



## Soaring Accident Rates

By Rich Carlson – SSF Chairman

A cursory look at the 2006 soaring accident rates shows both good and bad news. The bad news is that the number of accidents remained constant from the previous year. The good news is that there were 50% fewer fatalities than in 2005.

For the twelve month period October 1, 2005 through September 30, 2006, 32 glider, motorglider, or towplane accidents meeting the reporting requirements of Part 830 of the Code of Federal Regulations were reported to the National Transportation Safety Board. The number of accidents reported during 2006 represents no change in the number of accidents compared to the FY05 reporting period. The five-year average for the FY2002 – FY2006 reporting period is 30.2 accidents per year.

While the average number of accidents has shown a steady decline since 1981 (averaging 45.6/year in the 80's, 38.6/year in the 90's and 32.0/year so far this decade) the yearly number of accidents remains unacceptably high. In addition, the average number of fatalities has remained just over 5.9 per year since the mid 1990's. In the FY06 reporting period three (3) accidents resulted in fatal injuries to the pilot. In addition to these fatalities, seven pilots received serious injuries while twenty-three pilots and eight passengers received minor or no injuries during the FY06 reporting period. Continuing a trend from the FY05 period, no tow plane pilots received fatal injuries in accidents involving accidents in those aircraft.

Of major concern is the mid-air collision between an ASG-29 glider and a corporate Hawker XP-800 biz-jet. While the accident resulted in only minor injuries to 2 of the pilots and no injuries to the jet's co-pilot or passengers, both aircraft were substantially damaged in the collision. The glider pilot bailed out while the jet made an emergency gear-up landing at the nearest airport. One positive result from this accident is that Air Traffic Control (ATC) personnel and the Reno area glider pilots are working together to identify practices and procedures that can improve communications between glider pilots, airplane pilots, and ATC controllers. Contact the SSF if you would like help in working with your local ATC personnel on matters concerning your local area.

As the FY06 statistics show, the majority of soaring accidents occur in the approach and landing phase of flight. For one reason or another, the pilot fails to make it to the landing area. Pilots need to consider multiple factors including: other traffic, wind, lift/sink, location, and distance remaining to the landing area in order to safely land a glider. Failure to account for one or more of these factors can leave the pilot low on the

approach - leading to an undershoot, or too high on the approach – leading to an overshoot.

One new tool that pilots and instructors should consider is that GPS recorders can help students and licensed pilots alike. Low-cost hand-help GPS units are available on the used market and can be carried in the training or rental glider. The approach and landing portion of the flight can be extracted from the recorder and displayed to determine how the pilot is handling various conditions. Using this tool you, and your instructor, can evaluate your own performance and quickly identify what areas you need to work on.

Takeoff accidents, though rare, are particularly frustrating because they usually avoidable. Both glider and launch vehicle are sitting on the ground before the launch begins. In FY06 four accidents occurred during the take-off phase of flight. One motorglider, two gliders being aerotowed, and one glider on a winch launch were involved in these accidents. Pilots can mentally prepare for an emergency and develop 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, club check rides and flight training.

Seven motorgliders were involved in a variety of accidents in the FY06 reporting period. This is more than double the number of accidents involving motorgliders in the FY05 reporting period. At this time it is unclear if this is a trend indicating new safety and training issues are arising, or if it is just that more motorgliders are being imported, and thus are a larger percentage of the US glider fleet. The SSF will continue to monitor this issue and will work closely with the Auxiliary-powered Sailplane Association (ASA) to develop programs that address the specific needs of the motorglider pilot.

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. Other pilots and people involved with the flying activity also need to be trained to be alert to any safety issues during the daily activity. All these tasks need to be performed on every flight. Failure to do so can result in another accident.

### Number of Accidents since 1981

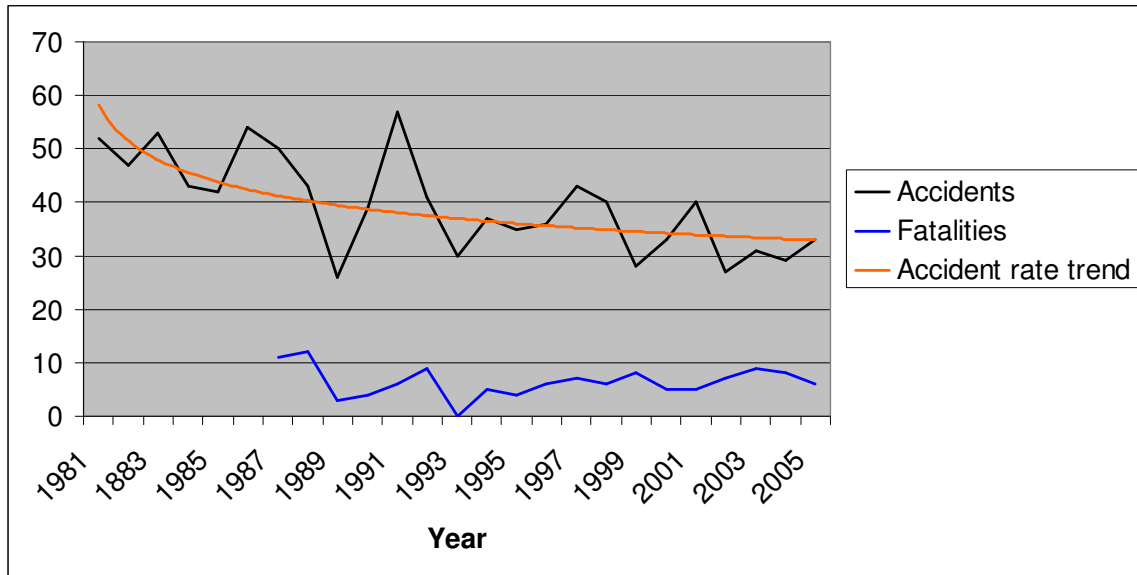


Figure 1 Number of total and fatal accidents on a per year basis.

