

2005 Hang Gliding Accident Summaries

By Joe Gregor

This month's column summarizes the non-fatal hang gliding accident reports received by USHGA during the year 2005. Based on personal knowledge of many unreported accidents, these nineteen reports no doubt represent but a small subset of the total number of accidents that actually occurred throughout the year. As a result no attempt was made to compute statistics based on this information. Instead these stories are offered as food-for-thought for those pilots wishing to help prepare themselves for a safe flying year in 2006. **In the future, I would like to solicit more complete stories, from pilots who have experienced a mishap (or near mishap) which they think could provide valuable lessons learned from which other pilots might benefit.** These are the types of articles you will find in AOPA, Plane & Pilot, and Flying magazines. It is hoped that in this way this column could provide an even greater safety and lead us away from the bi-monthly 'fatality report' that this column has unfortunately fallen into, misleading many lay readers into concluding that hang gliding is synonymous with insane risk and near certain death.

May

A pilot with moderate to low airtime flying a single surface glider made the decision to fly alone at a familiar site. After carefully evaluating conditions and mindset he performed a nice launch and began to soar in easy conditions. While chasing lift he got low on the ridge and sealed his fate by trying to cross a venturi in search of better lift, then circling in a bump halfway across. While setting up low on an approach into a field directly behind the ridge, the glider apparently hit rotor on final and crashed. The control frame was wrecked, the heartbolt 'noodled', and the keel damaged. The pilot suffered a concussion, broken ribs, shoulder and spine trauma, and bruising.

June

An experienced pilot was platform towing in private field with his wife acting as truck operator. Both individuals had been doing this for 10 years. An unnoticed loop from the VG pullstring looped around a bolt on the platform, causing the glider to roll upon release and immediate impact the ground. Extensive damage resulted to the glider airframe. The lucky pilot limped away with little more than a skinned knee.

After assisting several pilots at launch, an experienced pilot donned a new (untested) pair of gloves to launch. The gloves were very slippery, so during the first steps of the launch run the glider slipped, the basetube caught against a rock, and the pilot was cartwheeled into the rocky ground. The rock that caught the control frame prevented the glider from falling off launch. Pilot was badly bruised.

A pilot flying a coastal site with a motorized harness launched into benign conditions. Upon approaching the coast, he noticed decreasing temperature with lower altitude, and increasing wind speed. The motor was switched off before beginning an approach pattern for landing. Turbulence increased with the descent, and the pilot released the VG and went upright at about 70 feet AGL. At about 50 feet a wing lifted strongly and the

pilot was unable to compensate via weight shift. The glider turned 180 degrees and subsequently stalled in a 45 degree bank. The pilot released the control frame just prior to impact and rolled into a ball. The glider suffered control frame damage only. The pilot suffered a fracture to one neck vertebrae with no nerve damage. The pilot attributes the short list of injuries to the use of a full face helmet and chest mounted parachute. Several measures were listed that may have averted an accident, including: performing a long straight final, maintaining VG and remaining prone in order to maintain speed in turbulence, and receiving extra training for landing in turbulence; pulling in while attempting to correct for the initial turn may also have helped.

An experienced pilot landing after a short XC into an unfamiliar area was forced to choose between a moderate downhill landing into the wind (est. 10-15 mph), or a downwind landing up the hillside. The pilot chose to land into the wind, but did not anticipate effects of a wind shadow from a nearby house and was forced to execute a turn and fly over a fence to avoid outrunning the LZ. The glider's wingtip struck the fence and spun the glider into the ground. The final tally included a broken downtube, concussion, and a cut over the right eye. The visor of the helmet sustained scuff marks and apparently prevented worse injury. The accident pilot suggests practicing downhill and downwind landings under controlled circumstances before flying in areas with few flat fields.

An Advanced pilot with moderate airtime performed a cliff launch with full wire crew. Upon launch a wing immediately lifted and the pilot was not observed to take corrective action. The glider ended up flying parallel to the ridge but the wingtip struck a tree just as pilot began to initiate a turn away from the terrain. The glider rotated into the cliff face and the pilot impacted head first prior to settling back into a tree. The glider's control frame and battens were destroyed. The pilot recovered from facial injuries and concussion but still has no memory of the event.

An experienced pilot flying an intermediate glider at a high altitude site after a stint flying single surface gliders at sea level flared a little strong and early into no wind/slight downwind conditions. After ballooning the nose of the glider rotated back down with wings a little uneven and the forward momentum of the pilot rolled the glider completely over onto the kingpost. Except for some strained body parts the pilot was uninjured, and plans a return to the training hill to practice flares.

July

An extremely experienced pilot was launching a new Falcon 2 via scooter tow. The bridle system used employed two lines: one attached high on the harness for the initial climb-out, and one attached lower for the high altitude portion of the tow. The pilot failed to hook in prior to launch and held onto the control frame (assisted by the upper towline hanging over the bar) until he released at approximately 50 feet. The glider was locked out by this time as the pilot let go with one hand to effect the release. The pilot was propelled through a pine tree, dislocating his shoulder and breaking an arm. The reporter listed a number of factors contributing to this accident including: moving the glider while wearing the harness unhooked; failure of pilot to perform a hook-in check,

perhaps due to shared responsibility for the launch; fatigue at the end of a long day; use of a double release system that is difficult to locate in an emergency; poor radio communication with the tow operator; and possible lack of a weak link. An additional factor may have been the high experience level of the accident pilot leading all involved to worry less about backup safety checks.

A student flying a training glider attempted to compensate for an unintended turn by shifting his weight to the wrong side. The student panicked and did not respond to radio instructions and ended up doing a downwind landing. Though the wings were level and the glider was rolling on big wheels, the student put out his hand prior to rolling to a stop and broke his wrist.

An experienced pilot on an advanced glider under benign conditions was seen performing a spiraling dive into the ground and sustained massive internal injuries. There was no apparent explanation and no other reports.

A visiting pilot on a topless glider got trapped behind the ridge in a valley with no landing zones. The accident reporter could only surmise that the pilot was aiming for a small clearing, then overshot and flared into a cliff face. The pilot ended up perched on a ledge with a broken leg and possible other unspecified injuries. The pilot was wearing a full face helmet. Nothing more is known as no other reports were filed.

August

A highly experienced pilot flying an advanced glider executed an approach into a small but familiar bailout field. Due to the slope of the field the pilot elected to perform a downwind, upslope landing into what he judged to be light winds. During final approach the tailwind turned out to be significant and the pilot overshot the field, flaring over brush at the far end at an estimated ground speed of 10-15 mph. The pilot balled up, but on impact broke his forearm. There was no significant damage to the glider. The pilot believes that a high altitude LZ coupled with high wing loading exacerbated the problem, and speculated that a crosswind, cross-slope landing would have been a safer choice.

An Intermediate pilot crashed while landing in a familiar field on fairly recently acquired U2. The VG was set at 25% and the pilot was in a one hand up, one hand down posture. While on final the glider was hit by a thermal and turned 90 degrees towards the trees. The pilot was unable to correct and impacted the trees several feet above the ground. The glider sustained a broken leading edge and keel, and some sail damage. The pilot suffered a mild concussion and possible cracked ribs. The pilot had been told many times that he had a tendency to fly too slowly on final approach, perhaps as a result of going upright too early.

A pilot with 20 years of experience at the accident site launched his intermediate glider from a slot launch. While this launch was generally considered benign, there was a moderate gust factor this day. Within a few strides it was obvious the wing was not lifting, though the wings remained level. The pilot felt his nose angle was too low and pushed out to compensate. The result was a flop onto the ground, with some facial

bruising and cuts; possibly mitigated by a full face helmet. [Apparently much of this report was cut off, for it ends in mid sentence before possible reasons for the aborted launch are described.]

September

A highly experienced pilot crashed while landing in a restricted field after flying for a photo shoot. The field had been inspected from the ground but never used as an LZ before. While on final the glider was hit by a thermal, lifting the glider approximately 50 feet. The pilot chose to turn towards the least threatening obstacle which was a fence. He sustained a broken nose, wrist, kneecap, and numerous cuts. Glider damage was not reported.

A new H2 flying a Falcon crashed while landing from his second mountain flight. The accident pilot had previous approach experience via scooter tow. The pilot had been instructed while walking the field to enter the LZ from the corner where the trees are lowest. After a 15 minute flight including some marginal ridge soaring, the pilot entered the LZ from the middle where the trees were highest. Though the initial approach was judged (from launch) to be at a safe altitude, the pilot turned away from the LZ to lose more altitude before entering across the high trees. The pilot clipped a wing on a tree and the glider spun into the ground. Damage included a bent control frame; injuries included a severe concussion, broken thumb, and an abdominal blow resulting in bloody urine. Nobody was in the LZ to observe the accident from close range, and the pilot does not remember the accident.

October

An experienced hang glider pilot was working a thermal when a P2 paragliding pilot entered from above and sunk to the level of the hang glider. The hang glider pilot attempted evasive action by tightening his turn, but the tip wand impacted the body of the PG pilot. There were no injuries or structural damage, and both pilots landed safely. In discussion after the accident both agreed that though the PG pilot had erred by failing to maintain inadequate vertical separation upon entering the thermal, the hang glider pilot should have reacted by tightening his turn instead of diving to avoid impact.

December

A new Intermediate pilot launched an intermediate glider from a cliff launch after a lengthy period of towing and training hill launches. Winds were 10-20 mph and several experienced pilots had already decided not to launch. The accident pilot had performed several cliff launches flying a Falcon, but this was her first mountain launch with this new intermediate glider. While still several feet from the edge, the pilot told her wire crew that she just wanted to pick up and feel the glider. One experienced pilot pointed out she was too far back from the edge to safely launch given the wind conditions. The accident pilot picked up and balanced glider, then unexpectedly shouted "clear!" During the launch run her nose popped up and a wing lifted, spinning the pilot into the trees adjacent to launch. Pilot injuries and glider damage were both minimal. The

combination of new glider, inexperience, and the pilot's fear of being near the edge were cited as contributing factors to the launch error.

A highly experienced pilot flying an intermediate glider was gliding soaring at a cliff site when two topless gliders approached on a perpendicular vector. One topless glider evaded with a near miss. The other two gliders collided with the top of one pilot's sail contacting the control frame of the other glider, resulting in a tear to the top surface and damage to the carbon fiber crossbar. All pilots landed without injury. The glider with sail/crossbar damage reported that his crossbar failed immediately after landing.