

AERONAUTICS

Need for Civil Aeronautics Continues Even During War

CAB Member Cites Readiness To Participate in Military Maneuvers, Maintenance of Rapid Transportation

EVEN with all the military importance of aviation, war does not eliminate need for civil aeronautics, G. Grant Mason, Jr., member of the Civil Aeronautics Board told the Franklin Institute recently.

In support of this contention, he cited three main reasons: First, the readiness and ability of civil aviation enterprises to participate directly in military maneuvers, as in the invasion of Norway. "On that occasion," he declared, "Junker airplanes of the Lufthansa airline were used side by side with the military planes of the Luftwaffe to land the German army of occupation at Oslo and other points."

The second factor mentioned is the "maintenance of regular, rapid and reliable transportation." As an indication of the importance of this factor, he cited the 55% increase in passenger traffic in 1940. (In the first 5 months of this year, there was a gain of 29% over the 1940 period attributable in large part to the greatly increased rate of business activity due to national defense requirements.) He then stated, "If this economically sound trend is to continue, our airlines must have a great many additional airplanes—and that is most improbable unless it can be shown that new transport airplanes for the airlines are at least as useful to our national defense and the nation's welfare as transferring those same airplanes to our Army or Navy or exporting them for use on foreign owned airlines."

The third is "the spread of propaganda and subversive preparations for any subsequent open aggression."

In regard to the last factor Mr. Mason recalled that in 1938 he had said in a lecture that "The time has passed when it can be doubted that aviation is being used by Germany and Italy as one of the means of winning vast trade markets and perhaps gaining a political foothold to the south of us. It is impossible for the United States longer to maintain faith in the security of geographical isolation, an isolation which no longer has

any reality; for, with the infiltration into South America of European aircraft and airmen, the natural barrier of the Atlantic Ocean offers little or no protection."

Since then, he stated, about the only changes have been the opening of an Italian South Atlantic line replacing the German one, and the opening of new airlines within South America by Germany. However, he expressed the opinion that "gradually our national interest in aviation and defense was replaced by a hemisphere interest. We know now that to defend ourselves successfully, we must also help defend our friendly neighbors."

Apparently this hemisphere interest in aviation and defense has become mutual. Senator Mead of New York on July 8, 1941, made public a letter from Under-Secretary of State Sumner Welles, stating that Nazi-controlled commercial air services have been abandoned in Colombia, Peru and Bolivia and have been curtailed in Ecuador.

Mr. Mason warned against any curtailment of American civil aviation.

"Certainly," he declared, "if our civil aviation has been a backlog and a reservoir all these years, the national defense should consume whatever parts of it may be needed along with the military forces in the protection of our country. At such a time any part of civil aviation which is interfering with national defense should be suspended or abolished. In my opinion, however, this civilian industry, which is capable of self-support, does not need to be militarized into additional expenses for our taxpayers in order to meet threats to our security. American civil aviation, as a decisive factor in world affairs, should be given the fullest opportunity to stand side by side with our military forces as partners in national and hemisphere defense."

Science News Letter, July 19, 1941

A new *electric fence* based on a "single impulse" principle has been devised for livestock control at the University of California.

● Earth Trembles

Information collected by Science Service from seismological observatories and relayed to the U. S. Coast and Geodetic Survey resulted in the location of the following preliminary epicenters:

Thursday, July 3, 2:11.5 a.m., EST

Off coast of Chile, south of Santiago. Latitude 35 degrees south. Longitude, 72 degrees west. Severe shock.

Thursday, July 10, 8:16.3 p.m., EST

In Pacific Ocean 200 miles off coast of Colombia. Latitude, probably near 3 degrees north. Longitude, 82 degrees west. Sharp shock.

Stations cooperating with Science Service in reporting earthquakes recorded on their seismographs are:

University of Alaska, College, Alaska; Apia Observatory, Apia, Western Samoa; University of California, Berkeley, Calif.; Dominion Observatory, Ottawa; Dominion Astrophysical Observatory, Victoria, B. C.; The Franklin Institute, Philadelphia; Harvard University Observatory, Harvard, Mass.; University of Hawaii, Honolulu; Magnetic Observatory of the Carnegie Institution of Washington, Huancayo, Peru; Massachusetts Institute of Technology, East Machias, Maine; University of Michigan, Ann Arbor, Mich.; Manila Observatory, Manila, P. I.; Montana School of Mines, Butte, Mont.; Montana State College, Bozeman, Mont.; Nebraska Wesleyan University, Lincoln, Nebr.; Pennsylvania State College, State College, Pa.; Phu Lien Observatory, near Hanoi, French Indo-China; Seismological Observatory, Pasadena, Calif.; University of Pittsburgh, Pittsburgh, Pa.; University of South Carolina, Columbia, S. C.; University of Utah, Salt Lake City, Utah; Utah State Agricultural College, Logan, Utah; U. S. Weather Bureau, University of Chicago; Williams College, Williamstown, Mass.; Zikawei Observatory, near Shanghai, China; observatories of the Jesuit Seismological Association at Canisius College, Buffalo, N. Y.; Fordham University, New York City; Georgetown University, Washington, D. C.; St. Louis University, St. Louis; St. Xavier College, Cincinnati, and Weston College, Weston, Mass.; observatories of the U. S. Coast and Geodetic Survey at San Juan, P. R., Sitka, Alaska, Tucson, Ariz., and Ukiah, Calif.

MEDICINE

High Test Gasoline May Cause Disease

HIGH test gasoline, benzol and similar industrial solvents and cleaning agents are capable of causing a cancer-like disease of the blood, myeloid metaplasia, a three-man research team, Dr. Rulon Rawson, Dr. Frederic Parker, Jr., and Dr. Henry Jackson, Jr., representing the Harvard University Medical School and several Boston hospitals, announce (*Science*, June 6). The heavy, tarry fractions of petroleum have long been known to be cancer-causers, but the lighter distillates have not hitherto been indicted as the cause of this disease.

Apparently it takes very prolonged exposures to produce the malady, for the three investigators state that one of their cases was of a man who worked with benzol for five years in a shoe factory, another with high test gasoline in a machine shop for 26 years, a third with paint remover for 15 years, and so on.

They emphasize also that it is quite likely that some patients with this ailment will give no history of such exposure, "and it is reasonably certain that many so exposed will escape unscathed."

Science News Letter, July 19, 1941