STAR SECTORS: SPACE COMBAT GAME

BY G. JACK URSO, 2005

I. GAME BOARD

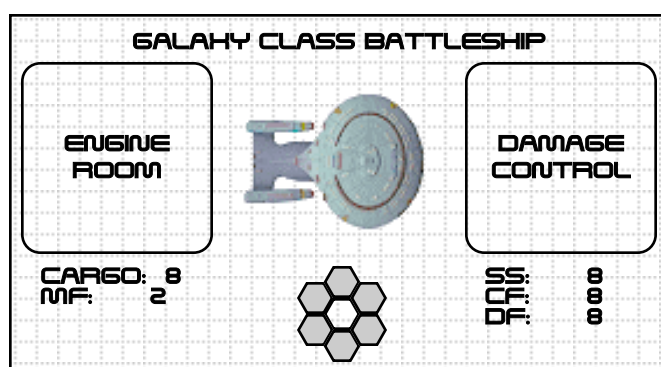The game board is a standard hex map with six-sided hexes.

II. SHIP CHARACTERISTICS

A ship profile card accompanies each ship and provides performance characteristics.

Engine Room: A storage area for mines, dilithium, trilithium, cloaking chips and warp power chips.

Damage Control: To indicate battle damage place one white chip, indicating one hit of damage in the Damage Control box. A gray chip indicates five hits of damage.

The ship's picture in the center of the profile card is where activated cloaking device chips (green) are placed.


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GALAXY CLASS BATTLESHIP

ENGINE                          DAMAGE
ROOM                            CONTROL

CARGO:  8                       SS:    8
MF:     2                       CF:    8
                                DF:    8
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Profile cards have the following abbreviations that indicate the ship's characteristics:

Cargo: Indicates how many items of cargo a ship can carry.

CF-Combat Factor: What number on or below a 12d an attacker must throw to hit an enemy vessel. Also represents the range at which a vessel can fire at a target. Damage to the ship lowers the CF -1 for every hit, affecting the ship's attack rating and range.

DF-Defense Factor: What number on or below on a 12d a defender must throw to defend his ship. Damage to the ship lowers the DF -1 for every hit.

MF-Movement Factor: The number of moves and turns a ship can make at normal or "sub-light speed." Damage can lower a ship's movement (see Section IV.E). Combine MF with CF to get the ship's warp factor (see Section IV.B)

SS-Shield Strength: How many hits a ship can take before being destroyed.

III. ORDER OF PLAY

Rounds measure the duration of time in Star Sectors. Each round is comprised of the players giving orders to the ships under their control to move or attack the enemy.

To Start:

- Each player rolls one 12d. Winner decides who goes first.

- Decide on a point value for the fleet that each side will play, 15 points, 25 points, 100 points, etc.

- A ship's combat factor determines its point value. Add one point for each cloaking device, advanced weapon bank and each extra engineering phase as indicated on the ship profile card.
  For example, a ship with a CF of 6 that has one cloaking device, two advanced weapon banks and +1 engineering phase is worth 12 points.

- Your fleet's point total represents the amount you get to spend to purchase mines, dilithium and trilithium (see Section VIII.B). What you don't spend, you lose.

- The number of mines, dilithium or trilithium each ship can carry is limited to the cargo factor indicated on its profile card. The markers for these items are placed in the engine rooms of the ship profile cards.

- Place terrain tiles and space stations before deploying ships.

- Deploy ships along first row of hexes on opposite sides of each player.

There are two phases for each ship's turn:

1. Tactical:

During this phase a ship can move and/or attack another ship.

2. Engineering:

- During this phase a ship can repair shields, transfer power, charge warp engines and advanced weapon banks.

The tactical phase always occurs before the engineering phase.

See Section IV for information on the tactical phase, see Section V for information on the engineering phase.
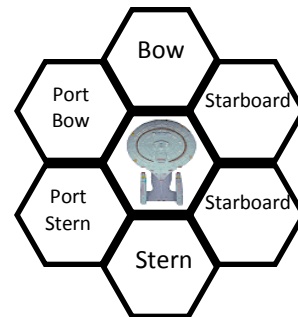
IV: TACTICAL PHASE

A) *Moving:*

- A ship's movement factor (MF) determines how many moves and turns a ship can make in total.

- A ship's bow is always pointed towards the flat side of a hex.

- A ship can move forward only in the direction its bow is pointed and in reverse only in the direction its stern is pointed.

- All ships can move in reverse at 1 MF as long as the ship was not moving forward on the same turn.

- By utilizing the *command crew's* engineering option a ship can increase it's MF +1, including in reverse (see Section VII.B).

- A ship's firing arc is identified by the targeting diagrams that appear on the ship profile cards.

- A hex has six sides, therefore it would take six moves to turn around 360-degrees inside a hex.

NOTE:

The diagram at right shows how a ship looks when deployed in a hex.
The bow is pointed up, the stern is pointed down.

IV: TACTICAL PHASE

B) *Warp Drive:*

To determine your ship's warp factor add the ship's current CF and MF together. The result (warp factor) is the number of space you can move your ship in a direct Line of Sight (LOS).
    For example, a ship with a CF of 6 and an MF of 3 has a warp factor of 9.

- A ship's MF can be considered its sub-light speed. This is the speed a ship can normally move at, even if the warp engines are not charged.

- A warp engine can be charged during a ship's engineering phase only if a ship did not attack, repair damage, cloak or decloak or complete a warp jump (see Section V.A).

- A warp engine is charged by placing one green chip in the engine room of a ship profile card.

- Only ships with nacelles have warp engines. A ship can charge as many engines as it has nacelles.

- A ship must charge its warp engines before using them, only one engine can be charged or used per turn.

- A ship cannot charge any of its warp engines the same turn its completes a warp jump.

- A ship can perform only one warp jump per turn, no matter how many charged warp nacelles it has.

- A ship can go to warp and attack on the same turn, however, attacks can only occur before or after the warp jump is completed. A ship cannot warp, attack, then go to warp again.

- A ship cannot turn before, during or after the warp jump, it must go in a straight, direct LOS.

- Ships can reverse warp at half its warp factor, round up fractions to nearest whole number.

- Ships can only *jump and cloak* or *decloak and jump* on the same turn. No ship can cloak and decloak the same turn (see Section VI.A).

- After the warp jump remove the green chip from the ship's engine room.

In the rare circumstances that a ship's damage reduces its MF to zero, but the ship still has SS, then the warp engines are considered damaged until ship repairs restores movement to at least 1 MF.

C) *Warp Energy Transfer:*

- Once per turn, energy from a charged warp engine can be diverted to increase a ship's performance, as long as the ship did not attack the same turn (see Section V.A). Player chooses one of the following modifiers:
        +1CF, +1DF, +1 MF, or +1 shield repair during engineering phase.

- Performance modifiers from warp power transfers cannot be combined with dilithium or trilithium.

IV: TACTICAL PHASE

D) *Targeting:*

A ship's firing arc is indicated by the seven-hex targeting diagrams on the ship profile cards (with the ship's position being in the center hex). The diagrams below show which hexes a ship could target in an attack, shown in gray in the example below.

The ship pictured in the examples below has a CF of 3, which represents both attack and range. For ships with higher combat factors and longer ranges simply continue the firing arc patterns as shown.
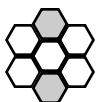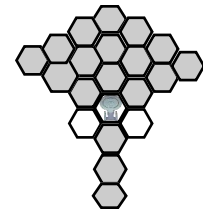
Ships with the diagram at left have no combat factor and cannot target any enemy vessels.
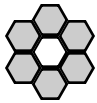
Ships with the diagram at left can target any enemy vessel in a 360° arc within its range as indicated by the gray hexes at right.
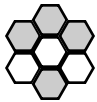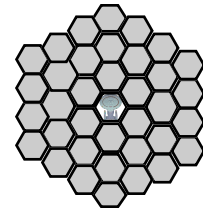
Ships with the diagram at left can target enemy vessel within its range as indicated by the gray hexes at right.

Ships with the diagram at left can target any enemy vessel within its range as indicated by the gray hexes at right.

- To engage an opponent you must move your vessel within range and in a direct Line of Sight (LOS). The sectors between the attacking ship and targeted vessels must be empty, no asteroids, planets, nebulae, or other vessels, regardless of alliance, can occupy the sector if you want to fire through it.

IV: TACTICAL PHASE

E) *Attacking:*

- The point of an attack to reduce an enemy's ship's SS down to zero and destroy it.

- The attacker suffers -1 CF for every space after the first adjacent hex the target is located.
    - For example, an attacker would suffer -1 CF when firing at a target two hexes away.

- The best way to determine CF modifiers when attacking is to count the blank hexes between the attacker and defender and subtract –CF for each blank hex.

- Some ship hulls are so long they occupy more than one hex. When determining the firing path the LOS begins from the closest point along the attackers hull to the defending ship.

- The three front hexes directly adjacent of the attacker are the **"point blank"** hexes. Because the defender is so close an attack is more likely to result in a hit, therefore the attacker gets to **roll two 12d at its full CF** at any target in the point blank hex within its firing arc. The attacker chooses the better of the two rolls. The ship's flight stand must be in the adjacent hex for this to take effect.
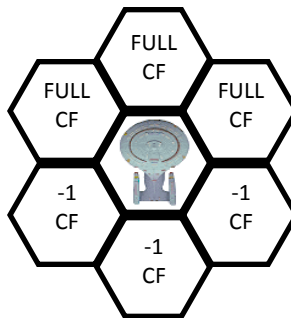
- When two ships' hulls extend into adjacent hexes an attack at full CF is permitted, however, the attacker rolls only one 12d, even though the attack is at its full CF.

- The attacking ship and rolls only one 12d and suffers -1 CF when targeting vessels in the hexes directly aft, starboard aft or port aft.

- Multiple attacks during a turn against a single ship occur separately. The defending ships rolls one 12d at its current defense factor (DF) against each attack. Resolve damage from each attack separately.

- If a ship does not fit in a hex adjacent to another ship then it must move somewhere else.

- An attacker can continue to move after attacking another vessel, however, it cannot engage another ship for the rest of the turn.

- Damage to a ship can reduce its combat factor (see Section IV.G).

IV: TACTICAL PHASE

F) *After Combat – Determining a ship's damage:*

- The hits a ship takes in combat are actually to the vessel's force field shield that surrounds it. The Shield Strength or SS number represents the total strength of a ship's shield.

- The Defense Factor (DF) represents the likelihood the shield will fail. The DF is the number you roll for when defending from an attack.

- Damage is indicated by placing one white chip for every hit in the Damage Control box. One gray chip represents five hits.

- Every hit reduces a ship's CF and DF by one. For example, if a ship with a CF of 3 has one hit its CF now becomes 2.

- During the Engineering phase of a ship's move you can decide to can repair damage and remove one white chip from the Damage Control box (see Section V.A).

- If dilithium crystals on board the ship in the engine room then they can be used to restore one lost shield factor in addition to the one hit a ship can restore normally (if it neither attacks nor cloaks). To do so, remove one silver dilithium crystal chip and one white damage chip from the Damage Control box.

- A ship is destroyed when the amount of damage equals its SS factor.

- A ship can destroy another ship and move through the hex it once occupied on the same turn (if it has enough moves), however, if a ship is destroyed all ships in its "point blank" hex zone, both friend and foe, experience –1 SS.

G) *Applying damage modifiers to a ship's movement factor (MF):*

- Add up the number of hits.

- Subtract the number of hits from the ship's original SS factor.

- If the result is lower than the ship's current MF then reduce movement to the lower number.

- If the result is equal to or greater than the ship's current MF then movement is not effected.

Examples:

- A ship with a SS of 8 and a MF of 2 has six hits of damage, leaving it with a SS of "2." SS 2 - MF 2 = 0. In this case the ship's MF is not reduced. If it had seven hits of damage, leaving it with a SS of "1," then the ship's MF s reduced -1 to MF 1.

- A ship with a SS of 5 and a MF of 4 has 3 hits of damage, leaving it with a SS of "2." MF 4 - SS 2 = 2, in this case the ship's MF is reduced -2 to MF 2.

- A ship with a SS of 10 and a MF of 2 has four hits of damage, leaving it with a SS of "8." SS 8 - MF 2 = 6.

V: ENGINEERING PHASE

A) Engineer's Duties:

During this phase a ship can do the following:

- Transfer power from an advanced weapon bank to repair one damaged shield (one bank transfer per engineering phase).

- Transfer power from a warp engine to repair one damaged shield (one transfer per engineering phase).

- Use one unit of dilithium to restore one damaged shield.

- Use one unit of trilithium to change an advanced weapon bank.

AND do **ONE** of the following **ONLY** if the ship did **NOT** attack during turn:

- Repair one damaged shield factor (removed one while chip from Damage Control box).

- Charge a warp engine (one green chip per nacelle).

- Charge an advanced weapon bank.

- Cloak, if the ship did not also de-cloak the same turn.

When restoring damaged shields by using dilithium (silver chips for 1 unit; black chips for 5 units) or the energy from a charged warp engine (green chips) remember to remove those chips in addition to the white chip representing a damaged shield in the damage control box on the ship profile card.

Additional repairs can be made by utilizing a command crew's engineer option (see Section VII.B), or by entering a metaphasic nebula. Benefits from a metaphasic nebula only occur during the engineering phase.

Ship's with three or more nacelles get an extra engineering phase and can repeat the above duty options.

B) Cargo, Mining and Repair Operations:

A ship can conduct cargo, mining and repair operation only if it did not attack the same turn.

- It takes one complete turn to on- or off-load any cargo or personnel.

- When conducting cargo or repair operations the player must remain docked (in the hex adjacent to the asteroid, planet, moon or space station) or within the nebula for one turn before transferring cargo, mining resources or repairing damage.

- A space station can repair two hits of damage per turn the following turn after the ship docks. This can be performed in conjunction with a ship's regular engineering phase, however, space stations can repair damage to only one ship at a time.

- A ship MAY change its orientation while on an asteroid or planet terrain tile and continue to gather resources as long as its movement factor is not exceeded.

VI: TACTICAL DEVICES

Specialized tactical devices enhance a ship's combat performance.

These devices include:

A) Cloaking Devices:

If your ship has a cloaking device it will be indicated on the profile card. Although not a weapon per se, a ship with a cloaking device can be a very dangerous opponent. The clear blue chips represent the cloaking devices, which are stored in the ship's engine room until activated.

When active, a cloaking device's blue chip is placed on the ship's picture on its profile card. This shows the players which ships in play are cloaked. When a ship de-cloaks move the blue chip back to the engine room.

- A ship's Movement Factor (MF) is reduced -1 when cloaked.

- Ships that have enough damage to reduce its movement to 1 MF cannot cloak until damage is repaired and the vessel can move at least 2 MF.

- A cloaked ship cannot fire its weapons.

- A cloaked ship cannot be fired upon.

- A cloaked ship will activate a mine and suffer damage the same as a uncloaked ship..

- The cloaking field of a cloaked ship between two hostile vessels disrupts the targeting sensors of both ships and neither can fire upon the other, even if one vessel is allied to the cloaked ship.

- A ship can either cloak or de-cloak once per turn, it cannot do both.

- A ship can de-cloak and attack a ship, but it cannot attack and then cloak during the same turn (attacking draws energy from weapons whereas de-cloaking releases energy to the weapon systems).

- Cloaking devices do not work inside ion storms and nebulae.

- A cloaked ship cannot conduct mining or cargo transfer operations.

- A cloaked ship can repair damage, but NOT during the same turn the ship cloaks or de-cloaks.

VI: TACTICAL DEVICES

B) Advanced Weapons:

Advanced weapons, like a plasma torpedo launcher, allow a ship to fire without rolling a die.

- Advanced weapons can be charged during the engineering phase, one bank per turn/phase.

- Advanced weapons are represented by red chips; one per weapon system.

- The number of advanced weapon banks on aboard a ship is indicated on the ship profile card.

- No dice are required to fire an advanced weapon.

- Advanced weapons can only be fired directly forward off the bow and not at an angle.

- Advanced weapons can be fired in combination with regular attack roll. (but only against the same target).

- The hex directly adjacent to the attacker is the "point blank" hex. Attacker fires at its full CF at any target in this hex.

- Attacker suffers a -1 modifier to its combat factor (CF) for every space after the first adjacent hex. For example, an attacker would suffer -1 CF when firing at a target two hexes away.

Advanced weapons work in the following way:
- Attacker declares target and removes attacking ship's red chip from profile card.

- Calculate combat factor modifier according to the advanced weapon guidelines above. For example, an attacker would suffer -1 CF when firing at a target two hexes away.

- Defender rolls as normal. Ships with an advanced weapon can fire both the advanced weapons and roll for a normal attack or fire only the advanced weapon and forfeit the normal attack roll. This allows the ship to repair damage the same turn while firing an advanced weapon. The reason for this is that the advanced weapon had been charged already and therefore the energy is "outside" the ship's active energy grid. Therefore, it can be discharged while the ship's regular energy grid repairs shield damage.

The following conditions apply when using advanced weapons:
- Under no circumstances can a single advanced weapon bank be charged during the same turn it is being discharged.

- A ship with two advanced weapon banks may discharge one bank while recharging the other, or may discharge both at the same time.

- An advanced weapon energy chip can also be used to restore one factor of a ship's shield strength.

- Advanced weapons can be modified by a command crew's tactical option.

VI: TACTICAL DEVICES

B) Advanced Weapons (con't):

Abbreviations used on the ship profile cards for advanced weapons include:

PTL	Plasma Torpedo Launcher	**QTL**	Quantum Torpedo Launcher
DC	Disrupter Cannon	**PC**	Phaser Cannon
PLC	Plasma Cannon	**PPB**	Phased Poleron Beam
DWC	Disrupter Wave Cannon	**TWC**	Tholian Web Caster*
TBP	Tachyon Burst Projector*	**EDT**	Energy Dampening Torpedo*

*Tholian Web Caster (TWC)/ Tachyon Burst Projector (TBP)/Energy Dampening Torpedo (EDT):
Each device reduces a targeted vessel's DF instead of causing shield damage.

For example a ship with a Tholian Web Caster and a CF of 5 is three spaces away from a targeted enemy vessel. 5 - 3 = 2. The enemy's DF is reduced -2 for the duration of the turn, no matter if other vessels target it. It is possible to "zero out" an enemy's DF using one of these devices.

VII: TERRAIN and RESOURCES

All terrain blocks weapons fire so that a ship can protect itself by keeping one of the terrain types between itself and the attacker. Different terrain can affect a ship's performance in unique ways.

A) Terrain:

Asteroids Fields:

- Impassable to all ships.

Ion Storms:

- Ion storms are represented by single-hex red gas cloud tiles.

- All weapons and cloaking devices are disabled in an ion storm.

- Any part of a ship within an ion storm cannot be targeted.

- Any part of a ship not completely within an ion storm can still be targeted.

VII: TERRAIN and RESOURCES

A) Terrain (con't):

Metaphasic Nebulae:

- Represented by single-hex blue gas cloud tiles.

- Yields one unit of trilithium per ship per turn.

- +1 shield repair per turn, ship base must occupy hex.

- Cloaking devices disabled, can re-cloak only after exiting nebula.

- Ships in a nebula cannot fire on or be fired upon from ships outside the nebula.

- Any part of a ship not completely within the nebula can still be targeted by enemy ships outside the nebula.

- -1 MF when entering, traveling through, or exiting a nebula.

Moons:
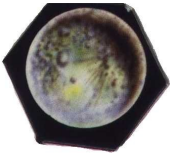
- Yields one unit of dilithium per ship per turn.

- All movement stops when entering orbit (by moving onto an adjacent hex).

- Half movement factor in orbit, round up fractions to nearest whole number.

Mutara Nebulae:

- Represented by seven-hex nebulae tiles

- Cloaking devices disabled, can re-cloak only after exiting nebula.

- Ships in a nebula cannot fire on or be fired upon from ships outside the nebula.

- Any part of a ship not completely within the nebula can still be targeted by enemy ships outside the nebula.

- -1 CF and DF.

- -1 MF when entering, traveling through, or exiting a gas cloud/nebula.
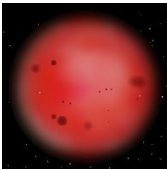
VII: TERRAIN and RESOURCES
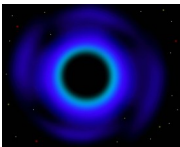
A) Terrain (con't):

Planets:

- Yields one unit of dilithium per ship per turn.

- All movement stops when entering orbit (by moving onto an adjacent hex).

- Half movement factor in orbit, round up fractions to nearest whole number.

Stars:

- All adjacent hexes off-limits.

- All ships automatically destroyed when in a hex adjacent to a star.

Worm Holes:

- Transports ships automatically to another worm hole regardless of range.

- Ships can move only one space when exiting a wormhole.

B) Resources:

Command Crew:

- Costs 4 credits plus cost of ship (as indicated by CF), as outlined in Section III.

- Represented by gold tokens, only one per ship.

- Player chooses one of the following modifier options at beginning of turn:
  - Command: +1 die roll for defense (roll two 12d, choose best roll).
  - Helm: +1 MF (at both sub-light and warp, including reverse).
  - Engineering: +1 shield repair during engineering phase.
  - Science: Detect cloaked vessel.
  - Tactical: +1 die roll at any range (roll two 12d, choose best roll).

- Can be used in conjunction with modifiers from dilithium, trilithium (see next Section VII.B) and warp power transfers (see Section IV.B).

VII: TERRAIN and RESOURCES

B) Resources (con't):

Mines:

- Costs 1 credit per unit, causes 3 hits of damage.

- Represented by the mine terrain tile.

- Can only be deployed aft of ship as ship moves or stands still.

- Will detonate if any part of a ship enters a mined hex.

- Can be targeted and destroyed by enemy fire.

Dilithium:

- Costs 2 credits per unit.

- Represented by silver chips for 1 unit; black chips for 5 units.

- +1 MF, restore +1 damaged shield factor.

- Can be used to charge one warp engine/nacelle.

- Can use only one unit per turn.

- Can be used with a command crew order, but not with a warp power transfer.

- Can be mined from a moon or planet or transferred from a space station at a rate of one unit per turn.

Trilithium:

- Costs 3 credits per unit.

- Represented by yellow chips for 1 unit; gold chips for 5 units.

- + 1 CF or +1 DF.

- Can be used to charge an advanced weapon.

- One unit per turn.

- Can be combined with command crew orders, but not with a warp power transfer.

- Can be mined from a metaphasic nebula or transferred from a space station at a rate of one unit per turn per ship.

VIII: SPECIAL ORDERS

A) Ship Self-Destruct:

A ship can be ordered to self-destruct during an attack phase. Each ship (friend or foe) in an adjacent hex takes one hit of damage.

B) Kamikaze Attack:

A ship can ram another vessel on purpose, causing as much damage to the target as the kamikaze's current CF. The attacking ship is destroyed in the attack.