

Press Pack METS 2021

The FastFind Return Link PLB is the latest Personal Locator Beacon (PLB) from the FastFind brand, which launched its' first compact, non-GPS, distress beacon back in 2001. FastFind, now part of Netherlands based Seas of Solutions, is synonymous with innovative and reliable PLBs based on the dedicated Cospas Sarsat 406 MHz rescue frequency.

In March 2021 Seas Of Solutions began supplying its long-awaited upgrade of the highly successful and widely adopted FastFind 220 PLBs. The new FastFind Return Link PLB is the world's first to include the Galileo powered Return Link Service (RLS) technology, a re-assurance signal back to the beacon user to confirm their call for help has been heard and their location is known. Developed by the EU to leverage the power of their new constellation of Galileo satellites, RLS allows the 406 MHz rescue frequency to have two-way communication for the first time since it's launch in 1982.

Explore the world with peace of mind knowing that if you find yourself in distress, activating your FastFind ReturnLink will summon emergency assistance and confirm when search and rescue professionals have received your call for help!

FastFind Return Link

Personal Location Beacon (PLB)

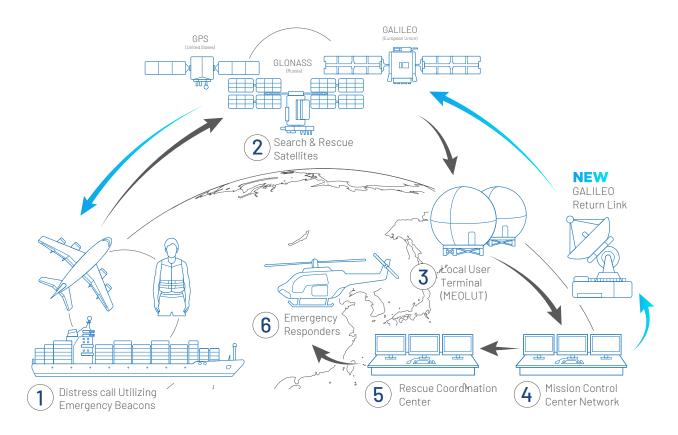






How does the Return Link Service (RLS) Work?

As part of the MEOSAR program to modernise Cospas Sarsat's search and rescue infrastructure, the European component, the Galileo GNSS satellites, offer new capabilities. Initially providing a new and super accurate GNSS service for positioning in devices with Galileo enabled receivers, as of March 2021 the Galileo's Return Link Service (RLS) was declared globally operational. This means beacons with RLS capabilities would be able to receive a re-assurance signal back to the beacon in the form of a blue light. This light, typically activated 10 minutes after activation, indicates the distress signal has been received and that the user's location is known by professional rescue services. RLS allows distress beacons a two-way communication channel for the first time.



So why is a beacon that signals back important?

The search and rescue (SAR) community have long known the survival impact of dealing with a distress situation on your own, either as a solo adventurer or as a group that feels isolated due to lack of communication with the outside world. Knowing that others are aware of your situation can greatly improve your mental strength for the challenges you are facing.

The FastFind Return Link (RLS) re-assurance signal lets someone is distress know they are not alone, it also reduces the chances of rash decisions taken by those who feel they have nothing to lose, like leaving the site of an accident or attempting to swim to safety. Knowing that SAR professionals know your situation and location will be an invaluable support. From a technical perspective the two-way interaction of the beacon design helps reassure users that it has activated and doing what it needs to do, the change from a white flashing light to white and blue, highlights that something has happened, even for those totally unfamiliar with distress beacons.

How Does an RLS PLB differ from the existing FastFind PLBs?

For many sailors, one of the major benefits of this product is the familiarity of how this technology operates, with its look and feel remaining mainly unchanged from the McMurdo FastFind 210 & 220 PLBs. The unit has the same three step activation process, to prevent false alerts and the same basic shape and weight.

What has changed is how it interacts with the user. After activation, the traditional PLB displayed a range of flashing lights to confirm dispatch of the 406 MHz signal and confirmation of GPS lock. This now has the addition of a blue flashing light which activates when a confirmation signal is send back to the PLB, confirming the call for help has been heard and location is known. It is this two-way interaction of the beacon which reassure PLB users, both that it has activated successfully, and the search and

rescue community are aware of their situation, hence the FastFind's marketing line to "Look for the blue".

The overall effectiveness of the new PLBs, working with the new search and rescue satellites (see Meosar below) has greatly accelerated distress detection and location confirmation times. Initially 406 MHz beacon detection was on average 90 minutes, but latest independent testing by the Belgian coastguard during the Operation Sharkbait in 2019, confirmed location confirmation on the FastFind in less than 10 minutes.

The FastFind Return Link PLB also comes with a newly designed flotation pouch and life jacket attachment clips, to improve the flexibility in both carrying and mounting the product, as a PLB that's not carried can't save a life.



How is this better than my mobile phone?

We are often asked to compare our PLBs to other technology such as mobile phones or GPS trackers, but there is no comparison. The alternatives are amazing pieces of technology but are not primarily designed as life saving distress beacons.

The FastFind Return Link has a range of features unique to PLBs, such as:

- Only PLBs use the dedicated 406 MHz search and rescue frequency, monitored by search and rescue organisations rather than call centres, with global coverage and powerful enough to penetrate a vessels hull.
- Only PLBs have dedicated power reserves of a minimum 24h activation time, even after five years storage.
- Only PLBs have an environmental durability requirement, from -20°C to +50°C, drop tested and water resistant to 5m.
- Only PLBs have multiple redundancy systems, allowing location via 406 MHz or dual GNSS receivers, a local 121.5 MHz homing signal and finally a strobe for low light detection.
- Only PLBs are subscription free and are part of the Cospas Sarsat rescue network.



What is the significance of the blue light feature?

The FastFind Return Link PLB's RLS signal will be confirmed by the activation of a blue light on our new range of beacons. The signal activating the flashing blue light is sent around 10 minutes after confirmation that the distress signal has been detected and the beacon's location is known. The use of a light confirmation rather than text on a screen ensures the user is aware of the RLS confirmation, even in low light or harsh water conditions. This means it does not require any action from the user – such as removing from



its pouch or lifejacket to review, which could interfere with the beacons operation and endanger the user. The choice of the colour blue was because of the international association of blue flashing lights and emergency services. Hence our tagline #LookForTheBlue.

Product Features

RLS	The FastFind ReturnLink PLB utilises unique functionality generated by Galileo satellite constellations Return Link Service (RLS) to send a signal to the FastFind Return Link beacon confirming the users 406M Hz distress alert has been received and Galileo GNSS location coordinates have been detected.
406 Mhz	Part of the Cospas Sarsat Search and rescue network, the 406 MHz signal goes direct to SAR professionals, has global coverage and is a dedicated, free to use and powerfully penetrating frequency.
Dual GNSS	FastFind Return Link also offers the accelerated location detection with combined Galileo and GPS GNSS receivers. This allows faster detection and location coverage in areas with previous no or low signal.
New Pouch Design & Clipping System	The PLB has a new carry pouch design and life jacket oral tube or webbing clip system that comes with the PLB. It offers a variety of mechanisms to attach or carry the beacon and helps ensure crew members have the unit on them at all times
False Activation Protection	Three stage activation process means the unit has to be opened before the button can be pressed and helps prevent accidental activations.
Power	Shelf Life of five years and a guaranteed operational period of a minimum of 24h



What is Galileo?



Galileo is the European Union's Global Navigation Satellite System (GNSS – often known by the US brand name GPS), allowing technology with a Galileo-enabled receiver to use signals provided by Galileo's for positioning. Galileo's development is part of the EU's upgrading the international search and rescue coordinating organisation COSPAS

SARSAT's under the MEOSAR program, which requires new earth-based antenna and a network of 72 satellites, made up of the America's GPS, EU's Galileo and Russian Glonass satellites. To help adoption of Galileo technology in consumer products and to showcase the sophistication of the new satellites, the EU helped fund the development of the FastFind Return Link PLB and has been at the forefront of education on the benefits of carrying this new generation of distress beacons.

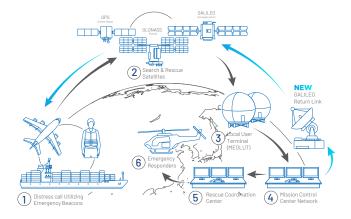
What is MEOSAR?

MEOSAR is the next generation of the Cospas-Sarsat international search and rescue satellite system that has helped to save over 45,000 lives since 1982. MEOSAR will increase the speed and accuracy of distress beacon signal detection and location with new MEOSAR ground antennae and additional MEOSAR satellites. A MEOSAR-compatible beacon can be located with an accuracy of location within 100 meters (328 feet), 95 percent of the time – and within five minutes of distress signal activation, all without reliance on GNSS.

What Impact will Galileo have on search and rescue?

Galileo's immediate impact on Search and rescue (SAR) has been the addition of 26 new satellites, allowing greater global coverage, with faster detection of the 406 MHz distress frequency used by distress beacons in EPIRBS and PLBs. Coupled with Galileo's precision GNSS capabilities, distress beacons with Galileo receivers greatly accelerates location detection.

The Second major impact is the Return Link Service (RLS), a re-assurance signal back to a beacon to inform the user that their distress



signal and location have been detected. This new capability is unique to the Galileo satellites and was activated in January 2021 and declared globally operational by Cospas Sarsat in March 2021. The world's first RLS enabled PLB, the FastFind Return Link has been available to buy since March 2021.

