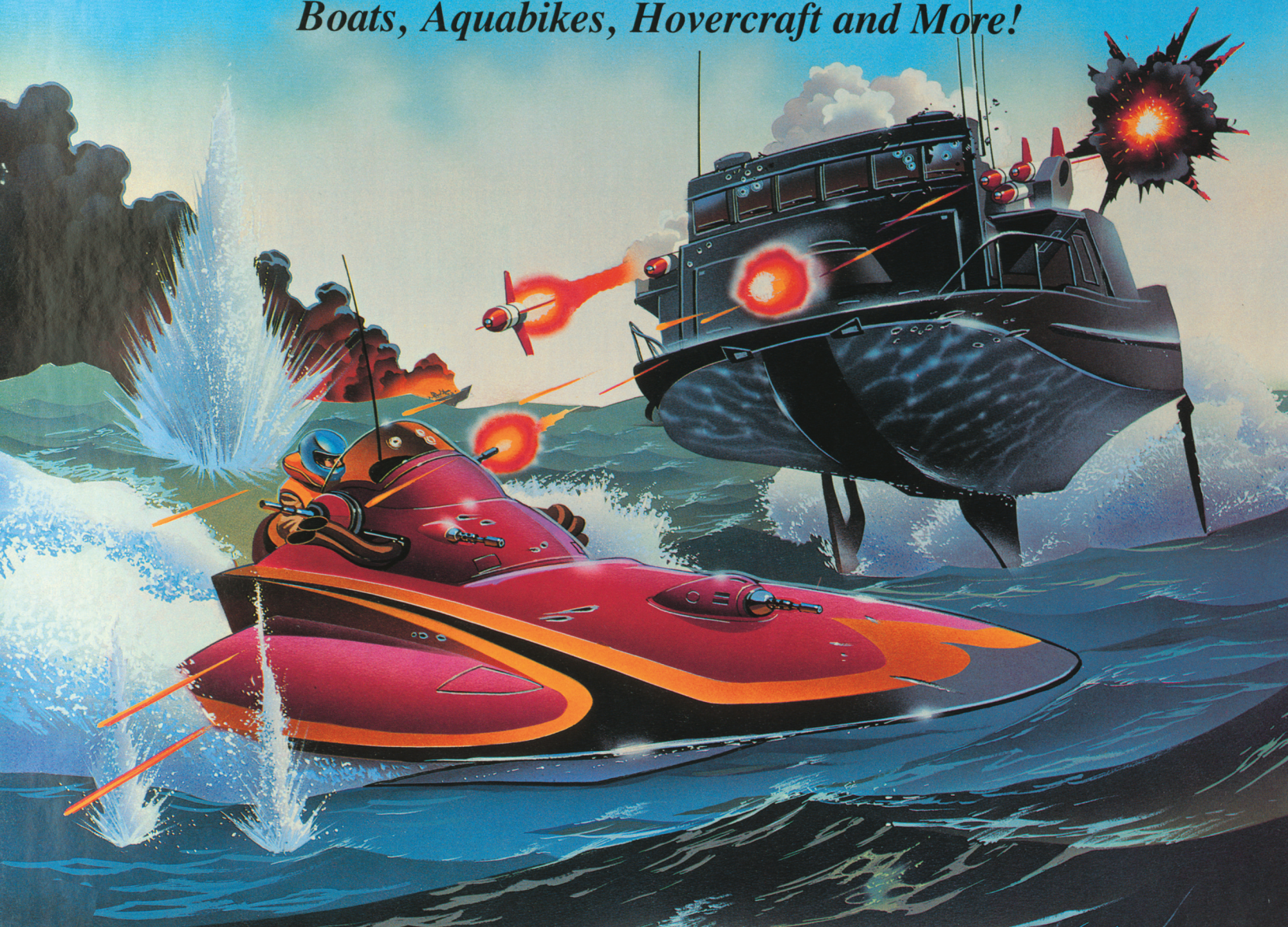


a **CAR WARS**® supplement

BOAT WARS®

Boats, Aquabikes, Hovercraft and More!



STEVE JACKSON GAMES



JUST WHEN YOU THOUGHT IT WAS SAFE TO GO IN THE WATER . . .

If you thought the roads were tough in 2040, you ain't seen nothin' yet. **Boat Wars** takes the action and excitement of **Car Wars** off the land and into the water!

This supplement gives you complete, official rules for movement, combat and construction of boats and *hovercraft*. Included are full-color counters for all the vehicles in the game, and a large blue-water map to play on.

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

Game components include:

- Over 100 full-color counters for boats and hovercraft, and a ziplock bag to hold them.
- Two boat turning keys and other movement templates.
- **Four** geomorphic 21"×32" map sections, showing safe channels, islands, and the tricky water in between.
- An expanded 8½"×11" rulebook.

New material in this edition includes:

- Sharks of all kinds, and other aquatic menaces.
- Aquabikes—the smallest speedsters afloat!
- Plenty of new counters.
- New gadgets . . . explosive duck decoys . . . and more!

Designed by Gary L. Canterbury, David W. Dyche, Michael Lee Merritt and Ken Scott. Additional material by Charles Oines and David N. Searle. Developed and edited by David Ladyman, Stephen Beeman, Scott Haring and Charles Oines. Cover Art by Marc Erikson. Interior Art by Guy Burchak and Charlie Wiedman.

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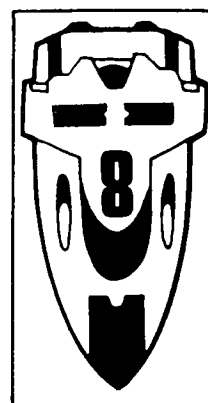
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BOAT WARS



Boats, Aquabikes, Hovercraft and More!

by Gary L. Canterbury, David W. Dyche and
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same boat with a 150 ci gas engine (1,900 power factors) has 5 mph acceleration and a top speed of 42.5 mph.

A boat power plant has a number of "power units" equal to its spaces times 50. These power units will last longer at lower speeds, and get eaten up quickly at higher ones. Power units are consumed at varying rates per mile, given by the formula $(PU \times (\text{current speed} - 10)) / (\text{maximum speed} \times 100)$. Recharging a boat power plant costs \$1 per 5 power units. On the average, a boat will have enough power to travel 200 miles at its "cruising speed" which is 60% of its top speed.

Boat power plants may exceed their maximum speed for short periods of time by "pushing" the plant. The rules for pushing are the same as for car power plants.

Boat power plants are always placed in the rear of the boat. If the boat is equipped with a Deck (see p. 4), the power plant goes in the rear of the below-deck area.

Propellers and Jet Drives

Propellers are what drive the boat through the water. Boats with Mini power plants or 10 or 30 ci gas engines can have only one propeller; boats with Heavy-Duty plants or 500 or 700 ci engines must have two; the in-between sizes can have one or two. Two propellers do not make a boat any faster, but they do make it more stable and they offer a measure of protection in case one is lost.

Boats with two propellers add +1 to Handling Class. However, if one propeller of a pair is lost, handling status drops to -6 immediately, and the boat's HC is permanently reduced by 2.

A damaged propeller does not affect a boat's performance in any way. If the last (or only) propeller is destroyed, the boat decelerates 2.5 mph/turn until it comes to a stop. Propeller armor can be bought — it costs \$10 and weighs 4 lbs. per point (just like wheelguards) and protects just like wheelguards; on a 1 to 4 on one die, the armor takes any damage directed at the propeller, and on a 5 or 6 the damage skips the armor and goes directly to the propeller. No more than 10 points of armor may be bought for a propeller.

Propeller Table

Power Plant Size	Propeller: Cost	Weight	DP
Micro, Mini; 10, 30 ci	20	10	2
Small; 50 ci	50	15	4
Medium; 100, 150, 200 ci	75	25	5
Large; 250, 300, 350 ci	100	40	8
Super; 400, 450 ci	200	75	12
Heavy-Duty; 500, 700 ci	500	150	18

A jet drive costs \$5,000 and weighs 200 lbs., taking 2 spaces. A jet drive replaces all of a boat's propellers, and increases calculated acceleration by 5 mph/turn and top speed by 20 mph. It adds +1 to HC, just as two propellers do. A boat's power plant must have at least one-third as many power factors as the weight of the boat before a jet drive will operate at all. A jet drive cannot be combined with turbochargers or superchargers of any sort.

Weapons

All weapons available in *Car Wars* can be used on boats, though there are changes in the way some weapons perform on the water. In addition, new, boats-only weapons are also available. Here is a list of changes in old weapons made necessary by naval warfare:

Anti-Tank Gun: Cannot be mounted on a Rowboat; can only be mounted to front or back of a Dinghy or Speedboat.

Explosive Grenade: When exploded underwater, a frag grenade shoots fragments for only 1/4". However, it has the additional effect of a concussion grenade throughout a 10" radius underwater.

Spikedropper: Has no effect on boats, as the spikes sink immediately upon release.

Oil Jet: Oil has no effect on boats or anything else in the water, including swimmers.

Flaming Oil: Not a hazard to a boat's handling, but it does normal damage to underbody armor. Will also affect swimmers.

Smoke Weapons: Normal effect above the surface. When fired below the surface, a normal-sized cloud is created, but it remains totally below the surface and disperses in 15 seconds.

Paint Weapons: Normal effect above the surface. A paint cloud will also work normally below the surface, except it will last 10 seconds before the current disperses it. Underwater flame clouds don't ignite, but continue to act like a paint cloud.

Ice Dropper: A sheet of ice acts as a debris counter, causing the equivalent damage (and hazard, if any). Once hit, it disintegrates.

Minedropper: Regular mines have no effect; they sink immediately, and will not detonate if they hit anything while sinking. Special amphibious mines are available at double the cost (regular mines only; not Spear 1000 or napalm or any other) and are fired from an unmodified minedropper. Amphibious mines float on the surface and are treated just like regular mines. They attack the underbody armor of boats.

New Weapons

Torpedo — Hits automatically — see below. Burst effect. Very similar to a Heavy Rocket, except it travels at 50 mph. (This is regardless of the speed or orientation of the firing boat — the moment it leaves the boat, it begins to travel at 50 mph in the direction fired. If fired forward by a boat traveling faster than 50 mph, the boat runs into the back of the torpedo, setting it off.) The torpedo travels 1/4" below the surface of the water, and will pass over objects deeper than that. Use a missile counter (or other 1/4" x 1/2" counter) to represent the torpedo, and move it in a straight line. The torpedo cannot be detected visually by anything more than 4" away from it. If the torpedo counter collides with any other solid object of reasonable size (not a beach ball, but a rock, or a boat . . .), it hits automatically — roll for damage. When a boat is hit by a torpedo, the underbody armor is affected.

Mini Torpedo — \$200, 75 lbs., 1/2 space, 2 DP, 2d damage.

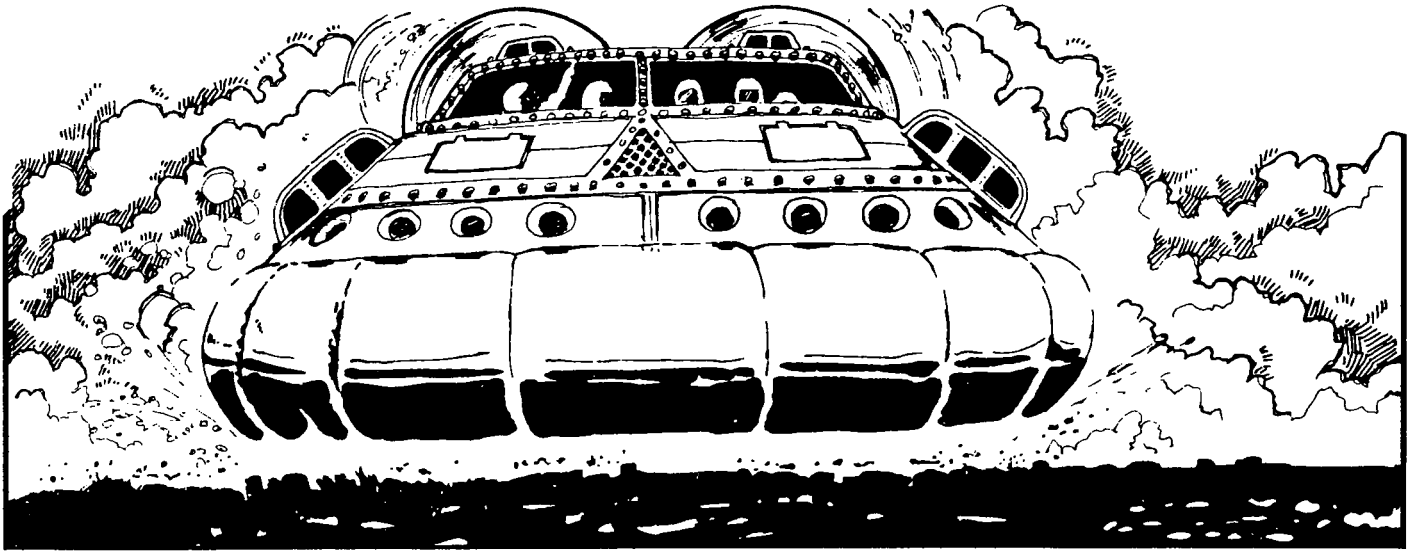
Standard Torpedo — \$300, 100 lbs., 1 space, 3 DP, 4d damage.

Heavy Torpedo — \$600, 200 lbs., 2 spaces, 4 DP, 6d damage.

Homing Option — Adds \$350 to cost, +20% weight. When added to any torpedo, the torpedo travels in a straight line only until a boat-sized object is detected in the torpedo's front arc of fire within a 24" range. If more than one object present comes in range simultaneously, the torpedo picks the closer one; if at equal distances, it picks the larger one; if sizes are also equal, roll randomly.

Once a target has been selected, the torpedo will home in on the target, turning up to 15° every phase it moves (i.e., a D1 boat bend), with no possible loss of control. If the locked-on target manages to escape the torpedo's front arc of fire, or gets farther than 24" away, the lock-on is lost, and the torpedo resumes straight-line movement until it finds another target. When the

Hovercraft



In a world where roads between cities are deteriorating from lack of maintenance, and combat along those roads often requires that vehicles be able to operate outside their confines, the hovercraft is the answer to many traveler's prayers. It floats above the ground on a cushion of air forced under the craft by a large, internal lift fan and is trapped in a hollow area called the "plenum chamber" by the "plenum skirts," or simply "skirts."

Since the craft has no contact with the ground, the surface conditions means very little to the hovercraft. This makes it possible to travel over road, off road, or on water with equal ease.

However, lack of contact with the road does have its disadvantages. Hovercraft do not maneuver as well as cars since they have nothing to push against, and they decelerate poorly for the same reason. The hovercraft is pushed along and maneuvered with thrust fans mounted at the rear of the craft. The loss of one or more of these fans will further aggravate the poor handling.

But the real weak point of any hovercraft are the skirts which contain the air that lifts the craft. Theoretically, these skirts aren't necessary for a craft to hover. However, the engines and plants available in 2040 aren't powerful enough to lift an armored craft without most of the skirts in place. Hovercraft have many other advantages and disadvantages. Whether the advantages outweigh the disadvantages must be answered by each individual duellist.

Hover Types

Hovercraft are built just like any other *Car Wars* vehicle, and the columns used in the chart below should be familiar to all players. The One-Man, Small, Standard, and Large Hovercraft are armored in six locations, just as cars are: Top, Underbody, Front, Left, Right and Back. The oversized hovers (Small Cargo and Cargo) are armored in ten locations just like buses in *Car Wars*. The armor can be made of any of the standard types, at the normal cost and weight penalties. Treat oversized hovers just like any other oversized vehicle.

Each hover comes with a lift fan and three (or two) thrust fans (described below). These are standard equipment, and do not add additional cost or weight, or subtract space, from the numbers listed in the *Hover Types Table*.

The four smaller hovercraft are all represented by standard ½"×1" counters. The Small Cargo hovercraft is represented by a ¾"×1½" counter, and the Cargo hovercraft by a 1"×2" counter. Targeting the larger hovercraft is just like targeting a bus: each side has both a front and a back section and the section to be fired at must be specified when declaring your shot.

Hovercraft can not have Chassis or Suspension modifications (but see the two- and four-thrust-fan variations, below).

The cargo space listed for hovercraft is handled in all respects like the cargo space for cars — only passengers and cargo can be placed in the space reserved for cargo.

Hover Types Table

Size	Cost	Wt.	Max. load	Spaces	Armor cost/wt.	HC Fan DP
One-Man	\$1,500	700	3,300	8	\$11/5	3 3
Small	\$2,300	1,400	5,300	14	\$16/8	3 3
Standard	\$3,000	2,600	7,600	20	\$20/10	3 4
Large	\$3,800	3,700	10,500	20(+7)	\$26/13	2 4
Small Cargo	\$18,000	5,100	16,500	27(+14)	\$36/16	2 5
Cargo	\$27,000	7,800	24,000	27(+24)	\$40/18	1 6

The Fan DP column on the above chart refers to the DP of each of the three thrust fans and the lift fan used to inflate the skirt. Loss of these fans is not good — see *Fans*, p. 14.

Power Plants

Since the power requirements for boats and hovercraft are the same high rpm and low torque, hovercraft use the same power plants and engines as do boats (see p. 2).

Top speed and acceleration are both calculated in the usual way. For electric plants, compare power factors to the weight of the hovercraft and reference the following table. For gas engines, find acceleration on this table as well, but top speed is determined by an increase in the *Car Wars* gas engine top speed formula:

$(360 \times \text{Power Factors}) / (\text{Power Factors} + \text{Weight})$; round down to nearest 2.5 mph increment.

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