

Variable Message Format (VMF) Training Course

Course Syllabus Overview

Duration – 2 ½ days

The aim of the course is to provide students with both technical and operational instruction on Variable Message Format (VMF) over a Combat Net Radio (CNR) bearer. The course has referenced both United States (US) Military Standards (MIL-STDs) documentation and Allied Tactical Data Link Publications (ATDLPs). In particular, the course includes the VMF Message set as described in MIL-STD-6017, the Application Header defined in MIL-STD-2045-47001 and the CNR Bearer protocols identified in MIL-STD-188-220.

Additionally, UK national standards may be referenced and in particular the following: Single Link Interface Requirement Specification (SLIRS), Header Interface Requirement Specification (HIRS), Bearer Definition Document (BDD) and System Management Operating Procedures (SMOPS). Interoperability between systems is discussed in depth, as well as the operational use of VMF. Furthermore, the course has utilised operator procedures detailed within Joint Multi-TADIL Operating Procedures (JMTOP) (Chairman Joint Chiefs of Staff Manual CJCSM 6120.01).

The course has used ATDLP-5.55 for North Atlantic Treaty Organisation (NATO) Qualification Levels for Tactical Data Link (TDL) training in an attempt to align potential future training requirements. SyntheSys has developed this course to meet the knowledge requirements of Levels 1 through 4 of NATO Qualifications Levels for TDL training described within ATDLP-5.55.

There are no theory examinations during the course. However, SyntheSys holds a multi-choice question bank covering the theory lessons that can be provided upon request.

Day 1

- Introduction to VMF
- Documentation
- Functional Area Designator (FAD) and Messages
- Message and Header Syntax
- Application Header
- Unit and Entity Reporting
- VMF Protocol Stack

Day 2

- Review of Day 1
- Network Layer
- Type of Service (TOS)
- Network Access Control (NAC)
- Addressing
- Data Link Field
- Planning and Design
- OPTASK Link CNR



Day 3

- Review of Day 2
- Digitally Aided Close Air Support (DACAS) Block 1 ECP #1, 2 & 3
- Digitally Aided Close Air Support (DACAS) Block 1 ECP #4 – Exchange Network Parameters (XNP)
- Digitally Aided Close Air Support (DACAS) Block 2 ECP #5

About SyntheSys

SyntheSys provides defence systems, training, systems and software engineering and technical management services over a spectrum of different industry sectors. Along with distinct support and consultancy services, our innovative product range makes us first choice provider for both large and small organisations. Established in 1988, the company focus is on fusing technical expertise with intuitive software applications to solve common industry challenges.

