



SCARMADA

UNITY RULEBOOK

0.0 Introduction	3	B.2 Auxiliary Services	30	F.5 Launch & Recovery	52
0.1 Game Components	4	B.3 Boosters	31	F.6 Long Range Fighters	53
0.2 Glossary	5	B.4 Carrier	31	F.7 Random Fighter Initiative	53
0.3 A Brief History of Starmada	7	B.5 Cloaking Device	31	Appendix G: Terrain.....	54
0.4 Change Log	8	B.6 Countermeasures	32	G.1 Asteroids	54
0.5 Design Credits	8	B.7 Directional Shielding	32	G.2 Black Holes	55
1.0 The Starship Display Sheet	9	B.8 Fire Control	32	G.3 Comets	55
1.1 Identifying Characteristics	9	B.9 Flares	33	G.4 Nebulae	56
1.2 Structural Components	9	B.10 Hyperdrive	33	G.5 Planets	56
1.3 Weapons	10	B.11 Ionized Hull	33	G.6 Three-Dimensional Play	57
1.4 Starship Systems	11	B.12 Launch Tubes	33	Appendix S: Scenarios.....	58
1.5 The Game Turn Record	11	B.13 Long Range Sensors	33	S.1 Alone in the Dark	59
2.0 Playing the Game	12	B.14 Marines	34	S.2 Breakout	59
2.1 Choosing the Scenario	12	B.15 Mines	34	S.3 The Chase	60
2.2 Assembling the Fleet	12	B.16 Overthrusters	35	S.4 Fleet Action	60
2.3 Deploying the Fleet	12	B.17 Probes	35	S.5 Hide & Seek	61
2.4 The Game Turn	12	B.18 Screens	35	S.6 Hit & Run	61
2.5 Victory!	13	B.19 Shockwave	36	S.7 On Patrol	62
3.0 Movement.....	15	B.20 Shuttlecraft	37	S.8 The Shakedown Cruise	62
3.1 Movement Orders	15	B.21 Solar Sails	37	S.9 Storms in Space	63
3.2 Engine Requirements	15	B.22 Stealth	37	S.10 Tin Can Dustup	63
3.3 Moving on the Game Board	16	B.23 Stutterdrive	38	S.11 To the Rescue	64
3.4 Special Maneuvers	17	B.24 Tractor Beam	38	S.12 The Trap	64
4.0 Combat.....	18	Appendix C: Weapon Options.....	39	Appendix T: Campaigns.....	65
4.1 Declaration of Targets	18	C.1 Alternate Firing Arcs	39	T.1 Objectives Campaign	65
4.2 The To-Hit Roll	20	C.2 Dual-Mode Weapons	39	T.2 Rotating Campaign	66
4.3 The Impact Roll	20	C.3 Multi-Weapon Mounts	39	T.3 Tournament System	66
4.4 The Damage Roll	21	C.4 Seeking Weapons	40	Appendix X: Backwards Compatibility.....	68
4.5 Applying Damage	21	C.5 Weapon Traits	41	X.1 Admiralty Edition	68
5.0 Fighters.....	22	Appendix D: Movement Options..	44	X.2 Nova Edition	69
5.1 Including Fighters in a Fleet	22	D.1 Emergency Thrust	44	Appendix Z: Player Resources.....	71
5.2 The Fighter Phase	22	D.2 Etheric Drag	44	Z.1 Designer's Notes	71
5.3 Fighter Movement	22	D.3 Evasive Action	44	Z.2 Starmada Drydock Instructions	73
5.4 Fighters in Combat	23	D.4 Floating Game Board	45	Z.3 Consolidated Tables	77
Appendix A: Starship Construction.....	24	D.5 Freeform Turns	45	Z.4 Rules Index	82
A.1 The Design	24	D.6 Graded Turns	46	The Starmada Universe...83	
A.2 The Combat Rating	26	D.7 Rolls	46	A Timeline of History	83
A.3 The Starship Display Sheet	26	D.8 Sequential Movement	46	The Terran Empire	84
A.4 Technology Levels	27	D.9 Towing	47	The Arcturan Federation	88
A.5 Starship Systems Table	28	Appendix E: Combat Options.....	48	The Negali	91
A.6 Drake Notation	29	E.1 Damage Control	48	The Kalaedinese Expanse	93
Appendix B: Starship Systems	30	E.2 Directed Damage	48	Starship Display Sheet Index	96
B.1 Anti-Fighter Batteries	30	E.3 Explosions	48		
		E.4 Partial Victory Points	49		
		E.5 Sequential Combat	49		
		E.6 Shield Reinforcement	50		
		E.7 Target Acquisition	50		
		Appendix F: Fighter Options.....	51		
		F.1 Combat Space Patrol	51		
		F.2 Dogfights	51		
		F.3 Fighter Screens	51		
		F.4 Fighter Variants	52		

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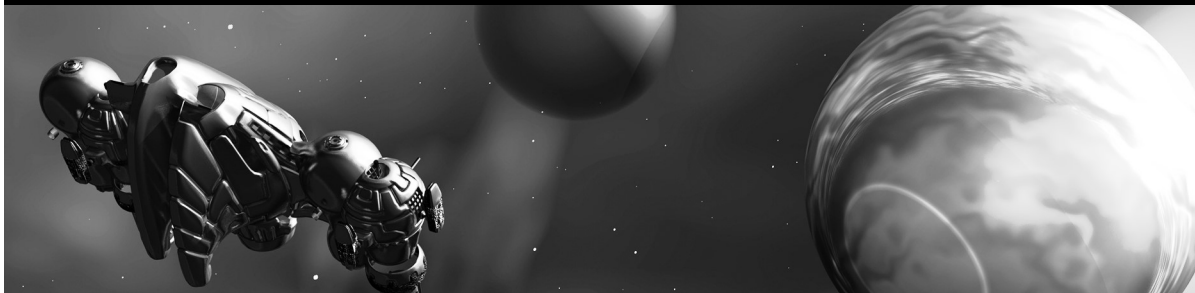
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0.0 INTRODUCTION



Starmada™ is a miniatures board game of starship combat. At its most basic level, players take command of space fleets in a general attempt to reduce each other to just so much space junk. At its most advanced, the game can be customized to breathe life into any science fiction background players might imagine.

Novices shouldn't fret; the core set of rules has been designed with ease of play in mind, accessible even to beginners. On the other hand, seasoned veterans should find the concise nature of the rules quite refreshing. **Starmada** allows players to concentrate on the finer points of squashing their opponent rather than arguing over rules interpretations, without sacrificing any of the flavor or excitement of more complex games.

Simple, but not simplistic, is the guiding principle.

Take some time now to look over the rules, then find an opponent, cue up your favorite sci-fi soundtrack, and lead your **Starmada** to victory!

The Unity Edition

The *Unity Rulebook* represents what we expect will become the definitive version of a game that has gone through several updates over more than two decades. In that time, players around the world have grown to love **Starmada** for its shallow learning curve, depth of experience, and ease of play, even as they differ over which release represents the One True Vision.

The goal of this edition, designated PROJECT UNITY, was to draw from the best parts of each incarnation of the game, from the *Compendium* and *Starmada X*, through the *Admiralty Edition* and 2012's *Nova Rulebook*, and unify those concepts in a way that allows experienced starship captains to continue enjoying the game they love while drawing new players into the fold.

Long-time players will be thrilled to learn there is no need to convert existing starship designs to this new edition: comprehensive rules are included which allow players to use both *Admiralty* and *Nova* ship display sheets with a minimum of modification.

With the release of the *Unity Rulebook*, we hope to revitalize the game and introduce the thrills of tabletop battles in deep space to a whole new generation. The Universal Game of Starship Combat is back, and better than ever!

Rulebook Structure

Starmada should not be seen as merely a traditional wargame, simulating a particular battle or series of battles against a fixed backdrop; instead, it is more of a toolkit, with which players can build settings to mimic their favorite movies and television shows, or create universes of their own design, all sharing a common rules framework. In this way, combat can be staged not only within a given context, but between worlds as well. Those who have always wanted to see a Federation heavy cruiser take on an Imperial star destroyer now have the chance!

The **Starmada** rulebook consists of three main sections:

- 1) By way of providing a baseline from which deviations can be measured, the first section (chapters 1 through 5) describes the basic game engine: what can be called "essential" **Starmada** (p.9). While these rules form the core upon which alternatives can be layered, they are not necessarily inviolable. Many can be modified or replaced by optional rules and additions.
- 2) Following the essential rules are several lettered appendices outlining a multitude of additional rules (p.24). Players should not see this collection as all-inclusive, nor should it be taken as a whole. The intent is not for players to make use of every option (this would be impossible in any event, as some contradict each other). Instead, if "essential" **Starmada** is seen as raw material, the appendices contain the tools with which players can mold that material into a desired form.
- 3) Finally, a brief introduction to the Imperial **Starmada** universe is provided, along with 30 sample starship display sheets are provided by way of helping new players hit the ground running (p.83).

Despite the number of optional rules and additions available, players should not feel any obligation to expand beyond the basics. A fully enjoyable game can be had using nothing but "essential" **Starmada**, and many players never have the urge to expand any further. Others feel shortchanged if they aren't making use of every possible option.

There is nothing wrong with either approach; each has its devotees, although most players will fall somewhere in the middle. The reality is no game is inherently better or worse than another: each meets the needs of its players. **Starmada** is meant to accommodate everyone.

0.1 Game Components

In addition to the items listed below, players will need to provide pens or pencils and some dice. All dice used in this game are six-sided, like those found in family board games. It would be best to have a half-dozen or more on hand. Some optional rules require a standard deck of playing cards.

Many of these components can be downloaded for free from the Majestic Twelve Games web site:

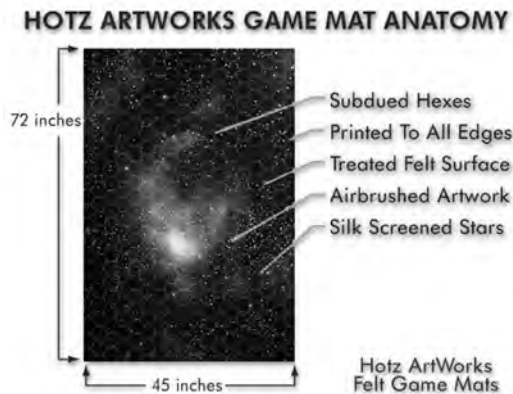
www.mj12games.com/starmada

Game Board

As with most board games, the **Starmada** playing area is subdivided into spaces which regulate movement and distances. These spaces are arranged into a hexagonal grid; thus, each space is referred to as a "hex".

While most any size of hex will suffice, it is recommended players use hexes measuring between 3cm and 5cm from edge to edge (1¼" to 2"), depending on the size of the models being used (see below). The minimum recommended playing area is a board 32 hexes across and 18 hexes wide.

Several manufacturers produce game boards ideal for use with **Starmada**. One excellent choice would be the felt game mats produced by Hotz ArtWorks.

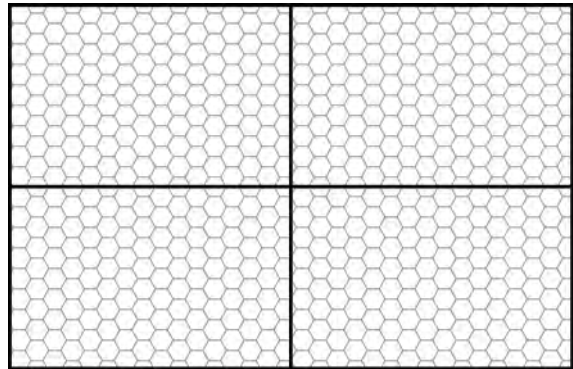


Anatomy of a Hotz Mat
www.hotzmats.com

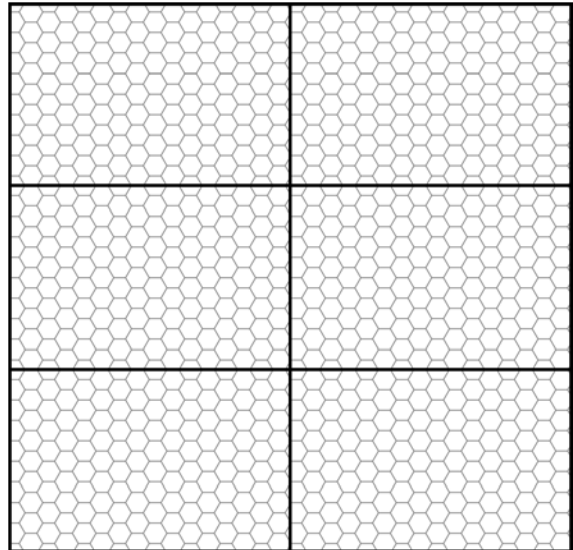
Either the full-size Hotz Mat with 2" hexes or the half-size mat with 1½" hexes would work well for a standard **Starmada** scenario (p.12).

Players without access to a suitable hexgrid will find a sample game board section at the Majestic Twelve Games web site. Once printed onto 11"x17" paper, the white margins should be carefully trimmed using a pair of scissors or hobby knife.

Four of these sections fit together to complete a standard game board, as shown below:



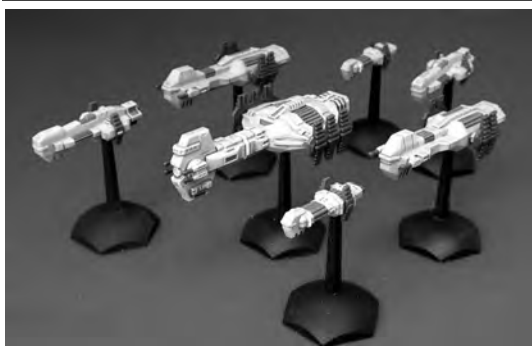
A larger playing surface can be obtained simply by adding more sections. Below is a 3 × 2 game board (measuring 32 hexes by 27 hexes):



Alternatively, **Starmada** can be played on an open tabletop (*i.e.* without hexes); when doing so, players will also need to supply at least one yardstick or tape measure. The basic rule of thumb is one hex equals a distance of 5cm (2") on the tabletop; this requires a playing surface at least 100cm wide and 150cm across (approximately 3'x5'). When measuring distances on the tabletop, always round up to the next "hex"; *e.g.* if two starships are 12cm apart, they are considered to be at a range of 3 hexes (12cm ÷ 5cm/hex = 2.4 hexes, rounded up).

Models

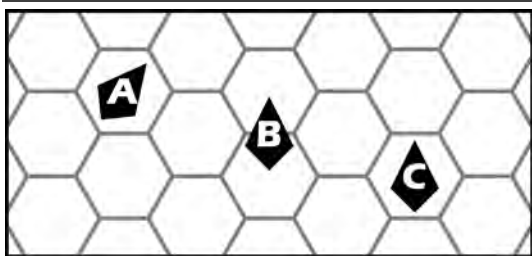
Each starship is represented by a **model** placed on the game board. Typically, a model is a metal or resin miniature, suitably painted and mounted on a "flying" stand. Such figures add an important aesthetic dimension to the game. Many different manufacturers produce ship miniatures, some with ties to **Starmada**. Visit the Majestic Twelve Games web site for more details.



Miniatures by Brigade Models
www.brigademodels.co.uk

Players without access to suitable miniatures will find a sheet of sample starship counters at the Majestic Twelve Games web site. Once printed onto cardstock, these counters should be carefully separated using a pair of scissors or a hobby knife. For extra durability, the counters may be glued onto thicker stock, such as a cereal box or mat board, prior to being cut out.

Whatever is used, each model must have some method of indicating its "front"; e.g. the sample counters have a small arrow on one edge. On the game board, models must be placed so each is completely within a single hex and clearly facing one of the sides.



In the above example, only Ship (C) is placed correctly. Ship (B) overlaps multiple hexes, while Ship (A) is not clearly facing one side of the hex it occupies.

Starship Display Sheets

In addition to the model used to represent it on the game board, each starship has an associated starship display sheet. This sheet contains all of the information necessary to define the ship's capabilities, as well as to track damage inflicted by the enemy.

The various parts of the display sheet, and how each impacts game play, are described in the following chapter (p.9).

Markers

Many of the options included in this book require the use of markers during the game. Players may use coins, beads, rare jewels, or any other suitable items for this purpose.

A full-color copy of this sheet of sample markers can be downloaded from the Majestic Twelve Games web site. Once printed onto cardstock, the sheet should be folded as indicated (along the red line), and the two halves glued together. Finally, the individual markers should be carefully separated using a pair of scissors or a hobby knife.



Double-sided markers are considered "face up" if the side with a colored background is showing; if the white background is showing, the marker is considered "face down".

0.2 Glossary

Accuracy: The number a player needs to roll or better on a single die in order to score a hit with a weapon; e.g. "4+" indicates a roll of 4, 5, or 6 is required to score a hit. Abbreviated as "ACC".

Bank: The set of weapons within a battery which can fire into a given firing arc (or arcs).

Battery: A group of identical weapons on a starship, all with the same range, rate of fire, accuracy, impact, and damage values.

Campaign: A series of linked games, in which the outcome of one battle has a direct impact upon the initial conditions of the next.

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

Combat Rating: A number indicating a starship's ability to inflict and endure punishment relative to other ships in the game. The higher this number, the more powerful the design.

Damage: There are two meanings:

- 1) The number of dice a weapon uses when making a damage roll. Abbreviated as "DMG";
- 2) The effect of a damage roll on a target.

Damage Roll: The act of rolling dice to determine what effect an attack has on the target.

Defensive Arc: One of four arcs surrounding a starship which define the area covered by certain types of defensive systems. Contrast with "firing arc".

Defensive Rating: One component of the combat rating; a quantification of how many points of damage, on average, it will take to destroy the starship.

Element: A term that includes both starships and fighter flights. It is used to avoid having the phrase "starship and/or fighter flight" occur repeatedly throughout these rules.

Engine Hit: A type of damage representing the loss of engine power. When all of a starship's engine boxes have been checked off, it can no longer maneuver.

Engine Rating: The amount of power provided by a starship's main propulsion system. Each point in the engine rating represents enough thrust to increase or decrease the ship's speed by one hex per game turn.

Engine Requirement: A quantification of the amount of energy needed from a starship's engines in order to complete a given set of movement orders.

Equipment: Starship systems that only provide benefit while operational. Equipment can be destroyed by damage. Contrast with “munitions” and “traits”.

Facing: The direction in which the front of a starship is pointed. Contrast with “heading”.

Faction: The political entity to which a side’s forces belong. Depending on the setting in which your games are set, a faction may represent anything from a small mercenary cartel to a galaxy-spanning empire.

Fighter: A small, fast attack craft used to harass enemy starships and defend against opposing fighters.

Fighter Capacity: A quantification of the amount of space a starship has set aside for the storage and maintenance of fighter flights.

Fighter Flight: A group of fighters operating as a single unit. The terms “fighter flight” and “flight” should be considered interchangeable.

Firing Arc: A segment of the imaginary circle surrounding a starship which defines the direction(s) in which a weapon can make an attack. Contrast with “defensive arc”.

Fleet Limit: The limiting factor when assembling a fleet for a scenario; defined as the highest allowable total combat rating for all starships on a side.

Game Turn: The period of time during which each phase in the sequence of play is conducted once. Contrast with “turn”.

Game Turn Record: The bottom portion of the starship display sheet, used to record movement orders and other bits of information throughout the game turn.

Heading: The direction in which an element is moving. Contrast with “facing”.

Hull Hit: A type of damage representing the weakening of a starship’s superstructure. When all of a ship’s hull boxes have been checked off, it is destroyed.

Hull Size: A quantification of the size of a starship; the number of hull hits the ship can take before destruction.

Impact: The number of dice a weapon uses when making an impact roll. Abbreviated as “IMP”.

Impact Roll: The act of rolling dice to determine whether a weapon hit is blocked by the target’s shields.

Line of Sight: An imaginary line traced from the center of an attacker’s hex to the center of the target hex; used to determine if an attack is obstructed or obscured by intervening terrain.

Loss Limit: A restriction placed on how many weapons from a given battery may be chosen as losses due to damage before those from other batteries are damaged.

Model: The playing piece representing a specific element on the game board.

Movement Allowance: The maximum number of hexes a fighter flight may move when activated. Abbreviated as “MA”.

Movement Orders: The system of notation allowing players to simultaneously plot where their starships are going to move.

Munitions: Consumable starship systems which are discarded after use. Contrast with “equipment” and “traits”.

Offensive Rating: One component of the combat rating; a quantification of how many points of damage, on average, the starship can inflict in a single game turn, weighted by an “engagement radius”.

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

Pill Bug: Armadillidiidae is a family of woodlice, a terrestrial crustacean group in the order Isopoda. Unlike members of other woodlouse families, members of this family can roll into a ball, an ability they share with the outwardly similar but unrelated pill millipedes and other animals. It is this ability which gives woodlice in this family their common names of pill bugs, roly polies, or doodle bugs. The best known species in the family is *Armadillidium vulgare*, the common pill bug.¹

Pivot: A maneuver by which a starship changes its facing by one or more hexsides while its heading remains unaltered.

Range: There are two meanings:

- 1) The distance between two objects, as determined by counting the number of hexsides crossed along the shortest path between the two;
- 2) A weapon characteristic defining the distance at which it may be used to attack a target. Range is divided into three equal bands: short, medium, and long. Abbreviated as “RNG”.

Rate of Fire: The number of dice a weapon uses when making a to-hit roll. Abbreviated as “ROF”.

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.

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

Shield Hit: A type of damage representing the degradation of a starship’s shield rating. When all of a ship’s shield boxes have been checked off, it is no longer protected by shields (although it may possess other forms of defense).

Shield Rating: The amount of protection provided by a starship’s shield generators; given as a number from 0 to 5.

¹ www.wikipedia.org. Be advised that under no circumstances may pill bugs wheel.

Side: Collectively, all of the players controlling the starships of one faction in a game. In a two-player game, players are considered to be “sides” unto themselves, while multi-player games may involve more than one player per side.

Sideslip: A maneuver by which a starship moves forward while “slipping” to either the left or the right.

Speed: The number of hexes of forward movement contained in a starship’s most recent set of movement orders.

Starship: An independent space-faring vessel; the basic combat unit in *Starmada*. The terms “starship” and “ship” should be considered interchangeable.

Starship Display Sheet: The sheet on which all of a starship’s capabilities and weapon systems are noted. It is also used to record damage suffered by the ship.

Starship Systems: Any apparatus or machinery possessed by a starship which is not otherwise represented by the basic descriptors (hull, engines, weapons, and shields). Ship systems are subdivided into three types: equipment, munitions, and traits.

Tiny: A tiny target is significantly smaller than even the lightest starship; e.g. fighters, shuttlecraft, etc. Such targets are more difficult for normal weapons to acquire and engage.

To-Hit Roll: The act of rolling dice to determine whether a weapon hits its intended target.

Trait: There are two meanings:

- 1) A type of starship system which represents an intrinsic quality of a starship. Due to their nature, traits are unaffected by damage. Contrast with “equipment” and “munitions”;
- 2) A characteristic of a weapon that enhances or modifies its operation within the rules.

Turn: A maneuver by which a starship alters its heading by one hexside (60°). Contrast with “game turn”.

U-Turn: A type of turn by which a starship reverses course, changing its heading by three hexsides (180°). Contrast with “game turn”.

Victory Point Target: The number of victory points that must be scored by one side in order to win a scenario.

Victory Points: The method by which a winner is determined. Victory points are usually scored by destroying enemy starships, although some scenarios provide for different methods by which they may be earned.

Weapon: An object mounted on a starship used to inflict damage upon enemy ships. Each weapon is part of a battery.

Weapon Hit: A type of damage representing the loss of a starship’s weaponry. If the ship carries equipment, this is also affected by weapon hits.

0.3 A Brief History of Starmada

As of 2019, *Starmada* is 25 years old. In that time, the game has gone through a number of iterations.

Starmada

Starmada was first posted to the rec.games.board Usenet group on January 22, 1994, at 7:36 PM (GMT). A search on groups.google.com should still turn up the original posts (there were four in all). This version was re-released as an appendix to the *Starmada X* rulebook.

Extremely primitive as compared to more modern evolutions of the game, very little of the original *Starmada* has been retained over the years.

Starmada 2.0

An updated version of the rules was posted in February 1995 on the author’s student web page (sadly, no longer reachable) at the University of Illinois. Many concepts from the first version were discarded or significantly altered; the most important change was the introduction of the shield rating.

This version still exists as a text file, and was much more fun to play than the first: perhaps it will see the light of day again.

Starmada 3.0

The first printed version of *Starmada*, this was a “shareware” release in 1996; the rules were available as a free download (again, from an extinct web site) with an encouragement to “register” them by sending \$10 to the author, who would then send a hard copy via return post. Registrations were steady despite the poor quality of said hard copies.

This version was the first to include weapon firing arcs, as well as introduce the concept of “space units” as a limiting factor in starship construction.

Starmada - Fourth Edition

Released in 1998, the fourth edition made some notable improvements to version 3.0; the most transformative of which was the specification of different ranges and to-hit values for each type of weapon carried by a starship. (Prior to this, all weapons on a ship had the same range and to-hit values.)

The Starmada Compendium

Originally billed as *Starmada - Fifth Edition*, this edition followed the fourth relatively quickly, appearing in late 1998. It bears the distinction of being the first version with artwork, and becoming (in 2000) the first professionally-printed version of the rules.

Initially put out as a 96-page rulebook and three 64-page expansions, the material was eventually collected in the *Starmada Compendium*. This version is likely the one to which most long-time players were first introduced.

Starmada X

Intended to mark the game’s tenth anniversary (hence the “X”), this version got off to a rocky start in late 2003. The initial release as a “box set” was not well-received; however, after being re-issued in traditional book form in early 2004 (allowing players to focus on game play instead of packaging), *Starmada X* held strong for nearly four years, cementing its place as one of the pre-eminent games of starship combat on the market.

Among the several improvements introduced were fully-customizable weapons and the implementation of a damage allocation track tailored to each individual starship design. It also became the first version with tie-ins to miniature manufacturers.

Starmada: The Admiralty Edition

Early in 2007, a group of veteran players came together to discuss the future of *Starmada*. This group was given the name of “The Admiralty”, and tasked with developing a new edition of the game. The result was *The Admiralty Edition*, the culmination of nearly a year of collective effort to update, streamline, and otherwise improve upon the game.

This was the most successful edition of *Starmada* ever, with a number of supplements released over the years, expanding the game into both historical wet-navy and far-future space-navy settings.

Star Fleet Armada

In 2009, Majestic Twelve Games began a joint venture with Amarillo Design Bureau, Inc. The first book, *Klingon Armada*, included display sheets for 40 starships representing the empires of the *Star Fleet Universe*, along with updates and additions to the *Starmada* rules to simulate battles in that setting. To date, five books in this series have been released, containing hundreds of ship designs.

Starmada: Fleet Ops

Not exactly a new edition, *Fleet Ops* was instead an attempt to “scale up” *Starmada* to allow for even larger battles. Published in 2011, it was meant to coexist alongside the *Admiralty* edition, but introduced a number of concepts that would make their way into the next iteration of the core game.

Starmada Nova Rulebook

Released in 2012, in many ways *Nova* represented a departure from earlier versions of the game. Most notably, this version moved away from representing each individual weapon on the starship display sheet in favor of abstract “attack dice”. Combat modifiers increased or decreased the number of attack dice rather than adjusting the chance of scoring a hit on each to-hit die.

Although these changes did speed up combat resolution, additional simplification (such as the introduction of generic “damage boxes”) resulted in a “love it or hate it” split among long-time players.

Starmada Unity

The first version of this rulebook was released in April 2017. Drawing from all the best bits of the editions that preceded it, *Unity* is meant to be the definitive incarnation of the game. It can be seen in some ways as a return to *Admiralty*, although this edition retained some of the more useful innovations from *Nova*.

0.4 Change Log

This section summarizes all substantive changes made to the *Starmada* rulebook.

- **April 2017:** Initial release.
- **June 2017:** Removed Defensive weapon to-hit penalty (p.42); modified description of Proximity weapon trait (p.43); renamed three Arcturan starship classes (p.86).
- **October 2018:** Adjusted Range-Based weapon trait construction multipliers (p.25).
- **April 2020:** Updated to v2.0. Visit www.mj12games.com/starmada to download a complete description of all changes.

0.5 Design Credits

It would be impossible to give full credit to everyone who has contributed to the development of *Starmada* over the years. Nevertheless, even an incomplete accounting is better than none.

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Garrick Herbst, Garrett Hunter, Darren Kehrer,
Kyle Koskinen, Don Kuehn, Tyrel Lohr,
Brad McElhaney, Jeff Miller, Robb Minneman,
Thomas Nicar, Jason Noble, Bob Norman,
Darren O’Connell, Deric Page, Eric Parker,
Jonathan Pike, Juha Pohjalainen, James Pridemore,
Sam Pullen, Joshua Rasey, Jerry Robinson,
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Majestic Twelve Games discussion forum:
forum.mj12games.com

1.0 THE STARSHIP DISPLAY SHEET



Before players can begin the process of blasting each other's fleets out of existence, some understanding of starships and the way they are defined within the game is necessary. This chapter explains these details by introducing the **starship display sheets**, which keep track of all required information for each ship in the game.

1.1 Identifying Characteristics

The top section of the starship display sheet consists of descriptive information.

Faction, Class, & Type

At the top of the starship display is a line with (up to) three distinct bits of information:

- The **faction** is the political entity which primarily operates the starship. Depending on the setting in which your battles are being fought, a faction may be anything from a pirate cartel to a galaxy-spanning empire.
- A starship's **class** is the designation given to the group of ships with which it shares its design and capabilities. Within the game, all ships in a given class have the same operational parameters, and therefore use identical display sheets.
- The starship's **type** provides a general idea of the role it fulfills within its fleet and command structure. In many cases, ships are assigned types with a naval analogue (e.g. "battleship", "destroyer", etc.) although this is not always true.

Combat Rating

Following the starship's class is its **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 ship will be in battle.

The starship display sheet above is for an Imperial Majestic-class battlecruiser. The Majestic has a combat rating of 185.

Imperial MAJESTIC-class Battlecruiser										185				
ID:	NAME:													
HULL	8	7	6	5	4	3	2	1						
ENG	4	3	2	1	WPN	16	12	8	4	SHLD	3	3	2	1
Lightning Turret	ACE		BDF		(2)									
Laser Cannon	AB		AC		BD		EF		(3)					
Fusion Torpedo	AB		(2)											
Countermeasures	<input type="checkbox"/>		Hyperdrive		<input type="checkbox"/> (1)									
1	2		3											
4	5		6											
7	8		9											

LIGHTNING TURRET
4-8-12 2x5+/1/1 | Pr1

LASER CANNON
3-6-9 1x5+/1/1 |

FUSION TORPEDO
5-10-15 1x4+/3/1 |



Starship Name

Below the starship class is an empty space reserved for the ship's name. This should be unique, as it serves to distinguish individual ships, and link the display to a specific model on the game board. Alternatively (or in addition) a unique letter or number can be written in the "ID" box.

1.2 Structural Components

The next section of the starship display constitutes four "tracks" which are used to mark the effects of damage as it occurs.

Hull

The number of boxes on the hull track corresponds to the starship's **hull size**. As the ship suffers **hull hits**, these boxes will be checked off; the number in the first unchecked box indicates how many hull hits can be taken before destruction. Once the last hull box has been checked, the ship is destroyed and removed from the game.

A starship's hull size is not reduced by hull hits; e.g. a hull size 6 ship is always considered hull size 6, regardless of the number of hull hits taken.

Some starships have a group of boxes above the hull track; this indicates the presence of **B.18: Screens** (p.35). Four sets of boxes represent **Directional Screens** (p.36).

HULL	8	7	6	5	4	3	2	1
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The Majestic is hull size 8.

Engines (ENG)

A starship's **engine rating** indicates the relative power of its main propulsion unit.

The number of boxes on the engine track is equal to one-half the starship's hull size, rounded up. As the ship suffers **engine hits**, these boxes will be checked off; the number in the first unchecked box indicates the ship's current engine rating. Once the last engine box has been checked, the ship can no longer maneuver (engines may be repaired if using **E.1: Damage Control**, p.48).

ENG	4	3	2	1
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There are four boxes on the Majestic's engine track. The starship begins with an engine rating of 5; after two engine hits have been taken, this drops to 2.

Weapons (WPN)

The number of boxes on the weapons track is equal to the one-half the starship's hull size, rounded up. As the ship suffers **weapon hits**, these boxes will be checked off; the number in the first unchecked box indicates how many weapons are currently functional (any equipment carried by the ship is also included in this total, but not traits or munitions). Once the last weapons box has been checked, the ship has no remaining functional weapons (or equipment; weapons/equipment may be repaired if using **E.1: Damage Control**, p.48).

WPN	17	13	9	5
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There are four boxes on the Majestic's weapons track. The starship has a total of 17 weapons (and equipment items); after the first weapon hit has been taken, the ship must choose four weapons (and/or equipment items) to be damaged.

Shields (SHLD)

Most starships have some amount of energy shielding, if only to protect them from the impact of meteors and other debris. However, the main function of a ship's **shield rating** is to defend against enemy weapons.

The number of boxes on the shield track is equal to one-half the starship's hull size, rounded up. As the ship suffers **shield hits**, these boxes will be checked off; the number in the first unchecked box indicates the ship's current shield rating. Once the last shield box has been checked, the ship is no longer protected by shields (although it may possess other forms of defense; shields may be repaired if using **E.1: Damage Control**, p.48).

It is possible for a starship to have no shield track at all; for example, in settings where **B.18: Screens** (p.35) are the primary defensive measure. In such cases, the engine and weapons tracks are extended to cover the space on the starship display sheet normally occupied by the shield track.

Some starships have four sets of boxes above the shield track; this indicates the presence of **B.7: Directional Shielding** (p.32).

"Shields" is used as a generic term for starship defenses that can absorb or deflect a certain percentage of incoming weapons fire: it is possible the "shield" rating may in fact be due to point-defense lasers, neutronium reactive armor, reflective hull paint, magic beans, or any number and/or combination of different systems.

SHLD	3	3	2	1
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There are four boxes on the Majestic's shield track. The starship begins with a shield rating of 3; after two shield hits have been taken, this drops to 2.

1.3 Weapons

Most starships have one or more weapon **batteries**. Each battery consists of a number of weapons of the same type and with the same capabilities.

The types of weapon carried by a starship are listed down the right side of the starship display sheet. A weapon's characteristics are given in the following format:

S-M-L ROF×ACC/IMP/DMG

where S (short), M (medium), and L (long) are the weapon's range bands (see below).

- A weapon's **range** (RNG) is divided into three bands: short, medium, and long. For example, a weapon whose RNG is given as "3-6-9" has a short range of 1-3 hexes; a medium range of 4-6 hexes; and a long range of 7-9 hexes. Some batteries have a movement allowance (MA) listed instead of range bands; this indicates the battery is made up of **C.4: Seeking Weapons** (p.40).
- Rate of Fire** (ROF) indicates the frequency with which the weapons in the battery can attack. This may be due to a high cyclical rate (e.g. a machine gun), several projectiles in each attack (e.g. a shotgun), or other factors. Weapons with higher ROF values have more chances to score hits against the target.
- Accuracy** (ACC) determines the chance weapons in the battery have of hitting the target. As it denotes the minimum result that must be rolled on a die in order to score a hit, a lower ACC is better (i.e. weapons with ACC 3+ are twice as likely to score hits as those with ACC 5+).
- Impact** (IMP) and **Damage** (DMG) reflect the destructive power of the weapons in the battery. The higher these numbers, the more damage the weapons are able to inflict on the target. The distinction between the values has to do with timing: IMP is applied when attempting to pierce the target's shields, while DMG comes into play if/when the shields have been penetrated.

If there is anything listed on the right side of a battery's display, this indicates the weapons possess one or more **C.5: Weapon Traits** (p.41).

LIGHTNING TURRET

4-8-12 2×5+/1/1 | Pr1

The *Lightning Turret* has range bands of 4, 8, and 12 hexes; its ROF is 2; its ACC is 5+; and its IMP and DMG values are each 1. It has the *Piercing-1* (Pr1) trait.

Below the starship's engine, weapons, and shield tracks is a section showing the number of weapons carried and the **firing arcs** into which they can be brought to bear (p.19). Each set of squares denotes a separate **bank** of individual weapons which can fire into the indicated arc(s). For example, "AB □□□ | BD □□□" indicates two banks of three weapons each, one firing into the [AC] firing arc and the other firing into the [BD] arc. As the starship suffers weapon damage, these squares will be filled in, reducing the number of weapons available.

Following the firing arcs is a number encased in parentheses. This is the battery's **loss limit**, used when assigning damage due to weapon hits (p.21).

Lightning Turret	ACE □□ BDF □□	(2)
Laser Cannon	AB □ AC □□ BD □□ EF □	(3)
Fusion Torpedo	AB □□□□	(2)

The *Majestic* has three weapon batteries: *Lightning Turrets*, *Laser Cannons*, and *Fusion Torpedoes*.

There are four *Lightning Turrets*, two firing into each of the [ACE] and [BDF] arcs. The loss limit of the battery is (2).

1.4 Starship Systems

Any characteristics or special equipment possessed by the starship, not encompassed by the other sections of the starship display sheet, are listed below the ship's weapons. Ship systems are divided into three types: **equipment**, **munitions**, and **traits**. Equipment is listed first, followed by traits (printed on a shaded background), and finally munitions, with each class of munition listed on a separate line. Systems are described in **Appendix B: Starship Systems** (p.30).

Any equipment carried by the starship (but not traits or munitions) also has a loss limit, which operates in the same manner as the loss limits for weapon batteries (p.21).

Countermeasures □ | Hyperdrive □

The *Majestic* has two pieces of special equipment: *Countermeasures*, and a *Hyperdrive*. The loss limit for this equipment is (1).

The *Majestic* does not have any traits or munitions.

1.5 The Game Turn Record

At the bottom of each starship display sheet is a game turn record, used to track different things throughout the course of the game turn.

1 □	2 □	3 □
4 □	5 □	6 □
7 □	8 □	9 □

One box is used for each game turn. Here players can record the starship's movement orders (p.15) as well as any additional information as described throughout the rules. The checkbox at top left is used to indicate when a ship has made its attacks.

2.0 PLAYING THE GAME



This chapter is intended to give an overall picture of how the game is played; further details can be found in following chapters. After a few games, players should be able to dispense with the rulebook entirely; every effort has been made to keep the process as intuitive as possible.

2.1 Choosing the Scenario

A dozen scenario templates are given in **Appendix S: Scenarios** (p.58). Alternatively, scenarios may be designed from scratch, although this should not be attempted until players have gained some familiarity with the game.

Once a few games have been completed, many players will likely want to try their hand at a **campaign**, or a series of linked scenarios. There are a nearly infinite number of ways to conduct a campaign; some easy-to-implement possibilities are discussed in **Appendix T: Campaigns** (p.65).

Players who wish to jump right in may elect to play a "standard" scenario, which is merely a no-frills engagement on an open game board between two evenly-balanced sides. This chapter describes the process for setting up and playing a standard scenario.

2.2 Assembling the Fleet

The first step in playing a game (aside from finding an opponent) is to decide what size battle to fight. There are five standard sizes:

Battle Size	Fleet Limit	VP Target
Very Small	400	240
Small	700	420
Medium	1000	600
Large	1500	900
Very Large	2000	1200

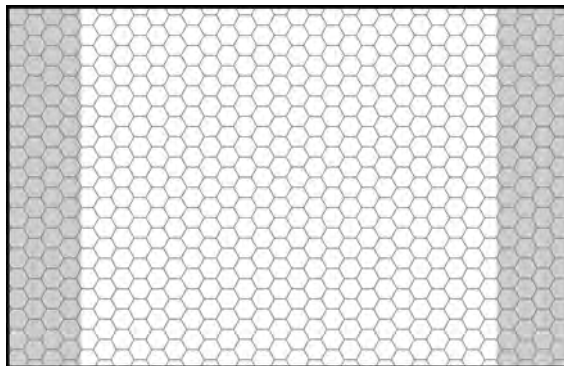
The **fleet limit** determines how big each fleet will be, while the **victory point (VP) target** indicates how much damage players must inflict in order to win the game (p.13).

To begin, select a faction and build a fleet by selecting starships available to that faction. The only limitation is that the total combat rating of all ships selected by either side may not exceed the fleet limit. Sides typically choose different factions, although it is possible for both sides to select the same faction: think of it as a training exercise, or the opening battle of a civil war.

2.3 Deploying the Fleet

After choosing the starships making up their fleets, players may either make copies of the appropriate ship display sheets, or else write the necessary information onto blank display sheets, which can be obtained from the Majestic Twelve Games web site.

Next, set the game board within reach of both sides on a level playing surface, such as a table or the floor. Determine the total number of starships on each side. The side with more ships places one model within four hexes of one short edge of the game board. The other side then places one model within four hexes of the opposite edge. If both sides have the same number of ships, roll a die to determine who places first.



Sides alternate placing models within their setup areas until all starships have been placed. No more than three ships may be placed in a single hex.

Once all starships have been placed, total the number of fighter flights on each side (p.22). Beginning with the side that has more flights, alternate placing one flight at a time until all flights have been placed (if using **F.5: Launch & Recovery**, p.52, some or all of a side's flights may be held onboard their carrier). Each fight flight must begin the game within two hexes of its carrier. No more than three flights may be placed in a single hex.

2.4 The Game Turn

Starmada is played in a series of **game turns**, each of which is made up of five distinct parts, or **phases**. The order in which these phases are conducted is referred to as the **sequence of play**. When all five phases have been completed, one game turn is over, and the next begins with the Orders Phase.

Each phase requires players to perform specific tasks, thus bringing some semblance of order to the chaos of battle. These tasks must be completed during the indicated phase, and may not be performed in another. For example, if a player forgets to make attacks with a starship during the Combat Phase, the opportunity is lost and cannot be recovered during the End Phase.

- During the **Orders Phase** sides record movement orders for each of their starships, according to the rules on p.15.
- During the **Movement Phase** sides move their starships across the game board, according to the rules on p.16.
- During the **Fighter Phase** sides alternate activating individual fighter flights, according to the rules on p.22. (If no fighter flights are present, players may skip this phase.)
- During the **Combat Phase** sides make attacks with their starships, according to the rules on p.18.
- The **End Phase** serves primarily to mark the end of the game turn. At this time, both sides should determine whether their conditions for victory have been met (see rule **2.5: Victory!** below).

A detailed sequence of play, describing all of the potential actions that may be conducted during the course of a single game turn, can be found on the following page.

2.5 Victory!

Winning the game is as simple as accumulating enough **victory points** (VPs). In most cases, VPs are awarded for the destruction of enemy forces. VPs may also be awarded for other achievements (or for preventing the other side from achieving something), as specified by the scenario.

Eliminating a starship awards the opposing side a number of VPs equal to the ship's combat rating; e.g. the destruction of a ship with a combat rating of 100 would be worth 100 VPs to the opposing side.

If, during the End Phase, one side has scored enough VPs to win, the game is over and that side is the victor. If both sides have scored the necessary number of VPs, the game is a draw.

Sequence of Play

This outline summarizes all potential actions to be conducted during the course of a game turn, and the order in which they should occur. See the relevant rule for details on each entry.

1) Orders Phase

- a. If using random movement initiative, assemble and shuffle activation deck (D.8).
- b. If using sequential movement, alternate proceeding through steps (1d) through (2c) with one starship at a time; if one side has more than twice as many ships, that side moves multiple ships at a time; unless using random movement initiative (D.8).
- c. If not using sequential movement, conduct steps (1d) through (2c) simultaneously for all ships.
- d. Record movement orders (3.1); determine engine requirements (3.2); expend boosters (B.3).
 - i. Record use of secondary weapon modes (C.2); record shield reinforcement (E.6).
- e. Reveal movement orders; confirm orders are valid (3.2).

2) Movement Phase

- a. Remove cloaked starships from game board; return uncloaked and detected cloaked starships to game board (B.5).
- b. Make hyperdrive warmup rolls; remove starships entering hyperspace from game board (B.10).
- c. Move all starships on game board according to movement orders (3.3).
 - i. Apply damage due to minefields (B.15) and asteroid fields (G.1); resolve explosions (E.3).
 - ii. Float game board as necessary (D.4).
 - iii. Resolve stacking (3.3).
 - iv. Utilize overthrusters (B.16).

3) Fighter Phase

- a. If using random fighter initiative, assemble and shuffle activation deck (F.7).
- b. Alternate activating one fighter flight at a time; if one side has more than twice as many flights, that side activates multiple flights at a time (5.2); unless using random fighter initiative (F.7).
 - i. Selected LRF flight may attempt to enter hyperspace (F.6).
 - ii. Move selected flight on game board (5.3); or place on combat space patrol (F.1).
 - iii. Interrupt flight's movement with opposing flight on combat space patrol (F.1).
 - iv. Declare attack by selected flight against adjacent target (5.4); or declare dogfight (F.2); or declare screening (F.3); or recover flight (F.5).

- v. Resolve defensive fire from target starship's tractor beams (B.24) and/or Defensive weapons (C.5).
- vi. Resolve declared attack and apply effects immediately (5.4); resolve explosions (E.3).

4) Combat Phase

- a. If using random combat initiative, assemble and shuffle activation deck (E.5).
- b. Alternate making attacks with one starship at a time; if one side has more than twice as many ships, that side attacks with multiple ships at a time (4.0); unless using random combat initiative (E.5).
 - i. Declare all targets, confirming range, firing arc, and line of sight restrictions (4.1); declare directed damage (E.2).
 - ii. For each target of each weapon battery, resolve effects of stealth (B.22); make to-hit roll (4.2).
 - iii. For each hit scored, make impact roll (4.3).
 - iv. For each point of impact inflicted, make damage roll (4.4).
 - v. If using sequential combat (E.5), apply effects of weapons damage (4.5); resolve explosions (E.3).
- c. Resolve starship systems/options used at the same time as weapons fire:
 - i. Launch flares (B.9); launch probes and/or fire probes as weapons (B.17).
 - ii. Resolve marine boarding attempts (B.14); trigger shockwave (B.19); use tractor beams (B.24).
 - iii. Place seeker flights (C.4).
 - iv. Make target acquisition (TAG) attempts (E.7).

5) End Phase

- a. Apply gravitational pull due to black holes (G.2).
- b. Apply effects of weapons damage (4.5); resolve explosions (E.3).
- c. Evaluate victory conditions (2.5).
- d. Resolve damage from emergency thrust (D.1); perform damage control (E.1).
- e. Reverse pivots (3.4); activate stutterdrives (B.23); declare towing (D.9).
- f. Remove face-up flare/probe/TAG markers; flip face-down flare/probe/TAG markers to face up (B.9/B.17/E.7).
- g. Deploy mines (B.15); launch shuttlecraft (B.20); launch fighter flights (F.5).

3.0 MOVEMENT



Movement in **Starmada** is governed by the first of Newton's Laws: an object in motion will remain in motion unless acted upon by an external force. In game terms, the object is a starship, and the force is the thrust provided by its engines.

The procedure for completing a starship's movement consists of three steps:

- 1) Movement orders are written for the starship during the Orders Phase.
- 2) The engine requirement is determined and compared to the starship's current engine rating; if this requirement does not exceed the engine rating, the orders are legal.
- 3) The starship's model is moved on the game board according to its orders during the Movement Phase.

For those players who are looking for a different "feel" in their games, **Starmada** can handle any number of alternative movement systems; some possibilities are described in **Appendix D: Movement Options** (p.44).

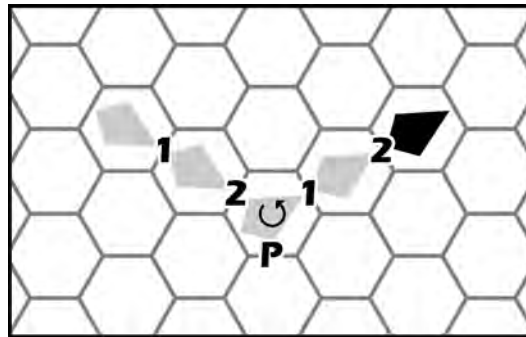
3.1 Movement Orders

During the Orders Phase, players secretly record **movement orders** for each starship under their control. Orders consist of forward movement and/or **turns**; these are written in the appropriate box of the game turn record, using the following notation:

- A number indicates forward movement; e.g. "3" means the starship is to move forward three hexes.
- "P" indicates a one-hexside (60°) turn to port (left/counter-clockwise).
- "S" indicates a one-hexside (60°) turn to starboard (right/clockwise).
- "U" indicates a three-hexside (180°) turn (a "u-turn").

Movement orders may include up to three one-hexside turns, or a single u-turn; all one-hexside turns must be in the same direction. Thus, "4P2" and "1S2S" are examples of valid movement orders, while "2P1S" and "2U1P" are not.

A starship's movement orders are "2P2". As a result, the ship will move two hexes forward (2), turn one hexside to port (P), and then move another two hexes forward (2), as shown below:



Those who have played other games using vector or inertial movement systems should note that what is being plotted in **Starmada** is not the thrust being applied by a starship, but the actual movement to be completed. Thus, a movement order of "4" does not mean the ship is accelerating by four hexes per turn; it means the ship intends to move four hexes straight ahead.

Speed

At the end of the starship's movement orders, the controlling player should write the ship's **speed** in parentheses. A ship's base speed is the sum of all forward movement included in the ship's orders. For example, "4P2" indicates a speed of 6 (4 + 2); thus, the final movement orders would be "4P2(6)". Speed is the primary factor in determining the engine requirement of the movement being performed (see below).

3.2 Engine Requirements

Each set of movement orders has an associated **engine requirement**, defining the minimum engine rating needed to complete the orders. If the ship's current engine rating is less than the engine requirement for the ship's recorded movement orders, the orders are illegal and cannot be completed. Any ship discovered to have illegal orders will not complete those orders, and instead move forward a number of hexes equal to its speed in the previous game turn.

The engine requirement for a given set of movement orders depends upon the number of turns to be performed:

- If the starship is performing no turns, the engine requirement is the difference between the ship's speed in the previous game turn and its current speed.

When determining the difference, always subtract the smaller value from the larger. If both values are the same, the engine requirement is zero. This is the only way to achieve an engine requirement of zero; thus, a starship without a current engine rating will continue to move at the same speed, and in the same heading, indefinitely.

- If the starship is performing a single one-hexside turn, the engine requirement is the ship's speed in the previous game turn or its current speed, whichever is greater.
- If the starship is performing two or three one-hexside turns, or a single u-turn, the engine requirement is the sum of the ship's speed in the previous game turn and its current speed.

The engine requirements for each type of movement order are summarized on the following chart:

Turns	Engine Requirement
None	Difference between previous and current speeds
One	Greater of previous and current speeds
Two or Three or U-Turn	Sum of previous and current speeds

Due to the above requirements, a starship with a previous speed greater than its engine rating cannot perform any turns.

Unless otherwise specified by the scenario, during the first game turn players should assume each starship's previous speed was equal to its engine rating.

After all movement orders have been recorded, they are no longer secret, and may be inspected by all players.

3.3 Moving on the Game Board

Once movement orders have been recorded for all starships, play proceeds to the Movement Phase, during which the ship models are moved on the game board according to those orders.

If a starship's movement orders cause its model to leave the game board, it is immediately removed from play and the ship may not return. Unless scenario rules state otherwise, ships leaving the board are considered destroyed, and the opposing side receives the normal amount of VPs.

Starship Maneuvers

Many options provide additional maneuvers and/or notations that may be included in a starship's movement orders. The table below provides a summary. See the relevant rule for details on each entry.

Code	Maneuver	Rule
Standard Maneuvers		
#	Move forward # hex(es)	3.1
P	Turn one hexside (60°) to port (left/counter-clockwise)	3.1
S	Turn one hexside (60°) to starboard (right/clockwise)	3.1
U	Turn three hexsides (180°/"u-turn")	3.1
Special Maneuvers		
L	Sideslip one hex to the left	3.4
R	Sideslip one hex to the right	3.4
... + #	Pivot # hexside(s) clockwise	3.4
... - #	Pivot # hexside(s) counter-clockwise	3.4
Starship Systems		
C/...	Activate cloaking device	B.5
H/...	Hyperdrive warmup	B.10
Movement Options		
E/...	Emergency thrust	D.1
Z/...	Evasive action	D.3
@/...	Roll	D.7
T/...	Towing	D.9
Terrain		
[#]	Planetary orbit for # hex(es)	G.5
↑	Increase one altitude level	G.6
↓	Decrease one altitude level	G.6

Stacking

Starships may move through hexes occupied by other ships without incident: space is big enough for them to pass. Further, two or more ships from the same side may end their movement in the same hex. However, if ships from opposing sides end their movement in the same hex, the situation must be resolved.

Roll a die for each starship, and add its current engine rating (re-roll any ties between opposing ships). The ship with the lowest total remains in place; then, in ascending order of their totals, each ship either remains in place (if on the same side as the first ship) or is moved to one of the adjacent hexes, maintaining its current heading.

A cruiser has ended its movement in the same hex as two opposing destroyers. A die is rolled for each starship, adding its current speed. The cruiser (engine rating 4) rolls a 3, for a total of 7; the destroyers (engine ratings 5 and 6, respectively) roll a 4 and a 2, for respective totals of 9 and 8. As the cruiser's total is lowest, it remains in place. The two destroyers are then moved to adjacent hexes; neither can remain in place, as that would fail to resolve the situation. The destroyers can both be moved into the same hex, or they can be split between separate hexes.

If a starship is relocated to a hex within a minefield (**B.15: Mines**, p.34) or asteroid field (**G.1: Asteroids**, p.54), the ship is "attacked" as if it had moved into the hex.

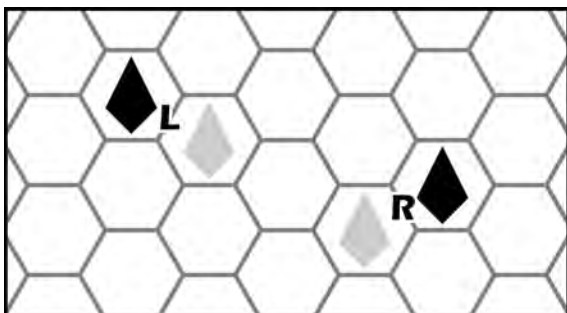
Starships from opposing sides may not be placed into the same hex during this process, nor may a ship be placed into a hex containing terrain with which it cannot coexist, such as an asteroid (**G.1: Asteroids**, p.54), event horizon (**G.2: Black Holes**, p.55), cometary nucleus (**G.3: Comets**, p.56), or planet (**G.5: Planets**, p.56). In the rare event there are no available hexes adjacent to the contested hex, the ship is moved two hexes, maintaining its current heading.

3.4 Special Maneuvers

In addition to forward movement and turns, starships may also include the following maneuvers in their movement orders.

Sideslips

A starship may plot **sideslips** during its movement orders, using “L” and “R” to indicate a one-hex slip to the left or right, respectively. When performing a sideslip, a ship is moved forward and to the left or right, without changing its heading, as illustrated below:



Each sideslip counts as one hex of forward movement for purposes of determining speed, and adds an additional +1 to the engine requirement of the starship's movement orders.

A starship with a previous speed of 4 has movement orders of “P2L2(5)”; this indicates the ship will turn one hexside to port, move forward two hexes, slip left for one hex, and move forward two more hexes, for a new speed of 5. Because the orders contain a single one-hexside turn, the engine requirement is equal to the greater of the ship's previous and current speeds, plus one for the sideslip, for a total of 6 ($\max\{4,5\} = 5 + 1 = 6$).

A starship may perform two or more sideslips consecutively. Ships may only slip in one direction per Movement Phase; in addition, sideslips must be in the direction corresponding to any one-hexside turns conducted (port=left; starboard=right). For example, movement orders of “1L2R(5)” are invalid, because they contain slips in both directions, while orders of “R3P(4)” are also invalid, because the sideslip is in the opposite direction from the one-hexside turn.

In addition to increasing the engine requirement of a starship's current movement orders, sideslips may reduce the engine requirement in the next Orders Phase. If a ship's movement orders contain a single one-hexside turn, the engine requirement is reduced by -1 for each slip conducted in the previous Movement Phase, provided those slips were in the same direction as the plotted turn (port=left; starboard=right). The engine requirement for movement orders containing two or three one-hexside turns, or a single u-turn, is unaffected by sideslips in the previous turn.

In our example, the starship has conducted movement orders of “P2L2(5)”. In the next Orders Phase, the ship wishes to carry out orders of “3P1(4)”. Normally, this would result in an engine requirement of 5 ($\max\{5,4\} = 5$); however, because the ship conducted a single slip to the left in the previous Movement Phase, the engine requirement is reduced by -1, for a final requirement of 4.

The primary application of this rule is to spread the engine requirement of a one-hexside turn across multiple Orders Phases. For example, a starship with an engine rating of 3 and a previous speed of 6 could not normally conduct a turn without first slowing down. However, it may turn while maintaining its speed by first plotting movement orders of “2R1RR(6)” (engine requirement $6 - 6 + 3 = 3$) and then “3S3(6)” (engine requirement $\max\{6,6\} = 6 - 3 = 3$).

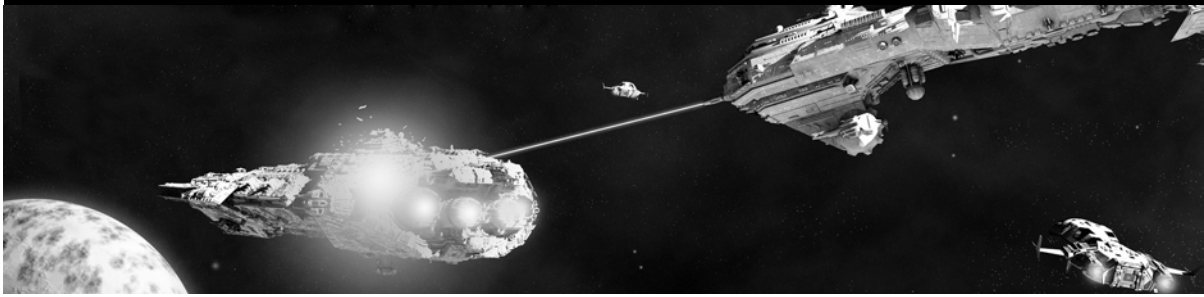
Pivots

By default, a starship's **facing** (the direction in which its nose is pointed) is the same as its **heading** (the direction in which it is traveling). However, a ship may alter its facing by plotting a **pivot** at the conclusion of its movement orders. This is done by writing a plus (+) or minus (-) followed by a number from 1 to 3. A plus sign indicates a clockwise pivot; a minus sign indicates a counter-clockwise pivot; the value indicates the number of hexsides turned. For example, “+2” indicates a pivot of two hexsides clockwise; “-1” indicates a pivot of one hexside counterclockwise. Pivots of “+3” and “-3” are identical, as they both result in a 180° facing change.

A pivot is written at the conclusion of the starship's movement orders. For example, “3P1(4) +1” indicates a move of three hexes forward, a one-hexside turn to port, and another hex of forward movement, for a final speed of 4, followed by a one-hexside clockwise pivot. Pivots have no effect on the ship's speed; however, the number of hexsides turned is added to the engine requirement. Thus, if the ship performing the above movement orders had a previous speed of 5, the engine requirement would be 6 ($\max\{5,4\} = 5 + 1$).

Any starship including a pivot in its movement orders must reverse the pivot during the End Phase. For example, if a ship pivots two hexsides clockwise in the Movement Phase, its model must turn two hexsides counter-clockwise in the End Phase. This is necessary to ensure the ship's proper heading is retained for the next Movement Phase.

4.0 COMBAT



The Combat Phase will be the heart of most game turns, as it is during this time when starships unleash their fury upon one another.

To begin, determine the total number of starships on each side of the battle. The side with more ships resolves the attacks of a single ship. Play then alternates between sides until all ships have had an opportunity to resolve their attacks.

Side A has three starships, while Side B has five. Therefore, Side B will attack with one of its ships, followed by Side A. They will alternate until Side A has attacked with all of its ships, at which time Side B will attack with its remaining two ships; this is illustrated by the following progression: B-A-B-A-B-A-B-B.

If both sides have the same number of starships, roll a die to determine which side goes first.

If one side has more than twice as many starships, it resolves the attacks of two ships at a time; if one side has more than three times as many ships, it resolves three at a time; and so on.

Side A has five starships, while Side B has two. Therefore, Side A will attack with two of its ships, followed by Side B. They will alternate until Side B has attacked with its second ship, at which time Side A will attack with its remaining ship; this is illustrated by the following progression: A-A-B-A-A-B-A.

The ratio between the two sides is only relevant at the start of the Combat Phase. Thus, if one side begins with more than twice as many starships as the other, it will continue to attack with two (or more) ships at a time even if the ratio is altered as the phase progresses.

Strictly speaking, as damage does not take effect until the End Phase, the order in which starships make their attacks is largely irrelevant; however, by alternating in this manner all players remain involved throughout the Combat Phase.

The procedure for resolving a starship's combat opportunity consists of five steps:

- 1) A declaration is made of the target(s) to be attacked and the weapon(s) to be used against each.
- 2) For each weapon, a number of dice is rolled equal to its rate of fire (ROF) value.

- 3) For each die that equals or exceeds the weapon's accuracy (ACC), a number of dice is rolled equal to the weapon's impact (IMP) value.
- 4) For each die that exceeds the target's shield rating, a number of dice is rolled equal to the weapon's damage (DMG) value, and the result of each recorded on the target's display sheet.
- 5) The effects of damage are applied during the End Phase.

The order in which a starship's weapons fire is resolved is entirely up to the controlling player. The game turn record contains a checkbox to indicate when each starship has made its attacks and ensure no ship mistakenly attacks twice in a single Combat Phase.

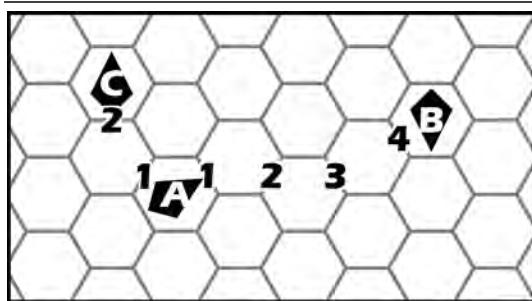
4.1 Declaration of Targets

When a starship has been selected to make its attacks, the controlling player must first declare the target(s) to be attacked and the weapon(s) to be used against each, keeping in mind the target of a weapon must be within the appropriate range and firing arc, and the attacker must have a line of sight to the target (p.19). All declarations for the firing ship must be made before any dice are rolled.

If, after the starship's attacks have begun (i.e. after any dice have been rolled), it is discovered the player has failed to declare a target for a weapon, or a weapon cannot attack the declared target due to range or arc restrictions, that weapon will not fire during the current Combat Phase.

Range

A weapon's long range band indicates the maximum distance at which a target can be attacked. For example, a weapon with RNG 5-10-15 may attack targets at a distance of up to 15 hexes. Count the number of hexsides crossed along the shortest path between the attacking starship and the target. If this distance is equal to or less than the weapon's long range band, the attack may proceed.

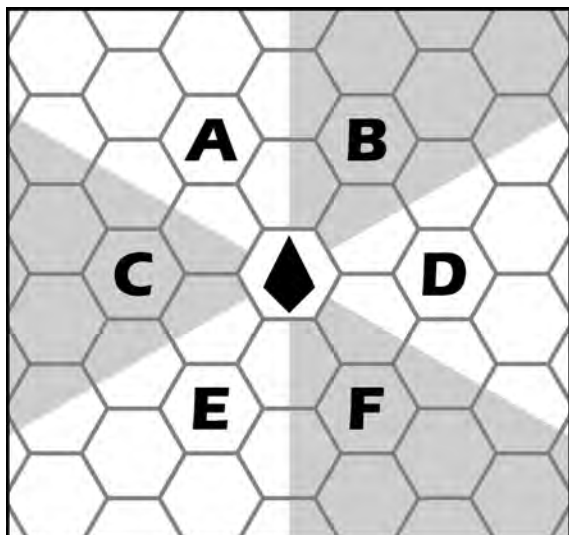


In the above illustration, Ship (A) is four hexes away from Ship (B), and two hexes away from Ship (C).

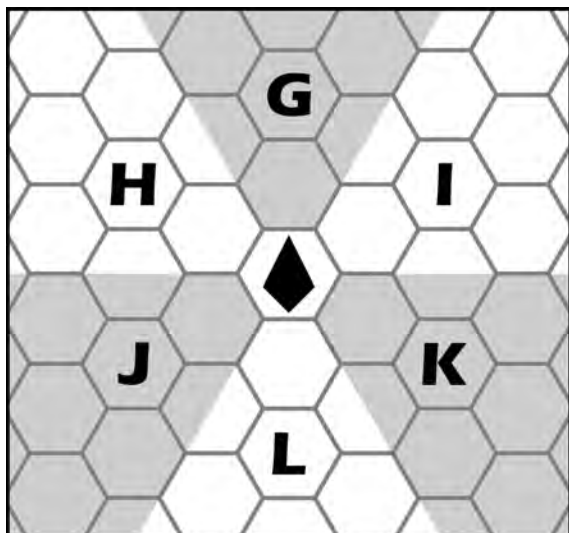
Firing Arcs

Starmada utilizes a unique notation system to identify firing arcs. Each starship has twelve “component” arcs, which can be combined in hundreds of ways to simulate most any weapon configuration players may require.

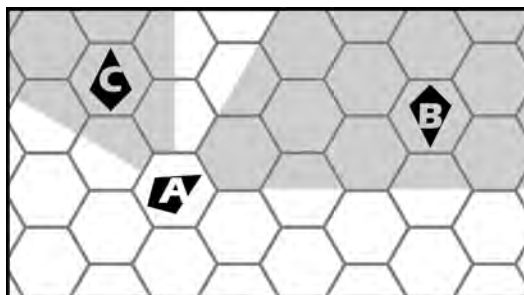
The component firing arcs are divided into two groups. The first group, labeled A-F, is bounded by the hex rows extending from the ship’s position:



The second group, labeled G-L, is bounded by the hex “spines” rather than the hex rows:



Any given target will occupy at least two of these component arcs: one from the A-F group, and one from the G-L group. If a target occupies a hex bisected by an arc boundary, it is considered to occupy both of those arcs. For example, the hex directly in front of a starship falls within the ship’s [A], [B], and [G] arcs.



In the example from above, Ship (B) occupies Ship (A)’s [G] (shown) and [B] arcs; Ship (C) occupies the [C] (shown), [H], and [J] arcs.

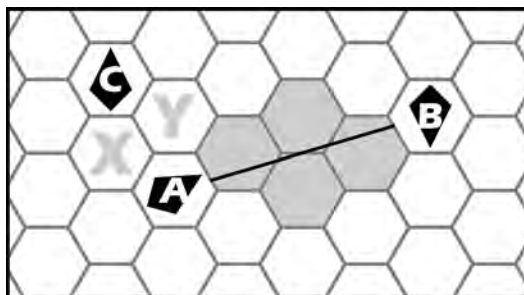
A weapon may only attack a target if it is able to fire into one of the arcs occupied by that target; e.g. if the target is in the [C] and [H] arcs, only those weapons with a “C” or “H” in their arc designations may be used to attack.

Line of Sight

By default, all starships are able to target all others on the game board. However, some options and advanced rules introduce objects which can obstruct **line of sight**. Intervening elements expressly do not obstruct line of sight.

Line of sight is determined by tracing an imaginary line between the center of the attacker’s hex and the center of the target hex. If this line crosses any portion of an intervening hex, the line of sight is considered to pass through that hex. If the line crosses directly between two hexes, line of sight is considered to pass through one (but not both) of them; the choice is up to the attacker.

In our example, the line of sight between Ship (A) and Ship (B) crosses through all four of the shaded hexes.



Further, the line of sight between Ship (A) and Ship (C) will cross through either hex X or Y, but not both. The choice is up to the attacking player.

Line of sight is never considered to pass through the hex occupied by the attacker, but always passes through the target's hex. Line of sight is considered to be blocked, and an attack impossible, in one of two cases:

- Any intervening hex contains an object that blocks line of sight (e.g. **G.5: Planets**, p.56).
- Intervening hexes contain objects which, when combined, apply a -4 or greater to-hit penalty (e.g. four or more **B.9: Flares**, p.33).

4.2 The To-Hit Roll

When attacking with a weapon, roll a number of dice equal to the weapon's ROF. For example, a weapon with ROF 2 would roll two dice. Compare the result of each die separately to the weapon's ACC; each die that equals or exceeds this value scores a hit on the target.

A weapon with ROF>1 may not divide its dice between multiple targets.

To-hit rolls may be modified by the distance to the target:

- If the distance to the target is equal to or less than the weapon's short range, a +1 bonus is applied to the result of each to-hit die.
- If the distance to the target is greater than the weapon's short range, but equal to or less than the weapon's medium range, the result of each to-hit die is unmodified.
- If the distance to the target is greater than the weapon's medium range, a -1 penalty is applied to the result of each to-hit die.

In our example, Ship (A)'s laser cannons have RNG 3-6-9. Therefore, attacks against any target within three hexes will receive a +1 bonus to the to-hit dice, while attacks against any target further than six hexes will suffer a -1 penalty. As Ship (B) is four hexes away, the to-hit rolls are unmodified.

Ship (A)'s laser cannons have ROF 1. Since two weapons are able to attack Ship (B), a total of two dice are rolled (2 × 1), coming up 2 and 6. The cannons have ACC 4+, which means one hit is scored on Ship (B).

When a starship is attacking a **tiny** target (such as a fighter flight, p.23), a -1 penalty is applied to the result of each to-hit die, in addition to any modifier for range.

Minimum/Maximum Rolls

Modifiers may result in a situation where a to-hit roll cannot fail; e.g. a +2 modifier for a weapon with ACC 3+. In such cases, any die that comes up 1 (before modifiers) is a miss.

Likewise, modifiers may create a situation in which a to-hit roll cannot succeed; e.g. a -2 modifier for a weapon with ACC 5+. In such cases, re-roll any die that comes up 6 (before modifiers) and add 5, along with any other modifiers.

To-Hit Modifiers

Many options provide for further adjustments to the to-hit roll. These modifiers are summarized on the table below. See the relevant rule for details on each entry.

Condition	+/-	Rule
Range Modifiers		
Short	+1	4.2
▪ Dfs weapon	+2	C.5
▪ Fcs weapon	-1	C.5
▪ Dfs+Fcs weapon	-2	C.5
▪ Gid weapon	0	C.5
Medium	0	4.2
Long	-1	4.2
▪ Dfs weapon	-2	C.5
▪ Fcs weapon	+1	C.5
▪ Dfs+Fcs weapon	+2	C.5
▪ Gid weapon	0	C.5
Target Modifiers		
Tiny	-1	4.2
▪ Acr weapon	0	C.5
▪ Inc or NPr weapon	-2	C.5
Anti-Fighter Batteries (<i>attacked by seeking weapons</i>)	-1	B.1
		C.4
Cloaked (<i>if detected</i>)	-1	B.5
Countermeasures	-1/level	B.6
Adjacent to hex targeted by Prx weapon	-1	C.5
Fire Control Modifiers		
Fire Control	+1/level*	B.8
Probe within 3 hexes of target	+1	B.17
Evasive Action (<i>attacker or target</i>)	-1/-2/-3	D.3
Directed Damage	-1	E.2
Line of Sight Modifiers		
Flares	-1/flare	B.9
Explosion	-1/hex	E.3
Fighter screen	-1/-2/-3	F.3
Asteroid field	-1/hex	G.1
Cometary coma/tail	-1/hex	G.3

*Only if negative modifiers also apply.

A weapon with ROF 3 and ACC 5+ is being used to attack a tiny target (-1) at long range (-1). This results in a total modification of -2 to the result of each to-hit die. Three dice are rolled, coming up 2, 6, and 6. Although the 6's do not initially score hits (having been modified to 4's), they can be re-rolled. The second rolls come up 1 and 5, for final results of 4 (1 + 5 - 2) and 8 (5 + 5 - 2). As a result, one hit is scored.

4.3 The Impact Roll

In order to score damage, a hit must penetrate the target's shields. For each hit scored as a result of the to-hit roll, roll a number of dice equal to the weapon's IMP. For example, if a weapon with IMP 2 scores two hits, a total of four impact dice are rolled (2 × 2).

Compare the result of each die separately to the target's shield rating; each die that exceeds this value scores a point of impact on the target.

In our example, Ship (A)'s laser cannons are IMP 2. One hit was scored, so two dice are rolled against the target's shields, which have a rating of 3. The dice come up 3 and 4, causing one point of impact on Ship (B).

Against a target without shields (either by design or as the result of damage), the impact roll is unnecessary; each hit automatically inflicts a number of points of impact equal to the weapon's IMP value.

Minimum/Maximum Rolls

Modifiers may result in a situation where an impact roll cannot fail; e.g. a +1 modifier against a target with a shield rating of 1. In such cases, any die that comes up 1 (before modifiers) fails to cause impact (provided the target has a non-zero shield rating).

Likewise, modifiers may create a situation in which an impact roll cannot succeed; e.g. a -1 modifier against a target with a shield rating of 5. In such cases, re-roll any die that comes up 6 (before modifiers) and add 5, along with any other modifiers.

Two hits have been scored by a Non-Piercing weapon (-1; C.5: Weapon Traits, p.43) on a starship with a shield rating of 5. Two dice are rolled, coming up 3 and 6. Although the 6 does not initially penetrate the shields (having been modified to 5), it can be re-rolled. The second roll comes up 3, for a final result of 7 (3 + 5 - 1). As a result, one point of impact is scored on the target.

4.4 The Damage Roll

The final step in an attack is to determine the type(s) of damage inflicted. For each point of impact scored on the target, roll a number of dice equal to the weapon's DMG. For example, if a weapon with DMG 3 penetrates the target's shields with one point of impact, a total of three damage dice are rolled (1 × 3).

The result of each damage die is considered separately:

Roll	Result
1-3	Hull Hit: Check off one box on the hull track of the target's display sheet.
4	Engine Hit: Check off one box on the engine track of the target's display sheet.
5	Weapon Hit: Check off one box on the weapons track of the target's display sheet.
6	Shield Hit: Check off one box on the shield track of the target's display sheet.

In our example, Ship (A)'s laser cannons are DMG 1. One point of impact was scored, so one die is rolled. It comes up 4, indicating an engine hit. As a result, one box is checked off of Ship (B)'s engine track.

Hull Hits

Hull hits are resolved by checking off one box on the target's hull track per hit; make sure to check boxes off from left to right. Once the last hull box has been checked, the starship is destroyed (although it remains on the board until the End Phase; see below).

Engine Hits

Engine hits are resolved by checking off one box on the target's engine track per hit; make sure to check boxes off from left to right. Once the last engine box has been checked, further engine hits are ignored.

Weapon Hits

Weapon hits are resolved by checking off one box on the target's weapons track per hit; make sure to check boxes off from left to right. Once the last weapons box has been checked, further weapon hits are ignored.

As the number in the first unchecked box on the weapons track is reduced, the controlling player must remove the appropriate number of weapons as losses. For example, if the number on the weapons track drops from 12 to 9, three weapon squares must be filled in on the ship's display sheet.

Players are free to select any weapons as losses, with the following limitation: no battery may lose more weapons than indicated by its loss limit until all batteries have reached their loss limits.

A starship has three weapons batteries with loss limits of (2), (3), and (4). Therefore, the ship cannot lose a fifth weapon from its third battery until at least two weapons in the first battery and three weapons in the second battery have been damaged.

As noted on p.11, equipment can also be damaged as the result of a weapon hit. For purposes of this rule, all equipment items carried by the starship, but not traits or munitions, are considered to form a separate "battery", with its own loss limit.

Shield Hits

Shield hits are resolved by checking off one box on the target's shield track per hit; make sure to check boxes off from left to right. Once the last shield box has been checked, further shield hits are ignored.

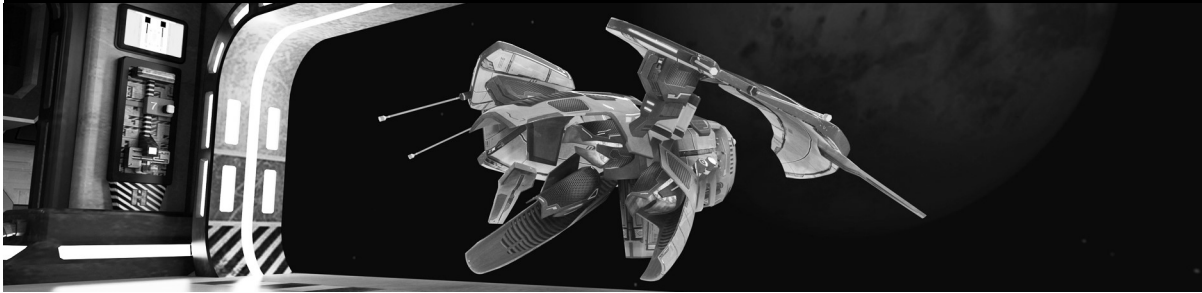
If a starship has no shield track (because it was designed without shields at all), any damage roll of 6 is considered to have no effect.

4.5 Applying Damage

As stated on p.18, damage inflicted during the Combat Phase is not applied immediately; instead, it takes effect at the start of the End Phase. An easy method for remembering this is to mark damage with a slash ("/") on the target's display sheet when it occurs, and then add a second slash (completing an "X") once the Combat Phase is concluded.

Any starship with all of the boxes on its hull track checked off is removed from the game during the End Phase, and the opposing side is awarded the appropriate number of VPs.

5.0 FIGHTERS



Starfighters, attack craft, gunboats: whatever the terminology, many science fiction backgrounds include small, fast, short-ranged, and surprisingly powerful units used to harass enemy starships and protect the fleet from their opposing counterparts. In **Starmada**, these small craft are given the collective label of **fighters**.

5.1 Including Fighters in a Fleet

Fighters are grouped into **flights**, each of which is represented by its own model. They do not have display sheets, as the only important information about a fighter flight is how many fighters it has left. Each flight starts with six fighters, and once all are destroyed, the flight is removed from play.

The easiest way to indicate damage to a fighter flight is by placing a small die next to the flight's model; the number showing on the die indicates the number of fighters remaining in the flight. (Be sure to use dice of a different size and/or color for this purpose, to prevent players from accidentally picking them up to roll.)

In order for a fleet to include fighter flights, at least one starship on that side must be designated as a **B.4: Carrier** (p.31). Each fighter flight requires a rating of 1. Therefore, if a fleet includes carriers with a total rating of 10, it could field up to ten flights. When assembling forces to a particular combat rating total, these flights are "free"; i.e. their combat rating is included in that of their carrier(s), and does not need to be accounted for separately.

Unless otherwise noted by the scenario, fighter flights begin on the game board, within two hexes of their carrier; they are assumed to have been "scrambled" before the first game turn. (See also **F.5: Launch & Recovery**, p.52).

5.2 The Fighter Phase

Fighter flights move and attack during a separate phase, called (unsurprisingly) the Fighter Phase. This phase occurs between the Movement and Combat Phases.

To begin the Fighter Phase, determine the total number of fighter flights on each side of the battle. The side with more flights activates a single flight. Play then alternates between sides until all flights have been activated.

Side A has seven fighter flights, while Side B has five. Therefore, Side A will activate one of its flights, followed by Side B. They will alternate until Side B has activated all of its flights, at which time Side A will activate its remaining two flights; this is illustrated by the following progression: A-B-A-B-A-B-A-B-A-B-A-B-A.

If both sides have the same number of fighter flights on the board, roll a die to determine which side activates first.

If one side has more than twice as many fighter flights, it activates two flights at a time; if one side has more than three times as many flights, it activates three at a time; and so on.

Side A has nine fighter flights, while Side B has four. Therefore, Side A will activate two of its flights, followed by Side B. They will alternate until Side B has activated all of its flights, at which time Side A will activate its remaining flight; this is illustrated by the following progression: A-A-B-A-A-B-A-A-B-A-B-A-B-A.

The ratio between the two sides is only relevant at the start of the Fighter Phase. Thus, if one side begins with more than twice as many fighter flights as the other, it will continue to activate two (or more) flights at a time even if the ratio is altered as the phase progresses.

When activated, a fighter flight is first moved across the game board, after which it may attack a single target, as described below. Each flight may only be activated once per Fighter Phase.

5.3 Fighter Movement

Fighter flights are moved directly on the game board; i.e. no movement orders are necessary. Flights have a **movement allowance** (MA) of 8. A flight is not required to use its entire MA; however, any portion of the MA not used is lost. A flight may not "save" MA for use in the next Fighter Phase.

When a fighter flight is selected for activation, the controlling player first declares how many one-hexside turns the flight will perform, up to a maximum of three. The number of turns dictates the cost of each hex of forward movement: if the flight will turn once (or not at all), each hex costs 1MA; if the flight will turn twice, each hex costs 2MA; if the flight will turn three times, each hex costs 3MA.

The fighter flight is then moved on the game board. Flights may perform sideslips; each slip requires twice as much MA as one hex of forward movement. Flights may not pivot (nor would they gain any benefit from doing so). As with starships, flights may only turn (and sideslip) in one direction per activation. There is no requirement that a flight move forward between turns and/or sideslips.

Fighter flights may move through any occupied hex, and may end their movement in the same hex as one or more elements from the same side; however, a flight may not end its movement in the same hex as an opposing element (unless initiating a dogfight; see **F.2: Dogfights**, p.51).

If a starship ends its movement in the same hex as an opposing fighter flight (or flights), the flight(s) must move when activated to resolve the situation, or else be eliminated from the game.

5.4 Fighters in Combat

After a fighter flight has finished moving, it has the option of immediately attacking any opposing element in an adjacent hex. Flights may not divide their attacks between multiple targets.

If the target interrupts a fighter flight's attack to perform defensive fire (e.g. **B.24: Tractor Beams**, p.38) all such fire must be declared before any dice are rolled.

Damage inflicted by fighter flights is applied immediately. This means fighters destroyed before their flight is activated will not be able to move or attack in the current game turn, while starships must apply damage from fighters as it occurs.

SHLD	<input checked="" type="checkbox"/>	3	2	2	1
	1				

A starship takes a shield hit from a fighter attack. Checking off the next box on the shield track reduces the shield rating from 3 to 2. The new rating takes effect for the remainder of the Fighter Phase as well as the upcoming Combat Phase.

SHLD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	2	1
	1				

Each fighter flight is considered a separate target: thus, if there are multiple flights in a hex, one must be selected as the target of an attack before any dice are rolled.

VPs are not scored when a fighter flight is eliminated; the combat rating of each flight is included in its carrier's total. Thus, a carrier must be destroyed in order to score VPs for its fighters.

Fighter Attacks on Starships

In order to attack a starship with a fighter flight, roll one die for each fighter in the flight. Each die that comes up 5 or 6 scores one hit on the target. To-hit modifiers (p.20) do not apply to fighter attacks. The IMP and DMG values for fighter attacks are each 1.

Fighter Attacks on Fighters

When attacking another fighter flight, roll one die for each fighter left in the attacking flight. Each die that comes up 5 or 6 destroys one fighter in the target flight. In addition, because it is assumed the target is fighting back, any die that comes up 1 destroys one fighter in the attacking flight. The number of hits scored on the attacking flight cannot exceed the number of fighters in the target flight.

A full-strength fighter flight attacks a target flight of two fighters. Six dice are rolled, coming up 1, 1, 1, 3, 3, and 6. Normally, this would indicate the loss of three attacking fighters; however, as there are only two fighters in the target flight, two hits are scored on the attacking flight, while a single fighter is removed from the target flight.

Starship Attacks on Fighters

When a starship attacks a fighter flight, the process is the same as when attacking other ships. However, fighters are considered tiny targets: therefore, the result of each to-hit die is modified by a -1 penalty.

Each hit scored on a fighter flight automatically destroys one fighter; no impact or damage rolls are necessary. Thus, weapons with IMP and/or DMG values greater than 1 waste these capabilities when attacking fighters.