Section 0 ▶ Introduction

"Fire at will, Commander!"

No sooner had Fleet Captain Frederic Antimony spoken these words, than a flash appeared on the viewscreen, and a half-dozen enemy starfighters disappeared from existence. Antimony's crew had learned long ago to anticipate their captain's moves, and almost before the order came down the *Indefatigable*'s powerful laser batteries lashed out with frightening efficiency. A cheer erupted from the bridge crew.

Antimony wished he could share in their enthusiasm and optimism. He knew better than to underestimate his opponent; the battle had been joined, and until it was won, he could not allow himself even a moment's lapse in concentration. And yet, Antimony could not help feeling a little disappointed. He had expected more from his opponent; so far, she displayed little of the brilliance that had forced the Imperial Starmada into this climactic confrontation.

The Fleet Captain betrayed little of this introspection as he turned to relay a new set of orders to his subordinates. Just then, one of the communications officers let out a cry of alarm.

"Captain! Three enemy destroyers are de-cloaking in our starboard quarter!"

Antimony whirled and fixed his gaze on the screen, where the new antagonists were just now coming into view. *So*, he thought to himself, *this will be interesting after all*...

What is Starmada?

Starmada™ is a miniatures board game of starship combat, in which players attempt to blast each other's fleets into just so much space junk. If you've never played a game like this before, don't fret; the core set of rules has been designed with simplicity and ease of play in mind, accessible even to the greenest of beginners. On the other hand, if you happen to be a seasoned wargaming veteran, we think you'll find the simplicity of the rules quite refreshing. It allows you to concentrate on the finer points of squashing your opponent instead of arguing about rules interpretations, all without sacrificing any of the flavor or excitement of more complex games.

Speaking of flavor, you will note that this game contains background and fleets for seven different factions. However, **Starmada** is much more than just an attempt to simulate space battles in (or sell miniatures for) yet another sci-fi universe. If you're like us, you recognize that most of the fun is in designing your own ships, races, and histories. Or, perhaps you've always wanted an easy way to pit starships from your favorite TV shows and/or movies against each other—if so, then **Starmada** is your game! In **Starmada**, you will find the most comprehensive starship design system on the market today, supplemented by our easy-to-use (and freely-available) *Starmada X Construction Assistant (SXCA)*, which you can find at our web site:

www.mj12games.com/starmada/sxca.xlt

In other words, **Starmada** is truly a "universal" game.

Okay, I've played Starmada before, but what is 'X'?

Starmada initially hit the gaming community in 1994, as a set of "freeware" rules distributed by the new (at least to me) medium of Usenet. After struggling through a few growing pains, the third edition came out in 1996, and from then until the publication of the **Compendium** in 2001, **Starmada** hasn't looked back.

However, with its impending tenth birthday on January 22, 2004, we here at MJ12 began to feel as though there was a need for one last revision of the rules, in an attempt to shore up a few of the loopholes that have managed to creep in, as well as include a few improvements that we've been tinkering with over the past few years. Thus, the idea for **Starmada X** was born.

If you own a previous version of **Starmada**, notably the **Compendium**, the obvious question is "Do I need to buy **Starmada X**?" Well, clearly our answer is going to be "yes"; but in the interests of keeping long-time players happy, **X** is close enough to the "old" **Starmada** that it was possible to generate a list of the changes that owners of previous incarnations can get hold of and use to bring their rules up to date. You can get this from our web site (**www.mj12games.com**). But after trying this new edition a few times, we're confident that you'll find it worthwhile to get your very own copy of the full rules.

Anyway, that's enough of an introduction. To quote from the first version of **Starmada** all those years ago:

"*But if it's not scientifically accurate, at least it's fun, so put your favorite space-opera soundtrack in the CD player and start playing*."

I couldn't have said it better myself.

Daniel Kast
cricket@mj12games.com
Denver, CO
October, 2004

Game Components ◄ 0.1

In addition to the rules themselves, there are several things you will need to have on hand in order to play a game of **Starmada**, many of which have been included with this release. The others should be available from the game store where you found this product.

The Game Board ◄ 0.1.1

Starmada is a board game, and like most other board games, the playing area is covered with a number of spaces, in this case called "hexes" (short for hexagons). These hexes regulate things like movement and weapons fire.

An appropriate game board should be available at most game stores, or in the collection of one of your gaming friends. A game of **Starmada** should be played on a game board at least 30 hexes across and 40 hexes wide.

Our preferred game board is a piece of 4' by 6' black felt with a 40mm hexgrid printed on it. It was previously manufactured by Geo-Hex, but is now carried by Monday Knight Productions (**www.mondayknight.com**):

Monday Knight Productions
4100 NE 104th Ave
Vancouver, WA 98682
(503) 317-0144
(866) 788-7807 *fax*
mondayknightproductions@yahoo.com

Starmada can also be played without a game board, on an open tabletop. This option may be preferred by experienced wargamers, who often recoil in horror from hexes. Such an arrangement will require slight modifications to these rules, but not many. When playing in this way, the rule of thumb should be one hex = 4cm. Thus, the playing area should be at least 120cm by 160cm (approx. 4' x 5'4").
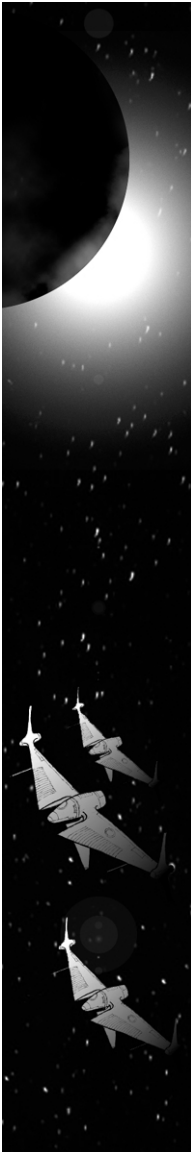
Playing Pieces ◄ 0.1.2

Each starship and fighter flight in **Starmada** is represented by its own playing piece. At the time of this writing, there are several different lines of starship miniatures available, almost all of which are perfectly suited for games like **Starmada**. One of the best sources of information about the various miniatures currently in production is Dean Gundberg's *Starship Combat* News:

www.star-ranger.com

In addition to starship and fighter flight playing pieces, you will also need a number of "explosion counters", the use of which is described in **Section 4: Combat**.

Starship Records ◄ 0.1.3

You will need to keep track of several bits of information about each starship involved in the game. **Section 1: The Starship Record** tells you how to make use of the starship record for this purpose. For right now, all you need to know is that the records are used to keep track of the current status of your fleet. As a starship takes damage, various systems on its record are marked off until the ship itself is destroyed.

Dice ◄ 0.1.4

All dice used in **Starmada** are traditional six-sided ones. You will need quite a few of these; about a dozen should suffice. The game can be played with fewer, but there are times when many dice need to be rolled, and it's nice to be able to do so all at once.

In addition to the dice used for generating random numbers, you may also wish to have a set of different-sized (or different-colored) dice that can be used to indicate how many fighters remain in each flight as described in **Section 5: Fighters**.

Pencils & Paper ◄ 0.1.5

In addition to pencils for filling out the starship records, it might be a good idea to have some extra sheets of paper handy to keep track of various things throughout the game.

Glossary ◄ 0.2

Often when you first encounter a concept in these rules, it will be printed in a **different font**. This means that the term is defined below:

Battery: A group of weapons on a starship, all with the same capabilities, range and to-hit values.

Class: The "template" to which a particular starship conforms. Most ships are not unique designs, but one of a number of nearly identical vessels.

Combat Rating: A number indicating the ship's ability to give and receive punishment relative to other ships in the game. The higher the Combat Rating, the more effective the design will be.

Crew Casualty: It is assumed that all damage suffered by starships includes some amount of casualties; however, certain types of damage have a greater than normal capacity for killing crewmembers. Crew casualties are marked off of the ship's hull boxes, but can be "overlapped" by hull hits.

Damage: There are two meanings:

1. The number of dice a weapon uses when making a damage roll (abbreviated "DMG");

2. The effect(s) of a weapon hit on a target.

Damage Roll: The act of rolling dice to determine what effect a weapon hit has on the target. See "damage".

Damage Chart: A section on the starship record that determines what types of damage the ship takes, and with what frequency each type of damage occurs.

Directional Diagram: A hexagonal display on the starship record that is only relevant to certain optional rules.

DMG: See "damage".

Engine Hit: A type of damage that represents a loss of power by a starship's engines. Each engine hit reduces the number of available movement points by one.

Explosion Counter: A marker indicating the last location of a destroyed starship. An explosion has a "strength" value, depending upon the size of the ship that created it. Every turn, this strength is reduced by one until the explosion has dispersed.

Fighter: A small, fast attack craft used to harass enemy starships and defend against opposing fighters. These rules use the terms "fighter" and "fighter flight" pretty much interchangeably.

Fighter Flight: A group of six fighters that move and attack as a single entity.

Flight: See "fighter flight".

Firing Arc: One of six arcs which regulate the directions in which a weapon can fire, as illustrated below:
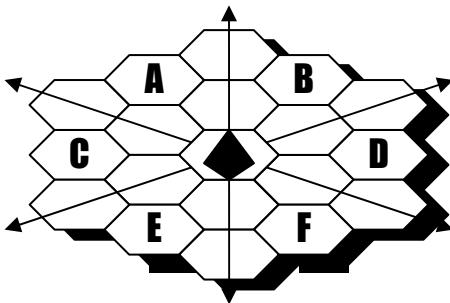
Game Turn: See "turn".

Hull Hit: A type of damage that represents the weakening of a starship's superstructure. When a ship has taken as many hull hits as it has hull points, it is destroyed.

Hull Points: A quantification of the size of a starship, and the number of hull hits the ship can take before destruction.

Line Of Sight: A starship is said to have "line of sight" to a target when a straight line, drawn between the center of the sighting ship's hex and the center of the target's hex, does *not* cross any part of a hex containing an object that blocks line of sight.

Maneuver: One of the following:

1. A change in a starship's facing (see "turn");

2. A sideslip, or a move in which a starship moves forward and to the left or right without changing facing;

3. A move backwards.

Maneuvers are included in a starship's movement orders, and are distinct from forward movement.

Movement Orders: The system of notation that allows players to simultaneously determine where their starships are going to move.

Movement Points: A number reflecting the amount of thrust produced by the engines of a starship. In game terms, movement points are used to move the ship across the game board.

MPs: See "movement points".

PEN: See "penetration".

Penetration: The number of dice a weapon uses when making a shield roll (abbreviated "PEN").

Phase: One of several subdivisions in each game turn, organized in a way to bring order to the chaos of battle.

Pill Bug: A small terrestrial isopod crustacean of the genus *Armadillidium* closely related to the sow bug and having a convex, segmented, flexible body enabling it to curl into a ball when disturbed.[1]

Range: There are two meanings:

1. The distance between two objects, as determined by counting the number of hexes along the shortest path between the two;

2. The maximum distance at which a weapon may attack a target. Range is divided into three equal "bands"; short, medium, and long. For example, a weapon with a range of 12 has range bands of short 1-4, medium 5-8, and long 9-12.

Rate Of Fire: The number of dice a weapon uses when making a to-hit roll (abbreviated "ROF").

ROF: See "rate of fire".

Scenario: A specific collection of rules for setting up the game, the forces to be used, and conditions under which victory may occur for either side. A scenario is often intended to simulate a specific "historical" battle.

Sequence Of Play: The order in which the phases of a game turn are conducted.

Shield Hit: A type of damage that represents a reduction in the effectiveness of a starship's shields. Each shield hit reduces the ship's shield rating by one.

Shield Rating: The amount of protection provided by a starship's shield generators; given as a number from 0 to 5. Sometimes referred to as just "shields".

Shield Roll: The act of rolling dice in order to determine whether a hit is blocked by the target's shields. See "penetration" and "shield rating".

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[1] *Source*: `www.dictionary.com`. Note that pill bugs may not wheel.

Shields: See "shield rating".

Ship: See "starship".

Side: These rules have been written with the assumption that there are two players involved in the game. Although this is the most typical situation, there is no reason to exclude more players from the carnage. Simply divide each fleet among the players on that side. When doing this, remember that only the player actually controlling a starship should write movement orders or roll dice for that ship.

Throughout these rules, the term "player" refers to the specific individual controlling a ship; "side" refers to all of the players involved in the command of a fleet.

Special Equipment: Any of a number of different items that a starship may possess which give it a particular advantage or ability beyond the basic rules of the game. Special equipment is described in **Appendix C**.

Special Equipment Hit: A type of damage in which a starship loses one of its items of special equipment.

Starmada: The greatest game of starship combat ever written. ☺

Starship: A star-faring vessel; the basic unit in **Starmada**. The terms "starship" and "ship" should be considered interchangeable.

Starship Record: The piece of paper on which is recorded all of a starship's capabilities and weapon systems.

To-Hit: The number a weapon needs to roll or better on a single die in order to score a hit on its target—e.g., "4+" indicates that a roll of 4, 5, or 6 results in a hit.

To-Hit Roll: The act of rolling dice in order to determine hits on a target. See "to-hit" and "rate of fire".

Turn: There are two meanings:

1. A period of time during which each step in the sequence of play is conducted once. Better known as a "game turn".

2. A maneuver by which a starship changes the direction in which it is facing.

Weapon Hit: A type of damage that represents the loss of a weapon. There are up to three different types of weapon hit, (a), (b), and (c), each of which corresponds to one of the starship's weapon batteries.

Victory Points: The method by which a winner is determined. Victory points are usually scored by destroying enemy starships, although some scenarios may include different methods for earning them.

VPs: See "victory points".
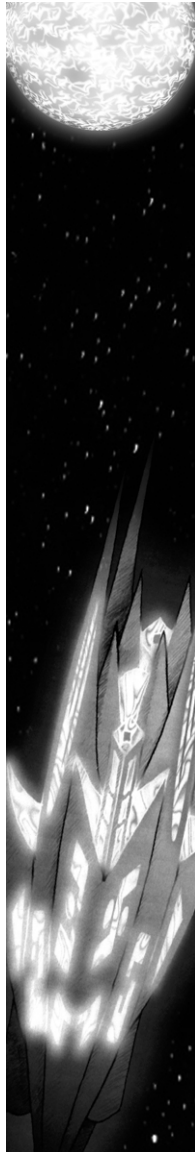
Section 1 ► The Starship Record

In this section, we introduce the **starships** you will use to vanquish your foes. There are several thousand different types of ships scattered throughout the galaxy, each with its own strengths and limitations. Here, we will be discussing how to read the **starship record**, and how it is used to keep track of a ship's status.

Each starship in a game of **Starmada** will have a corresponding record, a sample of which is provided on the next page.

Starship Name & Class ◄ 1.1

The first item on the starship record is the ship's name. This should be unique, and serves to differentiate which record represents which miniature on the game board.

Each starship design is given a name; this is referred to as its **class**. For example, the sample record is for the *Ranger*-class AMREP light carrier (CVL).

Combat Rating ◄ 1.2

Each starship has a **Combat Rating**, which is a number indicating the ship's ability to give and receive punishment relative to other ships in the game. The higher the Combat Rating, the more effective the design will be. The ship's Combat Rating is written to the right of the ship's name.

I.D. Box ◄ 1.3

Further to the right, beside the Combat Rating, is a box labeled "I.D." This can be used to write in a number or other identifying information so that players may differentiate which playing piece represents which starship.

Hull ◄ 1.4

The starship's hull boxes regulate how much damage the ship can sustain before destruction. There is one box per hull point possessed by the ship. Each time the ship takes a **hull hit**, one of its hull boxes should be filled in; once the last box has been filled, the ship is destroyed. Hull boxes also regulate **crew casualties**.

Engines ◄ 1.5

The number of engine boxes designates how many **movement points** (MPs) has to use in the upcoming Movement Phase. Whenever the ship takes an **engine hit**, one of the engine boxes should be filled in, and the number of MPs available is reduced by one; once the last engine box has been filled, the ship is "dead in space".

Shields ◄ 1.6

Every starship has some sort of energy barrier, if only to protect it from the impact of meteors and other debris.

However, the main function of a ship's **shields** is to defend against enemy weapons. In **Starmada**, shields are given a numerical rating from 0 to 5. The number of shield boxes indicates the ship's current ship rating. Whenever the ship takes a **shield hit**, one of the shield boxes should be filled in; once the last shield box has been filled, the ship has no more protection.

Below the hull, engine, and shield boxes is the starship's **damage chart**, which determines what kind of damage is suffered whenever the ship is hit by enemy weapons. The effects of each damage code are given in **Section 4: Combat**.

A ship may have up to three groups of weapons, or **batteries**. Each battery consists of a number of weapons of the same type and with the same capabilities. A battery is represented by two or three lines. On the top line is the weapon type, followed by the battery's characteristics:

- **Range** is the distance at which a weapon can attack an enemy, and is divided equally into three bands: short, medium, and long. For example, weapons with a range of 9 would have range bands of 1-3, 4-6, and 7-9.

- **Damage (DMG)** is the number of dice *per die that penetrates the target's shields* rolled for damage (i.e., the **damage roll**). For example, a weapon with a DMG of 2 that penetrates a target's shields with a pair of dice will roll a total of 4 damage dice.

The middle line of the battery display, if present, lists the special abilities of the weapon. These denote changes to the standard attack procedure when using this weapon. Weapon special abilities are described in **Appendix B: Weapon Abilities**.
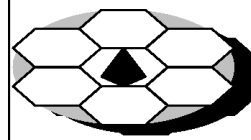
The bottom line indicates how many weapons there are, and the **firing arcs** into which each may fire. More details on firing arcs can be found in **Section 4: Combat**; for now, you should note that each box indicates a single weapon mount.

Players should also note that a letter designation is given before the name of each weapon type; e.g., "(a)". This is used when determining damage effects, as described in **Section 4.2.3: The Damage Roll**.

Ship Display

ARS Bunyan — 510 — I.D.

Ranger-class

AMREP Light Carrier

Hull 11	Engines 4	Shields 4
☐☐☐☐☐ ☐☐☐☐☐ ☐	☐☐☐☐	☐☐☐☐

1	2	3	4	5	6
Ha	Eb	H	S	H	Q

Battery A

Weapon Type	Range			To-Hit	ROF	PEN	DMG
Particle Beam	1-4	5-8	9-12	4+	1	2	1

Halves Shields, Extra Crew Casualties

AB	AB	AB
☐	☐	☐

Battery B

Weapon Type	Range			To-Hit	ROF	PEN	DMG
LR Rail Cannon	1-5	6-10	11-15	4+	1	1	1

Extra Hull Damage

AB	AB
☐	☐

Battery C

Weapon Type	Range	To-Hit	ROF	PEN	DMG

Special Equipment

Anti-Fighter Batteries ☐	Armored Gun Batteries ☐	Electronic Countermeasures ☐
Fighter Bay ☐☐	Hyperdrive ☐	

Movement Orders

1	6
2	7
3	8
4	9
5	10

- **To-hit** is given as a number followed by a plus sign (e.g., "4+"), and indicates the number that a **to-hit roll** must equal or exceed in order to strike its target.

- **Rate Of Fire (ROF)** is the number of dice the weapon rolls when attempting to hit a target.

- **Penetration (PEN)** is the number of dice *per die that hits the target* rolled against the target's shields (i.e., the **shield roll**). For example, a weapon with a PEN of 2 that hits with a pair of to-hit dice will roll a total of 4 penetration dice.

Below the weapons is a space used to list any **special equipment** the starship may be carrying, like a cloaking device or fighter bays. The effects of the various types of special equipment are detailed in **Appendix C: Special Equipment**.

Below the special equipment is a section reserved for the recording of movement orders, as described in **Section 3.2: Movement Orders**.

At the bottom right, you will notice a hexagonal display, called the **directional diagram**. This is not used in the basic **Starmada** game, but is reserved for certain optional rules (e.g., see **Appendix G.2: Directional Shielding**, p.41). For right now, you can safely ignore it.

Section 2 ► Playing The Game

The Universe is a large place, and there are an unlimited number of situations that you can simulate with **Starmada**. Maybe one of the fleets is blockading a star system, and the other is attempting to escort a shuttle of VIPs to safety. Or perhaps one fleet has been given orders to pick up a communications buoy, while the other happens on the scene.

However, most games are of the "meeting engagement" type, in which evenly matched fleets slug it out, with the side inflicting the most damage considered the winner. This is the type of battle described here; if you play another type of situation, the rules for setup and play will need to be modified accordingly.

Starting The Game ◄ 2.1

Before getting down to business, there are some preliminary steps that must be taken.

Choosing Your Forces ◄ 2.1.1

The first thing players need to decide upon is the size of the fleets involved. This determines the total Combat Rating of the starships on each side. The recommended size is 1000 points, although you may adjust this number if you want a longer (or shorter) game.

Once the point total for each side has been determined, each side should select starships with Combat Ratings that add up to this total, or as close to it as possible, and fill out a starship record for each one.

Sides do not have to start with the exact same Combat Rating total; as long as the difference between the two forces is no more than 10% of the lower total, the battle should be fairly even. For example, a fleet of 1024 points is fighting a fleet of 988. The difference between these two totals is 36 points. As 10% of 988 is 98, and 36 is less than this number, the sides can be considered equal.

Setting Up ◄ 2.1.2

Once each side has chosen its starships, the playing pieces can be placed on the game board. Each side should set up along one of the long edges of the game board, with no starship farther than five hexes from the edge and no closer than five hexes to either side. In the diagram below, the shaded areas represent the valid set-up areas:

When placing starships, each side should roll a die, with the lower roll meaning that side places its starships and fighter flights first. A starship must always be placed on the board so that its front is pointing clearly towards one of the hex sides.

After the sides have finished setting up, the game can begin. If both sides agree, objects can be placed on the game board (e.g., asteroids, planets, etc.). This can either be done by mutual consent, or one side can place all of the objects, with the other side given the choice of which edge of the board to set up its forces along.

For the most part, these objects only have the effects of blocking **line of sight** and prohibiting movement through the hexes they occupy; however, somewhere in the universe there may be objects that are not so docile...

The Sequence Of Play ◄ 2.2

Starmada is played in a series of **turns**, each of which is divided into several **phases**. All of the activities of one phase should be completed before moving on to the next. Once all of the phases have been completed, one game turn is over, and the next begins with the Orders Phase.

Sequence Of Play
1. Orders Phase
2. Movement Phase
3. Fighter Phase
4. Combat Phase
5. End Phase

Orders Phase ◄ 2.2.1

At the beginning of each turn, the players on each side secretly write down movement orders for the starships they control. In addition, there are several types of special equipment and optional rules that require pre-turn plotting; this is done during the Orders Phase.

Movement Phase ◄ 2.2.2

Once orders have been written, the ships are moved on the game board according to their orders. Detailed instructions for this process are outlined in **Section 3: Movement**.

Fighter Phase ◄2.2.3

Fighter flights are treated differently than starships, and as such are given their own phase in which to operate. Rules for fighters are given in **Section 5: Fighters**.

Combat Phase ◄2.2.4

After all fighter flights have acted, the Combat Phase can begin. Weapons fire is conducted according to the rules given in **Section 4: Combat**.

End Phase ◄2.2.5

There are some actions that may need to be completed during the End Phase; these are noted in the relevant sections of the rules.

Winning The Game ◄2.3

A basic game of **Starmada** is played for ten turns, at the end of which the side with the most points is the victor. **Victory points (VPs)** are scored by destroying opposing starships; some scenarios may include other methods by which sides can earn VPs. Whenever a ship is destroyed, the opposing side immediately receives a number of points equal to that ship's Combat Rating.

If, at the end of ten turns, one side has scored more points than the other, that side has won a minor victory; if one side has scored at least twice as many points as the other, that side achieves a major victory.
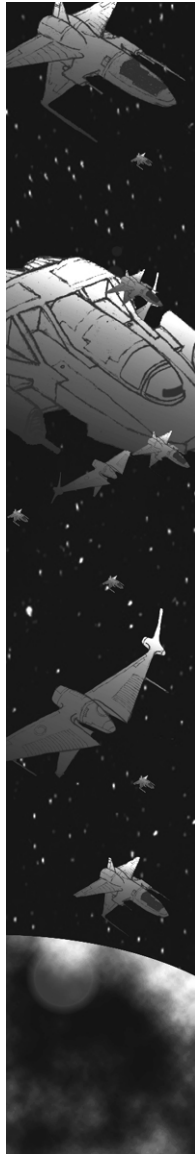
Section 3 ► Movement

The movement system given here is, admittedly, not all that realistic. No attempt has been made to simulate what maneuvering in space is or might be like. **Starmada** is a simple move-and-shoot game; anything more complex would take away from the spirit of the rules.

Movement Points ◄3.1

The movement of starships in this game is governed by the concept of movement points (MPs), which indicate how far a particular ship can move in a single turn. The number of MPs a ship has at its disposal is determined by the number of engine boxes on its starship record.

Movement Orders ◄3.2

a.k.a., "The Brian Rule"

For each starship under their control, players must write down movement orders on their starship records. Although this may sound time-consuming, it really isn't; once you've got the hang of it, you'll be able to write movement orders for an entire fleet in no time. And playtesting has revealed that prerecorded movement actually speeds things up in the long run, as players are not able to conduct an exhaustive search for the most advantageous location. Instead, players must try to outguess their opponents.

Maneuvers ◄3.2.1

Movement orders consist of a series of **maneuvers**, separated by forward movement. For example, the orders "3P2" mean that the starship is to move 3 hexes forward, turn one hex side to the left (port), and then move another two hexes forward. A ship may not perform two maneuvers in a row; it must move forward at least one hex between maneuvers. A starship may only begin its movement with a maneuver if the last thing it did in the previous Movement Phase was move forward.

The various possible maneuvers are:

Code	Maneuver
P	**Turn to Port**: The starship is turned one hexside to the left (counterclockwise). A turn to port costs one MP.
S	**Turn to Starboard**: The starship is turned one hexside to the right (clockwise). A turn to starboard costs one MP.
L	**Sideslip Left**: The starship is moved to the hex in front of it and to the left, retaining its current facing (see diagram below). This maneuver costs two MPs.

Code	Maneuver
R	**Sideslip Right**: The starship is moved to the hex in front of it and to the right, retaining its current facing (see diagram above). This maneuver costs two MPs.
B	**Move Backward**: The starship is moved into the hex directly behind it. Unlike other maneuvers, a ship does not have to move forward between a move backward and another maneuver. Thus, "PBP" and "BBB" are perfectly legal movement orders. A move backward costs two MPs.

Movement Point Cost ◄ 3.2.2

Each maneuver has a corresponding MP cost, as given above. Forward movement costs one MP per hex. Thus, movement orders of "3P2" would cost 3 + 1 + 2 = 6 MPs.

No starship may spend more MPs than it currently has available. A ship does not have to spend all of its MPs, but any unused are lost; i.e., MPs cannot be "saved" from turn to turn.

Moving The Starship ◄ 3.3

After all movement orders have been recorded, the starships are moved on the game board, according to their orders. It does not matter in what order they are moved; all ships may be moved simultaneously if desired.

Stacking ◄ 3.3.1

Starships may occupy the same hex without penalty; however, no ship may attack a target in its own hex.

Leaving The Game Board ◄ 3.3.2

Starships may leave the game board; however, any that do may not re-enter the game and are considered destroyed for victory purposes.
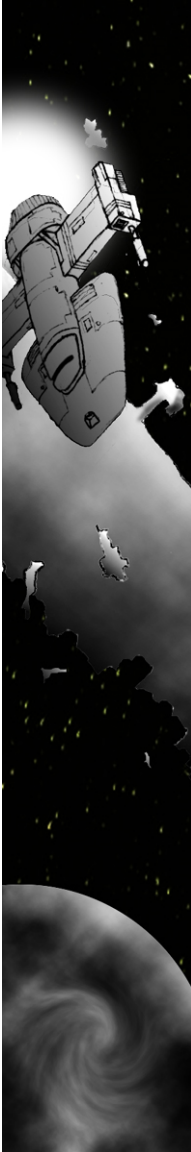
Section 4 ► Combat

We come now to the most important section of the rules; the part where you get to blow each other to smithereens...

Before Attacking ◄ 4.1

During the first Combat Phase of the game, each side should roll a die; the side with the higher roll resolves its attacks first. In the next Combat Phase, the other side will go first. Continue alternating this way until the end of the game. Keep in mind that all combat is considered to be simultaneous and that no damage is applied until the end of the Combat Phase (see **Section 4.3: Effects of Damage**).

When it comes time for a starship to make its attacks, there are four things that must be taken into account: declaration of targets, firing arcs, range, and line of sight.

Declaration Of Targets ◄ 4.1.1

Before resolving any of its attacks, a starship must declare at which targets it will be firing, and what weapons it will be using against each, remembering that each weapon can only be fired once per Combat Phase.

Firing Arcs ◄ 4.1.2

There are six firing arcs in the **Starmada** game, as shown in the diagram below:
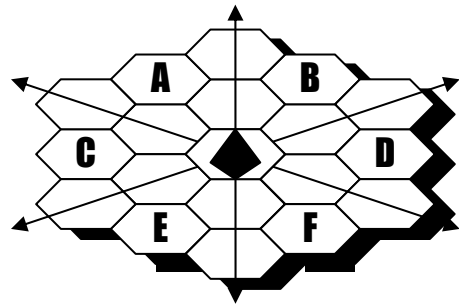
The weapons section of the ship record indicates which arcs are covered by each weapon. For example, a box under the heading "AB" would indicate one weapon that can fire into the A and B arcs. Obviously, a weapon may only attack targets that lie inside the indicated arcs.

A starship may not attack any targets in its own hex.

Range ◄ 4.1.3

The distance from a firing starship to its target is referred to as the range, and is determined by counting the number of hexes along the shortest path between the two. When determining the range, you should count the hex containing the target, but not that of the firing ship.

Each battery's range is divided into three bands: short, medium, and long. A weapon may not attack targets outside its long range band.

Line Of Sight ◄ 4.1.4

In order to attack a target, a starship must be able to trace a line of sight to that target. This means that an imaginary line drawn from the center of the firing ship's hex to the center of the target hex must not cross any part of a hex containing an object that blocks line of sight. For example, **explosion counters** block line of sight.
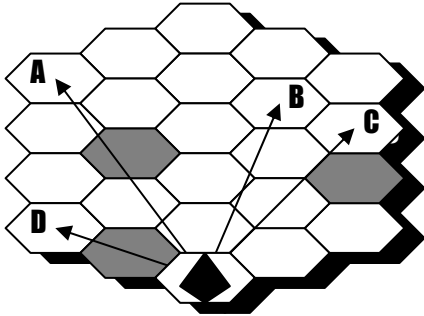
In the example above, the shaded hexes represent explosions. The firing ship could not fire at targets in hexes A or D, as the line of sight is blocked. The line to hex B is obviously open, while the line to hex C crosses the side of an explosion hex, but not through it, and is therefore not blocked. If hexes on either side of the line contained explosions, the target in hex C could not be attacked.

Starships and fighter flights do *not* block line of sight.

Attack Procedure ◄ 4.2

In order to make an attack, three separate rolls are needed: the to-hit roll, the shield roll, and the damage roll. The procedure given here is for the most basic of weapon types. Most weapons will be handled quite differently; these differences are outlined in **Appendix B: Weapon Abilities**.

The To-Hit Roll ◄ 4.2.1

Each weapon receives a number of to-hit dice equal to its rate of fire (ROF). Roll the appropriate number of dice; each die that equals or exceeds the firing battery's to-hit number hits the target. Add +1 to each die if the target is at short range, and subtract -1 if the target is at long range.

For example, three laser cannons (ROF 1) with a to-hit of 4+ and a maximum range of 9 are firing at a target 7 hexes away. The player rolls three dice, and they come up 3, 4, and 6, respectively. Normally, this would indicate two hits; however, since the target is at long range (7-9 hexes), the player must subtract -1 from each die. This means that the 4 is now a 3, a miss. Had the target been at short range, all three weapons would have hit, since the +1 would have changed that 3 to a 4.

Modifiers to the attack roll may occasionally result in a situation where a 7 or more is needed to score a hit. As

this is obviously impossible on a six-sided die, use the following method to determine hits:

If:	Then:
7+ is needed	**Two** dice with unmodified rolls of 6 result in *one* hit.
8+ is needed	**Three** dice with unmodified rolls of 6 result in *one* hit.
9+ is needed	**Four** dice with unmodified rolls of 6 result in *one* hit.
Etc.	Etc.

For example, a starship is attacking with 5 weapons (ROF 1) against a target with Electronic Countermeasures (ECM) at long range. The weapons' to-hit value is 5+, and the target has Electronic Countermeasures. Because of the long range (-1) and the ECM (-1), a roll of 7 is needed to score a hit. Five dice are rolled, coming up 1, 3, 4, 6, and 6. As two 6's were rolled, the target suffers one hit.

To-hit dice from multiple weapons in a single battery may be combined for this purpose; however, to-hit dice from weapons in different batteries must remain separate.

Regardless of modifiers, whenever a to-hit die comes up a 1, the roll automatically fails.

The Shield Roll ◄ 4.2.2

For each die that hits the target, roll the appropriate number of penetration dice and compare the results to the target's shields rating. Each die that exceeds that number causes damage to the target.

In our example from above, one hit was scored. The weapons have a PEN of 1, indicating that only one penetration die is rolled. The target has a shield rating of 3, which means the firing player must roll a 4 or better to cause damage. The die is re-rolled and results in a 5: success!

The Damage Roll ◄ 4.2.3

For each die that penetrates the target's shields, roll the appropriate number of damage dice and compare the results to the target's damage chart. The resulting alphanumeric code indicates the type of damage suffered:

Code	Damage Type
H	**Hull Hit**: One hull box should be filled in.
E	**Engine Hit**: One engine box should be filled in.
S	**Shield Hit**: One shield box should be filled in.
Q	**Special Equipment Hit**: The starship loses one piece of special equipment.
a	**Weapon Hit**: One of the starship's weapons in battery (a) is destroyed.
b	**Weapon Hit**: One of the starship's weapons in battery (b) is destroyed.
c	**Weapon Hit**: One of the starship's weapons in battery (c) is destroyed.

A number in front of a letter indicates multiples of that type of hit; e.g., "2E" means two engine hits.

In our example, one die penetrated the target's shields. Therefore, it is re-rolled on the damage chart, coming up a 3. As the target's ship record shows that a damage roll of 3 results in "Ea", the starship takes one engine hit and one weapon (a) hit.

When a starship takes a weapon hit, the exact weapon lost from the indicated battery is up to the defending player.

When a starship takes a special equipment hit, note that only those items with an associated damage box (or boxes) can be damaged—for example, a ship cannot lose its organic hull to damage. The exact special equipment lost is up to the defending player.

If *some* of the indicated damage cannot be applied—for example, "Ea" on a target that has already filled in all its engine boxes, but still has some weapons in its "a" battery—then only apply that damage that is still relevant, and ignore the rest. However, if *none* of the indicated damage can be applied—e.g., "Ea" on a ship that has already filled in all of its engine boxes *and* lost all of the weapons in its "a" battery—then the ship takes a hull hit instead.

Effects Of Damage ◄ 4.3

As combat is simultaneous, all damage is applied at the end of the Combat Phase. Players should mark damage with a slash on the starship record ("/") when it first occurs, and then fill in the boxes once all attacks have been resolved.

Note that once targets have been declared, players cannot change their minds; thus, if an enemy starship is destroyed or rendered useless early in the Combat Phase, it is not possible to shift your focus to another target.

Destroyed Starships ◄ 4.3.1

A starship that has been destroyed is removed from the board, the opposing side gains VPs, and an explosion counter is put in its place. Explosion counters have little effect on the game other than to block line of sight. However, if a starship chooses to enter a hex containing an explosion counter (or if a ship explodes while in the same hex as another), there is the possibility for damage.

The initial strength of an explosion counter depends upon the size of the destroyed starship:

Hull Points	Strength Of Explosion
1-3	1
4-8	2
9-15	3
16-24	4
25+	5

During the End Phase, each explosion counter is reduced in strength by one; any counter already at strength 1 is removed. Explosions are not reduced in strength during the first End Phase after their appearance.

Also during the End Phase, any starship inside an explosion should have a number of penetration dice rolled against it equal to the strength of the explosion. For example, if a ship is inside a strength 4 explosion, 4 dice are rolled against its shields. Any of these dice that penetrate the shields are then re-rolled for damage.

As noted above, attacks cannot be made *through* hexes containing explosions; however, attacks *into* or *out of* explosions are possible, with a negative modifier equal to the strength of the explosion. Thus, a starship inside a strength 2 explosion would have its to-hit rolls modified by -2.

Crew Casualties ◄ 4.3.2

In certain situations, the rules may call for a starship to take a crew casualty. When this happens, the next hull box should have a line drawn through it ("—"). This does not represent actual hull damage, and "real" hull hits overlap crew casualties as they occur. However, once all hull boxes have been marked, either with crew casualties or hull hits, the target can no longer move or attack, as the crew members have all been killed or incapacitated. This awards VPs to the opposing side as if the ship had been destroyed.

Section 5 ► Fighters

Many starships carry fighters: small, fast attack craft used to harass the enemy and protect friendly vessels from opposing fighters. Because of their unique nature, fighters have been given their own section of the rules (as well as a separate phase in the game turn sequence).

Fighter Bays ◄ 5.1

In order to use fighters in a game of **Starmada**, at least one of your starships must have fighter bays. Each fighter bay allows a side to use one fighter flight; each flight represents six individual craft and is treated as a single unit.

Including Fighters In A Fleet ◄ 5.1.1

Fighter flights are represented by their own playing pieces. They do not have starship records, as the only important information about a fighter flight is how many fighters it has left. Each flight starts with six fighters, and once they are all destroyed, the flight is removed from play.

The easiest way to denote fighter damage is to place a small die next to the flight's playing piece; the number showing on the die indicates the number of fighters remaining in the flight.

Unless otherwise noted in a scenario, fighter flights begin on the game board; they are assumed to have been "scrambled" before the first turn.

The Fighter Phase ◄ 5.1.2

Fighter flights move and attack during the Fighter Phase of each turn. Their movement is not written down ahead of time, and any damage inflicted by fighters is administered immediately; thus, any ship or fighter destroyed by a fighter flight does not have an opportunity to return fire before being removed from play.

At the beginning of each Fighter Phase, if both sides have fighter flights, each side should roll one die; the side with the higher result has the advantage for the current phase. That side is allowed to choose one flight (friend or foe) to move and attack first. When that flight has finished its actions for the turn, the side that lost the initiative roll has the chance to decide which flight will go next. The sides continue to alternate until one side has no more flights left to move, at which point the opposing side may move any remaining flights as desired.

Fighter Movement ◄ 5.2

Fighter flights are moved directly on the game board; i.e., no movement orders are necessary. Flights can be moved up to 10 hexes from their starting position, in any direction and/or flight path; they have no facing and therefore no need to spend MPs to turn, sideslip, or perform other maneuvers.

Fighter Stacking ◄ 5.2.1

Fighters may move through and even end their movement in the same hex as another starship or fighter flight; however, a fighter may not attack a ship in its own hex. Fighters may attack each other while in the same hex.

All fighter flights from the same side in the same hex are considered a single target; when hits are scored, they may be taken from any or all of the flights in any combination desired by the owning player(s).

Fighter Combat ◄ 5.3

After a flight has finished moving, it has the option of immediately attacking any opposing starship or fighter flight in an adjacent hex. Fighters may also attack enemy fighters in the same hex.

Fighter flights that are destroyed are removed from the board; no explosion counters are placed.

Note that the damage from fighter flights is applied immediately. For example, if a starship takes a shield hit from fighter attacks, it loses that shield for the remainder of the Fighter Phase as well as for the upcoming Combat Phase.

Fighter Attacks On Starships ◄ 5.3.1

In order to attack a starship with a fighter flight, roll one die for each fighter in the flight; the to-hit number is 5+. Each die that hits is re-rolled for penetration, treating the target's shields as half their current value (rounded up). For example, if fighters are attacking a ship with shields 3, the effective shield value is 2 (3 x ½ = 1.5, rounded up to 2). Each die that penetrates the shields results in one die of damage.

Fighter Attacks On Fighters ◄ 5.3.2

When attacking another flight, roll one die for each fighter left in the attacking flight. Each die that comes up a 5 or 6 destroys one fighter in the target flight. Each die that comes up a 1 destroys one fighter in the attacking flight (it is assumed the target is fighting back).

Starship Attacks On Fighters ◄ 5.3.3

When starships attack fighters, the following must be taken into account:

- Weapons attack fighters with a -1 to-hit penalty.

- Any to-hit die that hits a fighter flight automatically destroys one fighter; no penetration or damage rolls are necessary. Thus, weapons with PEN>1 and/or DMG>1 waste these capabilities when attacking fighters.

- Weapons with the following abilities have no effect on fighters: Must Re-Roll Penetration Dice; No Hull Damage.

Fighters & Explosions ◄ 5.3.4

Any fighter flight that enters a hex containing an explosion is immediately destroyed.
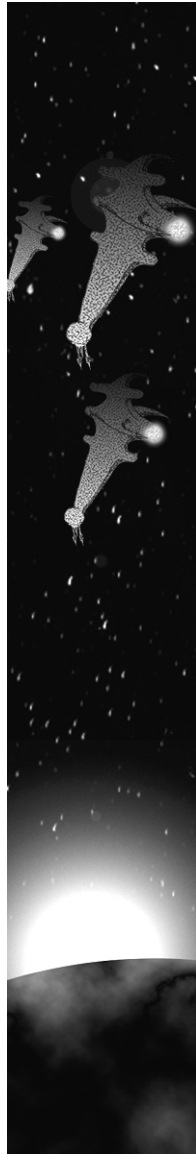
Appendix A ► Starship Construction

Since the primary motivation behind **Starmada** is the creation of a set of starship combat rules which can be used to simulate any battle in any science fiction setting, the game would not be complete without some way of designing your own starships. In this section are the construction guidelines that we have settled upon. However, as with the rest of these rules, players should feel no guilt about making changes. Think fighter bays should take up less space? Go ahead and reduce their space unit requirement. Have a problem with the Combat Rating multiplier for the cloaking device? Try building a few ships with a different factor and see how it works. **Starmada** is made to be tinkered with, so roll up your sleeves and dig in!

Although every attempt has been made to reduce the complexity of this system, you will still need the help of a sturdy calculator to get through these steps. Additionally, players can make use of the *Starmada X Construction Assistant*, a spreadsheet template that can be downloaded from our web site:

www.mj12games.com/starmada/sxca.xlt

In setting down these construction rules, we had two goals in mind:

1. First, we wanted to ensure that starships were constructed in a "realistic" manner. Although this is a science fiction game, and many things are possible, a ship with two hull points and forty-seven laser cannons should not be one of them.

2. Secondly, and perhaps more importantly, the system should also contain a method for different designs to be evaluated for comparison.

The rules that follow achieve this dual purpose admirably (we hope).

Designing A Starship ◄ A.1

This section deals with the physical construction of a starship; **Appendix A.2: Evaluating The Design** shows how to determine the ship's Combat Rating.

Hull Points ◄ A.1.1

The first decision in starship construction is the size of the ship; i.e., how many hull points does it have?

This decision is entirely up to the designer, but will have an impact on all of the steps that follow.

Space Units ◄ A.1.2

The limiting factor in starship construction is space. In this sense, "space" is an abstract combination of volume and mass. Each part of a ship takes up a certain amount of space, and the sum of the space

Starmada X™ Starship Record Sheet

Sheet 1

I.D.

Hull	Engines	Shields
1	2	3	4	5	6

Battery A

Weapon Type	Range	To-Hit	ROF	PEN	DMG

Battery B

Battery C

Weapon Type	Range	To-Hit	ROF	PEN	DMG

Weapon Type

Special Equipment

Movement Orders

1	6
2	7
3	8
4	9
5	10

Sheet 2

I.D.

Hull	Engines	Shields
1	2	3	4	5	6

Battery A

Weapon Type	Range	To-Hit	ROF	PEN	DMG

Battery B

Battery C

Weapon Type	Range	To-Hit	ROF	PEN	DMG

Weapon Type

Special Equipment

Movement Orders

1	6
2	7
3	8
4	9
5	10

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