1. Course Title

UHF TACSAT Combined BASIC / TADM

2. Identification Number (ID)

0029

3. Purpose of the Course

The purpose of this course is for current and future operators of TACSAT radios and is designed to prepare the students for duties governing the maintenance and operating procedures for the current NATO AN PRC 117F. It will combine both the TACSAT Basic 037 and TADM 038 modules.

In detail to be able to in week one:

1. Set up and identify the AN/PRC 117F Controls, Indicators and connectors. In this section we will also cover the embedded encryption within the AN/PRC 117F and external fill devices. And will also cover other types of operation that the AN/PRC 117F can perform.
2. Programming of the AN/PRC 117F radio. The exercises consist of hand programming the radio and establishing voice communications using line Of Sight (LOS) settings.
3. Understand the general principles of satellite communications and emphasises on the aspects that directly affect the communication link. In this subject we will hand program the radio for dedicated satellite communications as per MIL STD 188-181B and operate the radio using an actual satellite channel or satellite simulator.
4. Understand the Demand Assigned Multiple Access (DAMA) waveform and be able to program and operate in both voice and data over a DAMA network. As per MIL-STD 188-183 and NATO STANAG 4321 ED4 (IV).
5. The use of DATA applications both High Performance Waveform (HPW) and V-Mail (Data Applications) at the end of the student will be able to explain when the options are required and confidently operate both.

Week Two:

7. Complete and test a High performance waveform (HPW) database and check that it works in a lab environment and over the satellite channel. Using actual satellite access or simulator.
8. Create and test a via sat E-mail database and test it in a lab environment and over an actual DAMA channel or a simulator.
9. Trouble shoot simple problems on both the radio and the computer databases. And be able to rectify the problems.
10. Conformation exercise consisting of all aspects of both the TACSAT BASIC course and the TACSAT Applications and Database Managers course. This will confirm student’s confidence in all current aspect of TACSAT and it applications.
11. Future TACSAT updates and new applications as applicable.
4. Learning Objectives

Upon completion of the course, the qualified student will gain the necessary knowledge to operate and maintain the equipment of the AN/PRC 117F and its associated Databases.

- Explain UHF satellite communication procedure in detail in both Voice and Data.
- Demonstrate UHF satellite communication procedure both in voice and Data.
- Carry out basic troubleshooting on the PRC 117F.
- Carry out basic procedures within a lab in accordance with safety procedures, and external practices as directed.
- Understand the computer applications required for UHF TACSAT data transfer.

5. Qualification

COMBINED TACSAT Basic and TADM.

6. Student Criteria

- Be assigned to a NATO or national signal establishment with the role of technician or operator.
- Met the background knowledge prerequisites for the course.
- Have successfully completed a national or civilian course in basic communications systems.

7. Rank

- Officer
- Enlisted
- Civilian equivalent

8. Language Proficiency

According to STANAG 6001: English SLP 3232

9. Security Clearance

NATO SECRET
10. Course Length

10 working days

11. Special Instructions

Students will be issued all relevant course material.

12. Class Size

- Maximum
- Recommended
- Minimum

10/10/4

13. Nomination Procedures

www.nciss.nato.int

14. Pre-course Study Material

N/A

15. Location

The course is conducted at the NATO Communications and Information Systems School (NCISS), Latina Italy.

16. Background Knowledge Prerequisites

Preferable:

1. Previous experience in basic communication systems (e.g. SATCOM, VHF, UHF, HF, LOS.)
2. Basic knowledge of computer operating systems.