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## L-3 TELEMETRY-WEST INTRODUCES NEW TELEMETRY, COMMAND & RANGING SOLUTIONS FOR COMMERCIAL SATELLITES

**SAN DIEGO, March 3, 2014** – L-3 Telemetry-West (L-3 TW) announced today that it is now supplying commercial GEO satellite Telemetry, Command & Ranging (TC&R) solutions featuring its new CTKu-900 and CRKu-900 transmitter/receiver products. These highly advanced components are the newest additions to the company's growing portfolio of Telemetry, Tracking & Control (TT&C) products for the commercial satellite marketplace and offer a faster delivery and increased performance solution.

Larry Dobbs, director of business development for space products at L-3 TW, said, "With the introduction of our new CTKu/CRKu-Band products, we are pleased to be offering an on-orbit, frequency-agile solution that supports various operational modes, as well as the requirements mandated by new GEO satellite applications."

Incorporating a blend of digital signal processing and L-3 TW's proprietary RF ASIC design, the two products provide the flexibility of high-resolution, in-flight frequency agility and commandable data rates, while avoiding traditional fractional spurs.

All transmitter and receiver features were strategically designed to meet the demands of the fast-paced commercial satellite market and achieve a shorter delivery lead time. The CTKu-900 and CRKu-900 are fully qualified designs and can be provided either in a stand-alone configuration or in conjunction with one another.

For more information, please visit [L-3com.com/TW](http://L-3com.com/TW).



**L-3 TW's New CTKu/CRKu-900 TRANSMITTER & RECEIVER**

## FEATURES

- **PM Transmitter / FM Receiver** for commercial TC&R/TT&C telemetry applications
- Frequency-agile in flight at < 1 kHz resolution (Transmitter and Receiver)
- Supports video downlinks > 1 MHz bandwidth for all ranging channels (Transmitter)
- Frequency tuning across 500 MHz band (Transmitter) and 200 MHz band (Receiver)
- Commandable or factory set data rates (Receiver)
- High-reliability, radiation-hardened with a 22.5-year mission life

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## UPCOMING EVENTS

### Satellite 2014

Washington, DC | 10-13 March

### SpaceOps 2014

Pasadena, CA | 5-9 May

### AUVSI's Unmanned Systems 2014

Orlando, FL | 12-15 May

### 30th Space Symposium

Colorado Springs, CO | 19-22 May

## SPACE PRODUCTS

**L-3 TELEMETRY-WEST —  
NOW SUPPLYING COMMERCIAL SATELLITE  
TELEMETRY, COMMAND & RANGING SOLUTIONS**



Commercial Frequency-Agile  
Ku-Band TC&R

**InControl**  
Satellite Command & Control Software

CTKu-900  
Ku-Band TC&R Telemetry Transmitter

CTKu-900  
Ku-Band TC&R Command Receiver

L3

L-3 TW's new transmitter and receiver are designed for the commercial satellite marketplace, with faster delivery times and increased performance. Rely on L-3 hardware and software for your satellite communications needs.

To learn more about how our space products can meet your requirements, please visit us at Satellite 2014 in Booth 6030 or at [L-3com.com/TW](http://L-3com.com/TW).

Telemetry-West

[L-3com.com](http://L-3com.com)



## RECENT LAUNCHES

## FIRST GLOBAL XPRESS® SATELLITE ACHIEVES KEY MILESTONE

**January 31, 2014** — Inmarsat (LSE:ISAT.L), the leading provider of global mobile satellite communications services, today announced that Inmarsat-5 F1, the first in its fleet of three Global Xpress® (GX) satellites, has successfully completed its orbital deployment stages on schedule. Inmarsat and Boeing engineers, working from Inmarsat's GX teleport in Nemea, Greece, are now beginning a month of comprehensive payload testing in preparation for commencing live end-to-end testing of the high-speed, mobile broadband GX connectivity services, scheduled to start in March.

From its geostationary orbital location at 62.6 degrees East, Inmarsat-5 F1 will offer high-throughput broadband services for Europe, Africa, the Middle East and Asia. The satellite, built by manufacturing partner Boeing, features 89 beams and 6 steerable high-power spot beams, which will enable Inmarsat to dynamically increase capacity based on customer demand.

Part of a US\$1.6bn investment programme by Inmarsat, the revolutionary Global Xpress constellation is on course to achieve full global coverage by the end of 2014 and will be capable of delivering download speeds of up to 50 Mbps on land, at sea and in the air, virtually anywhere in the world. The unique combination of seamless global Ka-band coverage from a single operator, consistent higher performance and the network reliability for which Inmarsat is renowned, has already attracted significant interest from potential government and commercial users across the world. Inmarsat is working with the world's leading satellite terminal manufacturers and a network of Value-Added Resellers (VARs) in preparation for the initial roll-out of GX commercial services in 2014, culminating in the launch of the global service in 2015.

**Source:** Inmarsat.com



## ROCKET LAUNCH PUTS 29 SATELLITES IN ORBIT, A NEW RECORD

The satellites were launched on an Orbital Sciences Corp.-built Minotaur 1 rocket that relied on solid-rocket motors from decommissioned Minuteman missiles for its initial boost. The mission marked the 25th launch for the Minotaur family of vehicles and the 11th of a Minotaur 1.

Dulles, Va.-based Orbital obtained a commercial space transportation license from the U.S. Federal Aviation Administration for the launch in an arrangement that Air Force officials said helped reduce costs, specifically on verification of the Minotaur vehicle.

The STPSat-3 satellite was built by Ball Aerospace & Technologies Corp. of Boulder, Colo., in 47 days and is the latest in a series of spacecraft developed under a Defense Department program to field space capabilities quickly in response to emerging military needs. Ball officials have said STPSat-3 was built at a cost of about \$30 million.

The STPSat-3 spacecraft carried five experiments: 1) a U.S. Air Force Academy mission designed to measure plasma densities and energies; 2) a U.S. Naval Research Laboratory sensor designed to help characterize the Earth's ionosphere and thermosphere; 3) a directed energy experiment from the Air Force Research Laboratory; 4) a NASA-National Oceanic and Atmospheric Administration mission to collect precise measurements of total solar irradiance; 5) a space phenomenology mission.

The 29 payloads were the most launched during one mission aboard an expendable U.S. rocket, Air Force leaders said.

**Source:** SpaceNews



The ORS-3 mission carried the STPSat-3 satellite as its main payload, plus 15 additional Defense Department satellites, 12 payloads from universities and one from Thomas Jefferson High School in Northern Virginia. **Credit:** NASA by Allison Stancil





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## L - 3 T E L E M E T R Y & R F P R O D U C T S G R O U P



### L-3 ADVANCED TECHNOLOGY & SYSTEMS

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L-3 Advanced Technology & Systems (L-3 AT&S) is a provider of SIGINT systems engineering, specific emitter identification, novel geolocation techniques, RF polarimeter processing, technical studies and analyses, software development and rapid prototyping.



### L-3 TELEMETRY-EAST

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L-3 Telemetry-East (L-3 TE) is a preeminent supplier of airborne telemetry products and systems for the aircraft and missile flight test, airborne telemetry and ground receiver markets. Additionally, L-3 TE is a supplier/integrator of quality telecommunications products and end-to-end communications systems.



### L-3 TELEMETRY-WEST & SOUTHERN CALIFORNIA MICROWAVE

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L-3 Telemetry-West (L-3 TW) is a premier provider of flight hardware and systems solutions for telemetry, tracking, command & control; flight termination; and secure mission data transmission in the satellite, launch vehicle, weapons, aircraft and UAV markets.

L-3 Southern California Microwave (L-3 SCM) is a manufacturer of microwave transmitters, receivers, power amplifiers, repeaters and antennas for military test ranges, UAVs, RPVs, UGVs, robots and law enforcement agencies.

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**PAST ISSUES:** To read past issues, please go to [L-3com.com/TW/News](http://L-3com.com/TW/News)

**PLEASE EMAIL YOUR COMMENTS, SUGGESTIONS OR REQUESTS TO:** [Focus.TW@L-3com.com](mailto:Focus.TW@L-3com.com)

