# 363rd EXPEDITIONARY COMMUNICATIONS SQUADRON

**MISSION**

**LINEAGE**
363rd Expeditionary Communications Squadron

**STATIONS**
Langley AFB, VA, 27 Aug 1948-26 Apr 1949
Langley AFB, VA, 1 Sep 1950-1 Apr 1951
Shaw AFB, SC, 2 Apr 1951-8 Feb 1958
Prince Sultan AB, Saudi Arabia

**ASSIGNMENTS**

**COMMANDERS**

**HONORS**
**Service Streamers**

**Campaign Streamers**

**Armed Forces Expeditionary Streamers**

**Decorations**

**EMBLEM**

**MOTTO**

**NICKNAME**

**OPERATIONS**
Prince Sultan Air Base, or PSAB, probably didn't notice anything different in the way the sun rose Jan. 23, but that day marked the dawning of a new age for secure telephone switching and the end

of an era for the AN/TTC-39A, a mobile tactical central telephone office, affectionately called TICK-39 or just TICK. The 363rd Expeditionary Communications Squadron brought the Air Force's newest tactical secure voice capability online on that day, as the final circuits were moved off of the TICK-39, and connected to the new switch multiplexer unit, or SMU. Although there were other SMUs in the Southwest Asia theater, this was the Air Force's first to be configured to serve as a fully integrated compact digital switch, or CDS, capable of replacing the mission of the venerable AN/TTC-39A. The importance of the event and its impact are best summed up by the words of Lt. Col. Gary D. McAlum, 363rd ECS commander: "The SMU is a major milestone in the evolution of secure communications. It boasts significant improvements over the AN/TTC-39. It is easier to maintain, more re- liable, and improves quality of service. It also relieves the Air Force from a serious manning bur- den, with SMU operations and maintenance being 100 percent contractor-supported." The AN/TTC-39A is part of a large, but aging, family of mobile communications equipment designed to rapidly bring a robust communications capability to a bare base. This family of interoperable equipment is commonly known as tri-service tactical communications, or TRI-TAC, equipment, conceived with the goal of facilitating vital command and control communications between all U.S. forces and North Atlantic Treaty Organization partners. The AN/TTC-39A van served as the deployed base telephone switch and was comparable to your home town telephone company in a tractor-trailer. It was one of the first military tactical telephone switches capable of automated operation (no need for an operator to answer and manually connect calls) and could pro- vide services for both analog and digital voice plus data traffic. Its built-in communications security equipment rack was one of the most important features, giving it secure automatic telephone switching capability. The TICK-39 provided a varying degree of PSAB's telephone switching capability since 1996. In the beginning, it provided all primary telephone switching. A commercial SL-100 telephone switch (just like the one "downtown") was installed at PSAB in 1997, and the AN/TTC-39As were dedicated exclusively to providing secure telephone capability, servicing the tactical KY-68 digital secure voice telephones. For those unfamiliar, the KY-68 is a big, ugly green telephone, loved by all despite its appearance because of the instantaneous secure voice capability it provides. A little more than a year ago, a concept was proposed to replace the TICKs completely with the newest switching technology, the SMU. The SMU project moved amazingly fast at PSAB. The structure and major pieces of the SMU were in-place by September, and everything was ready to start transfer- ring circuits by Dec. 27. The PSAB SMU is capable of roughly the same number and types of circuits as the TICK. How- ever, it does have major technological advances. It is much easier to program switching schemes, and it provides far greater feedback to the technician through its computer interface. The PSAB TICK maintainers describe the ease of setup and operation of the SMU as simply amazing. They won't be the experts maintaining it though – contractors will. Part of the whole SMU/CDS concept is to cut back on the number of "blue-suit" secure- voice maintainers in-theater. In recent years the aging active duty TRI-TAC equipment has been undergoing phase-out to the new theater deployable communications suite of equipment. The Air and Space Expeditionary Force Center is increasingly forced to turn to Air National Guard units to fulfill AN/TCC-39A manning requirements at contingency locations around the world, as active duty units integrate into and spin-up on TDC. For example, nine of 10 assigned TICK-39 maintainers at PSAB are Air National Guard personnel during the current rotation. The SMU and its contractor operation actually free up 15 military maintenance authorizations. It will truly mark the end of an era when the AN/TTC-39A maintainers assigned to the cur- rent AEF

rotation depart. It will be the last time blue-suit maintainers handle the secure- voice switching needs of this base, and one more step down the road to replacement of TRI-TAC communications equipment at PSAB. For all the tactical communications "old-hats," it's both a sad and an exciting time. It's

sad to see an old friend who has served well retire and depart, but exciting to see the next generation take the field.

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Sources
Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.