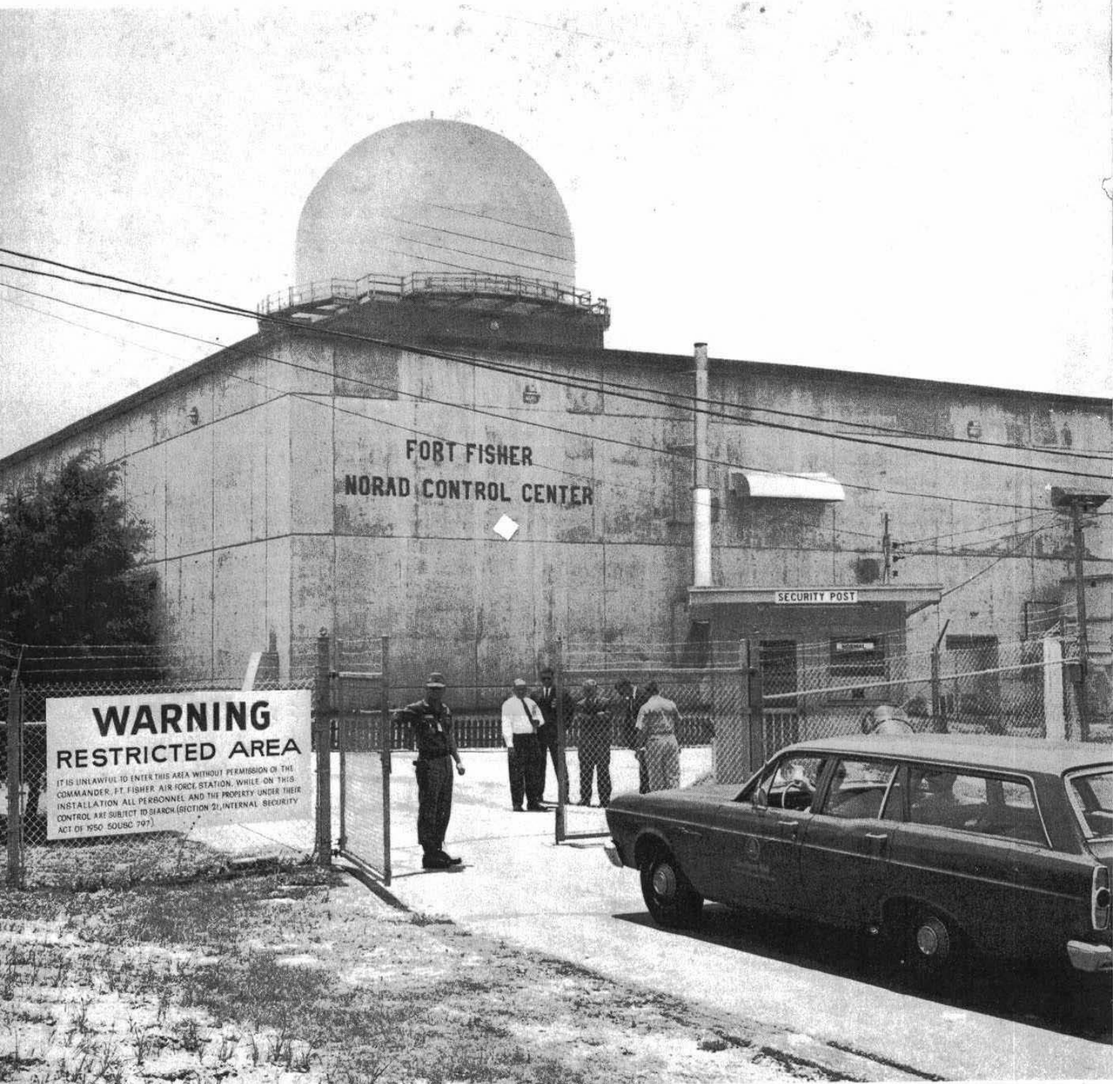


SOUTHERN TELEPHONE

NEWS

September 1968

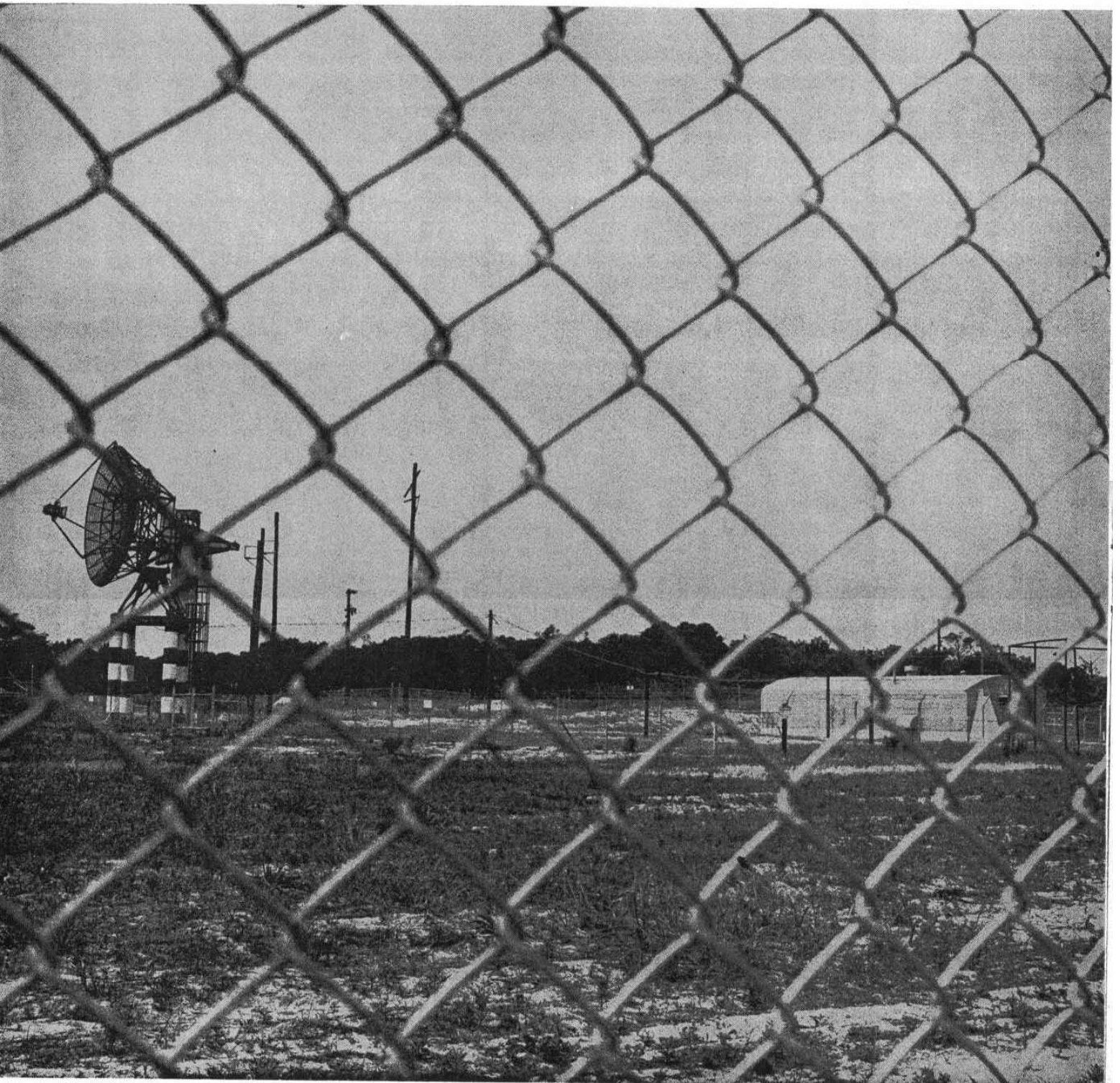


COMMANDING WITH COMMUNICATIONS – Reprint

Commanding with Communications

In Communications, Defense of Our Nation Comes First. This Is Exemplified by a Bell System Team of Southern Bell, Western Electric, Bell Labs and A. T. & T. People at Fort Fisher, North Carolina.

By W. A. RUSSEY
Military Communications Supervisor
Atlanta, Georgia





FORT FISHER AIR FORCE Station near Kure Beach, North Carolina opens wide its gates to Southern Bell and Bell System people. Highly restricted, Fort Fisher houses a NORAD (North American Air Defense) Control Center. This Center, a part of the SAGE (Semiautomatic Ground Environment) and BUIC (Back-Up Interceptor Command) network, also houses communications equipment specifically designed to help this military installation carry out its role in the defense of our nation.

This is a story about how a Bell System team worked with our country's Armed Forces in providing the best possible communications equipment and services to help them perform a vital job—the defense of our nation.

It is a picture story about how Southern Bell, Western Electric, Bell Labs and A.T.&T. people worked with the U. S. Air Force in studying, designing, developing, manufacturing, installing and placing into operation a new switching system. It is the 305 Switching System and is a part of the over-all integrated nationwide network of SAGE (Semiautomatic Ground Environment) and BUIC (Back-Up Interceptor Command).

Thanks to this new back-up switching system we recently installed for the Aerospace Defense Command at Fort Fisher, North Carolina, we can sleep better at night—knowing that the nation's security is even more secure than ever before.

The 305 Switching System enables decentralization of the nation's air defense system in this area. This means, in effect, that in the event of a direct hit on the regional control center, SAGE would still be operative since calls would go around the knocked out center. In other words, SAGE and BUIC handle the control of air battles from the ground by the use of ground-to-air interceptors, both manned and unmanned.

The Fort Fisher back-up equipment installation, which is

part of the NORAD (North American Air Defense) System, is the first in Southern Bell's territory. It is the third in what is to be a series of 17 installations this year throughout the United States and Canada. All of the circuits will be switched over the AUTOVON (Automatic Voice Network), which is a private voice telephone network leased by the Bell System to the Department of Defense. The AUTOVON switches telephone calls over any available path regardless of geographic locations.

This huge military communications system is alive 24 hours a day. It lies over our country like a net. It spans the continent from the Arctic in the north to the waters of the Gulf of Mexico in the south and to extreme points of the eastern Atlantic and western Pacific shores as well.

The NORAD Control Center featured in this article is just one of many in the system. However, with back-up switching, it is recognized as one of the best equipped and most efficiently operated.

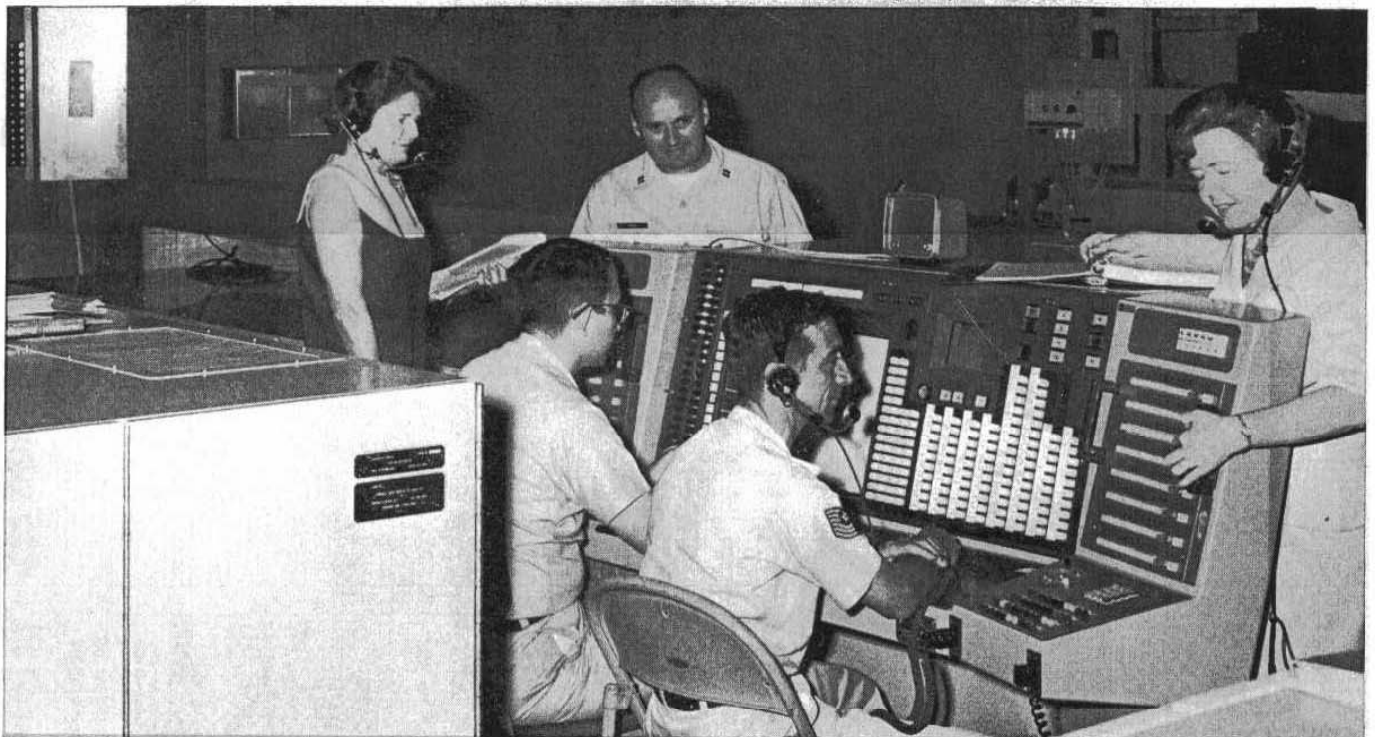
Without the protection afforded this nation by our Armed Forces and their selected and highly trained personnel, we could not enjoy the freedom and security which is ours. Southern Bell, working with this Bell System team, is proud and considers it a responsibility to assist our military people in accomplishing this vital job. ■

Commanding with Communications

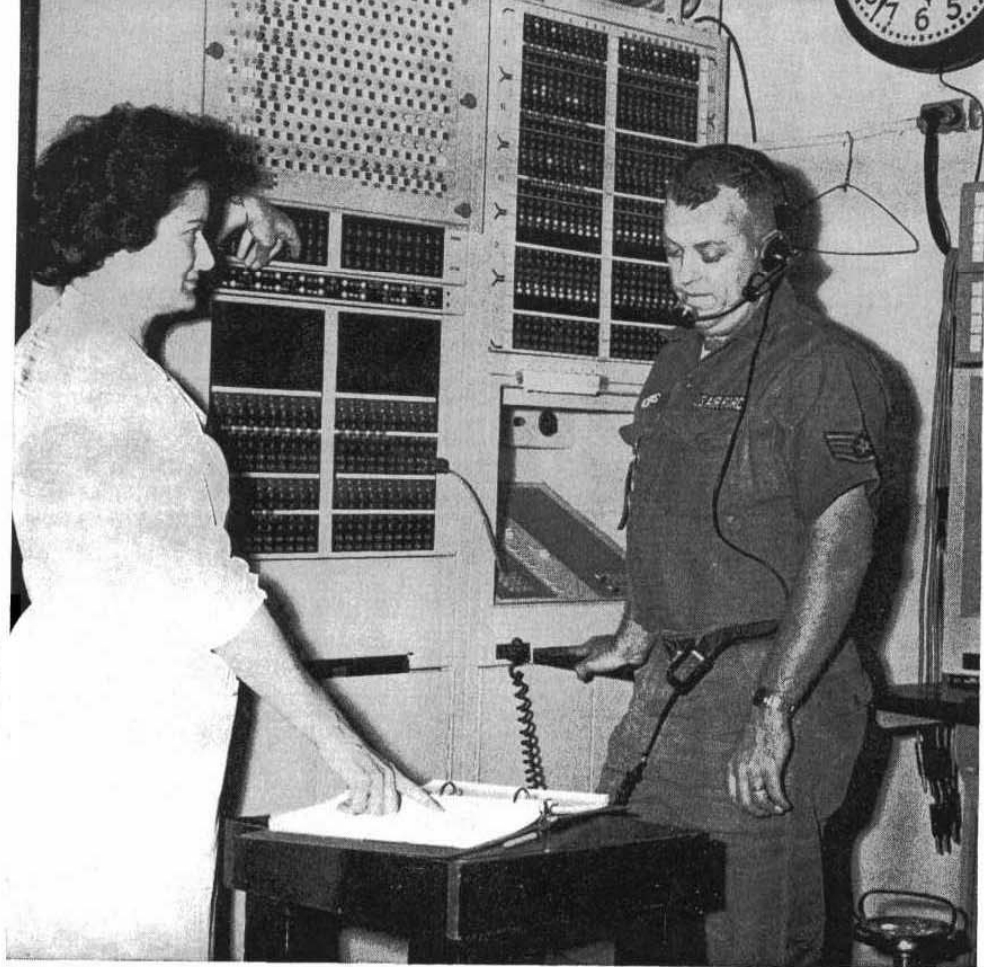


STUDYING A MASS of wiring in a 305 Switching Console is Earl Dunn, Switchman, Southern Bell, as he maintains one of the System's Consoles in the NORAD Control Center.

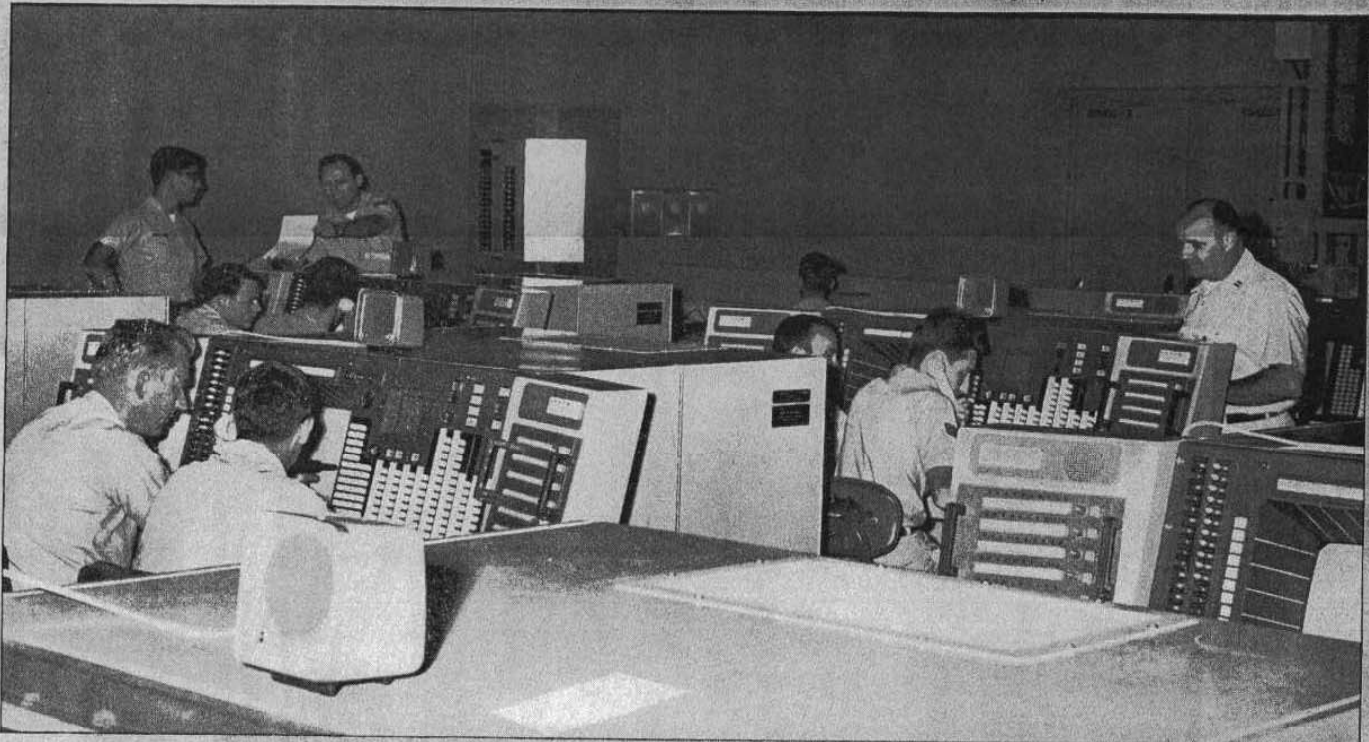
MRS. ODELL McMULLEN, Southern Bell Traffic Staff Supervisor, Charlotte, North Carolina, left, and Mrs. Kathryn Lane, Staff Supervisor, A.T.&T.—Long Lines, Atlanta, Georgia, instruct U. S. Air Force personnel in the use of the Bell System's 305 Switching System Communications Consoles at Fort Fisher.



MRS. HILDA SMITH, Chief Service Advisor, Southern Bell, Wilmington, North Carolina, instructs Staff Sergeant Darrel Dobbins in the use of the Auxiliary Control and Dial Restoration Panels.



IN THE NORAD CENTER'S Control Room, Captain Cook supervises a simulated alert with Air Force personnel operating the many consoles equipped with the 305 Switching System.



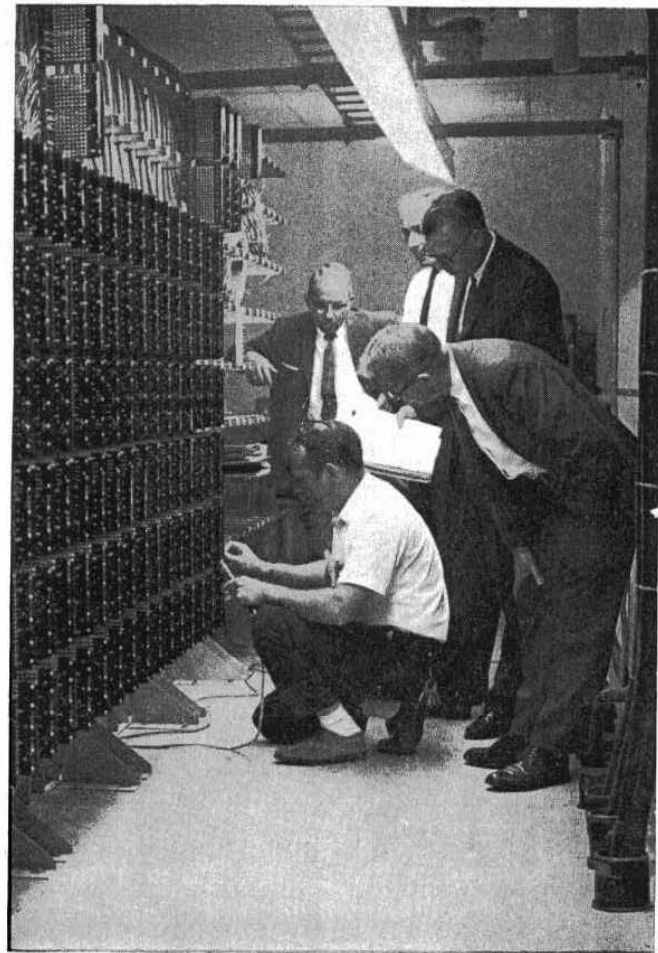
Commanding with Communications



SOUTHERN BELL and A.T.&T.—Long Lines Traffic employees sign in at Fort Fisher's Security Post. These telephone people helped train selected Air Force personnel to operate the new communications equipment called the 305 Switching System. Left to right: Captain D. C. Cook, Director of Operations, 701st Radar Squadron, Fort Fisher; Mrs. Kathryn Lane, Staff Supervisor, A.T.&T.—Long Lines, Atlanta, Georgia; Mrs. Odell McMullen, Staff Supervisor, Southern Bell, Charlotte, North Carolina; Mrs. Hilda Smith, Chief Service Advisor, Wilmington, North Carolina; and Airman 1-C T. S. Sarris.

THE BELL SYSTEM coordinating committee for the 305 Switching System worked on the site of the NORAD Center as the new system was installed, tested and placed into operation. Left to right: George Kincaid, Engineer, Southern Bell, Charlotte, North Carolina; A. P. Smith, Senior Customer Circuit Engineer, Western Electric Company, Kearney, New Jersey; S. J. G. Smith, Engineer, A.T.&T., New York, New York; C. V. Friddle, Supervisor, Western Electric, Raleigh, North Carolina; W. A. Russey, Military Communications Supervisor, Southern Bell, Atlanta, Georgia; J. D. Daniels, Jr., Installer, Western Electric, Wilmington, North Carolina; W. T. Livengood, PBX Installer-Repairman, Southern Bell, Wilmington, North Carolina; Walter Diamond, Engineer, Western Electric, Atlanta, Georgia; and W. E. Strack, Standards Engineer, Western Electric, Newark, New Jersey.





SOUTHERN BELL and Western Electric employees work regularly in the 305 Switching System equipment room checking out and maintaining the complex installation. Left, C. V. Friddle, left, and J. D. Daniel, Jr. of Western Electric. Above, Earl Dunn, Switchman, left, and Robert Grice, PBX Installer-Repairman, Southern Bell, Wilmington, North Carolina. Right, W. J. Livengood, Kneeling, Toll Testboardman, Wilmington, North Carolina; W. A. Russey, Southern Bell, Atlanta, Georgia; E. B. Evans, Central Office Foreman, Southern Bell, Wilmington, North Carolina; E. L. Saunders, Account Manager, Southern Bell, Wilmington, North Carolina; and W. R. Dexter, Sales Representative, Government Communications, A.T. & T.—Long Lines, Washington, D. C.

HOLDING A MEETING under one of the huge radar towers of the NORAD Center are members of the Bell System 305 Switching System coordinating committee. Captain D. C. Cook, Director of Operations is center, in uniform. The Operations Building and Telephone Equipment Room is in background.





Communications for Defense . . .

A Statement of Bell System Policy

The Bell System provides many important communication services. Of supreme importance, however, are those for the defense of the United States. We are proud of the privilege to take part in providing such services and accept the obligations entailed:

- to exercise imagination in anticipating changing defense needs and in developing facilities and methods to meet them.
- to maintain for these purposes an organization of highest competence capable of functioning effectively at all times including extreme emergency.

The Bell System is dedicated to the principle that in communications, defense of the nation comes first.