

## **New products and services from Orolia**

### **Provision of PNT services**

In mid-October Orolia, a world leader in resilient Positioning, Navigation and Timing (PNT) provision introduced its new McMurdo Horizon™ system (*illustrated*), said to be the world's first S- and L-band compatible phased-array system. This features antennas developed by Ball Aerospace with all-seeing, horizon-to-horizon coverage to reliably capture search and rescue signals relayed from orbiting satellites immediately after line-of-sight is established.

The technology team behind this latest innovation includes Orolia's McMurdo subsidiary, providers of emergency readiness and response devices, and a world leader in the design, development and installation of search and rescue ground-based infrastructure, and Ball Aerospace. The latter brings sophisticated phased-array antenna technology to the challenge of enhancing global search and rescue programs.

It is reported that as part of this global debut, the McMurdo Horizon system is now available to enhance regional search and rescue services worldwide with premiere technological advantages to complement existing and emerging ground-based systems.

For nearly 30 years Orolia has been supporting the world's leading search and rescue programmes, reaching a major milestone with the world's first operational Medium-altitude Earth Orbit Search and Rescue (MEOSAR) system in 2011 and remaining the only company to successfully install and launch MEOSAR systems ever since.

In the words of Orolia VP Sarsat Programs, Paul Zweers: '*Orolia has been honoured to support global search and rescue priorities for nearly 30 years, including the installation of the world's first MEOSAR system. Today, we are excited to take this next technology leap by introducing the world's first multi-band, multi-dimensional phased-array system.*'

It is further understood that Orolia's McMurdo Horizon Medium Earth Orbit Local User Terminal (MEOLUT) can deliver enhanced search and rescue coverage and second-generation signal processing capabilities, all in a compact form with no moving parts. The key technology innovation, based on a modified off-the-shelf phased-array antenna developed by Ball Aerospace, is a custom-designed Orolia device based upon decades of advanced engineering expertise to provide value and unparalleled performance.

Furthermore, it has been stated by Orolia that by pointing to satellites near the horizon, the McMurdo Horizon MEOLUT can detect and locate emergency beacons at a greater range. This enhanced detection ability, combined with the McMurdo Selective Schedule Algorithm, enables the system to monitor more diverse regions, including the translation of oblong and irregular data points that are said to be invisible to traditional systems.

### **Reliable naval operations, even in GPS denied environments**

On 18 October Orolia announced from France that its exhibit at the forthcoming Euronaval Exhibition\* in Paris will address the growing threat of GPS/GNSS interference on naval operations.

Orolia will showcase the latest continuous PNT technology provisions available for global naval applications, designed to ensure reliable operations even in GPS denied environments. Featured exhibits will include demonstrations of new fixed site and mobile naval services as part of Orolia's Resilient PNT Defense Platform, along with encrypted mission timing and sophisticated military signal interference, detection and mitigation systems.

This exhibit will also include the European debut of Orolia's latest PNT innovation, the SecureFind™ combat rescue beacon. Together, Orolia's comprehensive technology solutions deliver precise, secure naval communications, situational awareness and decision support for a wide range of critical surface, air and underwater naval missions.

**Orolia will also deliver a presentation on Resilient Positioning, Navigation and Timing Applications for Military Vessels during the exhibition by Stéphane Chèze, Directeur, EMEA Business Development, Orolia, on 24 October from 1130 to 1200.**

### **Orolia prepares SAR systems across five continents**

The company has prepared a record nine SAR systems across five continents for commissioning through the Global Cospas-Sarsat Satellite Search and Rescue System, it is reported.

To date 75% of the Earth's surface is monitored by Orolia's MEOSAR systems. Cospas-Sarsat conducts an annual commissioning process for regional search and rescue systems that are being constructed or upgraded worldwide. This year, Orolia has prepared a record nine global search and rescue systems for commissioning across five continents, which include five ground-based Local User Terminals (LUTs) and four Mission Control Centres. It is understood that these new, lifesaving search and rescue systems are in line to be commissioned in North America, Australia, Europe, Asia and Africa.

Through its McMurdo subsidiary Orolia has equipped these systems with the very latest search and rescue technology to improve response times and save more lives worldwide.

### **About Orolia**

Orolia provides virtually fail-safe GPS/GNSS and PNT solutions to support military and commercial applications worldwide. See also: [www.orolia.com](http://www.orolia.com)

McMurdo Inc., an Orolia subsidiary, is the global leader in Search and Rescue (SAR) satellite ground infrastructure, installing more than 60% of SAR systems worldwide and manufacturing more than 25% of the world's registered emergency beacons. See here: [www.mcmurdogroup.com](http://www.mcmurdogroup.com)

\*Euronaval: Orolia Stand – H37 at Parc des Expositions, Paris Le Bourget, Carrefour Charles Lindbergh, 93350 Le Bourget, France.