

## VSAT-105: “MIDS Specifications and Documentation”

### GENERAL DESCRIPTION

Course 105 is a 1 day, 8-hour introduction training course that focuses on fundamental principles of MIDS Low Volume Terminal reference documents and specifications. This course is designed to introduce MIDS software Interface Control Documents, MIDS hardware Interface Control Documents, System Segment Specification for the MIDS LVT, and the Version Description Documents for MIDS software for operators and technicians who are preparing to operate and maintain the MIDS terminals in a LINK 16 network. This training course will provide a basic review of the MIDS LVT. All instruction will be reinforced with practical hands-on lab session. These sessions will provide the student with first-hand experience with all the material found in the MIDS LVT ICDs, MIDS LVT SSS, and Software VDDs allowing them to gain the necessary knowledge to troubleshoot the MIDS LVT using the reference documents and specifications. All instruction is given with respect to applicable references. This course can be combined with other courses and customized per student needs. Please contact the POC for additional information.

### Topics to be Covered:

#### MIDS LVT

- Overview of the MIDS LVT

#### MIDS Hardware Interface Control Document (ICD)

- Introduction to MIDS LVT Hardware ICD
  - Mechanical, electrical, and cooling interfaces
  - Installation, bonding, grounding, and shielding interfaces
  - Hard-wired signals, Host/System data bus message exchanges

#### MIDS Software Interface Control Document (ICD)

- Introduction to MIDS Software ICD
  - Volume 1 of 3
    - Defines for all Platforms hosting the MIDS LVT:
    - The terminal initialization data and associated protocols to load, modify or request initialization data.
    - The terminal Status Data and associated protocols to request status data
    - The functional messages exchanged between the Terminal and the Platforms
    - The Bus messages exchanged between the Terminal and the Platforms and associated Bus protocols and exchange rates.
    - The format, units and range of all message data elements.
  - Volume 2 of 3
    - Defines the Functional Input Messages (FIMS) and Functional Output Messages (FOMS) exchanged between the Host and the Terminal as well as the associated application level protocols.
      - Purpose of a Functional Message
      - References to the requirements specifying the functional message.
  - Volume 3 of 3
    - Defines the 1553B Bus interface between Platform A and Platform L

#### MIDS System Segment Specification Document (SSS)

- Introduction to MIDS SSS
  - This specification establishes the overall performance and qualification requirements for the MIDS LVT.

## MIDS Software Version Description Document (VDD)

- Introduction to MIDS Software VDD
  - Describes the software loaded on the Computer Software Configuration Items (CSCI) of the MIDS LVT.

## CLASS MEETING TIMES/LOCATION

This class will consist of 1-day instruction at ViaSat's Carlsbad, California facility. Classes will begin promptly at 8 am and will be dismissed at 4 pm daily. Classes can also be scheduled at the customer's location by contacting the POC below.

## STUDENT PREREQUISITES and CRITERIA

Students are required to have basic MIDS LVT knowledge and have attended ViaSat's VSAT 101 course; for this is an advanced course discussing the MIDS LVT software and hardware ICDs, MIDS LVT SSS, and Software VDDs. Students must meet the following requirements:

- **Citizenship and Foreign Disclosure** – This course is available to U.S. and Foreign citizens. All students must show proof of citizenship. Because this course is governed by Traffic in Arms Regulation (ITAR), 22 CFR 121-128 it will require an export license with a supported Technical Authorization Agreement (TAA) with all customers purchasing this course.
- **Ability to Understand English Language** – All students must be able to understand the English language. No language interpreters will be provided. All students must have fundamental English reading, writing, and speaking skills.
- **Classroom Courtesy** – It is expected that all students respect classmates, instructors, and training equipment and property.
- **Attendance and Participation** – Attendance for all sessions is mandatory. Active participation is highly encouraged at all levels.

## OTHER/MISCELLANEOUS

- **Purchasing Requirements** – Orders for this course can be made by contacting the Points of Contact listed below. Orders for this course must be received by ViaSat's Contracts department 15 days prior to the starting date listed for the Course of Instruction.
- **Minimum and Maximum Class Size** – Minimum class size required to hold the Course of Instruction is three (4) students. The maximum class size for this course is sixteen (12) students.
- **Student Requirements Prior to Class** – There is no required reading prior to the start of class. However, all students should review the basic concepts LINK 16.

## POINT OF CONTACT

The primary Point of Contact (POC) for all students is Mr. Timothy Trudeau, MIDS/LINK 16 Systems Engineer/Lead Instructor for ViaSat, Inc.

E-mail: [Tim.Trudeau@ViaSat.com](mailto:Tim.Trudeau@ViaSat.com)  
+1 (760) 476-4233 office  
+1 (760) 397-7781 mobile

The primary Point of Contact (POC) for placing an order for this course is Stacey Auer in ViaSat's Contracts Department:

E-mail: [Stacey.Auer@ViaSat.com](mailto:Stacey.Auer@ViaSat.com)  
+1 (760) 476-4252 Office  
+1 (760) 795-1045 Fax