

Reich Looks To U. S. For Gazette 6-20-37 Helium Supply

Berlin, June 19 (AP).—Helium ("sun gas"), the key to safe airship travel, has become a by-word in Germany since the "Hindenburg" tragedy at Lakehurst May 6. Every German expects a generous gesture from the United States to place at the disposal of the Zeppelin works whatever amount of helium may be required to continue the late Count Ferdinand von Zeppelin's program.

Since the Reich's minister of aviation, Col. Gen. Hermann Goering, gave orders to work faster at completion of the substitute "Hindenburg" at Friedrichshafen, aviation experts such as the veteran balloonist Dr. Alfred Hildebrandt and the famous physicist and 1936 Nobel prize winner, Prof. Peter Debye, have voiced their opinions about use of helium in airships and production of this precious gas.

Germany's efforts aim at finding helium sources in the country itself. Professor Debye in a newspaper article discussed the problem of extracting helium from the air.

Air Extraction Too Difficult.

"Nearly 200 airships of the size of the 'Hindenburg' could be filled with 35,000,000 cubic meters of helium contained in the atmosphere over Berlin alone," he said. He continued pessimistically, however, "if it could be reached."

It would be chasing a phantom, according to the physicist, to try to convert this theory into practice. "Helium," a by-product of liquid air, can be produced theoretically," he said, "but it would take 440 refrigeration machines which are used for the liquification of air, to work continuously for one year to produce a quantity necessary for an airship the size of the 'Hindenburg.'"

While many are demanding exclusive use of helium for all commercial dirigibles, Major Hildebrandt believes that a combined helium-hydrogen filling would do just as well. In his opinion dirigibles would be safe if the outer cells contained the non-inflammable helium, while for purposes of economy bags of larger capacity with hydrogen should be placed inside.

Patents for a helium gas bag with a hydrogen "core" were granted in 1932. Lack of helium, however, prevented application of this device in the destroyed "Hindenburg."

Now, Germany is hopefully looking to America to supply the precious gas for the new airship scheduled to be completed this fall.