1. Course Title
Bi-Band Suitcase Satellite Terminal (BBSST) Operator

2. Identification Number (ID)
0042

3. Purpose of the Course
To provide military and civilian personnel with knowledge and skills to
   a. install and operate the BBSST Satellite Communications (SATCOM) terminal;
   b. perform limited preventive maintenance on the BBSST system. Repair actions are limited to
      the replacement of the Lowest Replaceable Unit (LRU) sub-assembly.

4. Learning Objectives
   Upon completion of the course, the qualified student will be able to:
   • Deploy, teardown, and operate the BBSST system designated for operations and
     exercises in both Ku-Band and X-Band.
   • Perform basic activities to check the performances of the BBSST system.
   • Maintain operational the BBSST system to ensure Satellite communications.

5. Qualification
   NATO SATCOM BBSST Operator

6. Student Criteria
   1. Been assigned to a NATO or National Signal Establishment with the role of technician or
      operator,
   2. Have met the Background Knowledge Prerequisites (see item 16: Student has to complete
      the SATCOM basics (ID 601) course (pre-course study material) at https://jadl.act.nato.int/.
      There will be an entry exam on arrival. Questions are taken from the above on-line
      training)
   3. Have successfully completed a national military or civilian course on basic electronics,

7. Rank
   • Officers
   • NCO’s
   • Civilian technicians and engineers

8. Language Proficiency
   Language Proficiency according to STANAG 6001: English SLP 3232 and a detailed knowledge of
   the applicable English electronic terminology.
9. Security Clearance
NATO SECRET

10. Course Length
5 working days

11. Special Instructions

12. Class Size
- Maximum
- Recommended
- Minimum
6/6/3

13. Nomination Procedures
See joining instructions and nomination procedure on www.nciss.nato.int

14. Pre-course Study Material
Student has to complete the SATCOM basics (ID 601) course at https://jadl.act.nato.int/
There will be an Entry Exam on arrival. Questions are taken from the above on-line training.

15. Location
The course is normally conducted at the NATO Communications and Information Systems School (NCISS), Latina Italy. Mobile training is possible and must be coordinated IAW established guidelines.

16. Background Knowledge Prerequisites
Completion of the ADL Course ID 601- SATCOM Basics Ver 3.0 is mandatory

I. BASIC MATHEMATICS
1. Simple algebraic equations, functions exponential & logarithms.
2. Decibel Notation (dB, dBW & dBm).

II. THEORETICAL KNOWLEDGE BY TECHNICAL SUBJECT

A. ELECTRONICS
2. UPS.
B. TELECOMMUNICATIONS - PRINCIPLES AND TECHNIQUES.
1. RF basics.
2. Multiplexing basics (TDM, FDM).
3. Modulation – BPSK, QPSK and 8PSK.
4. Error detection / correction techniques

C. READING AND INTERPRETING ELECTRONIC / ELECTRICAL BLOCK DIAGRAMS AND INTERCONNECTION DIAGRAMS.

D. PRACTICAL EXPERIENCE BY FIELD OF ACTIVITIES - USE OF TEST EQUIPMENT.
1. Digital Multi-meter.
2. Digital Data Tester & Data generator - Analyser.
4. Earth resistance measurements.

E. PRACTICAL EXPERIENCE BY FIELD OF ACTIVITIES - USE OF TEST EQUIPMENT.
1. Basic Communication Systems (e.g. SATCOM, VHF-UHF, HF, LOS).

17. Modules
N/A