

## FLARES

### TYPES OF FLARES:

Generally there are two types of flares:

- 1) Collision Avoidance Flares: Designed to warn other vessels of your position. These flares give a white light.
- 2) Distress Flares: To be used when there is “grave and imminent danger to life and/or to the vessel”.

We will go into more detail later in this article about each.

### HOW TO USE:

Never look directly at a flare when it is lit.

Make sure your crew know how to use them before an emergency arises

Always use heavy duty workmen style gloves for pyrotechnic flares and hold the flare firmly and over the side of the boat.

Always make sure the wind is behind you for pyrotechnic flares

When the pyrotechnic flare has finished drop the used flare canister into water – never directly onto the boat.

### STOWAGE OF PYROTECHNIC FLARES:

Keep in a dry place – you can purchase containers especially for flares

Store them in an easily accessible place, and make sure your crew know where they are located.

Storage life – most flares have a shelf life of 3 years. The expiry date is marked on the flare.



### DISPOSAL OF PYROTECHNIC FLARES:

This is getting increasingly more difficult to do. The best option is to call your nearest coastguard and ask their advice. If you are in a foreign port check with the marina you are in.

DO NOT let them off, put in your household refuse or throw overboard.

### WHAT FLARES DO YOU NEED:

This depends on how far you sail offshore. It is recommended that if you sail...

**Inshore waters** (i.e. up to 5 miles from land) you should have:

2 red hand held

2 orange smoke hand held

**Coastal waters** (i.e. up to 7 miles from land) you should have:

2 red hand held

2 orange smoke hand held

2 red parachute

**Offshore waters** (i.e. over 7 miles from land) you should have:

6 red hand held

2 buoyant orange smoke

4 parachute

## **DISTRESS FLARES**

Distress flares have 2 functions, one to notify others that you are in distress and the second is to pin point your position to the rescuer. There are three main types of distress flares:

### ***RED HANDHELD***

Visibility: Approximately 7 miles on a clear night

Candelas: Approximately 15,000

Burn: Approximately 60 seconds

Use: Raise the alarm when close to land or in sight of other vessels and/or to pin point your position.

How to use: Check your flares as the firing mechanism is not standard, but all should be held overboard and downwind and tilted away from the operator.



### ***SMOKE***

Types: There are two types, handheld or buoyant.

Visibility: Approximately 3 miles in daylight

Burn: Hand held approximately 50 seconds, buoyant about 3 minutes

Use: Raise the alarm when close to land or in sight of other vessels and/or to pin point your position. They are particularly good for air rescues as they help indicate the surface wind direction.

How to use: Do NOT use at night (you cannot see smoke at night!)

The handheld version you use as you would the red hand held. The buoyant type you activate it and throw it overboard to the leeward side of the vessel, but in line of sight of your rescuer.



### ***ORANGE***



### ***PARACHUTE***

Visibility: Approximately 28 miles on a clear night

Height: Approximately 300 metres.

Candelas: Approximately 30,000

Burn: Approximately 40 seconds

Use: Raise the alarm when offshore or out of sight of other vessels.

How to use: Again check your flares as the firing mechanism is not standard, but all should be fired downwind (the rockets will tend to turn into the wind) at an angle of approximately 15° from the vertical. In low cloud you should increase the angle to 45° to reduce the height (rises to approximately 200 metres) and therefore, hopefully, stay under the cloud cover.



Beware of the recoil, the case will almost certainly slip through your hands, make sure you miss the sails and that the other end (end opposite where the flare is released) is also not pointed at you.

You should fire a second parachute flare two minutes after the first – this allows a rescuer to take a bearing of your position.

### ***LED FLARES (have replaced the laser flares)***

New to the market, they are designed to eventually replace the red handheld flare. They are also known as eVDS (electronic Visual Distress Signal)

Visibility: Approximately 3 miles on a clear night, and it produces an intensive light though out a full 360°

Burn: Approximately 6 hours on one set of batteries (which can be replaced), via a light head with contains 21 light emitting diodes flashing in a programmed sequence which imitates the flickering of a pyrotechnic flare. This is interrupted at intervals with the SOS (...----...) pattern

Use: Raise the alarm when close to land or in sight of other vessels and/or to pin point your position.

How to use: Hold above eye level, and as for pyrotechnic flares, do not look at the light when in use. To operate you just need to twist the base of the flare.

Benefit: No heat, no flames, no explosive compounds, robust and waterproof. They also have a shelf life of 14 years (with battery changes required)

Disadvantage: They require batteries, you need to ensure the batteries are in good condition and always carry a spare set.

They are not accepted by SOLAS (Safety of Life at Sea) regulations yet and therefore cannot be used on coded or commercial vessels as not recognised as an official distress signal.



### **WHITE ANTICOLLISION FLARES**

#### **NOTE THIS IS NOT A DISTRESS FLARE.**

Visibility: Approximately 3 miles on a clear night

Candelas: Approximately .....

Burn: Approximately 40 seconds

Use: To attract another vessels attention to warn them that you may be on a potential collision course when the vessel does not seem to be taking appropriate avoiding action. Another use for the white flare is to illuminate a man overboard at night, much better than a spotlight as not uni-directional.

How to use: Again check your flares as the firing mechanism is not standard, but all should be held overboard and downwind and tilted away from the operator. It is advisable after using a white anti-collision flare to call the nearest coastguard and report the use just in case it is mistaken for a distress flare.

