

**In this Issue**

- Ground Solutions ..... 2
- Airborne Solutions ..... 3
- ITC 2009 Preview..... 4
- In the News ..... 5
- Recent Activities..... 6
- Vice President Q&A ..... 7

**L-3 TELEMETRY-WEST LAUNCHES NEW & IMPROVED WEBSITE**

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

**SAN DIEGO, CA., October 22, 2009** – L-3 Communications Telemetry-West (L-3 TW) announces the launch of its new and improved website. The upgraded and updated site is the result of significant analysis, design, and development. The goal – provide customers a one-stop site for all L-3 TW products, services, and support.

This new site provides visitors more content, improved layout and easier access to the other L-3 divisions that make up the L-3 Telemetry & RF Products Group. (Advanced Technology & Systems, Southern California Microwave, Telemetry-East, and Global Network Solutions)

Visitors to the site can read about the company’s history/heritage, products offered and contact information. The upgraded site also gives current customers an instant and secure way to get “Members Only” support.

“The new website will be a great source of information for our current and prospective customers. We’ve made it more inviting to those who want to learn more about our company and more organized so our current customers can find what they need with fewer mouse clicks,” said Glenn Flaherty, Vice President of Business Development. “We wanted a clean and navigable website that our customers will find user-friendly, appealing and informative.”

In addition to the site’s many new technical and systems features, the graphic design and interface present a dramatic improvement. We have streamlined the site’s navigation, making it more intuitive and user-friendly.

Check out the new website at [www.L-3Com.com/TW](http://www.L-3Com.com/TW).

**UPCOMING EVENTS**

**MILCOM**

**When:** 19-21 October  
**Where:** Boston, MA

**INT’L TELEMETERING CONF.**

**When:** 26-29 October  
**Where:** Las Vegas, NV

**NSISC SPACE INFOSEC**

**When:** 27-29 October  
**Where:** El Segundo, CA

**BOEING OPERATOR CONF.**

**When:** 28-30 October  
**Where:** Beverly Hills, CA

**AFCEA TECHNET ASIA-PACIFIC**

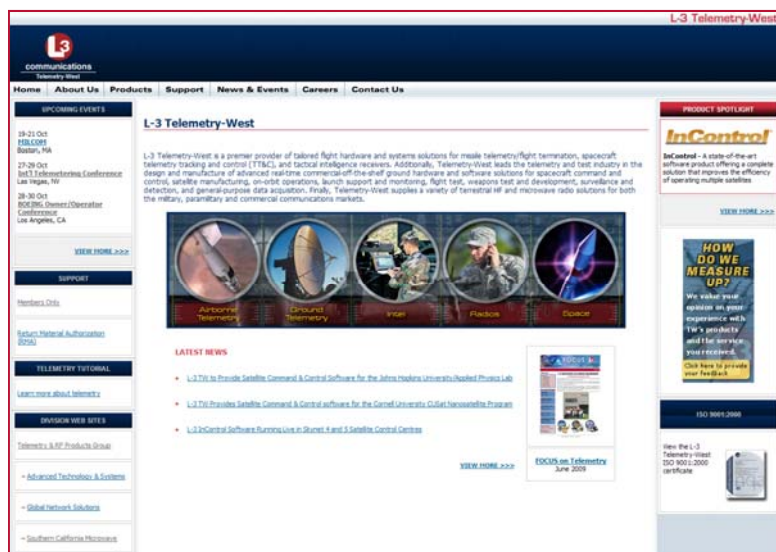
**When:** 3-5 November  
**Where:** Honolulu, HI

**FOCUS - OCTOBER 2009**

Published for customers of L-3 Telemetry & RF Products Group.

**SEND FEEDBACK TO:**

[Focus.TW@L-3Com.com](mailto:Focus.TW@L-3Com.com)



L-3 Telemetry-West Home Page

*Excellence You Can Measure*

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## Ground Telemetry



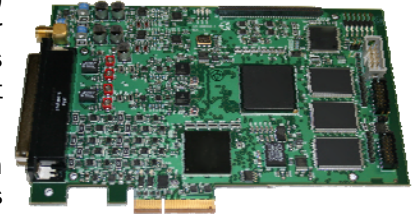
### L-3 TELEMETRY-WEST INTRODUCES ITS NEXT GENERATION OF TELEMETRY MODULES WITH THE MFT-800

**SAN DIEGO, CA., October 22, 2009** — L-3 Telemetry-West (L-3 TW) introduces the MFT-800 telemetry board. The MFT-800 is suited for quick-look application and flight-line checkout systems, as well as general purpose mission control configurations that support flight test, training and launch applications.

The MFT-800 builds on the success of L-3 TW's previous generation Multifunction Telemetry Module (MFT773A-PCI) by improving its performance in many key areas including data rates and bit error performance.

This fourth generation multi-function telemetry processor has been upgraded to a PCI Express™ compliant solution, providing a complete PCM telemetry ground processing system in the latest industry standard form factor. It is able to process either one or two data streams simultaneously and is approximately half the size of the MFT773A-PCI with more than double the throughput performance.

"By offering users improved performance, while simultaneously supporting the latest industry standards for PC connectivity, the MFT-800 allows users a telemetry processing architecture that can makes use of the latest host processors, thereby reducing risk and lowering overall lifecycle costs" said James Yates, Director of Product Line Marketing.



**MFT-800 PCIe Telemetry Module**

### KEY FEATURES

- Dual stream design saves bus slots
- Bus-mastering DMA channels can support both input and output channels
- Extract clock and data from noisy PCM data streams at rates to 30 Mbps
- Decode, translate, or generate IRIG-A, -B, or -G time
- Time tag PCM input frames
- 1 micro-second resolution synchronized to an external source or on-board TCXO
- PCI Express™ Form Factor
- Status tag PCM input frames, including sync state, bit slip, CRC error detection
- Extract two asynchronous embedded frames or fully decommutate a primary and embedded stream
- Simulate telemetry data and formats to 40 Mbps
- Viterbi decoder supporting 1/2 rates
- Numerous I/O for simultaneous support to external equipment e.g. decryptors

### L-3 TELEMETRY-EAST TO ADD C-BAND TO ITS GROUND RECEIVERS

**BRISTOL PA., October 22, 2009** — L-3 Telemetry-East (L-3 TE) will release an upgrade kit for its fielded ground receivers, providing C-Band functionality, in late 2009. The design effort, which is sponsored by the U.S. Air Force with oversight from Edwards Air Force Base, is a response to the decreasing spectrum available due to encroachment by the commercial market (such as satellite radio and 3G wireless).

Current telemetry ground receivers typically operate in a bandwidth between 215 MHz to 2485 MHz. The new C-Band functionality covers 4.4 GHz to 5.15 GHz. The first installation of the upgrade kit will be in the RCB-2000 telemetry receiver.

The upgrade kit provides a low-cost solution for fielded receivers. The U.S. Air Force and U.S. Navy are expected to start using the kit to update their ranges in 2010.

A white paper on the C-Band receivers will be presented at the International Telemetry Conference in Las Vegas, NV, on October 28 by Mark Kukawski.



**RCB-2000 Telemetry Receiver**

## Airborne Telemetry Solutions

### L-3 TELEMETRY-EAST INTRODUCES NEW C-BAND TRANSMITTER ST-5000

**BRISTOL, PA., October 22, 2009** — L-3 Telemetry-East (L-3 TE) introduces the ST-5000 C-Band Telemetry Transmitter, furthering their commitment to the defense and aerospace industries' transition to C-Band. The ST-5000 is designed for operation in environments where size, weight, and power efficiencies are critical. The ST-5000 extends battery life and features ultra-high power efficiency, full isolation, and serial-loaded programmability.

L-3 TE, who teamed with L-3 Nova Engineering, are excited to bring C-Band capabilities to the telemetry marketplace. This ST-5000 continues the success of L-3 TE's ST-800, 3000 and 4000 series of transmitters in a new generation.

The ST-5000 is available in 2, 5, and 10 watt versions. Center frequency, deviation sensitivity, and other features can be programmed through a serial communications port using any basic PC. The ST-5000's three internal modules (modulator, regulator, and power amplifier) are housed in separate machined enclosures to maximize RF isolation, while providing a rigid and robust mechanical design that will withstand the harshest of missile, weapons, and aircraft environments.

C-Band frequencies are adjustable in 0.5 MHz steps in the following ranges:

- 4400 – 4950 MHz
- 5050 – 5250 MHz

All units undergo rigorous testing ensuring reliable operation under extreme mission conditions.

See a demo in L-3's booth #702 at the International Telemetry Conference in Las Vegas, NV, October 27-29.



**ST-5000 C-Band  
Telemetry Transmitter**

### L-3 TELEMETRY-EAST ANNOUNCES AIRSTOR™ A NEW LINE OF RUGGED NETWORK DATA RECORDERS

**BRISTOL PA., October 22, 2009** — L-3 Telemetry-East (L-3 TE) introduces a line of high-capacity, high-speed rugged network data recorders, called AirStor. The use of more numerous sensors, higher-speed data buses, and additional video streams is generating ever-increasing data flows in modern aircraft flight-test programs.

With up to 12 terabytes of storage capacity and a 4 Gbps data rate available in a rugged 3U rackmount chassis, AirStor sets new standards in capacity, data rate and low cost-per-terabyte data recording and storage. AirStor is specifically designed for operation in airborne environments, including temperatures of -20°C to +70°C, altitudes of up to 85,000 feet and the shock and vibration of fixed or rotary-wing aircraft.

AirStor also offers Fibre Channel, 10 gigabit, 1 gigabit, or 10/100 Ethernet inputs along with various redundancy options to protect critical flight test data. AirStor data recorders can be combined with L-3's AirDAS, NetDAS, and IntelliBus data acquisition products, along with the Vista software suite, creating a complete data acquisition, storage, and management solution.

Various encryption options are available with appropriate government approvals. AirStor data recorders deliver higher performance and a lower price than ever before possible in an airborne environment.



**AirStor™ Telemetry Data Recorder**

## INTERNATIONAL TELEMETERING CONFERENCE 2009

## PRODUCT LAUNCHES

## PCIe TELEMETRY BOARD MFT-800



## C-BAND TELEMETRY TRANSMITTER ST-5000



## PAPERS PRESENTED

ADVANTAGES OF USING A MODULAR ARCHITECTURE TO  
EXTENUATE THE EFFECTS OF DISRUPTIVE TECHNOLOGIES

BY: YASON KHABURZANIYA, L-3 TELEMETRY-WEST

Disruptive technologies affect every industry and often indicate the rate of technological advancement. Observing previous technological leaps can help ensure that the next disruptive technology innovation has less of an impact.

Many methodologies that were developed to combat the high adoption costs of disruptive technologies in the field of computer engineering can be applied to the satellite and telemetry world. One such methodology is modular architecture in software.

## UPGRADE OF RCB RECEIVERS FOR C-BAND RECEPTION

WRITTEN BY: RAJESH GOVINDARAJAN, L-3 TELEMETRY-EAST

PRESENTED BY: MARK KUKAWSKI, L-3 TELEMETRY-EAST

The White Paper defines how L-3 will satisfy a new requirement imposed by the U.S. Air Force to incorporate C-Band in fielded receivers without degrading current functionality and/or performance.

ALL THE DATA.  
ALL THE TIME.When there is no margin  
for failure.

With the world's largest selection of COTS and custom telemetry solutions available today, L-3 continues to offer the telemetry community, leading-edge products and services for its mission-critical requirements. Whether you need individual components or integrated solutions, L-3 can provide you a path to success. Thousands of installations worldwide prove the telemetry community relies on L-3.

Telemetry & RF Products | Cincinnati Electronics  
Datron Advanced Technologies | ESSCO  
Communication Systems-East | Nova Engineering  
Communication Systems-West

&gt;&gt;SEE US IN BOOTH 702.



L-3com.com

SPECIALIZED PRODUCTS &gt; CISR &gt; GOVERNMENT SERVICES &gt; AM&amp;M

DoD photo by Master Sgt. Michael Ammons, U.S. Air Force.

## L-3 TELEMETRY & RF PRODUCTS IN THE NEWS

### L-3 TELEMETRY-WEST TO PROVIDED SATELLITE TEST SOFTWARE SOLUTION FOR LOCKHEED MARTIN'S GPS III C<sup>3</sup>M PROGRAM

**SAN DIEGO, CA., October 22, 2009** – L-3 Telemetry-West (L-3 TW) has signed a contract with Lockheed Martin Space Systems Company (LMSSC) to supply a Command, Control, Communications, and Monitor (C<sup>3</sup>M) system used in factory testing on the GPS III Program. The C<sup>3</sup>M software is based on L-3 TW's InControl software product, which supports satellite test and on-orbit operations.

"The selection of L-3 TW for the GPS III C<sup>3</sup>M program again underscores InControl's flexibility to operate in multiple phases of a satellite mission, including satellite manufacturing and system testing," said Jim Presnell, Vice President of Engineering. "L-3 TW is pleased to participate in this crucial activity with LMSSC."

In the C<sup>3</sup>M environment, InControl will provide the test executive for LMSSC's Factory Assembly, Integration and Test (AI&T) of the GPS III satellites. The GPS III C<sup>3</sup>M program is the third in a series of large satellite factory test systems at Lockheed Martin based on the InControl software.

L-3 TW will provide the C<sup>3</sup>M systems for primary AI&T activities at LMSSC's Littleton, CO location, as well as additional test systems at Lockheed Martin in Newtown, PA, and at Cape Canaveral Air Force Station, FL.

# InControl<sup>®</sup>



**Atlas V**  
Credit: Pat Corkery/ULA

#### ATLAS 5 Rocket Launched PAN Payload

**September 8 , 2009 at 5:35 p.m. EDT** – The Atlas 5 rocket launched from Cape Canaveral carrying a secretive communications satellite built by Lockheed Martin for the U.S. government. The company acknowledged that it had built the communications satellite – dubbed "PAN" – under a commercial arrangement with the government. Yet few other details were released, such as what agency was behind the project or what it would do in orbit .

L-3 Telemetry-West provided product for this program.

## L-3 GIVES BACK

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

L-3 Telemetry-West and Southern California Microwave donated goods & money to both the Helen Woodward Animal and A.B and Jessie Polinsky Centers in San Diego, CA.

The popular AniMeals program from the **Helen Woodward Center** offers free pet food for the dogs and cats of elderly or disabled people throughout San Diego County. The Center is a unique non-profit organization that for over 30 years has been committed to the philosophy of people helping animals and animals helping people.

For more information, see [www.animalcenter.org](http://www.animalcenter.org)

The **A.B. and Jessie Polinsky Children's Center** is a 24-hour facility for the temporary emergency shelter of children who must be separated from their families for their own safety, or when parents can not provide care. Each month more than 300 children ages birth to 18 years old are admitted to the Center. Built on County donated land and augmented with funds raised from private donations under the auspices of the Promises2Kids (founded as the Child Abuse Prevention Foundation), the new facility has the licensed capacity to serve 204 children.

For more information, see [www.promises2kids.com](http://www.promises2kids.com)



## RECENT ACTIVITIES

### SUCCESSFUL LEAN SIX SIGMA TRAINING PROGRAM LAUNCHED AT L-3 TELEMETRY-WEST

**SAN DIEGO, CA., September 2009** — L-3 Telemetry-West (L-3 TW) launched a Lean Six Sigma program in April 2009 with a goal of providing employees the training, tools and DMAIC (Define, Measure, Analyze, Improve, Control) framework to systematically improve processes, reduce lead times, and increase customer satisfaction. The first wave of greenbelt training and projects were completed in September.

Training included Executive and Champion training as well over 25 greenbelts attached to seven different projects that span L-3 TW's entire business including; Solder Reflow, Return Material Authorization (RMA), Material Estimating, Engineering Change Orders (ECO), Procurement, Product Cycle Time and Defect Reductions, and Forecasting.

Each of the teams were able to apply the Lean Six Sigma approach and generate results that will have a positive impact on L-3 TW's business and customers. The next wave of projects and teams are currently being launched.



The L-3 TW Material Estimating team Celebrates! Burt Smith and Andy Hamelynck congratulate team members; Paul Brammer, Jim Adams, Mary Kelly, Mike Davis, Philip Kondilas, Tom Pekar, and Keith Boyle (instructor)

### L-3 TELEMETRY-WEST DELIVERS 1000TH ENTR (EMBEDDED NATIONAL TACTICAL RECEIVER)

**SAN DIEGO, CA.** — L-3 Telemetry-West (L-3 TW) celebrates delivery of their 1000th ENTR unit to the warfighter. Delivery of the 1st unit was in 2004 with the 1000th unit delivery this year. All development and production of ENTR's is done at L-3 TW's facility in San Diego, CA.

ENTR demonstrates L-3 TW's ability to design, develop and deliver multiple variants of a complex radio in significant quantities. Future warfighter needs will require larger quantities in a shorter time frame. Our San Diego team stands ready to meet the challenge and looks forward to celebrating the next 1,000 units.



L-3 Telemetry-West ENTR Team

## Q&A WITH L-3 TELEMETRY & RF PRODUCTS

WE ASKED GLENN FLAHERTY, VICE PRESIDENT OF BUSINESS DEVELOPMENT SOME PERTINENT QUESTIONS...



**Glenn Flaherty**  
Vice President Business  
Development  
L-3 Telemetry & RF Products  
Group

L-3 Telemetry & RF Products Group Vice President of Business Development is Glenn Flaherty. We asked him to reflect on the current and future state of the Telemetry industry and L-3 Telemetry & RF Products position and technology base.

**Question: How does L-3 Telemetry & RF Products decide what technologies to invest in and how does that process connect to your customer base?**

**Answer:** We regularly solicit input from our customers and employees. We use that information, combined with our market research, to constantly refine our product/technology roadmaps. This is an endless cycle where we look for those areas with the best payoff for L-3 and our customers.

**Question: With the change in the U.S. administration over the last year and the overall global recession, what do you think the outlook is for major suppliers to the U.S. Government and major aerospace primes and how has this changed affected L-3 Telemetry & RF Products?**

**Answer:** I think we're all feeling the same pressures to do more with less; we know that budget pressure is going to continue for years to come. This is a fantastic opportunity for us to take a step back and look at how we do business. Read the article on the previous page where we describe some of our Lean 6σ program activities.

Visit L-3 TW's new website at [www.L-3com.com/TW](http://www.L-3com.com/TW). Now isn't the time to sit back and watch, it's a time to get involved. I think all leaders across industry and government are looking for ways to improve the way we do business.

**Question: As our telemetry industry continues to move towards new spectrum, advanced networked waveforms and upgraded cryptological solutions, how is L-3 addressing these key technologies?**

**Answer:** The L-3 Telemetry & RF Products Group is uniquely positioned to serve our customer base from a broad spectrum of capabilities able to address customer needs. Our existing infrastructure, both equipment and people, allows us to take on new challenges without stretching our limits. We have many technology innovation efforts underway – some driven directly by our customers – some driven by our projections of where we see our markets heading. I suggest visiting *The International Telemetry Conference in Las Vegas, NV 26-29 October* and you will see firsthand our new products and can discuss our roadmap for the future.

### L-3 TELEMETRY-WEST TRACES ITS ROOTS

In 1997 ten business units were divested from Lockheed Martin to form L-3 Communications. Conic and Telemetry & Instrumentation were two of the original ten business units; later combined to form L-3 Telemetry-West in October of 2001.

Conic, was a world-leader in airborne telemetry, space TT&C, tactical receivers, HF/SSB, and microwave radios and Telemetry & Instrumentation, was a pacesetter in ground telemetry components and turnkey systems. The formation of L-3 Telemetry-West, combined two of the world's premier telemetry businesses into a single company capable of providing a full range of telemetry and terrestrial communication solutions.

Once a small startup with a storefront in National City, the combined division now known as L-3 TW has established its headquarters at the L-3 owned engineering and manufacturing facility in Kearny Mesa; the heart of industrial San Diego, CA.



1962 – Conic Building located in National City, CA



2009 – L-3 Telemetry-West located in San Diego, CA



## Telemetry & RF Products

Today, L-3 Telemetry & RF Products serves commercial, military and civilian customers worldwide with a product offering that includes TT&C satellite transponders, high data rate satellite transmitters, high-power amplifiers, high-reliability receivers/transmitters, encryption/decryption units, video compression/decompression units, tactical intelligence/tactical HF/SSB microwave radios, telemetry ground system components and solutions, specialized telemetry and surveillance products, telecommunications products and specialized networks, and advanced technologies in SIGINT, SEI, and Geolocation.

**L-3 Telemetry & RF Products Group is made up of the following companies:**

**ADVANCED TECHNOLOGY & SYSTEMS**

**SOUTHERN CALIFORNIA MICROWAVE**

**TELEMETRY-EAST/GLOBAL NETWORK SOLUTIONS**

**TELEMETRY-WEST**



### L-3 Advanced Technology & Systems

355 Ravendale Drive | Mountain View, CA 94043

Phone: 650-961-9400 | Website: [www.L-3Com.com/ATS](http://www.L-3Com.com/ATS)

L-3 Advanced Technology & Systems is a provider of SIGINT Systems Engineering, Specific Emitter Identification, Novel Geolocation Techniques, RF Polarimeter Processing, Technical Studies & Analyses, Software Development, and Rapid Prototyping.



### L-3 Southern California Microwave

2732 Via Orange Way, Suite E | Spring Valley, CA 91978

Phone: 619-670-3414 | Website: [www.L-3Com.com/SCM](http://www.L-3Com.com/SCM)

L-3 Southern California Microwave is a leading manufacturer of microwave transmitters, receivers, power amplifiers, repeaters and antennas for military test ranges, UAVs, RPVs, UGVs, robots and law enforcement agencies. Additionally, L-3 SCM provides standard FM PCM telemetry systems.



### L-3 Telemetry-East/Global Network Solutions

1519 Grundy's Lane | Bristol, PA 19007

Phone: 267-545-7000 | Website: [www.L-3Com.com/TE](http://www.L-3Com.com/TE) | [www.L-3Com.com/GNS](http://www.L-3Com.com/GNS)

L-3 Telemetry-East/Global Network Systems 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/GNS is a worldwide supplier and integrator of quality telecommunications products and end-to-end communications solutions.



### L-3 Telemetry-West

9020 Balboa Ave | San Diego, CA 92123

Phone: 858-694-7500 | Website: [www.L-3Com.com/TW](http://www.L-3Com.com/TW)

L-3 Telemetry-West is a premier provider of tailored flight hardware and systems solutions for missile, UAV and spacecraft telemetry, tracking and control (TT&C); software & HPAs for satellite command & control; COTS telemetry ground system solutions; tactical intelligence receivers; and terrestrial HF and microwave radios.

**How do we measure up? [www.L-3Com.com/TW/VOC](http://www.L-3Com.com/TW/VOC)**