

Per Caelum Gliding Scholarship 2025

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Gliding is often described as the purest form of flight. The absence of thrust to get you airborne makes you a more methodical and considerate pilot, as well as learning 'stick-and-rudder' techniques and recognising thermal currents. Being a Sergeant with Dulwich College's CCF, I had already been gliding once before, sparking an interest in the sport. To take this further, I decided to apply for a Gliding Scholarship with the Honourable Company of Air Pilots. Thankfully, after a lengthy application and interview process, I was awarded this once-in-a-lifetime opportunity.

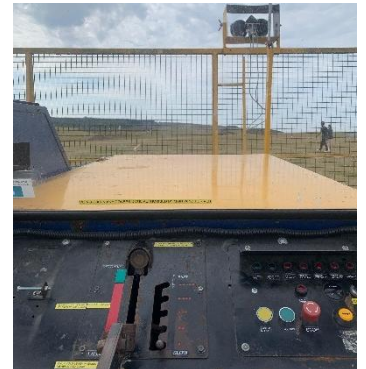
After many months of eager waiting, I was finally on a train to Church Stretton, the local town to the Midland Gliding Club (MGC). Even that was 6 miles away from the club, so after a £40 taxi and half-mile walk up the Long Mynd (not for the faint-hearted!), I had arrived at my home for the next five days. The weather was forecast to be brilliant, offering ample opportunities to practice circuits and soaring.

Upon the programme's start, we first had to go over some housekeeping. In order to launch the gliders as quickly and safely as possible, it fell to the Scholars to operate the launch point, supervised by a Launch Director (typically a member of the club). The setup at MGC was unique; a winch was used to launch the gliders, however we also had a retrieve winch at our disposal, allowing us to recover the cable far quicker. We also had to collect the gliders and tow them to the launch point using a pair of electric buggies. On average, we could launch a glider every four minutes!

Owing to the good weather, each day followed roughly the same schedule. Breakfast at 8am, unpack the hangar, brief about launch direction and aims for the day, then out on the airfield by 9:30am. We were normally launching by 10am, and each person (eight on the course) typically got three circuits of 7-10 mins before lunch. After a hearty meal, once the thermals had become stronger, we'd each fly once or twice on longer soars. My longest was 40 minutes, however some went up for over an hour! This allowed us to get experience with approach planning and circuit etiquette, as well as soaring techniques and stalls/spins.

Over the week, we used a variety of gliders. Almost all flights were done with the ASK-21, a brilliant training aircraft and notoriously hard to spin, especially with someone heavy in the front seat! However, on the Thursday, we had the opportunity to fly the T.21, an RAF trainer glider that is almost 80 years old. The handling characteristics of the T.21 were slightly more of a suggestion than those of the ASK-21 – you felt more at the mercy of the wind.

Another highlight for me was a personal project I completed whilst at the club. Across the five days, I took readings of the strength of the Sun's UV radiation both outside and under the gliders' canopies. To be specific, my project focused on the quantification of UV radiation exposure and the photoprotective properties of canopies in gliders. This resulted in the production of a 2000 word essay on this subject, which I have sent to my college. The team at MGC were very helpful, allowing me to take UV radiation readings during flight. My instructors were also interested in my results; understandable given they are often gliding for over six hours a day in direct sunlight!



1 - MGC's retrieve winch.



2 - MGC's expertly packed hangar!



3 - The Schneider ASK-21, YN being the newer one we used.



4 - The Slingsby T.21, first flown in 1947.

To summarise briefly what I found: the canopy blocks around 95% of the ‘sunburn-causing’ shorter-wavelength UVB. However, it does let through some long-wave UVA, which can also cause sunburn, but needs a far higher intensity to cause the same effect. For occasional short flights under an hour, this level of exposure isn’t an issue. However, longer flights will require protection such as long-sleeve clothing and sunscreen, especially if you fly regularly (as is the case for most people at a gliding club). More importantly, the main problem with gliding and UV exposure is actually the time spent on the ground. As you have no canopy to protect yourself, you can receive a large amount of UV radiation whilst operating the launch point or waiting to glide, especially given the lack of shade on a cloudless day. This increases the risk of sunburn, and therefore skin cancer. It was an incredibly rewarding essay to write, and gave me some interesting results and lots of data to analyse!



5 - An example of data recorded during the week.

Overall, I thoroughly enjoyed the week I spent up at the Long Mynd. The last day culminated in our certificate presentation, led by Robin Keegan, Past Master of the Company. I would like to thank Per Caelum (HCAP’s Masonic Lodge) for funding my scholarship, as well as the MGC team for making the week possible. I also want to thank the rest of the Scholars at MGC – Audvik, Katie, Shriyam, Isabel, Matthew, Shreyash, and George – I couldn’t have asked for better company.



6 - Certificate presentation.

Special thanks must go to Mark and Sam, our instructors, and Carl, our winch driver, who had to deal with a cable snag for four hours in the blistering midday sun! Thank you not just for putting up with us, but for working tirelessly over the week to ensure we got as much flying done and were as efficient as possible.

Finally, to anyone reading this, wondering “is this Scholarship really for me?” – the answer has to be “yes!”. The opportunities on offer are amazing, and you will thoroughly enjoy your week, wherever you end up flying. It’s safe to say that thanks to the Per Caelum Gliding Scholarship, my passion for aviation has only gained lift – and I can’t wait to see where the thermals take me next.

