



# ACC WIDEBAND SATCOM in transition

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**LANGLEY AIR FORCE BASE, Va.** — As the Department of Defense transforms to network-centric warfare, Air Combat Command is modernizing its satellite communications terminals to keep pace with ever-expanding AEF connectivity requirements.

The terminals being fielded today, and in the future, bring increased reliability and flexibility to the warfighter thus requiring a smaller footprint and less manpower. These terminals are being designed to support a broad range of missions as the Air Force migrates to a common terminal product line.

Many of today's SATCOM systems are fast approaching the end of their life cycle. These legacy terminals are unable to meet

mission requirements as DoD fully embraces the constructs of NCW.

ACC, working with Electronic Systems Center and the Air Force Space Command, will field SATCOM terminals capable of supporting current and emerging information exchange requirements of a highly mobile Air Expeditionary Force. These terminals bring increased capability, reliability and flexibility to the warfighter in a lighter, leaner package.

Under the transformational communications initiative, the vast majority of wide-band SATCOM will be IP-based traffic with satellites functioning as space-based routers.

In addition to the systems in the graphic below, the Air Force will begin fielding the Ground Multi-band Terminal beginning in fiscal '06. This terminal will be capable

of operating full duplex in the C-, X-, Ku- and military Ka-bands and will be produced in both transit-case and platform-mounted configurations. Both versions will support two simultaneous hub-spoke networks with a maximum of six spoke terminals per network. Initially, GMT will support a max data rate of 50 Mbps and in later spirals, up to 274 Mbps. These terminals will be fielded to combat communications squadrons to replace existing GMF terminals. Current plans call for fielding a limited number of GMT terminals to support Global Hawk Unmanned Aerial Vehicle and Distributed Common Ground Station connectivity requirements.

These and other programs are part of an effort to migrate to a common terminal product line that satisfies a broad range of missions.

**Terminals below represent a piece of ACC's modernization plan through 2010 and provide the foundation for transitioning to network-centric MILSATCOM.**

## + AN/TSC-94 GMF terminal



The older legacy systems, such as the AN/TSC-94 Ground Mobile Forces terminal, will be replaced by the end of fiscal '04.

## + AN/USC-60A Tri-band terminal



Current plans will field a total of 70 AN/USC-60A systems capable of operating in the C, X and Ku-bands at data rates up to 8,448 Mbps.

## + 20 Quad-band Hub terminals



Quad-band hub terminals, operating in the C-, X- and Ku-bands and receive-only in the military Ka-band, will be delivered in fiscal '05.



**Col. Glen West, Joint Task Force, Southwest Asia Air Reserve Component liaison officer, gets a tour of a forward Ground Mobile Forces satellite terminal from Senior Master Sgt. Tracy Von Hollen, chief of the 438th Expeditionary Communications Squadron.**

Tech. Sgt. Joe Springfield / JCCC