

FRANK CHADWICK

IRONCLADS AND ETHER FLYERS™ Aeronaval Warfare in the 19th Century

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SPACE
1889®

FRANK CHADWICK



IRONCLADS
AND
ETHER FLYERS
Aeronaval Warfare in the 19th Century



IRONCLADS AND ETHER FLYERS

To Walt, for years of assistance.

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Space: 1889 is Frank Chadwick's registered
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Victorian Era space-faring.

SPACE: 1889

THE CLASSIC ether theory of the 19th century was right. An etheric "wind" blows through space, carrying light and energy. And we can build ether flyers that travel between the planets. **Space: 1889** is set in a past that might have been had humankind discovered space travel as soon as predicted by such 19th-century authors as Jules Verne and H. G. Wells. If you enjoy **Ironclads**, be sure to look for **Sky Galleons of Mars**, covering aerial combat above the canals of the red planet. Other titles from Heliograph:

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Ironclads and Ether Flyers



WHEN THOMAS EDISON crash-landed on Mars in 1870 in the ether flyer of his own invention, it not only opened the portal to an ancient and exotic civilization, but also opened the lid of the Pandora's box of *lift-wood*, a tree indigenous to the Martian uplands which synthesizes an organic compound with antigravitic properties. Nineteen years later, the major naval powers of Earth have embarked upon ambitious aerial gunboat building programs, and the arms race has fueled international tensions and suspicions. Equipped with untried vessels and untested theories of aeronaval warfare, the fleets of Earth prepare themselves for the inevitable conflict.

Ironclads and Ether Flyers is a fast-paced game of aeronaval combat in and above the oceans of Earth. This rule book is intended as a sourcebook on 19th-century aeronaval combat, and serves as a freestanding set of miniatures combat rules.

WHY THIS GAME?

AS YOU LOOK through the ship listings contained in the back of this book, you will probably be struck by the amazing diversity of warship designs in service at this time. Primitive broadside ironclads (old ships of the line with iron plates bolted to their

hulls) served alongside sleek, new, turret battleships. Antique muzzle-loading smoothbore cannon served alongside modern, high-velocity, quick-firing, rifled breechloaders. Emerging technologies such as submarines, self-propelled torpedoes, and super-heavy guns with tremendous penetrating power were changing the face of naval warfare into an unfamiliar landscape through which designers hesitantly groped.

The result was a remarkable assortment of unusual vessels, ranging from the functional to the bizarre. Take for example the Italian battleships *Italia* and *Lepanto*. These were giant ships for their day, displacing well over 13,000 tons and slightly over 400 feet long. Each ship mounted four big guns, 17" monsters which fired one-ton shells at a muzzle velocity of over 1700 feet per second. But while these were exceptional features for their day, what makes them truly unique was that they were almost completely unarmored.

Naval combat was different as well. Most naval vessels had very little ability to elevate their main armament. This was partly due to engineering difficulties, but also due to the fact that there was very little need to do so. Without sophisticated range finders, long-range gunnery was more a matter of luck than science, and so there was little demand for high elevation of the guns. Instead, battles took place at relatively close quarters.

Most of these unusual, even baroque, designs never saw battle, as the latter part of the 19th century was a time of preparation for war, but not war itself. Now, however, you have the ability to pit them against one another and see which design theory

was best adapted to its day. With the design rules in this game you can test your own vision and imagination as well—the 19th century was a time when designers required artistry and imagination as well as technical expertise (unlike 20th-century naval architecture which is so scientific as to appear sterile and repetitive). Finally, the unique universe of **Space: 1889** adds enough science fiction elements to the game to add considerable spice: Aerial warships and deep-diving submarines add the vital third dimension to the game.

USING THESE RULES

THESE RULES are divided into several sections, and scenarios are available after each part of the rules has been finished. So, for example, after you've finished "Basic Rules: Naval Vessels," you can play any of the pure naval scenarios. After you've finished "Basic Rules: Aerial Flyers," you can play a number of aeronaval scenarios. After you've finished "Interplanetary Ether Flyers," you can play any scenario desired.

After the first four parts have been read and several scenarios have been played, players may wish to embark upon a campaign game. A campaign game allows players to command a fleet and maneuver it against the enemy through the course of several battles.

Complete campaign game rules are provided, and several campaign scenarios are in this rule book. The rules in "Ship Design" enable you to design your own naval vessels, aerial gunboats, and interplanetary ether flyers.

"Ships of the World" consists of a complete listing of the naval warships

in service on Earth in 1889, along with their ratings for the game. At the back of the ship listings, there are a number of ship record forms. It is a good idea to make a number of photocopies of these for use in the game and permission is hereby given to do so for your own personal use.

Charts containing necessary game information are provided at the very end of this book. It is suggested that players make copies of these charts for ease of reference. Permission is specifically given to make photocopies of these pages for personal use.

GLOSSARY

THE RULES, and the description of the environment in which the battles are fought, make repeated use of the following terms:

Aerial Flyers: Also called aerial gunboats, or just flyers, these are armed vessels held aloft by liftwood panels. Liftwood is a tree native to the Martian highlands with unique anti-gravity properties. (For a more complete description of liftwood, see *Sky Galleons of Mars*.)

Cables: A cable is a nautical unit of measure equal to 200 yards (one-tenth of a nautical mile, or 100 fathoms). It is the basic unit of measure used in this game. That is, all gun ranges are given in cables and all movement allowances are given in cables per turn.

Players may adapt the size of their game to their available table space by specifying different actual scale measurement lengths per cable. For example, if a scale of one foot per cable was used, a vessel with a movement rating of four could move up to four feet per turn, while use of two inches per cable would allow it

to move only eight inches per turn. For most games, six inches per cable is easy to measure and allows actions which can fit on a moderately sized table.

These rules are easily adaptable for play with both *Sky Galleons of Mars* and *Soldier's Companion*, also available from GDW. In *Sky Galleons of Mars*, a cable is exactly one hex; in *Soldier's Companion* it is exactly one foot.

Ether Flyers: Ether flyers are large spacecraft which travel through interplanetary space by means of ether propellers, but which rely on liftwood for atmospheric flight.

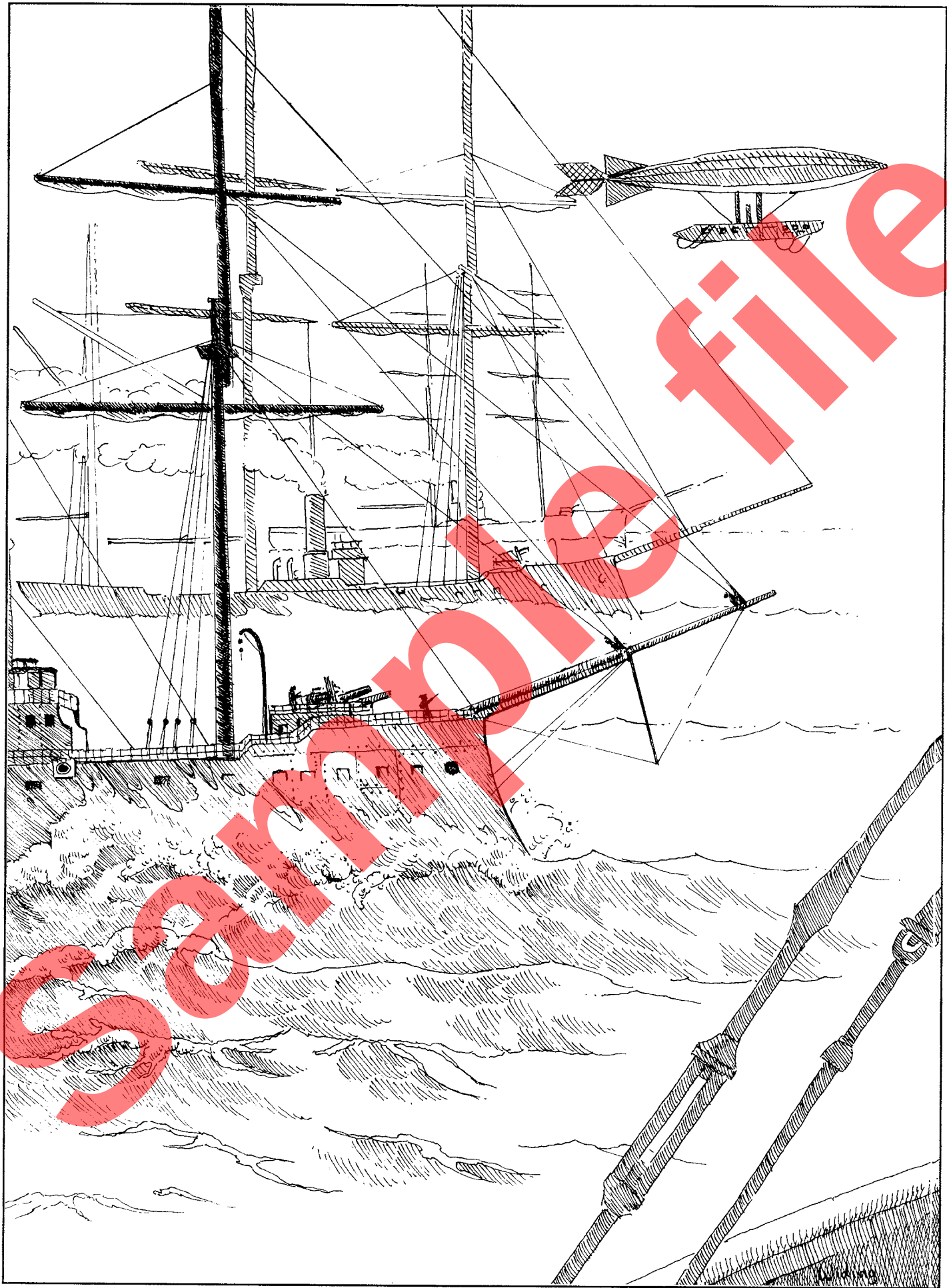
Ironclads: Armored naval vessels. Although threatened by the emerging aerial technology, they are still the heart of any terrestrial naval force.

Miniatures: This book's principal function is to serve as a complete set of miniatures rules. Players must provide their own miniatures. While GDW provides a line of aerial and naval vessels for use with these rules, players may also use vessels from other manufacturers, homemade miniatures, or cardboard markers.

Naval Vessels: Also called ships, these are steam-powered warships that float on the water.

Playing Surface: Any flat playing surface is suitable for playing *Ironclads*. A dark blue cloth covering will add to the surface's appearance, and coastlines may be made from colored paper or scenic terrain tiles.

Zeppelin: An aerial vessel held aloft by a large, rigid lifting bag filled with hydrogen gas. For those countries whose access to Martian liftwood is restricted, Zeppelins provide the only means of fielding an aerial force.



Basic Rules: Naval Vessels

IRONCLADS and Ether Flyers is played in turns, each of which represents about one minute of real time. There are three phases in a turn: the Initiative Phase, the First Player Movement Phase, and the Second Player Movement Phase.

In the Initiative Phase, each player rolls two dice and adds his squadron commander's leadership rating to the roll. The high die roll wins the initiative for that turn. The player who loses the initiative must plot his movement for the turn. After he has finished plotting his movement, the player who won the initiative conducts his Movement Phase. After that, the other player conducts his Movement Phase, but must carry out the moves he preplotted to the best of his ability. Note that the player with the initiative always moves first and does not have to preplot his movement.

Plotting for each ship is done using a simple shorthand system of three letters: F, P, S. *F* means forward, *P* means a turn to port (left), and *S* means a turn to starboard (right). For example, to plot a ship moving one cable forward, followed by a turn to port, followed by an additional one-cable move, plot "F-P-F." (If port and starboard are confusing, use right and left.)

In each Player Movement Phase,

one player (the moving player) moves all of his ships according to the rules of movement. After all of his movement is finished, both players may fire at the enemy. Each weapon may only fire once during the game turn, however, so weapons which fire at the end of the First Player Movement Phase may not fire again at the end of the Second Player Movement Phase. After all movement and fire is finished, the moving player makes all the damage repair rolls he is entitled to.

After both players have completed their Movement Phases, the turn is over and a new turn begins with its Initiative Phase.

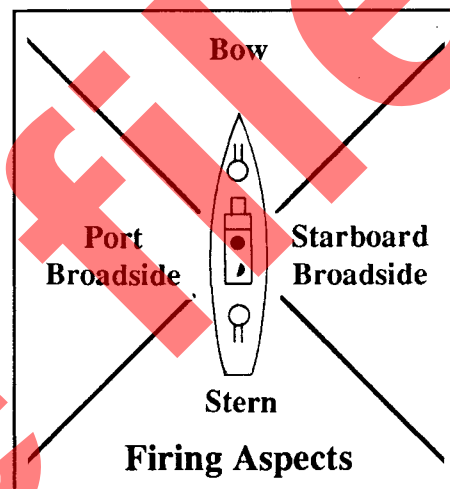
FACING

EACH VESSEL is always oriented in such a manner that its bow is facing one of the six compass headings (north, northeast, southeast, south, southwest, northwest). Whenever a vessel moves, its first cable of movement must be in the direction it is facing at the start of its movement.

Vessels may only change facing during movement, and the procedure for doing so is covered under Movement.

Facing also affects the ability of vessels to fire. Each vessel has four firing aspects which are determined

by its facing. Most weapons may only fire at targets in certain firing aspects, as explained in the rules on gunfire. The four firing aspects are illustrated below.



MOVEMENT

EACH SHIP has a movement allowance which is the number of movement points it may expend in a single turn. Each movement point spent allows a vessel to move one cable in the direction it is facing and change its facing by one compass heading. Ships which move one cable but do not change their facing still use one movement point. Vessels which do not move at all may also change their facing by one compass heading.

If two ships end a turn effectively in contact, their relative position is important, particularly for determining which guns bear in which direction. The player who moved last determines where his ship ends its move (and thus its relative position to the other nearby ship or ships). He then announces which of his firing aspects the other enemy ship is in and which firing aspect of it his ship is in. For example, he might say: "The enemy ship is in my broadside aspect; I am in its rear aspect."