Marine Safety Signals: Tips and Instructions

The principles of signaling.

The first purpose of distress signaling is to attract attention. And second, to provide a homing signal to guide the responding party to your boat. Remember, nothing can happen until someone's attention is attracted.

The most effective distress signals for attracting attention are Orion® aerial flares and parachute flares because they are moving, spectacular, and cover a large sighting area.

Once help is on the way, hand-held red signal flares, orange smoke signals and orange distress flags serve as beacons to help rescuers pinpoint your position and keep them on course.

[Please see this guide for a better understanding of when to use LOCATE vs ALERT signals.](#)

What are the four main rules of signaling?

   1. Conserve your aerial signals until you are reasonably sure of being sighted. Wait until you see or hear a vessel or aircraft before using "one-time" signals.

   2. Stay with your boat if it is safe to do so. A boat is easier to spot than a swimmer!

   3. Using U.S. Coast Guard approved marine signals such as Orion products will improve your chances, but anything that works is worth trying. USE COMMON SENSE! Shout, flash your running lights, wave a piece of clothing, use your windshield as a mirror, flash a flashlight … or ANYTHING ELSE that's available to attract attention. Above all, DON'T PANIC!

   4. Familiarize yourself with your signals before you leave shore. Time is important in any emergency and shouldn't be spent reading instructions.

Using aerial signals.

Aerial flares should be fired after sighting or hearing a potential rescue vessel. To attract attention to your distress situation, the U.S. Coast Guard recommends that you fire two aerial flares – one immediately after the other – so rescuers can confirm the sighting and the direction of the signal.

Parachute flares do not need to be fired in two's, since a single parachute flare has an adequate burn time (25 to 30 seconds) to confirm sighting and position.

Using hand-held signal flares.

Orion hand-held signal flares are intended as homing signals to pinpoint your position. The surface-to-surface sighting range on water is approximately 3 to 5 miles, depending on boat elevation. If a rescuer is 5 miles away and running at 20 miles per hour, it will take 15 minutes to reach you. Therefore, you should have at least 12 minutes (total burn time) of signals onboard to maintain a strong homing signal until help arrives.

When should I signal?

Orion aerial flares and other "one-time" signals should be fired only after sighting or hearing a potential rescuer. Experts recommend that once an aircraft has been sighted, one flare should be fired … then a second flare fired immediately after the first one to let search teams confirm the sighting and direction of the signal.

Remember, search and rescue missions often establish grid search patterns, which means you may see the same aircraft two or three times coming from different directions. Do not waste aerial flares if the aircraft has initially passed by you. Carrying extra pyrotechnic signals onboard will improve your chances of being sighted.

What are USCG requirements for visual distress signals?

Visual distress signals must be carried on all boats that are operated on the high seas, coastal waters (including the Great Lakes), the territorial seas, and all waters directly connected to the Great Lakes or the territorial seas up to a point where the waters are less than two miles wide. For more information on USCG requirements, click on the links below:

- [Coast Guard visual distress signal requirements FAQs](#)
- [USCG signal requirements](#)
- [Selection Guide](#)
- [Disposal and replacement](#)

- [USCG Auxiliary Seal of Safety checklist](#)
- [Guide to other Federally required safety equipment](#)