

# Forms of communications/Signalling when on the sea

Over the past few years, the options for communicating and signalling have changed for many of us that venture out onto the sea. This short article is to provide some thoughts and to raise awareness about what we may carry.

Throughout this article, we will provide an overview of what can be carried, advantages, as well as limitations to support your decision making.

## Personal Location Beacons (PLB)

PLB's have become more popular over the past five years with many sea paddlers. In the past, we have adopted these for when in remote settings, but now it is carried as standard on every sea trip.

A PLB is a personal electronic transmitter used to alert rescuers that there has been a life-threatening situation with a need for assistance. When activated, the PLB sends out a signal on either a 406MHz frequency or Local Area System using 121.5MHz, and VHF DSC. PLBs range from £240 - £380 to purchase.



A PLB is registered to a person rather than to a vessel and is manually activated. Due to a shorter battery life of approximately 24 hours, this means the signal will cease transmission after this time. It is important to remember to keep this charged.

An advantage of the PLB over pyrotechnic flares is that you are able to fly with it for overseas trips and is a great piece of kit for the solo paddler and groups paddling offshore or in remote environments.

## Very High Frequency Radio (VHF)

A Marine VHF radio is a system used to communicate from craft-to-craft, craft-to-shore and in certain circumstances craft-to-aircraft. It uses FM channels on the very high frequency (VHF) radio band in the frequency range between 156 and 174 MHz.

An advantage of a VHF radio is that if you are speaking for 10 seconds, the Coast Guard is able to fix your position, even if you are not sure exactly where you are.



A radio and operator's licence is required to use a handheld VHF radio.

There are many VHF radios on the market, but a handheld, waterproof and floating VHF would be a good start. Some VHF radios also have a Digital Selective Calling which are slightly more expensive than the standard VHF. However, they have a dedicated distress button, with a built in GPS, meaning that once pressed, an automated mayday alerts the Coast Guard and other vessels. Hand held VHF radios range from £80 - £340.

## Electric Flare

Electronic Visual Distress Signals (EVDS) are hand-held non-pyrotechnic devices that are being offered as alternatives to pyrotechnic flares.

Many paddlers now buy EVDS as an alternative to handheld pyrotechnic flares because of cost. These range between £80 - £120, EVDs are also chosen because of safety, ease of testing and disposal. The electric LED flare can last up to six hours and can be used time and time again.

LED distress flares are also significantly safer and easier to store. They are easier to dispose of compared to traditional pyrotechnics. As the flares are battery powered, they need to be charged and checked regularly. In combination with other communication devices, an electric flare can be used as a locating device particularly for the 'final mile'.



## Pyrotechnic flares

For years, these flares have been the go-to means of attracting attention. Red, smoke and collision flares are all available. They can be purchased as a single item or a pack. All pyrotechnic flares have a shelf life of 3 years from the date of manufacture and disposal of these flares can be problematic.

There is no way of checking that they work, unless you set them off and they are a one-off use. They are a widely recognised signal which can be used to indicate that you are in distress and need assistance.

Cost ranges from £10 for a single flare to £90 for packs.



## Mobile Phone

Mobile phones can be used to call for assistance when things start to go wrong, or if you want to inform your land-based contact that you are running late.

Important considerations are to have numbers saved in your contacts and to ensure the device is carried in a waterproof case. There have been occasions when the user is not able to use their phone through the case, so it is really important that this is practised. Some mobile phones have shortcuts to make an emergency call when locked. We would encourage everyone to find out the functions of their phone.



Mobile phones are expensive so it is worth investing in an appropriate and robust waterproof case.

Speaking with Kevin Mansell, a highly experienced sea paddler and the Chair of the British Canoeing Sea Technical Group, he said that although there are many variables to take into account, depending upon the level of sea paddling and the area in which you are operating, he would opt for the following in order of preference:

1. VHF
2. PLB
3. Mobile phone
4. Electronic flare

In summary it is important to consider what devices are carried depending on the paddling that you are undertaking as well as the environment that is being paddled.