Soaring Safety Foundation

Annual Soaring Safety Foundation Safety Summary
by
Soaring Safety Foundation Trustees

This report covers the FY17 (November 1, 2016 to October 31, 2017) reporting period. This summary is printed in SOARING, the complete report can be found on the SSF web site (http://www.soaringsafety.org/accidentprev/reports.html). A review of the NTSB accident database shows a 6/3% increase (17 vs 16) in the number of US soaring accidents during this time period compared to the FY16 reporting period. The number of fatal accidents in FY17 was unchanged (3 vs 3) compared with FY16. It should also be noted that the number of insurance claims was unchanged in 2017 compared to 2016. While the long term trend in accidents reported to the NTSB continues to decline, there is general agreement that more steps must be taken to continue reducing the number of accidents and to eliminate all fatal accidents.

For the twelve-month period ending October 31, 2017, eleven(11) gliders, three (3) motorgliders, and three (3) tow-planes were involved in seventeen (17) separate accidents meeting the reporting requirements of NTSB Part 830 of the Code of Federal Regulation. This represents a 6.3% increase in the number of accidents reported during the previous reporting period. The five-year average for the FY13 – FY17 reporting period is 21.2 accidents per year, representing a 10.9% decrease in the average number of accidents from the previous five-year period.

While the average number of accidents per year has shown a steady decline since 1981 (averaging 45.6/year in the 80's, 38.6/year in the 90's, 33.5/year in the 00's, and 24.4/year for the first 8 years of this decade) the number of accidents each year remains too high. In addition, the average number of fatalities has remained nearly constant, at just under 6 per year since the mid 1990's. In the FY17 reporting period three (3) accidents resulted in fatal injuries to three (3) pilots. In addition, two (2) pilots and one (1) ground observer received serious injuries while ten (10) pilots and two (2) passengers received minor or no injuries.

A review of the three (3) fatal accidents showed that a private pilot of an AC4 glider in NE was fatally injured during a failed aerotow launch. A pilot of an ASW 28-18E motorglider in WA was fatally injured after impacting terrain for unknown reasons. An ATP rated tow-pilot flying a Pawnee in VA was fatally injured when the glider being towed kited after the CFI pilot was distracted shortly after lift-off. All fatal accidents are still under investigation by the NTSB, more details may be given in the main report (http://www.soaringsafety.org/accidentprev/reports.html).

Continuing a long historical trend, the largest number of accidents occurred during the landing phase of flight during this reporting period. In FY17 landing accidents represented 41% of all accidents. As usual only one (1) of the seven (7) landing accidents, or 14%, occurred while the pilot was attempting to land in a field. The remaining six (6) accidents occurred while the pilot was attempting to land on an airport. Details of these accidents are given in the full report.

Proper training and an operational focus on safe arrivals can go a long way toward addressing the landing accident problem. The SSF continues to promote that pilots and instructors adopt a 'goal oriented approach' to pattern planning and execution. The 'goal' is to arrive at your selected landing spot, so that you can stop at a predetermined point. This same procedure should be used during every landing, either at an airport or in a field. In addition, for off-airport landings is is important that the pilot mentally transition from cruise flight mode to landing mode with enough altitude to examine the prospective field to determine what obstacles the pilot must deal with. A good rule of thumb is 3-2-1, at 3,000 ft AGL the pilot should have at least one landable field within gliding range. At 2,000 ft AGL the pilot should select a specific field and examine it for obstacles and obstructions. At 1,000 ft AGL the pilot is committed to an outlanding, and mentally switches to landing mode. Making last minute changes while on short final to deal with obstructions is a leading cause of off-airport

landing accidents.

Four (4) aborted launch accidents, called PT3 (premature termination of the tow) events, accounted for 23.5% of the FY17 accidents. As noted above a private glider pilot and an ATP rated tow-pilot were fatally injured during failed aerotow launches. In addition, the pilot received serious injuries while attempting to return to the runway with the spoilers open. The left wing of the glider struck the ground while attempting to return to the runway after kiting on tow.

Pilots can, and should, mentally prepare for a failed launch by developing a specific set of action plans to deal with several contingencies. The task is then to execute the proper plan at the proper time. Flight instructors should continue to emphasize launch emergencies during flight reviews, check rides and flight training.

There were thee (3) motorgliders involved in accidents during the FY17 reporting period. In addition to the one (1) fatal accident noted above, the following accidents occurred. The commercial pilot received minor injured after bailing out of his motorglider in NV. The commercial pilot was not injured after the touring motorglider suffered an inflight failure of the upper rudder hinge due to corrsion.

Flight instructors play an important safety role during everyday glider operations. They need to supervise flying activities and serve as critics to any operation that is potentially unsafe. Their main job is to provide the foundation upon which a strong safety culture can be built. Other pilots and people involved with the ground and flying activates also need to be trained to recognize and properly respond to any safety issues during the daily activity. Everyone, students, pilots, ground operations staff, and instructors, should continuously evaluate both ground and flight operations at US chapters, clubs, commercial operations and at contests. An operations safety culture should train everyone to raise safety issues with fellow pilots, club officers, and instructors. By addressing issues before they become accidents, we can improve soaring safety. Only by the combined efforts of ALL pilots can we reduce the number if accidents.