

## Section VII. Mobile Subscriber Equipment Contingency Communications

### AN/TTC-50 Communications Central

**NSN:** 5895-01-349-8064

**Reference:** TM 11-5805 -786-12-2

#### General Information

The AN/TTC-50 Communications Central (CC) is a part of the communications parent switch (CCPS) and the contingency communications extension switch (CCES). It can perform as an originating affiliation, disaffiliation, duplication, and automatic subscriber finder. It also provides nodal control. While in transit, the CC can operate as an MSRT via one of four RT-1539A radio sets and associated equipment installed in the shelter. The radio set also provides full-duplex, encrypted radio transmissions between mobile subscribers within proximity of each other or a fixed or mobile subscriber in the network through a CC. The CC is comprised of an extended S-250E electrical equipment shelter mounted on a heavy HMMWV. It tows two PU-753/M, 10 kW, trailer-mounted, diesel generator set, which provides power when the CC is emplaced and operating as a switch.

#### Major Components

- 1 Shelter S-250E/G
- 1 Junction Box J-1077A/U
- 1 Generator PU-753/M, 10 kW
- 1 Electronic Transfer Device KYX-15/TSEC
- 1 RF Multicoupler CV-2391/TRC-191
- 1 Electronic Transfer Device KYK-13/TSEC
- 4 Radio Sets RT-1539
- 1 Group Logic Unit C-11865/TRC-191
- 1 Mast-Mounted RAU Antenna AS-3886/TRC-191
- 1 VINSON COMSEC Unit TSEC/KY-57
- 1 Antenna Mast AB-1339/G, 15 meters
- 1 Automatic Key Distribution Center, TSEC/KGX-93A
- 1 Data Processing Terminal AN/TSQ-154A
- 1 Switching Processor OL-386/TTC-39A
- 1 Frequency Oscillator O-1838/TTC-39A
- 1 Printer
- 1 Intercommunications Station LS-147

**Major Components  
(Cont.)**

- 4 Trunk Encryption Device TSEC/KG-194
- 1 Digital Computer AN/UYK-86(V)3
- 1 EL Display
- 1 RSS-D CP-1997
- 1 Keyboard
- 1 Packet Switch AN/TYC-20
- 1 TUNA, TSEC/HGF-96
- 8 Dual Loop Key Generators (LKG) KG-112
- 1 Environmental Control Unit
- 1 DNVT TA-1035/U
- 3 ThinLan Transceivers
- 1 VHF Whip Antenna AS-3885/TRC-191
- 1 CPS Headset Control

Parent Switch—4-Line Termination Units (LTUs)  
Extension Switch—2-Line LTUs

**Technical Characteristics**

Power Requirements .....	Primary — 115 V AC, 60 Hz, single Phase Alternate — 28 V DC Emergency — 24 V DC
Data Rates .....	16 kb/s to 256 kb/s
CCPS .....	105 digital terminations (3 LTUs) 12 digital terminations (J-1077) 8 AUTOVON trunks 8 Commercial trunks (1 LTU)
CCES .....	35 digital terminations (1 LTU) 12 digital terminations (J-1077) 8 AUTOVON trunks 8 Commercial trunks (1 LTU)

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