HARRIS®

AN/PRC-117F(C) SATCOM TDMA CAPABILITY (STC)

Expanding the Voice/Data Capabilities of Limited UHF SATCOM Resources

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Advanced Networking—Today

The Harris SATCOM Time Division Multiple Access (TDMA) Capability (STC) uses existing 25 kHz satellite channels more productively by allowing multiple user-defined nets on a single dedicated 25 kHz channel. STC provides additional voice channels, local user controller capabilities, and a simplified setup process supporting various mission requirements.

One Channel, Up to 11 Voice Circuits

Compared to conventional DAMA's five fixed circuits, STC provides a set of channel configurations that allow the user to sub-divide a single satellite channel in a variety of voice and data circuit combinations. Possible configurations include:

- Up to 11 MELP voice circuits, or
- 4 MELP voice circuits and one 2.4 Kbps data circuit, or
- 3 MELP voice and one 16 Kbps data circuit (shown below)

Complete User Control

A key advantage of STC, when compared to DAMA, is the AN/PRC-117F radio channel controller function that allows the user to configure STC SATCOM channels locally. The AN/PRC-117F controller broadcasts time hack messages to keep all participating terminals in sync, eliminating external controller requirements.

Any AN/PRC-117F STC-capable radio with a programmed STC preset can be quickly set up to become the channel controller of the overall network. A typical network requires a single controller, but an alternate controller can be set up for redundancy, as required. To access a given net, simply choose a circuit and a configuration preset via the radio's Keypad Display Unit (KDU) and operate in the same manner as a typical voice or data net.

Software-Only Upgrade

STC is available as a software-only upgrade to fielded radios, and currently ships with newly purchased radios. No radio hardware modifications are necessary.

Existing customers can download the latest AN/PRC-117F software—which includes STC at no charge—from the Harris Premier Website (https://premier.harris.com/rfcomm). Additional STC feature details as well as other AN/PRC-117F information are also available on the website for download.

Features:

- Proven 25 kHz SATCOM reliability with TDMA flexibility
- Up to 11 voice circuits on a single WB SATCOM channel
- Up to (16 Kbps) data speed compared to DAMA's 9.6 Kbps
- 100% user-defined channel control
- Software upgradeable
- Simple setup for easy operation and troubleshooting

Contact Harris RF for additional details on STC and other Harris RF products.