

SOARING

OFFICIAL PUBLICATION

of

THE SOARING SOCIETY OF AMERICA, INC.

Volume 4

October-November

Number 10-11

OVER-AGED *Equipment*

It has been our unpleasant duty to publish in another part of this magazine, the report of an accident which could have been avoided had the aircraft been properly maintained. Quoting from a recent bulletin from the Civil Aeronautics Authority: "An improperly maintained airplane (glider) is a menace not only to its pilot but to every cubic foot of air through which it flies and to every square foot of ground over which it flies. . . . Pilots for their own safety and well being and in consideration for fellow beings, never should fly improperly maintained aircraft. Improper maintenance can cover a multitude of sins, most of which can be charged to negligence.

". . . Contact this reminder: When you are sick, you usually stay in bed, you don't go to work. Treat the airplane (glider) the same way for a longer life. When it is 'sick,' get it well again before you force it to work."

This subject is particularly apropos at this time since popular use of gliders in this country is now approximately 12 years old, and many pilots are still flying equipment from those dark ages of 1929 and 1930, when the country was flooded with all sorts of primary types of gliders. Early in 1930, several companies brought out utility secondary types of gliders, many of which are still in use. While most of these gliders, due to frequent crackups, have been overhauled fairly regularly, this overhaul and repair has, for the most part, been carried out by persons unqualified to make such repairs. Other gliders have been stored for several years at a time before changing hands to other pilots who have used them for short periods and again disposed of them. Such equipment is a detriment not only to those who risk life and limb on each flight, but also to the gliding and soaring movement.

It, therefore, behooves each and every pilot and owner of gliders of any description to immediately make a thorough check of the airworthiness of his equipment. An examination of all available reports regarding glider accidents which have resulted in structural failures have shown, without exception, that these accidents have occurred in gliders which have not carried CAA certificates of airworthiness. Every pilot who is flying a glider, whether it is his own equipment or club equipment, should make a line inspection before every day's operation, to insure the proper functioning of all controls and tow cable release hook. All fittings should be examined for excessive wear and all hinge pins and control con-

nections should be inspected for proper safetying of bolts and clevis pins. The old adage, "A stitch in time saves nine," holds very true in aircraft maintenance. A small repair, the replacement of a bolt, a patch on torn fabric, and any like repairs, will often prevent a major accident at a later date.

Having had the opportunity to observe some of the results of poor maintenance of gliders while supervising the repair of some 25 gliders over a period of 3 years at the Elmira Aviation Ground School, this matter has been forcibly brought out. Here are a few of the things that have been observed: Repairs made by incompetent persons have been only about one-half as strong as the original member; repairs made in direct violation of approved methods as outlined in ACM-18, also in violation of common sense, have resulted in a structure which is absolutely unsafe for even the mildest form of gliding. It has seemed that most of the individual owners and clubs have assumed that if they keep the covering tight with dope that the ship will be held together, but upon removing this covering, this is what is found: Rust on the tubular structure and in many cases portions of the structure rusted to the extent that the tubes could be crushed with the fingers; broken aileron bell cranks; frayed and rusted control cables; elongated holes and worn pins in control connections; aileron hinge bolts which have pulled through the spar fastenings; broken drag wires; buckled compression ribs; fungus growth in the plywood leading edge and plywood web of spars. One shudders to think of the number of near accidents that might have resulted in serious injury to the pilot if these gliders had not been overhauled and properly inspected.

Perhaps it would be well for all those who own gliding equipment to give it a thorough overhaul this winter making sure that the aircraft is in airworthy condition. Such an overhaul should be supervised by someone competent to pass on the airworthiness of the glider, such as a licensed mechanic or someone with sufficient background of structures and sound engineering practice as to be able to recognize structural weaknesses when observed. This applies particularly to home built gliders.

Accidents resulting from pilot carelessness and faulty piloting technique is something that can be easily controlled. However, accidents resulting from structural failures are unnecessary. Therefore, inspect your glider NOW!