



2021 Soaring Accident Summary

By Soaring Safety Foundation Trustees

For the twelve-month period ending October 31, 2021, twenty (20) gliders and two (2) motorgliders, were involved in twenty-one (21) separate accidents meeting the reporting requirements of NTSB Part 830 of the Code of Federal Regulation. A mid-air collision between 2 gliders accounts for the discrepancy between 22 aircraft and 21 accidents. This represents a 4.5% decrease in the number of accidents reported during the previous 12 month reporting period. The five-year average for the FY17 – FY21 reporting period is 23.6 accidents per year, representing a 2.4% increase 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, 25.5/year for the 10's, and 21.5/year for 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 and is also considered too high. In the FY21 reporting period two (2) accidents resulted in fatal injuries to two (2) pilots. In addition, nine (9) pilots received serious injuries while sixteen (16) pilots received minor or no injuries in these nineteen (19) non-fatal accidents.

While the number of accidents reported to the NTSB is easy to track (Figure 1), and that number has been declining for both Gliders and General Aviation as a whole, it is important that this number must be combined with flight hours or launches to determine the accident rate. Several years ago the SSF Trustees began asking all soaring organizations (clubs, chapters, commercial operators) to submit their flight times/launches in a confidential manner. This is done by mailing postcards to the organization representative listed in the SSA's database. For the past four (4) years approximately 30% of the organizations have returned these postcards. In February 2022, another mailing occurred, readers of this article are encouraged ask their organization to respond.

In addition to requesting data from soaring organizations, the FAA sends survey requests to some glider owners. The On-line Contest (OLC) also posts data on its web site allowing the SSF to gain another proxy for flight time/launch data. Finally, the SSF has been looking at contest traces posted to the SSA's web site to gather this type of data during sanctioned contests. While the SSF Trustees are not convinced that the times/launches provided by any of these proxies are accurate enough to draw final conclusions, the trends from all of them show a wide fluctuation in accident rates over the past 5 years. Getting better data via soaring organizations confidentially reporting this data will help clarify this situation.

A review of the two (2) fatal accidents showed that the pilot of a SGS 1-35 glider in NY was fatally injured after failing to recover from an unintentional stall/spin after aborting the aerotow between 100 and 200 ft AGL for unknown reasons. The pilot of a Moni glider in OK received fatal injuries after failing to recover from an apparent stall/spin. All fatal accidents are still under investigation by the NTSB, more details may be given in the full report available at (<http://www.soaringsafety.org/accidentprev/ssfreports.html>).



Unlike previous years the NTSB aviation accident database does not contain any description of the accident in twelve (12) of the twenty-one (21) or 57% of the accidents. This makes it impossible to place these 12 accidents in one of the 3 (take-off, cruise, landing) categories the SSF uses. While it is expected that descriptions will be added as investigations are concluded, it is not know at this time when that will happen. The SSF will update the community as information becomes available.

In FY21 four (4) landing accidents represented 19.1% of all accidents. Continuing the historical trend, approximately half (50%) of the landing accidents occurred during off airport landings while the other half (50%) occurred while landings at an airport. Details of these accidents are given in the full report.

Three (3) non-fatal and one (1) fatal aborted launch accidents, called PT3 (premature termination of the tow) events, occurred in FY21 accounted for 19.1% of the accidents. The fatal accident, described above, involved a SGS 1-35. See the full report for more detail.

There were two (2) motorgliders involved in accidents during the FY21 reporting period. ISee the full report for more details.

The Soaring Safety Foundation offers both anonymous Site Surveys as well as Safety Seminars at your location as a part of our ongoing commitment to safety. The SSF also offers Flight Instructor Refresher Courses for Flight Instructor recurrent training. More information on these and our growing collection of on-line safety and training programs can be found on our website. <http://www.soaringsafety.org>