Soaring Safety Foundation

Annual Soaring Safety Foundation Safety Summary
by
Soaring Safety Foundation Trustees

This report covers the FY16 (November 1, 2015 to October 31, 2016) reporting period. This summary is printed in SOARING, the complete report can be found on the SSF web site (http://www.soaringsafety.org/prevention/reports.html). A review of the NTSB accident database shows a 15.8% decrease (16 vs 19) in the number of US soaring accidents during this time period compared to the FY15 reporting period. The number of fatal accidents in FY16 also decreased by 40% (3 vs 5) compared with FY15. It should also be noted that the number of insurance claims continued to decline in FY16, continuing a tread for the past 2 years.. 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, 2016, nine(9) gliders, six (6) motorgliders, and one (1) tow-plane were involved in sixteen (16) separate accidents meeting the reporting requirements of NTSB Part 830 of the Code of Federal Regulation. This represents a 15.8% decrease in the number of accidents reported during the previous reporting period. The five-year average for the FY12 – FY16 reporting period is 23.8 accidents per year, representing a 15.8% 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 25.4/year for the first 7 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 FY15 reporting period three (3) accidents resulted in fatal injuries to three (3) pilots and one (1) passenger. In addition, one (1) pilot received serious injuries while eleven (11) pilots and two (2) passengers received minor or no injuries.

A review of the three (3) fatal accidents showed that a private pilot in IL was fatally injured during a failed aerotow launch. A commercial pilot and passenger in CO were fatally injured when the motorglider impacted mountainous terrain in cruise flight. A motorglider pilot in NV was fatally injured when the glider impacted terrain for unknown reasons. All fatal accidents are still under investigation by the NTSB, more details are given in the main report (http://www.soaringsafety.org/prevention/reports.html).

Continuing a long historical trend, the largest number of accidents occurred during the landing phase of flight during this reporting period. In FY16 landing accidents represented 56% of all accidents. In an unusual trend only four (4) of the nine (9) landing accidents, or 44%, occurred while the pilot was attempting to land at an airport. The remaining five (5) accidents occurred while the pilot was attempting to land in a field. 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 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.

Three (3) aborted launch accidents, called PT3 (premature termination of the tow) events, accounted for 18.8%

of the FY16 accidents. The pilot received minor injuries while attempting to land after the canopy opened during the self-launch. The left wing of the motorglider struck trees while attempting to land with the engine extended and not running. The pilot of a glider was not injured after the rear canopy opened during the ground roll, the pilot elected to continue the tow releasing at pattern height before returning for a successful landing. 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 six (6) motorgliders involved in accidents during the FY16 reporting period. In addition to the 2 fatal and 1 self-launching accident noted above, the following accidents occurred. The pilot was not injured after the touring motorglider landed in trees short of the intended runway. The pilot was not injured after the touring motorglider veered of the runway during the ground roll, striking cornstalks with the left wing. The pilot of a motorglider was not injured after striking trees while attempting an off-airport field landing.

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.