

this week the Army concluded operation "Eager Beaver" in the Canadian Yukon in which 435 engineers built emergency airstrips on the frozen lakes and shifty muskeg of the Arctic.

When the first attempts were made to discover what conditions the serviceman would find in the Arctic, unexpected difficulties constantly were being encountered. Motors would not start. Fuel lines froze. Huts created snowdrifts which blocked the streets. Equipment stuck in the snow. Tools became brittle and broke in normal use. All of those problems had to be solved.

Now when the Army announces a new model of its equipment, usually the description of it says, ". . . and it will operate in temperatures as low as minus 65 degrees Fahrenheit." Such a statement was made recently in connection with a new hand-talkie FM radio, and the latest jeep model.

Military tactics in the Arctic will be affected by four things, according to Lt. Col. Joseph J. Peot, an instructor in the Signal Corps. They are sparse settlement, lack of roads and railroads, numerous lakes and waterways, and lack of maps.

Natural Communication Routes

Lakes and waterways frequently offer a good road system about six or eight months of the year when they are frozen, he said. Snow can be removed from the ice, and waterways may provide natural airstrips.

But military tactics may be affected adversely by sparse settlement which creates a scarcity of local supplies and of quarter-

ing facilities. Roads and railroads, almost nonexistent, are highly vulnerable to the enemy, as well as to the weather.

Maps are unreliable, and aerial photographs are not too satisfactory because of a lack of contrast in the topography and because of a lack of actinic values in Arctic sunlight. The actinic value in light affects the exposure of photographic films.

Morale Inhibiting Factors

Morale of troops is apt to drop in Arctic operations because of a feeling of loneliness brought on by the absence of inhabitants, industry and cultural features. The long winter nights and deathly silence accompanying dropping temperatures also may inhibit good morale. A feeling of being isolated may develop in troops because of their being far away from built-up areas.

Because of these morale-inhibiting factors, emotional stability in the soldier assumes an even greater importance. It is still controversial whether psychological tests can reveal which men are best suited for Arctic duty, but physical tests at least ought to screen out the men whose health would be affected by the Arctic climate, Col. Peot said.

Much remains to be learned about the Arctic and about Arctic warfare. But the armed services are working toward a goal which should provide adequate protection for the United States should some nation decide to get rambunctious in the cold, desolate regions of the North Pole.

Science News Letter, June 14, 1952

METEOROLOGY

Weather Pattern Reversed

► THE NATION'S weather has been going backward and it is expected to continue going backward for the rest of June.

Instead of the general weather patterns moving from west to east across the nation, they are moving from east to west. In mid-May, the Weather Bureau's Extended Forecast Section predicted that average temperatures for the period to mid-June would be

below seasonal normals across the northern half of the nation from New England to the Rockies.

On June 1, it was forecast that this below seasonal normal area will extend from an area around Ohio and Indiana out to the West Coast. East of there, near normal temperatures are expected during June.

The extreme Southwest and the Southeast can expect above normal temperatures, while the rest of the South will have about average temperatures.

"Abundant showers, giving more than normal rainfall, are expected over most of the country between the Rockies and the Appalachians," the weathermen predict for June. Other parts of the country can expect normal amounts of rain.

This backward movement of the weather patterns is caused by an east-to-west movement of the waves in the general air current which circles the globe above 10,000 feet. The current continues to move from west to east, but the waves or north-and-south undulations in it are now travelling from east to west.

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