

GPS World

THE BUSINESS & TECHNOLOGY OF GNSS

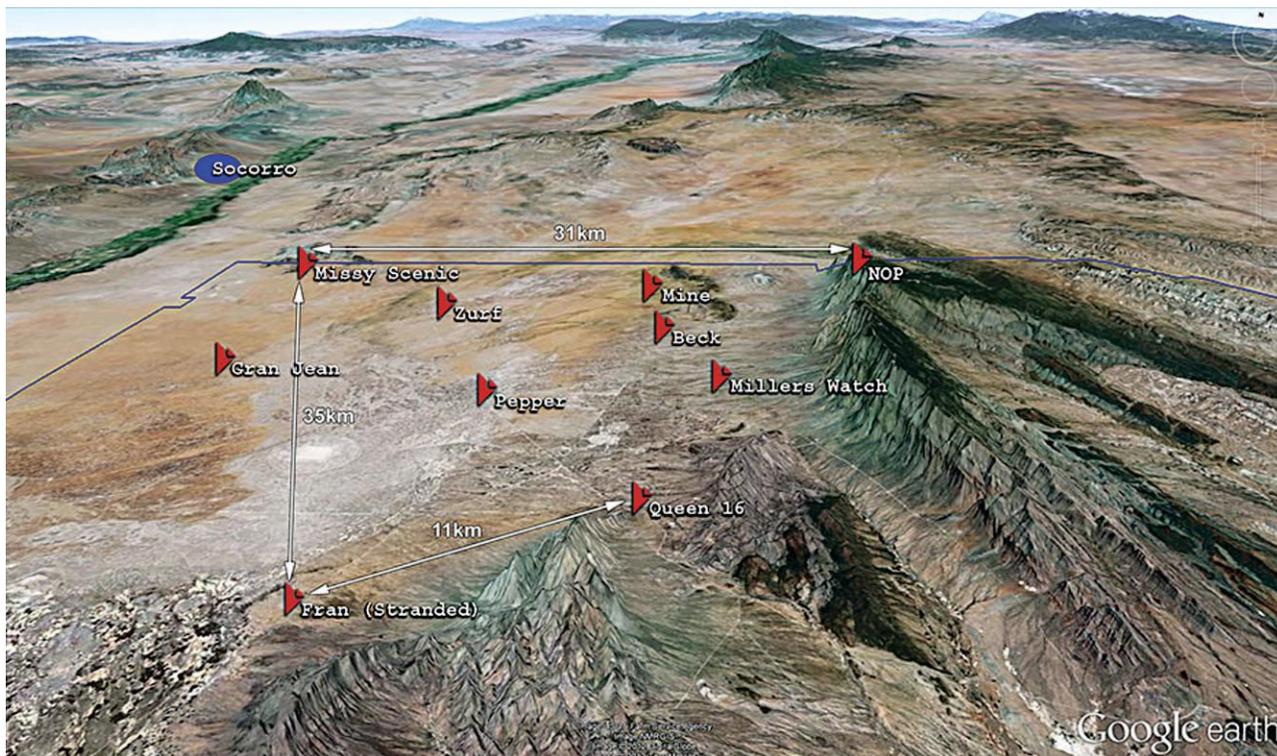
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2013 GNSS RECEIVER SURVEY

INTERFERENCE STANDARDS

- + GALILEO IOV
E1, E5, E6 SIGNALS
- + CIVILIAN POSITION
AUTHENTICATION SYSTEM

Industry news and developments | GPS | Galileo | GLONASS



▲ GOOGLE EARTH DEPICTION of the USAF LocataNet test bed deployed at the White Sands Missile Range.

Locata Tests Lead to Air Force Contract

The U.S. Air Force (USAF) signed a sole-source, multi-year, multi-million dollar contract with Locata Corporation to install a ground-based LocataNet positioning system at the White Sands Missile Range in New Mexico. The USAF will field Locata's technology for reference-truth positioning across a large area of White Sands when GPS is being completely jammed.

In a recent USAF technical report, the need for a new non-GPS based positioning capability was described by the 746th Test Squadron as the key component for "the realization of the new 'gold standard truth system' for the increasingly demanding test and evaluation of future navigation systems for the U.S. Department of Defense." The Air Force has now contracted with Locata to provide this capability for the USAF's future truth

reference, the Ultra High-Accuracy Reference System (UHARS).

The report documented extensive testing of a LocataNet covering 1,350 square miles (3,500 square kilometers) deployed at White Sands. The USAF and the 746th Test Squadron proved a LocataNet can accurately position USAF aircraft over a large area when GPS is denied. Locata delivered accurate independent positioning as good as, or better than, the USAF's current CIGTF Reference System (CRS). The Locata non-GPS based positioning capability is core to the UHARS that will replace the CRS in 2014.

After aircraft testing, the USAF concluded that the Locata system had not only met the demanding contractual tracking and positioning requirements, but actually exceeded them on many points. Some of the

milestones documented by the USAF included:

- LocataNet position accuracy of 2.5 inches (6 centimeters) horizontally and 6 inches (15 cm) vertically for aircraft flying at a distance of 30 miles (50km) at up to 350 mph (550 km/hr) at 25,000 feet, without GPS.
- Throughout the period of the testing, the entire White Sands network achieved nanosecond-accurate synchronization within several minutes of the LocataNet being activated, and remained synchronized even during severe weather until turned off at the end of each test.
- By attaching a simple 10 watt amplifier, the USAF proved that Locata signals could be acquired and tracked by aircraft at distances

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» DEFENSE

Raytheon UK Wins Contract for GPS Anti-Jam System

Raytheon UK has been awarded a contract by the UK Ministry of Defence for delivery of a new GPS anti-jam antenna land system. The contract is for an undisclosed number of advanced systems for deployment in operational theaters spanning multiple vehicle platforms. This UOR

(Urgent Operational Requirement) contract is the first award for Raytheon's GPS Anti-Jam (AJ) Land product family. Raytheon UK has delivered more than 7,000 units for air and naval capabilities in the UK and U.S., according to Bob Delorge, chief executive, Raytheon UK.

The contract will see the deployment of the systems under a very short timescale, with final delivery of the capability expected to be completed six months from contract award.

Raytheon UK is a subsidiary of Raytheon Company.

» FLEET TRACKING

Navman Wireless Debuts Professional Services for Fleet Tracking

Navman Wireless is offering two professional services packages to expedite, optimize and provide problem resolution for 100-plus-vehicle implementations of its OnlineAVL2 fleet management platform. The new services are designed to reduce rollout and configuration time by up to 80 percent, produce a 50 percent faster return on investment, and help corporate and construction fleet managers derive maximum value from the system by doubling the number of features used.

Both the Standard and Turnkey professional services bundles entitle customers to a dedicated project and account team, including a field services

engineer serving as a single point of contact and project manager, plus the use of a dedicated phone line staffed with support specialists assigned exclusively to handle larger accounts.

The Standard package includes installation support, basic OnlineAVL2 configuration, a training website and weekly group training webinars, priority issue escalation, and a yearly account review to evaluate the customer's use of the system and identify opportunities to realize greater benefits from the deployment.

The Turnkey package includes all Standard features plus 80 hours of project management time for on-site project planning and user training

as well as weekly update calls and advanced OnlineAVL2 configuration for features such as geofences, maintenance module setup, report scheduling, and email and text alerts. This premium package also includes ongoing best practice guidance, regular on-site business reviews, API-based integration into backend systems, and guaranteed 45-day implementation with appropriate advanced notice and asset availability.

Optional add-on services include custom training and documentation, installation and training at additional depots or terminals, and project management for complex implementations.

Locata

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of up to 60 miles (100 km). Longer distances could be enabled by attaching higher-powered amplifiers.

- The Locata system functioned under dynamic aircraft operating maneuvers, including banking, angular and linear accelerations, airspeeds up to 300 knots (560 km/hr), and altitudes up to 30,000 feet above sea level.

- The USAF required Locata to design, prototype, and deliver aircraft-certified antennas for use on both the Locata ground-based transmitters and the USAF aircraft. Locata worked with Cooper Antennas Ltd. of Marlow in Buckinghamshire, United Kingdom, to produce an aircraft-certified version of Locata's quadrifilar helix antenna design.

Under the new contract, Locata will provide the USAF with Locata

receivers and LocataLite transmitters to blanket 2,500 square miles (6,500 sq km) of the White Sands Range. Locata will also deliver extended hardware warranty, along with ongoing Locata software and firmware upgrades, to the year 2025; and provide long-term consultation and expert technical advice to ensure optimal operational performance of the USAF's fielded LocataNet systems.