

this product, which is a specialty (not tire) type, helps us toward Victory, *for it is all used in building tanks, planes and other war machines.* Perbunan is superior to natural rubber for fuel lines, engine mounts airplane cabin-sealing compounds, gasoline tanks, gaskets, and many other parts. A large bomber, for instance, may have several thousand synthetic rubber parts.

Experiments with another synthetic rubber, Butyl, are being constantly pushed. A small experimental plant produces 170 pounds of this product daily for experimentation which may give us a better solution to the rubber shortage problem than we have now. In June, 1941, we started construction of a large scale Butyl rubber plant which has since been taken over by the U.S. Government.

The 1,000,000-ton a year synthetic rubber program now being developed by the Government calls for the production of much Buna-S made by the process which we bought from a German company. More than 50,000 tons a year will be Butyl rubber made by the process which we discovered in 1937 and have been developing ever since.

AIRCRAFT UNDER CONTROL

Pulleys over which airplane control cables operate turn on anti-friction bearings. If the pulleys don't turn, the

cable will slide and in time will wear and break. Disaster may result. Even if the cable doesn't break, the controls will not operate freely.

One good reason for the pulley not operating would be congealing of the grease in the bearings at low temperature or melting out at high temperature. This can't happen now, for in 1941 we developed for the Army and Navy a grease for control pulley bearings that would allow free movement at 65 degrees below zero F., and which would stay in the bearings up to 150 degrees above zero F.

CASEY JONES BACK AT WORK

Anticipating wartime transportation emergencies, we began in the summer of 1941 to haul crude oil from the middle west and the southwest to our eastern refineries — something we hadn't done in 20 years. When the tanker shortage developed a few weeks later, we set to in earnest to develop the transportation of crude oil by tank car. That tanker shortage was alleviated in the fall, but we are now faced with a far more serious shortage. Today we are using every tank car we can get our hands on to bolster the flow of oil to the east.

We have spent thousands of dollars (most of it before Pearl Harbor) to build new unloading racks to handle the thousands of cars which roll in every week. In addition, and again before Pearl Harbor, we started to ship refined products up the Mississippi and Ohio

Rivers by barge and thence eastward by tank car. This is more expensive, but supplants shipments by tanker from Gulf to Atlantic ports and thence westward by pipe line.

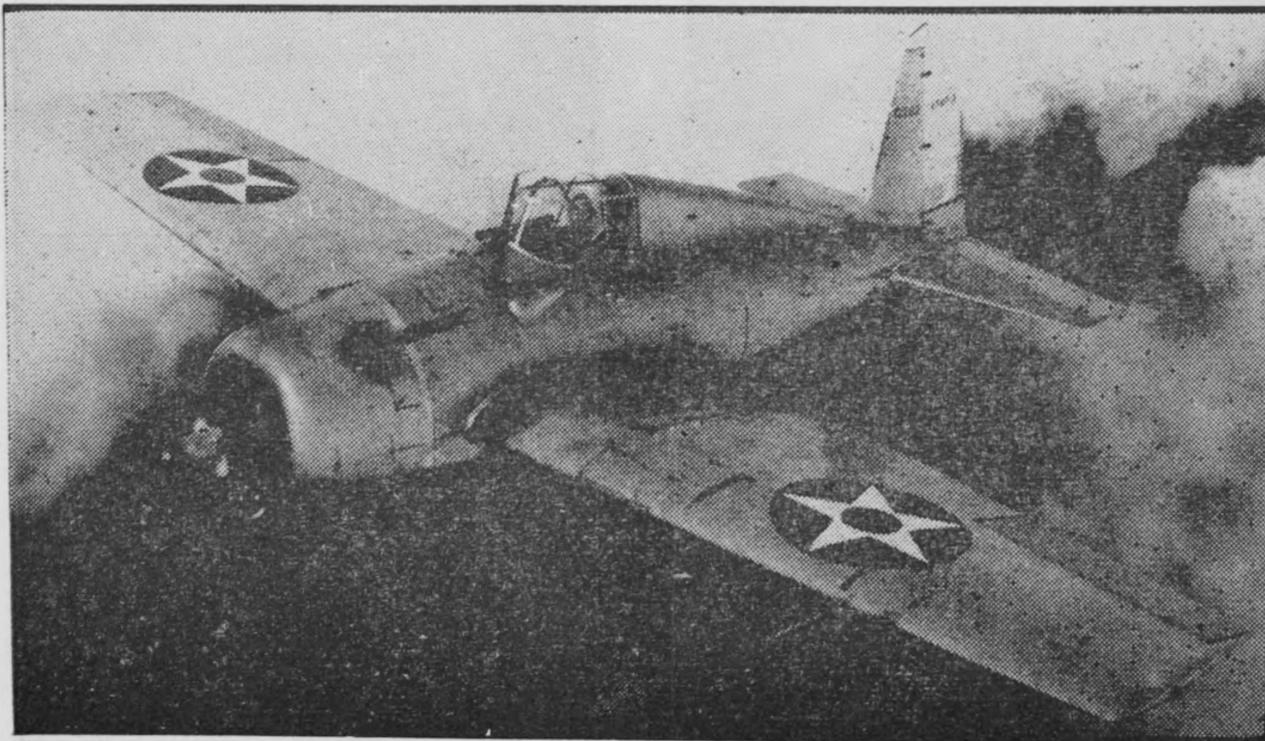
PULSE BEATS IN STEEL ARTERIES

Pirates of old were smart enough to know that control of the treacherous Florida straits gave them control of the water-borne trade from the Gulf of Mexico to the North Atlantic seaboard and to Europe. Modern pirates wearing the Swastika, are just as smart, in their despicable way, as they are now proving.

However, we anticipated them in some measure, in that southeastern United States, which for its petroleum supply was once largely dependent upon tanker transportation coming through the Florida straits, now has the assurance of a constant supply by the Plantation Pipe Line. This line, of which we are a joint owner, was rushed to completion early this year and carries gasoline, heating oil, kerosene, and tractor fuel from Baton Rouge, Louisiana, to six southeastern states, in which there are large war industries and numerous Army camps and air bases.

Late in 1941 we completed another vital pipe line which carries crude oil from Portland, Maine, to Montreal, Quebec refineries, eliminating the haul around the Gaspé Peninsula and down the St. Lawrence River and saving hard-pressed tankers 2,000 miles and 12 days' journey on every round trip they make.

Official U. S. Navy Photograph



CONCLUSION

Many who had a look at advance proofs of this booklet said that it should have a conclusion. We would state it this way:

From the record of this one company, it is plainly apparent that industry is essential to our Victory effort. We have told you how this company of ours has risen with all of its resources to meet the responsibility laid before it. We assure you that what we have done is typical of what all industry has done — namely, that it has worked, is working, and will work, to give that boy at the front the edge he needs to lick the enemy.