<p align="center">Fleet
Tactical Combat Simulator</p>

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This section gives a background of   humanity and the galaxy in the year 2120.
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This section explains the rules and mechanics of game play.
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Background

In the year 2075 the "Age of Expansion" began.. Technology had finally been able to conquer the speed of light.   The promise of riches and better life, brought about a massive exodus from an Earth suffering from over popualation and over use. In ten years there was 4 colonies with a population of one hundred thousand or more and uncountable smaller colonies.   The world governments let corporate colonies prolifirate for a percentage of the revenue. This rate of expansion would continue for the next five years.

In 2090 a corporate survey ship encountered a world that is so Earth like and pristine they name it Eden. An orbital outpost was built and the flow of trade and colonists began.   Also so began the largest plague in human history.   The viral life form that infested the planet in such a way as to lie dormant for many years. When a massive break out occurs it only confirms that large portions of the population were infected. Ironically those who live on Eden never suffered from an active viral attack.   Before the virus was identified and contained 1.5 billion humans suffered violent deaths.

As of 2119 a network of 20 colonies attest to mankind's desire to explore.   Although many other indigenous life form have been cataloged, up until now their has been no contact with a sentient alien life form.   The formation of the Terrain Core Worlds Republic in the aftermath of "Satan's Fury" created the Stellar Explorer Corp. for the purpose of exploration and initial surveying of all planetary worlds

 On 2119, December 25 the SEC FG-S Newton, a science frigate encountered a group of alien spacecraft while surveying planets in the Garada Sector. Cpt. Savage of the Newton according to procedure implemented SEC Directive 1, which defined rules of engagement for First Contact with a sentient life form.   The alien ships responded with hostility.

On December 30, 2119 the TCWR created the United Stellar Defense Fleet.

The fate of humanity and the Core Worlds is in your hand.

This was a period first after the development of hyperdrive technology.   Corporations used this technology to exploit the planets of Sol's neighbor stars.

Expression that refers to the ten largest colonies which are all within fifty light years of Earth.

Name of governing body which oversee all interplanetary relations

Viral plauge that originated on Eden in 2090. Named for the hellish demise of its victims.

Simulator Details

Fleet Tactical Combat Simulator is a simulation of starship combat in the 22nd century. A hexagonal wargame <u>Fleet</u> is a detailed representation of the tactical elements of starship combat.

The sequence of play for each game 'turn', i.e. each tick of the game clock, consists of the following phases:

Orders Phase
Players can input orders for each ship requiring new orders that turn.

Movement Determination Phase
Each objects movement orders are resolved.
Damage resolved from terrain damage, (mines, asteroids, super novas, etc.).

Direct Fire Weapons
All damage is resolved from any direct fire weapons scheduled to fire.

Seeking Weapons Phase
Resolve damage from any seeking weapons which struck their target

It is important to remember that <u>Fleet</u> revolves around ships, not players.   Players are asked for input whenever one of their ships is in need of additional orders, (as opposed to the traditional player 1 up, player 2 up, etc.)   As such, it is quite possible for one player to be asked to input orders for numerous ships while his or her opponents stand around and watch.   It is important to learn the Orders functions, as these provide the mechanisms for rapid game play.

The strategic elements of Fleet center around maneuverability and energy management.   It is important to maneuver well in order to bring weapons to bear in an optimum fashion and coordinate fire power.   Energy management of the ship's offensive, defensive and navigational systems is required to effectively utilize all of the combat potential of your ship.   Master these main elements of game play and you will win.   Combine these with a good strategy and your Fleets should conquer the Universe.

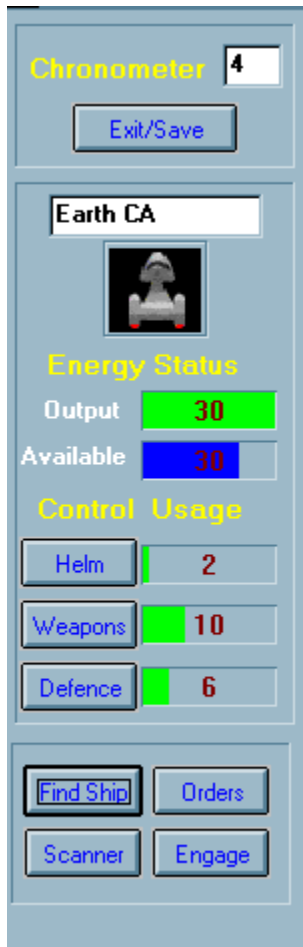Abbreviation for Fleet Tactical Combat Simulator

Quick Start

So you don't want to read all the instructions heh?   OK. Fine.   Here is the minimum needed to get a game goin ;

1.   Select play scenario from the front panel.   Select turkey.scn from the drop down menu label Selected Scenario.   Select Play.

2.   You can now enter the orders for your ship.   First click the Helm Button on the ship control panel.   This will   open up a helm control window.   Select Move Mode Intercept.   Click on the Select Button to select a target to engage.   Use the Find Ship Button or scroll the map and click on a target.   Any of the four defense pods will suffice.   Now we will automatically navigate toward the target.   You can exit the Helm control if you wish.

3.   Now select Weapons from the ship control panel.   Click the Arm Button.   All weapons will be armed simultaneously or each weapon can be selected individually from the list box for charging.   Now select Target.   Again click on the defense pod to target by either selecting it from the Find Ship control or directly clicking it on the map.

4.   Next we should consider raising some shields.   First click on the Defense Button on the main ship control panel.   Select the Auto box and push the green button to the right to increase the amount of energy allocated to shields.   This energy will be automatically allocated amongst threatened shield facings.   If you allocate more than two units of energy to the shields your weapons will not charge as fast as they might otherwise.   You will notice the energy gauge for weapons turn yellow.   If it turns red then no weapons are charging.

5.   Finally we should select the Orders Button from the main ship control panel.   Select the Recharge All Weapons box.   This causes the ship to automatically navigate toward the target until all weapons are recharged and ready to fire.   Hit the Engage Button on the main ship control panel.

6.   The game chronometer should advance until all weapons are charged and ready to fire.   Provided you are within the maximum range of the lasers you may Fire at the training pods.   If not select wait on range from the Orders Button.

This should get you going.   Cruise around the planet and destroy the training pods.   Clicking on your ship at any time will freeze the game and bring up the tactical display.   You can use this to cancel orders when required.   Good luck and have fun.

Star Ship Controls

Chronometer 4

Exit/Save

Earth CA

Energy Status

Output 30

Available 30

Control Usage

Helm 2

Weapons 10

Defence 6

Find Ship   Orders

Scanner   Engage

General

Once a scenario has been started the player is presented with a map background and the ship's control panel.   All the controls   needed to to command a starship are located on the control panel to the left of the map.   This control panel contains the chronometer and the exit button at the top.   Located below the chronometer are the ship's name and picture.   Next are the Energy Output and Energy Available displays.   These displays indicate the amount of energy currently produced and the amount remaining for further allocation.   Below that are the ship's operational   controls.   The three buttons labeled Helm, Weapons, and Shields respectively bring up a command screen which allows the user to control those ship's functions. The player also has a Tactical Scan that is available to monitor the status of the units.

Helm
Weapons

Energy Allocation

In Fleet, energy allocation occurs automatically.   As a system is commanded to perform some function, the required energy is automatically allocated from the engines.   The systems requiring energy are: Navigation, Weapons, and Shields.   Energy is allocated to each of these systems.   The energy required for each of the systems is displayed as a bar in the fields next to each of the ships main functions on its control panel.   Energy allocated to a system is represented as a green bar.

Navigation

The energy needed for navigation is determined by the speed of the ship which was set in the Helm Screen.

Weapons

The energy required to fully charge weapons which have been selected for arming in the Weapons Screen are represented by the bar.   If less than the required amount of energy is available the last weapons will not be charged as quickly.   Energy can however be "stored" in a weapon.   This allows you to pause the arming process without losing the energy already allocated.   If there is not enough energy to satisfy the arming requirements of all arming weapons, the energy status bar will turn yellow.   If the weapons are not being provided any energy the bar will turn red.   The length of the status bar indicates how much energy the weapons need to charge in the minimum amount of time. The number indicates how much energy they are actually getting.

Shields

Energy for shields is determined by how much protection has been allocated to each facing in the shields screen.

Helm

The helm screen is activated by the Helm button on the ship's control panel.   The helm screen provides all the functionality to navigate your
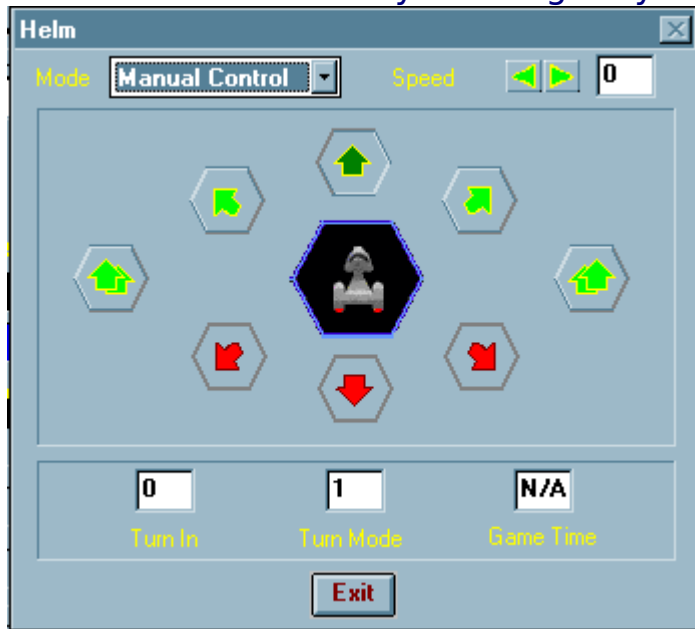
starship around the cosmos.

Under manual control, the rosette in the middle of the screen is used to input what direction you wish the ship to take.   The icon of the ship in the middle of the rosette   is facing in the ships current heading.   The combo box on the top left of the helm screen labeled mode allows many different types of movement modes.   These are described under Movement Modes

Speed
The speed function (located at the top right) allows the player to set the ships speed. Maximum game speed for a ship is 10 (forward or reverse). A ship may accelerate at double current speed or 1 whichever is greater. Ships can decelerate 1/2 current speed or 1 which   ever is greater. To go in reverse the vessel   must first be brought to a stop (speed of 0).

Turn Mode

The turn mode (located below the rosette) refers to the distance the ship must travel forward before becoming eligible to change heading. The vessel's size and speed are both factors in determining the ships turn mode.
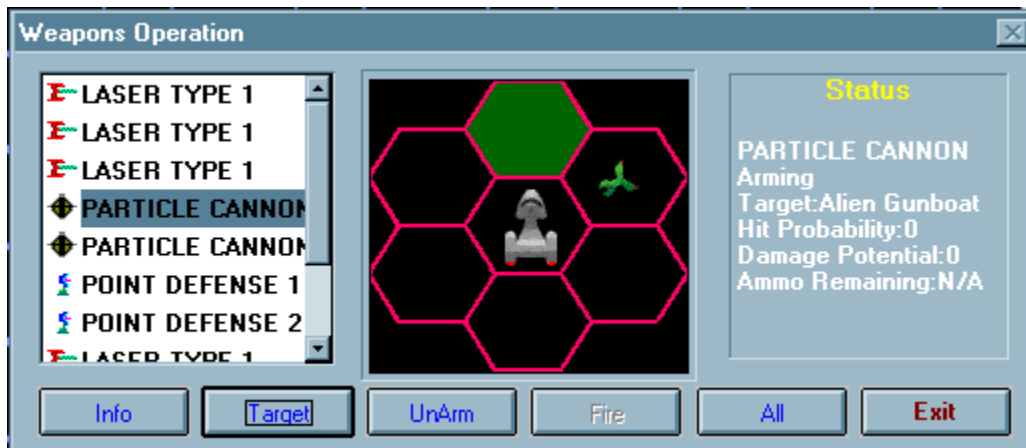
Turn In

The turn in (located below the rosette) refers to the number of hexes forward the ship must move until the   ship completes its turn mode, and becomes eligible to turn.

Game Time

The game time (located below the rosette) refers to the value the Chronometer must read before the ship will move.

Weapons

The Weapons screen provides all functions necessary to control ship offensive systems. The box on the left of the display lists each of the ships weapons. At the bottom of the screen are the buttons to arm, target, and fire the ship's weaponry.   Note that as opposed to arming each weapon individually, the user can select All and then Arm or Target to facilitate arming or targeting all weapons simultaneously.

Status
Selecting the weapon name brings up a weapons description panel on the right side of the screen.   This displays the status of that weapon. Weapons have the following status types:Empty,   Arming,   Ready, Fire,   Destroyed.

Info
Clicking Info will show wepon details for the selected weapon

Target
Clicking the Target button allows for the selecting of a target for that weapon.   By selecting the All button and then the Target button, all weapons can be targeted simultaneously.   After selecting Target, the player must click on a ship in the map area.   The weapon status display should be updated with this ship as that weapon's target automatically.

Arm/Unarm
Clicking the Arm button causes that weapon to go into the arming state.   While in the arming state the weapon will continue to draw power if availble to meet its charging requirments.   When the weapon has charged sufficiently, the status will change to ready

Fire
Clicking Fire will cause the weapon to be fired that turn.

All
Clicking All will allow you to issue commands to all weapons.
Exit
Clicking Exit will close the Weapons display

Weapon is not ready to fire, not currently arming.

Weapon is not ready to fire, not currently arming.

Weapon will fire this turn at the selected target!

Weapons is fully charged and ready to rock!

Weapon is being charged with energy or a missile is being reloaded.

Shields

There are two defensive systems used in Fleet, shields and armor. Shields are essentially an energy field which protects a certain section of the ship from damage.


Power to shields is allocated via the green buttons in the middle of the shields screen, armor requires no power allocation as it is incorporated into the ship when it is constructed.   Alternatively, the Auto box can be selected which allows for the automatic allocation of shield energy to each facing.   The green buttons to the right of the Auto box are for selecting the amount of energy to be allocated to the shields.

For each unit of energy allocated to shields, six points of shield strength can be allocated to an individual facing, or those six units can be distributed amongst the six shield facings.

Orders

The purpose of the special orders function is to speed up game play. These orders essentially set up wait states for each ship such that many clock ticks can go by without that ship requiring further orders.
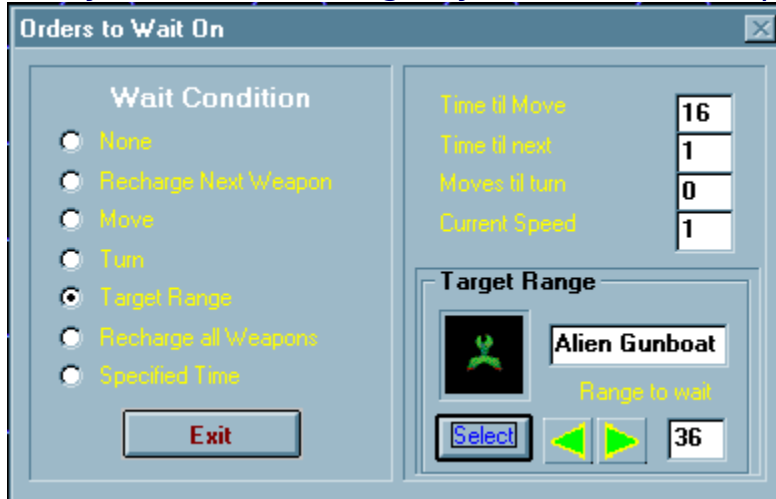
Due to various conditions, some wait states may not always be available. The following is a list of the possible wait states.

No Wait
The ship will require further orders next clock tick.
Wait on Recharge
The ship will not require further input until the next weapon is fully charged.
Wait on Move
The ship will not require further input until the ship performs it's next movement.
Wait on Turn
The ship will not require further input until the ship can turn.
Wait on Range
The ship will not require further input until it is within the range to the target specified in the range selector.   Target is selected above the

wait state selector.
Recharge All
The ship will not require further input until ALL weapons have been fully
charged.
Wait on Time
The ship will not require further orders until the number of clock ticks input into the selector has passed

Scanner

The scanner function provides each player with the big picture.
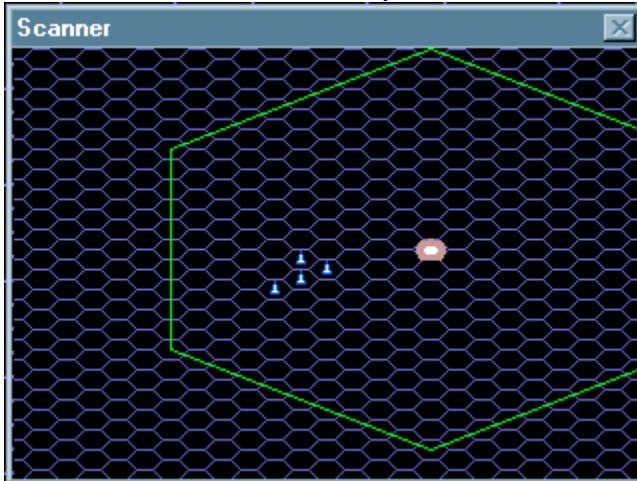
Selecting this button will bring up the scanner map display in a small window which can be conveniently placed on and off screen.   To turn off the scanner, click the scanner button again.

Engage

Pressing the Engage button commits that ship to carrying out the orders given.   This button will end the turn for that ship.   If the ship is assigned an order control of this ship will not be regained until the order is completed.   If ship needs to have an order interrupted use the Tactical Scan to break the order for the unit.

Find Ship

This function is used to locate an object that may not be visible on the

Select Target

Earth CA
Alien Destroer
Alien Destroer
Alien Destroer
Alien Gunboat
Alien Gunboat
Alien Gunboat
Alien CA
Earth Light Cruiser
Plasma Cruiser

Speed

Heading

Ok
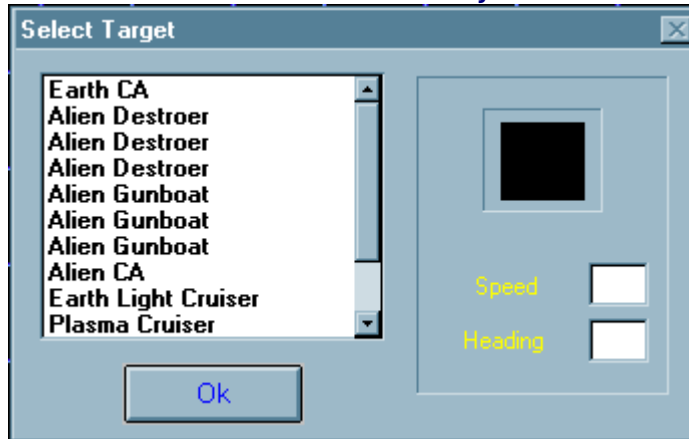
map. It

provides an easy way to move the center the view port to any object on the map. Simply select the object name in the dialog and press the Ok button to move the viewport over that target. In targeting modes this will actually select the target

Tactical Scan

Tactical Scan   ☒

Ship **Earth CA**   Current Speed **0**   Size **7**

Armor

16

15   **15**

15   **15**

14

Shields

1	12
2	9
3	
4	
5	
6	9

Weapons

Ɛ⁻ LASER TYPE 1
Ɛ⁻ LASER TYPE 1
Ɛ⁻ LASER TYPE 1
⊕ PARTICLE CANNO

Status

Energy Output	30
Hull Structure	35
Shield Generators	6
Sensors	2
Bridges	1

Cargo

Order

Close
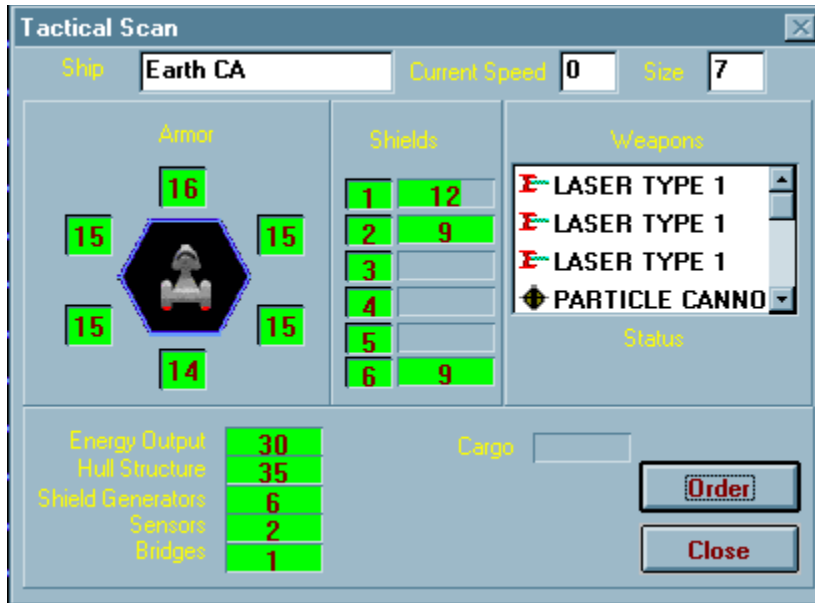
The ships tactical scanner is the resource that each player uses to determine the functional characteristics of his or some other player's ship. The Tactical Scanner is activated by clicking on almost anything in the display map. The tac-scan contains displays for shields, armor, power, weapons, and damage. This screen will dump just about all the data associated with a ship.

Space Dock

The Space Dock is where ships are built or repaired in Fleet.   The Space Dock allows the user to modify existing ship designs as well as construct new ships.   This option is invoked from the startup panel from within Fleet.

Ship Name	BISMARK

Image ◄ ►

Weapons

𝐄 LASER TYPE 3	Add
✦ HELLBEAM	
✦ HELLBEAM	Delete
✦ HELLBEAM	
✦ HELLBEAM	Arcs
𝐄 LASER TYPE 3	
✦ POINT DEFENSE	Information
✦ POINT DEFENSE	Ammo

𝐄 LASER TYPE 1
𝐄 LASER TYPE 2
𝐄 LASER TYPE 3
𝐄 FUSION BEAM
✦ PHASE CANNON
✦ DISRUPTOR
✦ PARTICLE CANN
✦ HELLBEAM

Construction Units Distribution

Reactors	◄ ► 45
Shield Generators	◄ ► 15
Armor	◄ ► 15
Cargo	◄ ► 5
Control Systems	22
Weapons	32
Total	134

Combat Statistics

Base Cost	1225
Offensive Weight	47
Defensive Weight	44

Exit/Save

Internal Systems

Structural Integrity	67
Sensors	4
Bridge/Control	6
Crew	8
Max Speed	10
☐ Starbase	
Turn Mode	8
Size Class	13

Armor

Total	150
Unused	0
Arc 1 ◄ ►	40
Arc 2 ◄ ►	25
Arc 3 ◄ ►	20
Arc 4 ◄ ►	20
Arc 5 ◄ ►	20
Arc 6 ◄ ►	25

Scenario Design

This utility allows players to create their own scenarios.   New Scenarios can be constructed by selecting theDesign option from the front screen.   Old scenarios can be loaded for play or edited by selection the Load option.   Either selection brings up the scenario builder dialog.   At the top of the control bar on the left is a list box containing players and terrain.   At least one vessel must be chosen for each captain.   Placing terrain (planets) in the scenario is optional.   In order for Mission types convoy and Defend Position to work there must be at least one terrain object added to the scenario.The Victory Conditions button on this window toggles through the selectable mission types.

Selectable mission types currently available are:

Destroy All   Destroy all enemy units.
Convoy   Get all units outside the warp effect
               radius of the terrain (planet)
Defend Position   Defend a planet.   Defending consists of preventing
               the enemy from doing the specified
               amount of damage to the planet.
Kill Target   Side A must destroy a given target.
               Target is selected in the target box.

Facts and Figures

A. Size Class

Size class corresponds to a number of construction units based on the following formula

MAX_#_CUs = 10*SIZE_CLASS

note: CUs = Construction Units

Size Class to Ship Class Translation

```
        2      4      6      8      10     12     14     16     18     20     20+
        |      |      |      |       |      |      |      |      |      |      |
<fighter>       <frigate>                      <----cruiser---->
<star base>
        <-escort>           <----destroyer-->          <battleship-->
```

B. Power

 * Maximum Power = 50% of total CUs
 * Output = 1 unit of power for each CU devoted to energy

C. Speed

 * Maximum Game Speed = 10 (FOR SHIPS)
 * Maximum Game Speed = 20 (FOR TORPEDOES)
 * Maximum Ship Speed = 3*(Total_Power_Output/Size_Class)
 * Current Ship Speed = 3*(Power allocated for Speed/Size_Class)
 * Ship cannot accelerate to speed faster than 2*current speed
 * Ship cannot decelerate to slower than 1/2 its current speed

D. Shields

 * Maximum CUs devoted to Shield generators = 40% of total
 * Maximum of 50% of Total Shield Energy can be channeled into a single shield
    facing
 * 1 CU of shield provides for 10 points of damage protection in a single
    facing.
 * 1 CU of shield is activated by 1 unit of power allocated to it.

E. Systems Overhead (Critical Hits)

Systems overhead accounts for 20% of the total CUs available for ship construction.   These CUs are removed from those available when the ship
size class is selected at ship construction time, (i.e. these CUs are

automatically allocated according the percentages below.)   It is important
to remember that these systems are damageable items, hence they can be thought
of as "critical hits".   The larger the ship, the more of these critical hits it will be able to take.
 * Sensors = 20% of CUs devoted to systems overhead
 * Control Spaces (Bridge, Engineering, etc.) = 10%
 * Crew = 40%
 * Computer = 10%
 * Shield Channel = 20% (lose one shield facing when hit)
 * Communications = 10%

F. Damage
1 Point of sustained damage = 1 destroyed CU
Note: the CU damaged is NOT hittable a second time, that CU is lost.
If the CU damaged is part of Systems Overhead then it is hittable multiple
times, with damage accumulating against that system until that system is
destroyed.

G. Structural Integrity
The number of structural integrity units = maximum number of CUs the ship started with

H. Movement
Movement cost =(Ship speed*Size class)/3
Turn mode   =(((0.5*Size class)+2)*(Abs(Ship speed)/10))

I. Armor
One CU of armor will absorb six points of damage.
There are no construction limits on armor.

K. Weapons

Weapons Class Table

Class

1	BEAM WEAPON
2	TORPEDO
3	MISSILES
4	ENERGY BASED SEEKER
5	POINT DEFENSE

Beam Weapons

Name	Class	Ranges					To Hit					Damage					Recharge Rate	Turns to Recharge	Number of CUs
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5			
Laser Type 1	1	3	6	8	x	x	10	8	7	x	x	3	2	1	x	x	1	5	1
Laser Type 2	1	3	7	9	x	x	10	8	7	x	x	5	4	2	x	x	2	10	2
Laser Type 3	1	4	8	10	x	x	10	8	7	x	x	7	5	3	x	x	3	10	3
Fusion	1	2	4	6	x	x	10	7	5	x	x	9	9	9	x	x	1	5	2
Phase Cannon	1	5	10	16	x	x	10	9	8	x	x	8	8	8	x	x	3	15	4
Disrupter	2	5	9	15	x	x	10	9	8	x	x	6	4	2	x	x	1	10	3
Particle Cannon	2	4	8	12	16	x	9	7	6	4	x	10	9	8	7	x	2	15	3
Hell Beam	2	4	10	18	x	x	9	7	6	x	x	14	10	8	x	x	3	15	3
Splash Cannon	2	5	12	20	x	x	10	9	7	x	x	20	12	8	x	x	4	20	7
Enveloping Ray	2	5	12	20	x	x	10	9	7	x	x	30	18	12	x	x	5	20	8

Note: splash cannon damage= (1/2 * facing shield, 1/4 * adjacent shields)
Note: enveloping ray damage = 1/6 * all shields

Missiles

Name	Class	Flight Duration	Damage	Speed	Damage To Destroy	Reload Rate	Number of Cus
Type 1	3	60	20	15	8	10	2
Type 2	3	60	15	15	6	10	2
Type 3	3	60	10	15	4	10	2

Torpedoes

Name	Class	Speed	Damage	Duration	Recharge	Turns to	Number of

			1 2 3 4 5	1 2 3 4 5	Rate	Recharge	Cu's
Type I	4	20	20 16 12 8 6 5	12 22 36 60	3	30	10
Type II	4	20	15 12 8 6 4 5	12 22 36 60	3	20	6
Type III	4	20	10 8 6 4 5 3	12 22 36 60	2	10	4

Note: Torpedoes take damage equal to twice the current warhead size.

Point Defense Weapons

Class	Ranges					To Hit					Damage					Energy Rate	Turns to Recharge	Number of CUs
		1	2	3	4	5	1	2	3	4 5	1	2	3	4 5			
Type I	5	2	3	4	x	x	10	9	8	x x	3	2	1	x x	1	2	1
Type II	5	1	2	3	x	x	10	9	8	x x	2	1	1	x x	1	1	1

Note: Number of turns need to recharge can vary due to energy not being available

Registration

To obtain ship construction and scenario creation utilities, additional scenarios, ships, and weapons as well as the latest registered version of Fleet Tactical Combat send check or money order for $20 U.S. ($25 outside U.S., Canada, or Mexico) to:

Smoke and Mirrors Studios
1565 Surfside Blvd.
Merritt Island FL, 32952
USA

Comments and bug reports can be sent to the authors at the above address or Email; Doug_S@msn.com,
or via Compuserve at 103635,1575
or
J_Wells@msn.com

Thanks for Registering Fleet: Tactical Starship Combat Simulator. Please include this registration form (or at least the information we need to send your copy to you) along with $20 US if you live in the United States, Canada, or Mexico.   Please include $25 US if you live

outside these three countries.

The following items are required;

First Name:
Last Name:
Email address (if you have one):
Address 1:
Address 2:
City:
State:
Country:
Zip Code:

The following information is optional;
What is your age?
What is your gender?
What influenced your decision to cough up actual money for Fleet?
Recommendation:
Price:
Article:
This is the coolest game you have ever seen:
Other:
Where did you hear about us ?
What kind of computer are you planning to run Fleet on?
CPU:
Memory:
Video Card:
Sound Card:
Other:
Operating System:

Credits

Fleet was designed and coded by John S. Wells and Douglas B. Stastny.

Graphics were created by PRGrafix.

WinG & Wavemix are Copyright Microsoft Corp.and are distributed under Microsofts License
Programming developed with Borland Language Products
Playtesters:
Drew Strikland
Jay Morris
Kevin Brasher
Jim Clark
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Movement Modes

There are two basic navigational modes; manual and automatic

Manual Control Modes
The rosette is used to choose the desired heading the ship will move in.   The side slip buttons, located to the left and right of the navigation rosette, allow the ship to move forward and to the left or right.   This allows for more maneuverability
Manual
Emergency Turn (Snap Turn)
 Tactical Turn (Turn In Place
Automatic Control Modes
Selecting an automatic mode will cause the helm screen to switch to automatic controls.   The rosetta will be replaced by the information relevant
to the automatic mode selected.
Intercept Ship
Evade
Emergency Stop

This function provides a mechanism to reset the turn mode to zero and allow the player to change headings immediately.   This maneuver is not recommended except in emergencies as it is liable to result in structural damage to the vessel.

This function   allow the ship to maneuver at speed while remaining in a hex.

This function automatically navigates the ship towards the target displayed in the selector on the left of the screen.   Note: This may crash you into a planet.

Allows for complete manual control over direction of starship

This function automatically navigates the ship away from theselected target ship.

This function   brings the vessel to an immediate stop.   This willcause damage based on how fast and how large the ship is.