

*John F. Mikes*

# MANNING THE DEW LINE

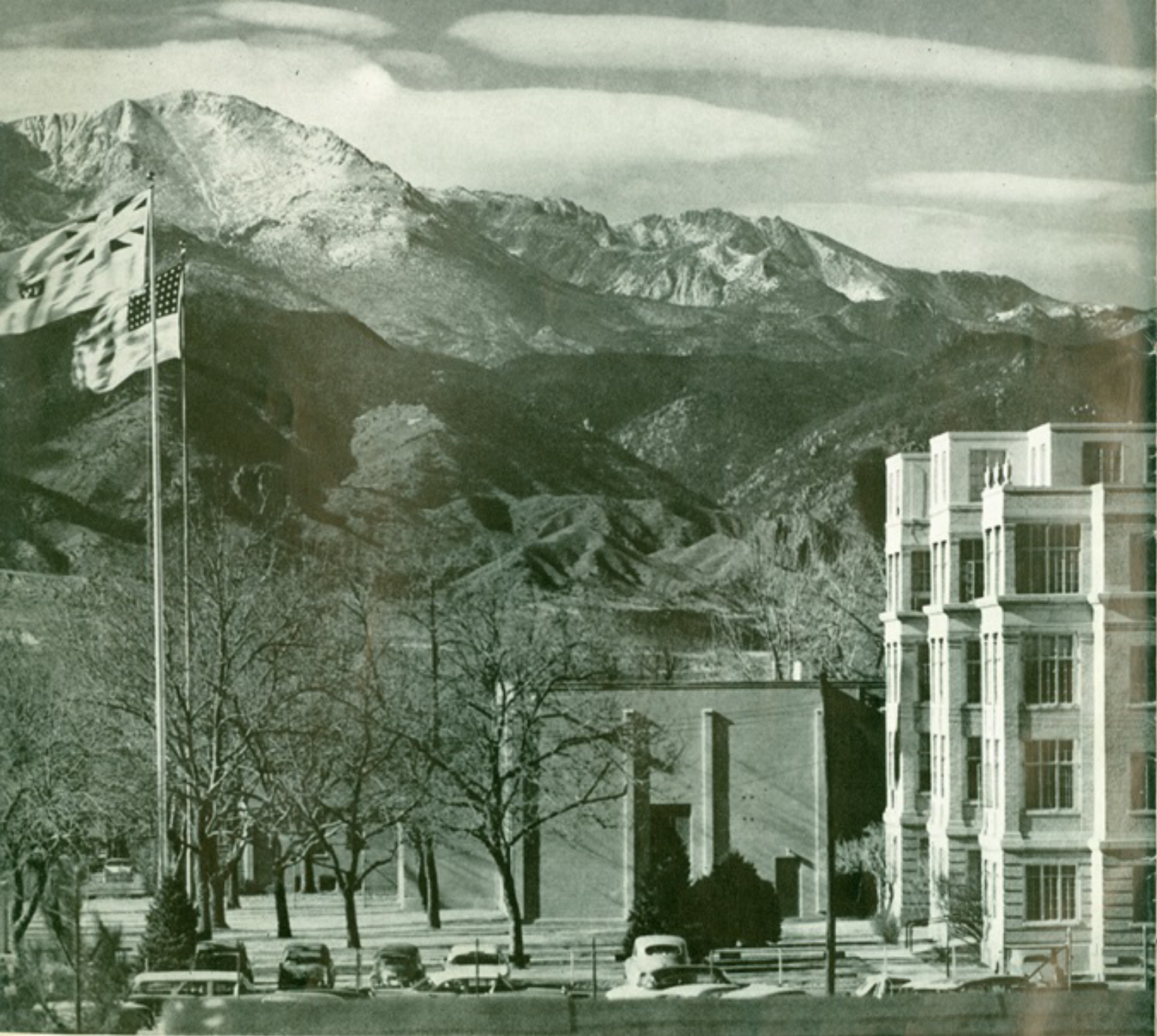


Front cover: A DEW Line main station, its approach flanked  
by the high-flying flags of the United States and Canada.

# MANNING THE DEW LINE

Published by International Telephone and Telegraph Corporation in the interest of its service organization, Federal Electric Corporation, which operates and maintains the DEW (Distant Early Warning) Line under contract to the United States Air Force.





North American Air Defense Command Headquarters building, right, and Combat Operations Center stand in the shadow of Pike's Peak in Colorado Springs, Colorado.

## Why the DEW Line?

The most crucial element in air defense is time—the precious interval between alert and reprisal during which interceptors would take to the air, retaliatory bombing would get underway, and civilian populations would take cover. Thus, a nation's chances of survival are increased by extending the geographic perimeter of its defenses to the utmost by means of a distant early warning system. This is the basic concept of the DEW Line, North America's first line of defense against surprise attack over the top of the world.

DEW Line radar stations along the 70th parallel maintain constant surveillance of the Arctic area and stand ready to flash instant warning of hostile aircraft to defense command centers far to the south. The DEW Line is integrated within the total defense system of the North American continent through interconnection with the Mid-Canada and Pine Tree Lines, coastal and off-shore radar stations, patrol planes, and radar picket ships. Defense control rests with the North American Air Defense Command (NORAD), with headquarters at Colorado Springs, Colorado.

The DEW Line was completed in 1957. Its operation and maintenance have been the responsibility of Federal Electric Corporation since that time.





## The men on the Line

The DEW Line is an electronic detection system so sensitive that it can spot a single silvery jet streaking across the Arctic sky, a squadron of aircraft flying high above the clouds, or for that matter, even a lone sea gull wheeling in graceful arcs close by. It is biting cold, ruthless winds, and nights that are measured in months. It is men, hundreds of them, like these specialists keeping watch at their radarscopes.

The men on the DEW Line have come from all parts of the world — Canada, Europe, South Africa, Asia, Australia, and almost every state in the U.S. They are carpenters, mechanics, tractor and bulldozer operators, electricians, plumbers, storekeepers, radio and radar specialists, riggers, airplane pilots, engineers, doctors, dentists, and clergymen. Their skills and backgrounds are varied, but they share a singleness of purpose born of the knowledge that theirs is an important, difficult, and sometimes dangerous job.





Warning lines are secret. These locations are approximate.

## Terrain and weather





From the northernmost tip of Alaska to the east coast of Baffin Island, the DEW Line chain of more than 60 early warning radar stations extends 3,000 miles across some of the bleakest and most forbidding territory on earth. The terrain varies from a flat coastal plain in the west, to rugged mountains in the east. Temperatures range from 65 degrees below zero in winter, to as high as 65 degrees above during the brief summer. For about two of the winter months the sun does not rise, and for a similar period in the summer it does not set. The winter snowfall averages only a few inches, but 100-mile-an-hour winds may whip and swirl the powdery flakes into drifts as high as 50 feet.

These are  
typical stations



U. S. flag at northernmost site—Point Barrow.





Each of the Line's six sectors covers approximately 500 miles. Each has a main station with living quarters, administration and communication offices, hangar, garage, and storage facilities clustered beneath the giant radome. Normal staff at a main station is 50 civilians plus a joint U. S. and Royal Canadian Air Force complement charged with evaluating radar findings. Smaller auxiliary stations manned by about 20 "radi-cians" and mechanics stand at roughly 100-mile intervals between main sites. Five-man intermediate stations, called "I-sites," fill in all gaps in the Line.





4601st Support Wing (DEW) officers work with project manager at Paramus headquarters.

## Administration







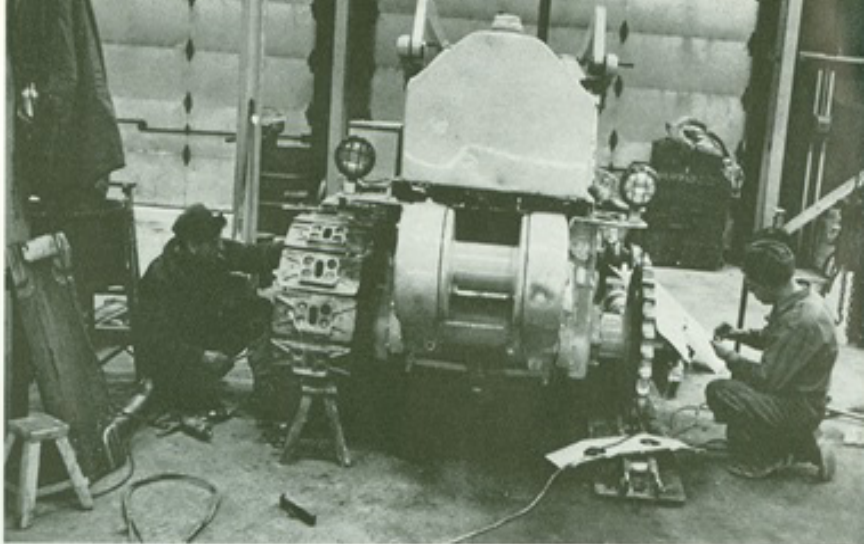
U. S. and Canadian Air Force officers confer with civilian contractors.

Federal Electric's operation and maintenance contract with the United States Air Force is administered by the Air Defense Command. Direct coordination of DEW Line operations is carried out between Federal Electric and the Air Defense Command through representatives of the 4601st Support Wing (DEW) stationed at the company's Paramus, New Jersey, headquarters. Representatives of Canada's Royal Canadian Air Force are based with the 4601st unit.

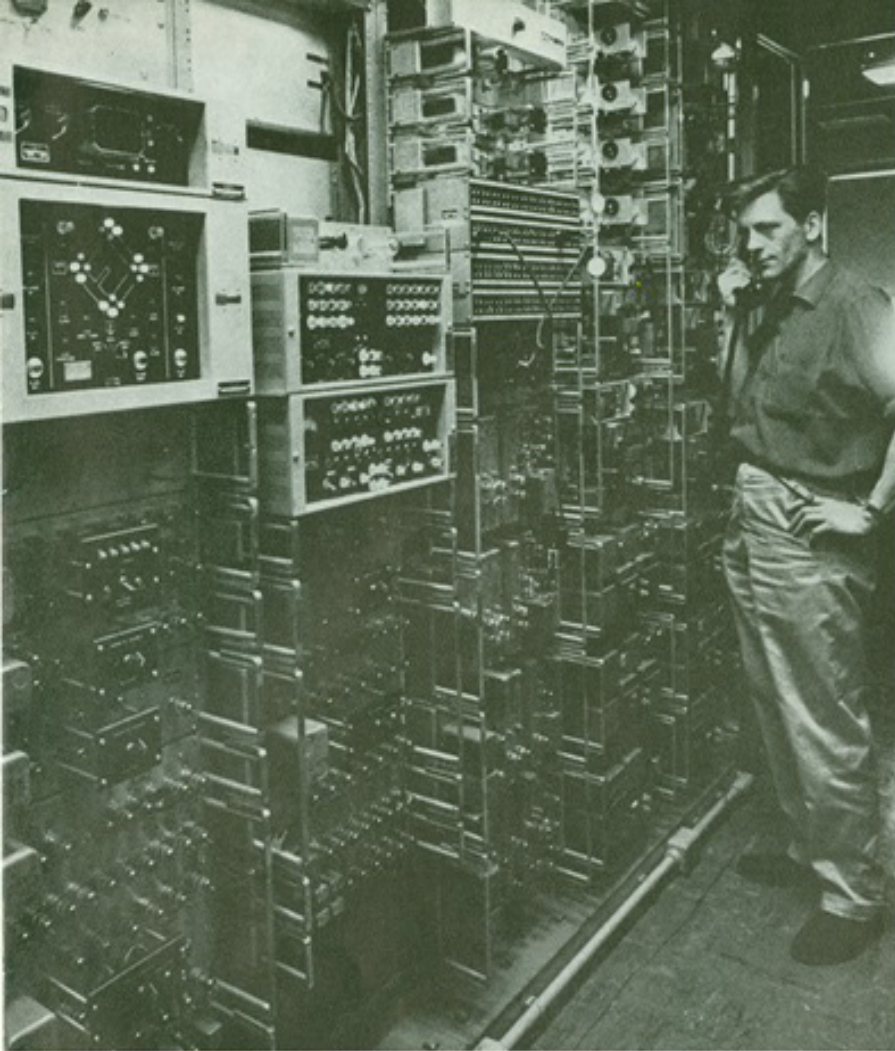
The Canadian sector is manned almost entirely by Canadians, including some 100 Eskimos who, through the cooperation of the Department of Northern Affairs of Canada, have been trained to perform outside plant support and maintenance work. All employees in Alaska are American citizens—among them, some 40 Eskimos.



# Specialists on the job



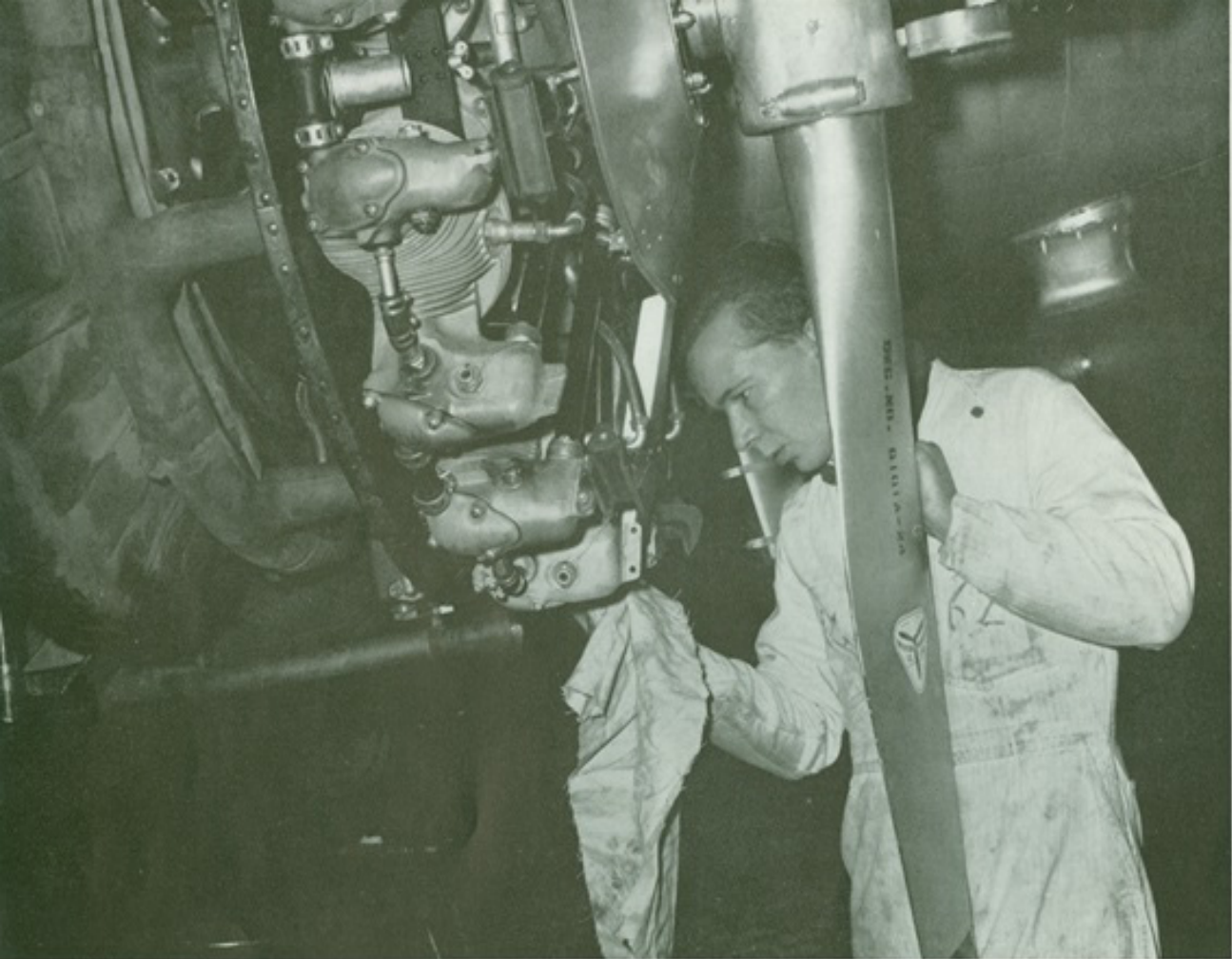




This is the equipment  
 I'm working on now.  
 Will be off it in another  
 two weeks.

All manner of skills, with maximum capability in each, are required to keep the Line functioning smoothly. For example, each "radician" is responsible for the operation and maintenance of more than 40 types of highly sophisticated electronic and electromechanical gear. Supply men are charged with having 56,000 different line items on hand at every point of need. Technical personnel receive an intensive ten-week course at Federal Electric's training center in Streator, Illinois, to familiarize them with the new types of electronic equipment they will use on the Line. On-the-job training is a continuing function.





New skills acquired







A diversity of individual talents is imperative. Under a cross-training program based on the exchange of knowledge and experience, a specialist in one phase of the work soon becomes adept in others. Thus, a diesel mechanic learns to do plumbing, or carpentering, or welding; and the welder may be found bulldozing ice and snow at the controls of a caterpillar tractor.



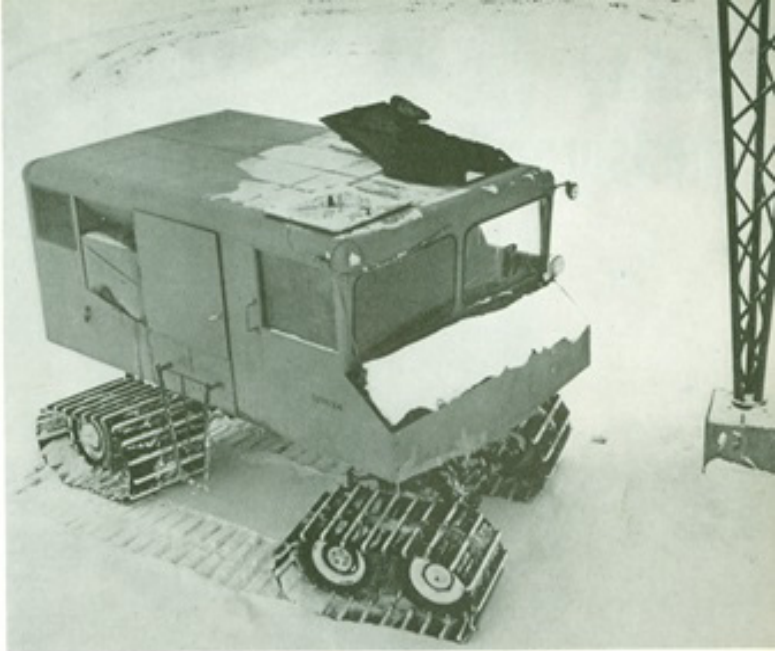
## Movement of men and goods



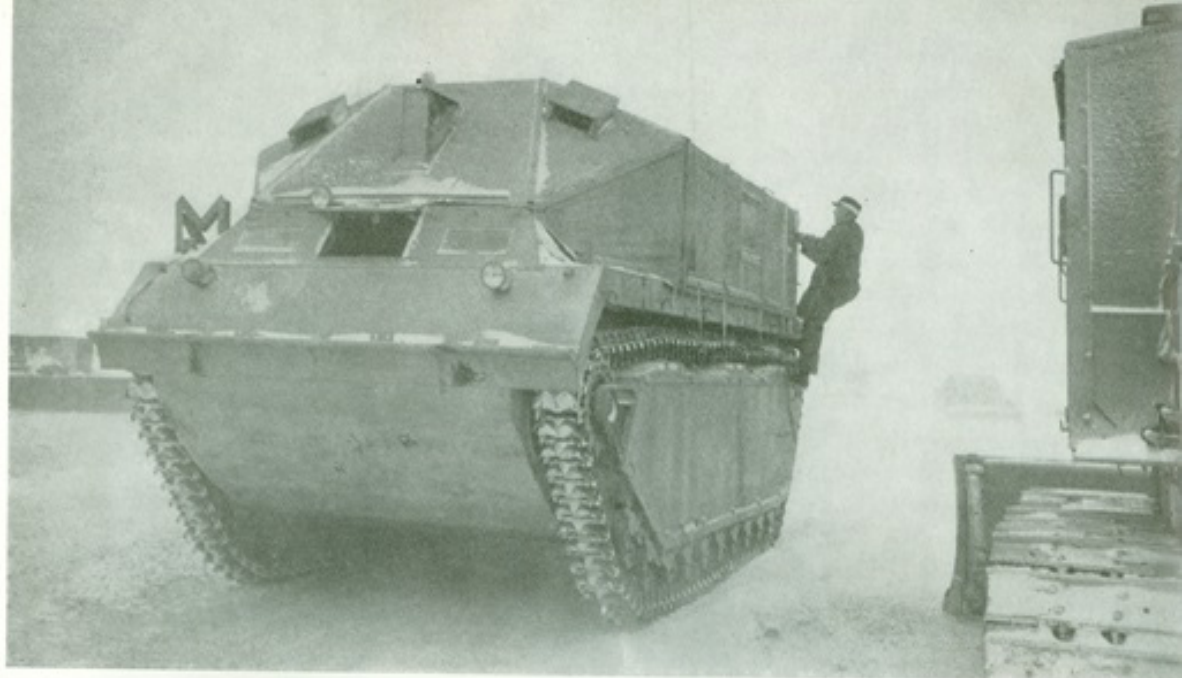
Some of the DEW sites are briefly accessible by sea during the summer. At all other times they can be reached only by plane or helicopter, so that the Line relies heavily for the flow of supplies and the movement of personnel on the intrepid commercial and military pilots who have contributed vitally to the development of the Far North. With the exception of one or two sites that receive supplies by helicopter, all the stations are equipped with gravel air strips. Short overland hauls are accomplished by a variety of powerful tracked vehicles and snowmobiles.







# Safety measures



Amphibious rescue vehicle.



Extraordinary precautions are taken to prevent fire, which, because of the shortage of water, is a constant dread in the Arctic. As far as possible, buildings are constructed of fireproof materials, elaborate systems of fire detection and extinguishing have been installed, and frequent lectures stress the importance of fire prevention. Special Arctic clothing is supplied by the U.S. Air Force, and a mandatory course in Arctic survival is included in Federal Electric's pre-assignment training program.





Class in fire prevention.

Barter Island fire truck.

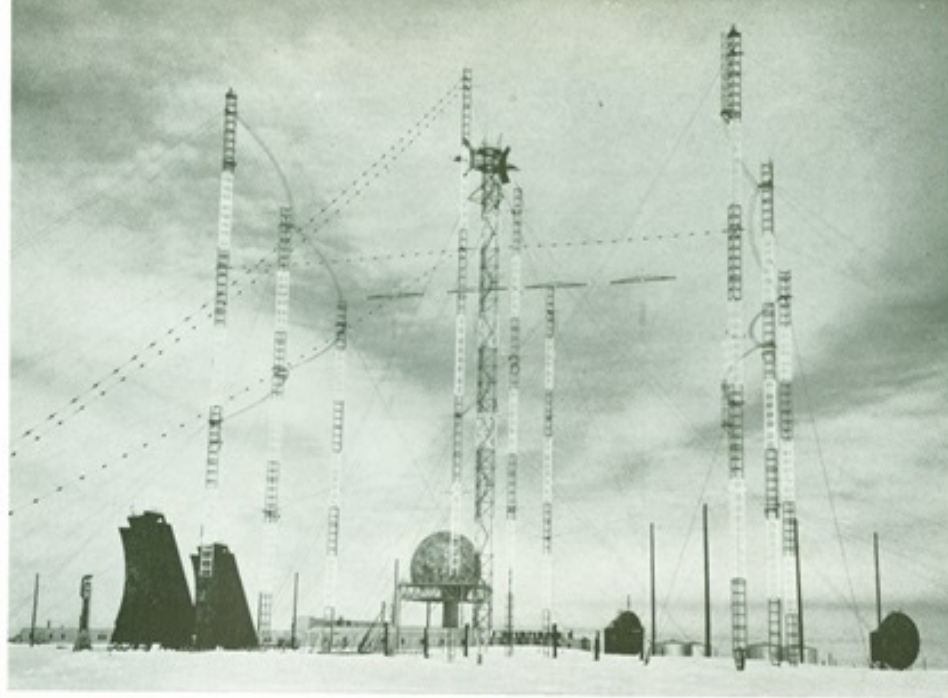




**Communications**

Emergency short-wave radio.





Antennas for my  
equipment.  
(the Tall ones)

An array of transmitting and receiving antennas.

Teleprinter section.



Radio in several forms links DEW Line stations with one another, with Air Defense headquarters, and with the rest of the outside world. Over 12,000 miles of duplex telegraph make up the administrative teleprinter network that stretches from Federal Electric headquarters in Paramus, N. J., to western Alaska, to eastern Canada, and return, with relay stations in Edmonton, Anchorage, and Montreal. Emergency short-wave radio equipment is installed at every main and auxiliary station.



Caribou steaks.

Good food in abundance







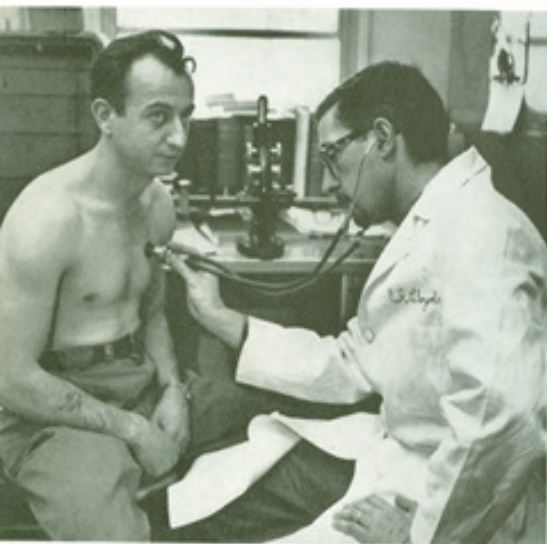
Here's why  
 I'm back up  
 To 205 Lbs.

Food is provided in great variety and in ample quantity to meet the 4500-calories-a-day requirements of men who work in the Arctic. A year's supply of staples is off-loaded during the annual sea-lift, and fresh meats, fruits, and vegetables are flown in regularly. DEW Line chefs are encouraged to embellish the master menus prepared at Federal Electric headquarters, and meticulous attention is paid to morale-raising details. On occasion, when Eskimo hunters are lucky, native delicacies such as caribou steak, seal liver, or eider duck are served.

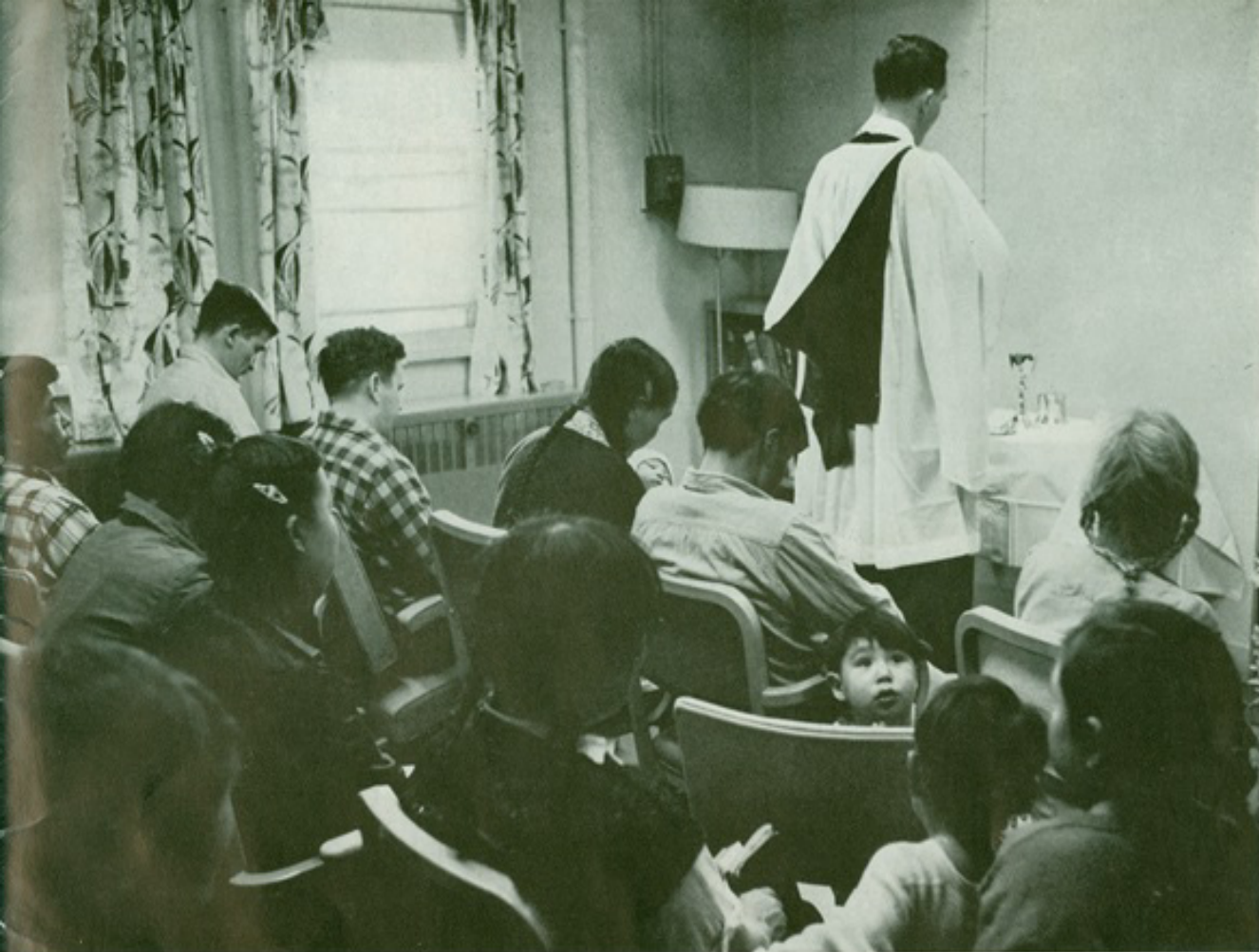
Food warehouse.



## Physical and spiritual welfare

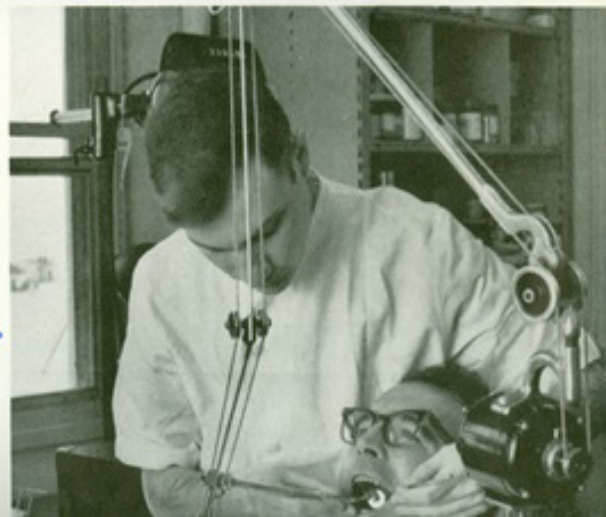


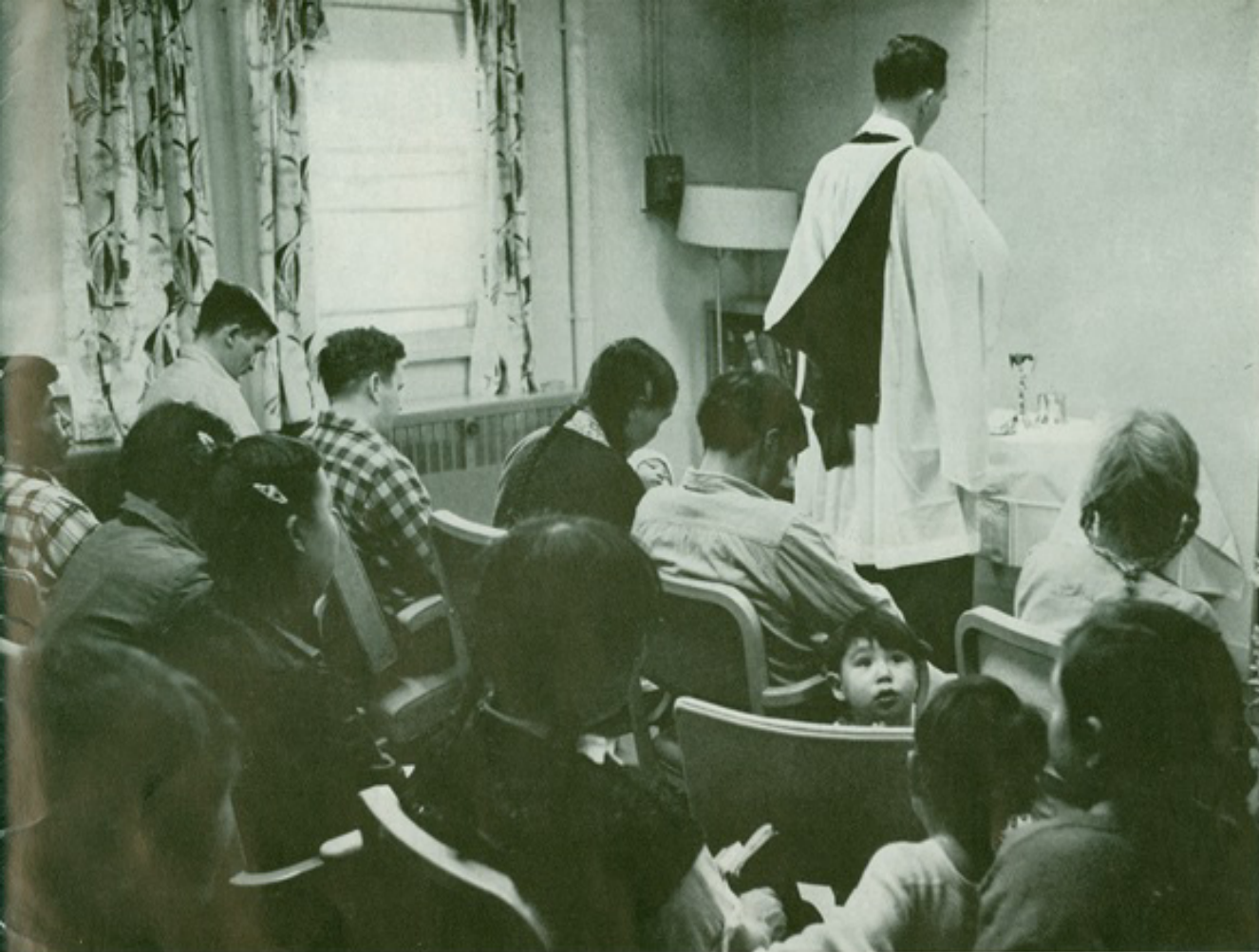




Airborne doctors and dentists regularly travel the Line to augment the work of trained medical corpsmen who handle the everyday problems at their assigned stations. Spiritual needs are cared for by six clergymen who also shuttle from station to station by air. These services are extended to Eskimo employees and their families as well.

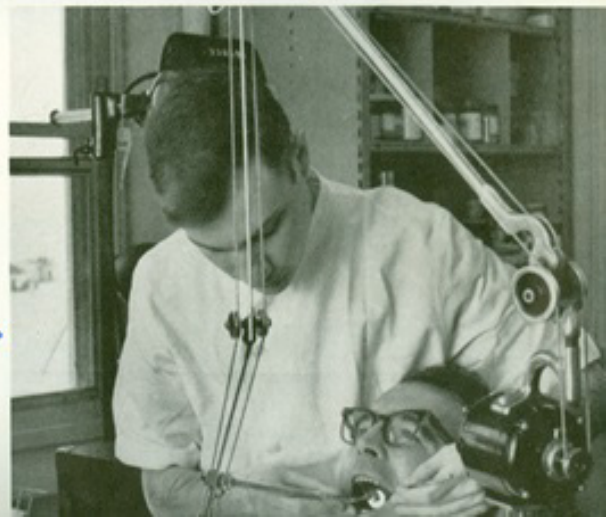
*This dentist used  
To be at Fox. He's  
now in jail for  
stealing drugs and  
supplies from FEC.*





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Eskimo family on the move.

## Friendly neighbors

The DEW Line's Eskimo neighbors, quick to learn construction techniques, operation and maintenance of non-technical equipment, and other of the white man's hitherto unfamiliar skills, have adjusted easily to a way of life that is new to themselves and their families. Those employed by Federal Electric are housed in special quarters, and most have bought such items as sewing machines, cameras, rifles, and outboard motors. They watch movies with interest and find pleasure in leafing through magazines, and their enjoyment of popular music has led many of them to purchase record collections and phonographs.

New homes are provided.





Classroom.





# Recreation



Although a series of tests have determined the psychological stability of each man on the Line, morale remains a major consideration. To offset the inevitable loneliness and boredom of long sunless winters, constant winds, and the monotonous expanse of drifting snow, Federal Electric supplies all types of entertainment and recreational facilities for leisure time.



Latest movies draw a capacity crowd.



Three class-A movies are flown weekly to each site. An extensive library of books and periodicals is maintained at every station. Ping-pong and billiard tables, records and phonographs, short-wave radio, cards, games, and art and craft supplies are also available. Photography is a major hobby, and each main station has a fully equipped photo laboratory.



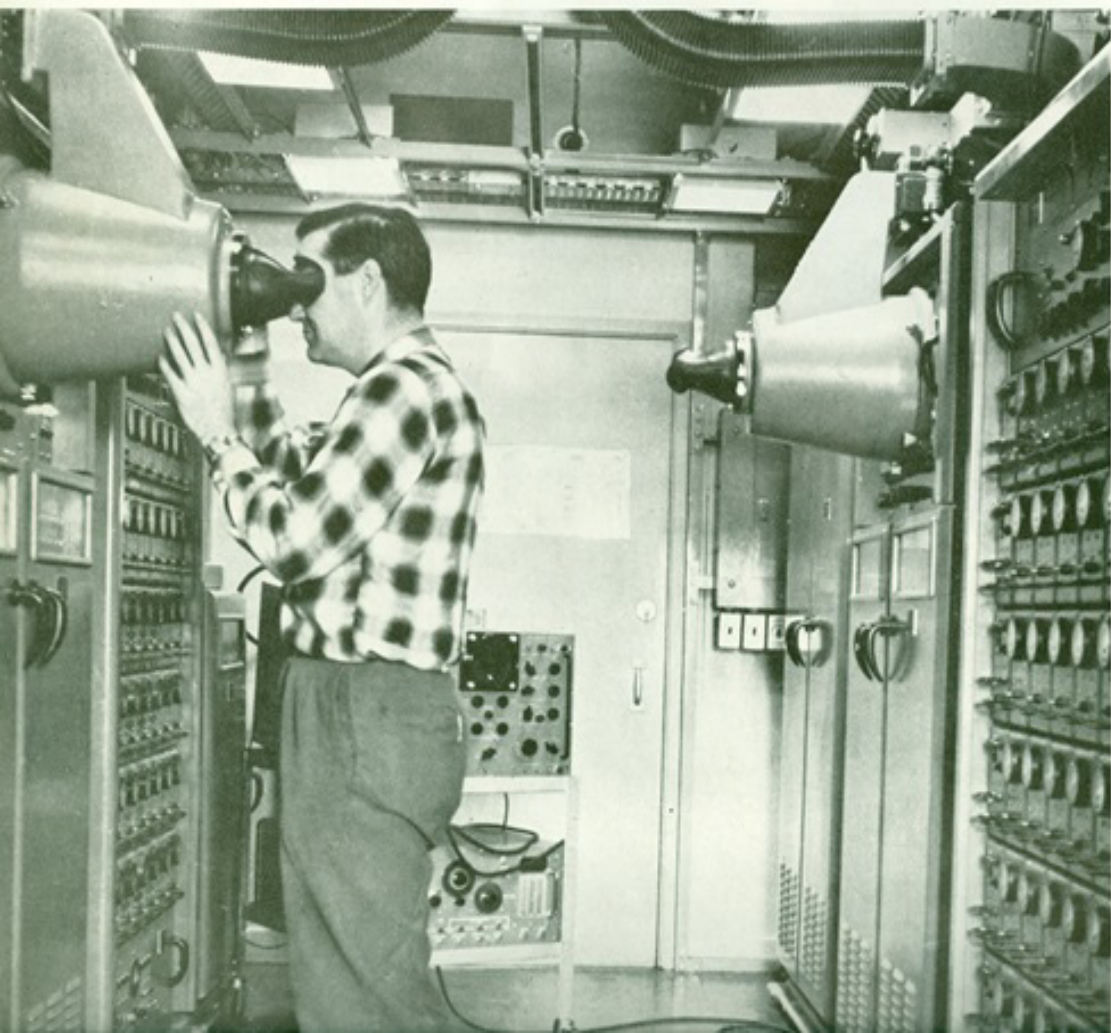
Tape-recording a letter home.



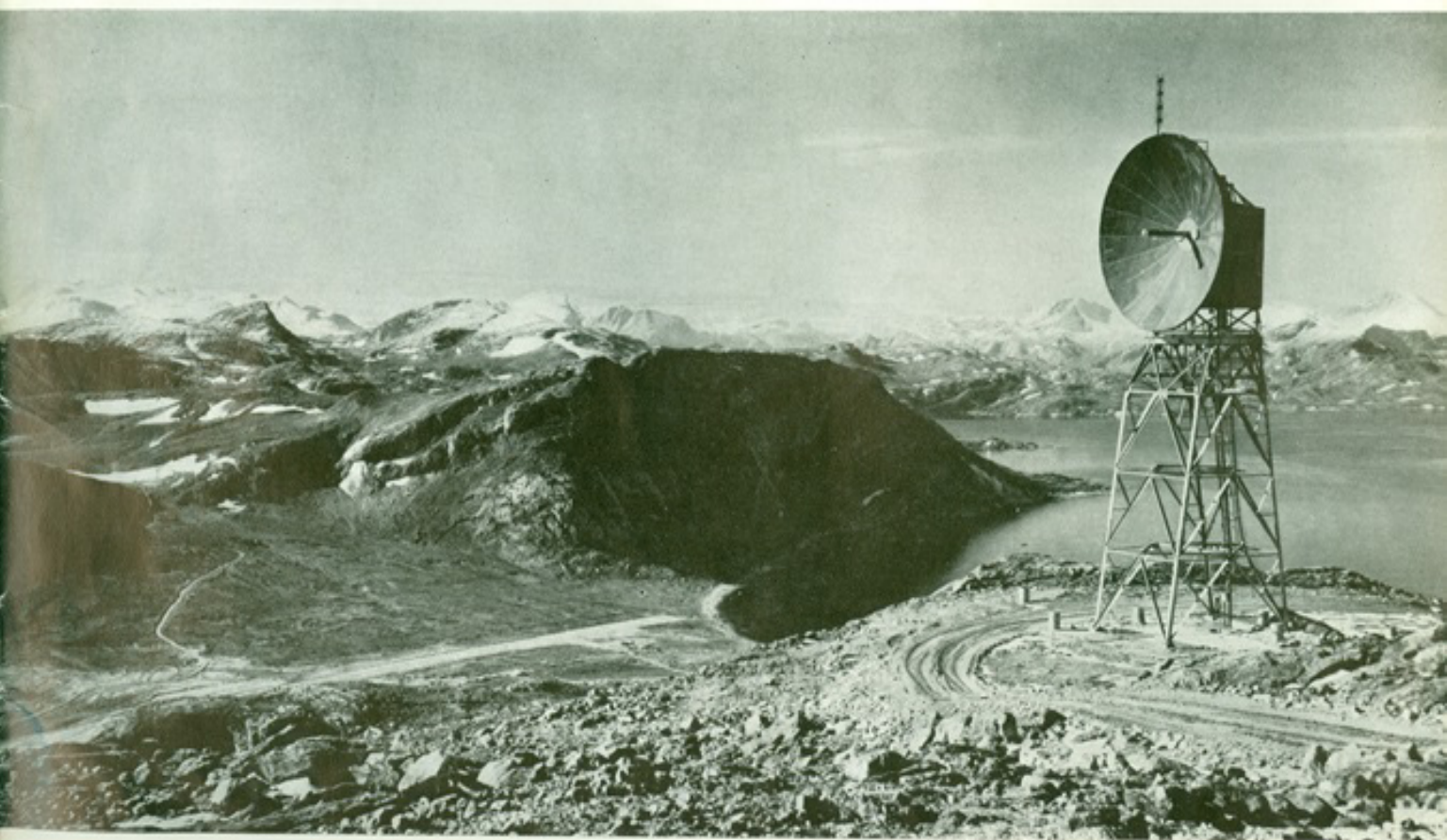


# The primary mission

This is the equipment  
I'll be working on  
in two weeks



Leisure well spent returns the men to duty at peak performance for their primary mission — the successful operation of the DEW Line 24 hours a day, seven days a week. They are fully aware of the magnitude of their task. But even as they bend every effort to make sure that the DEW Line will fulfill its function, they earnestly hope that the day never comes when it will be necessary to sound an alert. Instead, by its very presence, let the DEW Line stand as a powerful deterrent to attack.







Lighted tower and radome shed an eerie glow after dark.