

Coriolis Satellite RF Test System—Telemetry 70/70

(Colorado Springs, CO, May 7, 2001) – RT Logic announces that Spectrum Astro, Inc., a premier satellite manufacturer, has installed the RT Logic Telemetry™ 70/70 to serve as the Coriolis Satellite RF Test Set. The T70/70 provides the functionality to test the Coriolis satellite's S-Band downlink and uplink capability.

As an S-Band RF Test Set, the Telemetry 70/70 verifies the proper operation of the Coriolis satellite's state-of-health uplink and downlink. Signal processing for the downlink includes S-Band radio frequency (RF) down-conversion, intermediate frequency (IF) demodulation at 70 MHz, subcarrier demodulation, and bit synchronization. The uplink signal processing includes subcarrier and carrier modulation (to 70 MHz) and up-conversion to S-Band. The PC-based operator interface supports full configuration and monitoring of the S-Band test rack.

Coriolis is a test mission for the flight of two Department of Defense payloads: Windsat and the Solar Mass Ejection Imager (SMEI). The Coriolis satellite is planned for launch in early 2002. The T70/70 is to become part of Spectrum Astro's satellite test infrastructure once the Coriolis satellite production is complete.

“This solution provides the Coriolis program the capability to accurately determine the state and performance of the satellite's RF subsystem during manufacture, while also providing Spectrum Astro a flexible system that can be enhanced to handle additional RF band requirements in the future,” said Robert Shimel, Spectrum Astro's RF Expert Engineer. “Having satellite test equipment based on RT Logic's open architecture allows Spectrum Astro to get the most from the investment and positions us to react quickly to future program needs.”

Using a standards-based open architecture, the T70/70 employs “best of breed” commercial-off-the-shelf (COTS) RF, IF and baseband processing products to meet program requirements. The core of the T70/70 is a VME chassis running a highly reliable real-time operating system. The system uses rack-mount up- and down-converters, a VME IF receiver, a PMC subcarrier demodulator, VME bit synchronizers, and a PMC uplink modulator. RT Logic supplies many of the COTS IF and baseband products within the RF Test Set and provides all software from low-level drivers through comprehensive GUIs. RT Logic's Digital Vector Modulator generates the system's SGLS uplink, performing both baseband and IF modulation.

“More than twenty Telemetry 70/70s are in use at a variety of satellite manufacturers and ground systems worldwide, including Spectrum Astro,” said Sean Conway, RT Logic's VP of Project and Business Development. “This important delivery marks the first at Spectrum Astro and positions us as a preferred choice for state-of-the-art, affordable RF test equipment. We are proud to support Spectrum Astro and are committed to providing innovative, high-performance systems backed by world-class support.”

RT Logic is a leading provider of open architecture systems and products for satellite ground operations, satellite test activities, and launch vehicle/range telemetry acquisition. RT Logic's Telemetry 505 and Telemetry 508+ complement the Telemetry 70/70. For more information, please call (719) 598-2801, email: sales@rtlogic.com, or check out www.rtlogic.com.

