

2020 Soaring Accident Summary

By SSF Trustees

For the twelve-month period ending October 31, 2020, eight (8) gliders, seven (7) motorgliders, and two (2) towplanes were involved in seventeen (17) separate accidents meeting the reporting requirements of NTSB Part 830 of the Code of Federal Regulation. This represents a 22.7% decrease in the number of accidents reported during the previous 12 month reporting period. The five-year average for the FY16 – FY20 reporting period is 22.0 accidents per year, representing a 1.8% 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 25.9/year for the 10's) 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 FY20 reporting period eight (8) accidents resulted in fatal injuries to eight (8) pilots and one (1) passenger. In addition, two (2) pilots and two (2) passengers received serious injuries while seven (7) pilots received minor or no injuries in these nine (9) 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 three (3) years approximately 30% of the organizations have returned these postcards. In February 2021, another mailing occurred, readers of this article are encourage ask their organization to respond.

In addition to requesting data from soaring organizations, the FAA sends survey requests to some glider owners. That data is available via the FAA's web site and currently it is used by the SSF as a proxy to calculate accident rates (see Figure 2). 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 SSA Contest committee has indicated that they will 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, 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.

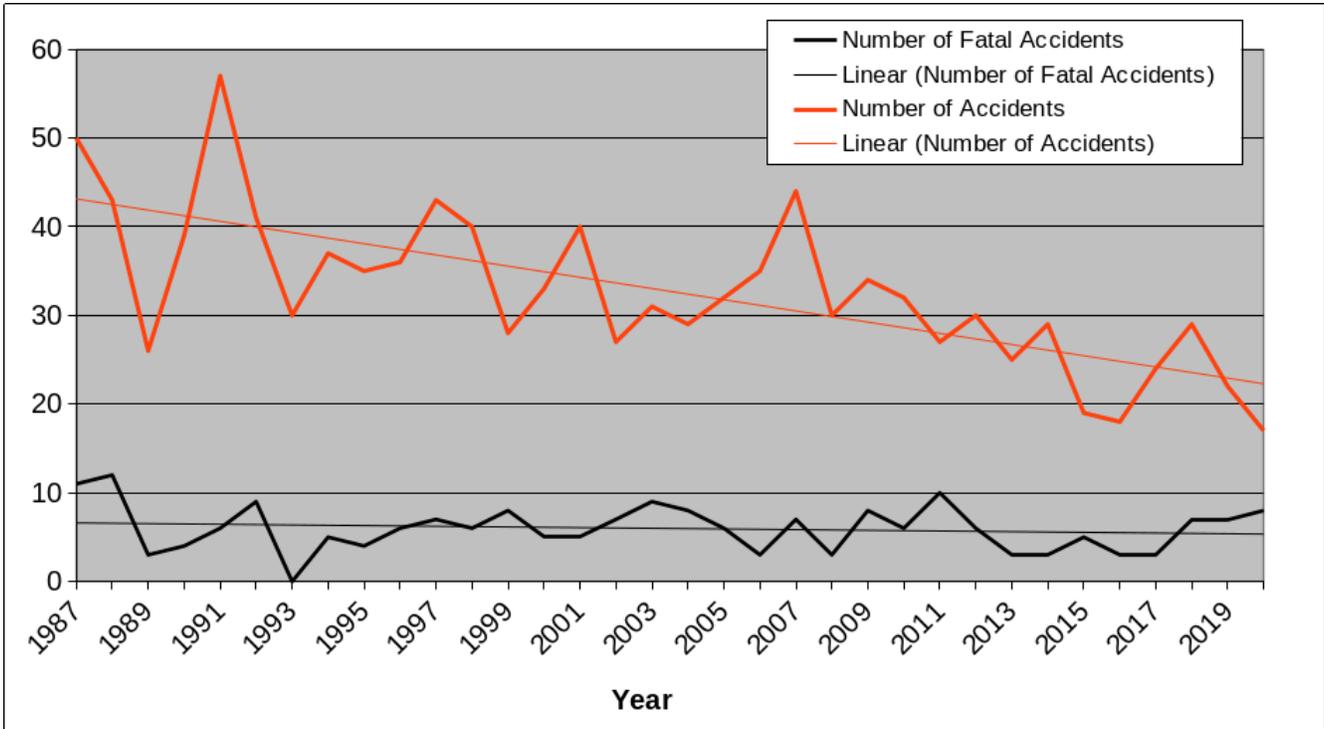
A review of the eight (8) fatal accidents showed that the ATP rated pilot of a AC-4C glider in VA was fatally injured after failing to recover from an unintentional stall/spin while on downwind. An ATP rated pilot and a commercial pilot in a Cessna L-19 Birdog received fatal injuries after impacting a tree during a practice tow take-off in HI. The private pilot of a Standard Cirrus in FL was fatally injured after impacting terrain in a nose low attitude following a release at 500 ft AGL. The pilot of a Sinus motorglider in FL was fatally injured after impacting a house when the engine quit. The pilot of a

8GCBS towplane in CA was fatally injured after impacting terrain following a kiting incident at 75 ft AGL. The pilot of a AC-5M motorglider was fatally injured after it stalled/spun during a steep climb on self-launch take-off in OR. The pilot of a ASW 27-18 in NV was fatally injured after the glider impacted mountainous terrain at 8,800 ft MSL. The pilot of a LAK-17 was fatally injured in CA after impacting terrain for unknown reasons. 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>).

Continuing a long historical trend, the largest number of accidents occurred during the landing phase of flight during this reporting period. In FY20 landing accidents represented 41.2% of all accidents. Continuing the historical trend, approximately half (43%) of the landing accidents occurred during off airport landings while the other half (57%) occurred while landings at an airport. Details of these accidents are given in the full report.

Two (2) non-fatal and four (4) fatal aborted launch accidents, called PT3 (premature termination of the tow) events, occurred in FY20 accounted for 35.3% of the accidents. The fatal accidents involving both towplanes, the Std Cirrus and AC-5M aircraft were mentioned above. Other accidents were: A CFG and his student were not injured after the Blanik L-23 impacted terrain while practicing low altitude rope breaks. The private pilot and passenger in a motorized L-13 were seriously injured after the motorglider ran off the end of the runway while trying to self-launch with the spoilers open. See the full report for more detail.

There were seven (7) motorgliders involved in accidents during the FY20 reporting period. In addition to the accidents noted above, the following accidents occurred. The commercial pilot of a Sinus was not injured after deploying the ballistic parachute at 300 ft AGL after the engine failed to start. The ATP rated pilot received minor injuries after the Ventus 2CT's right wing struck the ground while landing after the engine failed to start in the pattern. The private pilot of a Sinus was not injured after a striking the VASI light system during a hard landing under power. See the full report for more details.



Accidents per Flight/Time

