

# **Rover/MST**

## **787 Off-Aircraft Load Tool**

### **for 787/Next Generation Aircraft**



- Official shop | hangar | flightline Off-Aircraft Load Tool for 787
- ARINC 615A Data Loader: 615A over Ethernet, AFDX®, and CAN
- Data Loader for ARINC 826 A & B for (CAN Bus)
- Built-in NetGate Ethernet to AFDX® gateway portal function
- Built-in Remote Data Concentrator (RDC) simulation function
- Supplied with 787 Reference 615A NetLoader
- LSAP inspection tool for ARINC 665-1, -2 and -3
- BEDS tested and compliant
- Emulation mode for the 787 onboard data loading function
- Full support for data load of next generation and legacy (ARINC 615-3) LRUs



## Rover/MST 787 Off-Aircraft Load Tool for 787 & Next Generation Aircraft

### General

TechSAT's Rover/MST (Multi-function Support Tool) is a complete all-in-one tool for data loading support for 787 LRU/LRMs. It supplies the data loading functionality to load all 787 LRUs as the official Off-Aircraft Load Tool (OALT) for the Boeing 787.

Based on the versatile Reference DevStation family of data loading development stations used by all 787 suppliers, the Rover/MST provides a full data loading support capability for all 787 LRUs and LRMs. A built-in simulation of the entire 787 data network provides a two-way portal between the 615A Ethernet based data loading function to support LRU/LRMs residing in ARINC 664 (AFDX®), CAN Bus and ARINC 429 networks.

### Powered by 787 Reference NetLoader

Rover/MST is powered by 787 Reference NetLoader TechSAT's versatile ARINC 615A data loading utility. More 615A data loadable avionics has been developed and integrated using Reference NetLoader than all other 615A data loading development tools combined.

### The Data Loader That Flies

Reference NetLoader uses the same data loading engine code used as TechSAT's Configurable Data Loading Engine (CDLE). The versatile CDLE target data loading engine used in Reference NetLoader flies in avionics on 737/7447/767/777 and in the future on Next Generation Aircraft A380/A400M and 787. Reference target simulations using TechSAT's CDLE are used to cross qualify the onboard data loading function of the 787.

### Data Loading Support for CAN Bus

The CAN Bus functionality built into the Rover/MST supports the emerging use of CAN Bus data loading protocols in avionics applications. The Rover/MST provides full support for 615A over CAN bus and data loading via ARINC 826A. It also supports downstream data loading via proprietary CAN gateways using "diminutive" data loading per ARINC 826B.

### Rover/MST for Development or Maintenance Support

TechSAT's Rover/MST provides an ideal support tool for 787 developments, integration and manufacturing

applications. It includes a complete simulation of the 787 data networks in all network protocols. Included are the full operational characteristics of the 787 Remote Data Concentrator (NetGate/RDC) and Network Interface Module (NetGate/NIM) functions of the 787 data network. When combined with other TechSAT simulation products, a complete "table top" 787 data loading/data transfer network can be constructed for development, lab and manufacturing support purposes.

### Rover/MST for Hangar/Shop or Flightline

Rover/MST is the official off-aircraft data loading solution supplied to airlines for the maintenance of the 787. In development it is used in the integration labs of all major 787 partners to verify data load compliance with the onboard data loading function of the 787. Airline maintenance user for the first time will benefit by using the same data loading tools as applied as the reference standard for vetting all data loadable 787 avionics provided by program suppliers.

At first flight of the 787, a complete selection of LRU/LRM adapters will be available, providing complete hangar, repair shop and flightline capability for all data loadable avionics. Additional proprietary data loading support packages will be available for proprietary loadable LRUs.

### Standard Data Load Support

- > ARINC 615A over Ethernet, AFDX and CAN Bus
- > ARINC 615-3/-4 (ARINC 429)
- > ARINC 826 A & B (CAN Bus)

### Options

- > Full ADS2
- > With AFDX View Analyzer Package
- > CMCF Simulation (787 Health Management Simulation)

### Rover/MST Form Factor

- > 19" Rack Full Rack, Bench Top 19" Rack and Roll-Around & Portable Versions