### Changes to the SERs

<table>
<thead>
<tr>
<th>Date</th>
<th>Section</th>
<th>Type</th>
<th>Original text</th>
<th>Revised text</th>
<th>Rationale</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-Feb-14</td>
<td>3.17</td>
<td>Minor</td>
<td>A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self-draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.</td>
<td>A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self-draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.</td>
<td>Added ISO 9650-1, which is the correct specification.</td>
<td>Passed in 2014.</td>
</tr>
<tr>
<td>12-Feb-14</td>
<td>3.18</td>
<td>Minor</td>
<td>A boat shall carry navigation lights that meet U.S. Coast Guard requirements mounted so that they will not be obscured by the sails nor be located below deck level.</td>
<td>A boat racing between sunset and sunrise shall carry navigation lights that meet U.S. Coast Guard requirements mounted so that they will not be obscured by the sails nor be located below deck level.</td>
<td>Clarifies that all boats racing at night, including those in Nearshore races, must display navigation lights.</td>
<td>Passed in 2014.</td>
</tr>
<tr>
<td>12-Feb-14</td>
<td>3.3.1</td>
<td>Minor</td>
<td>A boat shall have a second set of navigation lights that comply with U.S. Coast Guard requirements and which can be connected to a different power source than the primary lights.</td>
<td>A boat shall have a second set of navigation lights that comply with U.S. Coast Guard requirements and which can be connected to a different power source than the primary lights.</td>
<td>Originally, this was going to be an addendum to 3.2.1. However, it was broken out so it could be filtered for races that do not include multihulls. For Ocean and Coastal only.</td>
<td>Passed, SASC meeting</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>2.4.9</td>
<td>New</td>
<td>None.</td>
<td>A boat over 30' LOA (9.14m) shall have a means to prevent the boom from dropping if support from the mainsail or halyard fails.</td>
<td>A boat over 30' LOA (9.14m) shall have a means to prevent the boom from dropping if support from the mainsail or halyard fails.</td>
<td>Changed to only require boom support in boats over 30' in length. NCORC request. Also added metric LOA equivalent.</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>3.2.2</td>
<td>New</td>
<td>None.</td>
<td>A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in such a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self-draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.</td>
<td>A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing the entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in such a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self-draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.</td>
<td>Minor grammatical change to improve comprehension.</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>3.3.2</td>
<td>New</td>
<td>None.</td>
<td>A boat shall have a second set of navigation lights that comply with U.S. Coast Guard requirements and which can be connected to a different power source than the primary lights.</td>
<td>A boat shall have a second set of navigation lights that comply with U.S. Coast Guard requirements and which can be connected to a different power source than the primary lights.</td>
<td>NCORC request: removes requirement for second set of navigation lights for Coastal category.</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>3.36</td>
<td>Edit</td>
<td>A boat shall carry a Class B transponder with a masthead mounted antenna of at least 15° (381mm) in length. The AIS can use the boat's VHF antenna if a low loss AIS antenna splitter is used.</td>
<td>A boat shall carry adequate inflatable life raft(s) designed for saving life at sea with designed capacity for containing entire crew. The raft shall be SOLAS, ISAF, ISO 9650-1, or ORC approved. The raft shall be stored in such a way that it is capable of being launched within 15 seconds. The life raft shall hold a current certificate of inspection. Boats built after 01/06/2001 shall have the life raft stowed in a deck mounted rigid container or stowed in watertight or self-draining purpose built rigid compartment(s) opening adjacent to the cockpit of the working deck.</td>
<td>The ability for boats built prior to 1/6/2001 to store their life rafts below decks.</td>
<td>Passed, SASC meeting</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>3.39</td>
<td>Edit</td>
<td>A boat shall carry a Class B transponder with a masthead mounted antenna of at least 15° (381mm) in length. The AIS can use the boat's VHF antenna if a low loss AIS antenna splitter is used.</td>
<td>A boat shall carry a Class B transponder with a masthead mounted antenna of at least 15° (381mm) in length. The AIS can use the boat's VHF antenna if a low loss AIS antenna splitter is used.</td>
<td>NCORC recommended simplification for Coastal Category. 1. Split 4.1 into 4.1.1 and 4.1.2. 2. Added new language for Coastal. 3. Removed x for 4.1.1 for Coastal.</td>
<td>Passed, SASC meeting</td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>3.9</td>
<td>Edit</td>
<td>A boat's crew shall be aware of multiple methods of steering the boat with the rudder disabled, and shall have chosen and practiced one method of steering the boat with the rudder disabled and be prepared to demonstrate said method of steering both upwind and downwind.</td>
<td>A boat's crew shall be aware of multiple methods of steering the boat with the rudder disabled, and shall have chosen and practiced one method of steering the boat with the rudder disabled and be prepared to demonstrate said method of steering both upwind and downwind.</td>
<td>NCORC recommended simplification for Coastal Category. 1. Split 4.1 into 4.1.1 and 4.1.2. 2. Added new language for Coastal. 3. Removed x for 4.1.1 for Coastal.</td>
<td>Passed, SASC meeting</td>
</tr>
<tr>
<td>Date</td>
<td>Section</td>
<td>Action</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>4.3.2</td>
<td>Edit</td>
<td>The Minimum Equipment Requirements establish uniform minimum equipment and training standards for a variety of boats racing in differing conditions. These regulations do not replace, but rather supplement, the requirements of the US Coast Guard, the Racing Rules of Sailing (RRS), the rules of Class Associations and all applicable rating rules.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>1.1</td>
<td>Edit</td>
<td>A boat may be inspected at any time by an inspector or measurer of the Organizing Authority. If she does not comply with these regulations her entry may be rejected, or will be liable to disqualification, or such other penalty as may be prescribed by the race protest committee.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>1.3</td>
<td>Edit</td>
<td>All equipment required shall function properly, be regularly checked, cleaned and serviced, and be of a type, size and capacity suitable for the intended use and size of the boat and the size of the crew, who will have practiced with the use of equipment. This equipment shall be readily accessible while underway and, when not in use, stored in such a way that deterioration is minimized.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>1.4</td>
<td>Edit</td>
<td>Each crewmember shall have a life jacket that provides at least 33.7lbs (150N) of buoyancy, intended to be worn over the shoulders (no belt pack), meeting either U.S. Coast Guard or ISO specifications. Life jackets shall be equipped with crotch or leg straps, a whistle, a waterproof light, be fitted with marine-grade retro-reflective material, and be clearly marked with the boat’s or wearer’s name, and be compatible with the wearer’s safety harness. If the life jacket is inflatable, it shall be regularly checked for air retention. Lifeline deflection shall not exceed the following: a) when a deflecting force of 9 lbs (40N) is applied to a lifeline midway between supports of an upper or single life jacket “type”. b) If the device carried under 3.7.1 satisfies this requirement, then no additional device is needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>2.3.4</td>
<td>Edit</td>
<td>A boat shall have an installed water tank and delivery system. Vessels shall carry water as required by the Notice of Race such that a single failure of a tank or delivery system will not allow the loss of more than half the water.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-15</td>
<td>2.4.1</td>
<td>New</td>
<td>At least 30% of those aboard the boat, but not fewer than two members of the crew, unless racing single handed, including the person in charge, shall have attended a half-day, one-day, or two-day US Sailing Safety at Sea Seminar within the last 5 years, or other courses as accepted by US Sailing (required after 01/01/2015).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Jan-16</td>
<td>3.4.1</td>
<td>New</td>
<td>Lifejacket deflection shall not exceed the following: a) When a deflecting force of 9 lbs (40N) is applied to a line midway between supports of an upper or single lifejacket, the lifeline shall not deflect more than 2° (50mm). This measurement shall be taken at the widest span between supports that are aft of the mast. b) When a deflecting force of 9 lbs (40N) is applied midway between supports of an intermediate lifeline of all spans that are aft of the mast, deflection shall not exceed 5° (120mm) from a straight line between the stanchions.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Passed, SASC meeting
- Added other national boating regulatory groups in addition to USCG; part of our effort to make the SERs apply internationally.
- Removed "and" which may have been interpreted to mean that several standards needed to be met.
- Updates the use of a Type I to correspond with Coast Guard life jacket change which removes references to life jacket "types". Removed reference to "Type IV" which was eliminated by the Coast Guard in September, 2014.
- Updates the use of a Type III or Type V to correspond with the Coast Guard life jacket change which removes references to life jacket "types".
### 2.4.5
The maximum spacing between the bases of lifeline supports (e.g. stanchions and pulpits) shall be 87" (2.2m).

**Align with OSR’s for stanchion spacing**

**Added 1/1/2016.**

---

### 3.1.1
Each crewmember shall have a life jacket that provides at least 33.7lbs (150N) of buoyancy, intended to be worn over the shoulders (no belt pack), meeting either U.S. Coast Guard or ISO specifications. Life jackets shall be equipped with crotch or leg straps, a whistle, a waterproof light, be fitted with marine-grade retro-reflective material, and be clearly marked with the boat's or wearer's name, and be compatible with the wearer's safety harness. If the life jacket is inflatable, it shall be regularly checked for air retention. Alternatively, each crewmember shall have a U.S. Coast Guard approved inherently buoyant off-shore life jacket equipped with crotch or leg straps, a whistle, a waterproof light, retro-reflective material, marked with the boat or owner's name, which is compatible with a safety harness.

**Reworded and split between 3.1.1 and 3.1.2 in an attempt to make it easier to read.**

**Added 1/1/2016.**

---

### 3.1.2
Each crewmember shall have a life jacket intended for small boat sailing or other active boating for each crewmember or an inflatable life jacket as described in 3.1.1.

**Need to recognize an ISO or other national standard for sailing life jackets.**

**Added 1/1/2016.**

---

### 3.1.3
Each crewmember shall have a safety harness and compatible safety tether not more than 7’ (2.13m) long with a minimum tensile strength of 4500 lbs. (20kN). The tether shall have a snap hook at its far end and a means to quickly disconnect the tether at the chest end.

**Added 1/1/2016.**

---

### 3.1.4
A boat racing between sunset and sunrise shall carry navigation lights that meet U.S. Coast Guard requirements mounted so that they will not be obscured by the sails nor be located below deck level.

**Internationalization**

**Added 1/1/2016.**

---

### 3.3.1,3.3.2
A boat shall carry fire extinguisher(s) that meets U.S. Coast Guard or applicable government requirements, when applicable.

**Internationalization**

**Added 1/1/2016.**

---

### 3.4,3.5
A boat shall carry U.S. Coast Guard fluoros meeting day-night requirements not older than the expiration date.

**Internationalization**

**Added 1/1/2016.**

---

### 3.7.4
A boat shall carry a Coast Guard approved Type IV "throwable device". If the device carried under 3.7.1 or 3.7.2 satisfies this requirement, then no additional device is needed.

**Internationalization**

**Added 1/1/2016.**

---

### 3.10
A boat shall carry a cellular phone in a waterproof container.

**Removed since advisory only**

**Added 1/1/2016.**

---

### 3.11
A boat shall carry a satellite telephone in a waterproof container.

**Removed since advisory only**

**Added 1/1/2016.**

---

### 3.12
A boat shall carry man overboard alarms for each crewmember based on AIS or other method.

**Removed since advisory only**

**Added 1/1/2016.**

---

### 3.38
A boat shall carry adequate food, energy bars, and snacks to maintain crew stamina as described in the Notice of Race.

**Removed since advisory only**

**Added 1/1/2016.**

---

### 2.4.1
A boat's stanchion and pulpits bases shall be within the working deck. Stanchions used with HMPE shall have rounded openings to reduce chafe.

**Revision to 2014 version which was correct. This was an unintentional error.**

**Added 6/6/2016.**

**New version 2016.1.**

---

### 2.4.2
A boat's stanchion and pulpits bases shall be within the working deck. Stanchions used with HMPE shall have rounded openings to reduce chafe.

**Revision to 2014 version which was correct. This was an unintentional error.**

**Added 6/6/2016.**

**New version 2016.1.**

---

### 2.4.2
A boat's stanchion and pulpits bases shall be within the working deck. Stanchions used with HMPE shall have rounded openings to reduce chafe.

**With HMPE removed as acceptable lifetime material in 2.4.4 HMPE reference is removed.**

**Passed in 2016**
1. Jan 17 2.4.4 Edit

Lifelines may be either uncoated stainless steel wire or high molecular weight polyethylene (HMPE) line with spliced terminations or terminals specifically intended for the purpose. A multipart-lashing segment not to exceed 4" per end termination for the purpose of attaching lifelines to pulps is allowed. Lifelines shall be taut (see appendix for requirements). When HMPE is used, the load-bearing portion (core) shall meet or exceed minimum diameter requirements.

1. Jan 17 3.28

A boat shall carry six SOLAS red parachute flares not older than the expiration date. The requirement for SOLAS parachute flares has been removed. Requirement for parachute flares removed to be in line with ISAF OSR's. Note that requirement is removed added so that SER at least matches USCG requirement in total number of nighttime flares. Third hand flare added so that SER at least matches USCG requirements in night flare count. Passed in 2016

1. Jan 17 3.6.2 Edit

A boat shall have a watertight handheld VHF radio or a handheld VHF radio with waterproof cover. This radio shall have DSC/GPS capability. In order for the required DSC/GPS handheld to function properly it must have an MMSI number programmed in to it that is related to the vessel. Passed in 2016

1. Jan 17 3.8.2 Edit

A boat shall have a watertight handheld VHF radio or a handheld VHF radio with waterproof cover. This radio shall have DSC/GPS capability with an MMSI number properly registered to the vessel. It was felt that the requirement of a DSC hand held for the nearshore venue was excessive and Nearshore was split off from Ocean and Coastal for this requirement and renumbered Added 12/2017

1. Jan 18 3.8.3 Edit

A boat shall post a durable, waterproof diagram or chart locating the principal items of safety equipment and through hulls in the main accommodation area where it can be easily seen. As required in 1.2 above the person in charge shall ensure that all crew members know where all emergency equipment is located and how to operate the equipment. In addition, the person in charge and crew should discuss how to handle various emergency situations including Crew Overboard, Grounding, Loss of steering, Flooding, Fire, Dismasting, and Abandon Ship. World Sailing added an item on discussing abandoning the vessel. We added training and other discussion topics. Added 12/2017

1. Jan 18 4.4 New none

A boat shall post a durable, waterproof diagram or chart locating the principal items of safety equipment and through hulls in the main accommodation area where it can be easily seen. Should there be an incident during a race the Organizing Authority or US Sailing may conduct an investigation to determine the facts of the incident and provide recommendations. By participating in a race conducted under the SER, the person in charge, each competitor and boat owner agrees to reasonably cooperate with the organizing authority and US Sailing in the development of an independent incident report. Investigations of incidents help us determine if our requirements are working and to decide ways to improve them. There have been incidents where witnesses or evidence were not available to those conducting an investigation making the investigation less useful. This is intended to set an expectation of cooperation by the racers Added 12/2017

1. Jan 19 3.28 Edit

A boat shall carry a trysail, with the boat's sail number displayed on both sides, which can be set independently of the main boom, has an area less than 17.5% of E x P, and which is capable of being attached to the mast. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material. A mainsail with a reef of at least 50% of P is an acceptable substitute for a trysail. Added mainsail with 50% reef of P as alternative to trysail Added 12/2017

1. Jan 20 1.2.1 New none

All boats shall have an AIS Transponder, sharing a masthead VHF antenna via a low loss AIS antenna splitter. An acceptable alternative is a dedicated AIS antenna that is a minimum of 0.9 meters long, mounted with its base at least 3 meters above the water, and fed with coax that has a maximum 40% power loss. AIS requirement for Coastal is effective January 1, 2024. All boats shall have an AIS Transponder, sharing a masthead VHF antenna via a low loss AIS antenna splitter. An acceptable alternative is a dedicated AIS antenna that is a minimum of 0.9 meters long, mounted with its base at least 3 meters above the water, and fed with coax that has a maximum 40% power loss. AIS requirement for Coastal is effective January 1, 2024. Already a requirement in Ocean venue, added to Coastal venue Added 12/2017

1. Jan 20 3.9 edit

A boat shall carry a trysail, with the boat's sail number displayed on both sides, which can be set independently of the main boom, has an area less than 17.5% of E x P, and which is capable of being attached to the mast. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material. A mainsail with a reef of at least 50% of P is an acceptable substitute for a trysail. Already a requirement in Ocean venue, added to Coastal venue Added 12/2019

1. Jan 20 3.33.2 edit

A boat shall carry a trysail, with the boat's sail number displayed on both sides, which can be set independently of the main boom, has an area less than 17.5% of E x P, and which is capable of being attached to the mast. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material. A mainsail with a reef of at least 50% of P is an acceptable substitute for a trysail. Added mainsail with 50% reef of P as alternative to trysail Added 12/2019

1. Jan 20 3.6 edit

A boat shall carry a trysail, with the boat's sail number displayed on both sides, which can be set independently of the main boom, has an area less than 17.5% of E x P, and which is capable of being attached to the mast. Storm sails manufactured after 01/01/2014 shall be constructed from a highly visible material. A mainsail with a reef of at least 50% of P is an acceptable substitute for a trysail. Correct order and numbering of section Items in 3.6 were out of order Added 12/2019
<table>
<thead>
<tr>
<th>Date</th>
<th>Section</th>
<th>Change</th>
<th>Added/Modified</th>
<th>Text</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Jan-20</td>
<td>4.6</td>
<td>New</td>
<td>12/2019</td>
<td>Lifejackets as described in 3.1.1 – 3.1.3 should be worn by all crew on deck in any conditions where recovery may be difficult. It is recommended that lifejackets be worn by all crew on deck unless the person in charge has indicated that they may be set aside.</td>
<td>Makes the recommendation for PFD use while racing</td>
</tr>
<tr>
<td>8-Feb-21</td>
<td>4.3.1</td>
<td>EDIT</td>
<td>2/9/21</td>
<td>At least 30% of those aboard the boat, but not fewer than two members of the crew, unless racing single-handed, including the person in charge, shall have attended a one-day or two-day US Sailing Safety at Sea Seminar within the last 5 years, including online courses when available, or other courses as accepted by US Sailing or other national authority.</td>
<td>Changed 5 year SAS expiration to &quot;valid&quot; due to lack of in person training under Covid-19 restrictions.</td>
</tr>
<tr>
<td>8-Feb-21</td>
<td>4.3.2</td>
<td>EDIT</td>
<td>2/9/21</td>
<td>At least 30% of those aboard the boat, but not fewer than two members of the crew, unless racing single-handed, including the person in charge, shall have attended a half-day, one-day, or two-day US Sailing Safety at Sea Seminar within the last 5 years, including online courses when available, or other courses as accepted by US Sailing or other national authority.</td>
<td>Changed 5 year SAS expiration to &quot;valid&quot; due to lack of in person training under Covid-19 restrictions.</td>
</tr>
</tbody>
</table>