

These stations made history by helping GIs call home from remote locations—and that achievement was only their sideline.

Our Affiliates From MARS

BY DR. LARRY R. MORRISON

MOST of us think of the Military Affiliate Radio System (MARS) as a provider of phone patches and a handler of messages between servicemen overseas and their families and friends back home.

That image is especially strong for those who served during the Vietnam War. They will remember how—with commercial telephone service limited and costly—MARS patched them through to friends and relatives at home. In 1969 alone, thirty Air Force MARS stations in Vietnam and Thailand, working with 200 stations in the United States, put together 210,000 phone patches.

Grand as it is, however, morale-building is a pleasant fringe benefit. The primary MARS mission is operational.

At its inception in 1948, the MARS program sought to stimulate the interest of amateur radio operators in military communications and to provide the nation with a pool of trained people it could call on in an emergency.

MARS still does that, but its mission is now global. Under Department of Defense sponsorship, it provides emergency communica-

tions—local, national, or international—as an adjunct to normal channels. The work covers crash sites, earthquake areas, and war zones.

The network is a high-frequency backup to defense communications as well, so MARS has a specified role in various emergency and contingency plans. The Air Force Emergency High Frequency Network is currently in the planning stages. It will use mostly MARS assets and create a reliable contingency communications system.

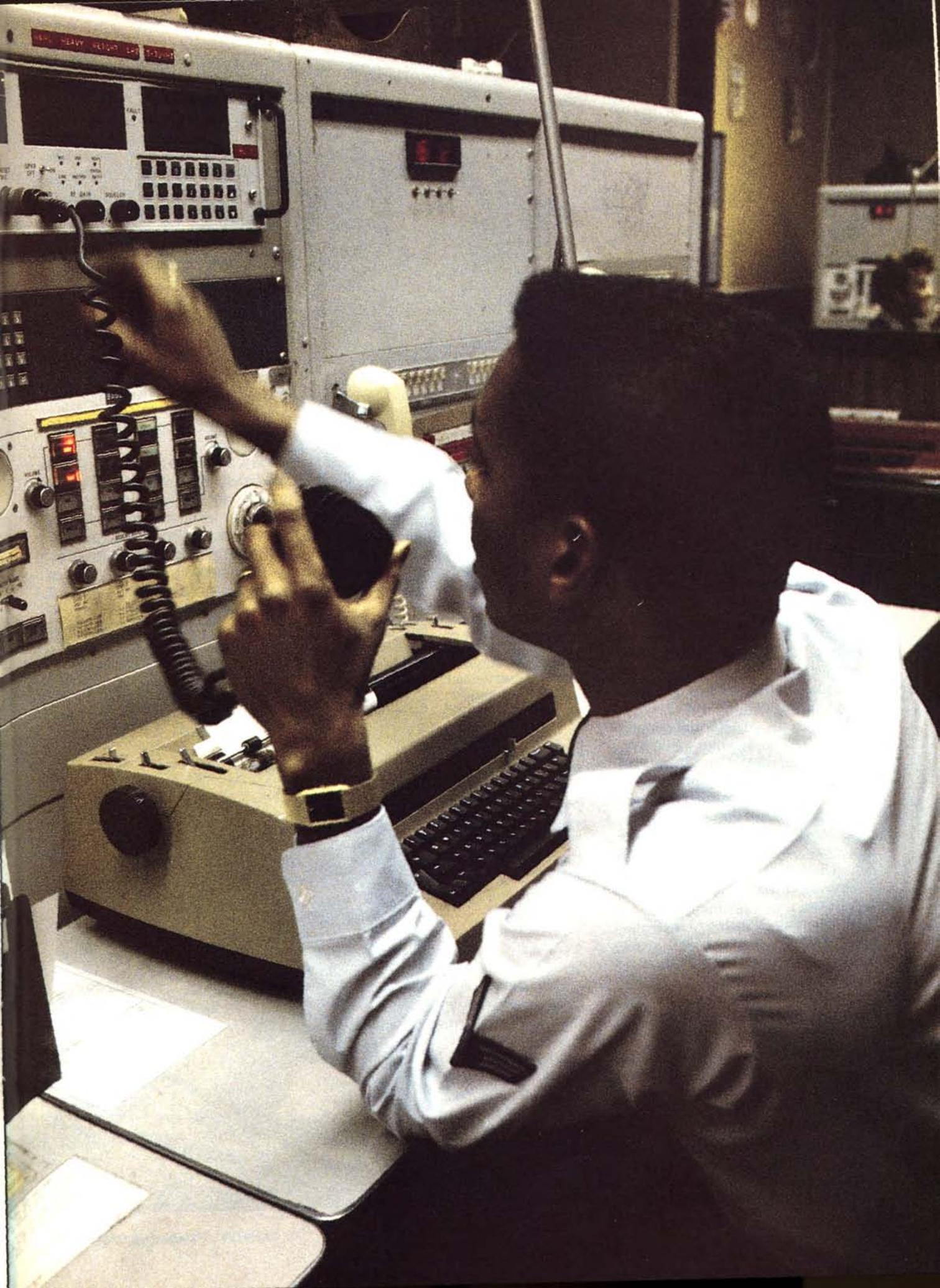
Emergency Connections

Throughout its existence, the Air Force MARS program has provided communications assistance during military operations and emergencies. MARS played a prominent part in the evacuation of American dependents during the Middle East Crisis of 1967, and it demonstrated its value again in the Iranian emergency of 1979.

During the first attack by Iranian militants on the United States Embassy in Tehran, on the morning of February 14, 1979, normal communications with the United States and the western world were severed. At

The main mission of the Military Affiliate Radio System (MARS) is to provide emergency communications as an adjunct to normal channels. These units train by handling messages from service members overseas and relaying them to families and friends. Here, SrA. Warren L. Parham of the 2045th Communications Group, Andrews AFB, Md., patches an overseas call.

—Staff photo by Guy Aceto



The Amateur Origins of MARS

Military amateur radio operations were first organized in 1925 as the Army Amateur Radio System. Networks of radio stations were established, and civilian amateur members were given intensive instruction in Army radio procedures and practices. By the beginning of World War II, about 8,000 amateur operators had been trained.

The network was disbanded on December 8, 1941, when the Federal Communications Commission terminated all amateur radio operations in the United States. The MARS system as we know it today dates back to 1948. The advantages of having a cadre of trained radio operators on call for emergencies were not lost on military planners. Both the Army and the newly created Air Force wanted to maintain such a capability. Thus the two services jointly formed the Military Amateur Radio System.

Originally, MARS membership was restricted to military personnel and reservists, but in 1950 membership was opened to other radio amateurs.

The MARS mission was expanded in 1952. MARS networks were authorized to transmit quasi-official communications and messages originated by the American Red Cross. MARS was now recognized as a supplementary system for regular communications networks and was to handle official Air Force message traffic when established systems were not operational. It was also agreed that MARS stations could assist in civil defense emergency communications networks so long as that did not interfere with their essential military functions.

Meanwhile, it had become apparent that the word "amateur" no longer described the operation adequately. Everyone agreed that "affiliate" was a better term, so the name was changed in 1952 without loss of the MARS acronym.

In 1959, MARS was tasked to provide back-up for USAF communications circuits and to respond to domestic emergency plans of numbered air forces in the United States. Soon thereafter, MARS stations began acquiring transportable units for mobile radio communications.

When the Air Force Communications Service (now Air Force Communications Command) became a major command in 1961, it became the single manager of the Air Force MARS program.

—L.R.M.

ited installation of additional telephone facilities, but the Chief of Air Force MARS offered a solution. Portable MARS radio stations could be—and were—airlifted to Vietnam. By December 14, seven Vietnam MARS stations were operating, and more than 15,000 messages were processed during the 1965–66 holiday season. By May 1966, Air Force Communications Service (AFCS) had begun action to airlift five packaged MARS stations to Thailand.

During 1966, more than 14,000 telephone calls were placed via MARS from Vietnam personnel to friends and relatives in the States. The MARS network reached its peak that year, with 450 military stations and more than 11,000 affiliate members.

MARS operations between Southeast Asia and the United States continued to increase. Alaska became a major relay for written traffic. Alaskan stations operated twelve to eighteen hours daily, using volunteer assistance, and passed thousands of messages monthly.

7:00 a.m., the National Military Command Center in the Pentagon requested the Andrews AFB, Md., MARS station to make contact with any radio station in Iran it could reach.

By 8:30 a.m., MARS had contact with an Iranian amateur radio station. For the next two and a half hours, this connection provided a link between government officials in Washington and the situation in Iran. Most of the communications that day concerned the welfare of American citizens.

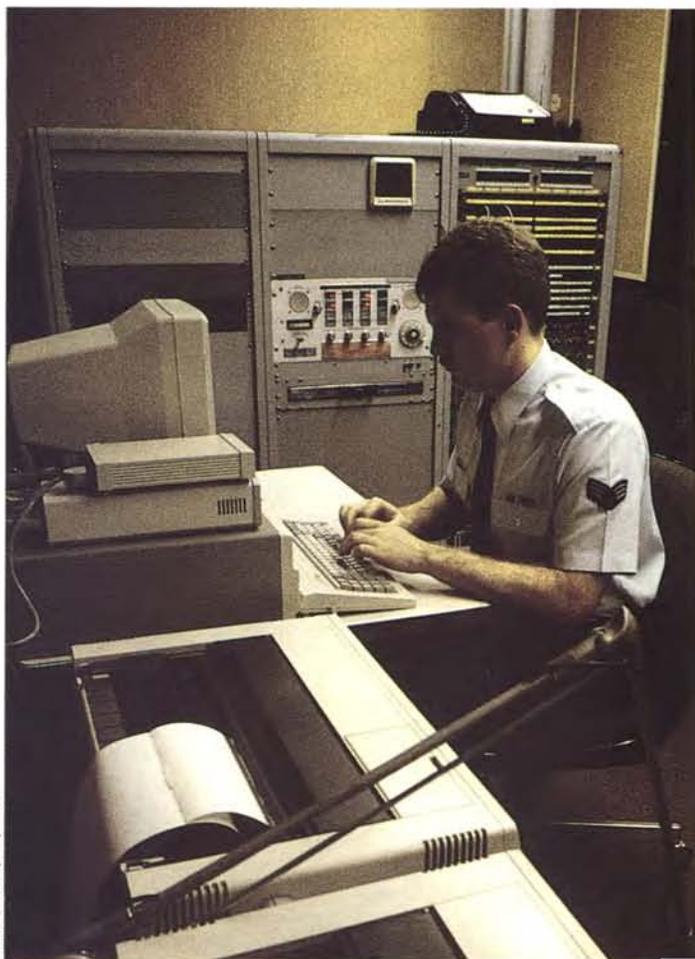
The next day, the Andrews MARS station was finally able to establish contact with a MARS station in Tehran. For almost a week this channel augmented vital communications with Iran.

In Southeast Asia, MARS showed the other—and better known—side of its worth. In Vietnam in 1965, commercial telephone facilities were exceedingly limited. At most, they could handle thirty calls to the United States a day from servicemen. With the holiday season approaching, the military command in Vietnam appealed for help.

High costs and shortages of both equipment and manpower prohib-

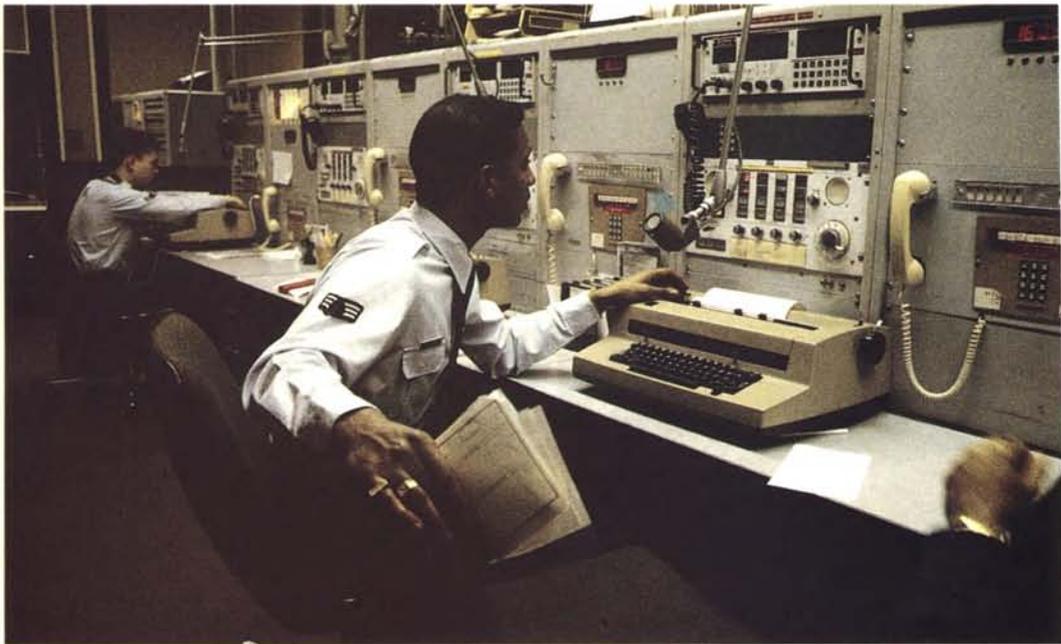
The MARS station at Andrews was one of the first to be completely computerized.

The new system greatly improves productivity and increases the speed at which messages can be received and sent. Here, SrA Stewart G. Smith of the 2045th Communications Group works on the computerized communications equipment.



—Staff photo by Guy Aceto

While many MARS stations are only open eight hours a day, the one at Andrews AFB is open around the clock, since it is one of the key stations. More and more MARS stations are taking over base emergency communications, though. Here, Airmen Smith (left) and Parham man the consoles to make phone patches during their shift.



—Staff photo by Guy Aceto

Phone patches from the combat zone averaged more than 10,000 per month.

As the war went on, MARS handled a lot more phone patches—more than 200,000 of them in 1970, for example. In addition to its morale-boosting work in Southeast Asia, MARS had a significant role in Operation New Life, the evacuation of refugees in the spring of 1975. The Hickam AFB, Hawaii, MARS station relayed US-bound messages by radio teletype through March AFB, Calif., the network control station for the refugee operation. From April 25 through April 30, the Hickam MARS station handled 497 radio-teletype messages and 114 phone patches related to the evacuation of refugees.

Amid Natural Disasters

Since MARS began operations in 1948, it has often assisted during natural disasters. When an Atlantic storm devastated coastal areas of Delaware and New Jersey in March 1962, a MARS van provided mobile communications between search parties. MARS also proved useful following an Alaskan earthquake in 1964. Civilian and off-duty military operators began relaying news of the earthquake soon after it happened. The network further enabled Alaskans to communicate with concerned friends and relatives in the continental United States.

More recently, MARS operated under emergency conditions when

hurricane Elena struck the Gulf Coast in September 1985. The hurricane passed directly over Keesler AFB, Miss., causing some \$25 million in damage. Throughout the storm, however, the base MARS station continued to function.

Later that same month, the first communications link between Mexico City and the United States following a major Mexican earthquake was established by the manager of the Robins AFB, Ga., MARS station, who picked up an emergency call from a MARS radio operator in Mexico City. Once he realized what the situation was, the MARS manager began transmitting and reached the American Embassy in Mexico City. Because of the severity of the earthquake, all telephones in the city were out. The first word of the disaster to reach the US State Department came from the Robins MARS station.

MARS stations fall into two general categories. The first is the base or unit station, located on a military reservation. Normally, military personnel operate these stations during duty hours, using military equipment.

In the second category are those stations operated by MARS mem-

bers, known as affiliates, participating in the Individual Member program. They are licensed radio amateurs who volunteer their time and services to MARS. They augment the military stations by operating the communications networks when the duty-hour stations are closed. Using their own equipment, they provide service on voice, continuous-wave, and radio-teletype circuits on radio frequencies assigned for MARS use.

Air Force Communications Command today manages 300 military MARS stations; approximately 3,000 volunteer affiliates complete the Air Force MARS network. There are ten MARS regions worldwide: six in the continental United States, one in Alaska, one in Central America, one in the Pacific, and one in Europe.

At present there are four round-the-clock stations, responsible for the ten MARS regions. These stations are located at Scott AFB, Ill., Andrews AFB, Md., Travis AFB, Calif., and Rhein-Main AB, Germany. AFCC is now studying the feasibility of operating a twenty-four-hour station in each MARS region to provide more effective coverage. ■

Dr. Larry R. Morrison has been with the Air Force Communications Command's history office since 1983. He was previously a professor of history at the University of Nebraska and at Virginia Tech. He earned his B.A. degree in history at DePauw University and his doctorate in American History at the University of Virginia. An Army draftee in 1967, he had his first contact with MARS while serving in Vietnam, when he "called home" via MARS.