

A Sky Full of Ships

Hardpoint
Games

2nd Edition

BASIC RULES

BASIC RULES : Generic R
ASFoS : Generic Rules for
FSIS : Basic Campaign Ru

Generic Rules
for Fast & Simple
SciFi Fleet Actions

SET	MDH	JDA	AJH	MDB
AJH	WRE	ALB	ENT	PRM

A Sky Full of Ships

A simple (but not too simple) set of starship combat rules, which allows huge fleets to engage each other in epic battle (and finish in a reasonable amount of time)

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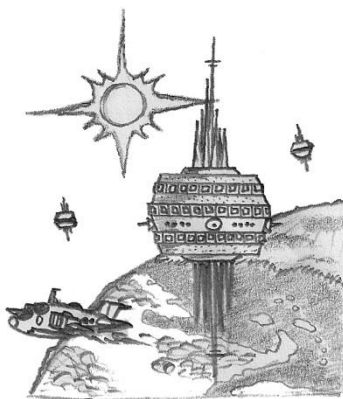
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And thanks to everyone who's suggestions helped to make these a better set of rules



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Introduction

Welcome to "A Sky Full of Ships, 2nd edition - Basic Rules", an updated and improved version of the original simple rules for scifi fleet actions. Why a second edition? For the longest while I didn't think ASFoS needed one, as there were no large problems that needed fixing. However, a few minor 'improvements' can't hurt, including a minor engine power change, some new combat modifiers, and an important addition to the ship construction system. And of course the obvious cosmetic facelift.

I have always been interested in science fiction. Whether it was in books, TV or movies, scifi has been one of my favourite literary genres since I was very young. Much later, when I discovered wargaming, it was only natural for me to combine these two favourite hobbies. Through the years I've played many scifi games and found several favourites that I still play today. However, none really seemed designed to recreate those great fleet battles, those most dramatic of moments when entire empires stood or fell.

And so, to fill that void, these rules were created. Instead of being just the captain of a few ships, you take the place of an admiral, commanding entire fleets. Using simple, fast moving game mechanics, these rules attempt to portray the important aspects of huge fleet engagements without becoming too bogged down in time consuming detail. They're for those players willing to sacrifice some complexity to achieve a fast moving, playable, and most importantly, FUN game.

All the basic rules needed to play the game can be found here in this book, along with some of the optional rules.

So, welcome to A Sky Full of Ships (2nd edition), generic rules for fast & simple scifi fleet actions. Give them a try - it may look like a lot of rules, but they're pretty simple in action.

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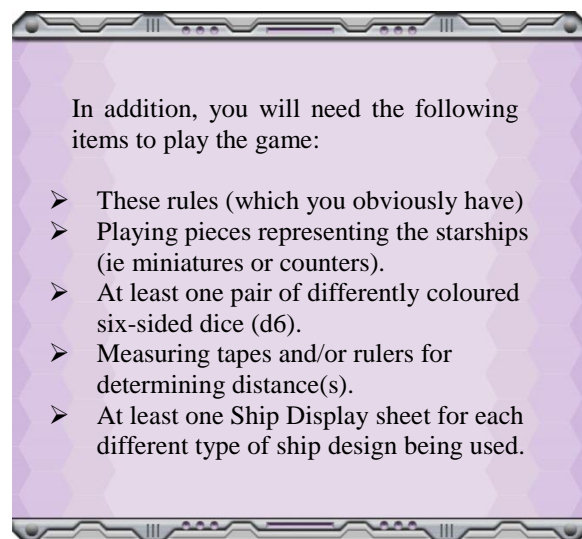
Dan Abbott - January 2016

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Playing the Basic Game

You'll need a flat playing surface of at least 36 inches square (and preferably larger). A simple tabletop will suffice, and covering it with a black cloth or 'star field' covering will make the game seem much more visually attractive.



Ship Design

Ship Concepts

Mass

The starships used within the game, A Sky Full of Ships, range from the smallest frigate to the largest titan. This variety requires an artificial measure of a ship's size that we achieve through the use of the game mechanic; the Hull Box. The size of a ship is represented by the number of these hull boxes - the more massive (bigger) the ship, the more hull boxes it has.

As with modern wet navies, ships tend to be further classified into categories of mass. A Sky Full of Ships follows this example with mass categories of its own. The table to the right shows the mass (number of hull boxes) of the different classes of ships.

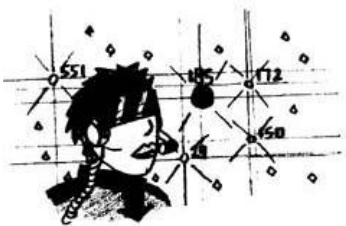
Frigates and Destroyers are both classified as 'Escorts'. Titans can vary greatly in size, anything greater than 24 mass is called a Titan. The use of Escorts and Titans require the use of the advanced rules, so ignore them for now. The basic rules applies to all the classes in between

Frigate:	1
Destroyer:	2
Light Cruiser:	3 or 4
Heavy Cruiser:	5 or 6
Battle Cruiser:	7, 8 or 9
Battleship:	10, 11, or 12
Dreadnaught:	13 to 18
Superdreadnaught:	19 to 24
Titan:	25 or more

Power

The power of a warship is directly related to its mass. The bigger the ship is, the more room it has for weapons and their associated power supplies. So when ships are built, their offensive abilities are directly related to their size. Everything is again based on the number of hull boxes. They determine not just the size, but also the capabilities of the ship. The bigger the ship, the more combat power it has.

Beka Eslar allowed her gaze to wander about the cramped and cluttered confines of her duty station. Observation outpost 234, one of the many unsung guardians for the Colm Star System, was without doubt the most boring assignment she'd ever drawn, and it would be a minor miracle if she finished her tour of duty here with her sanity intact.



"I'm gonna go nuts" Beka remarked aloud. Her voice echoed dully off the bulkheads. "See, I'm already half way there. I'm talking to myself".

Suddenly, a series of warning lights lit up her sensor boards. Beka felt chilled as she applied herself to her scanner controls and tried to refine the data that was pouring into her computers from the system's sensor net. "Status report!" The voice of the outpost commander boomed over the intercom. He sounded calm, but then he was an old combat veteran.

Her eyes were fixed on the various icons that were appearing on her consoles. "Commander, we have multiple contacts with an estimated 100 plus warships. They are a mix of capital ships, cruisers and light escorts - I think there are also several troop transports following the warships". Beka spoke as calmly as she could manage into her bridge pickup. It looked like the war had finally come to the Colm system after all.

Ship Systems

Weapons

In the basic rules, all weapons on a ship are grouped into one of two main types;

Primary or Secondary Batteries.

The Primaries are all of a ship's large powerful anti-ship beam batteries, and are split into four 90 degree arcs of fire. The Secondaries are short ranged all around defensive weapons. The Weapons Box on the Ship Display is used to show the current strength of both types. The example below illustrates ONE Weapons Box.

Weapons Box



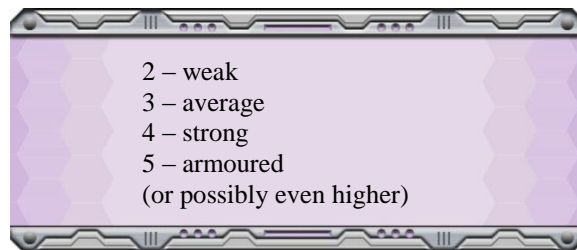
Primary Batteries - The strength of a ship's main long range weapons, is split into four 90 degree arcs of fire, forward, left, right and rear. Each arc can have a different strength, depending on what weapons are represented in that arc of fire. Forward arc is commonly the most powerful although no single arc normally has all of the Primary Battery power.

Secondary Batteries - These smaller, but possibly more numerous, rapid firing short range batteries have a 360 degree arc of fire, but a very short maximum range.

- *In this example the Primary Batteries have a strength of 8 in the forward arc, 4 in the left & right arcs and 2 in the rear arc, a strength of 6 Secondaries and no Specials.*

Hull

In addition to using the Hull Box to represent size, every ship has a basic natural structural strength chosen during construction. This basic strength is often good enough for escorts and small cruisers, but some larger ships reinforce their hulls for greater survivability. Some ships have intentionally weaker hulls to produce cheaper ships. These practices give a large range of possible defensive strengths for a ship's hull. Within A Sky Full of Ships, this range is represented by a hull strength number –



Electronic Defences

Usually a ship's defences are not limited to armour. Many ships enhance their defensive strength through electronic means, by adding electromagnetic screens or force shields. Their strengths can range from 0 (none) to 4 (maximum). These electronic defences do not exist independently, they are added to the ship's hull strength. The sum of a ship's natural hull strength and its electronic defences is called its **Defence Factor**.

Engines

To move, all ships need a drive of some sort. The power of this drive, its acceleration and turning capability, is represented by the Engine Rating. This rating ranges from 0 to 5 and this number determines how much a ship can turn, speed up, or slow down during each turn.

Ship Displays

The purpose of the Ship Display is to show the capabilities of a specific ship or ship type.

The Ship Display will act as a reminder of the ship's size, its offensive power, toughness, speed and is the main way of keeping track of damage. Below is an example of a Ship Display for one type of cruiser.

'ID' is used for simple ship identification.

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Light Cruiser (CL)		 ▶ 2 ◀ 																																	

Defence Factor (DF)

DF represents the ship's total hull strength. The number inside the brackets represents the ship's natural hull strength before being strengthened by electronic defences. This example shows an average hull (3) strengthened by one point of electronic defence screens for a total defence factor of 4. The natural strength is shown in case the screens are lost.

Weapons Boxes

The first row of boxes are the weapons boxes. Although the number of weapons boxes always begins the same as the number of hull boxes, only one weapons box is important, the leftmost box. It contains the 6 numbers that represent the current strengths of the different weapon types and arcs. Only this box is considered active, the other boxes are merely pre-calculated damaged strengths. You'll notice that the numbers in each box in the row of weapons boxes get proportionally weaker as you move along the row to the right.

The leftmost weapons box in the row represents all weapons at full strength. As the ship takes damage to its weapon systems, and weapons boxes are marked off (starting with the leftmost box and moving right) the active box becomes the next one in line. As the active box moves right, the strengths get weaker, so that when only 1/2 the boxes are left, the strengths in the left most active box is exactly 1/2 of when they were at full strength. When only 1/4 of the weapons boxes are left, the strengths are 1/4 of full, etc. Primary, secondary and special strengths all decrease at the same time, exactly in proportion to the percentage of boxes lost.

Hull Boxes

The next row is the hull boxes. They represent the size of the ship. Damage to the hull is taken in a similar fashion to weapons, marking off the leftmost box and moving right. When all the hull boxes have been marked off, the ship is destroyed.

Critical Hits

The third row is the Critical Hits, used only with the optional rules.

Engine Rating

The last number, inside the icon in the lower right of the display, is the engine's power.

Movement Rules

Sequence of Play

The purpose of the Sequence of Play is to provide a structure for the players to play out their turns. A Sky Full of Ships is played as a series of simultaneous turns, with each turn divided into several phases. Once all of the phases have been completed, one game turn is over and the next begins. This repeats until the game is concluded. The basic rules for ASFoS uses a very simple sequence of play.

The 3 phases of a turn for A Sky Full of Ships are -

- 1) **Plot Movement** - At the beginning of each turn all players must write Movement Orders for each ship in their fleet.
- 2) **Move Ships** - Once all movement plots are recorded, the ships are moved exactly according to their plots.
- 3) **Fire Ships** - Once all ships are moved they may fire at any target in range and arc.

Movement

Movement is simultaneous in A Sky Full of Ships. All distances are given in inches, however you may choose to use whatever measurement unit you believe best suits your style of play or the size of your playing area. For instance, using centimetres may be more appropriate for smaller tables. Or, if you are having trouble finding rulers marked in inches, simply use double the measurement in centimetres (ie 2 cm instead of 1 in) instead.

A good starting speed for a game is 6 inches/turn.

Engine Power

The movement rules simulate a simple momentum based system, without using true vector movement. The Engine Rating of a ship, shown in the lower right of the ship display, determines how many points of power the ship has available for movement. All, some or none of these engine points may be used each turn to accelerate, decelerate, or turn. Engine points do not accumulate from turn to turn, unused points cannot be saved. Each engine

point expended allows the ship to speed up or slow down by 1 inch per turn, or allows the ship to make a 45 degree turn. Ships with engine ratings of 1 have to decide which to do, turn OR accelerate/decelerate. They do not have enough power to do both on the same turn.

Each turn you keep track of your ship's current speed, and may increase or decrease it by a maximum of your ship's engine rating. Speed carries over from turn to turn. Ships may not have negative movement - this means they cannot move backwards.

- *For example: if you had an engine power of 2, and moved 6 inches last turn, you could speed up by a maximum of 2 this turn, and move 8 inches, or slow down and move 4, or anything in between.*

The number of 45 degree left or right turns permitted to your ship per turn is also dependant on engine power. You may make a maximum number of turns equal to the engine power, (ie 2 engine points allows 2 turns). Turns require power from the engines, so each turn subtracts 1 point from the engine power available this turn. Turns also occur at a specific point in your movement (explained later).

- *For example: with an engine power of 2 you can make 2 turns, or 1 turn and speed up or slow down by 1.*

Movement Orders

At the beginning of each turn all players must write Movement Orders for each ship in their fleet. Although this sounds time consuming, we've found it actually speeds up play, as players don't stop to plan out their movements more than once per turn this way. Any ship that does not have an order written for it will continue to move in the same direction and speed as in the previous turn. If you have a large number of ships, you should group similar types into squadrons, and record their movements together.

Plotting

At the beginning of each turn you record (plot) the movement of each of your ships for that turn. This can be as simple as writing your intended movement on a piece of paper (the back of the ship display for example), or you can use a more formal approach such as using the Plotting Chart (below).

You begin by writing the name of the ship in the 'ID' box. Then, each turn you fill in one line to show what you wish that ship to do for that turn. The 'V' (velocity) column represents the ship's current speed. The 'delta V' (change in velocity) column is where you plot any changes in the ship's speed. The final column is the ship's plot for the turn including any changes in direction.

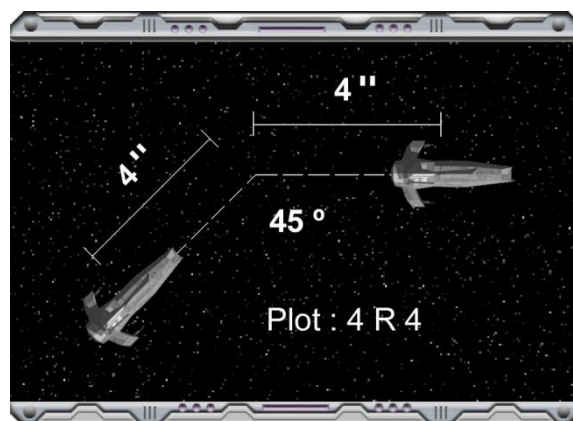
ID: Battleship 1			
Turn	V	ΔV	Plot
1	5	+1	6
2	6	—	3 R 3
3	6	—	6
4			

- For example: Turn 1, speed up by 1 and move forward 6. Turn 2, move 3 - turn right - move 3. Turn 3, move forward without any changes to speed or direction.

A simpler way would be just to record on the back of the ship display:			
T1	5, +1, 6		
2	6, 3R3		
3	6 (etc).		

Movement Phase

Once movement plots have been completed for all ships (or squadrons), the ships are moved. It doesn't matter which player moves first or what order the ships are moved since all ships must move exactly according to their recorded plots.



- In the above example the ship model would be moved 4 inches, make a 45 degree turn to the right and finish by moving the final 4 inches. The ship's current speed would be 8 inches per turn.

Sometime ships travel a bit too fast and find they can't turn quickly enough to stay on the gaming table. You can resolve this in one of two ways: 1) ships that leave the table are gone, or 2) use a 'floating' playing area. Since one area of space is the same as another, whenever the action drifts towards one table edge, and ships end up off table, simply move everything the same number of inches back towards the center of the table, keeping the same relative locations and facing.

Due to the difference in scale between how very large space is and how very small our ship models should actually be, ships cannot accidentally collide with one another. Instead they may freely move through each other during the movement phase. If there is a problem placing the actual miniatures at the end of movement due to the size of the models, then place them as close as possible to their intended positions. There is no intentional ramming in the Basic Rules.

Turns

As well as requiring power from the engines, turns also occur at a specific point in your movement. If you are making only 1 turn it occurs at the halfway point. For 2 turns, the 1st is at the beginning of movement and the 2nd at the halfway point. For 3 turns, the 1st is at the beginning, 2nd at the 1/3 point and the 3rd at the 2/3 point (etc).

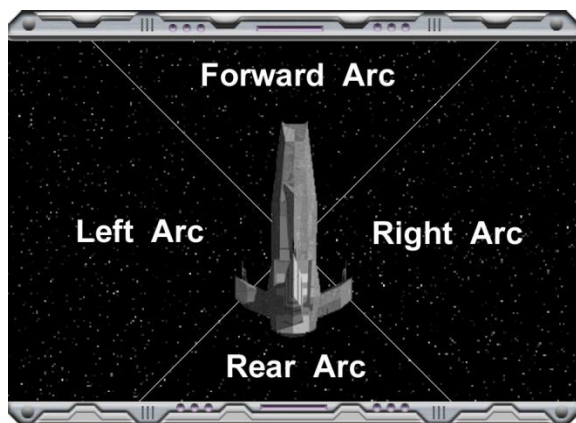
Combat Rules

Weapons Fire

Arcs & Ranges

Players may pre-measure (ie check the range) at any time. Since this is science fiction and all ships are equipped with computers and sensors to keep track of the ship's current speed, bearing, and distance to every other object in the game, it would be silly not to allow players to pre-measure.

Primary Batteries - The strength of a ship's main long range weapons, is split into four 90 degree arcs of fire, forward, left, right and rear. The Primary Batteries may be fired once per turn, at a single target within ONE of the four arcs of fire. You may pick which arc you wish to use, but the primaries may be fired only ONCE per turn. (Many weapons actually have more than one arc of fire, so firing your primaries again would represent some weapons firing in two directions at the same time). Primary Batteries have a maximum range of 36 inches.



- In this example the Primary Batteries might have a strength of 8 in the forward arc, 4 in the left & right arcs and 2 in the rear arc. During a game, you may have no eligible targets in the forward arc, one enemy ship in the left arc, and one in the rear arc. Since you can't use the strongest arc (no targets), you'd probably choose the next strongest and fire into the left arc with a strength of 4.

Secondary Batteries - These smaller rapid firing short range batteries have a 360 degree arc of fire, but a maximum range of only 6 inches. They may also fire ONCE per turn, at any one target in range.

Range Bands

While the standard weapon ranges in ASFoS are described as being in multiples of 12 inches, there is no reason why you cannot change these ranges if you want to. For example, using a smaller table may require players to use shorter ranges.

A simple way of making shorter Range Bands is to use centimeters instead of inches, or you can choose a different number for the range bands. For example, if you were to choose 8 inch range bands then close range would be 0-8 inches, medium would be 8-16 and long would be 16-24. Remember to make secondary range half of a range band, in this example it would be 4 inches.

Line of Sight

In order to fire at a target, a starship must be able to 'see' it, which means it must be able to trace a line of sight to that target. This means that an imaginary line drawn from the firing ship to the target must not be blocked by any intervening object. However, regardless of the actual size of the spaceship models, all ships in ASFoS are assumed to be tiny compared with the scale of the battle. Therefore, all measurements should be done from the exact center of the firing ship, (for example, the peg holding the ship model) to the exact center of the target. This scale difference also means ship models do not block line of sight, ships cannot hide behind each other.

Combat Ratio

All combat within A Sky Full of Ships is based on the relative strength of the attacker's weapons vs the target ship's defence factor, calculated as an attacker to defender ratio. The attacker's strength is simply the power given in the currently active weapons box, for the appropriate arc in the case of Primary Batteries. The defender's strength is simply its Defence Factor (DF).

To calculate this Attacker to Target Ratio, take the strength of the firing ship's weapons in the arc used and compare it to the target ship's defence factor. If the two numbers are the same, you use the 1:1 column on the combat chart, if the attacker is twice as powerful as the target use the 2:1 column, if the attacker is half as powerful as the target, use the 1:2 column, etc. Always round down (in favour of the target ship). All types of batteries use the same chart.

- *For example: if a ship fires with a power of 19 and the target has a defence factor of 4, the attacker is at least 4 times more powerful than the target's toughness but not quite 5 times. Therefore the ratio is 4:1, the attacker would need a power of 20 before using the 5:1 column.*

The ratio between these two strengths corresponds to a column on the combat chart (see next page). The attacker rolls two different coloured dice. One die represents damage done to the target's hull, the other, damage to its weapon systems. Cross reference each die roll in the correct Attacker to Target Ratio column, the number resulting is the number of boxes of the given type destroyed by the attacker's fire. A '-' in the column means NO DAMAGE for that die. The defender then records the number of hull and weapon hits by crossing out one box for each appropriate hit achieved.

- *For example: rolling a white die for hull, and a red die for weapons, a player rolls a white 3 and a red 4. He has weapon strength of 14 and is attacking a target ship with a defence factor of 4 putting him in the 3:1 column.*

Checking the chart, he has destroyed 1 hull box and 2 weapons boxes on the target ship, which his opponent marks off, beginning at the leftmost box and moving right.

Normally ships may take a maximum of TWO shots per turn, ONCE with its Primary Batteries and ONCE with its Secondary Batteries (if in range). There is one exception to this rule: If your weapon power vs the target's defence factor is greater than 6 to 1, you may use just enough weapon power make a 6 to 1 attack and the remaining power is used to calculate a second attack (or third, etc), either on the same target, or on another in the same arc.

If your weapon power is not at least one third of the target ship's defence factor, you cannot damage the target.

Firing Sequence

Although each ship is calculated separately, all weapons of a given type are considered to be firing simultaneously, all primaries firing first with damage being recorded, then all secondaries firing using the new (possibly) damaged weapon strengths.

- *For example: two ships move within secondary range of each other and fire. They would both fire their primaries (simultaneously) and record damage. After this was done, they would then fire their secondaries (simultaneously) using the new damaged secondary weapon strengths.*

With twenty Battlecruisers at his disposal as well as a large screen of lighter warships and troop transports, the enemy's ability to hold the contested system was soon going to be put to the final test. The Admiral turned to his flag captain and chief-of-staff, both snapped to attention.

"Order the Taskgroups into final formations, we will commence the attack on the system defence squadron and space installations presently."

"Understood, Admiral." His chief-of-staff responded crisply, as he tapped the necessary order into a computer data board. Communications would relay the necessary signals in a matter of seconds.

The Admiral then turned to the tactical imager, and signalled to his subordinates with an off hand gesture, "Commence the attack."

Combat Chart

Attacker to Target Ratio

Dice Roll	1:3	1:2	1:1	3:2	2:1	3:1	4:1	5:1	6:1
0	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	1	1	1	2
2	—	—	—	—	1	1	1	2	2
3	—	—	—	1	1	1	2	2	3
4	—	—	1	1	1	2	2	3	3
5	—	1	1	1	2	2	3	3	4
6	1	1	1	2	2	3	3	4	4

Modifiers

Target is

Fast Ship	-1
Slow Ship	+1
Stationary Ship	+2

Range

Short	0 – 12"	0
Medium	12 – 24"	-1
Long	24 – 36"	-2

Modifiers are added to or subtracted from the dice rolls of Primary weapons fire only. Secondary Batteries are not modified.

Rolls greater than 6 are treated as 6, rolls less than 0 are treated as 0 (rolling a '0' actually means you missed). **Fast** ships are any ships moving 12" or greater for the current turn. **Slow** ships are any ships moving 4 inches or less for the current turn. **Stationary** ships are not moving.

Optional Rules

Critical Hits

Damage Procedure

If you roll doubles with the damage dice (the same number on both the hull & weapon dice) AND if you do damage, then you have inflicted a Critical Hit on the target ship. Roll another die, and consult the below chart. Multiple hits on the same location (until repaired) are wasted.

Die Roll	Location	Effect
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1	Bridge (Br)	The Bridge has been hit and command functions are down. The ship must reuse last turn's movement plot, and Primary and Special Weapons must fire at last turn's target (or not at all). This continues until repaired.
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2	Fire Control (FC)	Fire Control scanners and computers are off line. No Primary or Special weapon firing permitted until repaired.
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3	Reactor (R)	A power reactor goes critical and explodes at the beginning of the next turn for d6 worth of extra hull damage (unless immediately repaired).
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4	Engine (E)	Engines are damaged and have shut down. Engine power rating is reduced to 0 and the +2 'stationary' combat modifier is applied due to the ship's directional predictability until repaired.
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5	Electronic Defences (ED)	Shields and screens are down. The ship uses its natural hull strength as its defensive factor until repaired.
---	---------------------------------	---

6	Munitions (Mn)	Uncontrolled fires break out among the munitions and fuel storage. Lose one hull box per turn until extinguished (repaired).
---	-----------------------	--

➤ *For example: If your opponent rolls doubles getting a critical hit, then rolls a third die which results in a '3', then he has inflicted the Reactor critical on the target ship. If you do not succeed in repairing this critical hit at the end of the turn then you roll a d6 and mark off that number of hull boxes as destroyed. In the case of a Reactor critical, it becomes available again next turn whether you repaired it or not.*

Damage Control



All ships have Crew Units (CUs), small teams of crewmen dedicated to fixing damaged systems, which can be used to repair critical hits. The number of CUs on a ship is equal to 1/4 of the ship's hull boxes, rounded off (minimum of 1). The icon for each CU is placed on the ship's display in the row of hull boxes. This box still counts as a hull box. If the box containing the CU is destroyed, the CU is also lost.

At the end of the turn, during the repairs phase, you declare how many CUs are attempting to repair which critical hits, up to a maximum of 5 CUs per hit (if you have that many). Each CU may only work on one critical per turn, and has a 1 in 6 chance to repair it. When multiple CUs attempt to repair the same critical add their chances together. You may only make one attempt to repair any given critical per turn. The CUs need to roll equal to or lower than the number working on the critical on a d6 to affect the repair. Since repairs come after firing in the sequence of play, it is possible to repair a system the same turn it was hit.

➤ *For example: 2 CUs are attempting to repair a Bridge hit. Roll a d6, on a 1 or 2 the bridge is fixed.*

Special Weapons

General Rules

All ships may be given ONE type of special weapon in addition to its primary and secondary batteries. The number of special weapons a ship mounts is recorded in the box next to the secondaries on the Ship Display. This is different from the normal way, instead of recording their attack factor, you record how many special weapons the ship has. This number decreases with weapons box damage in the same manner as other weapons.

Special weapons fire after Primaries and always fire in the forward arc, possibly giving a ship a third 'shot' per turn. Unless stated otherwise, special weapons are treated like primaries.

- *For example: a ship is targeted by an enemy ship at long range, and at the same time it is attacked by another enemy ship at 6 inches. First, all three ships fire their Primary Batteries for the appropriate arc, and damage is recorded. Then the ships fire Specials, if they have any in arc and they weren't lost during primary fire, and damage is recorded. Then the two ships within 6 inches fire their Secondaries (using new damaged strengths) at each other and record damage.*

Mass Driver (MD)

A Spinal-mounted Mass Driver, also known as a Railgun or Gauss Gun, is a massive weapon system that functions by using electromagnetic grapples to accelerate solid projectiles to high speeds and fire them along the axis of the ship. Although Mass Drivers become less accurate with range and have difficulty hitting agile targets, they are powerful weapons due to the tremendous amounts of damage they can inflict, which does not decrease with distance.

Each Mass Driver may fire once per turn, at targets in the forward arc. Roll one d6 for each Mass Driver

firing from a single ship, the basic chance of hitting is '4' or higher on the die. All normal modifiers for Primary fire apply for this 'to hit' number.

- *For example: firing at a slow ship at 32 inches range, would require a 5 or 6 on the die. (ie: roll a 5, +1 for slow -2 for range = 4, a hit).*

If a Mass Driver hits, it hits with an attack factor of 12. If multiple Mass Drivers from the same ship hit, add their attack factors together. Then roll for damage on the Combat Chart, without modifiers (they've already been counted in the 'to hit' number).

Particle Cannon (PC)

A Particle Cannon is a powerful but short-ranged weapon that fires a large concentrated beam of charged particles at near relativistic speeds. Range is limited by the difficulty in focusing the beam because of the tendency of the charged particles to repel one another and thus dissipating the beam. Because of this, damage potential drops off quickly with range.

A ship with Particle Cannon(s) may fire them once per turn, at targets in the forward arc. Each Particle Cannon has an attack factor of 8. When firing multiple Particle Cannons from the same ship add their AFs together to get a total attack factor, which is then used against the target ship. All modifiers for primary fire are used normally except range. Particle Cannons do not use the range modifiers, instead there is a column shift on the combat chart, making the Particle Cannon weaker with range. If firing at medium range the Particle Cannon shifts 2 columns to the left on the combat chart, and at long range it shifts 4 columns.

- *For example: firing 2 Particle Cannons with a total AF of 16, at a ship with a DF of 5, would normally result in a 3 to 1 attack ratio on the combat chart. In this case however, if the target was 18" away (medium range), the attack ratio would decrease by two columns and become a 3 to 2 attack instead.*

Appendices

Introductory Scenario

Encounter at Emerald

This scenario is designed for 2 players, although it can easily accommodate more if required.



It's the third year of the war, and intelligence intercepts have placed an enemy battle squadron arriving in the vicinity of the space anomaly known as 'The Emerald', a large gas cloud in otherwise empty space. Your squadron has been dispatched to challenge the enemy's right to be there.

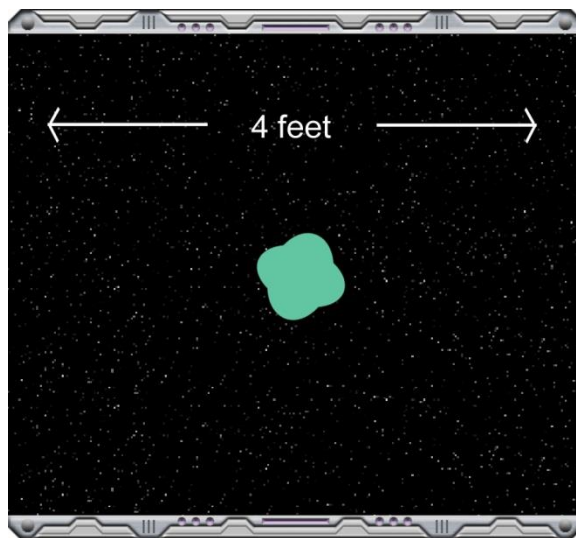
Setup

Use any available board or tabletop, a 4 foot by 4 foot surface would be best. Place an irregularly shaped 'gas cloud' in the center. For this gas cloud use any irregular shaped 6 inch diameter shape or cut one out of paper or cloth. For spaceships use whatever models you like best.

Each player has an identical fleet consisting of -

- 2 Warrior Class Battleships
- 3 Swordfish Class Heavy Cruisers

The players each roll a six sided die. The player who rolls highest chooses a corner and deploys his entire fleet within 6 inches of it. His opponent then deploys his entire fleet within 6 inches of the opposite corner. All ships start the game with a speed of 6.



Special Terrain Rule

Gas clouds only interfere with line of sight, they do not block it. For each inch of gas cloud between a ship and its target, an extra -1 combat modifier is applied to the dice. Gas clouds may be passed through with no penalty.



Victory

The player that destroys all his opponent's ships or drives him from the table is the victor.

Permission is granted to copy the following sections for personal use.

Sample Ships

Sample Ship Designs

Calypso Class Light Cruiser

Many a battle has been decided by a well timed cruiser wave swooping in on helpless battleships. The Calypso class is designed to literally swarm a target with fire. Their main weapons are their speed and a combination of primary and secondary fire.

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Swordfish Class Heavy Cruiser

Used extensively to patrol the enormous borders between competing star empires, this agile ship is quite able to defend itself against all threats, whether pirates, aliens or enemy patrols. Using its ample engine power to gain advantage over opposing ships, its powerful forward batteries and single mass driver makes it a threat to all challengers. Commonly used in squadrons of three, the Swordfish Cruiser can take on most opponents, up to and including enemy battleships.

Warrior Class Battleship

A much copied, standard battleship design, this ship has been around for a while and can be found existing in one version or another in most major fleets. With most of its offensive power concentrated forward, the Warrior Class tends to drive directly towards its enemies attempting to inflict maximum damage while engaging them head on. Usually armed with two spinal mount mass drivers, some variations exist which mount particle cannons instead.

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New Mars Class Battleship

This generic multi-purpose battleship can be deceptively powerful when used properly. Usually deployed wherever the opposing forces are uncertain or untested, this ship depends on powerful all around primary batteries. It engages the enemy by standing off, delivering broadsides, while circling around to keep the target in arc. Usually armed with two particle cannons.

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Sample Ship Counters

Copy these ships as many times as needed. Glue them onto cardboard and cut them out.
You now have 2 small fleets for use in your games.



Blank Ship Displays

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Blank Plotting Charts

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Printer Friendly Rules

Ship Design

The starships used within the game, requires an artificial measure of a ship's mass that we achieve through the use of the game mechanic; the Hull Box. The size of a ship is represented by the number of these hull boxes - the more massive (bigger) the ship, the more hull boxes it has.

The power of a ship is directly related to its mass. The bigger the ship is, the more room it has for weapons and their associated power supplies. Everything is again based on the number of hull boxes. They determine not just the size, but also the capabilities of the ship. The bigger the ship, the more combat power it has.

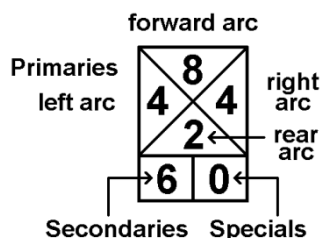
In addition to using the Hull Box to represent size, every ship has a basic natural structural strength. This gives each ship a hull strength number, which can be either 2 (weak), 3 (average), 4 (strong), 5 (armoured), or possibly even higher.

Weapons

In the basic rules, all weapons on a ship are grouped into one of two main types;

Primary Batteries or Secondary Batteries.

The Primaries are all of a ship's large powerful anti-ship beam batteries, and are split into four 90 degree arcs of fire, while the Secondaries are short ranged all around defensive weapons. The Weapons Box on the Ship Display is used to show the current strength of both types. The example below illustrates ONE Weapons Box.



All ships may be given ONE type of special weapon in addition to its primary and secondary batteries.

Defences

Usually a ship's defences are not limited to armour. Many ships enhance their defensive strength by adding electromagnetic screens or force shields. Their strengths can range from 0 (none) to 4 (maximum). These electronic defences do not exist independently, they are added to the ship's hull strength. The sum of a ship's natural hull strength and its electronic defences is called its Defence Factor.

Engines

To move, all ships need a drive of some sort. The power of this drive, its acceleration and turning capability, is represented by the Engine Rating. This rating ranges from 0 to 5 and this number determines how much a ship can turn, speed up, or slow down during each turn.

Ship Displays

The purpose of the Ship Display is to show the capabilities of a specific ship or ship type.

The Ship Display will act as a reminder of the ship's size, its offensive power, toughness, speed and is the main way of keeping track of damage.

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Light Cruiser (CL)									
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DF is the ship's Defence Factor, which represents the ship's total hull strength. The number inside the brackets is the ship's natural hull strength before being strengthened by electronic defences. The ship's natural strength is shown in case the screens are lost.

The first row of boxes are the weapons boxes. Although the number of weapons boxes always begins the same as the number of hull boxes, only one weapons box is important, the leftmost box. It contains the 6 numbers that represent the current strengths of the different weapon types and arcs. Only this box is considered active, the other boxes are merely pre-calculated damaged strengths. You'll notice that the numbers in each box in the row of weapons boxes get proportionally weaker as you move along the row to the right.

The next row is the hull boxes. They represent the size of the ship. Damage to hull is taken in a similar fashion to weapons, marking off the leftmost box and moving right. When all the hull boxes have been marked off, the ship is destroyed.

The third row is the Critical Hits, used only with the optional rules.

The last number, inside the icon in the lower right of the display, is the Engine Rating.

Movement

The movement rules simulate a simple momentum based system, without using true vector movement. The Engine Rating of a ship, shown in the lower right of the ship display, determines how many points of power the ship has available for movement. All, some or none of these engine points may be used each turn to accelerate, decelerate, or turn. Engine points do not accumulate from turn to turn, unused points cannot be saved. Each engine point expended allows the ship to speed up or slow down by 1 inch per turn, or allows the ship to make a 45 degree turn.

Each turn you keep track of your ship's current speed, and may increase or decrease it by a maximum of your ship's engine rating. Speed carries over from turn to turn.

The number of 45 degree left or right turns permitted to your ship per turn is also dependant on engine power. You may make a maximum number of turns equal to the engine power, (ie: 2 engine points allows 2 turns). Turns require power from the engines, so

each turn subtracts 1 point from the engine power available this turn. Turns also occur at a specific point in your movement. If you are making only 1 turn it occurs at the halfway point. For 2 turns, the 1st is at the beginning of movement and the 2nd at the halfway point. For 3 turns, the 1st is at the beginning, the 2nd at the 1/3 point and the 3rd at the 2/3 point.

Movement Orders

At the beginning of each turn you record (plot) the movement of each of your ships on a piece of paper (the back of the ship display for example). If you have a large number of ships, you should group similar types into squadrons, and plot them together.

Once movement plots have been completed for all ships (or squadrons), the ships are moved. It doesn't matter which player moves first or what order the ships are moved since all ships must move exactly according to their recorded plots.

Due to the difference in scale between how very large space is and how very small the ships are supposed to be, ships cannot accidentally collide with one another. Instead they may freely move through each other during the movement phase. There is no intentional ramming in the Basic Rules.

Combat Rules

Players may pre-measure (ie check the range) at any time. Since this is science fiction and all ships are equipped with computers and sensors to keep track of the ship's current speed, bearing, and distance to every other object in the game, it would be silly not to allow players to pre-measure.

Primary Batteries - The strength of a ship's main long range weapons, is split into four 90 degree arcs of fire, forward, left, right and rear. The Primary Batteries may be fired once per turn, at a single target within ONE of the four arcs of fire. You may pick which arc you wish to use, but the primaries may be fired only ONCE per turn. Primary Batteries have a maximum range of 36 inches.

Secondary Batteries - These smaller short range batteries have a 360 degree arc of fire, but a maximum range of only 6 inches. They may also fire ONCE per turn, at any one target in range.

Special Weapons - As an optional rule, all ships may be given ONE type of special weapon in addition to its primary and secondary batteries. Special weapons have unique rules for combat, each type of Special weapon being different. They fire after Primaries and always fire in the forward arc, giving a ship a third 'shot' per turn. Unless stated otherwise, special weapons are treated like primaries.

While the standard weapon ranges in ASFoS are described as being in multiples of 12 inches, there is no reason why you cannot change these ranges if you want to. A simple way of making shorter Range Bands is to use centimeters instead of inches, or you can choose a different number for the range bands. For example, if you were to choose 8 inch range bands then close range would be 0-8 inches, medium would be 8-16 and long would be 16-24. Remember to make secondary range half of a range band, in this example it would be 4 inches.

Ships need to be able to see their targets in order to hit them which is called Line of Sight. However, regardless of the actual size of the spaceship models, all ships in ASFoS are assumed to be tiny compared with the scale of the battle. Therefore, all measurements should be done from the exact center of the firing ship, to the exact center of the target. This scale difference also means ships do not block line of sight, no ship can hide behind another.

Combat Ratio

All combat within A Sky Full of Ships is based on the relative strength of the attacker's weapons vs the target ship's defence factor, calculated as an attacker to defender ratio. The attacker's strength is simply the power given in the currently active weapons box, for the appropriate arc in the case of Primary Batteries. The defender's strength is simply its Defence Factor.

To calculate this Attacker to Target Ratio, take the strength of the firing ship's weapons in the arc used and compare it to the target ship's defence factor. If the two numbers are the same, you use the 1:1 column on the combat chart, if the attacker is twice as powerful as the target use the 2:1 column, if the attacker is half as powerful as the target, use the 1:2 column, etc. If your weapon strength is not at least one third of the target ship's defence factor, you cannot damage the target. Always round down (in favour of the target ship).

The ratio between these two strengths corresponds to a column on the combat chart. The attacker rolls two different coloured dice. One die represents damage done to the target's hull, the other, damage to its weapon systems. Cross reference each die roll in the correct Attacker to Target Ratio column, the number resulting is the number of boxes of the given type destroyed by the attacker's fire. A "-" in the column means NO DAMAGE for that die. The defender then records the number of hull and weapon hits by crossing out one box for each appropriate hit achieved.

Normally ships may take a maximum of TWO shots per turn, ONCE with its Primary Batteries and ONCE with its Secondary Batteries (if in range). There is one exception to this rule: If your weapon strength vs the target's defence factor is greater than 6 to 1, you may use just enough weapon strength make a 6 to 1 attack and the remaining strength is used to calculate a second attack (or third, etc), either on the same target, or on another in the same arc.

Although each ship is calculated separately, all weapons of a given type are considered to be firing simultaneously, all primaries firing first with damage being recorded, then all secondaries firing using the new damaged weapon strengths.



The battered cruiser Lorik pulled up alongside the secret asteroid repair base. The weary officers and ratings heaved a sigh of relief, that they had finally made it to safety. They would be out of the heavy fighting for at least a little while, as repairs were affected to their ship.

"I for one am glad to see port, even if it is only a dull repair station" one of the bridge officers remarked.

The Lorik needed it, the last few battles and actions had been as non-stop as they had been gruelling.

Instead of being a mere captain of a few ships, wouldn't you rather take the place of an admiral, commanding during those great fleet battles, those most dramatic of moments when entire empires stood or fell. If so, '**A Sky Full of Ships**' just might be the rules for you. Using simple, fast moving game mechanics, ASFoS attempts to portray the important aspects of huge fleet engagements without becoming too bogged down in time consuming detail.

Combat Chart

Attacker to Target Ratio

Dice Roll	1:3	1:2	1:1	3:2	2:1	3:1	4:1	5:1	6:1
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1	—	—	—	—	—	1	1	1	2
2	—	—	—	—	1	1	1	2	2
3	—	—	—	1	1	1	2	2	3
4	—	—	1	1	1	2	2	3	3
5	—	1	1	1	2	2	3	3	4
6	1	1	1	2	2	3	3	4	4

Modifiers

Target is		Range	
Fast	-1	Short	0 – 12" 0
Slow	+1	Medium	12 – 24" -1
Stationary	+2	Long	24 – 36" -

2

A Sky Full of Ships is designed to be an easy, fast moving set of rules for large scifi fleet actions. Everything required for play is included in its single 56 page book - ship design, movement and combat rules, optional rules such as electronic warfare, special weapons and technological levels, as well as scenarios, sample fleets and more.

Admiral, your fleet awaits.

Hardpoint Games

<http://www.hardpointgames.com>