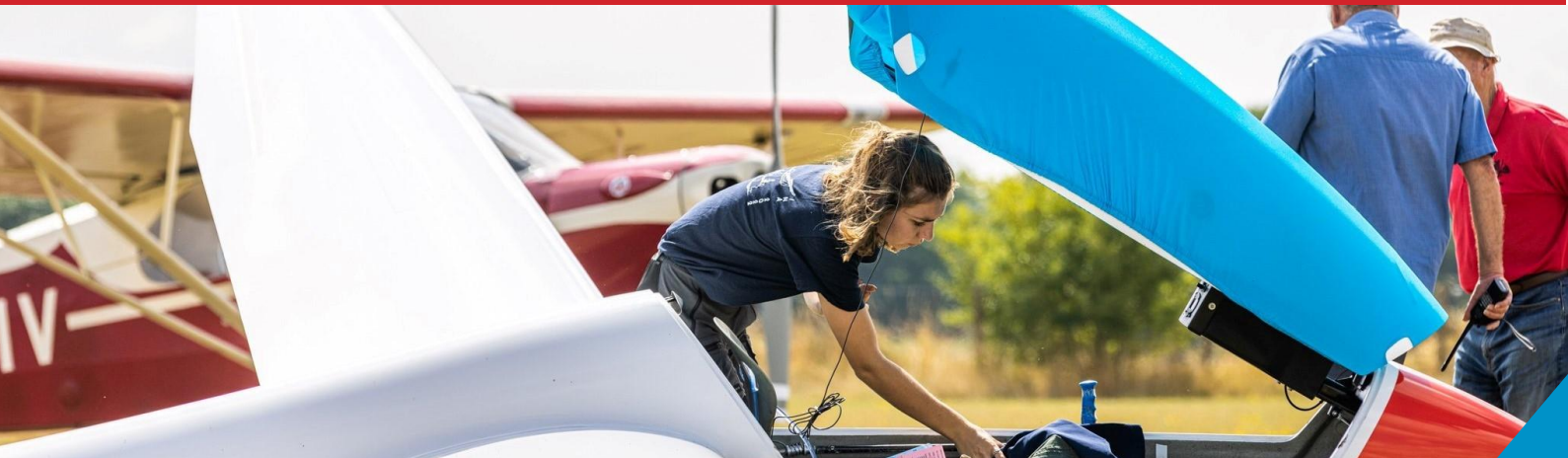


Safety Briefing



Accident Review 2022

This booklet offers guidance on how everyone can help to avoid accidents. The detail is relevant to all glider pilots, regardless of experience. Please read it carefully.



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INTRODUCTION

Despite some lingering aftereffects of the Covid pandemic, there was a resurgence of gliding activity in 2022, accompanied with an increase in the number of reported accidents and incidents.

Sadly, there were two fatalities in flying accidents and one person died on a gliding site after a medical event which occurred to a pilot preparing to launch, who was strapped in and going through pre-flight checks.

As usual, the review covers the BGA year, which in this case is 1st October 2021 to 30th September 2022.

CONTINUING SAFETY GUIDANCE

Safety Information

[MANAGING FLYING RISK](#) is regularly updated.

Please review that guidance regularly, together with the Safety Briefings and other Safety material on the BGA website. It might help you to avoid an accident.

BGA website safety Information links

The following BGA website links detail important safety topics:

[Safety home page](#)

- [Managing Flying Risk](#)
- [Safety Briefings](#)
- [Collision Avoidance](#)
- [Safe Winch Launching](#)
- [Safe Aerotowing](#)

Accident Review 2022

2022 ACCIDENTS AND INCIDENTS

During the year, there were 172 Accident/Incident reports, including details of 4 pilots seriously injured and 54 aircraft substantially damaged. The totals this year show that the recovery towards pre-pandemic levels of gliding activity has involved a return to serious accident rates similar to the previous, pre-pandemic ten-year period.

	Fatality	Serious injury	Substantial damage	All
2022	2	4	54	172
2021	0	6	37	114
2020	1	6	31	123
2008-2019 average	1.8	4.4	60	157

FATAL ACCIDENTS

Field landing while participating in a competition. Subject to AAIB investigation, focussed on possible medical factors.

Glider released early from aerotow at low level and crashed. Subject to AAIB investigation, focussed on possible detached elevator control.

SERIOUS INJURIES

The glider took off with canopy not properly locked. The pilot, distracted by the canopy opening in flight, was unable to retain control and the glider crashed inverted. The pilot was seriously injured.

The driver of a vehicle towing a glider did not hear a stop command over the noise of the engine of the towing vehicle. A member of the ground crew was knocked to the ground and required hospital treatment for serious injuries.

Aerotow failure <100ft. The glider was destroyed by the ensuing crash in a nearby field and both on board sustained serious injuries.

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SUBSTANTIAL DAMAGE

Half of the substantial damage accidents are associated with landing, either in a field or on the home airfield.

Category	'Substantial damage' reports	Notes
Field landing	11	Three late field selection, two hit cables, and two turbos failed to start.
Landing on airfield	10	Four judgement issues, three instructor late takeover, three weather conditions
Ground	6	Two towed gliders, two tug nose over, one tug taxi collision, one vehicle drove over wing tip
Under / overshoot	6	Three circuit judgement issues, two competition final glide errors, one instructor late takeover.
Stall/spin	5	Two ballooned landings, one when airbrakes were deployed at low speed after PIO on take-off
Integrity	4	Two canopies unlocked, one elevator disconnected, one airbrakes unlocked.
Winch	3	One wing drop, one un-commanded release, one practice launch failure.
Technical	3	Two undercarriage collapse, one canopy opened during winch launch.
Wheel up landing	3	Two distraction, one when lowered but not locked
Aerotow	2	Two rope disconnects at low level.
Control misuse	1	One airbrake/undercarriage lever confusion

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KEY SAFETY MESSAGES

Fly the aircraft

Landing, under control, wings level on any surface is generally preferable to a stall and spin at low level.

Carefully prepare the glider for flight

Rigging and pre-flight checks are of paramount importance, but every year there are numerous instances where accidents and incidents occur when gliders are launched with something vital missing or misplaced. This year there were 14 reports where glider integrity was compromised, and four gliders were substantially damaged. The consequences of failing to confirm that a glider is fully prepared for flight can be catastrophic, as in one recent fatal accident where a glider was launched with the elevator disconnected.

Do not distract anyone, or allow yourself to be distracted, while rigging or checking that an aircraft is fully prepared for flight.

Keep winch launching safe

Since the introduction of the BGA safe winch launch

initiative 17 years ago, it has been very effective in reducing the number of winch launch accidents and the tally of injuries sustained, in earlier years. The risks remain, and constant vigilance is necessary to further reduce accidents. This year there were several hazardous flights after winch launch failures, thankfully without serious injury, but three gliders sustained substantial damage. An updated safe winch launch booklet is available on the BGA website. It is an invaluable guide to safe winch launching.

Please secure a personal copy of the Safe Winch Launch booklet and follow the guidance.

Check rides are good value for money!

Taking additional check rides to brush up on technique and decision making is a cheap alternative to enduring the consequence of an expensive accident. Regular practice of launch failure situations will improve your ability to safely handle any such event. Practicing field selection and planning circuits to unfamiliar landing grounds is also highly recommended.

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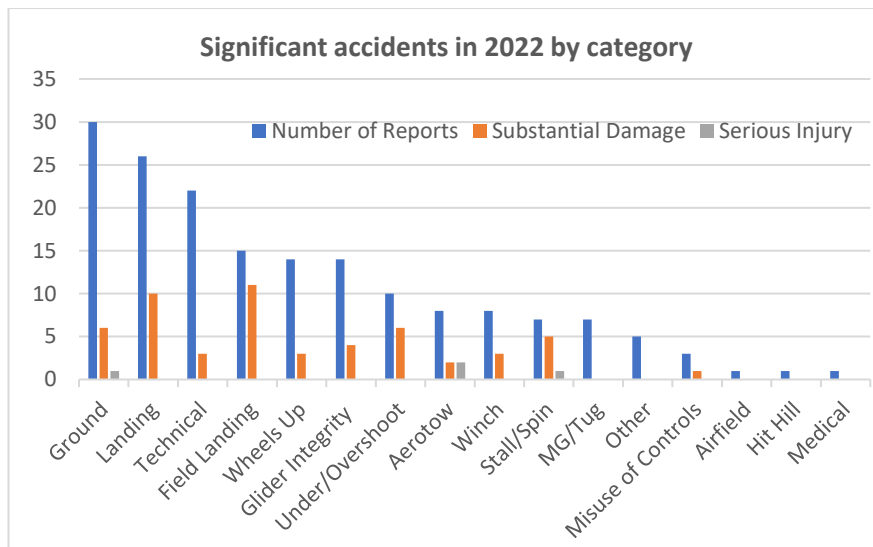
2022 OVERVIEW

A summary of the total numbers of each of the accident/incident categories reveals further insights into those areas needing particular attention if we are all going to reduce the number of accidents and reduce the cost of insurance claims.

Category	Reports	Definition
Ground	30	Tow out or manoeuvring gliders, or vehicles close by.
Landing	26	At the home airfield
Technical	22	Something broke or did not work as intended.
Field Landing	15	All except accidents involving stall/spin which are counted in that category
Glider Integrity	14	Gliders not properly prepared for flight
Wheel up landing	14	All except events involving using the undercarriage lever to operate the airbrakes.
Under/Overshoot	10	At the home airfield. Any occurring during field landings is counted in that category
Aerotow	8	All except accidents involving stall/spin which are counted in that category
Incomplete winch launch	8	Occurrences during a winch launch or immediately after an incomplete winch launch
Stall/Spin	7	Any involving a stall or spin, as the apparent immediate cause.
Tug/TMG	7	All such occurrences that do not fit under any other heading.
Other Flying	5	Any not covered by any of the other available categories
Misuse of controls	3	Use of one control to achieve the intended effect of another
Airfield	1	Hidden obstructions, potholes, etc
Hit Hill	1	Self-explanatory.
Medical	1	Pilot incapacitation
TOTAL	172	

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ACCIDENTS INVOLVING SUBSTANTIAL DAMAGE OR SERIOUS INJURY



Landing accidents continue to account for a sizeable proportion of substantial damage reports. Field landings are inevitably riskier than landing at an airfield. The severity of some of the damage sustained was affected by late field selection, or over reliance on the use of turbo engines that failed to start at low level.

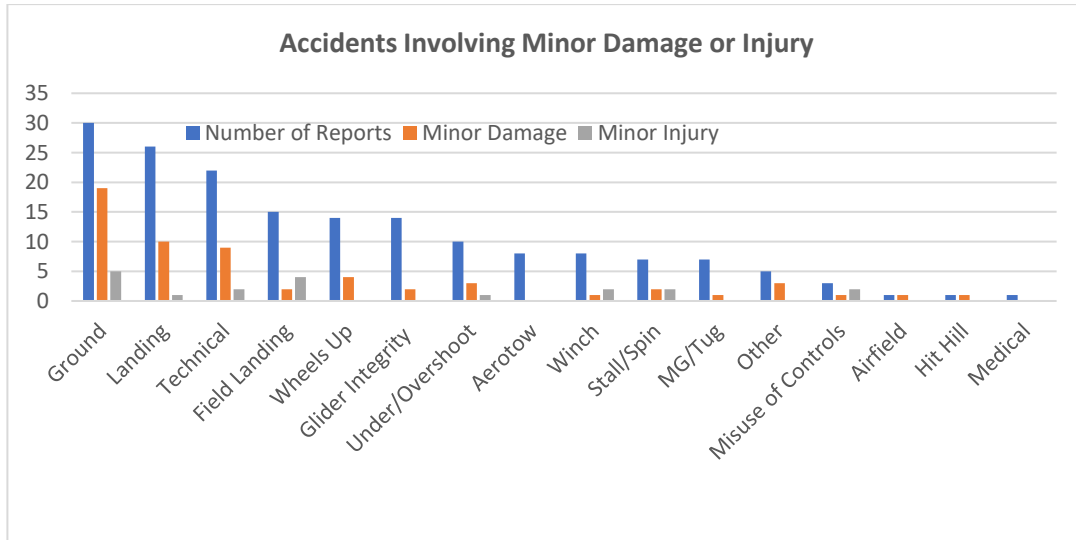
This year, as in many previous years, ground accident reports outnumber any other sort. Towed gliders feature prominently in these reports with wing tips particularly vulnerable as the attention of the driver is diverted away from potential

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obstructions. Another significant risk is present in dilapidated, unserviceable tow out gear.

Glider integrity (not properly prepared for flight) is a major concern, especially where the error is an insecure control connection, but any loose, or unlatched, item on the glider can easily lead to a catastrophic outcome. This year there were 4 gliders substantially damaged and one fatal accident associated with a disconnected elevator, not noticed before flight.

ACCIDENTS INVOLVING MINOR DAMAGE OR INJURY



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2022 ACCIDENTS BY CATEGORY

Ground

This category again tops the list of the most numerous accident this year. Typical scenarios include gliders towed into obstacles, tow out gear collapse, vehicles driving over wing tips, tug taxi accidents.

These accidents are expensive and avoidable!

Landing, Field Landing, Under/Overshoot

The tally of accidents in 2022 occurring during landings accounted for 51 reports, in which 27 gliders were substantially damaged or destroyed. Operating in rugged conditions, poor circuit judgement, late takeover by instructors, have all featured in landings at an airfield. Field landings have added risks, including late field selection, over-reliance on turbo engines that sometimes fail to start when urgently required, and encountering previously unseen cables on final approach.

Please pick a field early and if equipped with a turbo engine, make sure that it is serviceable and will start in flight, before setting off on a cross country.

Glider Integrity

Fatal accidents are thankfully rare, but failing to properly prepare a glider for flight can have exactly that consequence.

Preparing a glider properly for flight is of paramount importance, but was not achieved on 14 occasions this year, and 4 gliders sustained substantial damage. Five gliders were launched with the canopy unlocked, and two with airbrakes unlocked.

The following guidelines have been repeatedly published in recent years:

- Rigging should be directed by a person experienced on the type, in accordance with the flight manual, without interruption or distraction. A newly rigged glider should always have a daily inspection (D.I.) which should be conducted by a person experienced on the type without interruption or distraction.

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- A newly rigged glider should always have positive control checks.
- The pilot should carry out proper pre-flight checks, again without interruption or distraction.
- The BGA now recommends pilots to do a walk-round check before flight.

Please follow this advice.

Stall/Spin

Stalling in the final stages of an approach resulted, this year, in five substantially damaged gliders, but thankfully only two minor injuries.

Wheels-up Landing

A wheels-up landing seldom causes any injury. This year there were 14 reported wheels-up landings, incurring no injuries. This year, three gliders were substantially damaged. In two cases the pilot was distracted either by a busy circuit, or weak soaring conditions. The other substantial damage accident occurred when the undercarriage collapsed after the wheel was lowered, but not locked, before landing.

In most of the other wheels-up incidents, the pilot forgot to lower the wheel before landing. There was one case where the pilot completed an extended soaring flight with the wheel down and then raised the wheel for landing.

Winch

Significant improvements in the rate of accidents occurring during winch launching have been sustained since the introduction of the Safe Winch Launch initiative 17 years ago. Despite that, some significant accidents do recur. This year two wing drop events occurred, one with substantial damage, and the other a potential cartwheel, narrowly avoided by prompt action on the part of the winch driver.

The safe winch launch booklet is available from the BGA office and through the BGA website.

Aerotow

Two rope disconnects at low level resulted in substantial damage. Two tug upset events occurred, thankfully without damage, or injury.

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Aerotow operations are increasingly using lightweight tugs, and with that trend new risks are evolving. Impeccable maintenance regimes are required to avoid early engine failure events and the class of microlight tugs are apparently more susceptible to damage when operated in rugged conditions, or even simply taken out of the hangar in such conditions.

Technical

Several issues with undercarriage mechanisms resulted in two substantial damage accidents and a further four minor damage accidents.

One battery, restrained only with bungee cords, broke free during turbulence and inflicted minor injury to the pilot. The AMP Manual contains detailed information on the provision of adequate battery security.

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