CERTIFIED VSAT INSTALLER TRAINING COURSE

SAT-NSC-CC-0004

Ver	Date	Description	Author	Check
1.0	15/04/2018	Certified VSAT Installer Training Course Content & Description	AS	JD

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1   PURPOSE

The purpose of this document is to outline the specifications of the Certified VSAT Installer Training Course.

2   CURRICULUM

The training course will contain a full curriculum covering the basic satellite theory, tools equipment documentation, indoor equipment, outdoor equipment, stabilized auto-acquire antennas, remote site, antenna alignment, remote commissioning and faults

The course content contains the following modules and lessons.

2.1   Basic Satellite Theory

Course Introduction

What is VSAT?

Frequency Bands

Satellite Orbits

Satellite Link Terminology

VSAT Latency

Rain Fade

Sun Outages

Adaptive Coding Modulation - ACM

Linear Polarization

Circular Polarization

deciBels – dBs

DC Voltages

RF Safety

VSAT Glossary of Terms

2.2   Tools, Equipment & Documentation

Hand Tools

Cables

IT & Software

Adaptors

Communications

Spares & Consumables

Personal Protective Equipment – PPE

Documentation

Checklist

2.3   Indoor Equipment

Equipment Rack

UPS

SCPC Modems

Comtech

Paradise Datacom

TDMA Modems

iDirect

Newtec

Romantis

Routers, Switches and WAPs

2.4   Outdoor Equipment

Low Noise Block – LNB

Block Upconverter – BUC

RF Feed Assembly

Antenna or Sat Dish

Antenna Offset

Antenna Mounts

RF Coax Types

N-Type Connector termination

F-Type Connector Termination

Power

Grounding

2.5   Stabilized and Auto-Acquire Antennas

Stabilized Antenna Theory

ACU Configuration

Sea Tel

Intellian

SpaceTrack

Orbit

iNetVu

MotoSat

2.6   Remote Site

Site Serveys

Arrival at Install Location

JHA and Take 5's

Work Area

2.7 Dish Alignment

Dish Pointing

Elevation

Azimuth

Polarization

2.8 Remote Commissioning

Compression Point - 1dB Point

Cross Polarization – Xpol

VoIP

Data

Site Documentation

2.9 Fault, Issues & Downloads

Dish Pointing

Dish Movement

Low Rx Signal

Tx Power Problems

No or Slow Data

Poor Voice

Cross-Pol

3 SCHEDULE

The course will be taken at the students' own pace within a 3-week period from the date of enrolment. It is estimated that the course will take approx. 10 hours to complete including the assessment.

4 ASSESMENT

The final exam will consist of 40 questions to be answered in 60 minutes. The questions are a combination of multiple choice (single answer and multiple answer), arranging in to the correct order, true or false statements and fill in the blank.

A student will need to score over 80%, 32 or more questions correct, to pass the course and can attempt the exam a maximum of 3 times.

5 CERTIFICATION

Students who achieve the certification will be able to download the course certificate from the user dashboard in PDF format.

6 COST

The cost of the cost shall be set at $450 USD per student. A discount of 10% ($45) will be offered for orders of 4 or more students.

7 LANUAGE

The course content and assessment will be in English.

8 SKILL LEVEL

The course is aimed at technicians with basic skills and knowledge of communications.

9 COURSE PREREQUISTS

There are no course prerequisites.

10 FOLLOW ON COURSES

After completing the Certified VSAT Installer training course then the student should complete the specialised manufacturer training courses Intellain, Sea Tel and iDirect.

11 TIMELINE

The course is available online for student registration.