

CRIME AND CONFLICT

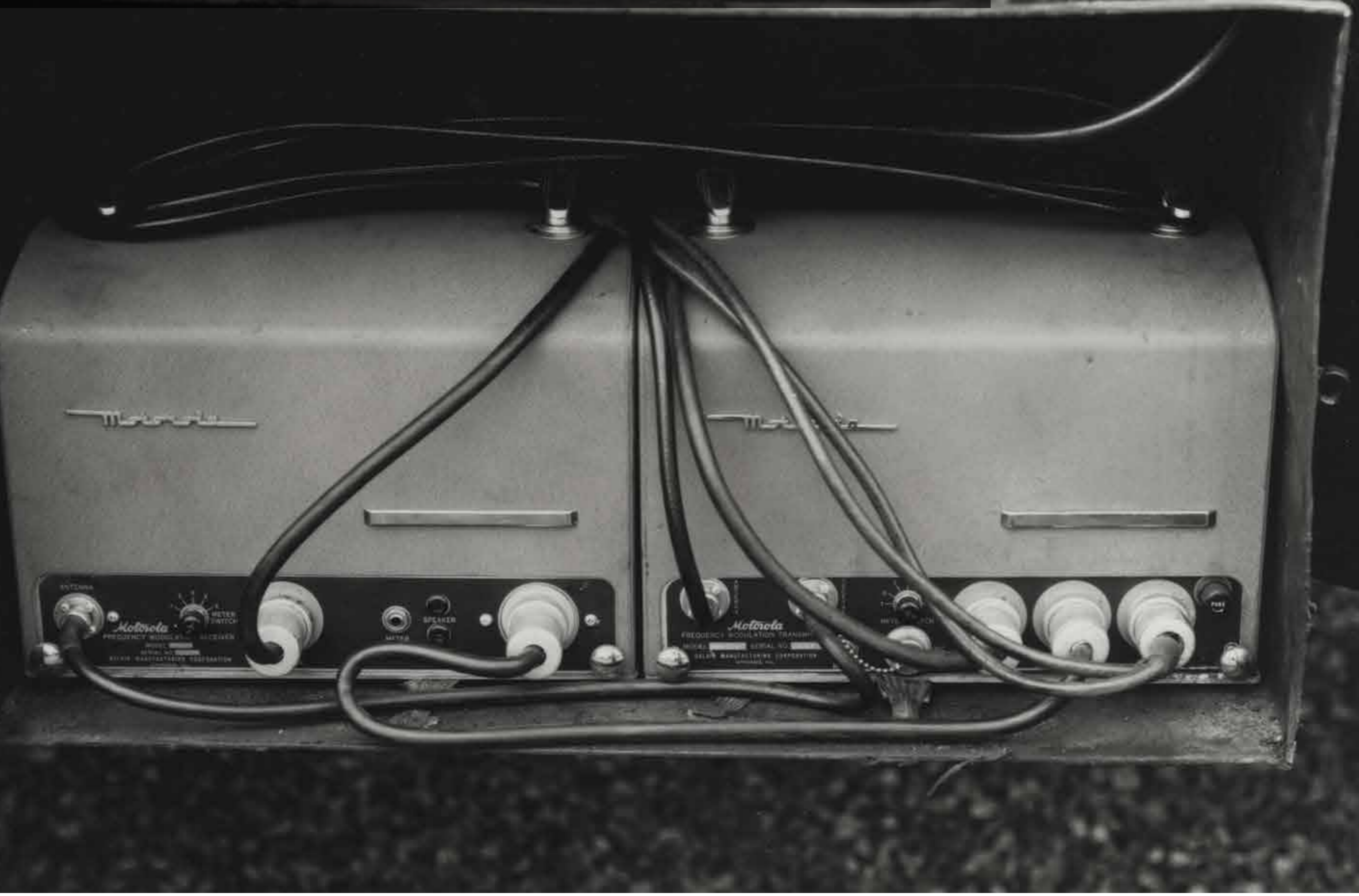
Developing Land Mobile Radio

The early development of land mobile radio depended crucially on police and military innovations.

Pioneering Police Radio

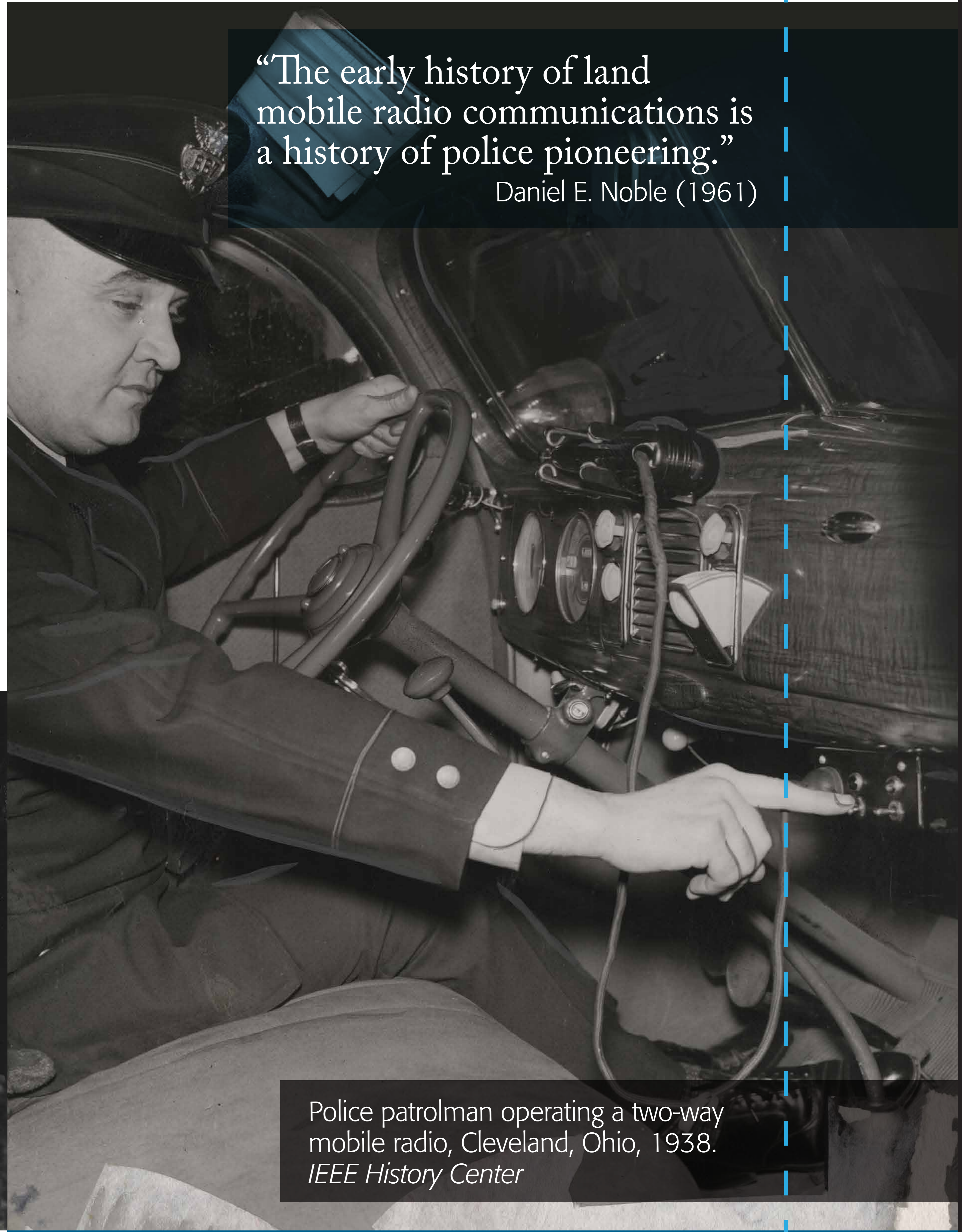
From the advent of broadcasting in the 1920s, police forces worldwide sought to harness wireless communication for law enforcement. The Detroit Police Department was among the earliest to realize regular one-way radio communications with patrol cars in 1928. There was initially no dedicated band for police use. To satisfy licensing rules, operators broadcast music or entertainment between dispatches. Police radio took off in the U.S. after 1930, when the Federal Radio Commission (later the FCC) opened up 8 shortwave channels. Two-way voice systems emerged later that decade, and by 1937 over 2,000 police forces had installed AM mobile radio equipment.

Motorola Deluxe Line FM mobile transmitter and receiver, 1940s. IEEE History Center



“The early history of land mobile radio communications is a history of police pioneering.”

Daniel E. Noble (1961)



Police patrolman operating a two-way mobile radio, Cleveland, Ohio, 1938. IEEE History Center

The Rise of FM

In 1933 Howard Armstrong surprised skeptical electrical engineers by developing a wideband FM radio system. Its ability to suppress the noise that plagued AM transmission suited it to public safety applications, where clear sound saved lives. Daniel E. Noble, an electrical engineer at the University of Connecticut who built an early commercial FM broadcast station, completed a two-way FM mobile radio system for the Connecticut state police in 1940. The following year, Galvin Manufacturing Corporation (later Motorola) tapped him as Director of Research. Galvin became the leading supplier of police radio equipment as forces around the country took up FM.

Motorola Radio advertisement featuring its SCR-536 AM Handie-Talkie, 1944. Hagley Museum and Library



Motorola Radio “Handie Talkie” co-ordinating our march to Victory

The story of every great Victory of our armed forces has been a story of teamwork . . . split-second timing and miraculously unified attack. Radio ties all combat arms together . . . makes of them a united, irresistible team.

In close cooperation with the U. S. Army Signal Corps, Motorola Radio Engineers have developed, built and delivered in great quantity such battle-famous radios as the Walkie-Talkie, the “Handie-Talkie,” the Cavalry Guidon Set, and the powerful two-way unit that moves on wheels.

Much of this equipment has been of the F.M. (Frequency Modulation) type. This is the static-less, noiseless kind

of radio that you will enjoy when Victory restores peace and normal living to our America.

There will be fine music once again in the Post War Motorola Radios for your Home and Car. F.M., Television, other Electronic developments? You bet! Motorola will have them all! Meanwhile, buy more war bonds!

GALVIN MFG. CORPORATION • CHICAGO 51

THE “HANDIE-TALKIE” IS ANOTHER MOTOROLA RADIO FIRST!

Motorola Radio

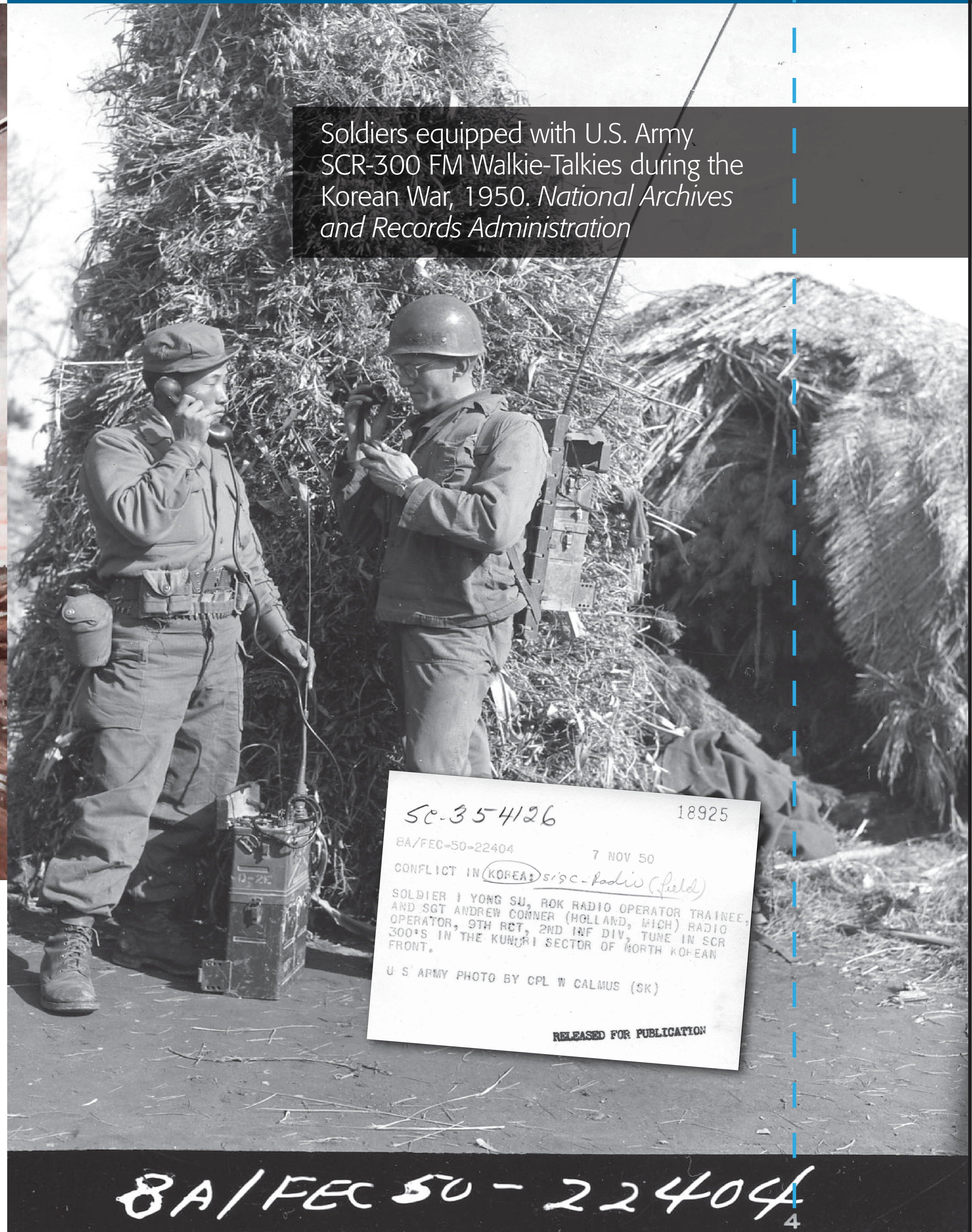


F.M. HOME & CAR RADIO • AUTOMATIC PHONOGRAPHS • TELEVISION • F.M. POLICE RADIO • RADAR • MILITARY RADIO COMMUNICATIONS

Portable Radios Go to War

When the United States entered World War II in December 1941, the Army Signal Corps had fallen behind the commercial state of the art. Mobile radio communications were essential in a war of maneuver involving the combined arms of aircraft, vehicles, and infantry. But this demanded a truckload of equipment that operated only when stationary. Galvin Manufacturing Corporation (later Motorola) led a group of companies that developed and built hundreds of thousands of portable AM and FM radios for the U.S. military. It went on to commercialize this technology for civilian uses.

Soldiers equipped with U.S. Army SCR-300 FM Walkie-Talkies during the Korean War, 1950. National Archives and Records Administration



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