

AERONAUTICS

North Pole Is Air Center

► THE NORTH POLE is the center of the world of a strategic air force of the present day, the annual report of the U. S. Air Force indicates. This area extends southward to about 30 degrees north latitude.

This includes all the United States except the southern tip of Florida and a bit of Texas, includes all of Europe, a little of North Africa, and Asia except the nations on the Indian ocean and the South China sea. Japan is within it.

The shortest air route between central United States and the Urals, between Alaska and Germany, or between Greenland and Japan lies directly over the polar region, the report states. Although the polar ice cap is impossible to ships or surface forces, it offers no barrier to aircraft flying above it. The cap of the world from the 30th parallel to the North Pole is the world of air power.

Within this area are eight great industrial areas which are today of sufficient productivity to be significant factors in a full-scale war. These centers are Japan, central Siberia, the Ural Mountains, Moscow, the Don Basin, western Europe, the

British Isles, and northeastern United States. The main targets of military air power in a war are industrial: oil refineries, steel mills, engine factories, electric power plants, aluminum smelters, or whatever may be important to military effort. From them flow the arms and weapons, the fuel and ordnance, and everything necessary to maintain fighting forces.

American national defense can not rely solely on interceptor fighters and anti-aircraft ground installations to defend approaches from the Arctic. It must include, the report asserts, craft that can answer aerial aggression with a smashing retaliatory attack. America must have aircraft that can operate effectively under the climatic conditions of the Far North.

There also must be available to that defense force a system that will warn of an approaching attack in time to take counter measures. It would include adequate intelligence with early warning radar devices. Then there must be a long-range striking force with aircraft that can make non-stop round trips from American bases across the polar route to an enemy's industrial installations and back to their stations.

Science News Letter, August 28, 1948

MINERALOGY

Sufficient Liquid Fuels

► FUEL OIL for home and other heating, and gasoline for cars and power, will probably be sufficient to meet all essential needs during the coming winter months providing reasonable precautions are taken to use wisely the available supply.

The oil industry today is refining 111 gallons of crude oil for every 100 gallons it processed a year ago. This means an 11% increase in supply. The total processed each day at the present time is more than 237,000,000 gallons. Demands, however, have increased during the year. There are now more home oil-heaters, farm tractors, motor vehicles, diesel engines and diesel locomotives than ever before in the history of liquid fuels.

The reasonable precautions that can be taken by the ordinary car owner and home owner are concerned mostly with keeping the mechanical equipment in which the liquid fuels are used in good condition.

This means for the automobile, properly adjusted carburetors and ignition, clean spark plugs and tire inflation. It means also avoiding unnecessary driving, "jack rabbit" starts, high speeds, engine racing, and running engines while parked.

In the home, it means having the oil heater serviced by an expert to see that it is in proper condition for efficient functioning. At the same time, the building itself should be checked so that the heat gener-

ated by the furnace is not wasted into the great outdoors. Window stripping, storm windows and doors, and wall insulation save heat. Cracks and crevices are excellent "heat exchangers" and, in the interest of liquid fuel saving, should be closed before the furnace is put into use.

For the most of the United States, the oil industry is of the opinion that sufficient liquid fuels will be available to meet essential needs unless military demands greatly increase. There may be some tight spots and temporary shortages, but not of serious proportions, it states in a recent report by the Oil Industry Information Committee of New York. Shortages are more apt to occur in the Middle West, the report indicates, because much must be brought into that region by tank cars. Pipeline distribution to this area has been handicapped by a shortage of materials, including steel.

Science News Letter, August 28, 1948

WILDLIFE

Find African Big Game No Longer Run in Herds

► ELEPHANTS and other big game animals in Africa no longer seem to run in big herds.

This is the conclusion of Dr. James L.

Clark of the American Museum of Natural History in New York. Dr. Clark was leader of the Museum's Central African Expedition which has just returned to this country.

He said that big game seems to be fairly plentiful. But the animals are not found in herds as they once were, except in the game preserves and national parks in Africa.

The expedition was more interested in insects than big game, but it found some giants of the insect world. Huge termite queens, four inches long, are among the specimens brought back by Dr. Neal A. Weber, associate professor of zoology at Swarthmore College and a member of the expedition.

Science News Letter, August 28, 1948

PUBLIC HEALTH

Girls Born Today Have Life Expectancy of 70

► WHITE GIRLS born today can expect to live to be 70; boys to reach the age of 65.

This new high of 67 years as the average life expectancy for people in the United States was reached in 1946, latest year for which complete figures are available, reports the National Office of Vital Statistics of the Public Health Service. Preliminary figures for 1948 indicate that the average length of life today is about the same or just slightly lower than it was two years ago.

A baby born today can be expected to live almost a whole year longer than if he or she had been born in 1945, and nearly two years more than if born in the prewar years of 1939-41. The life expectancy of babies today is over 17 years longer than that prevailing at the turn of the century.

The number of years left to a child of 10 today depends both upon sex and race. White boys on the average will live another 58.3 years, white girls another 63 years. Non-white children usually do not live as long, boys averaging another 51.9 years, girls another 54.8 years more.

Young men of 20, if white, have an average remaining lifetime of 49 years, girls one of 53.4 years. Males of 40 may expect to enjoy about another 30.9 years of life, females another 34.8 years. White men of 60 on the whole have 15.6 years more to life, women of the same age 18.1 years more.

But for people reaching the age of 65, non-whites have a longer average lifetime left than whites. At 65 and 70, this difference amounts to but a few weeks or months. But for people who reach 75, it adds up to a year or so.

White men of 75 may expect to live another 7.7 years, white women another 8.6 years; non-white men on the average have left to them the same number of years as white women, and non-white women may expect another 10.5 years of life.

Science News Letter, August 28, 1948