Viasat’s Link 16 Flight-line Tool (LiFT) software is designed to support “go/no-go” testing and troubleshooting of Multifunctional Information Distribution System Low Volume Terminals (MIDS-LVT) and Viasat Small Tactical Terminals (STT) in a field environment. The LiFT application is available on a touch screen PC or as a software package for customers who want to install the LiFT application on their own equipment.

This software is intended for use by first line and operational level maintenance and support personnel and allows the operator to quickly diagnose or monitor terminal faults. Data is provided in real time over a variety of supported interfaces.

**INTERFACES**

LiFT interfaces to the MIDS Platform A and Platform I MIL-STD-1553 interfaces, Platform D, Platform J and Support Port Ethernet interfaces, MIDS JTRS, as well as STT Ethernet interface. The application uses the same terminal interface software employed by Viasat’s Link 16 Environment Gateway Stimulator (LEGS) software.

**USER-CONFIGURED GUI**

To support different user preferences, the application software may be configured for either a menu-driven GUI or a touch-screen push-button GUI, as well as color schemes for low-light operational environments.

**TERMINAL INITIALIZATION AND STATUS DATA**

Although LiFT is a stand-alone application, it may be used in conjunction with Viasat’s LEGS software. When LiFT first connects to a terminal, it saves a copy of the current initialization data and the current terminal status data for further analysis.

The initialization and status data are formatted in the .lif format employed by LEGS. The Link 16 Initialization File Editor (LIFE) enables the user to view this data. An included Init Converter utility converts files between the .lif format and standard formats distributed by the Network Design Facilities.

**TERMINAL CONTROL ON THE FRONT LINE**

**LiFT Supports the Following Radios**

- MIDS-LVT(1) Variants: Platform A/I (1553) and D (Ethernet)
- MIDS-LVT(2) Variants: Platform J (Ethernet)
- All MIDS (including LVT(3)): Support Port (Ethernet)
- KOR-24 (STT): Platform J (Ethernet)
- MIDS JTRS

**LiFT Supports the Following Functions**

- Obtain terminal status
- IPF Fail, TDMA Rcv/Tx fail, thermal overload, and various BIT drill-down
- Initiate Built-In Test (IBIT) and view results
- View detailed BIT data and LRU/SRU isolation
- View SDU alerts and key status
- View terminal position data
- View cockpit ID/software versions
- Modify a limited number of settings
  - CCPD (Even/Odd/Auto)
  - Primary Source Track Numbers (STN)
  - NTR/non-NTR
  - Set network time
  - Transmit mode (normal/polling/radio silent)
  - Output power (low, medium, normal)
  - TACAN settings (channels and modes)
  - Voice and air control channel (stacked nets)
- Load an initialization file
- Start net entry
- Participate in a network
- View 12-sec counters (Total and By Frame)
- Observe received RF messages by type
- Exercise TACAN Functions
- Sanitize terminal for shipment

**Ordering Information**

PN: 1043057   LiFT Handheld KIT (LiFT software installed on a Touch Screen PC with 1553 Card)
PN: 1043058   LiFT Software License with CD for installation on CFE
PN: 1043061   LiFT Software License with CD plus 1553 Card
PN: 1194824   LiFT Kit in Ruggedized Case (NIIN: 7025-01-630-5259)
VERIFY TACTICAL MESSAGE EXCHANGES
The LiFT operator can initialize the terminal, set time, start net entry, participate in a network, and observe counts of the J-series messages transmitted and received. LiFT allows thorough check-out of the terminal while preventing access to sensitive settings and functions. It is used by air, ground, and naval integrators as well as maintenance personnel to determine mission readiness and “go/no-go” status.

RECORD OF OPERATOR ACTIONS
Indicators are employed to assist the user in interpreting information displayed, with green indicating normal settings and red/orange/yellow indicating severity and possible error conditions. All operator actions are displayed on the screen and recorded in a log file for later review. Interface recordings can also be made for later analysis via COTS/GOTS tools i.e. MANDRIL.