Zeppelins

A Crimson Skies Fan Supplement By Yahzuk

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Introduction

I've been a fan of Crimson Skies for almost ten years and have run CS based play-by-email games (PBEMs) for much of that time. Until recently, I've seldom used zeppelins in my games because I've never been satisfied with the published zeppelin rules. In my opinion, the zeppelin rules published were not developed to the same level of detail as the rest of the game. It's as if the developers ran out of time and quickly tacked some half-formulated zeppelin rules onto the end of the rulebook. There were rumors of an official "Zeppelins and Bombers" supplement book but sadly it was not published before FASA discontinued the game.

Recently I've graduated from running single games strung together to writing some detailed campaigns. Zeppelins are an important part of Crimson Skies universe and are an integral part of my campaigns. As such, they deserve a better set of rules.

I am not the first CS fan to undertake developing a set of zeppelin rules. The first rules that I became aware of are published on the Wings of Honor website. The Fox Force Five website has more recently developed their own rules in German, and I, along with the rest of the online CS community eagerly await their translation into English. John Paterson has also developed a set of rules for strategic zeppelin combat, where the game focus is the zeppelins instead of the planes. Grant on the new CS forum has been posting a lot of his own great zeppelin material. And there may also be other fan created rules that I haven't found yet.

I have great respect for the time and effort all these other authors have spent on their rules. None of these rules, however, quite encompass what I was looking for in a zeppelin supplement. So instead I have created my own zeppelin supplement which I am pleased to share with you here. I will note from the onset that this is not intended to be fully realistic zeppelin simulator anymore than Crimson Skies is meant to be a fully realistic flight simulator. My goals are to:

- 1. Make zeppelins an extension of the existing CS rules that still keeps the primary game focus on aircraft combat
- 2. Develop a set of zeppelin design rules that give zeppelin design a range of options and trade-offs similar to aircraft design
- 3. Make zeppelin design tied directly to the hex game map
- 4. Develop a system that is relatively simple to use (once familiar with these rules, a player should be able to design a zeppelin in 10-15 minutes).
- 5. Create a batch of varied zeppelin designs with short histories, similar to one of the aircraft supplement books

The observant fan knows that tidbits of zeppelin information is scattered throughout the canon CS material. I have tried to stay reasonably close to the canon material, but since it was published by numerous authors with no apparent design system behind it, it is impossible to conform to all of it. Discrepancies can be ascribed to the fact that zeppelins have a high degree of variation and customization, even within the same class.

If you like my rules, I hope you will use them. If not, check out one of the other fan attempts at zeppelin rules, or create and share your own!

~Yahzuk

P.S. – These rules are still in "Draft" form, but I've worked on them so long that I can't see the errors anymore, so I wanted to get them out to get some editing help. The descriptions of the zeppelins still need a lot of work, as I won't have any substantial time to work on them for a while, I 've decided to share these rules as they are. Any and all comments and feedback would be most welcome!

Component Based System

This is a component based system, wherein the player chooses a zeppelin configuration which occupies a number of hexes on the game map. A component is then assigned to each hex (some components require several hexes). A key assumption in this system is that the gondola occupies the length and width of the gondola. While not completely realistic, this approximation simplifies the design method and conveniently ties the zeppelin to the hex map game board. It also provides space for the characters to move about the zeppelin. As simplifying assumptions go, this one is no worse than allowing the same template to be used for both a Fury and a Warhawk.

Scaling this System

For this work a "flight" is defined as 1 plane per player. I created these rules while running a PBEM with 9 players per side, so I was considering a flight to have 9 planes. However, I've tried to make these rules scaleable and I think they'll work well for flights with 6-12 aircraft. The one component that won't scale well is the crew cabins. For different squadron sizes, some of the following designs will have too few or too many crew cabins. For flights with 6-12 aircraft, I recommend determining the number of crew cabins as if there were 9 aircraft per flight, then simply allowing that quantity of cabins to be acceptable for your actual crew.

Zeppelin Configuration

The first step to designing a zeppelin is to choose a configuration from the table below. This will set the space occupied on the map, the number of components and the number of engines. Length is the number of hexes from nose to tail. Width is the number of hexes at the zeppelin's widest point.

Length x Width	Hexes	Engines Std / Ext	Configuration
3 x 1	3	2/-	
4 x 1	4	4 / -	
5 x 1	5	4 / -	
6 x 1	6	6/-	
7 x 1	7	6/-	
8 x 1	8	8 / -	

Length x Width	Hexes	Engines Std / Ext	Configuration
3 x 2	4	-/2	
5 x 2	7	2/4	888
7 x 2	10	4/6	888
9 x 2	13	6/8	8888
11 x 2	16	8 / 10	88888
13 x 2	19	10 / 12	888888
15 x 2	22	12 / 14	888888
17 x 2	25	14 / 16	8888888
5 x 3	9	4/2	
7 x 3	14	6 / 4	

Length x Width	Hexes	Engines Std / Ext	Configuration
9 x 3	19	8/6	
11 x 3	24	10 / 8	
13 x 3	29	12 / 10	
15 x 3	34	14 / 12	
17 x 3	39	16 / 14	
19 x 3	44	18 / 16	
5 x 4	14	4/2	
7 x 4	21	6/4	

Length x Width	Hexes	Engines Std / Ext	Configuration
9 x 4	28	8/6	
11 x 4	35	10 / 8	
13 x 4	42	12 / 10	
15 x 4	49	14 / 12	
17 x 4	56	16 / 14	
19 x 4	63	18 / 16	
21 x 4	70	20 / 18	

Components

The table below shows the components that can be used on a zeppelin. Required components are highlighted in blue and must be included on all zeppelins.

B Bridge 1 5,000 lbs Required Component Must have 1 hex per 5 Command Crew (including Zeppelin Commander) GS General Stores 1 20,000 lbs Required Component Provides stores for up to 10 hexes Must have enough stores for zeppelin Required Component Provides cabins for up to 40 crew Must provide enough cabins for zeppelin Required Component Provides cabins for up to 40 crew Must provide enough cabins for zeppelin Crew Section Section 1 25,000 lbs Required Component Must have 1 hex per 3 Engineers May take place of both General Stores (Combined General Stores / Cabins 1 30,000 lbs Provides cabins for up to 20 crew PC Passenger Cabins 1 15,000 lbs Provides cabins for up to 20 crew May hold up to 1/3 flights of aircraft May launch any number of aircraft per turn May hold up to 1 flight of aircraft May launch 1 aircraft per turn Minimum zeppelin width 2 May hold up to 2 flights of aircraft May launch 1 aircraft per turn Minimum zeppelin width 3 May hold up to 2 flights of aircraft May launch 1 aircraft per turn Minimum zeppelin width 3 May hold up to 3 flights of aircraft May launch 1 aircraft per turn Minimum zeppelin width 4 May hold up to 50,000 lbs of bombs May drop 10,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 2 May hold up to 30,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 2 May hold up to 30,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 4 May hold up to 450,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 3 May hold up to 450,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 3 May hold up to 50,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 2 May hold up to 50,000 lbs of bombs per turn Requires 1 gunner to act as bombardier Minimum zeppelin width 3 May hold up to 50,	Code	Component	Hexes	Weight	Features
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Code	Component	Hexes	Weight	Features
C7	C7 Giant Cargo Hold		500,000 lbs	May hold up to 475,000 lbs cargo Minimum zeppelin width 4
C6/CR	Large Cargo Hold with Crane	7	550,000 lbs	May hold up to 400,000 lbs cargo May load cargo without landing Minimum zeppelin width 3
C8/CR	Giant Cargo Hold with Crane	10	750,000 lbs	May hold up to 550,000 lbs cargo May load cargo without landing Minimum zeppelin width 4

Gas Cells

Gas cells contain the gas that keeps the zeppelin aloft. The gas cells provide buoyancy depending on the zeppelin's size. When the gas cells are damaged the zeppelin loses gas. When a zeppelin drops below 40% of its buoyancy points it can no longer stay aloft and will crash.

Buoyancy Points = (Hexes Occupied) * 20

Gas cells may be filled with Helium or Hydrogen. Helium is safer but heavier and more expensive. Hydrogen is lighter and more plentiful, but is also explosive. Additionally, gas cells may be armored or unarmored. Almost all modern military zeppelins now bear armored gas cells, which are heavier but more resistant to damage. Some civilian and pirate airships still have unarmored gas cells.

Gas Cell Weight = (Buoyancy Points) * 25 * (2 if Helium) * (3 if Armored)

As gas cells are damaged, gas is lost and the zeppelin loses buoyancy. The minimum buoyancy a zeppelin requires to stay aloft depends on its weight.

Minimum Buoyancy Points = (Total Zeppelin Weight) / 5000

When a zeppelin goes below its minimum buoyancy, it begins a slow descent. It can still stay airborne for the time being, but cannot make it off the map and will have to land at the end of the mission.

If a zeppelin goes below **75%** of its minimum buoyancy, it begins a rapid descent. It must make an emergency landing as soon as possible. At the end of each turn, **roll 1d10**. If the roll is greater than the number of turns the zeppelin has remained airborne since going below **75%** of its minimum buoyancy, the zeppelin remains airborne. If the roll is less than the number of turns it's remained airborne, the zeppelin has waited too long to land and crashes to the ground.

If a zeppelin goes below 50% of its minimum buoyancy, it immediately crashes to the ground.

Characters aboard the zeppelin may make a non-combat bailout during the movement phase while it is in a slow or rapid descent. If the zeppelin fails a roll during a rapid descent or immediately crashes, characters aboard may make a combat bailout with a target number of **10-SS-QD**. If a hydrogen zeppelin explodes, characters aboard must make combat bailout with a target number of **20-SS-QD**. Characters in an inner hex of a width 3 or 4 zeppelin have a +3 modifier to their combat bailout rolls. Attempting to rescue an incapacitated character adds a +3 modifier to combat rolls. All attempts to rescue an incapacitated character count as a combat bailout and require a roll.

Characters who stay aboard a zeppelin as its crashing must a survival roll against a target number 15-CN+3 if incapacitated.

Hydrogen Gas Cells

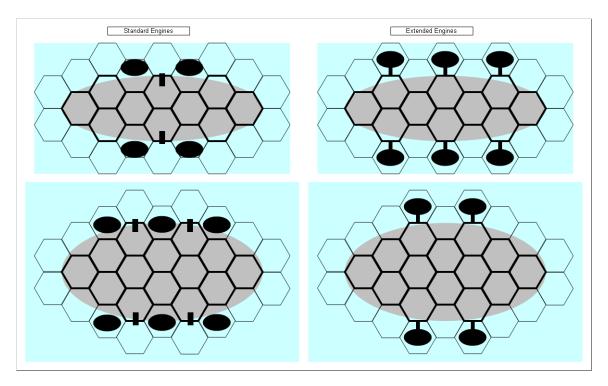
Hydrogen is a highly explosive and dangerous gas, but it is still widely used in zeppelins by pirates and less affluent militias because it is lighter and less expensive than helium. Any time a hydrogen gas cell is hit by a magnesium round, there is a chance it will ignite the gas and cause an explosion. If the explosion ignites the adjacent gas cells the entire airship may be lost.

Each time a hydrogen gas cell is hit by a magnesium round, roll 1d10. On a roll of 1 for armored gas cells or a roll of 3 or less for unarmored gas cells, the gas cell ignites and explodes. If the gas cell explodes, roll 1d10 for each adjacent gas cell. On a roll of 5 or less, the adjacent gas cell explodes as well.

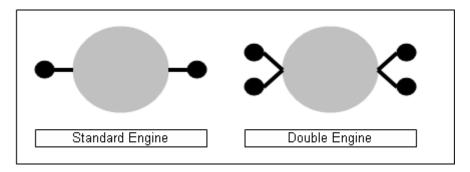
Engine Pods

Unlike aircraft, zeppelin engines are basically the same size. Instead of using larger engines, zeppelins simply add more engines. The standard engine configuration has engines mounted on the recessed hexes. (Engines may not be mounted on the first or last hex). Each engine weighs 10,000 lbs.

Extended engines are farther away from the side of the gas cell, which improves their efficiency and increases the zeppelin speed by 25%. The additional supports required increase the engine weight by 10%. Airships with extended engines may not carry cannons as they pose too great a risk of hitting the engines.



Some zeppelins, particularly larger ones, increase the number of engines they carry by using a double engine configuration. This configuration has two engines at each engine mount. The additional supports required to mount the double engines increase the engine weight by 50%. On the upside, double engine configurations provide a bit more protection for the airship as each engine pods mounts its own turret.



A zeppelin may have an extended double engine configuration, which combines the features of both extended and double engines.

Width 1 zeppelins may only use standard engine configurations. Their engines may be mounted off the first or last hex. They may not have engines in two adjacent hexes.

A zeppelin's speed depends on its weight and number of engines. Speed should be rounded to the nearest 5 mph.

Zeppelin Speed = (# of Engines) * (Drag Coefficient) * 5,000,000 / (Total Zeppelin Weight)

Zeppelin Width	Drag Coefficient
1	1.6
2	1.4
3	1.2
4	1.0

While zeppelins are very slow compared to aircraft, this system recognizes that some zeppelins may be fast enough to warrant movement on the game map. The table below shows zeppelin speed and movement on the game map (aircraft speeds and movement shown for completeness). When speeds fall between the breakpoints below, players should decide which way to round them as deemed appropriate to the mission.

Example:

If a zeppelin has speed 45 mph, players should decide if it's better for the mission to treat it as 40 mph or 50 mph. If a second zeppelin is involved in the mission with 40 mph, the 45 mph zeppelin should be treated as 50 mph to show the difference in speed between the two vessels.

Speed	Movement
350 mph	5 Hexes per turn
300 mph	4 Hexes per turn
250 mph	3 Hexes per turn
200 mph	2 Hexes per turn
150 mph	1 Hex per turn
100 mph	No movement for one turn followed by 1 Hex per
	turn for two turns
75 mph	1 Hex every other turn
60 mph	No movement on first two turns, 1 Hex on third
	turn, no movement on fourth turn, 1 Hex on fifth
	turn
50 mph	1 Hex every third turn
40 mph	1 Hex every fourth turn
30 mph	1 Hex every fifth turn
Less than 30 mph	No movement during game

Turrets

Almost all zeppelins carry turrets for protection. Typically one turret is mounted on each engine pod plus one at the nose and another at the tail. (Width 4 zeppelins have two turrets at both the nose and tail).

Turrets may carry up to four guns. Although the turrets do not have to be uniform on the zeppelin, they usually are except in some cases where the nose and tail turrets have larger caliber guns.

Turret weight = [400 + 1.5 * (Total Gun Weight)] * (# of Guns)

The table below shows the weights of commons turrets carrying uniform caliber guns. (Multiplying by the # of guns is not done for aircraft turrets. It's done here to make the turret weight large enough to be relevant to the overall airship weight in order to preserve game balance. Otherwise even 70 caliber turrets weigh only a very small percentage of the total airship weight.)

Number of Guns	1	2	3	4
30 Caliber	625 lbs	1,700 lbs	3,225 lbs	5,200 lbs
40 Caliber	775 lbs	2,300 lbs	4,575 lbs	7,600 lbs
50 Caliber	1,000 lbs	3,200 lbs	6,600 lbs	11,200 lbs
60 Caliber	1,300 lbs	4,400 lbs	9,300 lbs	16,000 lbs
70 Caliber	1,675 lbs	5,900 lbs	12,675 lbs	22,000 lbs

Cannons

Cannons are the zeppelin's main guns. Too large to accurately target fighters, they are primarily used against other airships, although they can be loaded to fire flak bursts at incoming aircraft. Cannons are also used to bombard ground targets.

Cannon Size	5" Gun	6" Gun	7" Gun	8" Gun
BTN	6	5	4	3
Flak Fired per turn (as a single burst)	1	2	3	4
Range	8 Hexes	7 Hexes	6 Hexes	5 Hexes
Weight	2,500 lbs	5,000 lbs	10,000 lbs	20,000 lbs

Firing at Zeppelins:

These rules are modified from the normal rules. Because zeppelins are such large targets, they are hard to miss, even when a pilot isn't trying to hit them. Whenever a plane facing the zeppelin fires at a turret or another aircraft, shots that miss the target may still hit the zeppelin. For missed shots in these situations, compare the failed firing roll against the to-hit number for the gas cell. If it passes, and if the zeppelin is in range, the missed shot hits the gas cell. Guns still jam based on the rolls to hit their intended target, regardless of whether the missed shot hits a zeppelin.

Zeppelin Crews

The table below shows the breakdown of the standard zeppelin crew complement:

Position	Crewmen	Rank	Stats
Zeppelin Commander	1	Varies	Random Generic Command Officer (18 + 1d6)
Command Crew	[(# Hexes) + (# of Aircraft)] / 20, round up	Varies	Random Generic Officer (10 + 1d10)
Engineer	(# Engines) / 2	Varies	Random Generic Officer (10 + 1d10)
Gunners	(# Turrets) + (# of Cannons) + (# of Bomb Bays)	Varies	Random Generic Senior Crewman (5 + 2d6)
Aircraft Mechanic	(# of Hangars) + (# of Aircraft Flights)	Varies	Random Generic Senior Crewman (5 + 2d6)
Pilot	(# of Aircraft)	Varies	Varies
Security	(# Hexes) * (2 if cargo zeppelins)	Varies	Random Generic Crewman (1d20)
Boarders	Varies	Varies	Random Generic Crewman (1d20)

Random Generic Crew	Rank	Stats
1 - 4	Airman	0-1-1-1-1
5 – 8	Senior Airman	0-2-2-2-2
9 - 12	Sergeant	0-3-3-3-3
13 – 15	2 nd Lieutenant	0-4-4-4-4
16 – 18	1 st Lieutenant	0-5-5-5-5
19 – 20	Captain	0-6-6-6-6
21 – 22	Major	0-7-7-7-7
23	Lt. Colonel	0-8-8-8-8
24	Colonel	0-9-9-9-9
-	General	0-10-10-10-10

Generic Crew Type	Dice	Range of Ranks
Random Generic Junior Crewman	1d10	Airman – Sergeant
Random Generic Senior Crewman	5 + 2d6	Senior Airman – 1 st Lieutenant
Random Generic Crewman	1d20	Airman – Captain
Random Generic Officer	10 + 1d10	Sergeant – Major
Random Generic Command Officer	18 + 1d6	Captain – Colonel

Generic crewmen advance in rank by participating in character combat. For each round of character combat they participate in and survive (do not become incapacitated or killed), they earn 1 point. The cost to advance to the next rank is equal to their average stat level. The points to advance to the next level may be earned over the course of several missions.

Example: A Sergeant (average stat level 3) must survive 3 rounds of character combat without being incapacitated or killed to advance to the rank of 1^{st} Lieutenant.

Crew Movement

Military zeppelins typically have experienced crews who are trained to hold their posts during combat. Commercial zeppelin crews usually require some training, but will abandon their posts faster than a military airship crew. Pirate airship crews receive little or no training, although many crewmen are ex military or commercial hands.

Position	Military Airship	Commercial Airship	Pirate Airship
	Starting position: Bridge	Starting position: Bridge	Starting position: Bridge
Command Crew	May abandon bridge if outnumbered (either in bridge or overall airship)	May abandon bridge if outnumbered (either in bridge or overall airship)	May abandon bridge if enemy characters on airship
	May abandon bridge if enemy characters on airship and no other crew remains	May abandon bridge if enemy characters enter bridge	
	Starting position: Engineering	Starting position: Engineering	Starting position: Engineering
Engineers	May abandon engineering if outnumbered (either in engineering or overall airship).	May abandon engineering if outnumbered (either in engineering or overall airship).	May abandon engineering if enemy characters on airship
	May abandon engineering if bridge is attacked	May abandon engineering if enemy characters enter engineering	
		May abandon engineering if bridge is attacked	
	Starting position: Hangars	Starting position: Hangars	Starting position: Hangars
	May abandon hangar is outnumbered (either in hangar or overall airship)	May abandon hangar is outnumbered (either in hangar or overall airship)	May abandon hangar if enemy characters on airship
Aircraft Mechanics	May abandon hangar if bridge is attacked	May abandon hangar if enemy characters enter hangar	
	May abandon hangar if no friendly aircraft in hangar	May abandon hangar if bridge is attacked	
		May abandon hangar if no friendly aircraft in hangar	

Position	Military Airship	Commercial Airship	Pirate Airship
	Starting position: 1 per gun	Starting position: 1 per gun	Starting position: 1 per gun
Gunners	May abandon gun if outnumbered (either in hex or overall airship) May abandon gun if gun no	May abandon gun if outnumbered (either in hex or overall airship) May abandon gun if enemy	May abandon gun if enemy characters on airship May abandon gun if fired on by enemy
Guillers	longer operational	characters enter hex	
	May abandon gun if bridge is attacked	May abandon gun if gun no longer operational	
		May abandon gun if bridge is attacked	
Security	Starting position: 1 per hex	Starting position: 2 per hex	Starting position: 1 per hex
Guards	Free to move about airship	Free to move about airship	Free to move about airship
	Starting position: Hangar	Starting position: Hangar	Starting position: Hangar
	May launch in plane	May launch in plane	Free to move about airship
	May abandon hangar if	May abandon hangar if	
Pilots /	outnumbered (either in	outnumbered (either in	
Boarders Preparing	hangar or overall airship)	hangar or overall airship)	
to Launch	May abandon hangar if	May abandon hangar if	
	bridge is attacked	enemy characters enter	
		hangar	
		May abandon hangar if bridge is attacked	
Off-Duty	Starting position: Crew	Starting position: Crew	Starting position: Crew
Pilots /	Quarters	Quarters	Quarters
Boarders	Free to move about airship	Free to move about airship	Free to move about airship

Boarding Zeppelins:

There are three boarding approaches that may be used by boarding crews during this campaign. These rules are based on the rules from <u>Behind the Crimson Veil</u>, but have been extensively modified.

Wing-Walkoff:

In this approach, boarders ride on the aircrafts wings. The aircraft must pull along side the zeppelin and stall, allowing the "wing-walkers" to step off onto the zeppelin. Aircraft carrying wing-walkers may not exceed speed 2 or 1 G. If they do, the wing-walkers will not be able to hold on and will fall from the plane. The number of wing-walkers an aircraft may carry depends on its size. For each hit to the aircraft's wing, roll 1d10. On a roll of 3 or less, a randomly chosen wing-walker is killed.

Wing-walkers are especially vulnerable to flak and shock. For each flak hit to the wing, each wing-walker must roll 1d10. On a roll of 3 or less the wing-walker is killed. When the pilot is affected by a flare or sonic rocket, each wing-walker must roll to avoid shock. On a failing roll of 3 or less, the wing-walker is

not only shocked but loses his grip on the wing and must make a bailout roll of 6 – Sixth Sense – Ouickdraw (+2 for shock).

For this method, the boarders must make a bailout roll of 9 - Sixth Sense - Quickdraw. Boarders who fail the roll must make a survival roll of 11 - Sixth Sense - Quickdraw to determine if they make it safely to the ground or if they are killed in the boarding attempt.

Plane BTN	Maximum Wingwalkers per Wing	
1 – 3	4	
4 – 7	3	
8 – 10	2	

Low Free-Fall

In this approach, the aircraft carrying the boarders gets as close as possible to the zeppelin and the boarders jump from the cargo bay, trying to secure themselves to the airship with grappling hooks. Though less exposed than wing-walkers during the approach to the zeppelin, boarding the airship is more difficult.

For this method, the boarders must make a bailout roll of 10 - (Sixth Sense) - (Quick Draw). Boarders who fail the roll must make a survival roll of 12 - (Sixth Sense) - (Quick Draw) to determine if they make it safely to the ground or if they are killed in the boarding attempt.

Whenever the cargo plane's tail is hit, there is a chance that boarders may be injured. For each hit roll 1d10. On a roll of 1, a randomly chosen boarder is "hit". For each hit boarder, roll against a target of 10-CN. If the roll fails the boarder is killed. If the roll passes the boarder is rendered unconscious for the remainder of the engagement. For each hit to the cargo area itself, a randomly chosen boarder is automatically "hit".

Hangar Incursion

In this approach the aircraft carrying the boarders makes a forced zeppelin hook landing in the enemy zeppelins aircraft bay. The boarders can then disembark the aircraft. This method is safest for the boarders, but riskiest for the aircraft.

For this approach the aircraft carrying the boarders must have a functional zeppelin hook. The aircraft makes a landing roll of **8** – (**Natural Touch**). All the normal landing modifiers apply. Consult Table 2 for the consequences of a failed roll. The boarders do not require a roll; surviving boarders are safely aboard the zeppelin.

1d10	Landing Mishap
1 – 4	Plane crashes into the zeppelin gas cell, doing 14-BTN flak hit's damage to the cell.
	The pilot and boarders must bailout against a target number of 14 (-1 for boarders in the
	cargo bay, -3 for wing-walkers).
5 - 7	Plane crashes into the zeppelin, ripping off both of its wings and comes to rest inside the
	zeppelin. The pilot and boarders in the cargo bay are unharmed and safely aboard the
	zeppelin. Wing-walkers must bailout against a target number of 15 or attempt to board
	the zeppelin against a target number of 18. Wing-walkers who attempt to board in
	zeppelin in this way and fail are killed.
8 -9	Plane crashes into zeppelin's landing structure and comes to rest inside the zeppelin.
	The plane takes 1d10 flak hits to the nose for each pt of speed of its landing maneuver.
	(ie, 1d10 for a 1S move, 2d10 for 2S, etc).
10	No major damage to the plane, despite the botched landing. The plane's zeppelin hook
	is destroyed.

Harpoon Zipline

A relatively new approach in which the pilot fires a modified harpoon rocket at the zeppelin. The pilot must then stall the plane while the boarders go across the harpoon's cable as a zipline before the pilot is forced to release the cable. Any number of boarders may go across the zipline. Each boarder must make a boarding roll equal to $\mathbf{5} + (\# \text{ of previous boarders across the line}) - (\mathbf{Quick Draw})$. Any boarder that fails the boarding roll must make a bailout roll equal to $\mathbf{10} - (\mathbf{Sixth Sense}) - (\mathbf{Quick Draw})$ to determine if the survive.

Character Combat

Theses rules are modified from the <u>Behind the Crimson Veil</u> rules for several objectives:

- 1) Make character combat a more interesting part of the game
- 2) Make character combat resolvable by a relatively few simple rolls
- 3) Make character combat less formulaic so the results are not entirely predictable
- 4) Allow pilots to participate in character combat
- 5) Allow characters to be removed from the current game without killing them so they can participate in future games
- 6) Allow characters to have a chance of avoiding hits so that a highly skilled character has a chance of surviving on his own against a group of weaker characters

Character combat takes place whenever two or more enemy characters are in the same hex. Each team inflicts a number of character hits to the opposing team. The number of character hits is determined by the (sum of each character's Dead-Eye + # of 1d10 + # of 1d4) /10, rounded down. The # of 1d10 rolled is determined by the square root of the number of characters in the hex, rounded down, see the chart below for convenience. The # of 1d4 is equal to the number of steady hand modifiers present; each character with steady hand of 6 or greater adds 1d4 to the roll, each character with steady hand 9 or greater adds 2d4 to the roll.

Example:

A team has two S6 guards, three S4 guards, and five S2 guards in a hex with several enemy characters. They will inflict hits to the enemy team equal to (6+6+4+4+4+2+2+2+2+3d10+2d4)/10. They have ten characters present so they get 3d10 for the large group modifier. They have two characters with SH=6 so they get 2d4 for the steady hand modifier. Depending on how they roll, they will inflict anywhere from 3 to 6 hits to the enemy characters.

Number of Characters in Hex	Number of 1d10 Rolled
1-3	1
4-8	2
9-15	3
16-24	4
25-35	5
36-48	6
49-63	7
64-80	8
81-99	9
100	10

Character hits are inflicted to a randomly chosen member of the opposing team. All hits are assigned but the results of the hits are determined. It's possible for some characters to be hit multiple times while other might not be hit at all. Hit characters roll against a target number of 17+# of hits-CN-QD. On a successful roll, the character avoids the hit completely. On a failed roll, the character is incapacitated for the remainder of the scenario. If the roll fails by more than 5, the character is killed. On a roll of 1 the

character is always killed. There will always be at least of 10% chance of being incapacitated, which may either be a roll of 2 or of 9, depending on the character's stats.

Character Stats	Killed on Roll	Incapacitated on Roll	Avoids Hit on Roll
1	1 - 8	9	10
2	1 - 8	9	10
3	1 - 6	7 - 9	10
4	1 - 4	5 - 9	10
5	1 - 2	3 - 7	8 - 10
6	1	2 - 5	6 - 10
7	1	2 - 3	4 – 10
8	1	2	3 – 10
9	1	2	3 – 10
10	1	2	3 – 10

Example:

An S4 security guard is hit in character combat. He must roll against a target of 17+1-4-4=10. On a roll of 10 he avoids the hit. On a roll of 5-9, he is hit and incapacitated. On a roll of 1-4, he is killed.

Character Combat Actions

Characters can make one of several combat actions to gain an additional advantage during character combat. Character combat actions must be declared during the firing order phase.

Overextended Attacks

Characters taking an aggressive stance during combat can over extend their attacks, allowing them to inflict more damage to their opponents, but putting them at greater risk to be incapacitated or killed if hit. When a character makes an overextended attack, increase their deadeye (including any 1d4 steady modifier if applicable) by 50%, rounding down. If the character is hit, reduce his constitution and quickdraw by 50%, rounding up, when determining the result of the hit.

Defensive Positioning

Characters taking a cautious stance during combat will proceed slowly, taking care to remain in cover when possible. This action increases their chances of surviving combat, but diminishes their effectiveness against their opponents. When a character uses defensive positioning during combat, reduce their deadeye (including and 1d4 steady hand modifiers if applicable) by 50%, rounding up. If the character is hit, increase his constitution and quickdraw by 50%, rounding down, when determining the result of the hit.

Example:

Team one controls the bridge of a zeppelin with a Lt. Colonel (8) and two Captains (6). Team two attacks the bridge with six 1^{st} Lieutenants (5).

Team two orders all of their characters to make overextended attacks. Each of the 1st Lieutenants is treated as having deadeye of 7 and constitution and quickdraw of 2.

Team one orders the Captains to take defensive positions. Each Captain is treated as having deadeye of 3 and constitution and quickdraw of 9.

Zeppelin Design Example: Republic Class

Let's walk through designing a zeppelin with these rules, using Texas's Republic Class as an example. This procedure may look complicated at first glance, but after you've done it a few times, you should be able to create a zeppelin design in under 10 minutes!

- 1. The first step is choosing a configuration. Sometimes its hard to tell right away what configuration will be best, so you may have to pick one and see how it works out. For the Republic, we'll use a 13x3 configuration, so the zeppelin occupies 29 hexes.
- 2. Next we choose the engine configuration. We want the zeppelin to have cannons, so we won't choose extended engines. For the Republic we'll stick to a standard engine configuration. That means the Republic will have 12 engines and the total engine weight will be 12*10,000 lbs = 120,000 lbs.
- 3. Next we can determine the number of guns. We'll choose what type they are later, but we need to know the number to estimate the basic crew requirements in step 4. We have a turret on each engine, plus one in both the nose and tail. Also there is a cannon in between each engine, or 5 on each side here. For the Republic that's 12+2+10 = 24 guns.
- 4. Now we can estimate the basic crew requirements. This will change as we add hangars and boarders, but its good to have an early starting point.
 - a. All zeppelins have one zeppelin commander
 - b. The command crew is (zeppelin hexes+aircraft)/20. At this point that's (29+20)/20 = 2.5, so we'll require 3 additional command crew.
 - c. The engineering crew is engines/2, so we need 12/2 = 6 engineers.
 - d. We counted 24 guns so we need 24 gunners.
 - e. We need 1 security guard per hex, or 29 security guards here.
 - f. So our basic starting crew requirement is 1+3+6+24+29=63
- 5. Now we can figure out the required components. This too will change as we go on, but lets us know how much space we have to work with.
 - a. We require (total command crew)/5 bridge hexes, or (1+3)/5 = 0.8 rounded up to 1 bridge hex here.
 - b. We need (hexes occupied)/10 general stores or 29/10 = 2.9 rounded up to 3 general stores hexes here. Sometimes the combined stores/cabins component should be considered if the decimal is less than 0.5
 - c. We need Crew/40 crew cabins, or 63/40 = 1.6 rounded up to 2 crew cabins at this point.
 - d. We need (engineers)/3 engineering hexes, or 6/3 = 2 engineering hexes here.
 - e. So far we've used 1+3+2+2=8 hexes. That leaves us 21 hexes to play with.
- 6. We certainly want the Republic to carry some aircraft so let's start with hangars. It usually makes sense to use the largest hangars allowed. For a width 3 zeppelin, that's the Medium Hangar (H5) which occupies 5 hexes and can hold 2 flights of aircraft. I'd like the Republic to carry 6 flights, so let's add 3 Medium Hangars. That uses up 15 of our remaining 21 hexes, leaving us with 6 hexes.
- 7. Now that we have hangars, we'll need some pilots and mechanics.
 - a. For the design rules we assume 9 players per flight (the middle of the 6-12 range), so we have 3*2*9 = 54 pilots.
 - b. We require one mechanic per hangar and one per aircraft flight. That's 3+6=9 mechanics.

- 8. We added some aircraft so this will change our command crew and bridge requirements. (29+54)/20 = 4.2 rounded up to 5 command crew. (1+5)/5 = 1.2 rounded up to 2 bridge hexes. We now have 5 hexes left.
- 9. We just added another 65 crew so we'll need some more crew cabins. (63+65)/40 = 3.2 rounded up to 4 crew cabins. We'll add 2 more cabins and have 3 available hexes left.
- 10. I want the Republic to be able to carry some boarders. The Air Rangers use Behemoths sometimes, so lets say 1 flight of Behemoths with 5 boarders each, 5*9 =45 boarders. That will require one more crew cabin.
- 11. I want the Republic to be a multi-purpose zepp, so lets round it out by making the last 2 hexes a small bomb bay (B1) and small cargo bay (H1). The bombardier can flight in the existing cabins.
- 12. Now we can tally up the weight of the components. The nice thing about this system is we can save that for the thing instead of having to keep track as we go along.

a. Bridge: 2*5,000 = 10,000 lbs b. General Stores: 3*20,000 = 60,000 lbs c. Crew Cabins: 5*10,000 = 60,000 lbs d. Engineering: 2*25,000 = 50,000 lbs e. Hangars: 3*350,000 = 1,050,000 lbs 1*100,000 = 100,000 lbs Cargo Holds: Bomb Bays 1*100,000 = 100,000 lbs g. Total Component Weight = 1,420,000 lbs h.

- 13. Now we need to determine the gas cell buoyancy and weight. The zeppelin occupies 29 hexes, so it has 29*20 = 580 pts of buoyancy. Texas has lots of Helium, so we'll choose that over Hydrogen, and this is a military zeppelin so it should be amored. That means the gas cell weighs 580*25*3*2 = 87,000 lbs
- 14. Now we'll come back to the guns. Let's give each turret two .50 cal guns (400 lbs each). Each turret weighs (2*1.5*400+400)*2 = 3,200 lbs. There are 14 turrets, so total turret weight is 14*3200 = 44,800 lbs.
- 15. We determined the zeppelin also had 10 cannons. Lets make them 7" cannons at 10,000 lbs each, so 10*10.000 = 100.000 lbs total.
- 16. So our total zeppelin weight is 1,420,000+120,000+87,000+44,800+100,000 = 1,771,800 lbs
- 17. Minimum buoyancy is (total zeppelin weight)/5000, or 1,771,800/5,000 = 354 pts of buoyancy.
- 18. Finally we can determine the zeppelin's speed. From the chart we see that a width 3 zeppelin has a 1.2 drag coefficient. So speed is (# engines)*(Drag coefficient)*(5,000,000)/(Total Zeppelin Weight), or (12*1.2*5,000,000)/1,771,800 = 41 mph, rounded to the nearest 5 is 40 mph.
- 19. Congratulations! Our design of the Republic class zeppelin is complete.

After you've designed a few zeppelins, you may want to do things in a different order. For instance, you might start off saying you want a zeppelin with 3 medium hangars. You could then determine the hangars plus crew cabins for the pilots requires at least 17 hexes. Then you could choose a zeppelin configuration at least 3 hexes wide (a requirement for medium hangars) and larger than 17 hexes.

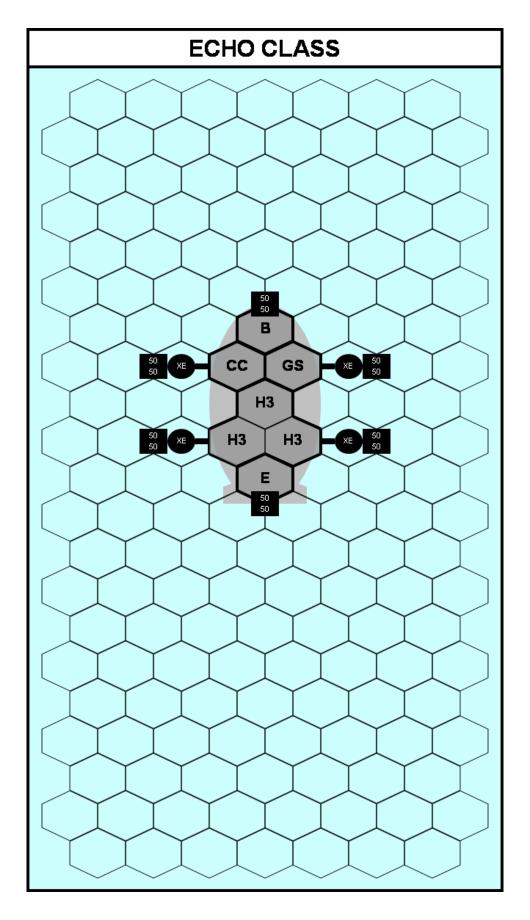
Zeppelins of the World

Zeppelins are common today in Europe and North America, and are rapidly increasing in numbers in Latin and South America. As a whole, the European nations tend to place more value on speed and durability of their airships, while North American manufacturers load them with as much as possible. The following is not meant to be a comprehensive list of zeppelin classes, but a sampling of some of the interesting zeppelins in the skies today. There is a great deal of variations among zeppelins, even within the same class, and these are only representative samples.

Echo Class			
	Austin Airship Comp	any, Republic of Texas	
		Position	Crewmen
Length x Width	5 x 2	Zeppelin Commander	1
Hexes Occupied	7 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	69 / 140	Security	7
Gas Cell / Gas	Armored / Helium	Gunners	6
Engines / Configuration	4 x Extended	Engineers	2
Turrets	6 x 2 – 50 cal	Pilots	9
Cannons	=	Mechanics	2
Speed	100 mph	Boarders	=
		Total	28
Bridge (B)		1	5,000 lbs
General Stores (GS)		1	20,000 lbs
Crew Cabins (CC)	40 Crew Cabins	1	10,000 lbs
Medium Hangar (H3)	1 Flight Aircraft	3	200,000 lbs
Engineering (E)		1	25,000 lbs
Gas Cell			21,000 lbs
Engines			44,000 lbs
Turrets			19,200 lbs
Cannons			
Total	40 Crew Cabins 1 Flight Aircraft	7 Hexes	344,200 lbs

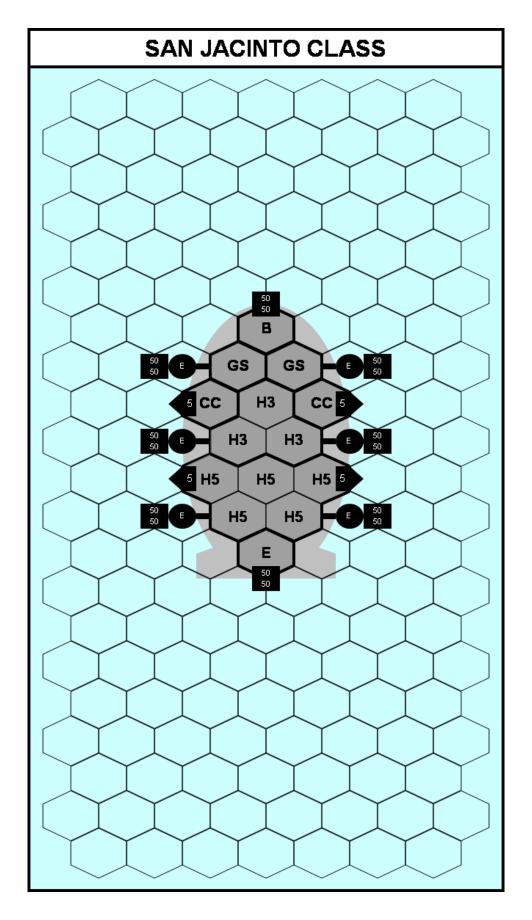
In 1932, the Echo class was the first model built by the Austin Airship Company. The Echo served a variety of roles alongside the San Jacinto class until the larger Republic debuted in 1935. Although the Austin Airship Company stopped production of the Echo class in 1936, several Echoes are still in use by the Republic of Texas as patrol vessels.

The best known Echo class airship is the *Comal River*, which has been patrolling the Texas-Mexico border for five years. Typically carrying a single flight of Bloodhawks from the Chamizaal squadron out of El Paso ARB, the *Comal River* spends most of its time intercepting Mexican pirates crossing into Texas and the occasional border skirmish with the Mexican Air Force. The *Comal River* was most recently recognized by President Crockett for spotting the German built Kondor class *Donnerschlag* over the skies of Chihuahua. The *Comal River's* intelligence alerted RTAF command about the Mexican-German arms deal and new TNCA factory early enough that the Republic class *Seminole Canyon* could be sent to destroy the factory before it becomes operational.



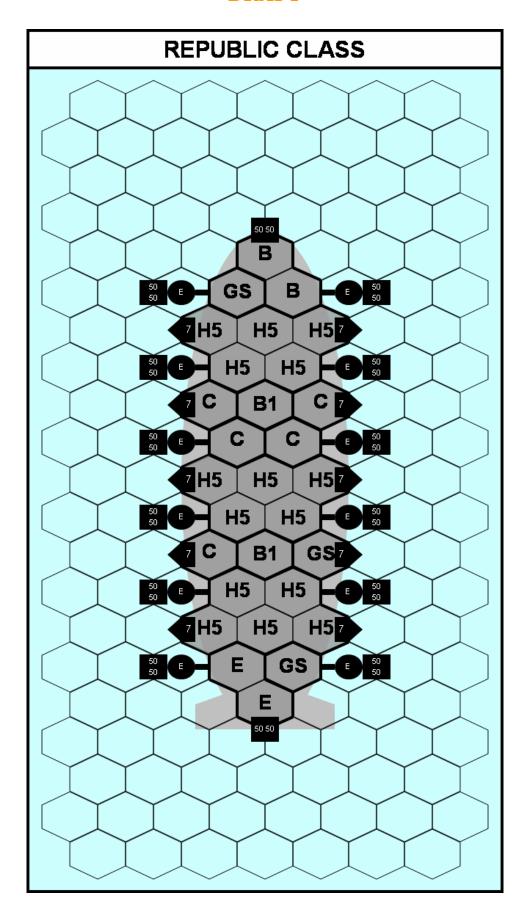
San Jacinto Class			
	Austin Airship Comp	any, Republic of Texas	
		Position	Crewmen
Length x Width	7 x 3	Zeppelin Commander	1
Hexes Occupied	14 Hexes	Command Crew	3
Min Buoyancy / Buoyancy	158 / 280	Security	14
Gas Cell / Gas	Armored / Helium	Gunners	12
Engines / Configuration	6 x Standard	Engineers	3
Turrets	8 x 2 – 50 cal	Pilots	27
Cannons	4 x 5" Cannons	Mechanics	5
Speed	45 mph	Boarders	-
		Total	65
Bridge (B)		1	5,000 lbs
General Stores (GS)		2	40,000 lbs
Crew Cabins (CC)	80 Crew Cabins	2	20,000 lbs
Large Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H3)	1 Flight Aircraft	3	200,000 lbs
Engineering (E)		1	25,000 lbs
Gas Cell			42,000 lbs
Engines			60,000 lbs
Turrets			38,400 lbs
Cannons			10,000 lbs
Total	80 Crew Cabins 3 Flights Aircraft	14 Hexes	790,400 lbs

The San Jacinto entered service at the same time as the Echo class, and served as the workhorse of Texas's fleet for three years until the Republic class debuted in 1935.



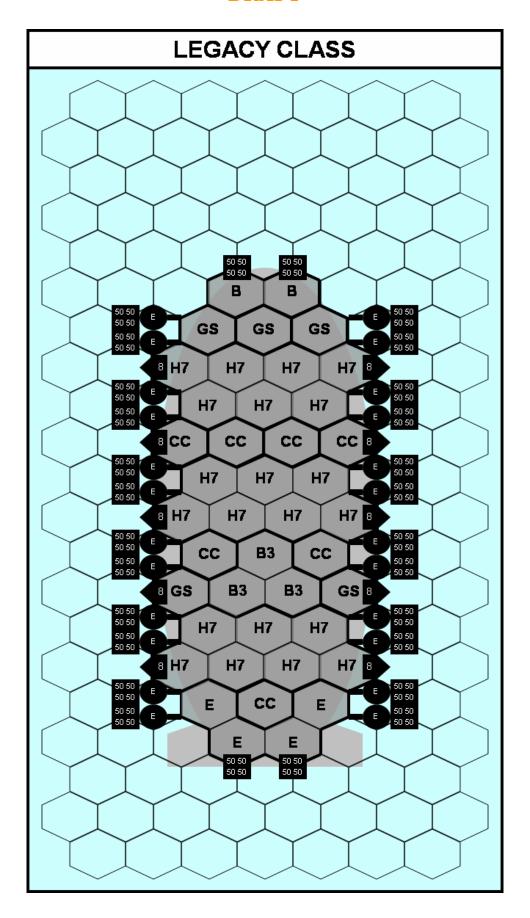
Republic Class					
	Austin Airship Company, Republic of Texas				
		Position	Crewmen		
Length x Width	13 x 3	Zeppelin Commander	1		
Hexes Occupied	29 Hexes	Command Crew	6		
Min Buoyancy / Buoyancy	344 / 580	Security	29		
Gas Cell / Gas	Armored / Helium	Gunners	25		
Engines / Configuration	12 x Standard	Engineers	6		
Turrets	$14 \times 2 - 50 \text{ cal}$	Pilots	54		
Cannons	10 x 7" Cannons	Mechanics	9		
Speed	40 mph	Boarders	45		
		Total	175		
Bridge (B)		2	10,000 lbs		
General Stores (GS)		3	60,000 lbs		
Crew Cabins (CC)	200 Cabins	5	50,000 lbs		
Medium Hangar (H5)	2 Flights	5	350,000 lbs		
Medium Hangar (H5)	2 Flights	5	350,000 lbs		
Medium Hangar (H5)	2 Flights	5	350,000 lbs		
Small Cargo Hold (C1)	75,000 lbs	1	100,000 lbs		
Small Bomb Bay (B1)	50,000 lbs	1	100,000 lbs		
Engineering		2	50,000 lbs		
Gas Cell			87,000 lbs		
Engines			120,000 lbs		
Turrets			44,800 lbs		
Cannons			100,000 lbs		
Total	200 Crew Cabins 6 Flights Aircraft 50,000 lbs Bombs 75,000 lbs Cargo	29 Hexes	1,771,800 lbs		

The Republic is the modern workhorse of the Air Ranger's fleet.



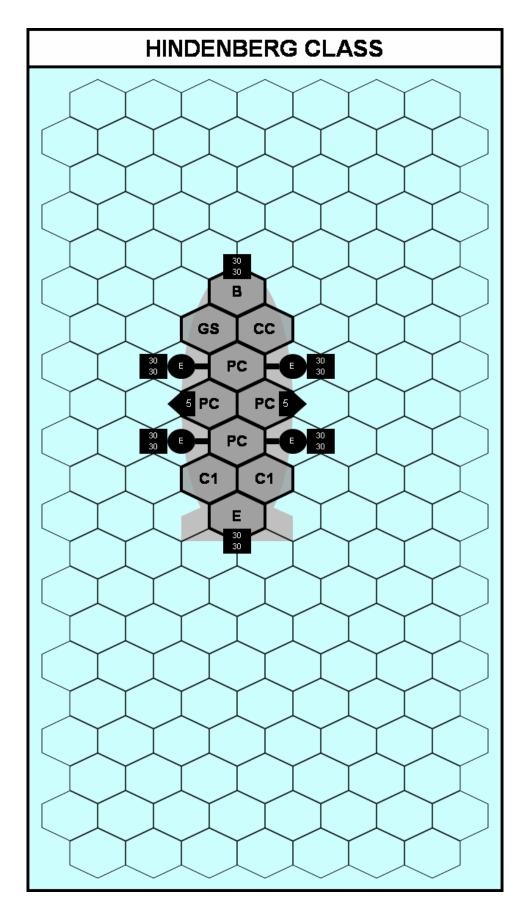
Legacy Class Austin Airship Company, Republic of Texas					
Length x Width	13 x 4	Zeppelin Commander	1		
Hexes Occupied	42 Hexes	Command Crew	9		
Min Buoyancy / Buoyancy	596 / 840	Security	42		
Gas Cell / Gas	Armored / Helium	Gunners	39		
Engines / Configuration	24 x Double	Engineers	12		
Turrets	28 x 4-50 cal	Pilots	81		
Cannons	10 x 8" Cannons	Mechanics	12		
Speed	40 mph	Boarders	81		
		Total	273		
Bridge (B)		2	10,000 lbs		
General Stores (GS)		5	100,000 lbs		
Crew Cabins (CC)	280 Crew Cabins	7	70,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Medium Bomb Bay (B3)	150,000 lbs Bombs	3	200,000 lbs		
Engineering (E)		4	100,000 lbs		
Gas Cell			126,000 lbs		
Engines			360,000 lbs		
Turrets			313,600 lbs		
Cannons			200,000 lbs		
Total	280 Crew Cabins 9 Flights Aircraft 150,000 lbs Bombs	42 Hexes	2,979,600 lbs		

The Republic currently has two Legacy class airships, the *Lady Bluebonnet* and the *Yellow Rose*. The third ship of the class is currently under construction in Austin. Due to the recent hostilities with the Mexican Air Force in Chihuahua, the third ship has been recommissioned as the *Rio Grande* and will be deployed to San Antonio upon its completion.



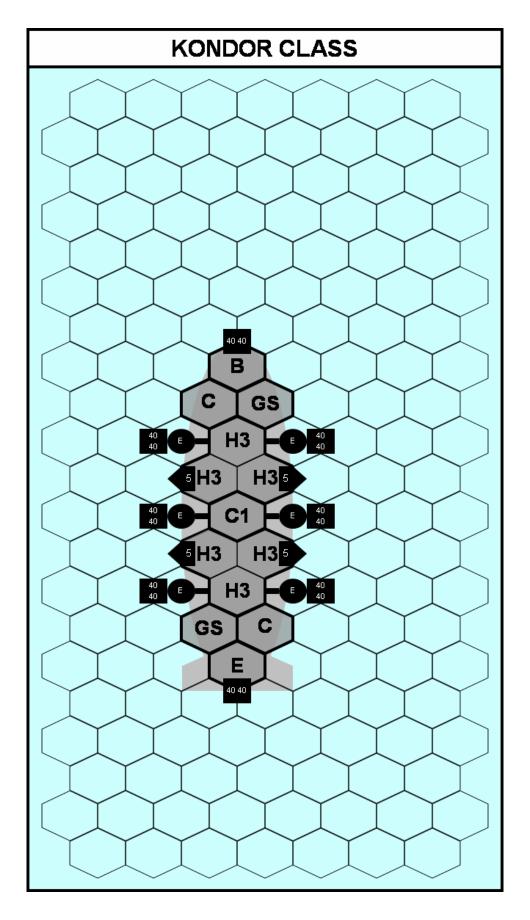
Hindenberg Class Luftschiffbau Zeppelin, Germany					
Length x Width	7 x 2	Zeppelin Commander	1		
Hexes Occupied	10 Hexes	Command Crew	1		
Min Buoyancy / Buoyancy	66 / 200	Security	18		
Gas Cell / Gas	Unarmored / Helium	Gunners	8		
Engines / Configuration	4 x Standard	Engineers	2		
Turrets	6 x 2-30 cal	Pilots	0		
Cannons	2 x 5" Cannons	Mechanics	0		
Speed	85 mph	Boarders	0		
		Total	30		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		1	20,000 lbs		
Crew Cabins (CC)	40 Crew Cabins	1	10,000 lbs		
Passenger Cabins (PC)	80 Passenger Cabins	4	60,000 lbs		
Small Cargo Hold (C1)	150,000 lbs Cargo	2	200,000 lbs		
Engineering (E)		1	25,000 lbs		
Gas Cell			10,000 lbs		
Engines			40,000 lbs		
Turrets			10,200 lbs		
Cannons			5,000 lbs		
Total	40 Crew Cabins 80 Passenger Cabins 150,000 lbs Cargo	10 Hexes	330,200 lbs		

The Hindenberg Class is a German passenger liner debuted in 1936. Its primarily used for transatlantic flights between Germany and North America. Hindenberg airships routinely visit the ISA, Mexico, the Empire State and the Atlantic Coalition. The lead ship of the class, the *Hindenberg*, recently suffered an explosion believed to be caused by a bomb. Initially designed to use hydrogen, the *Hindenberg* would have been destroyed had the class not been converted over to Helium in 1937.



Kondor Class					
Luftschiffbau Zeppelin, Germany					
		Position	Crewmen		
Length x Width	9 x 2	Zeppelin Commander	1		
Hexes Occupied	13 Hexes	Command Crew	2		
Min Buoyancy / Buoyancy	138 / 260	Security	13		
Gas Cell / Gas	Armored / Hydrogen	Gunners	12		
Engines / Configuration	6 x Standard	Engineers	3		
Turrets	8 x 2 – 40 cal	Pilots	18		
Cannons	4 x 5" Cannons	Mechanics	4		
Speed	60 mph	Boarders	-		
		Total	53		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		2	40,000 lbs		
Crew Cabins (CC)	80 Crew Cabins	2	20,000 lbs		
Medium Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Medium Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Small Cargo Hold (C1)	75,000 lbs Cargo	1	100,000 lbs		
Engineering (E)		1	25,000 lbs		
Gas Cell			19,500 lbs		
Engines			60,000 lbs		
Turrets			9,200 lbs		
Cannons			10,000 lbs		
Total	80 Crew Cabins 2 Flights Aircraft 75,000 lbs Cargo	13 Hexes	688,700 lbs		

The Kondor class is an early German military transport. Developed in 1929, the Kondor complies with the Treaty of Versailles and was produced in large numbers until 1935. Most Kondors still in service still use explosive hydrogen gas rather than helium. Germany has begun selling off its outdated zeppelins to allies in Mexico, Spain and Italy in order to help fund the construction of the Bismarck class battle zeppelins.

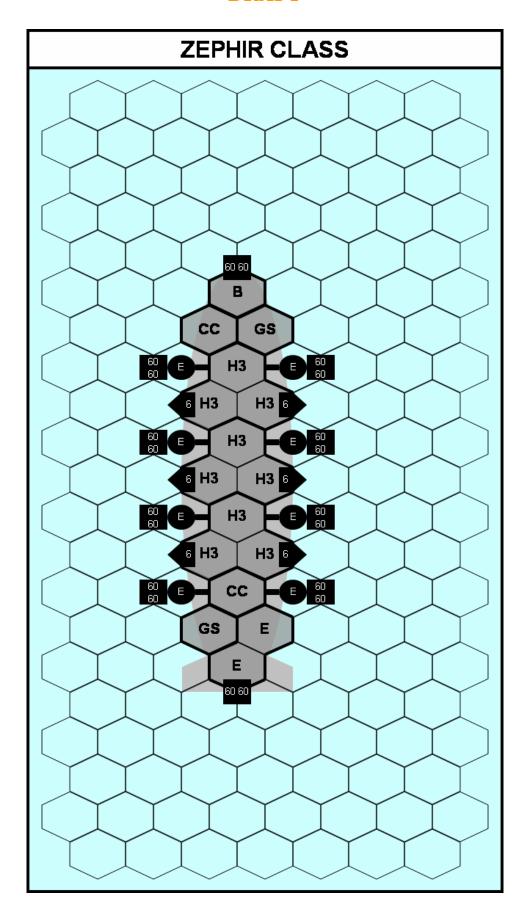


Zephir Class Luftschiffbau Zeppelin, Germany					
Length x Width	11 x 2	Zeppelin Commander	1		
Hexes Occupied	16 Hexes	Command Crew	4		
Min Buoyancy / Buoyancy	183 / 320	Security	16		
Gas Cell / Gas	Armored / Helium	Gunners	16		
Engines / Configuration	8 x Standard	Engineers	3		
Turrets	10 x 2 – 60 cal	Pilots	27		
Cannons	6 x 6" Cannons	Mechanics	6		
Speed	60 mph	Boarders	-		
		Total	73		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		2	40,000 lbs		
Crew Cabins (CC)	80 Cabins	2	20,000 lbs		
Medium Hangar (H3)	1 Flight	3	200,000 lbs		
Medium Hangar (H3)	1 Flight	3	200,000 lbs		
Medium Hangar (H3)	1 Flight	3	200,000 lbs		
Engineering (E)		2	50,000 lbs		
Gas Cell			48,000 lbs		
Engines			80,000 lbs		
Turrets			44,000 lbs		
Cannons			30,000 lbs		
Total	80 Crew Cabins 3 Flights Aircraft	16 Hexes	917,000 lbs		

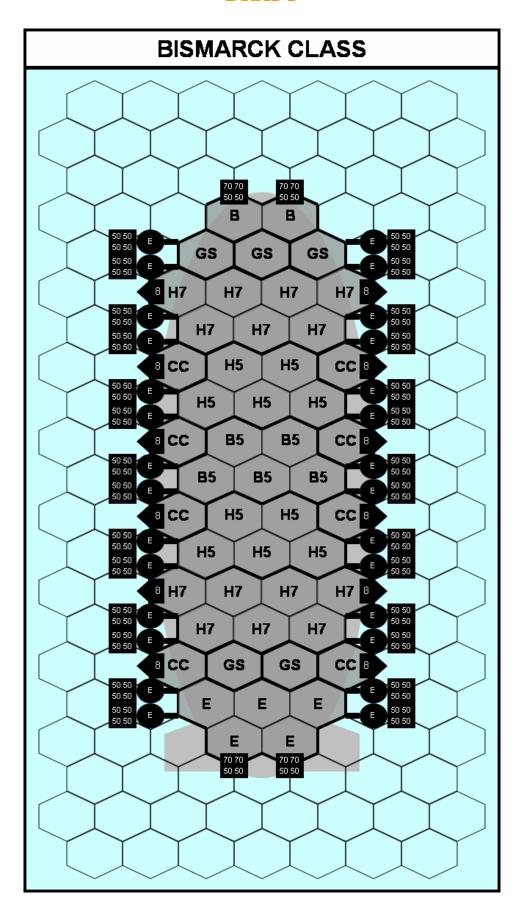
Luftschiffbau Zeppelin company was Germany's top zeppelin producer, responsible for both the Hindenberg and Kondor classes, but they suffered a severe setback in losing the bid to construct the new Bismarck class battle zeppelins. Realizing however that the Bismarck would be too large to build quickly or serve all airship roles, Luftschiffbau saw a new opportunity. They developed the Zephir class as a small but modern attack zeppelin.

A modernization of their successful Kondor design, Luftschiffbau Zeppelin was able to complete the design of the Zephir and begin production by mid 1937. As most of their facilities could be easily converted to build the new class, production ramped up quickly and Luftschiffbau Zeppelin cranked out thirty airships in less than a year. Almost all of these remain in the service of Germany, where they've proven themselves adequate against the larger Richelieu class of France. A handful have been sold to key German allies, most notably the sale of the *Strumjaeger* to the Mexican Air Force. MAF is reportedly very pleased with the airship and highly interested in acquiring more. A Zephir variant is also produced in the ISA.

As the *Bismarck* nears completion, it is expected that a pair of Zephirs will be assigned as escorts during her planned shakedown cruise over the North Sea.



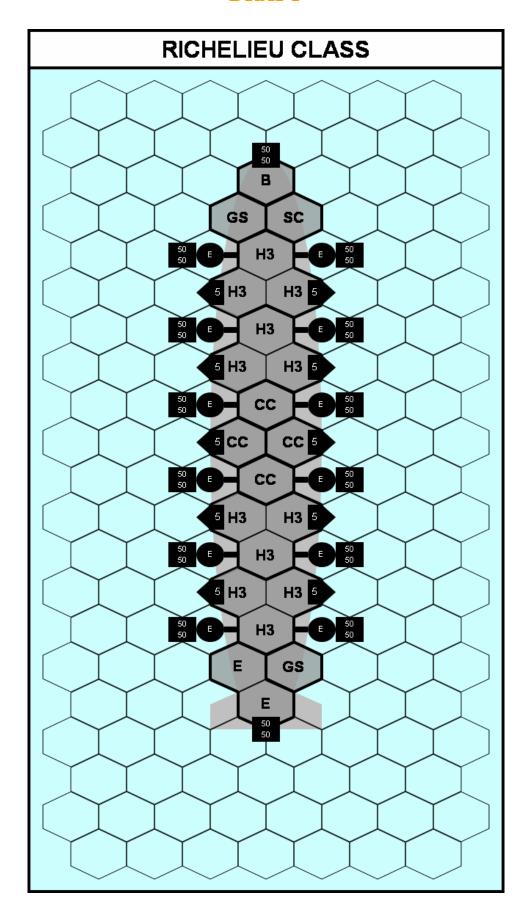
Bismarck Class			
	Blohm & Vo	oss, Germany	
		Position	Crewmen
Length x Width	15 x 4	Zeppelin Commander	1
Hexes Occupied	49 Hexes	Command Crew	8
Min Buoyancy / Buoyancy	699 / 980	Security	49
Gas Cell / Gas	Armored / Hydrogen	Gunners	42
Engines / Configuration	28 x Double	Engineers	14
Turrets	28 x 4-50 cal 4 x 2-50 cal, 2-70 cal	Pilots	90
Cannons	10 x 8" Cannons	Mechanics	14
Speed	40 mph	Boarders	99
		Total	317
Bridge (B)		2	10,000 lbs
General Stores (GS)		5	100,000 lbs
Crew Cabins (CC)	320 Crew Cabins	8	80,000 lbs
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Large Bomb Bay (B5)	300,000 lbs Bombs	5	350,000 lbs
Engineering (E)		5	125,000 lbs
Gas Cell			73,500 lbs
Engines			480,000 lbs
Turrets			375,200 lbs
Cannons			200,000 lbs
Total	320 Crew Cabins 10 Flights Aircraft 300,000 lbs Bombs	49 Hexes	3,493,700 lbs



Richelieu Class					
Société	Société Nouvelle des Forges et Chantiers de la Méditerranée, France				
		Position	Crewmen		
Length x Width	15 x 2	Zeppelin Commander	1		
Hexes Occupied	22 Hexes	Command Crew	3		
Min Buoyancy / Buoyancy	244 / 440	Security	22		
Gas Cell / Gas	Armored / Helium	Gunners	24		
Engines / Configuration	12 x Standard	Engineers	4		
Turrets	14 x 2 - 50 cal	Pilots	36		
Cannons	10 x 5" Cannons	Mechanics	8		
Speed	70 mph	Boarders	81		
		Total	179		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		2	40,000 lbs		
Crew Cabins (CC)	160 Cabins	4	40,000 lbs		
Combined Cabins / Stores (GSC)	20 Cabins	1	30,000 lbs		
Small Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Small Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Small Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Small Hangar (H3)	1 Flight Aircraft	3	200,000 lbs		
Engineering (E)		2	50,000 lbs		
Gas Cell			66,000 lbs		
Engines			120,000 lbs		
Turrets			44,800 lbs		
Cannons			25,000 lbs		
Total	180 Crew Cabins 4 Flights Aircraft	22 Hexes	1,220,800 lbs		

The Richelieu is commonly used by both the French Air Force and the French Foreign Legion. Although recognized throughout Europe, the Richelieu was unknown to North America prior to France's involvement with Louisiana. The French Foreign Legion has boasted that the Richelieu is easily a match for Texas's Republic Class airships, a subject fiercely debated across the Texas-Louisiana border. The two are equally matched in number of guns, although the Republic bears larger cannons. However, the Richelieu is almost twice as fast as the Republic, allowing it greater maneuverability to bring its guns to bear. The Richelieu is smaller than the Republic, but it is also lighter and can absorb almost as much damage as the larger airship before reaching its minimum buoyancy. The Republic carries six flights of aircraft to the Richelieu's four, but the Richelieu has more hangars allowing it to deploy its planes faster for an early numerical advantage in the air.

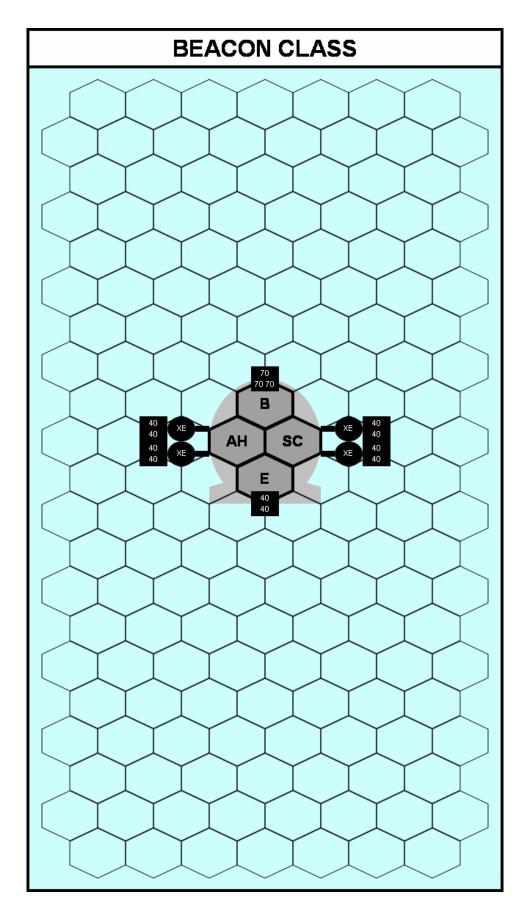
Texas won a major point in the debate when the *Chevalier de Tempete* was destroyed by the smaller San Jacinto class *Sam Houston*, but the French Foreign Legion is quick to point out that *Chevalier de Tempete* was already weakened from battle with the *Lake Twakoni*, and the *Sam Houston* had additional support by aircraft out of Ellington ARB. The debate will undoubtedly continue until a Richelieu and a Republic finally face off in the air. With the deployment of two more French Foreign Legion airships amid renewed tensions in Louisiana, the question may soon be answered....



Beacon Class			
	Bethlehem Steel Comp	oany, Atlantic Coalition	
		Position	Crewmen
Length x Width	3 x 2	Zeppelin Commander	1
Hexes Occupied	4 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	52 / 80	Security	4
Gas Cell / Gas	Armored / Helium	Gunners	6
Engines / Configuration	4 x Extended Double	Engineers	2
Turrets	1 x 3-70 cal 5 x 2-40 cal	Pilots	3
Cannons	-	Mechanics	2
Speed	130 mph	Boarders	-
		Total	17
Bridge (B)		1	5,000 lbs
Combined General Stores / Crew Cabins (SC)	20 Crew Cabins	1	30,000 lbs
Aircraft Hooks (H1)	1/3 Flights Aircraft	1	100,000 lbs
Engineering (E)		1	25,000 lbs
Gas Cell			12,000 lbs
Engines			66,000 lbs
Turrets			24,175 lbs
Total	20 Crew Cabins 1/3 Flights Aircraft	4 Hexes	262,175 lbs

The Beacon is a small patrol ship that's common along the Eastern seaboard. The Beacon is built by the Bethlehem Steel Company at the Fore River Shipyard in Massachusetts. It's used in large numbers by the Atlantic Coalition and the Empire State, and to a lesser extent the Maritime Provinces and Ontario. Beacons have been seen the service of Pacifica as well.

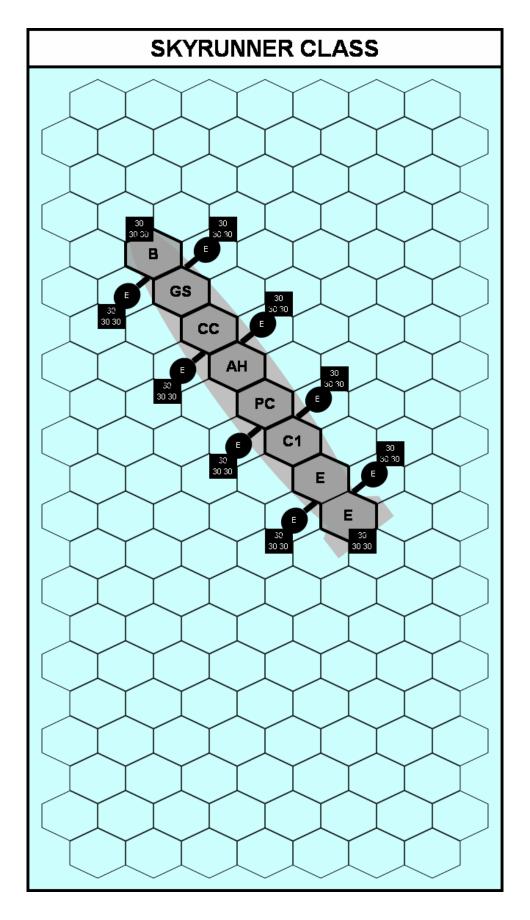
The Beacon's size and speed make it an ideal patrol ship. Although its aircraft hooks allow it to carry a handful of aircraft for defense, the Beacon doesn't fare well in combat situations as its small gasbag can only take a few hits before reaching minimum buoyancy. When serious opposition is encountered, the aircraft pilots usually try to cover the Beacon's withdrawal instead of attempting to defend it against a superior force. Despite its vulnerability, the Atlantic Coalition briefly experimented with using the Beacon as a mini-gunship against larger airships. They quickly found the Mako heavy fighter was better suited for this role and the experiment was abandoned.



Skyrunner Class			
	Bethlehem Steel C	ompany, Columbia	
		Position	Crewmen
Length x Width	8 x 1	Zeppelin Commander	1
Hexes Occupied	8 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	87 / 160	Security	16
Gas Cell / Gas	Armored / Helium	Gunners	10
Engines / Configuration	8 x Standard	Engineers	4
Turrets	10 x 3-30 cal	Pilots	3
Cannons	=	Mechanics	2
Speed	150 mph	Boarders	=
		Total	37
Bridge (B)		1	5,000 lbs
Crew Cabins (CC)	40 Crew Cabins	1	10,000 lbs
General Stores (GS)		1	20,000 lbs
Passenger Cabins (PC)	20 Passenger Cabins	1	15,000 lbs
Small Cargo Hold (C1)	75,000 lbs Cargo	1	100,000 lbs
Aircraft Hooks (AH)	1/3 Flights Aircraft	1	100,000 lbs
Engineering (E)		2	50,000 lbs
Gas Cell			24,000 lbs
Engines			80,000 lbs
Turrets			32,250 lbs
Total	40 Crew Cabins 20 Passenger Cabins 1/3 Flight Aircraft 75,000 lbs Cargo	8 Hexes	436,250 lbs

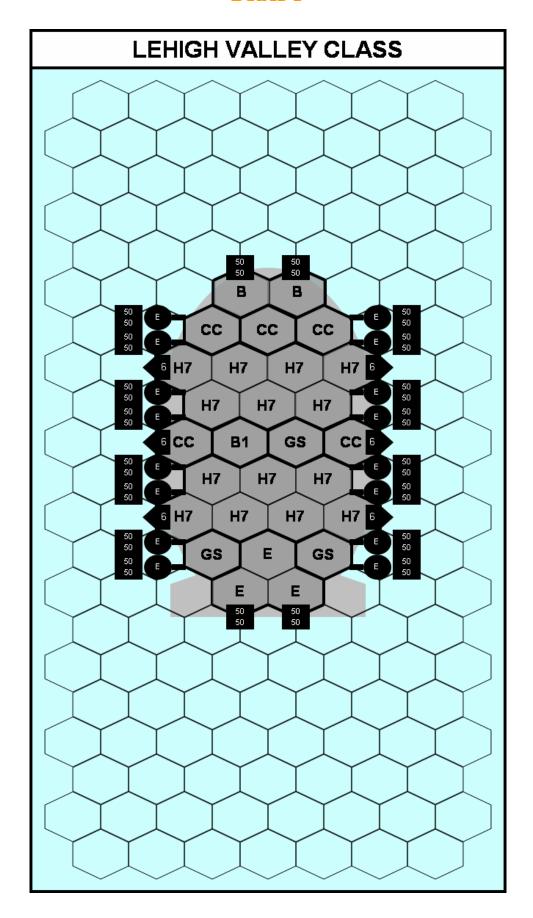
The Skyrunner class is small multipurpose transport that has found popularity in both rural and metropolitan areas. The Skyrunner is built by Bethlehem Steel Company at the Sparrows Point Shipyard in Maryland.

More than a dozen Skyrunner class airships have found their way to Appalachia, where smugglers have nicknamed it the "Rumrunner". Bethlehem Steel naturally denies any involvement with alcohol smugglers. Regional BAS forces however, believe Bethlehem Steel is not only selling airships to moonshiners but then selling information regarding their delivery points to the Broadway Bombers. This way Bethlehem Steel sells more airships and the Bombers receive accolades for their success against the smugglers. However, BAS has yet to find any hard evidence of such activities.



Lehigh Valley Class					
	Bethlehem Steel Company, Empire State				
		Position	Crewmen		
Length x Width	9 x 4	Zeppelin Commander	1		
Hexes Occupied	28 Hexes	Command Crew	5		
Min Buoyancy / Buoyancy	343 / 560	Security	28		
Gas Cell / Gas	Armored / Helium	Gunners	27		
Engines / Configuration	16 x Double	Engineers	8		
Turrets	20 x 2 – 50 cal	Pilots	54		
Cannons	6 x 6" Cannons	Mechanics	8		
Speed	45 mph	Boarders	63		
		Total	193		
Bridge (B)		2	10,000 lbs		
General Stores (GS)		3	60,000 lbs		
Crew Cabins (CC)	200 Crew Cabins	5	50,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Small Bomb Bay (B1)	50,000 lbs	1	100,000 lbs		
Engineering (E)		3	75,000 lbs		
Gas Cell			84,000 lbs		
Engines			240,000 lbs		
Turrets			64,000 lbs		
Cannons			30,000 lbs		
Total	200 Crew Cabins 6 Flights Aircraft 50,000 lbs Bombs	28 Hexes	1,713,000 lbs		

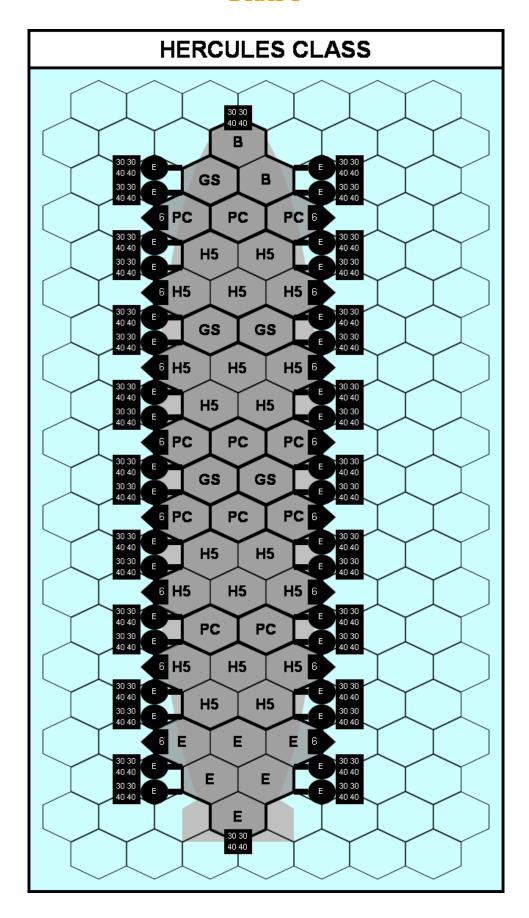
In 1936 the Bethlehem Steel Company constructed several zeppelin hangars at its main manufacturing site in Bethlehem, Pennsylvania. This was BSC's first dedicated zeppelin production facility, (the others being naval shipyards that were modified to produce zeppelins as well as surface ships), at which it could build larger airships. The Broadway Bombers were looking for an airship that could rival Texas's Republic Class, which the Austin Airship Company refused to sell outside of the Republic. To that end, Bethelem Steel developed the Lehigh Valley Class. Shorter than the Republic, the Lehigh Valley boasts more turrets but fewer and smaller cannons. Its more efficient hangar design allows it to carry the same number of aircraft with less wasted weight, although it can't deploy its aircraft quite as quickly. The Empire State remains the largest user of the Lehigh Valley Class, although variant versions have been exported to the Atlantic Coalition and Pacifica as well.



Hercules Class					
	Hughes Aviation, Nation of Hollywood				
		Position	Crewmen		
Length x Width	19 x 3	Zeppelin Commander	1		
Hexes Occupied	44 Hexes	Command Crew	6		
Min Buoyancy / Buoyancy	564 / 880	Security	44		
Gas Cell / Gas	Armored / Helium	Gunners	54		
Engines / Configuration	36 x Double	Engineers	18		
Turrets	38 x 2-30 cal, 2-40 cal	Pilots	72		
Cannons	16 x 6" Cannons	Mechanics	12		
Speed	75 mph	Boarders	-		
		Total	207		
Bridge (B)		2	10,000 lbs		
General Stores (GS)		5	100,000 lbs		
Passenger Cabins (PC)	220 Crew Cabins	11	165,000 lbs		
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs		
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs		
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs		
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs		
Engineering (E)		6	150,000 lbs		
Gas Cell			132,000 lbs		
Engines	_		540,000 lbs		
Turrets			243,200 lbs		
Cannons			80,000 lbs		
Total	220 Crew Cabins 8 Flights	44 Hexes	2,820,200 lbs		

When Austin Airship Company unveiled the Legacy class in 1937, Howard Hughes immediately set out to create something bigger. In March of 1938, Hughes introduced the Hercules. The Hercules holds the record as the longest airship in world, surpassing both the Legacy and the Caravel class cargo zeppelin. The Nation of Hollywood was unable to supply Hughes with enough aluminum to build the giant Hercules, so he constructed the airframe entirely out of wood, leading to the nickname "Spruce Goose". It's a testament to Hughes continued good relations with the Republic that he was able to get enough Helium for a ship of this size. Hughes Aviation has just completed a second Hercules airship for the Hollywood Knights and three more a planned for construction by the end of the year.

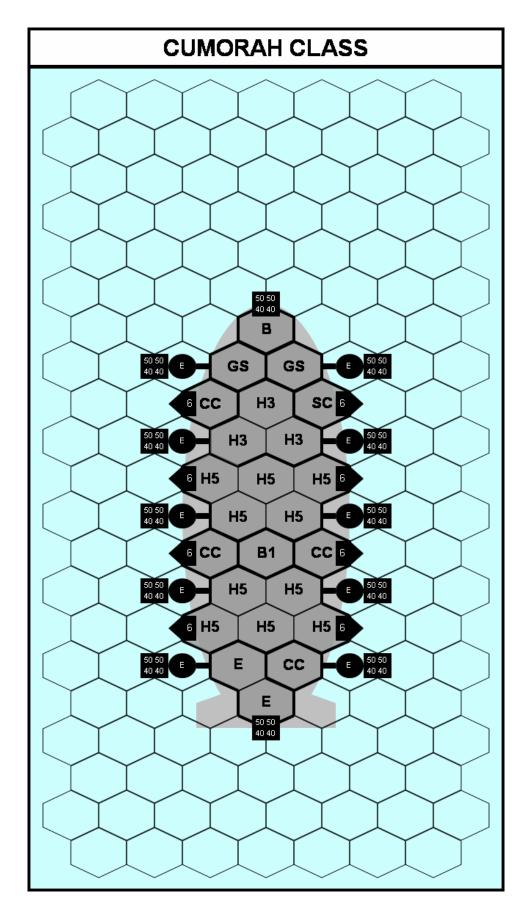
Although the Hercules may be one of the largest airships, it is far from the most powerful. It carries only eight flights of aircraft, whose celebrity pilots complained about the size of the original crew cabins. In his typical extravagance, Hughes removed all of the quarters and replaced them with luxury cabins for the entire crew. With fewer cabins, it carries no defenders beyond the standard compliment of security guards and gunners, instead relying on its fighters and turret guns for protection. Many critics feel this makes the "Spruce Goose" particularly vulnerable to capture, although to date the Knights have repelled all attempts.



Cumorah Class			
	Davis Avi	ation, Utah	
		Position	Crewmen
Length x Width	11 x 3	Zeppelin Commander	1
Hexes Occupied	24 Hexes	Command Crew	4
Min Buoyancy / Buoyancy	283 / 480	Security	24
Gas Cell / Gas	Armored / Helium	Gunners	21
Engines / Configuration	10 x Standard	Engineers	5
Turrets	12 x 2-50 cal, 2-40 cal	Pilots	45
Cannons	8 x 6" Cannons	Mechanics	8
Speed	40 mph	Boarders	72
		Total	180
Bridge (B)		1	5,000 lbs
General Stores (GS)		2	40,000 lbs
Crew Cabins (CC)	160 Crew Cabins	4	40,000 lbs
Combined General Stores / Cabins (SC)	20 Crew Cabins	1	30,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Small Hangar (H3)	1 Flights Aircraft	3	200,000 lbs
Small Bomb Bay (B1)	50,000 lbs Bombs	1	100,000 lbs
Engineering (E)		2	50,000 lbs
Gas Cell			72,000 lbs
Engines			100,000 lbs
Turrets			28,200 lbs
Cannons			50,000 lbs
Total	180 Crew Cabins 5 Flights Aircraft 50,000 lbs Bombs	24 Hexes	1,415,200 lbs

The Cumorah is the largest ship in Utah's air fleet. Utah has more than twenty Cumorah's that have served with distinction since the class was developed in 1931. These noble acts are overshadowed by a series of thefts of Cumorah class airships, beginning with Jonathan "Ghengis" Kahn's daring theft of the stolen *Moroni*. Kahn used the *Moroni* to raid his way across the People's Collective on his return to the ISA. Renamed the *Machiavelli*, it continues to served as the flagship of the Red Skull Legion to this day.

Following Kahn's example, Edwin "Mallet" Malloy and the Reapers later stole another Cumorah class ship which was renamed *Vindication*. The *Vindication* was Malloy's primary weapon in his vendetta against the Collective until it was destroyed by Comrade Aaron "Easter" Whittaker.

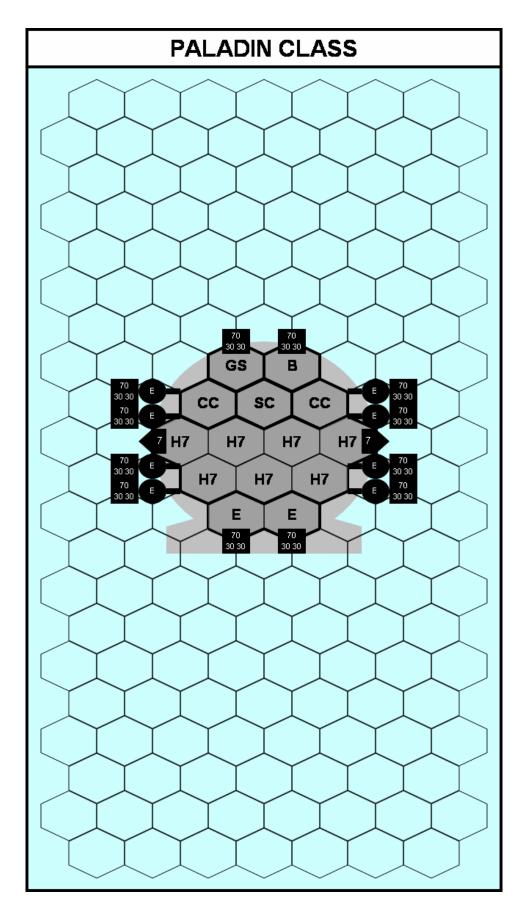


Paladin Class					
	Blake Aviation Security				
		Position	Crewmen		
Length x Width	5 x 4	Zeppelin Commander	1		
Hexes Occupied	14 Hexes	Command Crew	3		
Min Buoyancy / Buoyancy	174 / 280	Security	14		
Gas Cell / Gas	Armored / Helium	Gunners	14		
Engines / Configuration	8 x Double	Engineers	4		
Turrets	12 x 1-70 cal, 2x30 cal	Pilots	27		
Cannons	2 x 7" Cannons	Mechanics	4		
Speed	45 mph	Boarders	27		
		Total	93		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		1	20,000 lbs		
Crew Cabins (CC)	80 Crew Cabins	2	20,000 lbs		
Combined Cabins / Stores (SC)	20 Crew Cabins	1	30,000 lbs		
Giant Hangar (H7)	3 Flights Aircraft	7	500,000 lbs		
Engineering (E)		2	50,000 lbs		
Gas Cell			42,000 lbs		
Engines			120,000 lbs		
Turrets			98,400 lbs		
Cannons			20,000 lbs		
Total	100 Crew Cabins 3 Flights Aircraft	14 Hexes	868,200 lbs		

Blake Aviation Security was founded in Hollywood in 1930 to protect local shipping lanes from air piracy that grew out of the breakup of the United States. By 1935, BAS had grown into the largest and most successful security company in North America, with field offices in all but a few nations. These field offices served as central hubs for BAS forces. A year and half later, Blake's original field office business model was no longer sufficient. The locations of the BAS offices were well known, as well as the time it took BAS forces to respond to a distress call. Pirates attacked in larger numbers and easily overwhelmed small patrols or escort flights. As BAS began losing business to rival agencies, Paladin Blake saw the need to a new strategy.

In 1937, Blake purchased a small airship manufacturer in North California on the brink of collapse. Working with their engineers, Blake laid out his vision for the Paladin class. Originally conceived as a heavy escort, BAS soon found the Paladin was too slow to accompany many transport vessels. Instead the Paladin operates essentially as a "flying hangar", allowing BAS forces more mobility to better protect their clients. To date about a dozen Paladins have been produced, and another dozen are scheduled for completion by the end of the year.

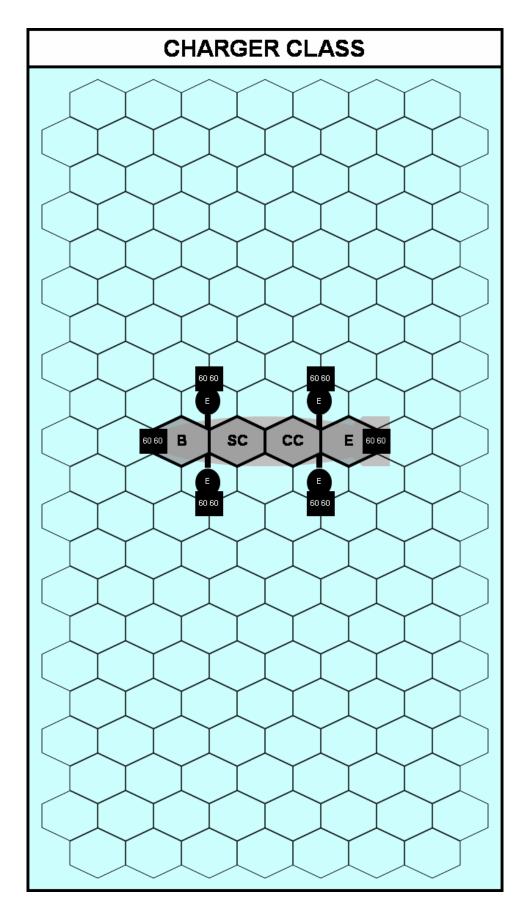
The Paladin is an unconventional design, almost round in shape. Each of its twelve turrets carries a single .70 caliber gun and two .30 caliber guns, giving it a mix of long and short range firepower, while a single 7" cannon on each side gives it some protection against pirate airships. The Paladin also gave Blake a new offensive weapon in his war against pirates. Using two or three Paladins working together, BAS has completed several raids on small pirate bases in Colorado, Mexico and the Disputed Territories.



Charger Class			
	Black Flag Corporation, Di	sputed Northwest Territories	
		Position	Crewmen
Length x Width	4 x 1	Zeppelin Commander	1
Hexes Occupied	4 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	28 / 80	Security	4
Gas Cell / Gas	Armored / Hydrogen	Gunners	6
Engines / Configuration	4 x Standard	Engineers	2
Turrets	6 x 2 – 60 cal	Pilots	-
Cannons	-	Mechanics	-
Speed	225 mph	Boarders	45
		Total	59
Bridge (B)		1	5,000 lbs
Crew Cabins (CC)	40 Crew Cabins	1	10,000 lbs
Combined Cabins / Stores (SC)	20 Crew Cabins	1	30,000 lbs
Engineering (E)		1	25,000 lbs
Gas Cell			6,000 lbs
Engines			40,000 lbs
Turrets			26,400 lbs
Total	60 Crew Cabins	4 Hexes	142,400 lbs

Chargers aren't really "produced" as much as they are cobbled together from the wrecks of other airships. Unsurprisingly, they are considered extremely unreliable. The Charger serves a single purpose: to ram into a larger airship and board her. As the impact damages the Charger, the boarders must move quickly to leap from one airship to the other before the Charger plummets from the sky. The entire crew, including the commander abandons the Charger to board their target, giving the Charger an average service life of one mission. Unable to take much damage, Chargers rely on the speed and escort fighters to get them to their target before they are shot down.

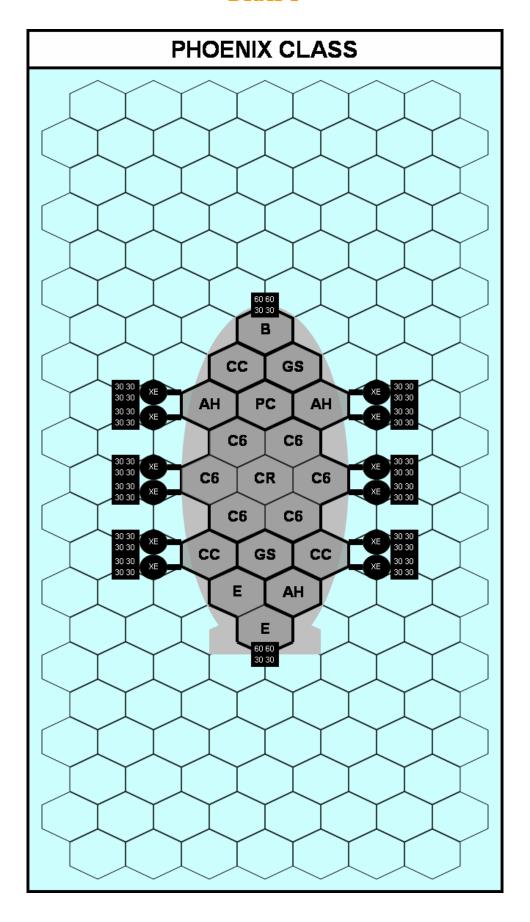
Despite its innumerable shortcomings, the Charger is still commonly used by Blackflag and other air pirates. The ability to put a large number of boarders onto a target airship provides a huge tactical advantage that often outweighs the risk. Blackflag briefly tried to use the Charger as a miniature gunship as well, thinking its superior speed would give it an advantage over larger airships. However, the Charger cannot stand up to enemy fire long enough to effectively serve in that roll.



Phoenix Class					
	Tucson Zeppelin Company, Arixo				
		Position	Crewmen		
Length x Width	9 x 3	Zeppelin Commander	1		
Hexes Occupied	19 Hexes	Command Crew	2		
Min Buoyancy / Buoyancy	256 / 380	Security	38		
Gas Cell / Gas	Unarmored / Helium	Gunners	14		
Engines / Configuration	12 x Double, Extended	Engineers	6		
Turrets	2 x 2–60 cal, 2-30 cal 12 x 4 – 30 cal	Pilots	9		
Cannons	-	Mechanics	4		
Speed	70 mph	Boarders	-		
		Total	70		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		2	40,000 lbs		
Crew Cabins (CC)	80 Crew Cabins	2	20,000 lbs		
Aircraft Hooks (AH)	1 Flight Aircraft	3	300,000 lbs		
Large Cargo Bay with Crane (C6/CR)	400,000 lbs Cargo	7	550,000 lbs		
Passenger Cabins (PC)	20 Passenger Cabins	1	15,000 lbs		
Engineering (E)		2	50,000 lbs		
Gas Cell			19,000 lbs		
Engines			198,000 lbs		
Turrets			83,600 lbs		
Total	80 Crew Cabins 1 Flight Aircraft 20 Passenger Cabins 400,000 lb Cargo	19 Hexes	1,280,600 lbs		

The Phoenix is a small multi-purpose transport used for both cargo and passengers. Its used primarily for small, short transport runs. The Phoenix is widely exported and has become a common sight throughout North America. To meet demand, Tucson Zeppelin Company has licensed production of the Phoenix to manufacturers in the Pacifica and the Empire State.

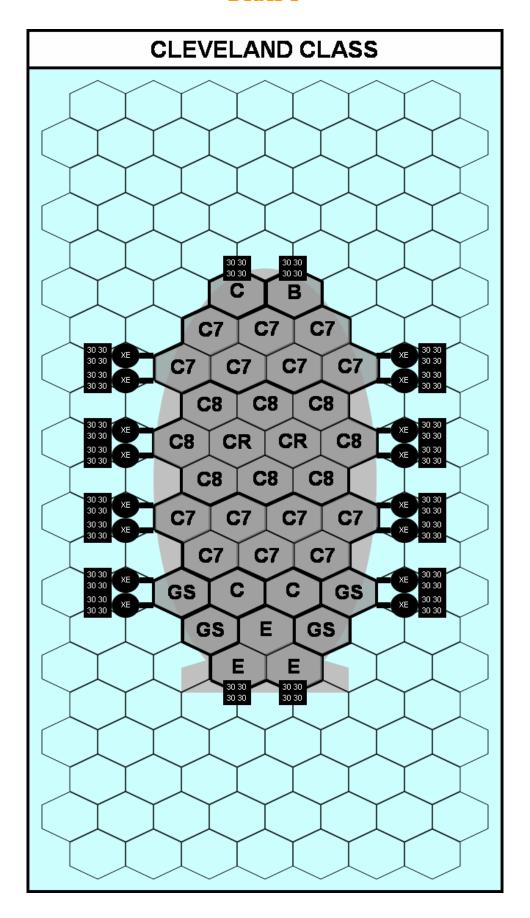
The Phoenix is usual because it carries aircraft on aircraft hooks instead of hangars. Although this is a less efficient use of the zeppelin's weight, it allows the Phoenix to drop its aircraft much faster than they could launch from a hangar. These aircraft are most commonly Northrup ZF-2 Black Bats, but they are sometimes supplemented by Kingfishers or other Fairchild models.



Cleveland Class					
	Superior Shipbuilding, ISA				
		Position	Crewmen		
Length x Width	11 x 4	Zeppelin Commander	1		
Hexes Occupied	35 Hexes	Command Crew	2		
Min Buoyancy / Buoyancy	460 / 700	Security	70		
Gas Cell / Gas	Unarmored / Hydrogen	Gunners	20		
Engines / Configuration	16 x Double, Extended	Engineers	8		
Turrets	20 x 4-30 cal	Pilots	-		
Cannons	-	Mechanics	-		
Speed	45 mph	Boarders	-		
		Total	101		
Bridge (B)		1	5,000 lbs		
General Stores (GS)		4	80,000 lbs		
Crew Cabins (CC)	120 Cabins	3	30,000 lbs		
Giant Cargo Bay with Crane (C8/CR)	550,000 lbs Cargo	10	750,000 lbs		
Giant Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs		
Giant Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs		
Engineering (E)		3	75,000 lbs		
Gas Cell			17,500 lbs		
Engines			264,000 lbs		
Turrets			104,000 lbs		
Total	120 Crew Cabins 1,500,000 lbs Cargo	35 Hexes	2,298,500 lbs		

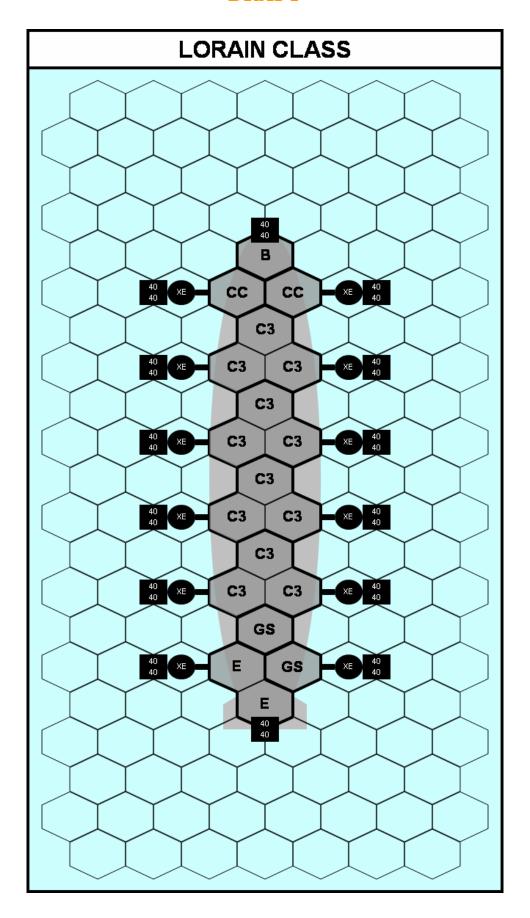
The Cleveland Shipbuilding Company started in Cleveland, Ohio in 1888 was a producer of surface vessels. It opened a second yard in Lorain, Ohio in 1898. The name was changed to the American Shipbuilding Company after acquiring several other companies with yards in Buffalo, Toledo, Superior, Chicago, Wynadotte and West Bay City, making it the largest shipbuilder on the Great Lakes. After the breakup of the United States, the name was changed to Superior Shipbuilding. Shortly thereafter they began producing zeppelins as well as surface ships.

The Cleveland was the first airship produced by Superior Shipbuilding. A general purpose transport, the Cleveland quickly became popular throughout North America. In fact by 1936 it was estimated that twice as many Clevelands were in active service outside of the ISA as were within it.



Lorain Class			
	Superior Ship	building, ISA	
		Position	Crewmen
Length x Width	13 x 2	Zeppelin Commander	1
Hexes Occupied	19 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	218 / 380	Security	38
Gas Cell / Gas	Unarmored / Hydrogen	Gunners	14
Engines / Configuration	12 x Extended	Engineers	6
Turrets	14 x 2-40 cal	Pilots	-
Cannons	-	Mechanics	-
Speed	100 mph	Boarders	-
		Total	60
Bridge (B)		1	5,000 lbs
General Stores (GS)		2	40,000 lbs
Crew Cabins (CC)	80 Crew Cabins	2	20,000 lbs
Medium Cargo Bay (C3)	175,000 lbs Cargo	3	200,000 lbs
Medium Cargo Bay (C3)	175,000 lbs Cargo	3	200,000 lbs
Medium Cargo Bay (C3)	175,000 lbs Cargo	3	200,000 lbs
Medium Cargo Bay (C3)	175,000 lbs Cargo	3	200,000 lbs
Engineering (E)		2	50,000 lbs
Gas Cell			9,500 lbs
Engines			132,000 lbs
Turrets			32,200 lbs
Total	80 Crew Cabins 700,000 lb Cargo	19 Hexes	1,088,700 lbs

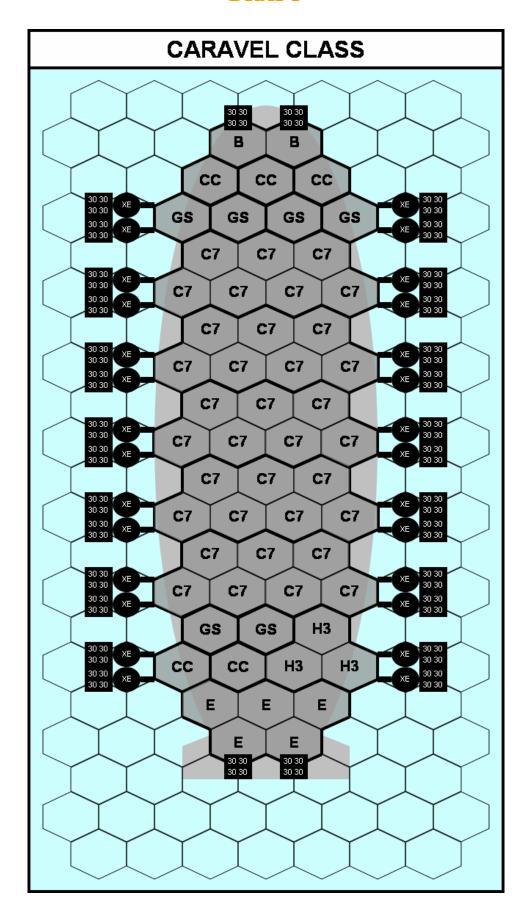
The Superior Shipbuilding Company's first zeppelin, the Cleveland class, was widely successful. The chief complaint against the Cleveland was its slow speed. Superior Shipbuilding addressed this with its next attempt. The Lorain class can carry half the cargo of the Cleveland, but at twice the speed. Named after Superior Shipbuilding's largest shipyard, the Lorain class has quickly surpassed the success of its predecessor. As a testament to its success, a copy of the Lorain is now produced in Germany as the Rhein class, the first non-German airship to be produced there.



Caravel Class				
Superior Shipbuilding, ISA				
		Position	Crewmen	
Length x Width	17 x 4	Zeppelin Commander	1	
Hexes Occupied	56 Hexes	Command Crew	5	
Min Buoyancy / Buoyancy	732 / 1120	Security	112	
Gas Cell / Gas	Unarmored / Hydrogen	Gunners	32	
Engines / Configuration	28 x Extended Double	Engineers	14	
Turrets	32 x 4-30 cal	Pilots	9	
Cannons	-	Mechanics	2	
Speed	50 mph	Boarders	-	
		Total	175	
Bridge (B)		2	10,000 lbs	
General Stores (GS)		6	120,000 lbs	
Crew Cabins (CC)	200 Crew Cabins	5	50,000 lbs	
Large Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs	
Large Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs	
Large Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs	
Large Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs	
Large Cargo Bay (C7)	475,000 lbs Cargo	7	500,000 lbs	
Small Hangar (H3)	1 Flight Aircraft	3	200,000 lbs	
Engineering (E)		5	125,000 lbs	
Gas Cell			28,000 lbs	
Engines			462,000 lbs	
Turrets			166,400 lbs	
Total	200 Crew Cabins 2,375,000 lbs Cargo 1 Flight Aircraft	56 Hexes	3,661,400 lbs	

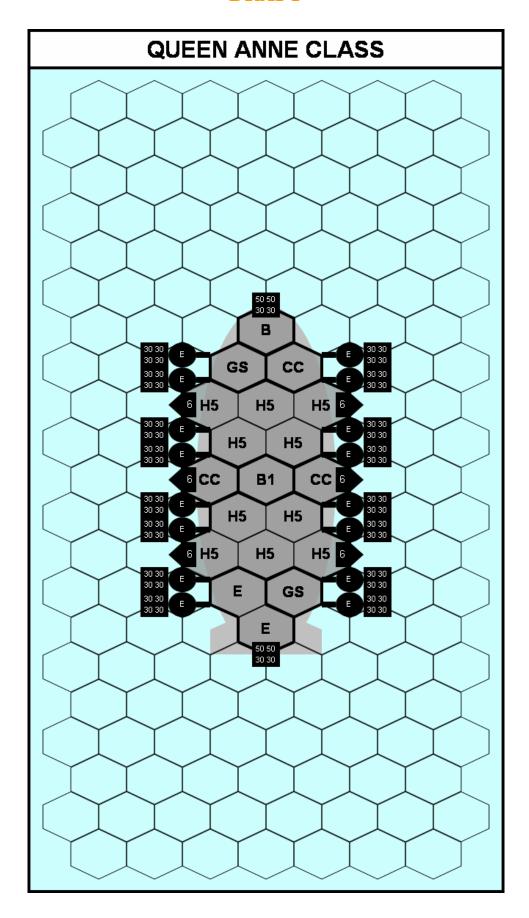
Capable of hauling over a million tons of cargo, the Caravel is the largest commercial airship in production. Considered too big for most services, it's used primarily as a bulk transport for commodities such coal, iron ore, cotton and wheat. The Caravel has a single hangar for one flight of defensive aircraft. Some shipping carriers have their own pilots, but most prefer to contract the services of a security firm such as Blake Aviation Security. Unfortunately, the aircraft can only launch from the rear starboard end of the airship. This well known flaw is heavily exploited, and almost all attackers now know to approach from the forward port side. BAS advisors have repeatedly suggested that the Caravel's hangar be replaced with aircraft hooks better distributed along the airship, but most Caravel operators have been slow to implement any changes.

Although the Caravel class has no passenger cabins per se, individuals traveling with a low profile often book passage in the Caravel's excess crew cabins. Such was the case when *Air Action Weekly* editor-inchief Nero MacLeon sought passage to Omaha aboard the People's Collective airship *Harvest*. MacLeon was traveling incognito to discuss the building of a new printing facility within the collective. The *Harvest* disappeared shortly after crossing over the PC border. As the *Harvest* had already unloaded her load of grain, its suspected that Nero MacLeon was the real target of the attack. Both his reasons for traveling under an alias and how the attackers located him are currently unknown.



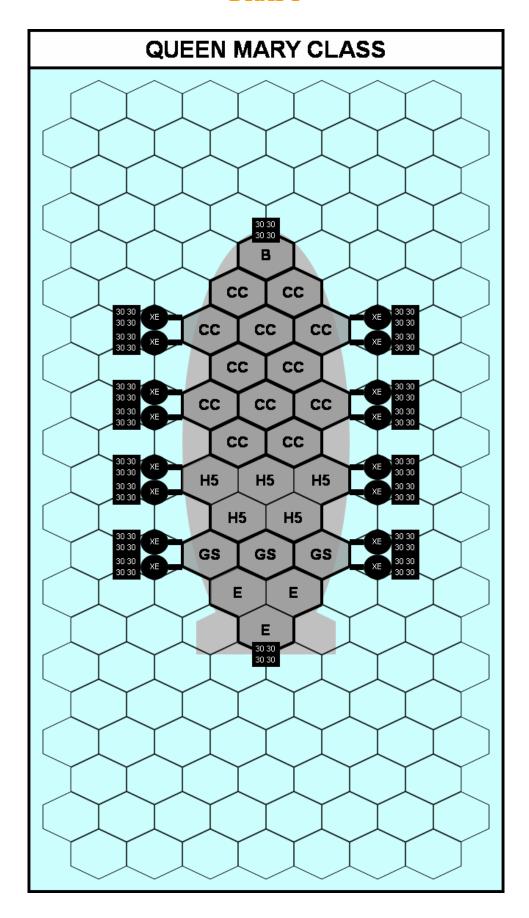
Queen Anne Class				
	Royal Airship Works, British Empire			
		Position	Crewmen	
Length x Width	9 x 3	Zeppelin Commander	1	
Hexes Occupied	19 Hexes	Command Crew	3	
Min Buoyancy / Buoyancy	270 / 380	Security	19	
Gas Cell / Gas	Armored / Helium	Gunners	25	
Engines / Configuration	16 x Double	Engineers	5	
Turrets	2 x 2–50 cal, 2-30 cal 16 x 4 – 30 cal	Pilots	36	
Cannons	6 x 6" Cannons	Mechanics	6	
Speed	70 mph	Boarders	18	
		Total	113	
Bridge (B)		1	5,000 lbs	
General Stores (GS)		2	40,000 lbs	
Crew Cabins (CC)	120 Crew Cabins	3	30,000 lbs	
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs	
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs	
Small Bomb Bay (B1)	50,000 lbs Bombs	1	100,000 lbs	
Engineering (E)		2	50,000 lbs	
Gas Cell			57,000 lbs	
Engines			240,000 lbs	
Turrets			99,600 lbs	
Cannons			30,000 lbs	
Total	120 Crew Cabins 4 Flights Aircraft 50,000 lbs Bombs	19 Hexes	1,351,600 lbs	

Introduced in 1932, the Queen Anne class still comprises the bulk of the British Fleet. Queen Anne class airships are commonplace throughout the British colonies and territorial holdings, as well as nations well affiliated with the Empire including Ontario, Australia, India and the Confederacy of Dixie. Many of these territories produce their own variants of the Queen Anne Class, often under different names.



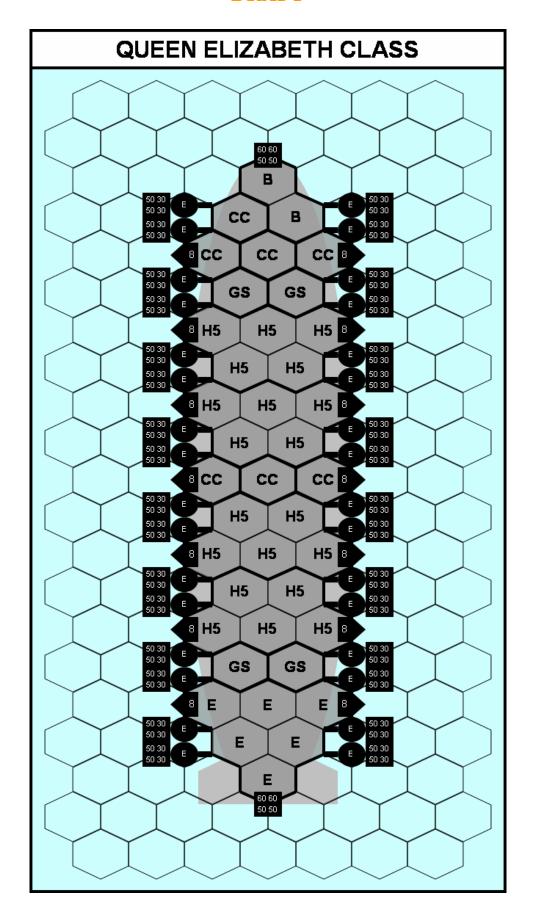
Queen Mary Class			
Royal Airship Works, British Empire			
		Position	Crewmen
Length x Width	11 x 3	Zeppelin Commander	1
Hexes Occupied	24 Hexes	Command Crew	3
Min Buoyancy / Buoyancy	198 / 480	Security	24
Gas Cell / Gas	Unarmored / Helium	Gunners	18
Engines / Configuration	16 x Double, Extended	Engineers	8
Turrets	18 x 4-30 cal	Pilots	18
Cannons	-	Mechanics	3
Speed	120 mph	Boarders	400
		Total	475
Bridge (B)		1	5,000 lbs
General Stores (GS)		3	60,000 lbs
Crew Cabins (CC)	480 Crew Cabins	12	120,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Engineering (E)		3	75,000 lbs
Gas Cell			24,000 lbs
Engines			264,000 lbs
Turrets			93,600 lbs
Total	480 Crew Cabins 2 Flights Aircraft	24 Hexes	991,600 lbs

The Queen Mary class is a British troop carrier used to transport soldiers to British colonies and territories. Although surface vessels remain the primary troop transport since they can carry more personnel, the Queen Mary class airship can carry troops faster and directly to the action instead of merely to the coast. The newly formed 1st Airborne Division is currently practicing maneuvers aboard the Royal Airship *H.M.A. Pegasus* including parachuting behind enemy lines and takeover of enemy airships. The latter includes a new maneuver to position the airship against an enemy airship to allow Her Majesty's forces to board her directly. The 400 man boarding force would then be able to quickly takeover the enemy airship. While the Queen Mary has the speed to catch most enemy airships, the obviously risky maneuver requires her escort craft to first destroy the targets weapons so she can get close enough. The new maneuver has yet to be tried in actual combat. The Royal Air Force wants to have the yet unnamed maneuver perfected by June of 1938. It has not escaped anyone's notice that this date happens to coincidence with the expected completion of Germany's first Bismarck class zeppelin.



Queen Elizabeth Class			
Royal Airship Works, British Empire			
		Position	Crewmen
Length x Width	17 x 3	Zeppelin Commander	1
Hexes Occupied	39 Hexes	Command Crew	6
Min Buoyancy / Buoyancy	547 / 780	Security	39
Gas Cell / Gas	Armored / Helium	Gunners	48
Engines / Configuration	32 x Double	Engineers	16
Turrets	2 x 2-60 cal, 2-50 cal 32 x 2-50 cal, 2-30 cal	Pilots	72
Cannons	14 x 8" Cannons	Mechanics	8
Speed	70 mph	Boarders	90
		Total	280
Bridge (B)		2	10,000 lbs
General Stores (GS)		4	80,000 lbs
Crew Cabins (CC)	280 Crew Cabins	7	70,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Medium Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Engineering (E)		6	150,000 lbs
Gas Cell			117,000 lbs
Engines			480,000 lbs
Turrets			289,600 lbs
Cannons			140,000 lbs
Total	280 Crew Cabins 8 Flights Aircraft	39 Hexes	2,736,600 lbs

The Queen Elizabeth is the pride of the Her Majesty's Fleet. Eight Queen Elizabeth Airships have been completed since its introduction in late 1937. Two of these have been sold to the Confederacy of Dixie where they've fared well against the both Air Ranger's Republic class and pirates in Appalachia. The British Empire is confident that the Queen Elizabeth will hold its own against Texas's Legacy class, although many are apprehensive about how the class will stand up to Germany's Bismarck class battle zeppelin. At the rate tensions are escalating in Europe, many predict Queen Elizabeth will be tested against the Bismarck first...



The Appomattox Unknown, Unionist Movement			
Length x Width	15 x 3	Zeppelin Commander	1
Hexes Occupied	34 Hexes	Command Crew	5
Min Buoyancy / Buoyancy	460 / 680	Security	34
Gas Cell / Gas	Armored / Hydrogen & Helium	Gunners	43
Engines / Configuration	28 x Double	Engineers	14
Turrets	2 x 3-70 cal 28 x 3 -40 cal	Pilots	54
Cannons	12 x 7" Cannons	Mechanics	9
Speed	75 mph	Boarders	90
		Total	250
Bridge (B)		2	10,000 lbs
General Stores (GS)		3	60,000 lbs
Crew Cabins (CC)	240 Crew Cabins	6	60,000 lbs
Combined Stores / Cabins (SC)	20 Crew Cabins	1	30,000 lbs
Large Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Large Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Large Hangar (H5)	2 Flights Aircraft	5	350,000 lbs
Small Bomb Bay (B1)	50,000 lbs Bombs	1	100,000 lbs
Small Bomb Bay (B1)	50,000 lbs Bombs	1	100,000 lbs
Engineering (E)		5	125,000 lbs
Gas Cell			51,000 lbs
Engines			420,000 lbs
Turrets			153,450 lbs
Cannons			120,000 lbs
Total	260 Crew Cabins 6 Flights Aircraft 100,000 lbs Bombs	34 Hexes	2,300,450 lbs

The Unionist Movement has purchased and liberated several sources, but the *Appomattox* is the first airship they have constructed themselves. Larger than a *Republic* class zeppelin, the *Appomattox* poses a significant threat to the skies of North America. To date the *Appomattox* is the only known ship of her type, although many believe she is intended to be the lead ship of a class of new Unionist airships. It's rumored that a second ship, the *Ulysses S. Grant* may be complete within the next three months. Believed to be based somewhere in Appalachia, the *Appomattox* announced herself to the world by dropping leaflets of Unionist propaganda over Richmond, Virginia.

The *Appomattox* has since struck government targets in the Appalachia, the Confederacy of Dixie, the ISA and the Empire State. All four nations have vowed to hunt down the Unionist airship, and have even agreed to share intelligence related to its position. Many can't help but notice that this alliance, however limited and temporary, is still a minor victory for the Unionist cause.

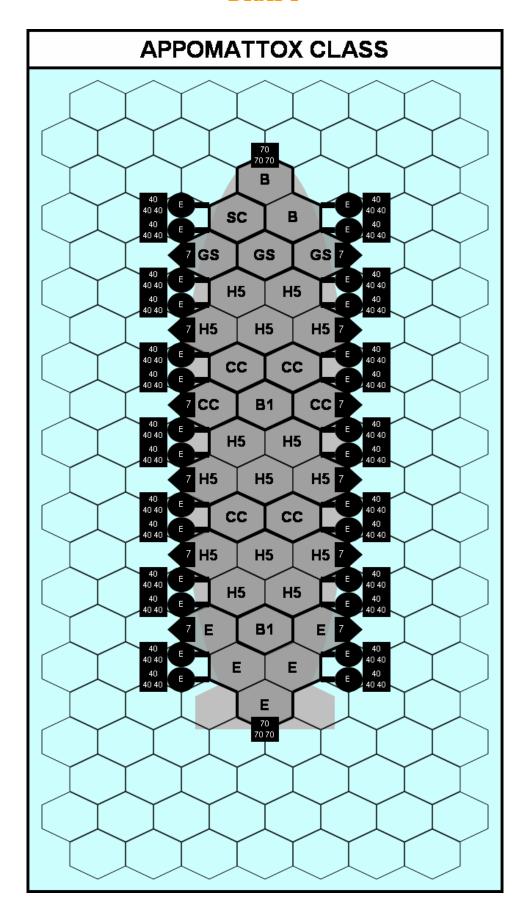
Special Rules:

The *Appomattox* has five gas cells. Cells 1, 3, and 5 are filled with explosive hydrogen. Cells 2 and 4 are filled with inert helium. If a hydrogen cell explodes it cannot ignite the adjacent cells, minimizing the risk to the airship.

"Four score less seven years ago our fathers brought forth on this continent a reunited nation, conceived in Liberty, and paid for with the blood.

Now we are engaged again in a great civil war, testing whether that nation deserves to endure. We are met on a great battle-field of that war. We have come to dedicate this airship, as a final weapon for those who would give their lives that that nation might live again. It is altogether fitting and proper that we should name it **Appenation**, in honor of the site where the last rebellion ended.

But, in a larger sense, we can not dedicate this airship. The brave men, living and dead, who struggled to protect this nation, have consecrated it, far above our poor power to add or detract. The world will note, and long remember what we say here, but it will never be forgotten what we are about to do. It is for us the living, rather, to be dedicated here to the unfinished work which tour forefathers fought so nobly to protect. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall have a new birth of freedom—and that government: of the people, by the people, for the people, shall return to the earth."

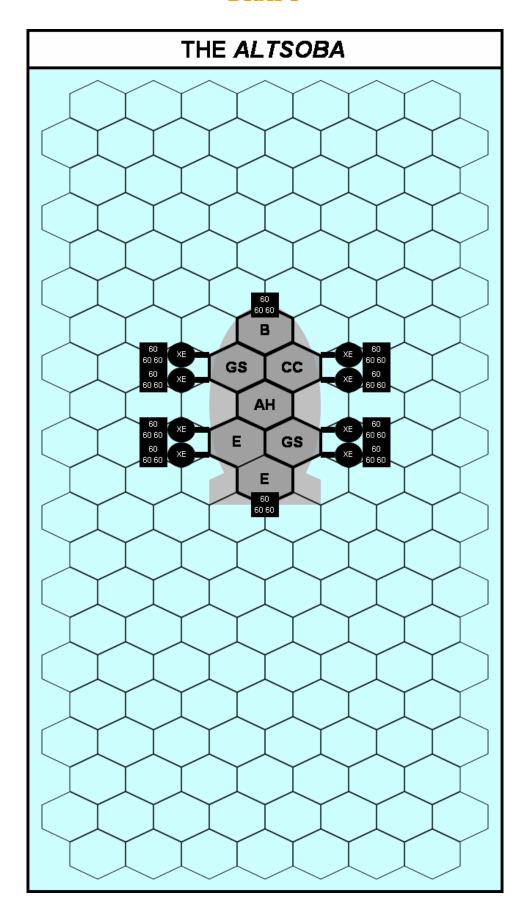


	The A	ltsoba	
Unknown, Navajo Nation			
		Position	Crewmen
Length x Width	5 x 2	Zeppelin Commander	1
Hexes Occupied	7 Hexes	Command Crew	1
Min Buoyancy / Buoyancy	90 / 140	Security	7
Gas Cell / Gas	Armored / Helium	Gunners	10
Engines / Configuration	8 x Double Extended	Engineers	4
Turrets	10 x 3-60 cal	Pilots	3
Cannons	-	Mechanics	2
Speed	155 mph	Boarders	=
		Total	28
Bridge (B)		1	5,000 lbs
General Stores (GS)		2	40,000 lbs
Crew Cabins (CC)	40 Crew Cabins	1	10,000 lbs
Aircraft Hooks (AH)	1/3 Flights Aircraft	1	100,000 lbs
Engineering (E)		2	50,000 lbs
Gas Cell			21,000 lbs
Engines			132,000 lbs
Turrets			93,000 lbs
Total	40 Crew Cabins 1/3 Flights Aircraft	7 Hexes	451,000 lbs

The *Altsoba* is a Navajo gunship and is only known ship of its class. It was built for the Wind Warriors to help defend the border against Colorado smugglers and pirates.

Special Rules:

The *Altsoba* carries a highly experienced crew and expert gunners. Add 3 to each roll when rolling to determine generic crewmen. The gunners get to fire according to their quickdraw at the same time that aircraft fire, instead of firing after aircraft per the normal turret rules.



The Leviathan				
Conceptual Design				
		Position	Crewmen	
Length x Width	21 x 4	Zeppelin Commander	1	
Hexes Occupied	70 Hexes	Command Crew	9	
Min Buoyancy / Buoyancy	955 / 1,400	Security	70	
Gas Cell / Gas	Armored / Hydrogen	Gunners	62	
Engines / Configuration	40 x Double	Engineers	20	
Turrets	44 x 2-70 cal, 2-40 cal	Pilots	108	
Cannons	18 x 7" Cannons	Mechanics	16	
Speed	40 mph	Boarders	350	
		Total	601	
Bridge (B)		2	10,000 lbs	
General Stores (GS)		7	140,000 lbs	
Passenger Cabins (PC)	20 Passenger Cabins	1	15,000 lbs	
Crew Cabins (CC)	600 Crew Cabins	15	150,000 lbs	
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs	
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs	
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs	
Large Hangar (H7)	3 Flights Aircraft	7	500,000 lbs	
Giant Cargo Bay with Crane (C8/CR)	550,000 lbs Cargo	10	750,000 lbs	
Engineering (E)		7	175,000 lbs	
Gas Cell			105,000 lbs	
Engines			600,000 lbs	
Turrets			651,200 lbs	
Cannons			180,000 lbs	
Total	20 Passenger Cabins 600 Crew Cabins 12 Flights Aircraft 550,000 lbs Cargo	70 Hexes	4,776,200 lbs	

A conceptual design by Dr. Eckner of Germany, the Leviathan is widely considered too large to be useful. After rejection by the Luftwafte, Eckner proposed his massive airship to other nations in both Europe and North America. The response was the same from all parties; the Leviathan requires far too many resources to commit to a single airship and no nation has a practical use for an airship that large.

It's rumored however that Blackflag intends to build such an airship. The disappearance of Dr. Eckner days before he was supposed to return to Germany has lent credence to these rumors. Blake Aviation Security sent two Paladin class airships deep into the Disputed Northwest Territories to locate and destroy the *Leviathan* before it can be completed and become a threat. After a three week search, the airships limped back to Pacifica with heavy damage, neither having seen any trace of the *Leviathan*.

