



Fraser Shipyards
1 Clough Ave.
Superior, WI 54880
(715) 395-2255
www.lakeassault.com

GSA SPEC 28'x9.5' Landing Craft with Walk Around Pilot House(LC28-9.5-FB):
(shipping not included)

13 July 2024

A. GENERAL SPECIFICATIONS:

1. Hull Length 28' (does not include outboard engines, engine guard, or rub rails)
2. Beam 9 feet 6 inches (does not include engine guard, or rub rails)
3. Overall height not to exceed 13'6" while on trailer and attached to a tow vehicle.
4. Draft should not exceed 18 inches with motors trimmed up and 24 inches with motors trimmed down.
5. Person and cargo capacity 3,500 lbs.
6. Boat weight 9,100 lbs approx.
7. Trailer weight 2,400 lbs approx.
8. Combined boat and trailer weight 11,500 lbs. approx.
9. Fire pump rated at 1500 GPM.

B. HULL DESIGN & OUTFITTING:

1. Hull is Landing Craft style modified "V" with 16-degree dead rise at the transom and 34" delta pad.
2. The boat has a 64" hydraulically operated bow door. The hydraulic system has cylinders on both sides of the door and is able to deploy door to 90 degrees from the closed position. The bow door will have an integrated ladder for diver re-entry, and flat tread areas for ATV deployment. Door has the ability to be latched in closed position. The boat can be safely operated at slow speeds with the bow door opened as a working platform.
3. Bow door includes D-rubber fendering on top exterior edge.
4. There will be a hydraulic bypass for manual door operation.
5. There will be an aluminum rub rail with swimmer's grab rails just above the waterline on port and starboard sides of vessel.
6. There is a tread plate gunnel of at least 5" fore to aft.
7. All decks are self-bailing and provide sufficient water egress.
8. There are sacrificial anodes attached to the hull for electrolysis protection.
9. Deck forward of the Pilot House accommodates the engine and pump unit.
10. There will be two lockable storage compartments, suitable for seating, provided on each side of the forward bow deck. (Cushions available at additional cost).
11. A 3/4" aluminum double pad eye will be incorporated into the keel.
12. 1 1/2" pipe safety railings are installed 6" above gunnel from dive doors, forward 72".



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13. Eight (8) 10" welded aluminum cleats.
14. Bottom plating 1/4" 5083 or 5086-H116
15. Side plating 3/16" 5083 or 5086-H32
16. Deck plating 1/8" 5052-H32 diamond tread plate.
17. Deck structure and component material are aluminum, they consist of 5083 or 5086 aluminum alloy with thicknesses of .190", .250", and .375", and are fully welded to the hull and all deck height transverse bulkheads and longitudinal girders to contribute to the strength of the hull. Floor is supported by 2x2 square tubing.
18. 3" Duramax D shaped rub rail along the full length of the boat at the gunnel height.
19. Three (3) 2000GPH automatic bilge pumps with automatic float switch. Two are located at the transom, and one at the forward end of the delta pad. All pumps are automatic as well as manually switched. All pumps are individually fused and switched for redundancy.
20. One (1) stainless steel threaded drain plug is provided.
21. ABYC approved carbon monoxide detector in cab.

C. WELDING:

1. The hull and superstructure are constructed of marine grade aluminum and MIG and TIG welded throughout.
2. All water seams are welded 100% on both sides.
3. Longitudinal structural members are stitch welded on opposite sides.

D. FUEL SYSTEM:

1. 150-gallon fuel tank.
2. Fuel tank is EPA compliant and meets all venting and overflow safety requirements.
3. Fuel sending units are connected to the NMEA network

E. TOWING EQUIPMENT:

1. There is a 2" double pipe motor guard with tow line guides.

F. PILOT HOUSE:

1. The walk-a-round Pilot House has width of 60 inches and an interior clearance height of 76".
2. Component material is all welded construction of 5086 aluminum alloy of 3/16" thickness.
3. The Pilot House is equipped with a forward leaning, tempered safety glass windshield with windshield wiper. Two sliding tempered safety glass clamped windows, one on each side and one clamped window on aft wall of house.



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4. There is a lockable sliding door with a tempered safety glass window on each side of the pilot house.
5. The dash console provides ample room for electronics, throttles, switches, and steering components.
6. Included is one Ritchie compass.
7. Includes two marine fire extinguishers with 10-BC rating.
8. There is an overhead console.
9. There is a grab rail alongside of the roof gutters on port and starboard sides.
10. There are 2 overhead grab rails running lengthwise in the Pilot House ceiling.
11. There is a grab rail near the console at the pump control station.
12. There are 2 grab rails on the exterior forward wall of the Pilot House.
13. There are 2 grab rails on the exterior aft wall of the Pilot House.
14. Four 12V red/white LED dome lights installed overhead inside of the cabin.
15. Padded helm seat box has storage below.
16. Two (2) stainless steel cabin ventilation fans provided.

G. ELECTRICAL SYSTEM:

1. The vessel's electrical system is 12VDC and 120VAC 60 Hz.
2. All electrical cable is marine grade tinned copper wire and labeled for each circuit.
3. Cables are routed in wire ways wherever possible. Cables are protected with chaffing protection wherever exposed to potential damage.
4. Electrical cables are sized in accordance with the American Boat & Yacht Council recommendations.
5. All electrical cables are marked in accordance with the markings in electrical drawings.
6. All electrical switches are of a heavy-duty type toggles properly insulated.
7. The DC negative and AC ground are connected to the hull framework
8. Wiring for radios, and all electronics are protected with circuit breakers. Two additional circuit breakers are provided for future expansion of the electrical system.
9. Electrical compartments are provided in the cabin to house the electrical power, circuit protection and control components. Serviceable components are accessible. Power, circuit protection and control components are protected against the following: corrosion, excessive heat, excessive vibration, water spray and EMI and RFI.
10. Mounting plates for antenna are on the roof.
11. Deluxe single motor heavy-duty wiper system with dual pantographic arms.
12. Two (2) 12-volt power outlets and two (2) USB charging ports are provided in the dash console.



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H. BATTERIES:

1. Four marine batteries are installed complete with battery switches.
2. There is a starting battery for each outboard motor, a starting battery for the pump motor and one dedicated house battery. A battery distribution panel, located on the console, includes a battery switch for each battery, crossover switches to allow jumping in case of a dead battery. All battery switches are located on lower panel of console.
3. Battery isolators or voltage sensing relays are used to charge the house bank via the outboard alternators
4. Batteries are installed in plastic battery trays and located in a dedicated mechanical space.
5. Battery status monitor provided.

I. 120V AC ELECTRICAL:

1. A 30-amp shore power system is installed to supply battery charger.
2. A three-bank battery charger is installed for use with the shore power system above.
3. There is an "Equipment Leakage Circuit Interrupter" ("ELCI") installed to guard against electrical shock to persons in the water adjacent to the vessel.

J. 12V DC ELECTRICAL:

1. A Blue Seas 6 position distribution panel is installed on the console.
2. Navigation lights are installed to meet USCG requirements with hinging anchor light mast.
3. Three 12V 2000 GPH bilge pumps are installed with automatic float switch.
4. Includes 2 Blue Seas 12v/USB charging ports.

K. PROPULSION:

1. Twin Four Stroke 200 HP outboard motors with stainless steel props are provided. Complete with a fuel management system, power trim and tilt and wiring harnesses.
2. Engine monitoring to be done through Multi-Function Display unit on dash.
3. Manual hydraulic steering system provided.

L. FIRE PUMP:

1. The fire pump is powered by an 8 cyl Marinized GM gasoline engine.
2. Pump end is a 1500 GPM for direct connection to engine flywheel.
3. Fire pump is rated at 1500 GPM at 150 psi at the pump.
4. The pump control station has a Pressure/RPM controller.



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5. There is a remote control 6" stainless shut off valve between the sea chest and pump with controls on the main console in the pilot house.
6. The dual wheel, manually controlled deck-mounted monitor is 1500 GPM with stacked tips and stream straightener.
7. The pump is configured with through-hull suction into a sea chest with a minimum of 6" intake. The sea chest has a screened inlet, and a valve at the sea chest outlet.
8. Winterization kit to bypass sea water intake installed so that anti-freeze can be introduced for storage.
9. Fresh water flushing port installed just ahead of sea chest valve.

M. PAINT AND GRAPHICS:

1. Deck area and interior of Pilot House are painted with Zolatone non-skid texture paint.

N. EMERGENCY LIGHTING, SIREN, AND WORK LIGHTS:

1. 22" emergency light bar, fully loaded with red LEDs.
2. Two Whelen Scene Lights mounted on Pilot House.
3. Strip lights in gunnels for walkway illumination.

O. TRAILER:

1. A custom aluminum tandem axle bunk trailer complete with electric brakes, spare tire, and tongue jack on trailer.
2. Galvanized steel wheels and electric disc brakes.
3. An adjustable bow stop and winch stand is provided with a manual 2-speed winch and strap.
4. Trailer LED lights are submersible.

Q. ELECTRONICS:

1. One (1) Garmin 12" TOUCH SCREEN with GPS, SONAR with SideVu and DownVu, CHART PLOTTING.
2. At additional cost Lake Assault can mount radios, mics and antennas with the mounting equipment supplied by the customer, run power wires to a fuse block and route antenna cabling. Radios should have a flush mount kit provided. All antenna mounts must be made to mount in a minimum material thickness of 1/8". Antenna connections and programming are the responsibility of the department and Lake Assault does not hold any liability to the functionality of used equipment after installation.