REPORT INTO THE ACCIDENT INVOLVING SCHLEICHER K21 G-CJGE AT MIDLAND GLIDING CLUB 20 APRIL 2026

CIRCUMSTANCES

The club were conducting the first day of a one -week introductory course at the club site at Long Mynd. Initially the club were flying two K21 dual seat gliders launching by winch and retrieving the cable mid-field by means of a motor vehicle.

Later in the day a third glider was brought into operation so that a club member could fly solo, this glider was a K23 single seater.

The day progressed without incident until at around 1600 local time when the K23 executed its second launch of the day. The launch progressed normally and the glider released at around 1400 ft AGL. The pilot flew the majority of the launch with the left wing held low to offset for a crosswind from the left. This is normal gliding practice as it facilitates the cable dropping in front of the winch. Shortly post release a second glider K21 G-CJGE which had been circling to the east of the launch line flew into the cable as it descended. The cable impacted the right wing approximately 6 feet from the wingtip and cut through the wing exiting a little over 3 feet from the tip. The wingtip and a portion of aileron including the outboard aileron hinge then descended to the ground impacting about 200 metres in front of the winch and slightly to the right of dead ahead.

As soon as the instructor in the glider realised what had occurred, the instructor gave the order to bale out. He released his harness and jettisoned his canopy. The front seat student took three attempts to achieve canopy jettison and released his harness. During this time the aircraft pitched down rapidly and adopted a near vertical descent. The instructor noticed the ground rush and instinctively pulled back on the control column. He was able to quickly recover to straight and level flight but was now at about 100 Ft AGL and level with the top of the ridge on which the club sits. He reassured the student that they were now OK and proceeded to manoeuvre the glider to land in a large field at the foot of the ridge. The glider landed without further incident. The instructor reported that he had little difficulty in retaining control of the damaged glider.

AIRCRAFT EXAMINATION

The K21 G-CJGE was disassembled in the field in which it landed and returned to the club site in its bespoke trailer. The only damage to the aircraft was the detachment of the wingtip as described above and damage to both canopies. The rear canopy had opened very violently when the securing catches were withdrawn by the pilot as a first step towards abandonment. The canopy rapidly opened to its full extent, this introduced very large loads onto the perspex transparency which failed and shattered. The canopy frame remained attached to the aircraft throughout. The front seat pilot was on his third ever glider flight and had been given a comprehensive escape brief prior to flying. When ordered to bale out he released the harness and then attempted to jettison his canopy. He had a little difficulty in achieving this but succeeded at his third attempt. The canopy release mechanism was examined and operated in situ and all aspects operated normally. His difficulty in achieving canopy jettison is believed to be as a result of lack of familiarity with the forces necessary to get the emergency release to operate. Once jettisoned the canopy fell quite slowly to earth intact but the perspex shattered on impact with the ground. The pieces of the canopy and the frame were collocated on the ground.

The accelerometer fitted to the instrument panel was examined and showed a maximum of +5.3G and a minimum of 0G. Whilst it is possible that the instrument was affected by the landing the behaviour of the aircraft post the collision with the cable are explained by these readings.

The winch driver only saw the K21 encroaching into the area of the winch launch a second or two before the collision. This is because at the maximum height of the launch the glider is at the upper edge of the forward window. The collision occurred in this area where the winch driver's field of view is restricted. The winch driver is focussed on the launching glider during the launch and monitoring winch indications thus he is unable to scan outside of this area.

Immediately on seeing the collision the winch driver guillotined the cable in accordance with recommended practice. The guillotine operated correctly and the cable was severed. The club operates a very proactive policy in regard to guillotine checks and maintains meticulous records.

INSPECTION OF THE CRASH SITE

A diagram of the airfield layout is attached to this report clearly showing the debris trail. The field in which the glider landed was unremarkable and is a field that is used occasionally by the club when gliders are unable to land back at the site.

PRE-ACCIDENT ACTIVITY

The weather on the day was clear and bright with a good cloud base and excellent visibility. The club has a limited number of launching options due to the geography of the site. The airfield was set up as shown on the attached diagram which is entirely normal bearing in mind the actual and forecast wind for the day. Launching progressed normally until the accident flight. Just prior to the accident G-CJGE and the other K21 had been circling in thermal lift just to the east of the site over a small forest. They were separated in height by about 100 ft and were manoeuvring in sight of each other. The instructor in G-CJGE was teaching his student how to maintain these turns and because of very rapid progress was pre-briefing him on how to exit the turn and return to straight flight.

On the ground the K23 was prepared for launch and the pilot conducted her pre-flight checks. When it was time to attach the cable, the K23 pilot, the launch marshal and the winch driver were all able to observe the circling gliders and all three assessed that the separation between them and the launch line were safe to launch. Thus, the glider launched and reached the top of the launch normally.

During this time the accident aircraft drifted closer to the airfield and during the exit from the thermal turn got closer still. This precipitated the collision with the cable.

DISCUSSION WITH CLUB OFFICERS

Because the situation deteriorated so rapidly between normal operations and the collision with the cable the discussion focussed on how this could happen. The club Chief Flying Instructor (CFI) explained that there was a very well evolved judgement as to when it was safe to launch as it is very often necessary to launch gliders when there are other gliders flying close by on the adjacent ridge. The three persons assessing the separation prior to launch all agreed that these parameters had been met.

ANALYSIS

Immediately after the collision with the cable the instructor gave the order to bale out. This is entirely in accordance with guidance given when the integrity of the aircraft cannot be guaranteed. In the process of preparing to exit the aircraft it is highly likely that the student who was experiencing difficulty if jettisoning the canopy pushed the control column forward with his body as he reached forward to operate the jettison handle. This explains the rapid change of attitude and the reading on the accelerometer. When the instructor recovered the aircraft a large control input would have been

required hence the large amount of G achieved. This undoubtedly recovered the situation and made escape by parachute unnecessary and highly risky due to the very low height. Having recovered the aircraft the instructor then reassured the student and executed a very well-judged field landing.

Thus, the cause of the accident is that safety margins between launching gliders and gliders flying in the local area were eroded. When gliders flying on the ridge their behaviour is very predictable thus safety margins can be reduced as the risk of a glider impinging on the launch line is similarly reduced. Gliders flying in thermic conditions are more unpredictable as constant re-centring is necessary to benefit from the rising air. Thus, safety margins in these circumstances need to be higher to account for this more dynamic behaviour.

Additionally circling or soaring overhead the winch, in or near the circuit area needs only to be conducted with the utmost caution both from a safe winch launching and safe circuit flying perspective.

CONCLUSION

The accident happened when the glider came into contact with the descending cable.

RECOMMENDATION

The BGA already recommends that when a glider pilot is unsure of the integrity of his aircraft that immediate abandonment is the best chance for survival. This accident reinforces the need for that policy although in this case circumstances quickly changed to make escape unnecessary.

Judgement is required to maintain safety margins during launching operations. Clubs should re-examine these parameters and apply differing limits in differing situations. Crosswind and other gliders operating nearby will dictate these parameters. The BGA should consider issuing advice to clubs to revisit this issue.

C V J Heames
Principal Accident Investigator.