

Safety Briefing



Accident Review 2023

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.



**BRITISH
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INTRODUCTION

Reports of accidents in 2023 include four fatal accidents, which is double that of the ten-year pre-Covid annual average of fatal accidents. Substantial damage accidents continue to occur at a rate little improved over the ten-year average. This review 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.

As usual, the review covers the BGA year, which in this case is 1st October 2022 to 30th September 2023.

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](#)

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2023 ACCIDENTS AND INCIDENTS

During the year, 144 accident/incident reports were submitted, including details of 4 pilots fatally injured, 5 seriously injured and 51 aircraft substantially damaged. The report totals this year are compared below with those of recent years and the pre-pandemic ten-year period.

	Fatality	Serious injury	Substantial damage	All
2023	4	5	51	144
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

- Mid-air collision while participating in a competition. Subject to AAIB investigation.
- Glider released early from aerotow at low level, spun and crashed. Subject to AAIB investigation.
- After successfully completing a tow, the tug aircraft continued the descent to impact with the ground. Subject to AAIB investigation.
- Overshot approach into trees. Subject to a Spanish investigation.

SERIOUS INJURIES

- Heavy landing following incomplete winch launch at <100ft.
- Heavy landing in crop during competition field landing.
- Cartwheel during rotation from incomplete winch launch.
- Collided with a tree during field landing.
- Club vehicle collided with a club member.

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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. Damage incurred while ground towing rigged gliders is a significant contributor to substantial damage accidents.

Category	'Substantially damaged' aircraft	Notes
Field landing	7	5 late selection, 1 hit cables, 1 turbo failed to start.
Airfield landing	13	7 unbraked/late round out/ballooned, 2 crosswind, 1 distraction by radio call on final, 1 late takeover, 1 control handed back late in the approach, 1 rough surface, 1 wheel up landing.
Ground	8	6 while towing out, 1 hangar packing, 1 taxi over poor runway surface
Under / overshoot	4	1 insufficient airbrake, 1 busy circuit distraction, 1 late takeover, 1 possible medical issue.
Stall/spin	2	1 stall on approach, 1 spun after releasing tow at low level and turned.
Integrity	2	2 canopies unlocked.
Collision	3	1 mid-air collision in thermal, 1 collided with tree
Winch	4	3 wing drop events, 1 abandoned launch.
Hit hill	2	2 hill soaring attempts in weak conditions.
Wheel up landing	1	Distraction
Aerotow	1	Out of position at low level, released, turned, ground loop
TMG/tug	2	1 nosed over during practice aborted take-off, 1 tug crash
Other	2	1 unreported damage found at annual inspection, 1 canopy opened in flight despite latches apparently being in place.

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KEY SAFETY MESSAGES

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 12 reports where “glider integrity” was compromised and 2 gliders were substantially damaged. The consequences of failing to confirm that a glider is fully prepared for flight can be catastrophic.

Please make use of the revised Daily Inspection book, which provides space to record the completion of duplicate rigging inspection and positive control checks as part of the DI before flying.

Do not distract anyone, or allow yourself to be distracted, while rigging or checking that an

aircraft is fully prepared for flight. Use the revised DI book.

Keep winch launching safe

Since the introduction of the BGA safe winch launch initiative 18 years ago, it has been highly 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. Safe winch launch guidance is available on the BGA members website. It is an invaluable guide to safe winch launching for all involved.

Please follow the guidance.

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Check field options before aerotow launch

Low, rushed turns can be fatal; field landings rarely are.

Familiarise yourself with the locations and conditions of fields and other landing options beyond the airfield before you launch, and plan to use them if turning back is unwise.

Fly the aircraft

Landing, under control, wings level on any surface is generally preferable to a stall and spin at low level. Do not make a radio call to a glider on final to remind the pilot that the wheel is not down AND if you receive such a call ignore it. This year one of these “(un)helpful” calls distracted the pilot who tried to correct the omission, lost control and crashed. Accident records show that wheels up landings rarely cause substantial damage.

Refresher training or check rides are good value for money.

Observe currency (and licensing recency) requirements as well as any site-specific requirements that may apply.

Taking refresher training or check rides to brush up on technique and decision making is a cheap alternative to enduring the consequence of an expensive, substantial damage accident.

Regular practice of launch failure situations will improve your ability to safely handle any such event that occurs naturally.

Practicing field selection and planning circuits to unfamiliar landing grounds is also highly recommended.

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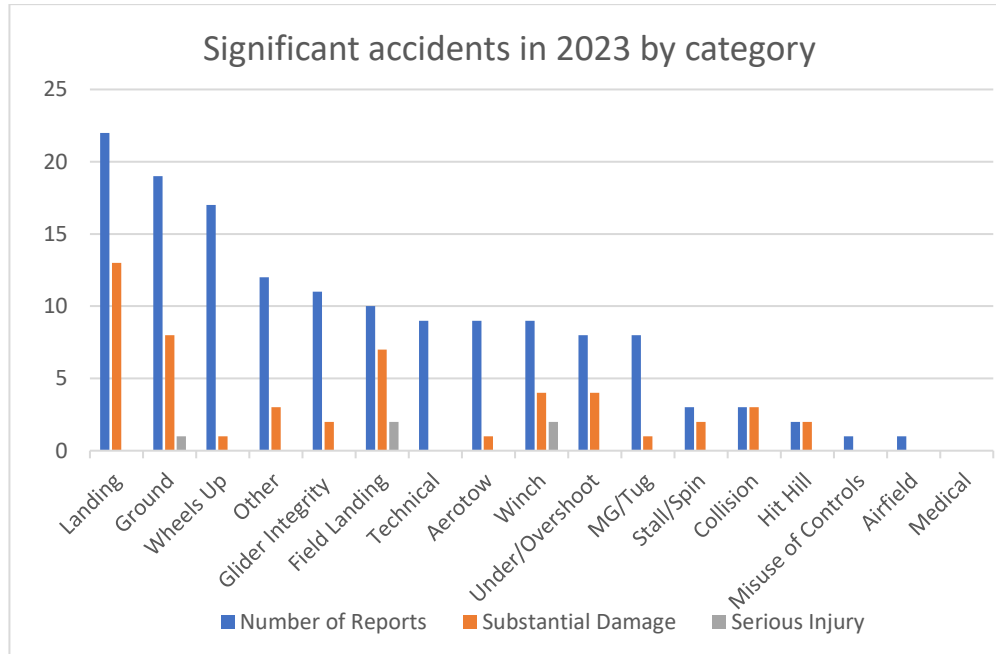
2023 OVERVIEW

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	19	Tow out or manoeuvring gliders, or vehicles close by.
Landing	23	At the home airfield.
Technical	9	Something broke or did not work as intended.
Field Landing	10	All except accidents involving stall/spin which are counted in that category.
Glider Integrity	11	Gliders not properly prepared for flight.
Wheel up landing	17	All except events involving using the undercarriage lever to operate the airbrakes.
Under/Overshoot	8	At the home airfield. Any occurring during field landings is counted in that category.
Aerotow	9	All except accidents involving stall/spin which are counted in that category.
Incomplete winch launch	9	Occurrences during a winch launch or immediately after an incomplete winch launch.
Stall/Spin	3	Any involving a stall or spin, as the apparent immediate cause.
Tug/TMG	8	All such occurrences that do not fit under any other heading.
Other Flying	12	Any not covered by any of the other available categories.
Misuse of controls	1	Use of one control to achieve the intended effect of another.
Airfield	1	Hidden obstructions, potholes, etc.
Hit Hill	2	Self-explanatory.
Collision	2	Airborne collision (including e.g. with a tree)
TOTAL	144	

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ACCIDENTS INVOLVING SUBSTANTIAL DAMAGE OR SERIOUS INJURY



Landing accidents continue to account for a significant 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 a turbo engine that failed to start at low level.

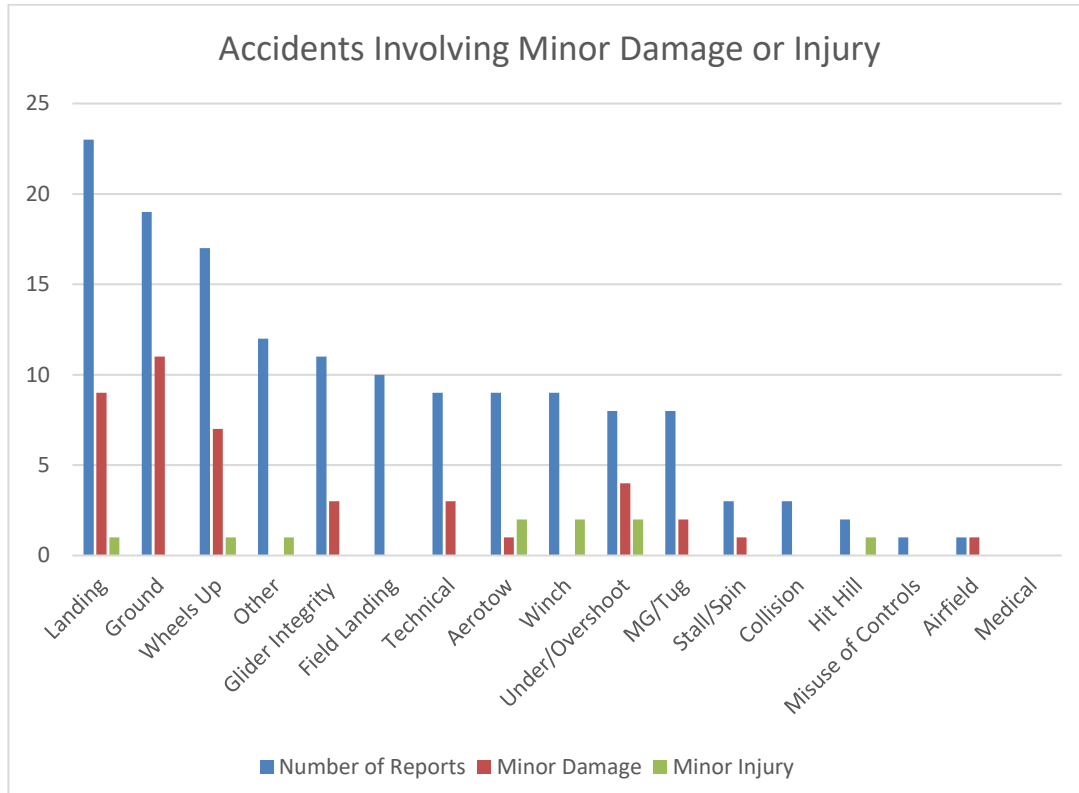
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This year, as in many previous years, ground accident reports feature prominently in the tally of substantially damaged gliders. Towed gliders are particularly vulnerable if the attention of the driver is diverted away from potential obstructions and wing tips collide with fixed obstructions, or other parked gliders. 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 11 gliders, not properly prepared for flight, involved in accident reports with 2 gliders substantially damaged. There is a revised DI book available which provides space to record duplicate rigging inspections and positive control checks. Please use this revised DI book.

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ACCIDENTS INVOLVING MINOR DAMAGE OR INJURY



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2023 ACCIDENTS BY CATEGORY

Landing, Field Landing, Under/Overshoot

The tally of accidents in 2023 occurring during landings accounted for 41 reports, in which 24 gliders were substantially damaged or destroyed. Operating in rugged conditions, poor circuit judgement, late change of planned touchdown point, 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.

Ground

This category is once again high on the list of the most numerous sort of accident, accumulating 19 reports, incurring 8 substantial and 11 minor damage. Typical scenarios include gliders towed into obstacles, tow out gear collapse, vehicles driving over wing tips, powered aircraft taxi accidents. These accidents are expensive and avoidable!

Glider Integrity

Preparing a glider properly for flight is of paramount importance but was not achieved on 11 occasions this year. 2 gliders sustained substantial damage. 2 gliders were launched with the canopy unlocked.

The following guidelines have been repeatedly published in recent years:

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- 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.) including positive control checks which should be conducted by a person experienced on the type without interruption or distraction.
- The DI including positive checks should be recorded in the DI book.
- The pilot should carry out a pre-flight walkaround check (e.g. ABCD) and pre-flight cockpit checks, again without interruption or distraction.

Please follow this guidance.

Wheels Up Landing

A wheels-up landing seldom causes any injury, or

substantial damage. This year there were 17 reported wheels-up landings, incurring 1 minor injury and 1 substantial damage accident.

Most wheels up landings involve pilot distraction at a critical stage of the circuit. Common factors are high workload due to things like other traffic in the circuit, rugged conditions, dealing with a turbo that failed to start when required

In other wheels-up incidents, the pilot apparently simply forgot to lower the wheel before landing

Technical

Technical issues were involved in 3 minor damage reports and no injuries. There were 9 reports in 7 of which something broke and 2 reports mentioned maintenance shortcomings revealed at DI.

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Aerotow

There were 9 aerotow reports involving 1 substantial damage, 1 minor damage and 2 minor injuries to wing runners who tripped and fell during the launch. The tally of reports includes 3 tug upsets and 2 rope disconnects, none involving damage or injury.

Winch

Significant improvements in the rate of accidents occurring during winch launching have been sustained since the introduction of the Safe Winch Launch initiative 18 years ago. Despite that, some significant accidents do recur. This year, 4 gliders sustained substantial damage and thankfully only 3 minor injuries. 2 wing drop events occurred, 1 of which involved a cartwheel with substantial damage.

There were 2 reports involving in rapid rotation after take-off, 1 of which resulted in substantial

damage and minor injury. On 1 occasion a glider was winch launched using the nose hook

1 glider overran the cable on the ground run and the cable became trapped in the wheel box. The pilot had no means of detaching the cable at the top of the launch. Disaster was averted by prompt action on the part of the winch driver who operated the guillotine.

During recovery from a practice launch failure exercise the glider flew into the cable, fortunately avoiding damage, or injury.

1 glider landed heavily incurring substantial damage after recovering from an abandoned launch.

Safe winch launch guidance is available on the BGA members website. It is an invaluable guide to safe winch launching for all involved.

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