Soaring Safety Foundation

Annual Soaring Safety Foundation Safety Summary
by
Soaring Safety Foundation Trustees

This report covers the FY15 (November 1, 2014 to October 31, 2015) reporting period. This summary is printed in SOARING, the complete report can be found on the SSF web site (http://www.soaringsafety.org/accidentprev/ssfreports.html). A review of the NTSB accident database shows a 37.9% decrease (18 vs 29) in the number of US soaring accidents during this time period compared to the FY14 reporting period. However, the number of fatal accidents in FY15 increased by 66.7% (5 vs 3) compared with FY14. The good news is that the number of insurance claims fell significantly in FY15. 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, 2015, fifteen (15) gliders, two (2) motorgliders, and one (1) tow-plane were involved in eighteen (18) separate accidents meeting the reporting requirements of NTSB Part 830 of the Code of Federal Regulation. This represents a 37.9% decrease in the number of accidents reported during the previous reporting period. The five-year average for the FY11 – FY15 reporting period is 25.8 accidents per year, representing a 11.0% 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 26.8/year for the first 6 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 five (5) accidents resulted in fatal injuries to five (5) pilots. In addition, four(4) pilots received serious injuries while nine (9) pilots and two (2) passengers received minor or no injuries.

A review of the five (5) fatal accidents showed that a private pilot in AZ was fatally injured during a failed winch launch. A private pilot in NM was fatally injured when the glider impacted terrain for unknown reasons. A glider pilot in TX was fatally injured when the glider struck power lines and terrain for unknown reasons. An ATP rated tow-pilot in CA was fatally injured when the tow-plane collided with terrain for unknown reasons. A glider pilot in TX 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 FY15 landing accidents represented 39% of all accidents. It should also be noted that six (6) of the seven (7) landing accidents, or 86%, occurred while the pilot was attempting to land at an airport! The remaining accident 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. In this approach, the pilot continuously evaluates the gliders flight path taking into account wind speed/direction, lift/sink, distance remaining to the landing spot, glider performance, and the height above the landing spot. The key to accomplishing this approach is to recognize that while most pilots have difficulty picking out a specific angle, every pilot is adept at recognizing changes in look-down angles. Responding to even the slightest change, by making small changes in the gliders flight path or sink rate, will help the pilot remain on the intended glide path to the landing spot. This increases the pilot's chances of successfully dealing with unexpected conditions throughout the landing phase of flight.

Five (5) aborted launch accidents, called PT3 (premature termination of the tow) events, accounted for 27.8% of the FY15 accidents. A pilot received minor injuries while the passenger was not injured during a hard landing after being waved off tow while the spoilers were open. The pilot of a self-launching motorglider was not injured after the left wing struck terrain while aborting a launch. The pilot and passenger were not injured agter striking trees during a simulated rope break. The pilot of a glider was not injured after the glider kited on tow due to the elevator being disconnected. More details will be provided in the full report. 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 two (2) motorgliders involved in accidents during the FY15 reporting period. The failed self-launch accident is reported above. The commercial pilot of a motorglider was seriously injured while attempting an off-airport landing with the engine extended but not running.

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.