WATERCRAFT

Canadian Watercraft

Generic Watercraft

Russian Watercraft

<u>US Watercraft</u>

AP1-88/400 Mk 2

Note: This vehicle does not exist in real life.

Twilight 2000 Notes: The AP1-88/400 is a Canadian hovercraft originally designed for use by the Canadian Coast Guard. Shortly before the Twilight War, numbers of these vessels began to be fitted by the Canadian military for use by raiding and special operations forces. The galley was removed and the medical treatment area was considerably reduced in size, and weapon mounts were installed. These vessels were also sold to Britain, Belgium, Norway, and Australia, and some were modified from Coast Guard AP1-88/400s during the war, but due to the late start, they were few in number, and most Canadian models stayed at home.

Price	Fuel Type	l Type Load		Veh Wt Crew		Night Vision	Radiological
\$1,330,000	G, AvG	7.35 tons	70 tons	9+34	18	Radar, Sonar, FLIR	Shielded

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
240	75	11000	1500	Trtd	P(32)	TF9 TS6 TR5 HF11 HS7 HR4

Fire Control	Stabilization	Armament	Ammunition
(Turrets) +2, (Pintles) None	(Turrets) Fair, (Pintles) None	25mm M-242 or 30mm Bushmaster II or 35mm Bushmaster III (Forward Casemate), 2xM-2HB, 2xJavelin Launchers (Top Turret), 2xMk-19 (Front Side Pintles), (2xMAG (Rear Side Pintles)	2400x25mm or 2000x30mm or 1750x35mm, 4750x.50, 12xJavelin ATGM, 600x40mm, 6000x7.62mm

<u>SRN6 Mk2</u>

Note: This vehicle does not exist in real life.

Twilight 2000 Notes: Like the AP1-88/400 Mk2, the SRN6 Mk2 is a Canadian modification of a hovercraft used by the Coast Guard – in this case, the British-designed SRN6 Mk1. The basic chassis is modified with a more powerful engine, armor plating, and weapon stations and ammunition storage. This produced a light hovercraft perfect for patrolling the many rivers, streams, lakes, and inlets and bays of Canada. It was used on both coasts as well as the Great Lakes/St. Lawrence Seaway area. The design was also sold to Britain, who disseminated it to Germany, Norway, Denmark, Belgium, and the Netherlands, and it was perhaps the most common hovercraft design in the European Theater. It is similar in size and function (though not design) to the US M-5 RACV.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$120,000	D, G, AvG, A	425 kg	9.5 tons	6+8	18	Image Intensification, FLIR, Radar	Shielded

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
240	75	2050	205	Trtd	P(9)	TF7 TS5 TR5 HF6 HS5 HR4

Fire Control	Stabilization	Armament	Ammunition
+1	Basic	25mm ChainGun, MAG (Turret), 2xM-40 Recoilless Rifles (F), 2xM-2HB (Rear Sides)	425x25mm, 4000x7.62mm, 16x106mm, 2000x.50

<u>Airboat, Large</u>

Notes: This is a much larger version of the standard airboat listed below. They were typically used by hunting parties or to access remote lodges before the Twilight War, but during the war, were used as light patrol craft in swamps, marshes, and other areas with quiet water. They are basically larger versions of the standard airboat, carrying a much larger load of passengers or cargo at a cost to speed and maneuverability. Military or militia versions often had up to four weapon mounts around the hull.

Price		Fuel Type	Load		Veh Wt	Wt Mnt N		Night Vision		Radiological
\$32,000		G, AvG	1.4 tons	s 2	2.35 tons	ons 12 (Optional		tional) WL Spotlight		Open
Tr Mov	Co	m Mov	Fuel Cap Fuel Cons		Co	nfig	Susp	Armor		
140		50	265	265 105		S	Sup 2		H0 W0 S0	
Length		Draf	t	Mn	/Invr Accl		1	Min Crew/Opt Crew/Pass		

20

1/2/+20

5

<u> Airboat, Standard</u>

7.4

0.5

Notes: This vehicle is most popular in swamps and marshes; some of the biggest users are located in the Florida Everglades and Louisiana Bayou country, though they are also used elsewhere. They are lightweight, maneuverable vehicles that can travel for short distances (4 phases or less) over dry land at one-quarter their normal water speed. Operating one takes a different sort of skill than normal boats; the referee may require the operator to have special skills within the Vessel Use (Boat) skill, but perhaps a better solution is a new skill, Vessel Use (Airboat). An airboat has no brakes, though some can reverse their propellers, and stopping and turning require good skill and training. They are very fast vessels, but not really suited for harsh weather or water conditions due to their light construction.

Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
\$14,000	G, AvG	275 kg	1 ton	12	(Optional) WL Spotlight	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
165	60	150	45	Sup	1	H0 W0 S0

Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
4.5	0.25	7	24	1/1/+1

Assault Boat, Inflatable

Notes: This is a military version of the standard inflatable raft. They are made by countries all over the world, by many countries, and are cheap and quiet. Most military versions have rigid bottoms to increase buoyancy and load-carrying ability. Some of the larger ones have a weapon mount in them, but this is not standard and is not included in the basic cost of the boat. They may be found with or without an outboard motor; the second speed, cost, and weight ratings are for when the boat is not equipped with an engine. They can be inflated by an air bottle in 1 minute, an air compressor in 1 ½ minutes, or a foot or hand pump in 1 minute per meter of length. A rare variation of these boats are Kevlar versions; these boats are two levels more rare than normal and 3 times more costly (for the boat itself, not the engine too).

Vehicle Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
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3.4-Meter (Rigid/Non-Rigid)	\$750/665	G, A	365 kg	60/40 kg	2	None	Open
4-Meter (Rigid/Non-Rigid)	\$1100/1000	G, A	550 kg	90/60 kg	2	None	Open
4.5-Meter (Rigid/Non-Rigid)	\$1500/1330	G, A	640 kg	120/80 kg	2	None	Open
4.7-Meter (Rigid/Non-Rigid)	\$1750/1500	G, A	825 kg	140/90 kg	2	None	Open
5.2-Meter (Rigid/Non-Rigid)	\$2060/1825	G, A	915 kg	165/110 kg	2	None	Open
5.25-Meter (Rigid/Non-Rigid)	\$2300/2100	G, A	1 ton	185/125 kg	2	None	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
3.4-Meter (With/Without Motor)	110/40	25/9	6	2	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
4-Meter (With/Without Motor)	100/33	23/8	8	3	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
4.5-Meter (With/Without Motor)	75/29	17/7	8	3	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
4.7-Meter (With/Without Motor)	95/26	22/6	12	5	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
5.2-Meter (With/Without Motor)	80/21	18/5	12	5	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
5.25-Meter (With/Without Motor)	85/18	20/4	15	6	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0

Vehicle	Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
3.4-Meter (With/Without Motor)	3.41	0.1	9	10/4	1/1/+4
4-Meter (With/Without Motor)	3.96	0.11	9	9/3	1/1+6
4.5-Meter (With/Without Motor)	4.5	0.13	9	7/3	1/1+7
4.7-Meter (With/Without Motor)	4.65	0.14	9	9/2	1/1+9
5.2-Meter (With/Without Motor)	5.2	0.15	8	7/2	1/1+10
5.25-Meter (With/Without Motor)	5.25	0.16	8	8/2	1/1+11

<u>PBL</u>

Notes: The PBL (Patrol Boat, Light) is a small boat similar to many civilian "bass boats" in design. It is a simple hull with a central helm station and two powerful outboard engines at the rear to power it. It is not heavily-armed or well armored, and its main purpose is to provide a mobile surveillance platform. There is typically one weapon mount at the front of the boat.

Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological

Tr Mov Com Mov Fuel Cap Fuel Cons Config Size Armor 140 32 40 5 FD 1 H1 W1 S0	\$30,000	G, AvG, A	300 kg - 2	00 kg 1.62 tons 6		t, Radar	Open
140 32 40 5 FD 1 H1 W1 S0	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
	140	32	40	5	FD	1	H1 W1 S0

Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
7.6	0.5	9	13	1/2/+4

Fire Control	Stabilization	Armament	Ammunition
None	None	M-2HB (F)	300x.50BMG

<u>PBR</u>

Notes: This is more of a generic category instead of an exact boat type. The modern PBR (Patrol Boat, River) had its genesis in the Vietnam era Mekong River patrol boats; it uses a hull of extremely strong high-impact plastic, fiberglass, or carbon-glass fiber, and has several weapon mounts. They are typically diesel-fired and quite fast and maneuverable. They are also quiet and small, so they can slip into places that larger vessels can't, carrying a load smaller boats cannot, and do so with some stealth. As this is a generic category, appropriate weapons for the country involved should be substituted for the weapons shown below in most cases.

Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
\$276,000	D, A	1.18 tons	7.35 tons	6	WL or IR Searchlight, or Both; (Optional) Radar or Sonar	Open

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
100	23	185	18	Sup	2	H2 W2 S1

Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
9.75	0.76	6	7	1/5/+9

Fire Control	Stabilization	Armament	Ammunition
None	None	60mm Mortar, Mk-19 (F), M-2HB (F), 2xM-2HB (R)	40x60mm, 250x40mm, 1200x.50BMG

<u>RIB</u>

Notes: The RIB (Rigid-hull Inflatable Boat) is a small vessel primarily used by US and NATO special operations forces, especially US Navy SEALs, but the Russians and Chinese also have a similar boat. The RIB is basically a collapsible boat with inflatable bladders stretched over a tubular metal framework. The design allows for a vessel that takes up less space aboard aircraft, has a high cargo capacity for its size, and yet is very buoyant and light. The RIB is inflated by compressed air canisters or a small air compressor that is attached to the framework and actuated by a pull on a lanyard. If compressed gas is used, the RIB fully inflates in 30 seconds; if a compressor is used, the RIB takes 3 minutes to inflate and the compressor must be held above water the entire time, an obvious liability during an airdrop or helocast into water. Another liability of both designs is the rubber construction, but a Kevlar version is available (3 times normal costs, and one level less common). Maintenance and upkeep on these boats is very

light and cheap. The 6.4-meter, 7.4-meter, and 8.4-meter RIBs have inboard engines, while the rest use outboard engines. The RIB may be thought of as a patrol boat version of the inflatable assault boat.

Vehicle	Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
4-Meter	\$3,000	D, A	650 kg	159 kg	4	WL or IR Spotlight	Open
4.7-Meter	\$4,700	D, A	700 kg	250 kg	4	WL or IR Spotlight	Open
5.4-Meter	\$6,000	D, A	750 kg	320 kg	4	WL or IR Spotlight	Open
6-Meter	\$14,000	D, A	680 kg	745 kg	4	WL or IR Spotlight	Open
6.4-Meter	\$24,000	D, A	1.28 tons	1.27 tons	4	WL or IR Spotlight, (Optional) Radar or Sonar	Open
7.4-Meter	\$32,000	D, A	1.5 tons	1.71 tons	4	WL or IR Spotlight, (Optional) Radar or Sonar	Open
8.4-Meter	\$69,000	D, A	585 kg	3.69 tons	4	WL or IR Spotlight, (Optional) Radar or Sonar	Open
11-Meter	\$79,000	D, A	1.45 tons	4.2 tons	4	WL or IR Spotlight, Radar, Sonar, Image Intensification	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
4-Meter	115	27	10	5	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
4.7-Meter	140	32	16	8	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
5.4-Meter	145	34	20	10	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
6-Meter	155	35	50	22	FD	1	H0 W0 S0, (Kevlar) H2 W2 S0
6.4-Meter	135	31	80	38	FD	2	H0 W0 S0, (Kevlar) H2 W2 S0
7.4-Meter	165	38	95	51	FD	2	H0 W0 S0, (Kevlar) H2 W2 S0
8.4-Meter	190	43	230	111	FD	2	H0 W0 S0, (Kevlar) H2 W2 S0
11-Meter	180	41	270	126	FD	2	H0 W0 S0, (Kevlar) H2 W2 S0

Vehicle	Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
4-Meter	4.05	0.11	10	11	1/1+5
4.7-Meter	4.7	0.14	10	13	1/1+7
5.4-Meter	5.43	0.16	9	14	1/1+9
6-Meter	6.05	0.24	9	14	1/2+13

6.4-Meter	6.4	0.32	8	12	1/2+15
7.4-Meter	7.47	0.37	8	15	1/2+18
8.4-Meter	8.38	0.54	7	17	1/3+20
11-Meter	11	0.57	7	16	1/4+11

Vehicle	Fire Control	Stabilization	Armament	Ammunition
4-Meter	None	None	None	None
4.7-Meter	None	None	None	None
5.4-Meter	None	None	None	None
6-Meter	None	None	MAG (F)	200x7.62mm
6.4-Meter	None	None	MAG (F)	350x7.62mm
7.4-Meter	None	None	M-2HB (F)	300x.50
8.4-Meter	None	None	M-2HB (F), MAG (R)	350x.50, 550x7.62mm
11-Meter	None	None	M-2HB (F), 2xMAG (RS, LS)	400x.50, 640x7.62mm

Aist-Class

Notes: This is an older large Russian hovercraft, the first built in Russia, and also operated by Poland. It resembles a much larger version of the Gus-class. The Aist is so simple that it can be operated by only three men, though more are required for optimum usage. It is the only vessel in Russian service where that is actually steered under normal use by the captain. Quarters and living accommodations are supplied for the crew, but not troops.

Twilight 2000 Notes: Most had been sold off to Russian client states long before the Twilight War, but 6 were still operated by the Russian Navy in a reserve role before the war, and these were taken into regular service during the Alaska Invasion.

Price	Fuel Type	Load	Veh Wt	Mnt	Crew	Night Vision	Radiological
\$2,500,000	AvG	100 tons	270 tons	30	7+130	Radar, Sonar, WL/IR Searchlight	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
280	85	26700	12800	Stnd	P(35)	HF3 HS3 HR3

Fire Control	Stabilization	Armament	Ammunition
+2	Fair	2xZSU-30-2 Autocannon Sets (2x2 Guns) (F, R)	4800x30mm

Bora Class Hovercraft

Notes: This Russian vessel is basically a hovercraft version of a missile cruiser. It is also known as Projekt 1239 or the Sivuch. They were designed for anti-ship duties, but their weapons and characteristics also make them good coastal raiders. They are also the largest hovercrafts ever built. They are stable enough for blue water sailing, with a long range. The problem, of course, with a vessel of this size is that it makes an easy (though hard to damage) target, it is difficult to hide, and a great deal of fuel is necessary to power it (and alcohol does not have the kick necessary for its engines).

Twilight 2000 Notes: Six were available at the start of the Twilight War, with more being built during the war. These craft were encountered on the shores of the remains of Russia as late as 2002, their high speed lending to their survival.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$35,000,000	D, AvG	230 tons	1280 tons	35+33	35	Radar, Sonar, FLIR, Image Intensification	Shielded

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
220	70	200000	20300	Stnd	P(93)	HF8 HS8 HR8

Fire Control	Stabilization	Armament	Ammunition
+4	Fair	100mm Automatic Gun (F), 2x30mm-6 Autocannons (F, R), 10-Round SA-9 Launcher (RD), 2x4-Round SS-22 Missile Launchers, 10xNSV (Around the Deck)	400x100mm, 1150x30mm, 20xSA- 9 SAMs, 8xSS-22 Ballistic Missiles, 10000x12.7mm

Gus/Skat Class Hovercraft

Notes: During the 1970s and 1980s, in a frenzy of ground-effect vehicle design, the Russians developed a large number of

hovercrafts for amphibious assaults. One of these was the Gus Class. The Polish also used a modified form of the Gus, called the Skat; this vehicle mounts the turret of a PT-76 light tank ahead of the bridge, at a cost of some cargo space; they also use a multifuel engine. Unlike most hovercrafts, the Gus and Skat have armor equivalent to a light tank as well as having high speed and can be very difficult to stop.

Twilight 2000 Notes: Most of these were later placed into storage, as they were large, heavy, unreliable, and difficult to maintain; however in the Twilight War, they were brought back into service and used extensively by Russian and Polish Naval Infantry and Spetsnaz forces for assaults against difficult targets.

Vehicle	Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
Gus	\$736,000	AvG	4.57 tons	27 tons	4+50	24	Passive IR, WL/IR Searchlight, Radar	Shielded
Skat	\$927,000	AvG, D, A	2.47 tons	34 tons	6+27	28	Passive IR, WL/IR Searchlight, Radar	Shielded

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
Gus	220	70	1300	589	Stnd	P(20)	TF12 TS4 TR4 HF22 HS12 HR8
Skat	220	70	1300	589	Trtd	P(20)	TF12 TS4 TR4 HF22 HS12 HR8

Vehicle	Fire Control	Stabilization	Armament	Ammunition
Gus	+1	Fair	2x23mm Autocannons	242x23mm
Skat	+3	Fair	2x23mm Autocannons, 76.2mm D56T Gun, PKT, DShK (C)	242x23mm, 88x76.2mm, 2200x7.62mm, 1300x12.7mm

<u>KvP-92</u>

Notes: This vehicle does not exist in real life.

Twilight 2000 Notes: This is an air cushion troop carrier used primarily by Russian Naval Infantry and Naval Spetsnaz teams. Naval Spetsnaz mainly used it for assaults, since it is too loud for surreptitious insertions unless done far from enemy troop positions. Later in the war, it was adopted in large numbers by Arctic troops, and it became a common sight in Scandinavia and Alaska; in addition, the Polish were known to make use of the KvP-92 and its variants. It can be easily mistaken for the US M-5 RACV, as the vehicles are of similar size and design. However, the main gun of the KvP-92 is mounted on top of the vehicle in a small turret instead of in the hull, and there is no secondary armament. There is a hatch on the front deck for the driver, hatches in the turret deck for the commander and gunner, and a door on either side for the troops. In the bow of the vehicle a ramp may be lowered.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$300,000 (-/R)	D, A	1 ton	11 tons	3+8	18	Passive IR	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150	55	520	240	CiH	P(8)	TF1 TS1 TR1 HF1 HS1 HR1

Fire Control	Stabilization	Armament	Ammunition

Fair

<u>KvP-92v</u>

Notes: This vehicle does not exist in real life.

Twilight 2000 Notes: This is the support version of the KvP-92. In this version, the normal turret is replaced by a small turret with a Vasilyek automortar mounted instead of the normal autocannon. It is otherwise similar to the KvP-92.

Price	е	Fuel	Туре	Lo	ad	Veh W	/t	Crew	Mnt		Night Vision	Radiological
\$325,000	(-/R)	D,	, A	600	kg	11.2 tor	าร	4	18		Passive IR	Enclosed
Tr Mov	Com	Mov	Fuel	Сар	Fue	el Cons	Co	onfig	Susp	Armor		
150	5	5	520	0		245	(CiH	P(8)		TF1 TS1 TR1 H	IF 1 HS1 HR1

Fire Control	Stabilization	Armament	Ammunition
+1	Basic	82mm Vasilyek Automortar	60x82mm

<u>KvP-92z</u>

Notes: This vehicle does not exist in real life.

Twilight 2000 Notes: This is a heavily armed KvP-92 variant intended to support the troop carrier version during assaults. This version does not carry passengers; instead, a large amount of weapons, ammunition, and gunners are carried. The primary weapon is a 3-barreled 30mm Gatling gun, carried on a rotating mount on top of the hull; on either side of this cupola is an NSV machinegun. In the front of the vehicle is a KPV machinegun, and on either side of the hull is a B-11 recoilless rifle fixed firing forward. It is otherwise similar to the KvP-92. These vehicles were greatly feared by those facing them, due to their firepower; thankfully, due to their lack of armor, they were also easily destroyed if one could get a clear shot.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$350,000 (-/R)	D, A	400 kg	11.5 tons	5	20	Passive IR, Image Intensification	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150	55	520	250	CiH	P(8)	TF1 TS1 TR1 HF1 HS1 HR1

Fire Control	Stabilization	Armament	Ammunition
+3	Fair	30mm-3 Autocannon, KPV, 2xNSV (Sides), 2xB-11 Recoilless Rifle (Fixed Front)	1200x30mm, 1250x14.5mm, 1425x12.7mm, 40x107mm

<u>KvP-121</u>

Notes: This massive air-cushion cargo carrier is similar in concept to the US LCAC, but much larger. It is used to move large cargoes and assault forces inland from the ships carrying them offshore. It is a RO-RO vehicle (Roll-On, Roll-Off), with large cargo doors and ramps at both ends to get vehicles and troops on and off the hovercraft. The crew is in a fully enclosed cab on top of the cargo area. They control two remote turrets, one on each end of the vehicle, each armed with a heavy machinegun.

Twilight 2000 Notes: Due to its size, fuel consumption, poor maneuverability, and general vulnerability, it was not used often during the Twilight War, except in poorly defended areas like Alaska, where they were used in large numbers.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$800,000 (-/R)	D, A	225 tons	86 tons	8+150	27	Radar, Sonar, WL/IR Searchlight	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
120	40	50000	1870	Stnd	P(24)	HF2 HS2 HR2

Fire Control	Stabilization	Armament	Ammunition	
+1	Fair	2xNSV	5000x12.7mm	

Polnocny-A/B/C Class

Notes: These were formerly the standard landing ships of the Russian Naval Infantry and its Pact counterparts. Though largely replaced in Russian and Polish service by hovercraft in the 1980s, they were widely exported and converted into civilian ferries, and some Pact and former Pact countries like Romania and Hungary used a few. They were also quite common in Chinese, Iraqi, Iranian, Indian, and Libyan navies. Most of these ships were actually built in the shipyards in Gdansk in Poland, and a few were built there during the war. Unlike most Western landing craft, the Polnocny series are heavily armed and can put up a large amount of covering fire for its troops. They can beach themselves for cargo and troop exit and then remove themselves again from the shore.

Vehicle	Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
Polnocny-A	\$1,724,000	D, A	180 tons	820 tons	13	Radar, WL/IR Searchlight	Enclosed
Polnocny-B	\$1,860,000	D, A	194 tons	884 tons	13	Radar, WL/IR Searchlight	Enclosed
Polnocny-C	\$2.506,000	D, A	250 tons	1192 tons	13	Radar, WL/IR Searchlight	Enclosed

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
Polnocny-A	76	17	38200	233	Sup	5	H8 W7 S6
Polnocny-B	72	17	41200	238	Sup	5	H8 W7 S6
Polnocny-C	64	15	55550	286	Sup	5	H8 W7 S6

Vehicle	Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
Polnocny-A	73	2.74	4	7	8/42/+168
Polnocny-B	75	2.84	4	7	7/37/+180
Polnocny-C	81.3	3.3	4	6	8/41/+232

Polnocny- A	+2	Fair	2xZSU-30-2, 2xBM-14-18 MRLs, 2x4- Round SA-8 SAM Launchers	10000x30mm, 72x140mm Rockets, 16xSA-8 Missiles
Polnocny- B	+2	Fair	2xZSU-30-2, 2xBM-14-18 MRLs, 4x4- Round SA-8 Launchers	11000x30mm, 72x140mm Rockets, 16xSA-8 Missiles
Polnocny- C	+2	Fair	2xZSU-30-2, 2xBM-14-18 MRLs, 4x4- Round SA-8 Launchers	12000x30mm, 144x140mm Rockets, 24xSA-8 Missiles

<u>Zubr</u>

Notes: Also known as the Pomornik class, these are some of the largest hovercrafts ever built, second in size only the massive KvP-121s. They have the advantage over the KvP-121 of being well-armored and heavily armed, and can carry a large amount of cargo to the shore. There is a large ramp in the bow of the vessel able to offload two main battle tanks at once, or three vehicles the size of a BMP-series or BTR-series APC. Unfortunately, like the KvP-121, they are too large to be transported by almost all ships in the Russian Fleet, and a lot of fuel is used up simply moving them from place to place. This, along with their cost, is the main reason why the Russians had less then 20 of them on hand by 2000. In addition to the Russian Zubrs, Greece has two of these hovercrafts.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$9,820,000	AvG	130 tons	550 tons	31+360	30	Radar, Sonar, Thermal Imaging	Shielded

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
115	40	75000	17250	Stnd	P(60)	HF10 HS6 HR6

Fire Control	Stabilization	Armament	Ammunition
+2	Fair	2x30mm-6 Autocannons, 2x16-Round 140mm MRLs, 2x2-Round SA-8 SAM Launchers	7000x30mm, 128x140mm Rockets, 16xSA-8 SAMs

ATC (Armored Troop Carrier)

Notes: This is basically a larger and faster version of the PBR, designed to be the waterborne version of the APC. It is also quieter, and has semi-stealth characteristics (radar, sonar, and IR detection is one level harder). They are also equipped with lightweight ceramic armor panels that greatly increase the protection over that of the PBR. To decrease the amount of crew required, the ATC is equipped with less weapon mounts; however, the ATC can also carry a larger raiding party.

Price	Fuel Type	Load	Veh	Wt	Mnt	Night Vision			Radiological	
\$456,000	D, A	3.08 tons	12.16	tons	6	Radar, Sonar, WL/IR Searchlight			Open	
Tr Mov	Com Mov	Fuel	Сар	ap Fuel Cons		Cor	nfig	Size		Armor
110	25	240	D		23	23 Sup 2			H6 W6 S1	
Length	D	Praft	Mn	vr		Accl		Min Crew/Opt Crew/Pass		crew/Pass

Fire Control	Stabilization	Armament	Ammunition
None	None	2xM-2HB (F, R)	1500x.50

10

1/2/+15

6

LCAC

10.97

1.07

Notes: The LCAC (Landing Craft, Air Cushion), is a large landing craft primarily used by the US Marines (and to a much lesser extent, the SEALs) for the landing of large amounts of troops or large vehicles onto shorelines or short distances inland. It is an air-cushion vehicle (hovercraft). Though not designed for long distance operation over land, it is nonetheless capable of it, and able to clear obstacles of up to 1.22 meters at full speed with a full load. It is also a RO-RO (Roll On, Roll Off) craft, with ramps in the front and rear to unload troops and vehicles or cargo. The normal cargo capacity is about 55 tons, but an overload of over 68 tons (such as an M-1A1 tank) can be carried at a reduced speed and higher fuel consumption.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$1,411,000	AvG	(Normal) 54.43 tons, (Overload) 68.04 tons	113.4 tons	5	20	Radar, Sonar, Thermal Imaging	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
(Normal) 165, (Overload) 145	(Normal) 60, (Overload) 50	18297	(Normal) 15140, (Overload) 17480	Stnd	P(28)	HF4 HS4 HR4

Fire Control	Stabilization	Armament	Ammunition	
+1	Fair	M-2HB (F), M-2HB (R)	1500x.50	

LCM-6/8

Notes: The LCM (Landing Craft, Mechanized) is an amphibious assault craft used by the US Marines and by US Army forces, as well as by some of its allies, such as South Korea and Taiwan, who use large numbers of them. Both may be transported aboard larger vessels to a combat zone, them used for the actual amphibious landing. The LCMs are basically large open-topped flat

vessels to transport large amounts of cargo. Though they are not armed when issued, many crews installed a variety of pintle or otherwise improvised mounts around the hull. They are equipped with a large crane for loading, which has a capacity of 31.57 tons. They are capable of beaching themselves for the offloading or troops, then removing themselves from the shore. Troops and cargo leave by the large ramp at the bow.

Twilight 2000 Notes: Though these vessels had mostly been replaced by the LCAC and helicopters in US forces, they came into more use later in the war as helicopters and the fuel for them became scarcer.

Vehicle	Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
LCM-6	\$175,000	D, A	31.31 tons	62.42 tons	8	WL Searchlight	Open
LCM-8	\$269,000	D, A	55.22 tons	95.5 tons	8	WL Searchlight	Open

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
LCM-6	36	8	2907	(LCM-6) 510	FD	4	H3 W2 S2
LCM-8	48	11	2907	440	FD	4	H3 W2 S2

Vehicle	Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
LCM-6	17.07	0.99	4	3	2/5/+80
LCM-8	22.46	0.99	4	4	2/5/+200

<u>LCU</u>

Notes: The LCUs were replaced largely by hovercrafts and/or helicopters in most First-World nations, and most Third-World nations did not have the capability to project force that would require such a craft; consequently, most vessels such as LCUs were used by countries in the middle of the economic range. Two types of LCU are illustrated below: the smaller LCU-1600 class and the larger LCU-2000 class. Both have living compartments for its crew, including sleeping quarters, a galley, a shower, a clothes washer and dryer, and a lounge. These vessels are capable of beaching themselves for cargo unloading and then removing themselves from the shore. They can be used as makeshift bridges by placing themselves astride a suitably-dimensioned body of water and dropping both the front and rear ramps.

Twilight 2000 Notes: Most of the LCU's available in the Twilight War were built in the 1970s or later. Later in the war, they came into more use by countries such as Russia, China and the US, both to replace hovercraft losses and to replace the large fleets of helicopters and the fuel required to move them.

Vehicle	Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
LCU-1600	\$1,146,000	D, A	170 tons	545 tons	15	WL/IR Searchlight	Enclosed
LCU-2000	\$2,286,000	D, A	350 tons	1087 tons	15	WL/IR Searchlight	Enclosed

Vehicle	Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
LCU-1600	48	11	25400	148	FD	5	H5 W4 S3
LCU-2000	48	11	50600	294	FD	5	H5 W4 S3

Vehicle	Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass

LCU-1600	41.15	2.74	4	4	3/11/+400	
LCU-2000	53.04	2.74	4	4	5/13/+800	

<u>M-5 RACV</u>

Notes: This vehicle does not exist in real life.

Twilight 2000 Notes: The RACV (Reconnaissance Air Cushion Vehicle) is a modern development of the Vietnam War era SK-5. The vehicle is fitted with upgraded electronics, navigation equipment (including inertial navigation and GPS), heavier armament, and improved protection. They were initially produced for US Navy riverine (brown water) patrol units, and used primarily in Korea, the Middle East, and the northern shores of Europe. Less than 250 were built before the November Nuclear Strikes, and only a handful after that point, with perhaps 25 being used on the west coast of the United States and another 10 on the Gulf Shore, primarily in Texas and Louisiana to counter Mexican sabotage teams. The M-5 has a casemate mount in the forward compartment mounting a German-designed 20mm Rh-202 autocannon. This turret has a limited traverse; it may traverse to 45 degrees of center in either direction. On both sides of the autocannon is a ball mount for a Mk-19 grenade machinegun; these weapons may fire only to the sides, and they have an arc of 180 degrees. On top of the superstructure is a turret mounting two M-2HBs; this turret has a full 360 degrees of traverse. There is a hatch on either side of crew compartment, on the M-2HB turret deck, and on top of the deck or the forward compartment.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$112,000	G, AvG, A	400 kg	9 tons	6	18	Image Intensification, Radar	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150	55	250	50	Stnd	P(8)	HF2 HS2 HR2

Fire Control	Stabilization Armament		Ammunition
+2	Fair	20mm Rh-202, 2xMk 19, 2xM-2HB	500x20mm, 800x40mm, 2000x.50

<u>M-22 PCAC</u>

Notes: This vehicle does not exist in real life.

Twilight 2000 Notes: This is a personnel carrier hovercraft primarily used by special operations forces for insertion of teams onto beaches and other terrain not suited for most combat vehicles. As such, the PCAC (Personnel Carrier Air Cushion) was used extensively by US Navy SEAL teams, US Marine Recon, British SBS, and German Kampfschwimmer units, and it is rumored that a few were seen in the hands of Israeli special operations units as well. They were another rare commodity in the Gulf War, with perhaps 200 being used, and less than 50 being retained in the Continental US. The PCAC has a front ramp for discharge of troops, two hatches on the front deck, and a small turret on the front deck behind these hatches (the same as used on the AAPV-7A1).

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$180,000	G, AvG, A	400 kg	9 tons	3+8	18	Image Intensification, Radar	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150	55	250	50	CiH	P(8)	TF6 TS4 TR4 HF2 HS2 HR2

Fire Control	Stabilization	Armament	Ammunition

+2	Fair		Mk 19, M-2HB	350x40mm, 1000x.50
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Mark V Special Operations Craft

Notes: Primarily designed for use by US Navy SEALs, the Mark V is also used by Marine Recon units, and to a lesser extent, other US and NATO special operations units. The Mark V can be disassembled and flown on two C-5 aircraft to the theater of operations, or moved by amphibious assault ships, along with a complete set of weapon options, spare parts, and support modules, as well as two complete crews. The Mark V is semi-stealth capable, being one level harder to detect by radar, sonar, or IR, 50% quieter than a comparably-sized conventional boat, and one level harder to target with radar, sound, IR, or fire and forget weapons. They are capable of inertial or GPS navigation even across trackless waters, and have very secure encrypted frequency hopping radios for communication at short, medium, long, and satellite ranges. The weapons listed below are typical loads, but any weapon that may be pintle-mounted may be placed on a Mark V's weapon mount. The mounts have some stabilization built in.

Twilight 2000 Notes: Only 12 of these boats were available to the US at the start of the Twilight War, with perhaps 4 more used jointly by British and Dutch units. They were constructed very rapidly during the Twilight War, with about 50 more being built up July 2000.

Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
\$960,000	D, A	3 tons	51.71 tons	18	Radar, Sonar, FLIR, Image Intensification	Shielded

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
200	46	9842	2050	Sup	3	H10 W8 S6

Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
25	1.52	7	20	1/6/+16

Fire Control	Stabilization	Armament	Ammunition
+2	Basic	ASP-30 (RS), M-134 (LS), 2xM-2HB (F), Mk-19 GMG (R), Twin Stinger Launcher (R)	850x30mm, 5000x7.62mm, 3000x.50, 650x40mm, 8xStinger SAM

PCF

Notes: The PCF (Patrol Craft, Fast) is an update of the Vietnam-era swiftboat, used for pursuit and interdiction of boat and shore traffic. Though some similar designs are used by other countries, the primary users of this type of vessel are the US Navy, NATO navies, and allied Middle Eastern navies. They are more heavily armored than the PBR. The PCF is equipped with a range of long, medium, and short-range radios for communicating with different military forces. They have shotgun microphones, a video recording system and camera. Comprehensive navigation equipment is installed to allow autonomous function. A psyops system with a tape-based, CD-based, or digital recorder was installed to play messages over a loudspeaker is installed, and the loudspeaker could also be used by the crew. A 6kW generator is installed to allow the various systems to operate with the engines off. The PCFs are equipped with a 227-liter tank for water for drinking and personal hygiene. The 81mm Gun/Mortar is a trigger-fired, breech-loaded version of the standard 81mm mortar.

Price	Fuel Type	Load	Veh Wt	Mnt	Night Vision	Radiological
\$800,000	D, A	4.6 tons	21.34 tons	12	WL/IR Searchlight, Radar, Sonar, FLIR, Image Intensification	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Size	Armor
130	30	3140	450	Sup	3	H5 W4 S4

Length	Draft	Mnvr	Accl	Min Crew/Opt Crew/Pass
15.64	1.2	6	12	1/6/+12

Fire Control	Stabilization	Armament	Ammunition
+2	Basic	2xM-2HB (Top of Superstructure), M-2HB/81mm Gun/Mortar Combination (F), Mk-19 GMG (R), MAG (Rear Sides)	20,000x.50, 130x81mm, 1200x40mm, 20,000x7.62mm

<u>XM-23 AACV</u>

Notes: This vehicle does not exist in real life; it probably wouldn't even work in real life, with that cannon!

Twilight 2000 Notes: This was an experimental assault craft pressed into production before it was really ready. The approximately 50 copies made before and during the Twilight War were used for coastal raids and for escort of other personnel and equipment carrying hovercrafts during assaults. The AACV (Assault Air Cushion Vehicle) was made by modifying an M-5 RACV to carry the complete turret of the Cadillac Gage Stingray tank on the front deck. Though the gun used in this turret is a reduced recoil model, it's recoil is still severe for a small hovercraft, and every time a shot is fired, the crewmembers operating the AACV must make a Difficult: Vessel (Hovercraft) roll; failure means that the AACV rolls in the opposite direction of that which the gun is pointed, and the AACV must stop for 3 phases while the crew regains control. The gun is fed from an autoloader, and as the autoloader is not able to handle vertically-stored rounds, the AACV cannot carry WP rounds for the gun. This autoloader was also an experiment, rushed into production; after every shot, a D10 must be rolled, with a result of 1 meaning the autoloader is jammed, and manually clearing the autoloader takes at least 6 phases and an Average: Heavy Gun roll. The turret does not have full traverse; instead only having 270 degrees.

Price	Fuel Type	Load	Veh Wt	Crew	Mnt	Night Vision	Radiological
\$250,000	G, AvG, A	300 kg	14 tons	3	20	Passive IR, Image Intensification, Radar	Enclosed

Tr Mov	Com Mov	Fuel Cap	Fuel Cons	Config	Susp	Armor
150	55	325	80	Trtd	P(12)	TF40 TS20 TR28 HF10Cp HS6Cp HR4

Fire Control	Stabilization	Armament	Ammunition
+4	Fair	105mm NATO Gun, MAG, M-2HB (C)	24x105mm, 2400x7.62mm, 1100x.50BMG