

EVOLUTION

Evolution of ARSOF Communications

By Kenneth Finlayson



In World War II, frequency modulation (FM) radios like the SCR-300 provided short-range voice communications for the Rangers and conventional ground forces. Long-range transmissions required the use of Morse Code.



With a satellite communications system mounted on an All-Terrain Vehicle, this Special Forces soldier in Afghanistan has the ability to send voice and data transmissions around the globe.

Army Special Operations Forces (ARSOF) communications grew out of the support to the World War II legacy units that are the predecessors of today's units. The following photo essay traces the history of ARSOF communications support from individual and unit perspectives. From World War II, the Korean War, and Viet Nam to the Global War on Terrorism, the need for technologically advanced communications systems, highly trained operators, and the ability to deploy rapidly have been hallmarks of ARSOF communications support.



Wire communications between a headquarters and its subordinate units were the most secure method of transmission. The communications section of Merrill's Marauders HQ established a switchboard to handle traffic with battalions in Burma during World War II.



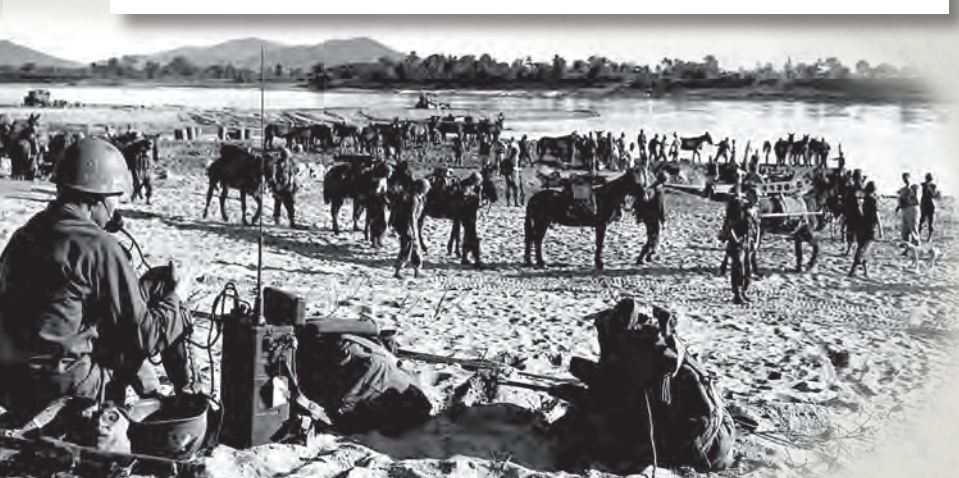
Support to today's Army Special Operations Forces requires a complex communications network for voice and data transmission world-wide. The Operations Center of the 10th Special Forces Group during the opening stages of Operation IRAQI FREEDOM shows the extensive C4I network supporting operations.

World War II: The Legacy Units

Operating behind enemy lines in all theaters of World War II, the predecessors of today's ARSOF units depended on radio communications to maintain contact with their headquarters. In Burma, the Office of Strategic Services (OSS) Detachment 101 and Merrill's Marauders worked deep behind Japanese lines. In the Pacific Theater, the Alamo Scouts and 6th Army Rangers gathered intelligence and conducted raids on the Japanese-held islands. In Europe, the Operational Groups and Jedburgh Teams of the OSS worked with resistance movements against the German occupation. The 512th Signal Company supported the Canadian-American First Special Service Force in 1944 and in 1945 was incorporated into the newly constituted 112th Signal Battalion supporting the 1st Allied Airborne Army. The 112th participated in Operation VARSITY and provided telephone support at the Potsdam Conference. The 112th was deactivated on 17 December 1945.



Operating behind the lines in Burma, Detachment 101 reported on the movements of Japanese troops. SGT Fima Haimson establishes communications using a home-made radio constructed of components obtained locally.



The MARS Task Force, the successor to Merrill's Marauders, assembles on the banks of a river in Burma. The communications section has established a radio net to control the operation.



First Lieutenant Milton Beckwith of the Alamo Scouts demonstrates a waterproof radio developed for use during infiltration of the Pacific islands in Luzon, 1945. The Alamo Scouts collected critical intelligence on the Japanese for the 6th Army.



T/4 Norman Skeely of the 5th Ranger Battalion prepares a message for transmission back to the battalion headquarters in France, 17 August 1944. The fast moving Rangers used vehicle mounted radios as well as man-pack systems. Strapped to his leg is the Morse Code key.



Members of MARS Task Force in Burma used radios to arrange for aerial resupply when operating behind Japanese lines. The hand-cranked generator supplied power for the radio, here doubling as a mirror stand.



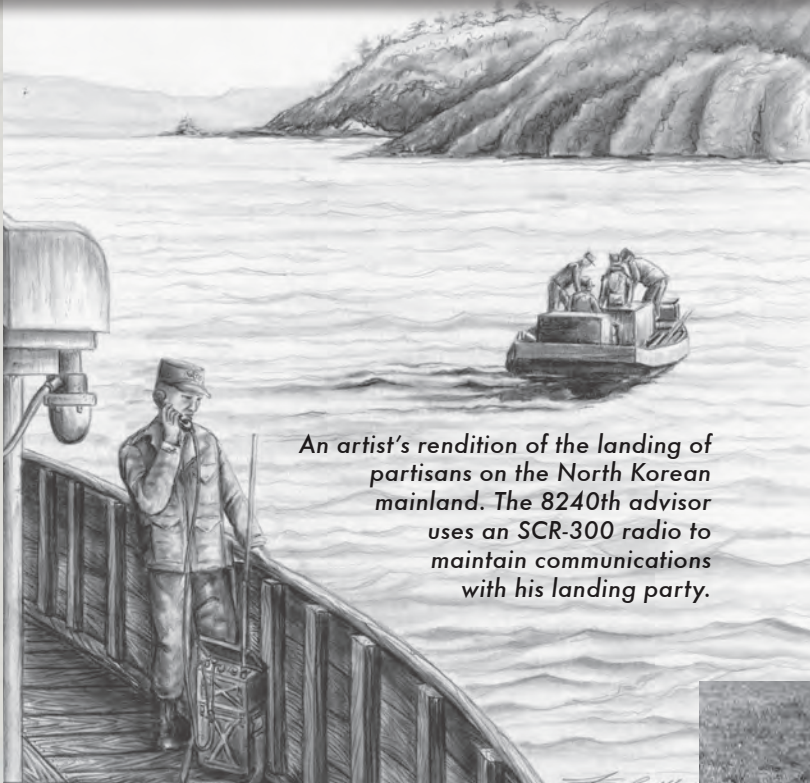
"Cable Dogs" of the 112th Signal Battalion burying communications cable to support the First Airborne Task Force (ATF) in Operation VARSITY, March 1945. The 112th soldiers parachuted across the Rhine to provide communications support. The 112th later established the 1st ATF communications network during the link-up with the Russian Army on the Baltic.

The 1950s: The Korean War and Early Special Forces

The birth of Army Special Forces coincided with the Korean War. Army Special Operations Forces were an integral part of the Army's force structure during the war. The Army organized Ranger companies, four of which were employed in 1950 and 1951. On the off-shore islands, U.S. advisors worked with North Korean partisan units under the control of the 8240th Army Unit. In 1952, the Army stood up the 10th Special Forces Group at Fort Bragg, NC. Some members of the 10th deployed to Korea to the 8240th. Communications for the ARSOF units was largely based on World War II-era radios, principally the FM SCR-300. The AN/GRC-109 system, with the hand-cranked generator was used by the Special Forces teams, who continued to use Morse Code for long-range communications.



A field communications station at Fort Bragg in the 1960s using a commercial shortwave radio. This is in the Special Forces Gabriel Demonstration area on Smoke Bomb Hill. The Gabriel demonstration was an active display of Special Forces' capabilities.

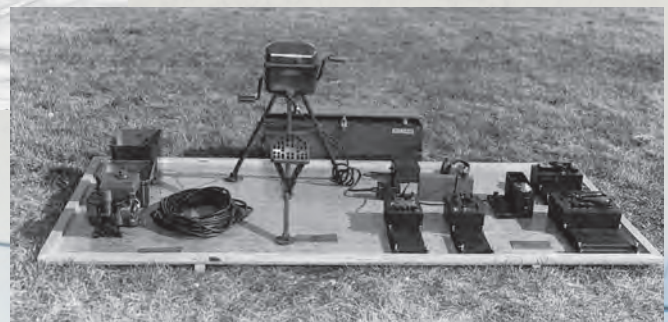


An artist's rendition of the landing of partisans on the North Korean mainland. The 8240th advisor uses an SCR-300 radio to maintain communications with his landing party.



An equipment layout at the 10th Special Forces Group, Bad Toelz, Germany. Amidst the skis and other equipment is the AN/GRC-109 radio system that was the standard issue for the teams.

The venerable AN/GRC-109, the "Angry 9" was a mainstay of SOF communications from the 1950s to the 1980s. The hand-cranked generator provided the power for the radio.



Communications bunker on Cho-do, an island off the western coast of Korea. Multiple antennas allowed the advisors from the 8240th Army Unit (AU) to keep contact with their elements on other islands via UHF and HF radios.



The 1960s and 1970s: The Vietnam War and the Return of the Rangers

The Vietnam War witnessed the rapid expansion of Special Forces, primarily with the formation of the 5th Special Forces Group, which at its peak numbered over 3,000 SF soldiers. The Rangers were present in the form of Long-Range Reconnaissance Patrols (LRRPs). During the war, the main mode of communications was via man-pack FM radios, with ranges extended by the use of retransmission sites. With the activation of the 1st and 2nd Ranger Battalions in 1974, the Army stood up the first battalion-sized Ranger units since World War II. ARSOF continued to depend on communications support at the unit level, as there were no SOF signal units in the force structure.



The ability to send and receive Morse Code, using the R-390 receiver, was a unique feature of Special Forces communications in the 1970s. While the conventional forces depended on voice communications, the ability to transmit Morse Code enabled the Special Forces teams to communicate at great distances.



Special Forces soldiers at Fort Bragg transmitting using the AN/PRC-74 HF radio. The RTO is sending a message in Morse Code.



A U.S. advisor with the South Vietnamese Army Rangers. American advisors used the man-pack PRC-10 FM radios to call for artillery, air support, and to communicate with their higher headquarters early in the war.

U.S. Special Forces advisors on patrol with their Montagnard team cross a rice paddy dike near Ba To in Quang Ngei Province, South Vietnam in 1963. The Radio-Telephone Operator (RTO) carried the PRC-10, and later PRC-25 and PRC-77 radios to keep contact with the firebase. The use of FM retransmission sites extended the range of the radios.



1980s and 1990s: Dedicated Signal Support and Global Operations

Inactive since December 1945, the 112th Signal Battalion (A) was reactivated on 17 September 1986 at Fort Bragg, NC. The mission of the 112th was to provide tailored communications support packages to Joint and ARSOF component commands. The 112th was initially assigned to 1st Special Operations Command (1st SOCOM) and in the 1990s, was assigned to the newly formed United States Army Special Operations Command (USASOC). The decades of the '80s and '90s saw ARSOF units involved in every major U.S. engagement, including Operation URGENT FURY in Grenada, Operation JUST CAUSE in Panama and Operation DESERT STORM in Iraq. Advances in communications technology introduced satellite systems as a major component of communications support.



Soldiers of the 112th Signal Battalion erect a Down-sized Deployable Satellite Terminal (DDST). The 112th's capability to transmit and receive voice and data globally via satellite communications systems extends the reach of ARSOF units around the world.

The increasingly complex multi-channel communications systems fielded by the 112th Signal Battalion support ARSOF units around the world. Since its activation in 1986, the 112th has maintained a continuous overseas presence from its base at Fort Bragg, NC.



Members of the 10th Special Forces Group establish communications during winter training in Colorado. Powerful lightweight, Multiband Intra-Team Radios (MBITR) were developed in the 1990s to support ARSOF missions.



As part of UNITAF in 1992, the 5th Special Forces Group conducted evaluations of Soviet-constructed airfields in Somalia.

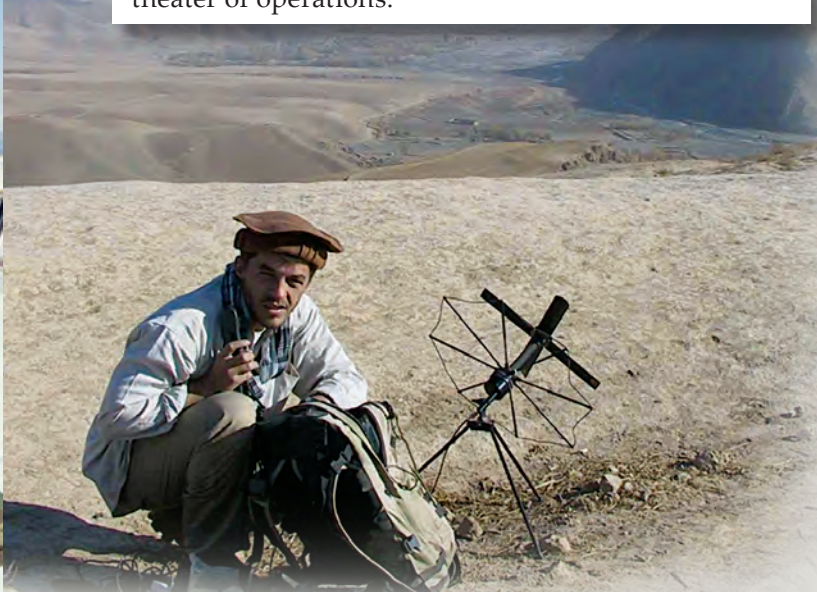


The 21st Century: Support to the Global War on Terrorism

The Global War on Terrorism placed ARSOF in the forefront in both Operation ENDURING FREEDOM in Afghanistan and Operation IRAQI FREEDOM in Iraq. On the ground, Special Forces teams working with host nations forces depended on lightweight systems such as the Multiband Inter-Team Radio (MBITR) for secure communications. The 112th Signal Battalion deployed communications teams around the world and by interfacing with the Joint Communications Support Element (JCSE), provided secure voice and data transmission capability to ARSOF units in every theater of operations.



The Joint Communications Support Element (JCSE) based at MacDill AFB, Florida, provides higher-level communications support to the Joint Special Operations Task Forces. Air Force General Victor E. Renuart, Commander of Northern Command, gets a demonstration of JCSE capability during an exercise in April 2007.



In the high mountain terrain of Afghanistan, satellite communications was critical for the far-flung Special Forces teams in Operation ENDURING FREEDOM in 2001. A member of the 5th Special Forces group has set-up a AN-PRC 104 capable of transmitting voice and data around the globe.



In Operation ENDURING FREEDOM, the 112th Signal Battalion elements deployed to the Philippines to support the Joint Special Operations Task Force on the island of Basilan. The 112th provided the communications interface between the Task Force headquarters and the Pacific Command in Hawaii using the TSC-93V (2).

Calling Close Air Support in northern Iraq during Operation IRAQI FREEDOM. Members of the 10th Special Forces Group supported the Kurds in OIF. ARSOF units often have Air Force Tactical Air Combat Controllers attached, who guide the aircraft carrying aerial delivered munitions using the AN-PRC 117 Multiband Tactical Radio.

