage hit to the impulse engine.

The 6 is a superstructure hit. No further location rolls are needed, but a crew casualty roll will be rolled later.

The 0 is a control systems hit. The player rolls a d10 on the port/starboard arc control systems chart. The d10 comes up a 0, and the engineering spaces are hit. This causes a d10 roll on the engineering chart. Results will be worked out as listed in the section on engineering hits.

The following sections detail damage locations found on the power system, weapons/defensive systems, and control systems charts:

Weapons/Defensive Systems Locations

Effects From Beam Weapons Hits:

A beam weapon that can bear on the shooting ship is damaged. The choice of weapon is up to the captain of the target ship. (Note that if a ship receives multiple weapons hits, he can assign two (2) hits and destroy a beam weapon rather than take two separate damage hits on different weapons.) If a beam weapon hit is rolled and no beam weapon can bear, then the damage is reduced by half and applied to the superstructure just as though it were a superstructure hit. Damaged beam weapons may be repaired in a later Repair/Shield efficiency segment, but function at a lesser level after having been repaired. The adjustment to performance of repaired weapons are explained in the section on System Repair. (Note beam weapon burn through applies to this location.)

To record that a weapon has been damaged, place a slash through the weapons number on the Damage & Combat Form. Once it is repaired, circle the number. If the weapon is hit again and destroyed, add another slash to the number to make an X on that number.

<div><div><div>2</div><div>6</div><div>1</div></div><div>Damaged Weapon</div></div>	<div><div><div>2</div><div>6</div><div>1</div></div><div>Repaired Weapon</div></div>	<div><div><div>X</div><div>6</div><div>1</div></div><div>Destroyed Weapon</div></div>
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Effects From Missile Weapon Hits:

A missile weapon that can bear on the firing ship is damaged. The choice of weapon is up to the captain of the target ship. (Note that a ship receives multiple weapons hits, he can assign two (2) hits and destroy a weapon rather than take two separate damage hits on different weapons.) If a missile weapon hit is rolled and none can bear on the firing ship, then the damage is reduced to half damage and given to the superstructure. Damaged missile weapons may be repaired in a later Repair/shield efficiency segment, but they fire at a -1 to hit. (Note beam weapon burn through applies to this location.)

Record damage to missile weapons in the same manner as those for beam weapons.

Effects from Shield Generator/Cloak Hits:

The shield generator or cloaking device is damaged. If the ship has a cloaking device, roll a d10. If the number is 6 or greater, then the cloak is damaged. Apply the damage from the hit as a normal superstructure hit, plus the ship may not cloak until the hit is repaired. Record the damage by checking off the next unmarked box on the cloak section of the Damage & Combat form. If there are no more unmarked boxes, the cloak is destroyed and may not be repaired during combat. The hit is repaired as outlined in the section on system repair rolls. If the number rolled is less than 6, or if the ship has not cloak, then the shield generator has been hit. The



shield with the damaged generator is treated as deflection 0 and maximum absorption 0 until the generator is repaired. Once the generator is repaired, it immediately is restored to the deflection and absorption levels that the rest of the main arc has been powered to. Record the damage by checking off the appropriate shield generator box in the Damage & Combat Form. Each hit to the same shield generator is recorded by checking off additional boxes on that same sheet. Repairs may be attempted in a later Repair/shield efficiency segment. (Note beam weapon burn through applies to shield generator hits.)

Effects from Transporter hits:

The transporters are damaged. They may not be used until they are repaired using the system repair rules. If there is more than one type of transporters on board, then roll randomly for which type has been hit. For example, if a ship has two types of transporters, odd numbers would damage one while even numbers would damage the other. Record the damage by checking off a transporter box on the appropriate line of the Damage & Combat Form. Transporters may be repaired as outlined in the section on system repairs. (Note that beam weapon burn through applies to transporter hits.)

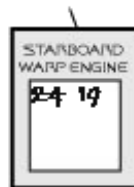
Power Systems Chart

Effects From Warp Engine Hits:

The warp engine nearest the firing ship takes damage. Facing warp engine means the one closest to the firing ship. Off side warp engine refers to the engine farthest away from the firing ship. The Constellation class cruiser has 4 warp engines, therefore, upper or lower engine must also be determined by a random die roll. Ships with single warp engines resolve all warp engine hits on that engine, regardless of what warp engine is specified on the hit chart.

Locations with the notation (1/2) on them have the damage scored by the hit reduced by half before being applied to the engine.

Record the damage by reducing the number on the Damage & Combat Form by the amount specified by the damage table; either the damage value taken, or 1/2 the damage value of the weapon (as specified on the damage chart), rounding down.



**Recording a 5 point
hit to an engine**

Warp engine power output may be put into negative numbers. If a warp engine receives damage that brings it under 0 points of power, i.e. -1, -2, etc., then roll a d10. If the number rolled is equal or less than the number of damage points below zero the hit took the engine to, then the engine has been severed from its mount, and no damage to that engine may be repaired in the tactical game. Damage points in excess of what is needed to sever an engine are applied to the superstructure using the normal rules.

For Example: A Romulan scout has four 15-point phaser blasts penetrate the shields. Two (2) of them hit the port warp engine. The engine has a power output of 16. The first hit reduces this to one (1) point of power output. The second hit reduces this to 0, brings the power output of the engine to -10, severing the engine. The remaining 4 points (1 damage point used to take the power output to 0, and 10 to sever the engine = 11. $15 - 11 = 4$) of damage burn through to the superstructure.

Had two 10-point phasers hit the engine, the first would have reduced the engine to 6 points of power output. The second would have reduced the engine to $6 - 10 = -4$ power output. The Romulan would then have to roll a d10. If the roll were less than 5, the engine would be severed.

Note that negative power output from an engine does NOT absorb power from other engines. Negative power output points DO need to be repaired before the engine can produce power again. Thus, negative output makes the engine harder to repair, and can lead to the severing of the engine from the mount.

Damage to warp engines may be repaired in a subsequent Repair/Shield efficiency segment. Once repairs have taken effect, hits to the repaired engine are treated as normal until the engine is again reduced to negative power output.

Effects From Impulse Engine Hits:

The impulse engine has been hit and takes damage. Record the damage by reducing the number on the Damage & Combat Form by the damage amount shown on the Damage Table, however entries that have (1/2) noted have the amount of damage reduced by half before being applied to the engine, rounding down. When an engine has been reduced to 0 power output, the remaining damage is divided by 2 and applied to the superstructure. Damage to impulse engines may be repaired in a subsequent Repair/Shield efficiency segment. Once repairs have taken effect, hits to the repaired engine are treated as normal until the engine is again reduced to 0 power output. Excess damage from hits on an impulse engine that has a current output of 0 burn through to the superstructure using the normal burn through rules.



Matten Greenway

Please note that power lost from warp and impulse engine hits do not cause the player to re-allocate his power on the phase the damage is taken. The ship will stay at the same power settings until the next power allocation segment. Although not

as realistic, this was done to keep game play smooth. It should also be noted, however, that if total power on a ship is reduced to zero, then per the earlier rule the ship may not move or fire. This rule takes effect on the phase the ship's power is reduced to 0, not in the next power allocation segment.

Effects From Thruster Hits:

Thrusters have been hit and take damage. The maximum thruster speed for the ship is reduced by 1. Record the damage by changing the thruster box on the Damage & Combat Form to reflect the new maximum thruster speed. If no thruster points remain, divide the damage done by 2 and apply it to the superstructure. Thrusters may be repaired in the Repair/Shield efficiency segment. When thrusters are repaired, subsequent thruster hits are treated as normal thruster hits until the number of thrusters available is once again zero. (Note beam weapon burn through applies to this location.)

Control System Hits

Effects From Sensor Hits:

The sensors are damaged and any sensor locks are lost immediately. Record the damage by marking of a box in the sensor box on the Damage & Combat Form. Little sensor information can be obtained while the sensors are inoperative, thus the affected ship cannot warp out of a fight or transport crew or troops. It may fire weapons, but the accuracy is reduced. The base modifier is -3 to hit. The ship's gunner can offset this with a skill roll. Roll percentile dice. For every 10 points under the gunner's skill level, the penalty is reduced by 1.

For example, if the gunner had a skill level of 60, and a 49 was rolled, then since the skill roll was made by more than 10 but less than 20, the modifier would be reduced to -2 from -3.) Ships with damaged sensors may not make called shots.

The sensors may be repaired in the Repair/Shield efficiency segment. (Note beam weapon burn through applies to this location.)

Effects of Command Spaces Hits:

The bridge or auxiliary control section has taken a hit. Roll a d10.

	BRIDGE	HELMA		
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WEAPONS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SCIENCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1-8	1-6	1-4	1-2 OUT

Recording a hit to the bridge helm station

If the control systems are hit, the superstructure takes 1 damage point. In addition, roll a d10 on the command spaces chart for each hit to determine what area and system has been damaged. Once the area hit is determined, mark the appropriate damage box on the Damage Control Status Display of the control sheet for the ship that was hit. Next, apply the results of the d10 roll are as follows:

**Die 10
roll**

Results

- 1-2 Bridge Crew Hit: The command crew on the bridge is shaken about, and may have been wounded or killed. Each bridge officer must make a percentile roll, then add the amount of damage taken from the hit. (Bridge personnel are the captain, helmsman, gunner, and science officer.) If the number rolled plus the damage taken is 90% or greater, the bridge crewmember has been wounded or killed, and cannot function for the rest of the game. (Note: no box is marked on the damage control display for this hit. Killed or wounded crewman are noted on the General Information Display.)
- 3 Bridge Weapons Station: The weapons controls on the bridge are damaged and may not be used to fire the ship's weapons until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 4 Bridge Helm Station: The helm controls on the bridge are damaged. The bridge controls may not be used to maneuver the ship until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 5 Bridge Science Station: The bridge science station is damaged and may not be used to roll for lock-ons or to search for cloaked ships until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 6 Aux. Control Science Station: The Auxiliary Control science station is damaged and may not be used to roll for lock-ons or to search for cloaked ships until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 7 Aux. Control Weapons Station: The weapons controls on the bridge are damaged and may not be used to fire the ship's weapons until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 8 Aux. Control Helm Station: The helm controls in Aux. Control are damaged and may not be used to maneuver the ship until they are repaired. For beam weapon hits, subtract 5 from the damage and apply the remainder as superstructure hits.
- 9-0 Aux. Control Crew Hit: The command crew in Auxiliary Control is shaken about, and may have been wounded or killed. Each Aux. Control officer must make a percentile roll, then add the amount of damage taken from the hit. (Auxiliary Control personnel are a helmsman, gunner, and science officer.) If the number rolled plus the damage taken is 90% or greater, the Aux. Control crewmember has been wounded or killed, and cannot function for the rest of the game. (Note: no box is marked on the damage control display for this hit. Killed or wounded crewman are noted on the General Information Display.)

Active Locations Vs. Off Line Locations:

Any location that is controlling the functions of the ship is considered the active location, and the other location is considered the off line location. For example, if the weapons are being fired from Auxiliary control, then auxiliary control is considered the active station, and the bridge the off line system.

Hits to off line systems or crewmen:

When an off line system or crewman is hit, there is no immediate effect to the ship. Basically, the result is only that the back up system or crewman is damaged (wounded) until repaired or replaced.

For example, all systems on an Eagle class destroyer are currently being controlled on the bridge. The ship is hit and the location rolled is a control systems hit. A d10 is rolled, and it results in an auxiliary control helm station hit. One point of damage is applied to the superstructure, and the helm box of the damage control status sheet is marked off to record the damage. Since auxiliary control helm is not actually controlling the ship, no other effect is applied.

Hits to on line systems or crewmen:

When an on line crewman or system is lost, then the effects below take effect:

- 1) Gunner Station or Gunner: The ship may not fire this turn. (If the ship has already fired, then this damage does not "undo" the shots made by this ship.)
- 2) Helm Station or Helmsman: The ship may not maneuver the following phase.
- 3) Science Station or Science Officer: The ship may not change locks or perform any new searches for cloaked ships. Locks for cloaked ship may be attempted to be retained, but the modifier for the science officer's skill roll will be 0%.

Transferring Control to Another Crewman or Station:

When the active and off line systems are both operational, control may be transferred from one location to the other during the sensor segment of any phase. The switch over takes place immediately with no lag time in the system.

When the active location takes damage and loses the ability to control a function of the ship, the player may transfer the control of that function to the off-line location - provided of course that the off line location is functional. For a location to be able to perform a function, both the crewman and the station must be functional. (For example, if the gunner on the bridge is killed and the gunner station is inoperable in auxiliary control, then auxiliary control may NOT take over for the bridge, as the auxiliary gunner has not functional controls to use.)

It takes one phase to transfer control from a damaged system to the off line location. During the transfer phase the ship suffers the effects listed in the hits to on line systems above. The other location comes on line during the sensor segment of the phase after the one (1) phase penalty has been observed. (Note that it IS possible for a ship to take a gunner station or gunner hit on the active location before it fires in the current phase, and thus lose the chance to fire for the phase. It would then have to take 1 phase to switch control to the off line location, and thus would not be able to fire until the phase after the switch is made. The end result is the inability to fire for two phases, not just one.)

If both locations are off line because of damage, there is no need to remember which station was originally the active one. As soon as both a crewman and a station are

available on the bridge or in auxiliary control, then that location may take control of the specific function without any transfer lag time.

Repairing damaged stations:

Stations are repaired using the normal system repair roll rules found in that section of these rules. Station repair rolls do get the cumulative repair bonus.

Replacing disabled officers:

It takes 2 phases (not including the phase the officer was disabled) to replace a wounded or killed officer. Once the two phases has passed, roll 3d10 and add 35% to determine the skill of the backup crewman.

As an alternative, the captain may take over the effected areas that are on the bridge. His skill level in most games will be his captain rating - 10%. (Optional: Players that use the same captains from one scenario to another may wish to roll up a history for their captain. If so, pick a main skill where the captain was trained; i.e. gunner, helm, science, or engineering. Roll 4d10 and add 40 for that skill. For all others roll 4d10 and add 30. These are the skill levels the captain will use when he has to take over a station on the ship.) While the captain mans another station, all other bridge crew suffers a -10% to their skill, as they lack someone to coordinate their efforts. After 2 phases, the player may roll three (3) 10 sided dice (3d10) and add the results to 35 to generate the back-up crewman for the effected station. The captain may then resume his duties.

Loss of the Captain:

If the captain is killed or wounded, then the coordination of the bridge crew suffers. All other bridge crewmembers perform at -10% to their skill levels until the new captain takes over. The ship also does not add the captain's skill level when determining initiative. After 2 phases have passed, the senior surviving officer on the bridge takes over as captain. (The order of seniority is: Science officer, Gunner, Helmsman.) Roll 3 dice and add 45 to determine the replacement captain's skill level, and roll 3 dice and add 35 to generate the new captain's replacement at his old station.

Fate of Disabled Officers:

In campaign games or other games where players use the same ships and captains over and over, the fate of wounded officers is resolved as follows: The medical officer rolls against his skill level. Determine how much he made his roll by and add this to the officer in question's skill level. Roll percentile dice. If the total is lower than the adjusted skill level, the officer survives, gets a Purple Heart, and may return to duty. If not, the officer has died and must be replaced by rolling a new officer. The players may want to roll for the new transfer on the following table as well:

d10	Effect
1	Green officer/Captain -10 to skill level
2-9	Average Officer/Captain
0	Experienced Officer/Captain +10 to skill level

Control hits and Boarding Actions:

If the boarding rules are used, areas that have been captured by enemy troops may not be used to control ship systems. Thus, if auxiliary control has been captured and the bridge helm control is damaged, then control may not be transferred to auxiliary control, and the ship will not be able to maneuver until the bridge station is repaired, or until auxiliary control is retaken and control passed to it. IF both the bridge and auxiliary control are captured, but engineering is still in friendly hands, then the ship will have to be controlled from engineering directly. It takes 1 phase for engineering to take over, then all skill levels will be considered to be 50 until a command space (i.e. bridge or auxiliary control) is liberated and available to command the ship again. At that time, there is no one phase delay to transfer control, as it is a voluntary switch between command locations.

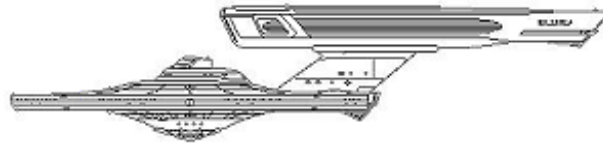


Image by Thomas Gage/Design by Eric Peterson

Effects From Engineering Hits:

Engineering is damaged. The engineer must make a skill roll and add the damage taken from the hit as described in the bridge hit section. If the engineer is shaken, he performs his duties at -5% for each point of damage from the hit, and a penalty to 10 sided die rolls that is found in the same manner as with bridge officers above. If the engineer is killed, no functions normally performed by the engineer may be performed until 2 phases later, when another engineer takes over; i.e. no skill or repair rolls that require an engineer may be made.

In addition, another vital shipboard system has been damaged. To determine which of these has been hit, roll the d10 a second time and consult the Engineering Damage Chart. The results of the system hit is as follows:

Tractor Beams Down: All current tractor beams are lost and no new tractor beams can be initiated until this hit is repaired. Record the hit by marking the next unmarked box on the tractor line of the Damage & Combat form. The hit may be repaired using the normal rules for system repairs. Beam weapon burn through applies to this hit.

Transporters Out: The transporters are damaged. They may not be used until they are repaired using the system repair rules. If there is more than one type of transporters on board, then roll randomly for which type has been hit. For example, if a ship has two types of transporters, odd numbers would damage one while even numbers would damage the other. Record the damage by checking off a transporter box on the appropriate line of the Damage & Combat Form. Transporters may be repaired as outlined in the section on system repairs. (Note that beam weapon burn through applies to transporter hits.)

Power Routing Systems Down: The power allocation settings may not be changed until this is repaired. If not repaired before an allocation phase and due to damage power has been lost, roll on table below and apply the results until enough lost power has been de-allocated. (If there is no more power in the system rolled left to lose, i.e. no thruster left and thruster rolled, just re-roll on table.)

Roll	Power Lost
1-2	1 beam weapon reduced to 0 allocation
3	1 missile weapon reduced to 0 allocation
4-5	thruster speed reduced by 1 point
6-7	Impulse speed reduced by 1 point
8-9	Rear main shield arc reduced by 1 deflection
0	Forward main shield arc reduced by 1 deflection

This hit can be repaired using the system repair rules with a target number of 7.

Weapons Power Sub-Grid Down: No weapons may be fired. Power allocated to weapons is not available until the damage to the weapons grid is repaired. Weapons fire may resume normally in the firing segment after the Weapons Power Sub-Grid has been repaired.

Shield Power Sub-Grid Down: All shields are dropped and remain inoperative until the damage to the grid is repaired. Any Power allocated to the shields will only re-power the shields in the Repair/Shield efficiency segment that the Shield Power Sub-Grid is repaired.

Maneuver Power Sub-Grid Down: The ship may not be maneuvered. On the following phase, the engines continue to move the ship straight forward at the movement rate reflected by the current Power to Movement rate. No heading changes are allowed, and the ship may not hold station. It must move one hex forward for each movement point it has. Beginning with the following phase, the ship decelerates at its maximum rate each PHASE, and then uses any remaining movement points as outlined above. The ship continues to decelerate until it reaches zero (0), or until the grid is fixed. If the damaged Maneuver Power Sub-Grid is not repaired by the next power allocation segment, the same number of power units must be allocated to movement as was allocated on the turn before. The maneuverability rating of the ship is reduced to zero until the maneuver grid is repaired. Once the grid is repaired, the ship accelerates at maximum each PHASE until the previously allocated speed is reached.

Main Power Grid Down: Power is lost to ALL sub-grids. All of the effects listed above are applied to the ship. All power sub-grids are functional again once the main power grid has been repaired.

Record hits to any grids by marking the appropriate box on the Damage & Combat Form. Any other special hits need only be noted on the sheet and erased when repaired.

ENGINEERING GRIDS				
SHIELDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WEAPONS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MANUEVERS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MAIN POWER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-8 1-6 1-4 1-2 OUT				

Grid hits can be devastating

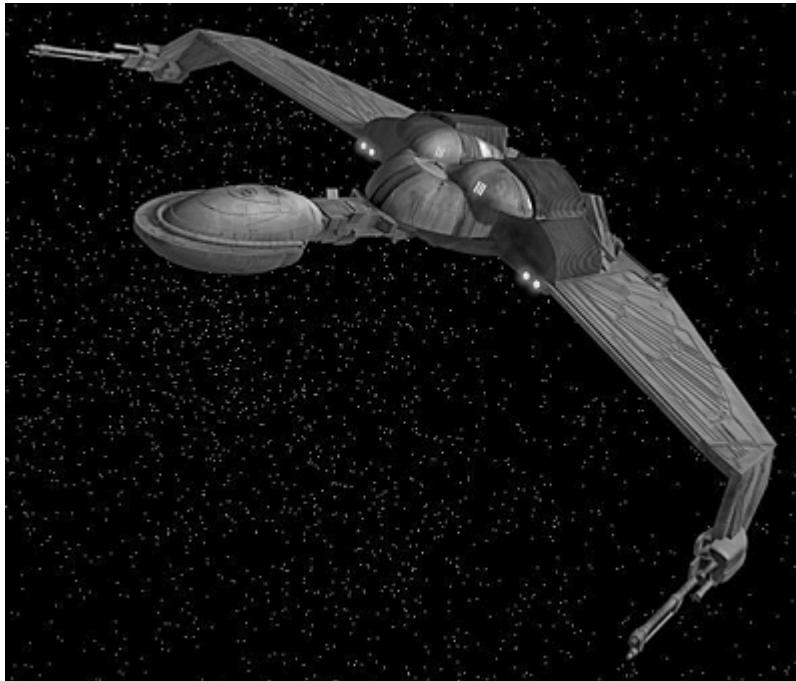
Effects from Tractor Beam hits: All current tractor beams are lost and no new tractor beams can be initiated until this hit is repaired. Record the hit by marking the next unmarked box on the tractor line of the Damage & Combat form. The hit

may be repaired using the normal rules for system repairs. Beam weapon burn through applies to this hit.

Effects From Crew Casualties

Whenever the superstructure is hit, there are crew casualties suffered. In tactical combat, the exact number of casualties is not important, but the percentage of crew lost is. The percentage of the crew who become casualties is determined by the superstructure strength of the ship, the damage done by a successful hit (up to a point), and the crew's efficiency in handling the emergency at the time.

Use the ship's original superstructure strength value and the table found on the damage location chart to find the percentage casualties given for each damage point caused to the superstructure that gives a casualties result. Then, multiply this percentage of casualties per damage point by the number of damage points, to a maximum of 5 damage points per weapon that hit, regardless of the total damage done by the shot. This will give the percentage of the crew that becomes a casualty. If the notation "C 1/2" is part of the location rolled, the crew casualties are halved before the crew roll is made.



Ships or bases with more than 100 superstructure points lose 1% crew casualties per 10 superstructure damage points until they reach 100 superstructure points. Once the 100 point level has been reached, they take normal crew percentage casualties. This represents the ship being hit in largely unoccupied areas at first.

Bases or ships with more than 200 superstructure points follow the procedure above, but take no casualties for superstructure hits until they move under the 200 point threshold.

Crew casualties caused by shield "leak" damage is always at 1/2 of the normal crew loss rate.

Efficient and/or lucky crews may reduce crew casualties as they are taken, with crew members acting swiftly to prevent disasters. To determine if this occurs, every time that crew casualties are taken, make a skill roll against the skill rating of the crew. Roll percentile dice, and if the number rolled is less than the skill rating of the crew, divide the percentage of crew casualties by 2, rounding down.

As a crew takes casualties, its ability to perform critical functions goes down. To reflect this, the crew's skill rating will be modified by casualties. Specifically, the modifiers are used when making repairs on systems or using damage control points. Do not use the crew modifiers when rolling to reduce casualties or when abandoning ship. The modifier is -1 or -10%, whichever is appropriate for the task, for each shaded box on the crew casualty track of the Damage & Combat Form that has been marked out. To hit rolls or other officer skill rolls are not affected by crew casualty modifiers.

Called Shots

Normally, damage locations are determined randomly. Alternatively, players with current valid sensor lock to the target they are firing at may attempt a **called shot**. Instead of rolling a location on the damage chart, the firing player looks at the damage chart and picks a location he would like to hit. He then determines the to hit number, adding an additional -1 to hit for the called shot. If a hit is scored, roll percentile dice against the gunner's skill level. If he makes the roll, then the hit is to the area chosen, if not, then roll a die as normal and allocate the damage to the location rolled. Cloaked ships may **not** be targeted for called shots.

Called shots from missile weapons have only the first group of damage points applied to the area chosen for the called shot, the rest must be rolled for at random following the normal procedure.

Note that called shots are made by weapon. Not all shots fired during a firing segment need be called shots, however, all called shots on any one target must be to the same target area. Multiple hit locations from multiple called shots on a target may not be chosen.

For example, if a ship is firing 6 phasers at a target, the captain may elect to fire any number of them (lets say 4 in this case) as normal shots first, allowing a higher chance to hit and weaken the shields, then fire the remaining phasers (2 in this case) as called shots. The two remaining called shots must be to the same area of the target. They may not be split and targeted at different parts of the target.

Each weapon must fired using a called shot must be rolled for separately by the gunner, i.e. if 2 called shots are made, then the gunner must roll against his skill level twice, one for each weapon. Note that this applies to each weapons fired in a collimator "burst".

Damage that leaks through the shields is ALWAYS distributed randomly, even if a called shot is made. Only damage that penetrated a shield due to it being down, or more damage being scored than the shield can absorb follow the above called shot procedure. This is because leak damage represents many different things, such as overloaded systems, kinetic damage from large salvos, etc., not just damage that the shield did not stop completely. (NOTE: If the advanced weapons rules are used, then called shots that leak from rolling a 10 on deflection rolls for missile weapons and hits from phaser cannons that leak are handled as if the shield were down.)

Repairing Damage

It is inevitable that ships will take damage in combat. Damage control is crucial to the outcome of ship to ship battles. In the Final Frontier, repairs are handled in the Repair/Shield efficiency segments. There are shield efficiency and system repairs, which take place every Repair/Shield efficiency segment, and there are repairs to the superstructure, engines, and thrusters, which takes place only in the Repair/Shield efficiency segment of the third (3rd) phase of each combat turn.

In total, each ship rolls 1 system repair roll and 1 shield efficiency roll each phase. It may make 1 engineer repair roll of any kind, as well as spend the available damage control points in the Repair/Shield efficiency segment of the last phase of the turn only.



Players will notice that at fist, it is very easy to repair damage systems. This represents the redundant systems built into each ship. Basically, the first few hits can be repaired by cutting in a backup system, or re-routing power through different systems. Later repairs are harder, due to these backup systems being damaged or destroyed.

Repairing Shield Efficiency:

A ship's shields may get some efficiency back each phase. To determine if they do, and how much, use the following procedure:

- 1) Determine the amount of shield efficiency lost due to damage stopped by the shield as outlined in the damage section of the rules.
- 2) Use this adjusted shield efficiency and enter the chart on the bottom right of the Shield Status display. Determine what the deflection number is at the adjusted efficiency level. If the number on the chart is greater than three (3), then use it as the target number, otherwise, the target number for the roll is 3.
- 3) Roll a d10.

- 4) If the number rolled is less than or equal to the target number from step 2 above, then the shields have recovered some of the efficiency lost.
- 5) The percentage of the recovery is equal to the durability rating of the shields. Thus, a ship with a durability of 5 would get 5% efficiency back every time it makes a successful roll in the shield efficiency/repair segment of each phase.

Note that the Engineer may use his skill roll on the third phase to affect the shield efficiency repair roll, just as he would any other repair roll. (See pg. 77)

Maximum shield efficiency is always 100%. Shields at 100% efficiency need not make repair rolls, as they can not boost their efficiency above 100%. Likewise, if a ship has less efficiency lost than the ship's shield durability rating, then if a successful deflection roll is made in the repair/shield efficiency segment, the efficiency is restored to 100%, not to a number above that.

System Repair Procedure:

Each ship may attempt to repair one damaged system each Shield Efficiency/Repair segment. To attempt to repair a system, use the following procedure:

- a) Pick the system to be repaired.
- b) Consult the Damage & Combat Display form for to find the repair number needed. The number needed is found at the bottom of the boxes. Use the number under the farthest left checked box. For example, if the engineering grids are showing damage to the shield grid as below, the repair range number is 1-8. The next hit will have a repair number range of 1-6. If the notation under the box is "OUT", that system may no longer be repaired.

ENGINEERING GRIDS				
SHIELDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WEAPONS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MANUEVERS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MAIN POWER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1-8	1-6	1-4	1-2 OUT

← Repair numbers

- c) Roll a d10. If the roll is less than or equal to the number needed, then the system is repaired and begins to function immediately. If not, then the system has not been repaired.

Intensified Repair Rolls:

If a system is not repaired on the first attempt, then a bonus is earned for each additional roll that is made on successive phases. This represents the cumulative effects of the repair effort. Add 1 to the next repair roll needed for the system being repaired on each consecutive phase as long as the same system is being rolled for. Any change in the system that is being repaired resets the bonus for all system repair rolls for consecutive tries to zero (0).

For example, a Romulan vessel has been taken several hits to its sensors. The current repair number range for the sensors is 1-4 (This is found on the Sensor track of the Damage & Combat Display form.) In the Repair/Shield efficiency segment of the following phase, the Romulan captain rolls for the damaged system to see if repairs are complete. The Romulan captain rolls a 7, indicating that repairs

are not yet complete. He waits until the Repair/Shield efficiency segment of the following phase to make another check. He will add 1 to the roll needed to indicate intensified repair effort. Thus, a 1-5 will be required to fix the system. The Romulan captain rolls a 6, and the system is still not repaired. In the next phase, he decides to attempt to repair a shield generator that has been hit. He looks at the repair number on the Damage and Combat form and sees that the repair number is 1-8. Since he has switched systems, there is NO repair bonus now. He rolls a 5 and the shield generator is repaired. On the next phase he again tries to repair the sensors. The target number is again 1-4, and NO repair bonus is added because it was lost when the system being repaired was changed to the shield generator.

A system repair check may not be made in the Repair/Shield efficiency segment of the same phase in which a system was damaged, because repairs have not yet begun. At least one Firing Phase must pass during which the system to be repaired receives no damage before repairs can begin. This does not mean that the ship can take no damage, but that only the system the player wishes to repair can take no damage.

Repairing Weapons:

The status of each weapon is noted by making marks on the weapon's number on the Damage & Combat Form. Review the damage results section of the rules for how to note damage and repair to weapons.

Weapon Repair Procedure:

Weapons may be repaired in the Repair/Shield efficiency segment of each phase, just like other systems. The target number range to repair a beam weapon is 1-8. The target range to repair a missile weapon is 1-6. Weapons DO get the intensified repair bonus on failed attempts just like other systems. Once repair attempts are successful that weapon may fire, with the restrictions described in the Residual Damage Effects section below.

The second time a weapon is destroyed. It may not fire for the rest of the combat. Note that inoperable weapons can be repaired in campaign games, but not in tactical games.

Residual Damage Effects:

All repaired weapons suffer a -1 to their to hit rolls.

Repaired beam weapon may be powered to only half its maximum power, and the weapons emission rate is reduced by 1. (Unless it is already 1. In this case, do not reduce the emission rate.) To find the new maximum power allocation available for the weapon, divide the original maximum power and divide by 2, rounding down.

Damage Control Points:

In the Repair/Shield efficiency segment of the 3rd phase, the ship's captain may also direct the ship's damage control parties to fix superstructure, engine, thruster damage. Each ship has a damage control rating. This is the number of points that may be spent attempting repair to the ship. The cost to try and repair one point of damage to thrusters, engines, or hull, is as follows:

a) Thruster hits--Cost 1 damage control repair point per lost thruster movement point to fix. If repaired, current max. thruster speed increases by 1 to the limit of the ship's undamaged maximum thruster speed.

b) Impulse or warp engine hits--2 damage control points per power unit to be repaired.

c) Superstructure--3 damage control points per hull box to be repaired.

The captain may spend his damage control points on any combination of the above. He then rolls against the crew efficiency for each attempt he purchased. If the roll is less than or equal to the crew's skill rating, the repair has been successful, and the ship's damage is adjusted as needed.

For example, a Miranda Class cruiser is in combat against a Klingon K'vort class cruiser. So far, the Miranda's left warp engine has taken 10 points of damage, and the shields are down to 65% efficiency. Seeing that he has 14 damage control points to spend, the Federation captain allocates all 14 repair points to try and repair 7 damage points from the left warp engine. The crew has a skill rating of 65. The player rolls seven times for his warp engine repairs, one for each point attempted. He rolls a 71, 23, 68, 47, 93, 12, and a 56. Thus, since 4 of the rolls were less than 65, four points of damage to the warp engine are repaired. He now has only 6 damage points to the left warp engine.

Lastly, in the Repair/Shield efficiency segment of the 3rd phase, the Ship's Engineer may attempt to help any one repair roll, or may attempt to fix part of the ship on his own. If attempting to help a repair roll, roll the Engineer's skill roll first. For every 10% he makes his roll by, add 10 % (or +1 to a repair roll if appropriate) to the crew's skill for that repair roll only. If the engineer attempts to fix a damage point to the superstructure, any engine, or thruster by himself, roll against his skill roll at 1/2 skill. If he succeeds, one point of damage is repaired. If not, no harm is done. Engineers may attempt to fix a power grid, weapon, shield generator etc., in this manner as well (i.e. by rolling against half of his skill level), but only one attempt to repair any of the above is allowed per turn, and only in the repair/shield efficiency segment of the 3rd phase.

Critical Hits

Sometimes a ship suffers a hit that is placed in such a way that the hit causes much heavier damage than it normally would. These hits are known as critical hits.

If an 8 is rolled on the main damage chart, then there is a chance a critical hit has been scored. Roll a d10. If the number rolled is a 1, then a critical hit is scored, otherwise, apply a normal superstructure hit.

To determine the effect of the critical hit:

1) Roll percentile dice and add the damage done by the hit that came up 8 on the chart. (For example, a 15 point damage hit would roll percentile dice and add 15.)

2) Subtract the current superstructure remaining on the target ship--damage from this volley should be included. (90 is the maximum number subtracted for the current superstructure level of any ship; however, use full value for stations.) The resulting number should then be cross-referenced on the critical hit chart to determine the effects of the critical hit.

Example: A K'tinga class cruiser has one 11 point hit penetrate its shields. The location comes up an 8, and a 1 is subsequently rolled. Thus, a critical hit has been scored. Percentile dice are rolled, getting 63. The damage from the hit is added to get $63+11=74$. The current superstructure of the K'tinga is 22. Thus $74-22=52$. The players then consult the critical hit table for the number 52 and apply the results.

Critical hits may be repaired as mentioned in the text of the Critical Hit chart.

Damage that leaks through a shield may cause critical hits to ships, but leak damage may not cause critical hits to stations or outposts. The damage added to the percentile dice is always 5, regardless of the damage of the hit or hits that scored the leak.

Ship Explosions



Damage received in combat may cause a ship to explode. When a ship receives damage that causes the Superstructure Track to drop below 0, the ship may explode. After all hits have been resolved, the captain must roll one die. If the number rolled is less than or equal to the amount of damage below 0, then the ship explodes. If the result is greater than

the amount of damage points below 0, then the ship does not explode. This roll is only made once, unless the ship takes additional superstructure damage.

For example, if the superstructure was damaged to 5 points below 0, the captain would have to roll a 6 or higher to prevent explosive destruction in this firing phase. If the ship takes 3 more points of damage to the superstructure in the next phase, (a total of 8 points of damage below zero superstructure) the captain would have to roll a 9 or 0 to prevent an explosion. When the superstructure gets to 10 or more points below 0, the ship automatically explodes.

When repairing damage on a ship that has a negative number of superstructure boxes left, the negative damages **DOES** need to be repaired. Thus, if a ship has taken 3 damage points below zero, the first 3 superstructure points repaired will bring the ship back up to 0, and the fourth will bring it back to 1 superstructure point.

Damage From Explosions:

Ships that are near to explosions will take damage. The closer the ship to the explosion, and the more powerful the explosion, the more damage the ship will take.

The strength of an exploding ship is based on the total amount of power available to the ship at the time it explodes. Any ship in the same hex as the exploding takes twice the number of power units available. Ships in the hex adjacent to the explosion receive damage equal to the total power that was available. Ships that are

two or more hexes away from the explosion will halve the damage for each hex they are away from the adjacent hex. The damage continues to spread until it reaches 1 point or less in value. When halving the damage, round the numbers up.

For example, a Klingon K'ringa Class Cruiser explodes from a photon torpedo hit. It currently has 50 power units available. Any ship in the same hex would suffer 100 points of damage. Any ship in an adjacent hex would take 50 points of damage. Any ship two hexes away would take 25 points, three hexes 13 (12.5 rounded up) points, 4 hexes 7 (6.5 rounded up) points, 5 hexes 4 points (3.5 rounded up), 6 hexes 2 points, and finally, ships 7 hexes away would take 1 point of damage. Ships 8 or more hexes away would take no damage in this case.

The damage from an explosion is applied to the shield facing the explosion. If the ship that exploded is on the line between two shields, roll randomly to determine which shield is struck. Shields are fully effective against explosion damage. Treat the explosion damage like a normal beam weapon hit for purposes of making a deflection roll. One deflection roll is made for each ship explosion that takes place. Treat the deflection roll as a normal deflection, including any modifications to the deflection roll from having been hit by weapons fire or other explosions that were of greater damage than the minimum damage rating of the shields. (If advanced weapons rules are used, explosion damage does NOT fully leak on a deflection roll of "0".)

Any damage that penetrates the shield is distributed in 5 point blocks, and the damage is applied as if it were damage from a missile weapon (i.e. full damage to superstructure locations).

Note that ship explosions that hit a ship with a strength higher than the minimum damage number of the shields of that ship count that towards any penalties to the deflection number of subsequent weapons fire and other explosions during the same phase.

Full Turn Example

This section marks the end of the basic rules needed to play "The Final Frontier". The rules that follow these basic rules are advanced rules that may be used to enhance the game by adding more complex systems seen in various movies and episodes of the television series.

But first, here follows an example that takes us through a review of the power allocation segment. Then we walk through one turn of movement and firing in the *One on One* scenario between a Klingon K'ringa Class Cruiser and a Federation Miranda class cruiser. This should help players understand the flow of the game better. Players may want to reference the sequence of play chart to follow along with the steps in the example. Remember that this example is for the core rules you have read already, and do not take into account the advanced weapons or systems rules that appear later on in this book.

Play begins after setup. Each turn begins with the power allocation segment. Here is a recap of how our Federation Captain allocated power for his first turn of the scenario:

The Federation Player in the *One on One* scenario mentioned before has completed setting up the game and preparing the portion of his control sheet that deals with crew and captain skills, shield efficiency, and current engine output. He

will now allocate power for his first turn. He begins with the Energy Allocation Form for his ship. This informs him that he has 48 warp power units available and 24 impulse power units available. Since the scenario did not specify any damage to his ship, and he has not suffered any damage yet in this scenario, he records these numbers in the column of boxes marked "Turn 1" on his ship control sheet. Thus, the Federation Captain has 72 units (these units can also be called points) of power to allocate to the ships weapons, shields, and movement.

The first box on the allocation form is for weapons. The Federation captain consults the Combat and Damage Form and determines that he has 4 phasers and 3 Photon Torpedo tubes that he can arm. As he feels that he will be in weapons range by the movement segment of the third phase of the turn, and since they are the most efficient weapons in terms of power use, he arm his torpedoes first. He consults the firing arc of the torpedo tubes and sees that two fire forward (Ahead) and 1 fires aft (Behind). Consulting the Missile Weapon box above the Beam and Missile Weapons section he sees that it requires 1 power unit to power and fire each tube, and that each torpedo does 20 points of damage. While he does not anticipate allowing the Klingon ship to move into his aft arc, he decides it is worth the one power unit as insurance in case he is out maneuvered. He charges all 3 tubes, expending 3 power units. He records this in the appropriate boxes by placing an "A" (Armed) in the box of the Photon Torpedo box on the Combat and Damage Form. Subtracting 3 from the remaining 72 power units available, he now has 69 power units left.

PHOTON TORPEDOES								
Tube	1	2	3	4	5	6	7	8
1	A							
2	A							
3	A							

Firing Arc: 1 & 2: F, 3: A

Marking Missile Weapons as Armed

The player places a 6 in each large box to denote that the weapon has been charged to full power

6		
---	--	--

Marking Beam Weapons as Armed

WARP POWER (48)	TURN 1 48
IMPULSE POWER (24)	24
TOTAL POWER (72)	72
WEAPONS Beam	24
Missile	3

Next the Federation captain consults the beam weapon section above the power allocation section of the ship control sheet. This informs him that each of his 4 phasers have a maximum power input of 6 power units and a maximum emission rate of 2 power units. He charges all 4 to the maximum, expending 4×6 or 24 power units to do so. He notes that each weapon is charges to 6 points of power on the Damage and Combat Form. Subtracting 24 units from the 69 still available, the Federation captain now has 45 units of power not allocated.

The next section of the ship control sheet is the movement section. As the scenario does not specify a starting speed, the Federation captain asses the situation and decides that with the long range between the ships on the first turn, he will need only a moderate impulse speed and a low thruster speed, as the thruster movement tends to clump at the beginning or end of the turn at lower speeds. The Captain decides on an impulse speed of 4 and a thruster speed of 2. He records these speeds on the right side of the slashes in the boxes for turn 1, then multiplying the desired speed by the movement ratios for impulse and thruster movement, he determines that he requires 4×4 or 16 power units for impulse and 2×3 or 6 units of power for thruster movement. The total cost for his movement for this turn is 22 power units. Subtracting this from 45 power units available leaves him with 23 power units still available.

The next box is the shields box. The Federation captain knows that even on the first turn it is possible to get into weapons range, and wants the maximum shielding possible. First, he allocates the 8 points needed to raise the ships shields to the maximum deflection number of 8 for the front main shield arc. He then allocates 8 more points of power to bring the aft main shield arc to its maximum deflection number of 8. Thus, he has used 16 points of power to bring the shields up to maximum. He records the absorption and deflection numbers that he has powered each of the main shield arcs to on the lines for this purpose on the shield status display. (The maximum allowable absorption and deflection can be found on the chart on the Shield Status Display.) Subtracted from the 23 units available after movement, this leaves 7 points of power unallocated.

Note that the Federation player has no cloaking device and does not anticipate beaming anyone over to the Klingon ship this turn, he skips these sections. Having a cloaking device onboard a ship requires the captain to consider additional things such as if he is going to fade in and attack this turn, how much power he can transfer to his shields if he does, etc.

The Federation captain decides to use the remaining 7 units of power to increase his thruster speed to 3 (at a cost of 3 power points) and to increase his impulse speed to 5 (at a cost of 4 points of power). Thus, all 72 units of power have been allocated.

WARP POWER (48)	TURN 1	48
IMPULSE POWER (24)		24
TOTAL POWER (72)		72
WEAPONS Beam		24
Missile		3
SHIELDS Forward		8/8
Aft		8/8
MOVEMENT: Impulse/Power Speed		5/20
Thruster/Power Speed		3/9
TRANSPORTER & CLOAK		
TOTAL POWER SPENT		72
INITIATIVE SCORE		

In this case, the ship had an even amount of power to allocate. Some ships will not have this advantage, or when in later turns not all of the power allocated to the beam weapons is used, this may not be the case. In such a case, some power may need to be dropped from shields or weapons to increase movement, or vice versa.

For example, a Federation captain has powered all of his systems, but finds that he has 2 power points left over that are not allocated. He has several options for his 2 points of power. He could just not expend them, but then they would be lost, as except for power allocated to beam weapons, power cannot be saved from turn to turn. He could drop two power units from the shields, weapons, or one from each and use the resulting 4 power units to increase his impulse speed by one. Another option would be to drop just one point of power from other systems and increase his thruster speed by one. Whatever our captain decides, he

notes this by changing the appropriate power allocation boxes in the current turn column to reflect the correct amount of power allocated to each system.

At this point our Federation captain has allocated all 72 power units available to movement, shielding, and weapons. He is now ready to continue following the sequence of play.

Next, the players determine initiative for the turn. Each player first determines his base initiative.

- The Federation player rolls percentile dice and rolls a 91. He adds his captain's skill rating of 69 to get a score of 160. He then adds the maneuver rating of his ship, which is 20 to get a total of 180 as his base initiative.

- b) At the same time, the Klingon player rolls a 47 and adds his captain's rating of 69 for a total of 116. He then adds the maneuverability percentage for his ship, which is 25, for a total base initiative of 141.



After the base initiative for both players has been determined, they both each announce their impulse speed for the turn. . The Klingon announces his speed as 4 impulse, and 3 thruster. The Federation player announces his speed as 5 impulse, and 3 thruster. As the federation player is generating 5 impulse points of movement this turn, he is one faster than the Klingon, and may add +10% to his score. This gives the Federation player a tactical score of 180+10 or 190. The Klingon

player's 141 remains unchanged because he is the slowest ship on the board and receives no other modifiers to his base initiative. The Federation player has initiative this turn because his score of 190 is higher than the Klingon's 141.

The players then proceed to the sensor segment. The Klingon player goes first, having lost initiative. He announces he will attempt a sensor lock on the Federation ship, and rolls 1 die. The die roll is a 1, and the Klingon player has a successful sensor lock. The Federation player announces he will try for a sensor lock on the Klingon ship. He rolls a 4, and also obtains a sensor lock. Both players ask the other if their transporters are powered. Both respond that they do not have them powered. Neither player sends any communications, so play continues into the first movement segment.

Neither player announces emergency evasive maneuvering. The Klingon player will move first, as he lost the initiative for this turn.

The segment begins with the first impulse movement round. The Klingon consults his allocation form and sees that the numbers he noted there for impulse movement are 1-2-1. Since this is the first round of the movement segment, the Klingon must expend a number of movement points equal to the first number of that group, which is a one. He expends the required point by moving 2 hexes forward. The Federation consults his allocation form and sees that the numbers he noted there for impulse movement are 2-1-2. Since this is the first round of the movement segment, the Federation player must expend a number of movement points equal to the first number of that group, which is a two. He expends the two movement points by moving forward two hexes for each one. The first impulse segment of the movement segment is now done, so the players move to the second impulse round.

The Klingon player has two (2) move points to expend this round. He expends the first by executing a sideslip to the port (left) side. The Klingon spends his second

movement point by executing another sideslip to the port side. The Federation player has only 1 move point for this round. He spends his impulse point by continuing 2 more hexes forward. Since both players have moved, the second impulse movement round is done, and play moves to the third impulse movement round.

The Klingon player has only 1 impulse move point for this round. He decides that the range is closing faster than he would like, and spends this point by holding station. The Federation has two move points to spend this round. He does so by moving a total of 4 hexes forward (two hexes forward executed twice). The third and final impulse movement round is over.

At this point, impulse movement has been completed for the movement segment of the first phase. As there are no cloaked ships to fade in, play proceeds to thruster movement.

The players consult the thruster move numbers that they wrote on their respective Energy Allocation Forms. The Klingon has 1-1-1 written there, and the Federation player has 1-2-1 written there. Thus, both ships will have 1 thruster movement point available for the first thruster round. The Klingon player must go first, and moves his ship 1 hex straight ahead. The Federation player also expends his thruster point by moving 1 hex forward. There is only 1 thruster movement round in each movement segment, so the players then move on to the firing segment of the first phase.

The captains count the range between the ships, and find that it is 24 hexes. This is out of range of most of both ships' weapons, but the players both place a fire or no fire counter near their ships anyway. The players then take time to note shield extensions, if any. Both players then turn their counter over. Both have revealed a no fire counter. Thus, play moves on the Repair/Shield efficiency segment of the first phase.

None of the ships have taken damage, and no shields have been hit, so there is nothing to do in this phase. Neither player wishes to warp out, so play for the first of the three phases is over, and the players return to the sensor segment to begin phase 2.

Both ships have current locks, so no more rolls are made during this segment. They automatically retain their locks, as neither target is cloaked. The Klingon player opts not to ask another question. The Federation player asks if all of the Klingon's shields are charged to maximum. The Klingon player responds that they are.

Play then proceeds to the movement segment of phase 2. Neither announces he will be executing emergency evasive maneuvers, and the Klingon player must move first again. The players expend their moves for the movement segment of phase 2 in the following way:

Round	Klingon (1-2-1)	Federation (2-1-2)
Impulse Movement 1	Hold station	2 forward, 2 forward
Impulse Movement 2	2 forward, forward and turn 1 hexside to port	2 forward
Impulse Movement 3	2 Forward	2 forward, 2 forward
Thruster Movement 2	1 hex forward	Hold station

The movement segment of phase two is now over. Play proceeds to the firing segment of phase 2.

This time, the range is determined to be 11 hexes. This is within range, but not really with great to hit numbers. Both captains decide whether or not to fire, then place a fire no fire counters, then reveal their counter. The Federation Captain places a no fire counter, so it is removed and he does not fire this phase. The Klingon Captain has decided to fire this phase, hoping to catch the Federation ship with a few unlucky deflection rolls, and thus score some early damage.

The Klingon Captain has 6 disruptors and 3 torpedoes he can fire. He decides to fire only the disruptors this turn. Each disruptor has a maximum power of 3 and a maximum emission rate of 1. The Klingon could try to fire the weapons at an emission rate of 2, but he would have to risk damage to the weapons, and this early in the fight he decides not to do so. Consulting the to hit table on his Damage & Combat Form, or by consulting the firing chart in column U (the column his disruptors use) he finds that at range 11 his base to hit number is 1-7. He consults the to hit modifier chart and determines that the speed modifier applies. This modifier is 1 (The difference in speed) divided by 2 = .5 rounded down = 0, minus 1 for being slower than the target = -1 to hit. This changes the base to hit number to 1-6. The Klingon has a lock on his target, so a +1 is added to his beam weapons to hit number, taking the number back to 1-7. Next, the Klingon player checks the maneuverability penalty. He subtracts the target's maneuverability, which is 2, from his maneuverability, which is 3. Since the result is not a negative number, there is no maneuverability modifier to the to hit number. The Klingon Captain rolls six 10 sided die--rolling a 3, 3, 1, 2, 8, and 0 (which is a 10). Four of the rolls are less than 7, so 4 shots have hit. Each shot does $1 \times 4 = 4$ points base damage, and a damage modifier at range 11 of +2 points of damage for a total of 6 damage points per hit. Thus, the total damage done is 6 points of damage * 4 hits = 24 points of damage. To record that he has fired his weapons this in the firing segment of the second phase, the Klingon player places a 1 in the second of the 3 small boxes in the beam weapon section for turn 1 on the Damage & Combat Form. This will remind him that he has fired 1 point of power in the second firing segment of the turn. As he had the ship's beam weapons charged to their full capacity of 3, he has 2 power points remaining in each weapon.



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Mateen Greenway

Next, the Federation player checks his shielding, and finds that his maximum absorption number is 90 damage points, which can easily stop the 24 damage points from the Klingon ship. He must, however, see if any leak damage is scored.

To check for leak damage, the player divides the number of damage points by 5 (which is the ship's shield durability rating). He ends up with a result of 4.

Subtracting 4 from 100, he checks the chart in the bottom right hand corner of the Shield Status Display, using the 90-100% line to determine the deflection number he must roll. In this case, it is still his maximum of 8. The Federation player rolls 4 d10, one for each disruptor that hit. He rolls a 1, 4, 5, and 6. All of these are less than 8, so no leak damage has been scored.

There are no other ships to fire, so play proceeds to the Repair/Shield efficiency segment for phase 2. The Federation player must now determine how much shield efficiency he loses. The 24 points of damage scored are divided by 5 (the shield durability)= 4%. Thus, the Federation ship stands to lose 4% shield efficiency. Once again checking the chart on the Damage & Combat Display, using the line for 90-100%, the player sees it is an 8. He rolls a d10, but rolls a 9, so no efficiency is regained. The player notes his current shield efficiency in the Shield Status boxes on the Damage & Combat Display as 96%. Per the chart on the shield status display, this is neither enough to reduce the maximum deflection number, nor to reduce the maximum absorption number.

At this point, play proceeds through the rest of the Repair/Shield efficiency segment for phase 2, with no actions being taken. Play then proceeds to the sensor segment for phase 3. No actions are taken in that segment, so play proceeds to the movement segment of the third and last phase of the turn.

Once again, the Klingon player moves first. The players execute their impulse moves in the following order and manner:

Round	Klingon (1-2-1)	Federation (2-1-2)
Impulse Movement 1	2 forward	Sideslip to starboard, Sideslip to starboard
Impulse Movement 2	2 forward, Sideslip to port	Turn 1 hexside port
Impulse Movement 3	Hold station	Hold station
Thruster Movement 2	1 hex forward	1 hex forward

The movement for the last segment of the turn is now over. Play proceeds to the final firing segment of the turn.

The range is now 2 hexes between ships. Both players place fire or no fire counters. When revealed, both captains have placed a fire counter for this firing segment. The Klingon player must declare first, and declares that all weapons will be fired, and all at the Federation ship. The Federation player declares that he will fire with all weapons at the Klingon ship.

In the firing segment, the Federation player will fire first, as he has the initiative. He elects to fire his phasers first, then his torpedoes. Consulting his Damage & Combat Form, or the firing chart in column Y for his Phasers and column S for his torpedoes, he determined that he needs a base 1-9 to hit the Klingon ship with both weapons. He subtracts 1 because of the maneuverability modifiers (his = 2, target = 3, so $2 - 3 = -1$), reducing the number to 1-8. Lastly as he has a lock on his target, the beam weapons get a +1 to their to hit number, making it 1-9. No other modifiers apply, so the numbers needed to hit are 1-9 for the phasers, and 1-8 for the torpedoes. He will fire he phasers at the full emitter rate of 2 points of power.

The Federation Captain rolls for his 4 phaser shots, scoring a 3, 7, 4, and 4: all hits. He has powered the phasers to 6 points each, and has fired their maximum emitter rate of 2 power points per phase. The damage modifier at this range is +3. Thus, each hit does $2*4 = 8$, $+3 = 11$ points of damage. Four hits times 11 points of

damage = 44 points of damage. The Federation ship then fires its photons, rolling a 2, and a 5. These both hit, and score 20 points each for a total of 40 damage points. The total damage scored by the Federation ship is $44 + 40 = 84$ points of damage.

The Klingon player consults his shield status display, and sees that his shields can stop 85 points of damage. Thus no damage has penetrated the shields, since less damage was scored than the maximum absorption level of his shields. He must now roll to see if any damage has leaked through the shields. He divides the damage done by 5, and gets a result of 16. Subtracting 16 from 100, he gets a result of 84%. He checks the deflection number for 84% and finds that it is 8. He then rolls 1 d10 for each weapon that hits. He declared that he is rolling for the beam weapons first, and rolls a 2, 4, 5, and 8. He then rolls for the 2 torpedoes that hit, rolling a 4 and a 0. The 0 is a 10, and since this is more than 8, some damage has leaked through the shields.

To determine how much damage the leaking weapons cause, the Klingon player divides the 20 damage points scored by the weapon that leaked by 5, which is his shield durability. This yields a result of 4 damage points. As his shields were at 100% at the start of the phase, this means the shields are at Step 1, so $4 * 1 = 4$ points of damage leaks through. Since only 4 points are leaked, and it requires 5 points do damage any vital systems, the 4 points are considered a superstructure hit. Since it is leak damage, we consider this as beam weapon damage. Beam weapons that hit the superstructure cause only half the total damage, so 2 points of damage are scored on the superstructure of the Klingon ship. Consulting the crew losses chart, we see that the 2 point hit would normally cause 4% crew losses. Since this was leak damage, we reduce this by half to 2%. The crew tries to reduce this to 1% by making a skill roll, but rolls a 70% and fails. Thus, 2% is marked off on the crew casualty chart.

Lastly, since 4 points of damage were scored by the Federation player, there is a 4% chance of a critical hit. The Federation Player rolls percentage dice, and they come up 39%. No critical is scored. This concludes the Federation player's firing for the segment.

The Klingon player then determines the number he needs to roll in order to hit the Federation ship. Consulting his Damage & Combat Form, or the firing chart in

column R for his torpedoes, and column U for his disruptors, both at range two, he determines he needs a base of 1-9 to hit. The Klingon captain decides to take a called shot, as he has a sensor lock, and did not performed emergency evasive maneuvers in the movement segment of this phase. The captains determine that the forward, or #2 shield of the Federation ship is being fired upon, the Klingon player looks at damage chart C (as determined by looking at the damage chart listing for the Federation ship) in the shield 2 column. The Klingon captain chooses the warp engines as his target, hoping to reduce the power output of the Federation ship. As

he is making a called shot, the Klingon player must reduce his to hit number by 1 to 1-8, as stated on the to hit modifier chart. His speed modifier for being slower than his target reduces the to hit numbers to 1-7. Lastly, he gets a +1 for having a lock on his target that is added to the beam weapons only. Thus, he needs a 1-8 for his beam weapons and a 1-7 for his torpedoes. The Klingon Player decides to fire his torpedoes first, then his disruptors.



Eric Peterson/Matt Allen

The Klingon rolls 5, 6, and 2 for his torpedoes, scoring hits with all 3. As each does 15 points of damage (As noted on the weapons portion of the ship control and ship data sheets), the Federation ship is hit with 45 points of damage. The Klingon then fires his disruptors. Once again he elects to fire only the 1 power unit allowed by his emitter rate. He does have 2 points available, but the extra power will carry over to the next turn, and it is still too early in the fight to risk weapons damage. The Klingon rolls for his 6 disruptors with 1 power unit emitted by each, scoring a 6, 9, 4, 3, 5, and 5. Thus, 5 of the 6 hit. Consulting the damage modifier for his disruptors, the Klingon finds they are +3 to damage at this range, therefore he has scored 4 (number of power points allocated *4) +3(damage modifier)= 7 points per hit. Five hits times seven damage points = 35 points of damage. The Klingon ship has scored $45 + 35 = 80$ points of damage.

The Federation player consults his shield status display and sees that the maximum absorption for his shields is still 90. No damage is scored by exceeding the absorption level of his ship, as the 80 points scored is less than the 90 his shields can absorb, however, leaks must still be rolled for at this point.

The Federation player determines his deflection number by dividing 80 by 5 to get 16%. This is subtracted from 96% to get 80%. This is enough to reduce his deflection number from the maximum of 8, since 80% is the efficiency needed to reduce the deflection number to 7. He then rolls a d10 for each hit. He announces he will start by rolling for the five disruptor hits, rolling 7, 4, 6, and 9. One disruptor has caused leak damage. He then rolls for the 3 torpedoes, rolling 5, 9, and 0. Two torpedoes have caused leak damage as well.

To determine how much damage has leaked, the Federation player divides the total damage for the hits that leaked (one 7 point disruptor and two 15 point torpedoes = 37 damage points) by 5 to get 7.4 points of damage. This is rounded down to 7 damage points. This is divided into a group of 5 points, and a group of 2 points. The Klingon player had made called shots against the Federation ships engines, but as this damage was leak damage, the called shot location does not apply. Instead, he must now roll to see where the damage is actually done. (If the damage had been scored by scoring more damage than the shields could stop, then the normal called

shot rules would be used.) The two point group can not damage vital systems, and so is applied to the superstructure. This is halved to 1 point of damage. Since this is leak damage the possible crew casualties of 2% are reduced to 1%. The Federation crew makes their skill roll, so the 1% is reduced to .05%, which rounds down to 0% or no crew losses.

The 5 point damage hit is rolled for by rolling a d10 and using the number 2 shield column of damage chart C. Much to the Klingon player's joy the roll comes up warp engine-what he was aiming at in the first place. Thus, 5 damage points are applied to a facing warp engine. The Federation player randomly determines this to be the port (left) warp engine. The damage is noted on the Damage & Combat Form in the port warp engine box.

Play then proceeds to the Repair/ Shield efficiency segment. Both ships have taken shield hits, and so their shield efficiency may decline. The Klingon took 44 beam weapon damage points, and 40 missile weapons damage points, for a total of 84. This is divided by 5 (the durability rating of his shields), resulting in 16 % shield efficiency lost. He subtracts this from his current 100% efficiency to get a modified efficiency of 84%. He checks his shield status display to find the deflection roll needed for 84% and sees it is an 8. His d10 roll is a 4. Since this is less than the 8 that was needed, he has recovered 5 percent of the 16% loss, leaving 11% shield efficiency lost. This leaves the shields at 89% efficiency. This number is noted in the shield efficiency column for turn #2, located on the Shield Status Display. The Klingon player will use this to determine his maximum deflection number and maximum absorption number for the next phase.

The Federation player took 35 beam and 45 missile weapon damage points. Performing the same calculations above, he also stands to loose 16% shield efficiency. This is subtracted from his starting efficiency this phase of 96%, for an adjusted efficiency of 80%. He checks his deflection roll for 80% efficiency and sees it is a 7. His d10 roll is a 2, so he regains 5% shield efficiency. This is added to the 80%, leaving 85%. He then notes this as the starting shield efficiency for the next phase.

At this point, the turn is over. Neither side has achieved their goal, so play continues for another turn. Remember that neither side used up all of the power allocated to beam weapons. The unused power will carry over to the next turn.

During the second turn, both players fire their beam weapons multiple times--the Klingon 3 times at 1 power point, the Federation player 3 times at 2 points each. Both ships' shields hold, and no additional leaks are caused. Both ships are reduced to below 75% shield efficiency.

To give an example of how damage is allocated, lets us assume that both ships power their ships similarly in the allocation segment of turn 3 as they did in turn 1. During the firing segment of the first phase, the range is determined to be 3 hexes, and both captains fire. The Shield efficiency of both ships drops to 70%. In the firing segment of phase 2, the Klingon fires but the Federation captain does not. The Federation ship has its shield efficiency reduced to 67%. In the firing Segment of phase 3, both captains again fire, at a range of 2 hexes. Due to reduced shield efficiency, neither ship's shields hold this time. The Klingon has again made called shots on the engines of the Federation ship, while the Federation ship fires his beam weapons on overload-i.e. at 1 power point over the normal emission rate.

The Klingon has 2 beam weapons hits of 7 points each penetrate the Federation ship's shields. He rolls against his gunner's skill for each hit that penetrated. The Gunner makes his first skill roll, so the first 7 point hit does indeed strike the engine. The Federation player randomly determines it is the right warp engine, and so its current power output is reduced by 7 points next turn unless repaired. The other 7 point hit, however, does not strike the engine, as the gunner fails his skill roll. The Klingon player then rolls for a damage location randomly, scoring a 1. The first 5 points damage the shield generator of the Federation player's facing shield, and the other 2 points burn through to damage the superstructure. This is reduced to 1, as the damage to the superstructure was from a beam weapon. This causes 2% crew casualties. The Federation player makes good deflection rolls, so no damage is caused by leaks.

The Federation player has fired his beam weapons at a higher than normal emitter rate, the damage from the beam weapons alone take down the Klingon's shield protection to 0. Thus, both torpedoes penetrate the Klingon ships shields. He divides the 40 damage points into 8 groups of 5, and rolls a location for each group. Two groups of 5 roll beam weapon hits, damaging two of the Klingon's facing beam weapons. Two other 5 point hits damages the superstructure, one hits a thruster, one hits the impulse engine, and one hits the port warp engine. The final 5 points hit a control system. The subsequent roll on the chart determines it is a Command Spaces hit.



To record this damage, the Klingon player first marks off two facing beam weapons as damaged on the Damage & Combat Form. He then places a subtracts 5 from both the port warp engine and impulse engine boxes on Damage & Combat Form; signifying that both engines have taken 5 damage points and are thus producing 5 fewer power points than normal. He then subtracts one (1) from the thruster speed box to record the loss thruster speed. Ten boxes are

marked off of the superstructure track to record the two 5 point hits there. Consulting the percent causality table, we see that ships with the superstructure strength of a K'tinga class cruiser take 2% crew casualties per damage point, and the rules state a maximum of 5 points of any damage group may cause crew casualties. The Player multiplies each 5 point damage group scored on the superstructure times 2% per point to arrive at a total of 20% Casualties. The crew attempts a skill roll, and makes the roll. This reduces the casualties to 10%, Thus, 10 boxes are marked off on the crew casualty track.

The Command Spaces requires that an additional d10 be rolled, and the result is a one (1). The bridge crew has been shaken about. All officers on the bridge must make a skill roll. The captain rolls an 84, +5 for the damage from the hit =89. This is less than 90, so the captain is uninjured. The Helmsman rolls a 98+5 damage points = 103, and has been killed or wounded severely. The ship will be without helm control for 1 phase, when control may be

switched to Auxiliary Control. The Gunner rolls an 80 +5 points damage =85, and suffers no ill effects. Lastly, the Science officer rolls a 07 + 5 points damage = 12, and is not effected.

Lastly, one of the two superstructure hits was an 8, so a critical hit may have been scored. A d10 is rolled and is a one, so a critical hit is scored.

The Federation player then rolls for a critical hit. To determine what the hit is, the Federation player rolls percentiles again and, rolling a 65. He then adds 5 for the damage done by the hit for a total of 65 + 5 = 70. After subtracting damage taken this phase, the Klingon ship has 19 superstructure points left. This is subtracted from the 70 for the final critical hit number of 41. Consulting the critical hit tables for a result of 41 we see that the ship loses partial fire control. Tying this in with the loss of the helmsman, we can conclude that the helm station must have malfunctioned, killing or wounding the helmsman, and damaging the fire control station.

Since the Federation captain fired his beam weapons at over their normal power emission rate, he must roll against the skill of his engineer to see if any were damaged. The Federation player rolls percentile dice 4 times against his engineer's skill level. One roll is missed, and thus 1 weapon is damaged. He marks this on his control sheet.

At this point, both ships have been damaged, and NO repairs to systems damaged this phase can be made at this time. This is because no repairs may be made on the same phase as the damage occurred. (Rolls to repair damage taken in previous phases may be made.) Rolls are now made by each ship to determine gains to the shield efficiency that was lost. Not being able to repair the shield generator this phase will mean the downed shield generator leaves the Federation ship vulnerable to boarding if the Klingon ship has it's transporters powered. Of course, the Klingon ship has its own problems, as the partial loss of fire control and the loss of 2 beam weapons will severely weaken its firing ability, and the ship will not be able to maneuver for one phase, when auxiliary control can take over steering the ship.

Who will win this engagement? try it for yourself, and see, Captain!!

(THIS IS THE END OF THE BASIC RULES FOR THE GAME!!!! WE suggest you play a few games then add the advances weapons rules. Play a few more games, then add any of the rest of the rules in this book to make your games more interesting.)





Wolfpack 359 Team

Special Circumstances and Rules

The following sections of the rules add more complexity to the game, but also add many of the more interesting and more popular systems seen in the movies and television series. Players are encouraged to become familiar with the basics before adding these rules to their game.

Self Destruction of a Starship

No Star Trek game would be complete without treating the ability to self-destruct one's own vessel. In the famed encounter known as "Balance of Terror", the captain of a disabled Romulan Warbird pushed the button to avoid capture. Indeed, in the debacle known as "The Genesis Incident", James T. Kirk and his crew activated the self-destruct sequence on the U.S.S. Enterprise just before they escaped.

To perform the self-destruction sequence, captains must announce at the end of any Firing segment that the ship has begun a critical overload of the matter/antimatter chamber. The captain must specify how many phases he will set the ship to self-destruct delay for. The minimum is 2 phases (20 Seconds), and the maximum is 30 phases (5 minutes.) Detonation will occur in the specified firing segment of the phase when time runs out. (Note that the times above include 1 phase to enter the proper destruction authorization sequences.)

In the firing segment of the phase when self-destruction is to take place, all fire is resolved. Then, any explosions due to damage are resolved. If there are no enemy boarding parties on board the self-destructing ship, then the ship explodes, and the effects of the explosion are determined just like any other explosion. If boarding parties are present, then a successful roll is needed to self-destruct the ship. (See Boarding Parties for the roll needed.) If two vessels self-destruct during the same phase, the explosion with the greater potential damage (i.e. the vessel with the greater total power Units available) will be resolved first.

If the ship is given the command to abandon ship, follow the rules and restrictions found in the section of the rules regarding rescues during combat/abandoning ship below.

Rescues During Combat

A captain who finds his ship in trouble can abandon ship in one of 2 ways: by beaming onto a friendly base or ship, provided it is within 4 hexes of range, or by ordering the crew to man the lifeboats and abandon ship.

By abandoning ship, the captain usually concedes victory to the enemy. If a captain decides to abandon his command and there is another ship or base in transporter range, he and his bridge crew may beam over in the normal sequence of play that a boarding party would beam over. Both of the ships/bases may use transporters to beam crewmembers aboard the rescuing ship/base, allowing a number of crew to be rescued equal to the combined total of the ship's transporter capacities each phase.

If there is no time to beam crew over, or no ships in range, then a general order may be given to abandon ship. All ships are equipped with lifeboats. These are shuttle like ships that are positioned in strategic areas around the ship's hull. To abandon a ship use the following procedure:

- 1) The Captain must order the crew to abandon ship before the movement segment of any phase of the turn. This may be combined with an order to self-destruct the ship, but an order to self-destruct is not mandatory.
- 2) Once the order to abandon ship has been given, the crew leaves their stations and head to the lifeboats. The ship may maneuver and fire weapons normally this phase, but the ship may not fire weapons after the current phase; Nor may it maneuver after the current movement phase-- The ship will move forward 1 hex for each movement point until it is destroyed or captured.
- 3) The player should mark the phase and turn that the crew is ordered to abandon ship. Once the ship actually explodes or is captured, use the following procedure to determine how many crewmembers have been evacuated:
 - a) Count the number of phases that have elapsed since the order to abandon ship was given. Do not count the phase the order was given. Multiply this by 5.
 - b) Make a skill roll for the crew. For each number under the crew's skill level, and 1 to the number from step a) above.
 - c) The total from step a) and b) is the percentage of the crew that managed to evacuate the ship before it exploded. Apply this percentage to the crew, troops, and officers of the ship. When determining which officers survive, use the following table (roll 1d6 for each officer that determined to have survived--see the example below):

- 1) Captain
- 2) Science Officer
- 3) Helmsman
- 4) Medical Officer
- 5) Gunner
- 6) Engineer

For example, if 3 phases elapse after the order to abandon ship is given, then multiply 3 times 5 to get 15. If the crew's rating is 50%, and the percentile roll is 34,

then $50 - 34 = 16$. Thus 15 (total from step a)) + 16 (Total from step b)) = 31% of the crew was able to abandon ship before the explosion.

Note that this percentage that evacuated the ship is the percentage of the CURRENT crew level of the ship, not the original crew compliment of the ship. Thus, if a ship had suffered 25% crew casualties and the order to abandon ship was given, then the percentage of survivors that successfully evacuate would be multiplied times the remaining crew--i.e. 75% of the original crew.

For example: If a Constitution II class ship, which has 425 crew members on board, had suffered 20% crew casualties, then successfully evacuated 35% of the crew before the ship exploded, the number of crew that made it off the ship would be 425 (Original Crew) - 85 (20% Crew casualties prior to abandoning ship) * 35% (the percentage of the crew that successfully abandoned ship) = 119 crew members. There are 6 major officers on the ship. Thus $6 * 35\% = 2.1$, which rounds to 2 officers that survive. Roll a $d6$ as needed and refer to the list above to randomly determine which officers survive, re-rolling any duplicate rolls. In this case, our 2 rolls are a 4 and a 5 , meaning that the survivors are the Gunner and Medical officer. The ship had 65 troops, times 20% losses = 52 times 35% evacuation rate = 18 surviving troops. Any troops that are converted to militia should be counted separately from the normal crew, in case the lifeboats are boarded by enemy forces.

If a ship explodes with no prior warning, thus no order to abandon ship is officially given, then the same procedure may be used to determine how many of the ship's crew evacuate before the explosion destroys the ship. The number of phases since the order to abandon will be 0 , since there was no order, so the only percentage of survivors will be whatever percentage is rolled under the crew's skill level. (Thus, it is very possible that there will be NO survivors.)

Once the number of survivors is determined, then the life boats must be placed on the board. Lifeboats have a 1 time use warp engine that moves the lifeboat away from the explosion in hopes the lifeboat will survive the explosion. The lifeboats then emit an emergency beacon. They are mobile, but are rather slow. The idea is to keep the crew alive until a ship can pick them up, not to actually have the lifeboat move the crew to a base or ship. The following rules apply to lifeboats:

1) Each ship launches 1 lifeboat into each of the 6 shield arcs. (Most actually launch many more than that, but these rules are used for simplicity's sake.) The boats are placed directly along the row of hexes corresponding to each of the shield arcs of the ship. They are each placed 2 hexes away from the ship, then a 6 is rolled to see how far the warp burst moves the lifeboat from the explosion. A different die is rolled for each boat, and they are moved directly away from the hex the ship explodes in. The number of surviving crew should be evenly distributed amongst the 6 lifeboats. This if 119 crew members and 18 troops in the above example survived, then these would be evenly distributed between the 6 life boats, for a total of 3 troops and 20 crew in 5 of the lifeboats and 19 crew in 1 of the lifeboats. The 2 surviving officers may be placed randomly on the lifeboats by rolling a 6 sided die ($d6$). Do not forget to handle the explosion of the ship in the normal way, and apply and damage to lifeboats that are in the explosion's radius.

2) Lifeboats may be destroyed. They are treated much like a shuttle, in that they have a 5 point 360 -degree shield, and 5 superstructure points. Thus, the shields will absorb a total of 5 points of damage, regardless of the arc they come from, then they will go down. The lifeboat is motionless after 5 points of damage, and explodes on a roll of a $d10$ just like a regular ship would. There are no escape methods from a lifeboat. Crewmembers in a destroyed lifeboat are killed.

3) Lifeboats may be boarded. Enemy troops may beam no more than the original troop complement divided by 6 troops over to a lifeboat. Thus, in our example above, a constitution class lifeboat could have no more than $425/6 = 71$ crew and $65/6 = 11$ troops per boat, and there can not be more than 11 enemy troops beamed over per lifeboat. Any crew that was converted to militia before the ship was abandoned should be evenly distributed amongst the lifeboats, and may be used in boarding actions. There is only 1 location to beam troops into or defend, as with shuttles and gunboats (q.v.). Do not use the normal ship boarding chart. Normal crew on a lifeboat may not be converted into additional militia units.

4) If a ship is abandoned while a boarding action is underway, then all of the normal crew and militia units may abandon ship, but the troops must stay behind to cover the rest of the crew. As stated earlier, a ship may be set to self-destruct as the crew is abandoning ship, per the desires of the captain.

5) Crew may be recovered from a lifeboat by docking with it, or by transporter. To dock with a lifeboat, a tractor beam must be placed on the lifeboat, then the lifeboat moved into the hex of the docking ship. The phase after it enters the tractoring ship's hex, it is considered docked. Enemy ships MAY tractor and dock Lifeboats. Lifeboats must ALWAYS shut down their engines when tractoried. Crew may be removed at a rate equal to the size class of the docking ship per lifeboat docked, per phase. The crew is added to the docking ships as of the Repair/Shield efficiency segment of the phase that docking takes place.

6) Lifeboats are unarmed. They may maneuver on the board, and have a speed of 1 impulse, 1 thruster movement per phase. Move all lifeboats on the board before executing any movement points for starships. They may not make emergency heading changes.

7) When a ship that is carrying more than its normal crew and troops, due to having rescued some from another ship or from lifeboats, any hits that cause crew casualties should also have those casualties applied to the extra crew as well as to the normal crew units.

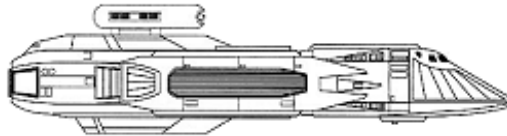
Please note that most races try to keep shipboard consoles as standard as possible. This keeps retraining to a minimum when personnel are transferred from one ship to another. This means that rescued crew can help crew the ship they are rescued by. However, not every ship has the same deck layouts. Thus, rescued crew may only be used to replace crew casualties to the rescuing ship at a rate of 20 crew members minus the size class of the ship per turn. This is to simulate the time needed to find the area of the new ship that they may best be of help in. This conversion takes place in the Repair/Shield efficiency segment of each phase

What happens to the crew and officers will depend on the race of the crew, and the circumstances of the abandonment. This will be treated later, in the campaign rules.



Giving Ships a Personality

We have found that there are times that players or referees might want to make a game more interesting by adding a little history to the ships involved. This can be done by looking up famous ship names and histories at the local library and including these histories in the Starships background. Alternatively, one can just use ones imagination to make up a name and history. To help in this process, a table has been included to help randomly generate “personality” traits for starships. By rolling a few random traits on these tables, and with a little imagination, a history can often be written about the ship’s and/or crew’s past. Most of these personality traits will not unbalance the game, however, if too many good or bad traits are rolled or chosen by a player, the referee may need to give some offsetting advantages/disadvantages to the opposing player(s). Remember that the ideas is to give some color to a scenario, campaign, or tournament, not to give one side or another a cheap advantage.



Determining Traits

The referee should either decide which ships on each side will have traits rolled for them, or have each player roll randomly to see if a ship has any special traits. This can be a simple even or odd number roll on a 10 sided die, or whatever chance the referee sees fit. If a ship has special traits, then roll one 4-sided die to determine how many it has. Then roll percentile dice on the following table to determine what the traits are, and how they affect game play. If the same result is rolled more than once, then determine if the result can be applied multiple times. If not, or if the results are contradictory, then roll again. For example, if green crew is rolled, then experienced crew is rolled, keep the first result, and re-roll the second. If faulty power grid is rolled, or a green officer is rolled, then roll to see which grid or officer might be affected. If different then the previous roll, then keep the new result. If warp engine refit is rolled twice, re-roll, do not double the effects, etc.

Roll	Special Trait
01-10	<u>Green Crew</u>
11-20	<u>Green Officer</u>
21-25	<u>Green Captain</u>
26-30	<u>Faulty Power Subgrid</u>
31-35	<u>Targeting Scanner Out of Alignment</u>
36-40	<u>Re-fit Impulse Engine</u>
41-50	<u>Exceptional Crew</u>
51-55	<u>Exceptional Officer</u>
60-65	<u>Exceptional Captain</u>
66-70	<u>Crack Marines</u>
71-75	<u>Refit to Shields</u>
76-80	<u>Refit to Warp Engines</u>
81-85	<u>Fleet Gunnery Champ</u>
86-90	<u>Crack Damage Control Crew</u>
91-95	<u>Improved Sensors</u>
96-99	<u>Improved Structural Integrity Field</u>
00	<u>Roll twice on this table, but ignore this result after the first time it is rolled.</u>



Trait Explanations:

Green Crew: The majority of the crew has never been in combat before. To simulate the effect combat has on the crew, determine the skill level of the crew in the normal way; i.e. by roll or as specified in a certain scenario. The first time that the ship is struck by enemy weapons (even if the hit does not penetrate the shields) the player must roll against the ship captain's skill. If the roll is more than the captain's skill level, then roll one 10 sided die and subtract the result from the crew's rating. This simulates poor preparation and response to danger. If the roll is less than the captain's skill level, but more than 1/2 his skill level (Rounded up), then there is no change to the skill level of the crew. This represents adequate training by the captain of his crew to face danger. If the roll is less than 1/2 the captain's skill level, rounded up, then roll a 10-sided die and add the result to the crew's skill. This represents superior preparation by the captain in training his crew to respond to dangerous situations.

Green Officer: A random officer is rolled, and is affected by this trait. This may actually be a green officer or a hack officer. If the officer is a green officer, he has no experience in combat, and the same skill roll modification procedure as in the green crew result above should be applied to the officer's skill level. If the officer is a hack officer, then he has experience, but no longer cares, or is just burn out and will not carry out his duties to his full capabilities. Subtract 10 from his skill level, regardless of if it was determined by random roll or was listed in a scenario.

Green Captain: As with the green officer result, this may be a captain with no experience, or a hack captain. If the captain is green, then follow the procedure outlined in the Green crew section to determine how he will respond to combat. If a hack, then subtract 10 points from his skill, be it rolled or specified by scenario.

Faulty Power Subgrid: Roll on the engineering table the first time any leak or other damage is scored on the ship as if engineering has been hit from the number 4 shield. If the hit is only a superstructure hit, then no damage is scored and this trait no longer applied to the ship. If the shield grid is rolled, then the ship may not make a roll to regain shield efficiency at the end of this phase only. If the maneuver grid is

rolled, then the ship may not perform any emergency heading changes this phase. If the weapons grid is rolled, then the weapons fire at -1 to hit this phase. Once any of the grids are "hit" in this manner, then this trait no longer applies. (Note this is not an actual hit, and does not need to be marked on the Damage & Combat Display, and does not need to be repaired.)

Targeting Scanner Out of Alignment: The targeting scanners are slightly out of alignment from a previous encounter and have not been repaired. Each firing phase the gunner must make a skill roll. If he does not make the roll, then all shots that phase are at a -1. If the Gunner makes his roll with a number that is less than half of his skill level, then the scanners have been realigned, and this trait no longer applies.

Re-fit Impulse Engine: The ship has just had its impulse engine refit. The engine produces 2 extra points of power each turn. The engineer must make a skill roll in each subsequent battle the ship is in, with a modifier of -10 for each battle after the first battle the ship participates in. The first time the roll is failed, the bonus output is reduced to 1 point, and the engineer skill roll modifier reset to 0. The second time the skill roll is failed, the bonus no longer applies--i.e. wear and tear have reduced the efficiency to normal.

Exceptional Crew, Officer, or Captain: This basically represents decorated officers or captains. Add 10 to the skill roll of the appropriate person or crew. This is cumulative, and may have a maximum bonus of +20 to any one person or crew's skill level.

Crack Marines: The Security troops on the ship are exceptional in boarding and defending ships. They receive +1 of all rolls to hit and for casualties during boarding actions. This modifier is in addition to any normal racial or experience bonuses. (In campaign games, this means the marines get a +10 to their roll when determining their initial skill level for the campaign.)

Refit Shields: The ship has just had its shield generators refit. Treat the shield durability rating as 1 point higher when determining the amount of shield efficiency lost, for determining the amount of leak damage, and for determining how much efficiency is gained back during the Repair/Shield efficiency segment at the end of each phase. For example, if the shield durability was 5, then for efficiency and leak purposes use 6. This trait lasts until the ship's engineer fails a skill roll, with a modification of -10 to his skill for each battle over 1 the ship is in. (Roll at the end of each battle.) If the modified skill of the engineer is less than 1, then this trait automatically no longer applies.

Ships with Cloaking Devices should first roll to see if the result is a refit of shields, or the cloaking device. (1-5 = cloak, 6-0 = grid.) If the cloak is refit, then the rating of the cloak is increased by 10% (+10%). The cloak bonus will be removed as outlined for refit shields.

Refit Warp Engines: The ship has just had its Warp Engines refit. Each engine produces 2 extra points of power each turn. The engineer must make a skill roll in each subsequent battle the ship is in, with a modifier of -10 for each battle after 1 the ship has been in. The first time the roll is failed, the bonus output is reduced to 1 point per engine, and the skill roll modifier reset to 0. The second time the skill roll is failed, the bonus no longer applies--i.e. wear and tear have reduced the efficiency to normal.

Fleet Gunnery Champ: The ship is blessed with an awesome weapons crew. All to hit rolls receive a modifier of -1 to the roll. Thus if a roll to hit was a 6, it would be considered that a 5 was rolled. The Gunner also adds 10% to his skill rating when determining if a called shot has hit the specified target.

Crack Damage Control Crew: The crew has 50% more damage control points available to use each turn. Thus, if a ship normally has 8 damage control points available in any turn, it would have $8 \times 50\% = 4$ extra points (round up), for a total of 12 damage control points available. The ship also receives -1 or -10% to the target number for all repair rolls, as appropriate.

Improved Sensors: Ship is considered a scout ship. (See the rules for scout ships.) Is the ship is already a scout ship, then the ship gets +15% to detect cloaked ships, and +1 on the number needed to detect mines.

Improved Structural Integrity Field: Add 10% to the superstructure of the ship, rounded up. For example, a ship with 36 superstructure boxes would get $36 \times 10\% = 3.6$, or 4 more superstructure boxes.

Roll Twice: Roll 2 times for this one trait, but ignore any 00 result after this. Thus, if 3 traits were to be rolled, and the second roll was a 00, then 2 traits would be rolled instead of 1 for trait number 2, and any further 00 would be ignored. Then the 3rd trait would be rolled for, ignoring any 00 result.

We hope this adds flavor to your games!!



Eric Peterson/Matt Allen

Ramming Starships

There have been a few times in the Star Trek universe where ships have been used to ram enemy ships in battle. Ships may also ram bases or other objects. Players should remember that for the most part, ramming represents the ultimate sacrifice by the ship, its officers and crew. Thus, it is not automatic that just because the captain orders the crew to ram another ship, that the crew will obey. To ram another ship on the board, use the following rules: