



# Technology Workshop

Showcasing: Flight Test and Aerospace Instrumentation

## PRELIMINARY Technology Workshop Agenda

**Monday, March 11, 2024**

**11:00 Training: Walk through of Configuration of Multi chassis Axon & KAM-500 System**

**13:00 Lunch**

**14:00 – 17:00 Training: Walk through of Configuration of Multi chassis Axon & KAM-500 System**

**18:00 - 19:30 Networking Event TBD**

**Tuesday, March 12, 2024**

**08:30 Registration with Tea and Coffee**

**09:00 Introduction and Welcome – Darian Wong, General Manager, Curtiss-Wright Aerospace Instrumentation**

**09:15 Introducing Axon PICO – Pat Quinn, Product Line Manager**

Pat Quinn introduces the new Axon PICO Power over Ethernet data acquisition unit.

**09:45 Time Space Position Information (TSPI) Field Test Results – Ben Kupferschmidt, Product Line Manager**

Ben presents real-world test results that demonstrate the precision of a TSPI product.

**10:15 The open XidML Standard - What are the Advantages for Operators - Florian Mertl, Airbus Helicopters**

Florian will discuss XidML and XdefML, and how users/operators can benefit from the open standard.

**10:45 Demo 1**

**11:15 Tea and Coffee Break**

**11:30 Data Encryption for Flight Test Instrumentation, Sridhar Kanamaluru, Chief Architect**

Sridhar covers the encryption of flight test data, both for data at rest (DAR) and data-in-transit (DIT) for over-the-air communications between DAUs, airborne test articles, and ground stations.

**12:00 Software updates: What's New in IADS, TTCWare, and DAS Studio – Ben Kupferschmidt, Product Line Manager and Pat Maher, Software Manager**

Ben and Pat present the new IADS, TTCWare, and DAS Studio features.

**12:30 Demo 2**

**13:00 Lunch**

**14:00 Handling Telemetry Blackouts and Surviving and Measuring High-Level Shocks – David Chamberlain and Stephen Curran, System Engineers**

David and Stephen discuss approaches to gathering and transmitting data during periods where telemetry bandwidth is limited or intermittent and different strategies for surviving and measuring very high-level shocks seen during launch and separation events.

**14:30 Using Computer Vision to Capture Flight Data on Legacy Aircraft, Teddy and Charles Rankin, Peregrine**

Teddy and Charles present FlightCV, a new method of using computer vision software to convert video data of instruments into flight parameters that can then be analyzed for abnormalities or exceedances.

**14:55 Tea and Coffee Break**

**15:10 IADS Post Test Explorer, Dale Jones, Principal Software Development Engineer**

Dale gives an overview of the post-test reporting tool and what we've learned so far from its use in the field.

**15:40 Workshop Day 1 Wrap-Up and Meet the Experts**

A chance to sit with onsite engineers and support to discuss projects or technologies of interest.

**19:00 Conference Dinner –TBD**

**Trusted. Proven.  
Leader.**

curtisswrightds.com



**Wednesday, March 13, 2024**

**08:45 Tea and Coffee**

**09:00 Analog Specifications and Their Real-world Value – David Buckley, Chief Architect**

Dave examines some of the specifications of analog data acquisition cards, focusing on how the specifications are derived and measured and what they mean for the equipment users.

**09:30 Empirical Analysis of Video Quality – Rocco Docimo, Product Line Manager**

Rocco discusses different video encoding schemes and presents empirical analysis of their performance in aerospace applications.

**10:00 Integrating Post-Mission Software with Flight Test Cards and Engineering Requirements - Luiz Souza and Guilherme Oliveira**

Luiz, flight test engineer, and Guilherme, electronics engineer, will discuss the challenges and solutions with this integration, as well as the benefits of a unified system for test data analysis and reporting.

**10:30 Tea and Coffee Break**

**10:45 User-Friendly Edge Computing in FTI Networks – Diarmuid Collins, Hardware Architect**

Diarmuid shows how user-friendly data processing, providing previously inaccessible services, can be brought to the FTI network within existing power, weight, and size constraints.

**11:15 Considerations for Telemetry for Hypersonic Applications**

This paper presents challenges when performing flight test on Hypersonic vehicles, emphasizing environmental challenges and the benefits of COTS versus custom hardware for testing.

**11:45 Thermal Simulation Analysis of FTI Installations, David Doyle, Customer Experience Manager**

David talks about using thermal simulation to see how heat dissipates in different installation scenarios.

**12:15 Product Roadmap: Data Acquisition – Pat Quinn and Rocco Docimo, Product Line Managers, Data Acquisition**

Pat and Rocco deliver an update on the current data acquisition products and the future roadmap.

**12:45 Demo 3**

**13:15 Lunch**

**14:15 Product Roadmap: Switches and Recorders – Ben Kupferschmidt, Product Line Manager**

Sridhar delivers an update on new products and presents the current product roadmap for recorder and switch products.

**14:45 Product Roadmap: Telemetry –Sridhar Kanamaluru, Chief Architect**

Sridhar delivers an update on new products and presents the current product roadmap for telemetry and flight safety products.

**15:15 Demo 4**

**15:45 Tea and Coffee Break**

**16:00 Product Roadmap: Ground Solutions and Software – Ben Kupferschmidt, Product Line Manager**

Ben presents an update on new and upcoming ground station setup, management, display, analysis, and post-test software products.

**16:30 Workshop Day 2 Wrap Up**

**Trusted. Proven.  
Leader.**