



Lifeboats

'It saved our lives, no doubt about it. If it wasn't for MOB Guardian, nobody would have known where we were.'

David McMurdo – fishing vessel Guyona

MOB Guardian

ALL YOU NEED TO KNOW

mcmurdo

SURVIVAL AT SEA JUST GOT EASIER



As a lifesaving organisation, the RNLI is firmly committed to improving safety within the fishing industry, primarily by providing free safety advice. However, fishing deaths remain, on average, the same year-on-year, despite a wealth of mandatory safety equipment and training courses available to UK fishermen. To challenge this tragic statistic the RNLI decided to develop an automated safety system designed primarily around the needs of fishermen.

Fishing is the most hazardous industry in the world. In the last 10 years approximately 200 fishermen have lost their lives in UK and Irish waters. 90% of these fatalities were caused by man overboard, capsize, major leaks/flooding or when a boat was reported overdue, often many hours after the incident occurred. Whatever the cause of an incident the result was normally the same – the crew ended up in the sea. In UK and Irish waters the risk is increased dramatically because the low temperature of the sea increases the risk of drowning by cold-water shock.

MOB Guardian is a 21st century safety system designed to help keep fishermen safer at sea by alerting the emergency services more quickly and accurately than is normally possible.

Benefits

- Regular confidential position reporting to the RNLI
- Automatic shore-based alarm if the boat sinks
- Automatic MOB alert to SAR agencies with GPS position within 3 minutes
- Manual alert to SAR agencies for onboard emergencies
- Operates worldwide



For more information call 01202 663142
or email mob_guardian@rnli.org.uk

STEP-BY-STEP GUIDE TO MOB GUARDIAN



STEP ONE

MOB Guardian Personal Safety Device, worn whilst working on deck, is constantly in radio contact with the base unit.



STEP TWO

Falling overboard breaks the radio link and automatically triggers an onboard alarm, simultaneously sending a signal to the search and rescue agencies.



STEP THREE

An alarm is activated onshore with the position and details of the casualty, typically within 2 to 3 minutes of the person going overboard.



STEP FOUR

This enables the emergency services to initiate a search and rescue operation immediately.

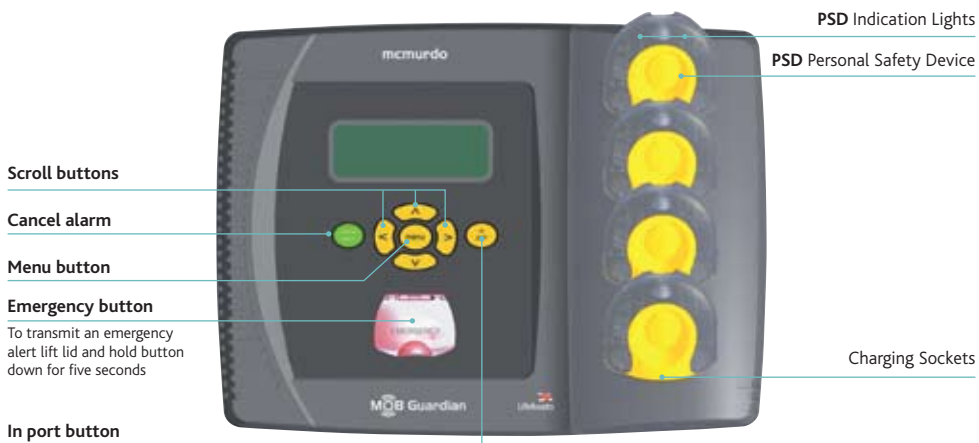
'I have a family, with two young children, so I want to give myself a fighting chance should I go overboard. Now someone will know when and where it happens.'

Richard Scott, a full-time fisherman for 7 years, works on a single-handed creel boat out of Pittenweem.

BASIC OPERATING GUIDE AND EMERGENCY ALERTING REFERENCE



MOB GUARDIAN BASE UNIT AND PSDs



If power is switched off prior to replacing all the PSDs there is a 60-second time-frame to return them to the charging slots. Exceeding this time limit will result in an 'out of range' indication on the PSD. No alert has been generated. Leaving the vessel whilst wearing a PSD could generate a Man Over Board Alert.

To transmit an emergency alert from the base unit or PSD

Press and hold the RED emergency button on the base unit or the emergency button in the centre of the PSD for at least 5 seconds.

To cancel an emergency alert

Press and hold the GREEN CANCEL button on the base unit for at least 5 seconds.

'I had MOB Guardian fitted 9 months ago. It gives me peace of mind knowing that if the worst happens and I need to hit the button, someone is watching and will pick up the alarm in minutes.'

James Jack has been a fisherman for 17 years. He is the skipper of a 12m prawn trawler with a four-man crew.

QUESTIONS AND ANSWERS



How has the RNLI been involved in MOB Guardian?

The RNLI developed the concept to try and improve safety within the fishing industry. They then contracted with McMurdo for commercial manufacture and with AWS to develop, build and operate the supporting monitoring/reporting infrastructure.

What's the coverage of the system?

It operates worldwide because it uses the IRIDIUM global satellite system.

Is MOB Guardian suitable for all fishing boats?

MOB Guardian is aimed at under 15 metre vessels with enclosed wheelhouses, or open boats with watertight compartments for the base unit. Larger vessels can be fitted but will require additional equipment at extra cost. Over 15m and open boats must confirm their suitability prior to ordering by organising a survey through AST.

Can fishermen fit MOB Guardian themselves?

No. It is a potentially lifesaving system requiring IRIDIUM satellite activation and correct onboard coverage for PSDs so must be installed and commissioned by AST, the appointed installers.

What happens if the boat loses all power?

The base unit is fitted with rechargeable batteries that will carry on functioning (monitoring or alerting) for at least 6 hours.

How long will a PSD work without re-charging?

Minimum of 24 hours provided the batteries are fully charged. Recharging of fully depleted batteries takes around 4 hours.

I've heard that I need to pay annual airtime charges?

No. From early 2009 the RNLI will pay for 5 years' free airtime thanks to a generous legacy donation.

'MOB Guardian brings the benefits of position reporting as well as the obvious peace of mind for single-handed fishermen and small crews like mine. I have it fitted to my fishing boat and would urge others to seriously consider the system too.'

David Pascoe, skipper/owner of the ring netter, Little Pearl, based in Newlyn.



Will the PSD activate if it gets wet, say from sea spray or rainwater?

No. They are radio devices that alert by being submerged in water which breaks the radio connection. Being 'wet' without being submerged should not activate the PSD.

Will the PSD work all over the boat, even down below?

Yes. PSDs will function throughout all vessels under 15m. If there is a coverage 'blind spot' e.g. due to metallic structures, extra Remote Head Units (RHU) must be fitted at a small extra cost to extend PSD coverage to those areas.

Can I change the batteries myself?

PSD batteries can only be changed by McMurdo or their agents. You can, however, change Base Unit battery packs yourself; purchase replacement batteries from McMurdo or their agents.

Can I cancel a false alert?

Yes. By pushing the 'Cancel' button, a message is sent to the RNLI/Coastguard and no action is then taken. It is advised that skippers also radio the Coastguard to confirm the false alert.

Can the MOB system stop the boat automatically?

Yes. The system has been designed to interface with existing products to enable this, subject to interface compatibility with the engine's management system.

Can I raise a manual alert for an onboard emergency?

Yes. The emergency button on the PSD can be used and this will alert the RNLI in typically less than 3 minutes. The emergency button on the Base Unit can also be used in dire circumstances and will override the built-in safety margin for false activations and alert ashore in typically less than 1 minute.

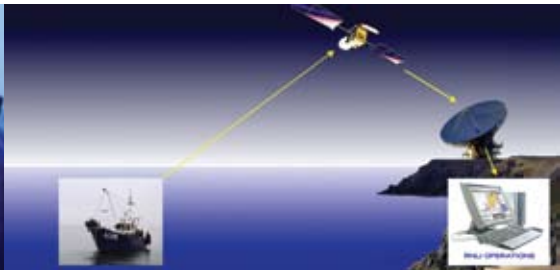
Is MOB Guardian easy to operate?

Yes. It has been designed to operate almost automatically. There is only a simple 'button' input when leaving port to activate.

'I have had both of my vessels fitted with MOB Guardian, because I feel more secure in the knowledge that if we do get into trouble someone will know very quickly and help will be minutes away.'

Edward 'Eddie' Temple, skipper/owner of Boy Joshua and owner of The Holladys.

HOW DOES IT WORK?



MOB Guardian is a satellite-driven system that enables two-way communications between the vessel, its crew and shore-based SAR agencies. To achieve this, the onboard base unit and Personal Safety Devices (PSD) utilise leading-edge technology to enable interference-free communication and failsafe safety features. MOB Guardian is the only system that provides safety for both the boat and crew. If a disaster happens at sea to either the vessel or an individual crew member, MOB Guardian will let us know.

Vessel reporting

The onboard base unit sends regular confidential reports to the RNLI Operations room via the IRIDIUM satellite system that gives the vessel's position, speed and course. If a report is missed the RNLI Operations room tries to regain contact by polling the vessel to allow her to reconnect in the event of being temporarily blanketed from satellite view. If contact cannot be regained, the Operations room investigates to confirm whether the boat is actually at sea. If so, the boat's last known position and details are passed to the Coastguard so that a rescue can be initiated.

Man Overboard (MOB)

Crew wear Personal Safety Devices (PSDs) that automatically alert SAR agencies of an MOB alert by sending the GPS position of the incident and relevant vessel details in, typically, 3 minutes. An audible alarm is sounded onboard to alert other crew members. Falling overboard breaks the radio link and automatically triggers an onboard alarm, simultaneously sending a signal to the search and rescue agencies. It can also be activated manually by pushing the emergency button (this is particularly important for single-handed fishermen). The onboard base unit logs the GPS position of the MOB alert and continually updates and displays the vessel's position relative to the incident via the lcd screen. This is also fed back continuously to the RNLI.

**For more information call 01202 663142
or email mob_guardian@rnli.org.uk**

FUNDING ARRANGEMENTS FOR FISHERMEN



The cost to UK fishermen is kept as low as possible because:

- McMurdo supplies UK fishermen MOB Guardian at cost price (a saving of approximately 40%)
- Government bodies provide grants of up to 50% of the installed price
- The RNLI provides: – 25% of the installed price
– 5 years' FREE satellite airtime

Sunderland Marine and Scottish Boat Owners reimburse their members for the fisherman's capital cost contribution excluding VAT.

For full details of all current funding arrangements or to obtain an order form, please call the MOB Guardian helpline on **01202 663142** or email mob_guardian@rnli.org.uk

MOB Guardian is available to non-fishermen and all enquiries should be directed to AST sales on **01493 440011**.

Useful contacts:

RNLI MOB Guardian Information	01202 663142
AST	01493 603460
AWS	01473 834560
McMurdo	02392 623900

Photo credits: RNLI/Nigel Millard/Mark Passmore



Lifeboats

The RNLI is the charity that saves lives at sea

Registered in England and Wales (209603) and Scotland (SC037736). Charity number CHY 2678 in the Republic of Ireland