

The gosport was strictly a one-way device. The student pilot could hear—but he couldn't talk back.

The First Intercom

BY C. V. GLINES

IF YOU'D like to prove how long ago you took Air Force flight training, ask one of today's pilots what a gosport is. Chances are it isn't in his aviation lexicon. Those who took primary flight training during World War II, however, know that the gosport was a primitive one-way communication device your instructor used to get your attention when he thought you were engaging in flight without your mind in gear.

The urgent need for an intercom between an instructor pilot and a student was apparent to Wilbur and Orville when they tried to shout instructions over the roar of the engine mounted directly behind them.

When the first mechanized war in the air began in 1914, the British realized they needed an intercom in their training planes. They were taking sixty percent of their combat losses because of pilot error and only two percent as a result of enemy action. Students couldn't hear what their instructors were shouting in those early open-cockpit, tan-

dem-seat planes. The students didn't understand the significance or the extent of their mistakes in flight because the instructor's critiques were delayed until they were on the ground.

Solving the Problem

Col. Robert Smith-Barry, commander of a "School of Special Flying" at Gosport, England, solved the problem. Believing communication in flight to be critical, he took a rubber hose and ran it between the seats for instructor and student. He attached funnels to the hose. These funnels were held in place over each pilot's mouth. The hose branched out in front of each pilot, and the two ends were attached to each man's helmet over the ears.

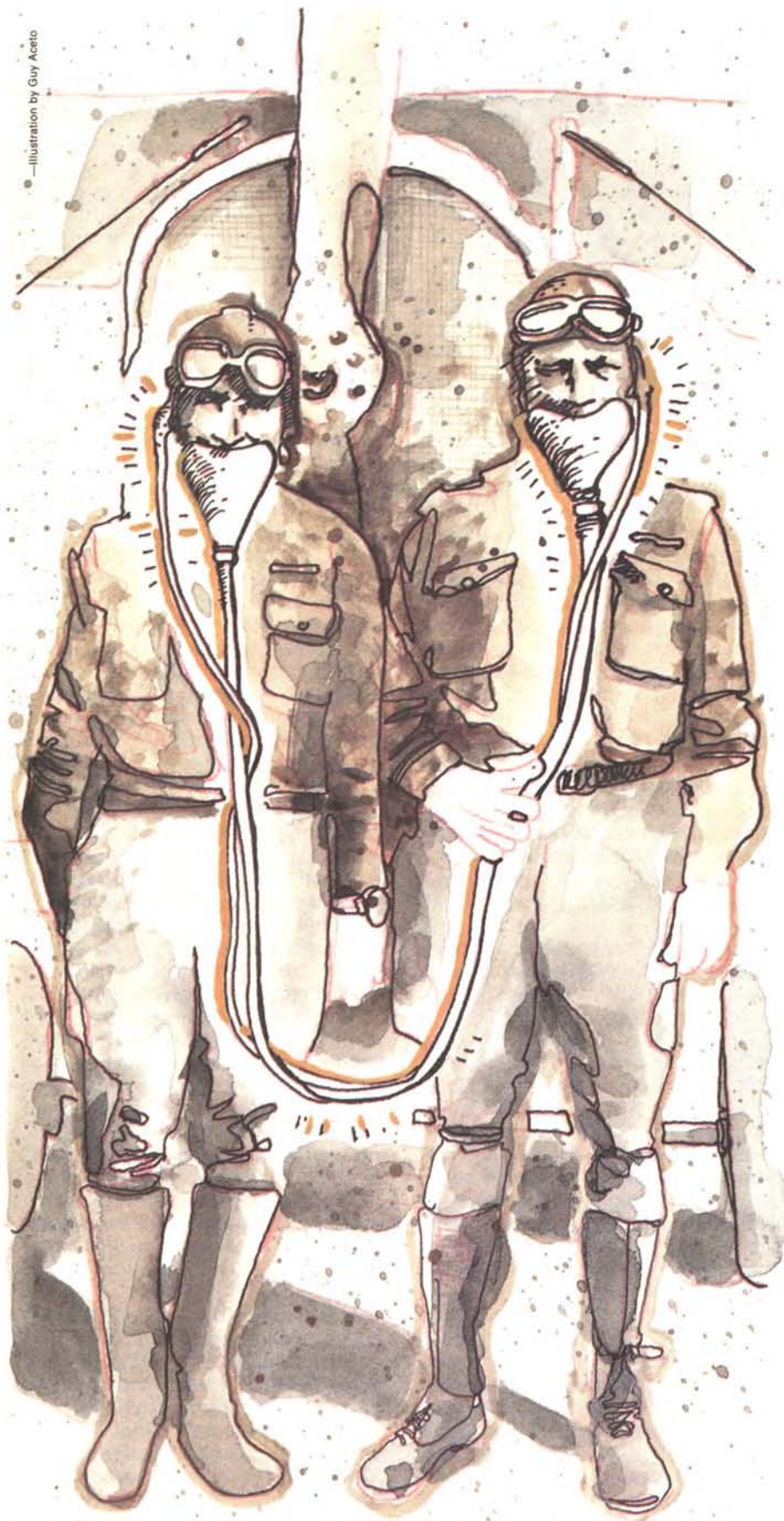
The device became known as the Gosport System. Students and in-

structors, pilots and crew members could converse after a fashion despite the engine's roar. Students developed confidence and skill faster. The British were able to cut the number of training flight hours from 100 to forty through this and other training improvements; accidents declined significantly.

The Aviation Section of the US Signal Corps, impressed with the device and the British flight training system, sent Capt. Henry H. "Hap" Arnold to San Antonio in August 1917 to choose a site for a "Gosport-type" pilot training school. This field became Brooks Air Force Base.

Various types of two-way and one-way "voice tubes" were tested at Dayton's McCook Field. However, the Air Service was not impressed with some of the tubes sub-

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The Gosport: "Helmet and speaking tube Ear Piece Assembly"



mitted. One type, manufactured in this country by A. G. Spaulding & Bros., was "not considered suitable for use as an intercommunicating device on either service or training types of airplanes," according to a confidential report. "The voices did not have sufficient volume, sounded metallic, and were very hard to understand."

The report added: "Considerable noise is picked up through the mouthpiece . . . the amount varying with the position of the mouthpiece, as, for example, when the mouthpiece is hanging down in the cockpit and when it is being held up in the slipstream. This change of intensity of the engine noise would be apt to prove very confusing to a pupil receiving instruction in flying."

Don't Talk Back!

The report notwithstanding, the need for inter-pilot communication overruled the disadvantages, and the devices were procured for open-cockpit training planes. However, military flight instructors decided they didn't want students to talk back or ask questions while airborne.

The gosport became a standard one-way system with a small hand-held funnel on the instructor's end attached to a rubber hose. The student had a special cloth or leather helmet, which was connected to the hose by small curved metal fittings attached over both ears. The supply manuals labeled the system "Helmet and Speaking Tube Ear Piece Assembly."

The instructor could instruct, but the student could not reply. When an instructor became disturbed about a student's performance, he would wave the funnel in the breeze to emphasize a point. At the other end, the student heard a roar in his ears that seemed like an engine wide open at ten paces. This attention-getting method always worked. Ask anyone who took primary flight training in the PT-17s and -19s.

When you graduated to the basic and advanced trainers, you appreciated that the electronics of the day had progressed considerably. You had an intercom system and could talk back, if you dared. The gosports disappeared when the primary trainers were junked at the end of the war. ■