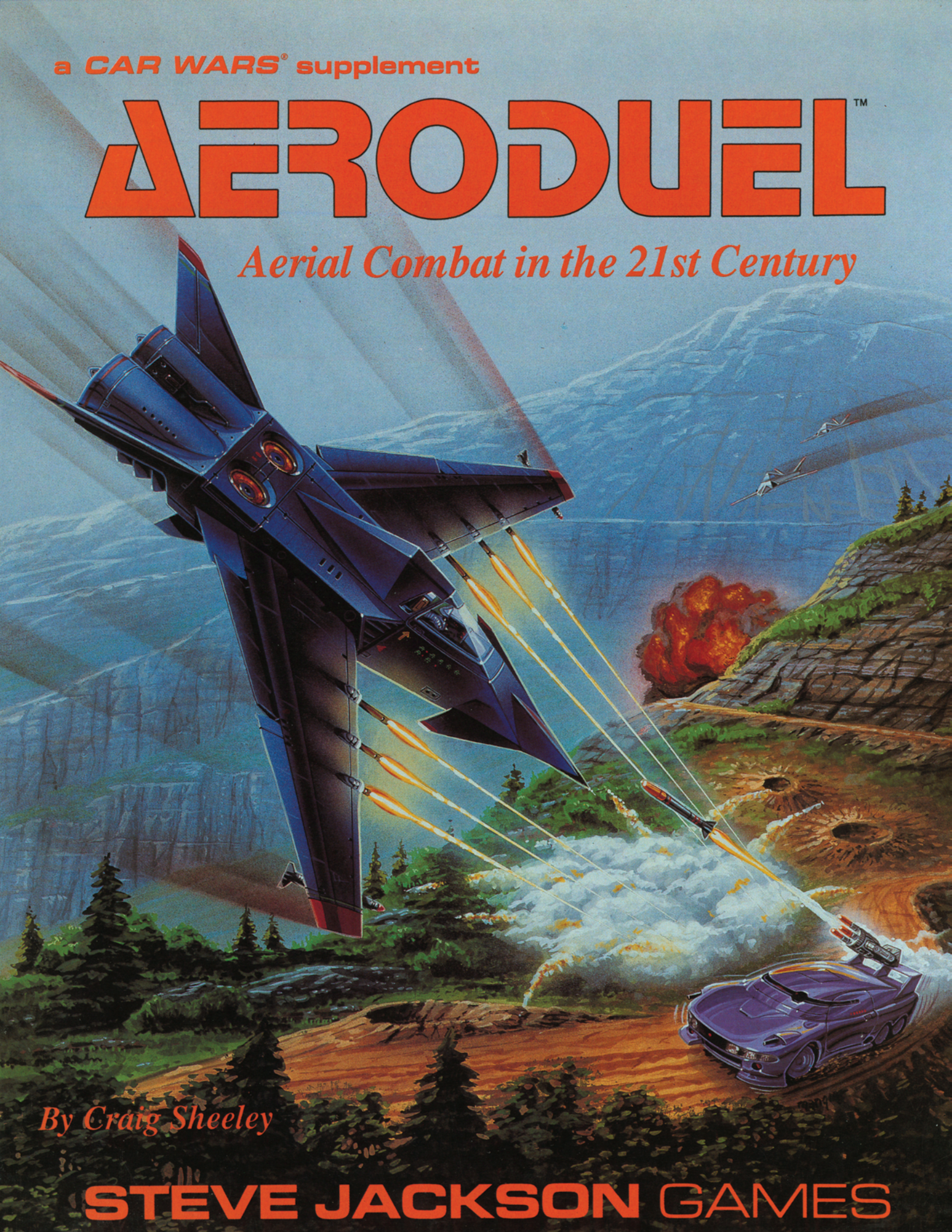
a CAR WARS® supplement

AERODUEL™

Aerial Combat in the 21st Century



By Craig Sheeley

STEVE JACKSON GAMES

THE SKY'S THE LIMIT

The cars rule the roads and the boats rule the lakes, but everyone scatters when the aircraft roar across the battlefield!

***Aeroduel* introduces air power to *Car Wars,* with complete rules for the expensive but ultra-deadly aircraft of the 21st century.**

Included are official rules for construction, movement and combat for everything that flies — airplanes, ultralights, airships, helicopters, gliders, autogyros, balloons and even jet packs!

***Aeroduel* includes:**

Two full-color counter sheets, with everything from one-man jets and autogyros to behemoth airships and military bombers.

Two 21"×32" airport map sheets with an aircraft hangar, anti-aircraft bunkers, control tower and other features. The backs are printed with blank grids for air-to-air combat or for you to customize.

The complete rules for playing *Aeroduel*.

***Aeroduel* is a *Car Wars* supplement (you will need *Car Wars, Car Wars Compendium* or *Deluxe Car Wars* to play).**

Game design by Craig Sheeley
Edited by Mike Hurst and Loyd Blankenship
Cover by Jeff Magniat
Illustrated by Karl Martin

STEVE JACKSON GAMES

0 80742 01310 0

ISBN 1-55634-170-9

SJG01995 1310

Made in the U.S.A

a *CAR WARS*® supplement

AERODUEL™

Aerial Combat in the 21st Century

by Craig Sheeley

Edited by Loyd Blankenship, Mike Hurst and Steve Jackson

Cover by Jeff Magniat

Illustrated by Karl Martin

Car Wars original design by Chad Irby and Steve Jackson
Loyd Blankenship, Managing Editor
Carl Anderson, Production Manager
Typography and Layout by Loyd Blankenship & Kerry Havas
Maps and Diagrams by Carl Anderson

Creative Interference: Robert Hayden, Charles Oines.
Playtesters: David Piatt, Wallace D. Greer, Phil Morrissey, Marvin Lowe, Matt Fairliegh, Eric Larsen, New Omaha Vehicular Association [NOVA] (Tim Jacques, Norman McMullen, Don Jacques, Jay Chladek), Southern California Civilian Armor Regiment [SCCAR] (Sean Wadey, Brian Irvine, Chris Rice, Rick Brower); Flame, Laser And Gauss Gun Specialists [FLAGGS] (Martin Poteralski, President), Carlos McReynolds, Mike Montgomery, Greater Orlando Duellists [GODS] (John M. Hurtt, Dave Hyde, John Hyde, and others) and Robert Eikel.

Table of Contents

1 2 3 4 5 6 7 8 9 10 ISBN 1-55634-170-9

STEVE JACKSON GAMES

AIRCRAFT IN 2040

History and Development

In 1904, the first powered airplane was patented by the Wright brothers. Within a few years airplanes were a craze that spread worldwide. And only ten years after the first flight, men were taking aircraft to war.

The development of warplanes parallels autoduel development with curious accuracy. At first, all the contesting aeroduellists had were improvised hand weapons — lengths of chain, wrenches, pistols, whatever was handy.

Soon, proper weapons began appearing. Machine-guns were mounted to the rear cockpits of spotter aircraft — or whichever end didn't mount the propeller, since no way had been found to shoot through it without destroying it. The machine-guns proved to be properly lethal, but two-seaters lacked the maneuverability of single-seat aircraft. The French tried to mount the machine-gun firing over the prop arc but the mount was cumbersome, like a pintle-mount MG in a driver-only car. When the interrupter gear was invented, fighter planes appeared with front-mounted machine-guns, similar to Joe Harshman's first autoduelling car.

World War I ended before aircraft could advance further. In the twenty years between world wars, more developments did occur: metal monoplanes, better engines, development of the first bombing computers. When World War II began, airplanes were both large and deadlier. The single-engine biplanes of the first war were replaced by monsters mounting up to four engines that could fly up to 1,600 miles to deliver their bombs and still return to their home airfields.

World War II was a rapid development period for aerial weapons: guided bombs, radar, remote-controlled weapons, bomb-dropping techniques of all kinds, new construction techniques and jets appeared during the conflict.

The wars of the late 20th century took these developments and expanded on them. Fighters turned into swept-wing jets, hurtling across the sky at trans-sonic speeds. Strategic bombing was rendered obsolete by the nuclear missile. Air-to-air missiles appeared, bringing a new lethality to aerial combat at ranges previously undreamt of. For a time guns were replaced by missiles in the belief that no aircraft would get close enough to use guns against a missile-armed craft. The Vietnam conflict dispelled the misconception and guns once again became standard weapons for combat aircraft.

Support and Transport

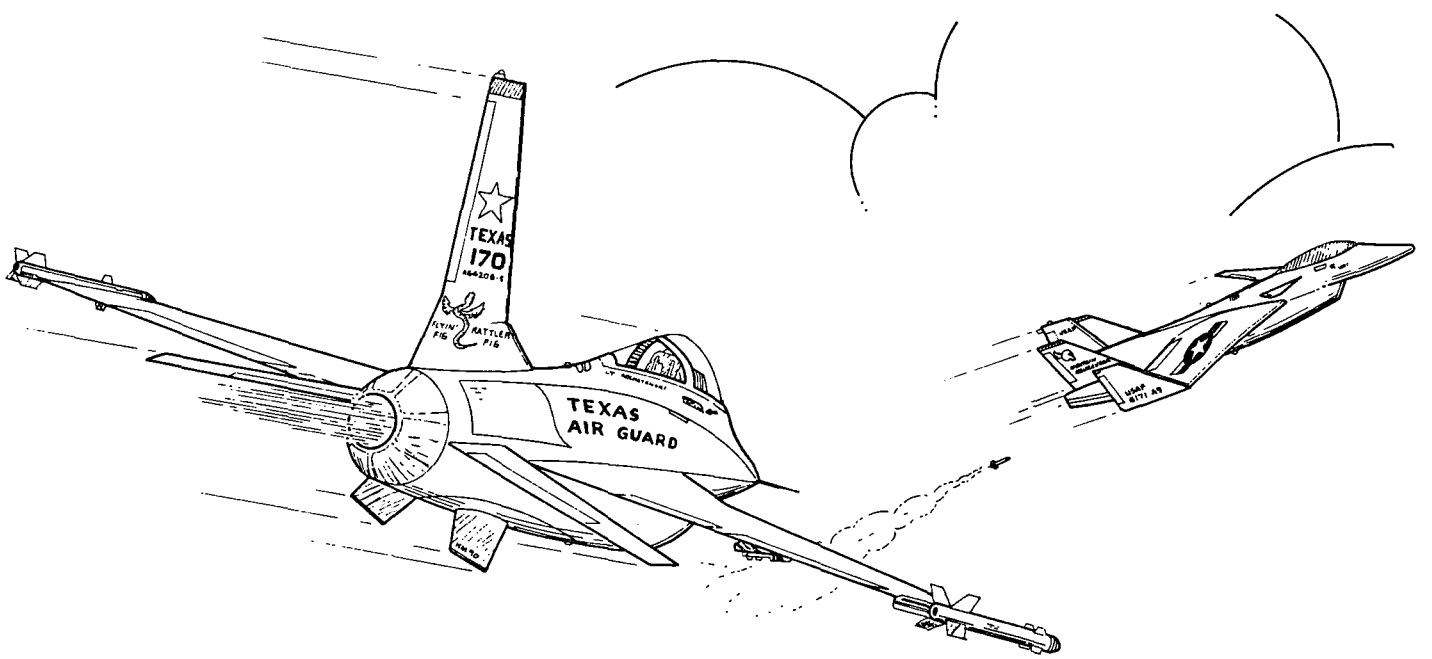
On the civilian scene, airplanes replaced airships over 100 years ago as the primary passenger and cargo hauler. When the airship *Hindenburg* experienced a still-mysterious hydrogen fire, airships were abandoned for years. Cargo and passenger airplanes took over, growing steadily larger and more numerous until they reached 200 tons and larger, powered by massive fuel-gulping jet engines to push them through the sky.

This era ended when the fuel ran out. The monster jets still exist, languishing in hangars or stripped for parts and construction material.

Airships returned with gratifying swiftness. They had been revived in the late 1990s as cheap vertical-lift transport vehicles. The crash of the cargo jets was the signal for mass airship construction to fill the gap swiftly.

Helicopters fared well from their introduction in the latter half of the century. Since helicopters were capable of landing and taking off from previously impossible landing locations, the military found immediate uses in moving men and supplies swiftly, without roads or airfields. Civilian use was similar, using helicopters to get in and out of small areas.

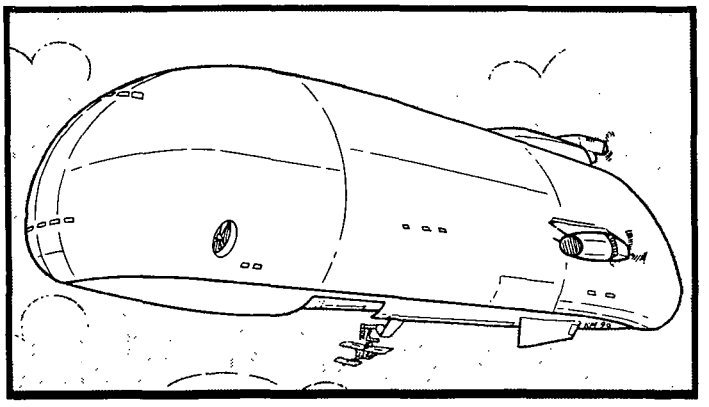
The gunship was born when military designers put weapons on helicopters, enabling them to provide aerial fire support with a long loiter time and the ability to hide on the ground if necessary. The gunships' potent anti-tank weapons almost pushed the AFV from the field for a time.



Airships

Airships were the first true powered aircraft, introduced over 150 years ago. They were the only aircraft in the skies until the invention of the powered airplane. Airships survived as cargo and passenger carriers, capable of much greater range than any of the airplanes of the period. Then their fortunes declined with the destruction of the *Hindenburg* almost a century ago. Few airships remained in use and even fewer were built.

Interest in heavy-lifting bodies — airships — rekindled towards the end of the last century, when new technology made airships feasible cargo-haulers. The interest in airships continued at an even greater pace after the fuel crunch in the early 21st century. Today, airships move most of the heavy cargo across the world's continents, the aerial equivalent of ocean-going cargo ships.



Airship Body Types

Size	*Price*	*Weight*	*Max Wt*	*Spaces*	*Armor $/Wt*	*Cntrl DP*	*Prop DP*	*Env DP*	*HC*
Micro	$ 10,000	2,000	12,000	20	14/7	3	3	6	2
Small	$ 20,000	3,000	20,000	40	50/ 25	4	5	10	2
Medium	$ 50,000	4,500	30,000	60	80/40	8	8	16	1
Standard	$100,000	8,500	50,000	110	140/70	10	10	20	1
Large	$150,000	12,000	75,000	150	200/100	15	16	32	1
Transport	$180,000	25,000	100,000	180	240/120	20	20	40	0
Super	$ 250,000	50,000	250,000	240	300/150	25	24	50	0

Body Types

Airships have five main components: envelope, gondola, power plant, weapons and accessories. The gondola is the main body to which equipment is fixed; the envelope is the gasbag which provides lift.

There are three kinds of envelopes: Non-rigid (blimps); semi-rigid; and rigid (dirigibles). The table above is for fully rigid dirigibles. To convert the statistics to the other types, modify the statistics as follows:

Non-rigid — A non-rigid airship is nothing more than a gondola fastened to the bottom of a gasbag. Such an airship is limited to Medium size or smaller. The base price is reduced by 50%. The envelope has only 3 DP in any size and maximum speed is reduced 50%. They can be deflated and stored, to be reinflated with relative swiftness (see below).

Semi-rigid — A semi-rigid airship is a gondola that provides a strong keel for the gasbag. Because of this, semi-rigid airships have multiple gas cells in the bag, making the envelope more resistant to damage. They are limited to Large size or smaller. The base price is reduced by 25% and the max weight is raised 50%. They have 1/3 envelope DP and only 75% maximum speed. Semi-rigid airships cannot be streamlined.

Spaces in airships are usually used for cargo, but are also used for power plants, weapons, crew, etc. The spaces are all in the gondola. The envelope is over ten times as large, but the area is filled with buoyant gas.

Armor cost and weight figures are for the gondola. The micro and small gondolas have six armor locations. The other gondolas have ten armor locations, like a trailer, even though most of them are much larger than any trailer. Armor can be any of the usual types, with no mixing allowed except for metal/plastic composites.

Only rigid airships can be streamlined, at the usual cost and spaces lost. This moves the gondola inside the gasbag at the bottom and has no other effects other than the streamlining.

Airships are normally propelled by four ducted fans (although this may be reduced; see below). Each fan has DP equal to the Prop DP listed. Each prop the airship loses lowers the HC by 1 (minimum 0). An airship that has lost half of its props loses half of the power factors provided by the airship power plant. Airship props are -4 to hit and may be armored (see p. 13).

Airships may have as few as two fans, or as many as 10% of the airship spaces (round down). Fans must be mounted in pairs. If an airship has only two fans, reduce the body weight by 400 lbs. and reduce body cost by $1,500. Each pair of fans added weighs 400 lbs. and costs $1,500.

Envelope DP is the damage-absorbing capability of the gasbag. When the envelope has taken 1/4 of its DP, the airship begins to lose altitude at 1/4'' per turn. When half of the envelope DP are destroyed, the altitude loss is 1/2'' per turn. The airship loses altitude at 1'' per turn when 3/4 of the envelope DP are gone. When all envelope DP are gone the airship falls freely (see *Falling*, p. 25). Envelopes can be armored (see below).

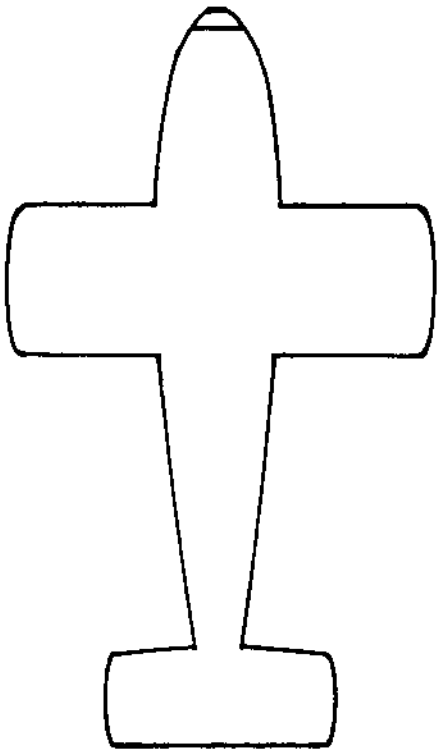
Envelopes take full damage from flamethrowers; all other weapons pass through, doing relatively little damage. Burst-effect weapons tend to explode inside, their radius of effect puny compared to the envelope's interior. Non-flamethrower weapons do 1 point of damage per damage die (i.e., a Vulcan would do 2 points, no matter what kind of ammunition it was using. A Heavy Rocket would do 3 points, etc.).

Control DP is the amount of damage that the airship's control surfaces can sustain. Control surfaces take only half damage from weapons fire. When their DP is gone, the airship can perform no maneuver greater than D2 difficulty. An airship with no control surfaces may still rotate, since rotating uses the fans rather than control surfaces.

Airplane Record Sheet

Pilot's Name: _____

Player's Name: _____



Vehicle Name:

Size: _____ Weight: _____

Cost: _____ HC: _____

Acceleration: _____ Top Speed: _____

Power/MPG: _____ Cruising Speed: _____

Pilot Skill: _____ Stall Speed: _____

Gunner Skill(s): _____

Weapon	To Hit	Damage	Ammo

Armor Type:

F(__/__): _____

R(__/__): _____

L(__/__): _____

B(__/__): _____

T(__/__): _____

U(__/__): _____

Extras and Notes:

Turn	Speed	Height	Handling Class											
1:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
2:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
3:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
4:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
5:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
6:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
7:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
8:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
9:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
10:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
11:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
12:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
13:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
14:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
15:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
16:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
17:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
18:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
19:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
20:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
21:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
22:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
23:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
24:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6
25:			5	4	3	2	1	0	-1	-2	-3	-4	-5	-6

INDEX

Entries beginning with a lower-case "p" are on the four pages of the pullout section in the center of the rulebook.