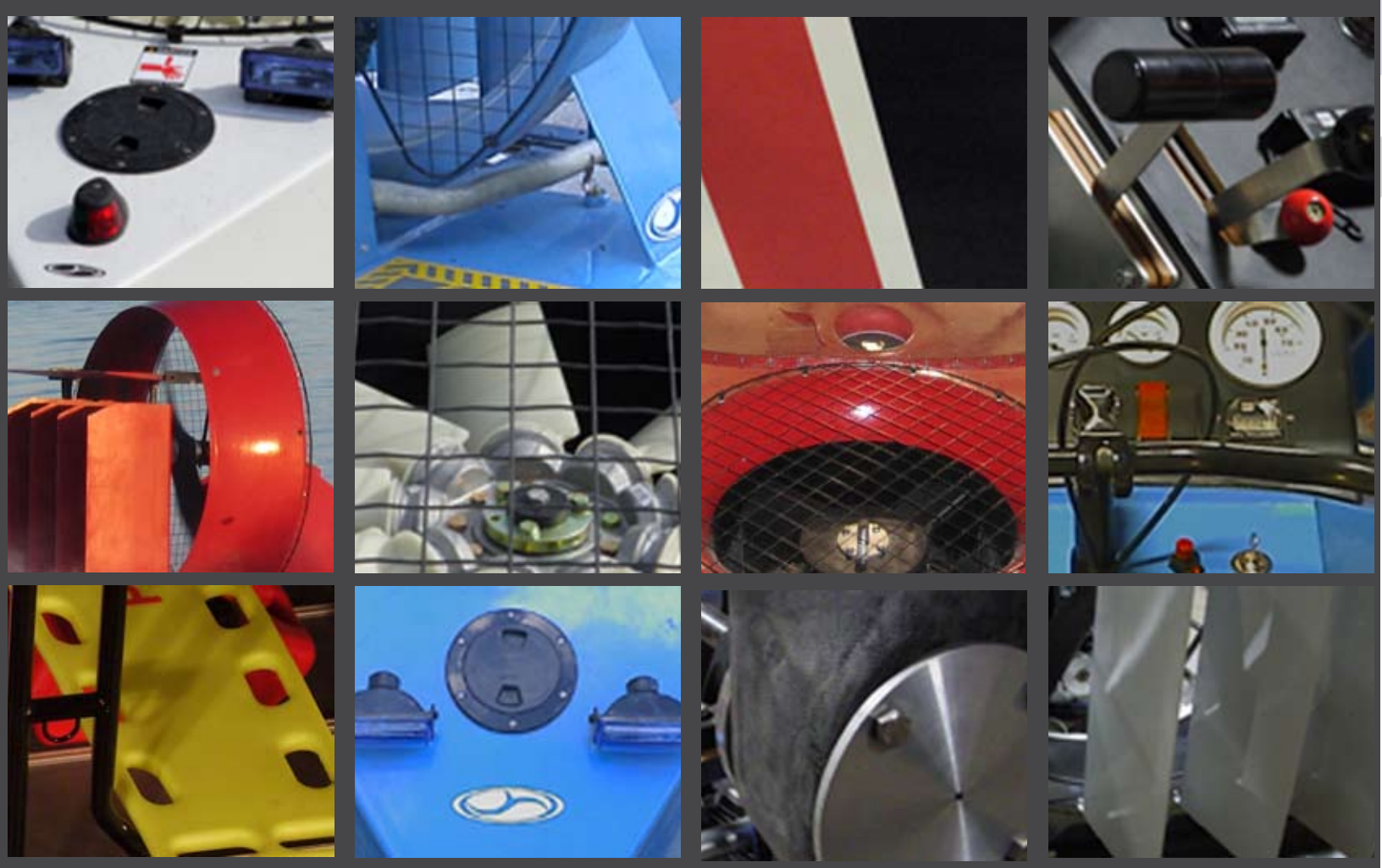


19XR-SAR

Search And Rescue



universal hovercraft

19XR-SAR - Search And Rescue



The 19XR SAR features a large open deck that can be customized for a variety of search and rescue or cargo applications. An Ideal craft for rescue in areas where other craft cannot go. The 19XR Rescue is designed to allow two litters and still have room for gear and rescue personnel.

Performance

Slope Gradient

The slope of a surface expressed as a percentage of change in elevation per unit of distance traveled. Example: 10% grade = 10 feet of increased elevation over a 100 foot distance. The 19XR can traverse 20% to 35% grade depending on the configuration of the craft.

Surface capability

Useful for transportation over nearly any surface including; salt or fresh water of any depth, sand, mud, mangrove, rapids, floods, grass, swamp, desert, ice, and snow.



Sea state

→25-30 mph winds. 1-2 foot chop. 3 – 6 foot waves.
→Beaufort scale 5; Moderate waves, taking a more pronounced long form; many white horses and some spray.
→The 19XR's length, low center of gravity, high rise bow and AcuFlow™ hull make it the most stable hovercraft rescue platform available today.

Systems

Control

Handlebar controls turn four vertical rudders set behind the thrust propeller.



19XR-SAR - Search And Rescue

A self locking lever controls the horizontal trim wing (this helps balance the craft). Left twist grip throttles the lift engine. Right twist grip throttles the thrust engine. Both have friction lock knobs.

Flotation

19XR Rescue is built from a composite blend of urethane foam and fiberglass rendering the craft unsinkable. Foam fills every available cavity in the hull providing more than 3,300 lbs of positive flotation.

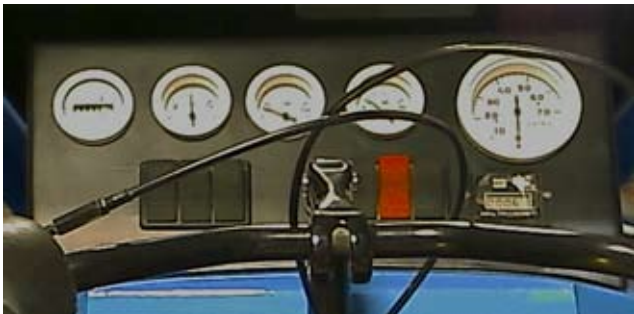


Power

80 amp engine driven alternator. Two 12V gel cell batteries (no possibility of leakage) power all onboard systems. Four 12V power outlets are available for additional equipment.

Instrumentation

Tachometer, Air Speed Indicator, Water Temp, Oil Pressure, Fuel level, Voltage, Hour Meter, level gauge and 6 inch Compass.



Fuel

9 gallon aluminum tank supplies both engines with 87-91 octane fuel.



Thrust engine

Two options are available; both engines are 4-stroke and electric start. The base model is equipped with a 35 hp, twin cylinder, air cooled, carbureted engine. The upgraded 130 hp model is a twin cylinder, liquid cooled, turbocharged, fuel injected engine. Upgraded engine increases speed, payload and rough water capability.



Thrust propeller

2-blade low noise propeller manufactured by Universal Hovercraft. A composite wood-carbon structure gives the propeller long life, resistance to wear and the ability to ingest rocks, ice and other debris without seriously damaging the blades.



Lift engine

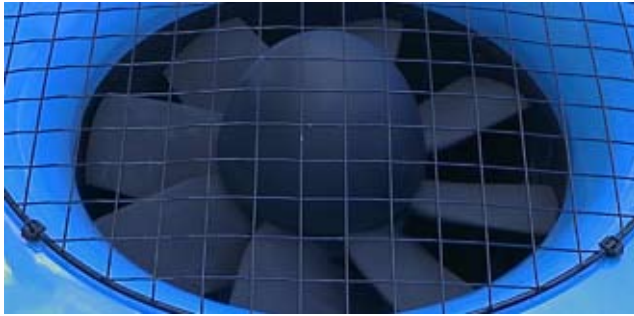
4-stroke, 16 hp, air cooled, carbureted engine with electric start. Smooth running, low maintenance, good fuel efficiency and high reliability.



19XR-SAR - Search And Rescue

Lift fan

8-blade, 26 inch, low noise lift fan with spinner. Good airflow and slow turning, precision shaped blades give this fan the ability to perform in the toughest environments.



Skirt system

Bag type skirt. Made from vinyl coated nylon. Bag skirts are more stable, agile and easier to repair than their segmented skirt counterpart. Bag skirts also increase rough water capability.

Landing skids

When the 19XR is at rest or stopping, landing skids will contact the surface. These skids are made from a composite blend of Kevlar and PVC foam. This blend is resistant to wear and can be replaced as necessary.

Brakes

Emergency stopping can be achieved two ways. Reducing lift engine rpm will increase the drag resulting in an effective brake. Dumping the lift fan (dropping throttle from "cruise" to "off") will cause a rapid deceleration over most surfaces. Our AcuPlow™ hull allows the pilot to accurately control braking over water.

AcuPlow™ system

Highly effective hull shape developed by Universal Hovercraft. Our hydro-dynamically shaped hull aerates and detaches water as it passes under the craft. This hull shape offers features including braking, high speed stopping, emergency braking and plowing.

Safety Equipment

Light tower

Mount to the tower; light bar, halogen lights, search lights, VHF antenna, paddle, boat hook and grab handles.

Siren

Eight operational modes. Tap and air horn features are horn-ringing adaptable. Intersection mode alternates the yelp, phaser and air horn tones. Powder-coated steel housing with an

illuminated faceplate has a rotary switch for mode selection; three push-button switches for air horn, phaser, & intersection features; an on /off dial with adjustable volume control; and a noise-canceling PA microphone.

Light bar

- 352 high-intensity LEDs and two linear Microthin strobe heads in each mini bar.
- Low-profile design improves fuel efficiency.
- Solid-state LED flasher has seven strobe-type patterns.
- Two switches - one controls power, the other controls LED mode selection.
- LEDs and strobes can operate independently OR together
- The standard light bar measures 2¼"H x 17¼"W x 9 1/8"D

Halogen lights

Two forward facing halogen lights, two rear facing halogen lights (20,000 candle power).

Navigation lights

Red green light on the bow, 360 degree white light at the stern. Lights are on two separate switches so each can be run independently. USCG approved.

Horn

Compact electric horn. Rated at 106 db.

Spot light

400,000 candle watt hand held search light. Intense, fog-penetrating beam with minimal back splatter. Includes a deck-mounted socket for hands-free use or pick it up for hand-held operation.

Stretcher

Our stretcher comes ready for deployment. The stretcher is attached to a mounting system that allows the stretcher to be easily removed from the cradle. After the victim has been secured, the stretcher can be quickly and securely be re-attached onboard the hovercraft for safe transport.

VHF Radio

Many radio options are available. All options include VHF radio and 48 inch tower mounted antenna.

First aid kit (500A)

Provides aid for up to eight people for 10 days. The 500A is substantially stocked with medications and motion sickness remedies. It's the only kit that includes EMT shears, a Sam Splint® and a 4x4 Watergel® sterile dressing. Among the contents of its sturdy, waterproof storage bag are 62 bandages of varying sizes and shapes, an emergency blanket and a CFT® lifemask. Includes a basic first aid module, wound module,

19XR-SAR - Search And Rescue

limb injury module, eye injury module, medicine module, CPR/shock module and a burn module.

- Intended Use: 10 day trip for 1-8 people
- Number of Pieces: 153
- Case Size/Material: 10 1/2" x 4 1/2" x 7"/420 denier nylon
- Contents Organization Method: Resealable waterproof storage bags organized by injury.

Life Sling

Lifesling2 is Coast Guard approved and works better than a ring or horseshoe buoy because: (1) It can be towed to the overboard crewmember rather than the crewmember having to swim to it. (2) It can be used as a lifting sling if the crewmember needs help out of the water. (3) It has 21 lb. of buoyancy. (4) The Lifesling system consists of a flotation collar which is a blend of the traditional horseshoe buoy and a helicopter rescue sling. (5) Its connected to 125' of multi-filament polypropylene retrieving line. (6) The collar and line are stored for protection against the elements in a rigid and attractive vinyl storage bag. Graphics on the bag illustrate the instructions for recovering a person in the water.

- USCG Type: Type V
- Configuration: Horseshoe Buoy/flotation collar
- Buoyancy: 21lb.
- Material: UL-approved foam, line, webbing
- Dimensions: 22"H x 12.5"W x 5"D
- Color: White storage bag; yellow Lifesling

Commercial life vest

Search and Rescue (SAR) vest with a soft, lightweight mesh designed for comfort and ventilation.

- Soft Aquafoam™ combined with durable Crosstech® foam adds extra comfort
- Two 1 1/2" encircling belts, adjustable chest strap and zipper front for optimal fit and security
- Two pockets with hook and loop closure
- Rolled, stand-up collar
- 62 sq. in. (400 sq. cm.) SOLAS-grade reflective tape
- USCG approved Type III

Ear plugs / ear muffs

4 sets of ear protection are provided.

Aluminum paddle

- Strong, lightweight, silver anodized aluminum shaft
- High-impact plastic blade
- 4.5 ft long

Boat hook

- Made of lightweight, anodized aluminum
- 1-1/4" tube dia.
- Comfortable safety grip

Throw rope

Throw lines provide an accurate way to deliver a line to a person in the water or to pass a messenger line to another boat. The 70' Throw Rope is safety yellow with foam inserts inside the bag for added buoyancy and SOLAS reflective tape which makes it easy to see.

Anchor

Folding grapnel anchor stores under the pilot seat. This lightweight system includes 50' of nylon rope and a vinyl storage bag.

High rise bow

The bow of the 19XR is raised 14 inches above the hull line increasing rough water and high wind capability. Even in the worst weather, waves will not break over the front of the craft as is the case with many competitors hovercraft.

Options

Wide stance tower

Heavy duty tower system for high load applications including towing; anchoring, lighting, GPS dome, or radar dome. Tower is customizable to fit a variety of applications. Maximum tower height should not exceed 90 inches, maximum width 85 inches.

Wiper

Electric windshield wiper and washer system with and 18 inch blade.

Canvas Awning

Awning solutions are customized to your specific application. Permanently mounted, removable and/or foldable awnings are available.

Miscellaneous

Storage: Two locking cupboards are located port and starboard. Inside dimensions are 16" x 16" x 12". Four cargo nets allow easy storage of life jackets or other rescue equipment. Under seat storage for pilot and passengers.

Mooring

One bow tow eye, two midship cleats, two stern cleats, six stainless steel deck eyes and four lifting eyes.

19XR-SAR - Search And Rescue

Rescue Hovercraft Pricing

19XR SAR 52 hp

Base price: \$ 52,000

19XR SAR 135 hp

Base price: \$ 59,432

Trailer: \$ 3,200

Upgrades

Mooring:

- 1X 16mm lifelines
- 6X S.S. Deck eyes
- 4X lashing eyes
- 1X tow eye
- 2X S.S. lifting eye

Miscellaneous:

- Storage under seats
- Two cupboards, port and starboard, with locks
- Handholds on windshield frame
- Fuel shut off valve
- 2X 12V batteries
- 6 months of spares

Standard equipment:

- Ear plugs
- Cleats (6 units)
- Life jackets (6 units)
- Anchor
- Life buoy
- Siren
- Navigation lights
- Electric horn
- Wiper
- Compass (6 inch)
- First aid kits
- Portable search light
- VHF radio
- Canvas awning
- Collapsible oar



19XR-SAR - Search And Rescue

Specifications

	52 HP	135 HP
Payload	900 lbs (408 kg)	1200 lbs (554 kg)
Seating	4 passengers	6 passengers
Range	200 miles (322 km)	200 miles (322 km)
Hover height	9 inches (23 cm)	8 inches (23 cm)
Climb gradient	25% to 35%*	40% *
	* 650 lb payload (295 kg)	
Length	19ft 9 in (6.02 m)	19ft 9 in (6.02 m)
Width	7 ft 6 in (2.29 m)	7 ft 6 in (2.29 m)
Width on cushion	8 ft 1 in (2.46)	8 ft 1 in (2.46)
Height:	6 ft 6 in (1.98 m)	6 ft 6 in (1.98 m)
Height on cushion	7 ft 2 in (1.88 m)	7 ft 2 in (1.88 m)
Empty weight	750 lbs (340 kg)	850 lbs (386 kg)
Fuel capacity	12 gallons (45 liters)	12 gallons (45 liters)
Fuel type	87 - 93 octane	91 - 93 octane
Fuel consumption	3.5 gph (13 lph)*	4 gph (15 lph)*
Static thrust	235 lbs (107)	457 lbs (207)
	* at cruise speed, water	
Speed full payload, water max	50 mph (80 kph)	55 mph (89 kph)
Speed water max*	55 mph (89 kph)	65 mph (105 kph)
Speed ice max*	60 mph (97 kph)	69 mph (111 kph)
Speed full payload water cruise	30 mph (48 kph)	35 mph (56 kph)
Speed water cruise*	35 mph (56 kph)	35 mph (56 kph)
Speed ice cruise*	40 mph (64 kph)	40 mph (64 kph)
	* 650 lb payload (295 kg)	
Hump speed	7 mph (11 kph)*	8 mph (13 kph)
Hump time	6 seconds	4 seconds
Noise	79 dba full throtte	81 dba full throttle
Cooling, lift engine	Air cooled	Air cooled
Cooling, thrust engine	Air cooled	Water cooled
	* 900 lbs payload (408 kg)	

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