

GREAT LAKES SINGLEHANDED SOCIETY SOLO CHALLENGES 2023 EQUIPMENT LIST, REQUIRED AND RECOMMENDED

**An entrant shall carry the following equipment throughout the event,
and shall maintain it in serviceable condition:**

1. All United States Coast Guard required equipment for the size of yacht used in the Challenge
2. Federal required navigation lights per INLAND RULES standards.
3. Emergency navigation lights with an alternate power source.
4. At least one permanently installed manual bilge pump operable with all cockpit seats, hatches and companionways closed.
5. A system for self-steering the yacht on a compass course or by apparent wind only, to exceed the capabilities of lashing or locking a wheel or tiller.
6. A self-inflating life raft designed solely for emergency use which has been inspected, tested, and certified by an approved servicing agent within 40 months prior to the Challenge date. The inspection certificate must be presented prior to the Challenge. The life raft must be stowed so as to be readily accessible to the helmsman in an emergency. A self-inflating life raft is highly recommended; however, a skipper may substitute a survival suit that provides appropriate thermal protection and floatation for the requirement of a life raft provided that a Personal Locator Beacon with built in GPS positioning, 406 MHz signal, and 121.5 MHz homing capability, SPOT or the equivalent is also carried.
7. Multihulled yachts may substitute a survival suit meeting the minimum thermal protection and floatation capabilities of the Mustang MS 2175/6 "Anti-Exposure Coverall and Work suit" for the requirement of a life raft. The Survival Suit is to be stored to be accessible when boat inverted.
8. A floating, watertight bag or container containing self-selected survival equipment, to be kept readily accessible. Optional on multihulls due to required crashbox compartment and its contents. It is recommended that the ditch bag contain a handheld VHF radio and flares.
9. A VHF marine radio-telephone with at least channels 6, 9, 16, 22 and 72. This radio must be accessible and useable from the helm station, or in the alternative, a handheld VHF shall be stored to be accessible from the helm station. It is highly recommended that a DSC capable VHF radio is in use with proper GPS connection and MMSI registration to contact the Coast Guard in case of emergency.
10. A masthead mounted VHF radio antenna connected to the primary VHF marine radio. Radiating element must extend above the top of the main mast.
11. An emergency VHF antenna not dependent on the mast.
12. A handheld VHF Radio with a minimum 5 watt output whose primary use is for emergency situations.

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13. Pyrotechnic signals to be carried on all boats shall include the Coast Guard required minimum, 3 day/night flares. A minimum of 6 SOLAS flares, including a 3 Parachute Flares must be carried. In date SOLAS & flares can be used to meet the Coast Guard requirements. Flares must be kept in a readily accessible location. On multihulls, they are to be kept in the crashbox. Electronic Flares may be used IF they are approved by the Coast Guard covering the body of water on which the event is being held.
14. Properly secured port and starboard jacklines or other appropriate method allowing the skipper to travel fore and aft on deck while remaining secured to the yacht. Securing to the yacht's life-lines to meet this requirement will not be acceptable.
15. A Safety Harness, designed and constructed for offshore sailing, is to be worn and securely tethered to the jacklines or yacht at all times when out of the cabin. The tether shall be used as soon as practical after casting the yacht off the dock to start the Challenge until the yacht crosses the finish line and returns to the proximity of the dock. Such safety harness is to include a personal strobe light and whistle. This requirement may be waived should the Skipper wear a self-inflating life jacket with harness, a Personal location Beacon (PLB) registered with a current SART registration sticker and a DSC capable waterproof VHF radio at all times when out of the cabin.
16. A tether that has a snap hook at one end and a quick release shackle to be used at the harness end, and that can be released while under a heavy load. A dual tether with one tether no more than 3 feet in length and one tether no more than 6 feet in length is recommended
17. A system using arm and leg motive power for re-boarding the boat in a person overboard situation.
18. Radar reflector, to be flown at all times from the rigging.
19. Proper sail number on all sails larger than a working jib.
20. Suitable first aid kit and a first-aid manual.
21. Two complete sets of appropriate ground tackle for the size of the yacht being used in the Challenge
22. Bolt cutters and, hacksaw or other mechanical means of severing rigging from the boat (e.g., angle grinder).
23. Appropriate marine navigation charts, not solely electronic.
24. A Knife, in a sheath, or if folding, capable of being opened with one hand, attached to the skipper at all times.
25. Tapered wood plugs of assorted sizes shall be readily available to plug a thru-hull if a hose or valve should fail.
26. One sturdy bucket (two gallons minimum) with lanyard for bailing.
27. A spotlight capable of illuminating sail numbers at night. It is recommended that it be at least 1,000 lumens in power

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28. A boat shall have a mechanical propulsion system that is permanently installed or mounted in an immediately deployable position and capable of driving the boat upwind with positive progress in Force 5 (Beaufort Wind Scale) wind conditions (sustained 17 to 21 knots) without sails for ten (10) hours. Installation of the boat's engine must conform to ISO and/or U.S. Coast Guard or Canadian Coast Guard standards. **(This was recommended in 2021 but is now REQUIRED)**

29. AIS is **MANDATORY** for 2023 in the Super Mac and Super Mac and Back courses as of 2023, except for solo sailors who have already completed at least twenty (20) GLSS Solo Challenges.

Additional multihull requirements:

1. A through hull "crash box" compartment or, as an alternative, a watertight container attached to the boat, external to the hull. Either choice to be accessible at all times, including when the boat is inverted, containing:
 - a) Handheld VHF radio
 - b) All required flares
 - c) Cutting tools
 - d) GPS enabled EPIRB
2. A through hull "crash box" compartment or, as an alternative, a watertight container attached to the boat, external to the hull. Either choice to be accessible at all times, including when the boat is inverted, containing:
 - e) Handheld VHF radio
 - f) All required flares
 - g) Cutting tools
 - GPS enabled EPIRB

Recommended but not Required Equipment:

1. Port and Starboard jacklines rigged *externally* of the lifelines, running from bow to stern, so as to allow the Skipper unimpeded travel along the length of the vessel to reach a re-boarding area.
2. Jacklines or clip points inside the cockpit to allow the Skipper to remain attached to the yacht when entering or leaving the companionway.
3. Lacing installed between the toe-rail and upper lifeline to prevent a person or gear from falling overboard between the lifelines.
4. A PLB (personal locator beacon) worn at all times when on deck and/or a 406MHz GPS enabled EPIRB

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5. AIS transponder identifying the yacht's position, course and speed to other craft will remain RECOMMENDED for 2023 for boats finishing at Mackinac Island. AIS is **MANDATORY** for 2023 in the Super Mac and Super Mac and Back courses as of 2023, except for solo sailors who have already completed at least 20 GLSS Solo Challenges. **AIS will become MANDATORY for 2024, except for solo sailors who have completed at least 20 GLSS Solo Challenges**
6. It is recommended that all entrants have completed a US Sailing Safety at Sea course or its equivalent.
7. It is recommended that all entrants carry a Life Sling or comparable device.

Tracking

A SPOT or other Messaging and Tracking device using satellite communications capable of sending a manual "OK" signal and set to a ping rate of no less than every 30 minutes is being phased in as of 2023

For New Participants this is **MANDATORY** as of 2023

For Existing GLSS members this is highly recommended for the Solo Mac courses ending at Mackinac Island and will be MANDATORY in 2024.

This is **MANDATORY** for all Super Mac and Super Mac and Back courses. Note: These devices must be registered with proper contact information to be useful and a contact shall be provided for all events.

I certify that I have aboard in operable condition all of the GLSS Required Equipment listed above, that my vessel is seaworthy, that I am 18 years of age or older and competent, and that I have taken all necessary steps to ensure that my entered boat and I are adequately prepared, including appropriate safety equipment as may be required by law or that a prudent seaman would consider advisable.

GLSS Events: **2023 Port Huron and Chicago Solo Mackinac Challenges**

Print Name: _____ Course: _____

Signature: _____ Date: _____