SAFETY FIRST

The Gray Hair Department

by JOSEPH M. ROBERTSON, *Chairman*
SSA Safety and Flight Operations Committee

This concerns two similar incidents that could very well have ended in extremely serious accidents. In both cases a towplane and a sailplane were involved.

It is usually considered that airplane towing is the safest launching method when compared with winch or auto towing but this does not mean there are no inherent dangers.

Case I: A student pilot took off by aero tow for the first time in a 1-26. Instruction prior to this time had been given in a TG-3A and a 2-22. In the opinion of the instructor, the pilot was capable of handling the 1-26. The take-off was normal and the tow was excellent but when it came time to release, the glider pilot did not fully actuate the release knob, or check to see that the tow rope had dropped free. In the ensuing maneuvers, the sailplane pilot was badly shaken up and, at one time, both towplane and sailplane were in a spin, still hooked together. Almost 1000 feet of altitude were lost before both pilots simultaneously released the connecting link. Luckily, the planned release altitude was 2000 ft. above the ground.

Discussion: The tow rope used was a ⅜" nylon line with no weak link. The tow pilot, while experienced as a pilot, was not experienced in towing. He released only after he was in serious trouble instead of immediately.

Cause: Failure of the sailplane pilot to fully actuate the release and to ensure that the rope was free.

Case II: A student pilot, in his first solo aero tow, took off for a local flight in the group's TG-2. Radio contact between the student and the instructor on the ground was provided by a transceiver in the sailplane.

When the sailplane first became airborne, the pilot allowed the ship to climb to an altitude of almost 50 ft. On word from his instructor, he opened spoilers and descended to the proper tow position. The tow pilot, alerted by the initial inability to climb, closely watched the student in the rear view mirror during the climbout. He noticed the student's difficulties in maintaining position and the constant use of spoilers. Finally, at about 500 ft. altitude, the student allowed the TG-2 to climb excessively high without realizing he was pulling the towplane's tail up. The tow pilot, finding himself being forced into a dive in spite of full back stick, decided he had had enough and pulled the release. To his consternation, the release would not work because of the strong upward pull. He tried full back stick again with no results. Repeated heavy pulls on the release failed to produce actuation. By this time the situation was critical because the towplane was in a 60-70 degree dive and the ground was rapidly approaching. He had previously not reduced power for fear the sailplane would overrun the towplane and foul the propeller with the rope. However, as a last resort, the throttle was chopped and the tow pilot turned his attention to calculating the chances for survival.

Observers on the ground, including the instructor, saw the unusual attitude of the two aircraft and the speed. The instructor told the student to pull the release. this was done in time to allow a recovery by the tow pilot. Both aircraft landed safely.

Comment: The student was obviously not ready for solo aero tow practice. The rope, again, was a ⅜" diameter nylon with no weak link. Further, it was not discovered until this time that the standard airplane tow hook would not release while subjected to a heavy upward load.

Cause: Lack of proper student preparation. Lack of a weak link in the tow rope and/or a tow hook that would release under any condition of loading.

It is advised by the Safety Committee that all tow hook installations on towing aircraft be checked and modified if necessary to assure proper operation under extreme loading conditions. It is also recommended that a weak link be a part of all tow ropes or that the rope itself be only strong enough to do the job of normal towing.

MATERIAL AVAILABLE

The SSA has a variety of items available on a free distribution basis, unless otherwise specified. Request by item number or name from SSA, Box 66071, Los Angeles 66, Calif.

Item 3. FAI soaring awards application blanks.

Item 4. SSA membership application blanks; in the form of business reply envelopes, making it easy for new applicants to mail in dues.

Item 6. SOARING . . . The S.S.A. . . . and YOU pamphlets, telling about the sport of soaring, glider pilot certificates, how soaring is organized, what the SSA is and what it does, and how to get started in soaring. Ideal for answering the questions of prospective soaring enthusiasts.

Item 7. Region lists of soaring clubs and SSA Governors, by SSA region number, as excerpted from the SSA Directory. The list for each region lists all soaring clubs in that region, their addresses, meeting times and places, flying sites and contact persons and the SSA Governors' names and addresses for each state in the region. Specify states interested in when ordering.

Item 8. List giving Availability of Plans, Kits, Partially Completed and Ready-to-fly Gliders and Sailplanes. At present, the list includes only U. S. designs for which details have been obtained, including a brief description, price, manufacturer's name and address. New equipment only.

Item 9. List of Glider Schools and Commercial Glider Operators in the U.S., giving location, equipment, services and prices, where known.

Item 10. List of Books on Soaring, where they may be obtained, prices and a brief description of each.

Item 24. Incorporation Procedures —California. Intended to show nonprofit soaring clubs the way to incorporate, with specific details for the state of California.

Item 25. Suggested Bylaws for Soaring Clubs. Distribution limited to those seriously attempting to form new clubs.

Item 28. Used Sailplanes For Sale List. All known used sailplanes for sale for which the owner has given permission to include on this list. Latest revision date is Oct. 5, 1961.

Item 30. Film Library List, with rules governing use of the films. Request from Walter B. Hausler, 67 Fisher Rd., Rochester 11, N.Y.

Item 38. How to Start a Soaring Club. Six pages of suggestions.