



The CAA Accident Prevention Leaflet

Issue no 7 of 2010

OK- fair cop - wrong diamond last time!

As several readers have pointed out, the red diamond pictured on the front of last month's GASIL was in fact out-of date!

Although the Freephone number is still valid, the 0208 number was changed some time ago, as we published in GASIL at the time. As in the wartime RAF, we would like to put the blame on gremlins for putting an old picture in the file, but sadly have to accept responsibility ourselves and apologise! The correct, current, sticker is shown here, and we encourage everyone to use the numbers to obtain last minute information on airspace restrictions and NOTAMs if there has been a delay since they checked the information on the AIS website www.ais.org.uk



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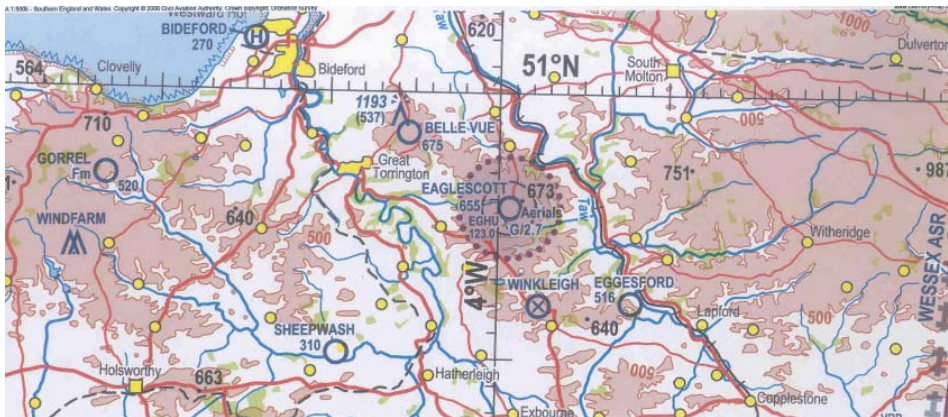
Operations at unlicensed aerodromes

As readers will be aware, CAP 793 "Safe operating practices at unlicensed aerodromes" has recently been published. A number of established training aerodromes have already opted to forgo their aerodrome licence and take advantage of the relaxation of the rules allowing flying training to take place at aerodromes without a licence. However, licensed aerodromes have traditionally had the protection of an Aerodrome Traffic Zone, with its attendant rules forbidding entry during its hours of operation unless the pilot has at least obtained information from the aerodrome operator to permit safe flight within it. Unlicensed aerodromes do not normally have that protection unless they provide at least an Aerodrome Flight Information Service (AFIS).

Without an ATZ, traffic at an aerodrome only has the protection afforded by Rule 12 of the Rules of the Air Regulations 2007: "A

flying machine, glider or airship flying in the vicinity of what the commander knows or ought reasonably to know is an aerodrome, shall conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome or keep clear of the airspace in which the pattern is formed; and make all turns to the left unless ground signals otherwise indicate." We suggest that instructors at such unlicensed aerodromes should be even more conscientious in teaching lookout in the circuit pattern than they may have been previously within an ATZ. Aerodrome owners should also consider the need for any appropriate ground signals to be clearly visible.

Microlight training has been taking place at sites without an ATZ for many years, as has motor glider training from unlicensed glider sites. The hazards are not new, but tend to be encountered more frequently during periods of change, as now.



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Don't stay on the runway

After a light aeroplane landed at a regional aerodrome recently, Air Traffic Control were unable to contact the pilot by radio, apparently because of a loose wire in the pilot's headset. Despite the controller attempting to instruct the pilot to turn off the runway at an intermediate taxiway, the aircraft had continued to the end of the runway and turned on to the taxiway there before communication was re-established.

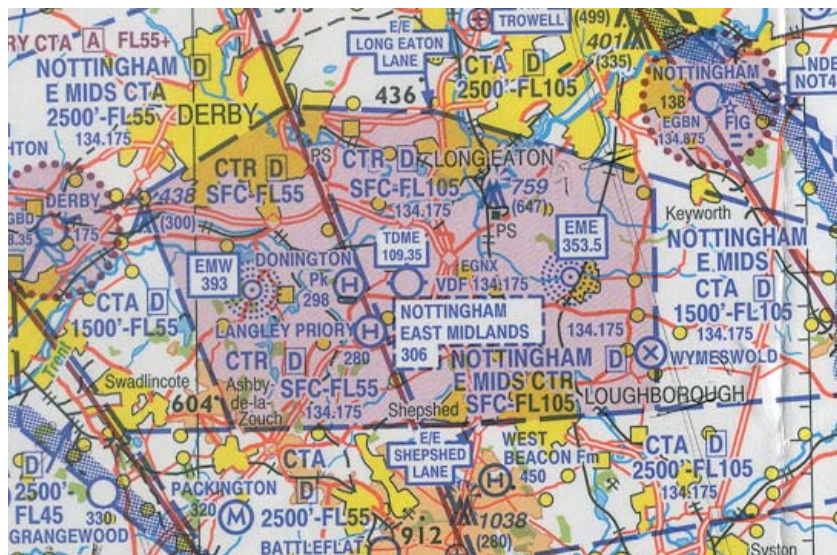
It seems the pilot was unaware of the requirement in Rule 14(4) of the Rules of the Air Regulations 2007, that unless an air traffic control unit at an aerodrome otherwise authorises, a flying machine shall move clear of the landing area as soon as it is possible to do so after landing. By continuing past 3 exit taxiways, the pilot had blocked the runway for another landing aircraft which was required to go-around.

Controlled Airspace and collision avoidance

In the previous issue we called attention to the increased collision risk when pilots attempt to avoid controlled and restricted airspace by flying through gaps between their boundaries. We advised an increased attention to lookout in and near these 'choke points'.

However, not discussed in the article was the fact that VFR traffic is perfectly entitled to fly in Class D Controlled Airspace provided it complies with the requirements. Although not always the case, it is often quite easy for pilots to obtain clearance to transit through such airspace. Those of us who do fly through it often find that very few others are doing the same. Although within Class D airspace the controller has no responsibility for separating VFR traffic from any other traffic, the low numbers of aircraft currently flying in that airspace under VFR at any one time means that the collision risk within the Class D airspace is much lower than just outside it.

While we continue to emphasise that you must not (except in an emergency) enter any Controlled Airspace without positive clearance, the whole purpose of Controlled Airspace is to reduce the collision risk to traffic within it. Let's take advantage of it.



Which way?

A group of light aeroplanes recently took part in a fly in to a farm strip. The pilot of the first aeroplane to depart decided that he would not interfere with others if he taxied to the start of the runway and lined up for his power checks and pre-take-off vital actions, so he did so. Just as he was applying power for take-off, a glider passed very low almost overhead, and rounded out for landing on the strip in front of him.

We should expect regular readers to be considering the airmanship points at this stage. Surely it was a bad idea for the lined up pilot to have blocked the runway? Had he checked the final approach before lining up? These points are indeed valid, and lining up early was probably not such a good idea.

However, in the aeroplane pilot's favour, we should mention that the strip had a pronounced slope, which dictated that the safest way to operate in anything other than strong winds was to land upslope and take-off downslope, and in this case the take-off

was being made downslope and with quite a pronounced direct tailwind, as indicated by the windsock at the side of the strip. The pilot was therefore expecting any approach to be made towards him and in full sight of him. Fortunately, the glider pilot who was attempting to land did manage to touch down and stop just before the hedge at the bottom of the slope.

Human factors can lead us into all sorts of undesirable situations. In this case, the fact that an aeroplane was lined up at one end of the strip probably suggested to the glider pilot that was the correct direction to land, and it is possible that confirmation bias may have led him to perceive that the windsock indicating a wind along the strip was actually indicating in the reverse direction. We can all be caught out by indications we want to believe; however, pre-planning can help reduce the risks, and if we are always aware of the wind direction below us, we can organise our circuit and approach if we need to land urgently.

Ditching

The AAIB's Bulletin 6 of 2010 includes a [report](#) of a Cessna 401 which suffered an engine failure in the Caribbean. It seems that full power on the remaining engine was insufficient to maintain altitude, and the pilot elected to ditch in a shallow lake. All occupants were able to vacate the aircraft through the cabin door. Recently, it is reported that a R44 helicopter had to ditch in a loch in Scotland, and again the pilot, the sole occupant, was able to escape.

SafetySense leaflet [21](#), available like all such leaflets free for download from the CAA's web site www.caa.co.uk/safetysense includes much useful advice. If you intend making an overwater flight this summer or in the future, we suggest you make yourself familiar with its contents and with any recommendations in your aircraft's Flight Manual, since if you do suffer a problem in flight it is unlikely that you will have time to consult either before having to carry out a ditching.

Wider distribution

Glider owners will have noticed this magazine arriving on their doorsteps for the first time, as their aircraft have been brought into the CAA's regulatory fold. While the BGA's existing systems will continue to be the primary means of communicating glider-specific safety information to glider owners and pilots, good practice in general aviation is valid to

anyone involved, no matter what type of aircraft they operate.

While welcoming our new readers, perhaps this is an appropriate time to remind our regulars that the CAA's Safety Promotion team can only inform about matters known to them. Please, if you find a problem or a good safety idea, don't keep it to yourself!

Air Displays and Restrictions of Flying

Many flying displays and other events this summer will be subject to Restrictions of Flying, as detailed (usually with maps) in Mauve AICs. Reminders, usually referring to these AICs, will be given in NOTAMs, together with details of other displays, and all are available through the AIS website www.ais.org.uk, which is where all AICs can be found free of charge. Displays and other major events taking place over the next month or so of which we are already aware are listed below, but others are likely to appear in NOTAMs at short notice:

| | | |
|---------------|---|--|
| 12-15 August | Eastbourne | Image © Jason Phelan Breitling Wingwalkers @ Flying Legends 2010 |
| 15 August | Bristol | |
| 16 August | Weston-Super-Mare | |
| 18 August | Cromer | |
| 18 August | Weymouth | |
| 19 August | Dawlish, Devon | |
| 19 August | Fowey, Cornwall | |
| 19-22 August | Bournemouth | |
| 20-23 August | Weston Park, nr RAF Cosford | |
| 22 August | Silverstone | |
| 23 August | Whitby | |
| 25 August | RAF Benson | |
| 25 August | Torbay | |
| 26/27 August | Clacton | |
| 27 August | Dartmouth, Devon | |
| 29/30 August | Dunsfold | |
| 30 August | Diss | |
| 2-5 September | Sywell (LAA Rally) | |
| 2 September | RAF Shawbury | |
| 3 September | Chatsworth, nr Chesterfield, Derbyshire | |
| 4 September | Portrush, N Ireland | |
| 4/5 September | Duxford | |
| 5 September | Shackerstone, by Twycross, Leics | |
| 11 September | RAF Leuchars | |
| 15 September | RAF Scampton | |

Emergency ADs

EASA produces [bi-weekly](#) summaries of the ADs they have issued or approved, which are available through their web site www.easa.eu. [Foreign-issued](#) (non-EU) Airworthiness Directives are also available through the same site, as are [details](#) of all recent EASA approved Airworthiness Directives. CAA [ADs](#) for UK manufactured aircraft which have not yet been incorporated in CAP 747 can be found on the CAA web site www.caa.co.uk/ADS.

We are aware that the following Emergency Airworthiness Directives have been issued recently by EASA and the FAA, however this list is not exhaustive and must not be relied on.

| <u>Number</u> | <u>Applicability</u> | <u>Description</u> |
|----------------------------------|-------------------------|------------------------------------|
| EASA 2010-0122-E | L 13 Blanik sailplanes | Main spar & aerobatics prohibition |
| EASA 2010-0142-E | Agusta A119 | Control box assemblies |
| EASA 2010-0147-E | Eurocopter SA 330 | Main gearbox oil cooling fan |
| EASA 2010-0151-E | Dyn'Aero DR 300, DR 400 | Exhaust pipes |

Distraction

A recent BFU (German AAIB) report concerns a K-13 glider whose canopy came open during the aerotow launch. Although the report does not go into detail, it seems one of the occupants was seriously injured, possibly during the subsequent hard landing in a field.

Doors and cockpit canopies coming open at inconvenient times have been the subject of several GASIL articles in the past. One referred to an AAIB report in Bulletin 9 of 2003 concerning an accident to a light twin piston aircraft. It seems the cabin door had opened just after the aeroplane lifted off the runway, and the pilot (who was alone in the aeroplane) appears to have attempted to secure the door before raising the gear and flap. In so doing he had sacrificed the

first rule of flight - FLY the AIRCRAFT; with fatal consequences.

Whilst it is difficult to ignore a distraction such as an open door or canopy, the aircraft MUST be attended to first. With the aircraft under control and trimmed at a safe, slow speed, then AND ONLY THEN can some consideration be given to the canopy/door problem. The best course of action is always to land as soon as possible and secure the door on the ground. Passengers/crew can assist if they are present, and once again the best course of action is to ask that the door/canopy be "held" secure rather than attempting a fastening in flight; securing the door is always best done on the ground. The message in all cases is FLY the AIRCRAFT FIRST!!

Backsliding

The pilot of a PA31 was recently surprised to find himself moving backwards relative to his aeroplane as it took off. While the exact cause of this particular event is not certain, the incident should remind us of the dangers of damaged seat rails or incorrectly locked mechanisms. It should also remind us to make positive (but not violent!) checks that our seats are secure as part of the pre-take-off vital actions.



File Photo

Class G airspace use survey

In order to fully understand the level and type of use of uncontrolled (Class G) airspace, the Airspace and Safety Initiative (ASI) is seeking detailed information about where, when, why, how often, and in what, pilots fly in Class G airspace. There are two aims; one is to gain a better understanding of the impact of new airspace restrictions on Class G operations, and the other is to identify likely areas of high intensity traffic with the attendant increased collision risk .

As a first step, the ASI co-ordinators have commissioned an on-line survey, which

is being conducted by an independent organisation (QinetiQ) to ensure that the information given cannot be attributed to an individual by the regulators. In order to achieve the aims, this needs to be completed by as many pilots as possible, so we encourage our readers not only to take part themselves, but also to encourage others to do so. The information requested includes several questions on pilots' recent flights, so participants will need their logbooks to hand when completing the survey, which can be found at www.surveymonkey.com/s/G5Z9BNB.

Fire in the hole

With summer well advanced, there will have been several instances of light aircraft engines suffering fires on start-up. The cause may well be that the pilot has over-primed the engine, or pumped the throttle, when the engine did not require it. The excess fuel has leaked into the engine compartment and heat has ignited it. Following the procedure for engine start in the Flight Manual should usually avoid the problem, but if a fire does occur for whatever reason, it is important that the

pilot knows how to prevent it spreading, as well as the whereabouts of the nearest fire extinguisher and how to contact the rescue services.

Different manufacturers may suggest different procedures, but we need to ensure that if it happens to us, we know and follow the procedure in the Flight Manual. **You won't have time to look it up if it happens to you!**

Mandatory Permit Directives

The following Mandatory Permit Directives (MPD) have recently been issued by the CAA. Compliance is mandatory for applicable aircraft operating on a UK CAA Permit to Fly. [MPDs](#) can be found at www.caa.co.uk/mpds and will remain on the website available for download until they are published in CAP 661, Mandatory Permit Directives, which is published twice a year in January and July and can be found at www.caa.co.uk/cap661

Owners of aircraft with Permits to Fly and their Continued Airworthiness Managers should register to receive automatic email notification when a new MPD is added to the website, through www.caa.co.uk > Publications > Subscriptions > New User Subscription Registration, and choose the 'Safety Critical Information' category.

[2007-002R2](#)

[Jet Provost](#)

[Mainplane spar attachment lugs](#)

[2010-005R1 \(E\)](#)

[Rotorsport MTOSport gyroplanes](#)

[Honeywell low fuel warning sensor](#)

[2010-006](#)

[Thruster T300, T600, TST](#)

[Aluminium flying strut ends](#)

Pre-flight information

In recent issues we have attempted to inform readers of future flying displays and other events which may impose Restriction of Flying Orders, or just become navigation warnings. We shall continue to do so whenever possible. However, often the information about even large events is received later than the GASIL publication dates, so it is vital that pilots continue to not only check NOTAMs before flight, but refer to the AICs which in many cases give more details about restrictions and warnings.

However, AICs contain a lot more than just details of Restriction of Flying Regulations and similar which are listed in the Mauve

series. Although not part of what ICAO describes as the Integrated Aeronautical Information Package, they provide much important information. White AICs give useful information about administrative matters relating to flight, Yellow AICs cover operational matters such as imminent airspace changes and navigation aid information. Perhaps the most important ones are the Pink AICs to which GASIL makes frequent reference, and which contain important safety material; for example Pink 034/2010 gives details of a GPS jamming exercise around the Sennybridge Danger Area (D203) in mid-Wales between 16-27 August.

Avoid the stall!

In a report from the BFU (German AAIB) we read of a Cessna 152 which was being flown on a sortie with an instructor which included practice glide approaches. It seems that the pilot made two approaches, both of which in the opinion of the instructor ended up high and close to the runway. On the second approach the instructor took control in an apparent attempt to show the pilot how to lose excess height, and set the aircraft up in an alternating sideslip. As he attempted to align the aeroplane once more with the runway direction, it seems the aircraft stalled, a wing dropped, and the aeroplane hit the ground hard on wingtip, propeller and nose leg.

Stall/spin accidents are frequently fatal, although when very close to the ground the crew may be able to escape without serious injury, as in this case. Maintaining the correct airspeed in the climb and on the approach is the best way to avoid stalling, and the correct speeds are usually detailed in the Flight Manual or pilot's handbook. However, in extreme attitudes the ASI may not give correct indications and if that is the case we suggest that such extreme attitudes should only be practised at a safe height above the ground, no matter what one's experience level. It should also be remembered that the airspeed at which an aeroplane stalls increases when manoeuvring, which is why we need to increase speed during steep gliding turns.

CAA Safety Evenings 2010-11

As many readers will be aware, the responsibility for organising GA Safety Evenings for the coming season has been taken over by GASCo, the GA Safety Council, to which the CAA is a major contributor. One aim is to increase the number of evenings available, and, although the CAA will continue to make presentations on these evenings, other member organisations of GASCo will provide many of the speakers.

While the general message of the evenings is unlikely to change, there will be more variety in the presentations. It is also hoped to be able to provide specialist expertise in the host organisation's particular operations, as well as in local issues. The evenings will continue to be of value to everyone involved in general aviation, whatever they fly, operate or maintain, and logbooks will continue to be signed when requested as proof of attendance!

The first confirmed events are listed below. Organisations wishing to host such an evening during the coming winter should contact GASCo in the first instance on 01380 830584 or by email to ce@gasco.org.uk.

| <u>Date</u> | <u>Area</u> | <u>Venue</u> | <u>Contact</u> |
|-------------|--------------------------|------------------------------|----------------|
| 20/10/10 | Rochester Aerodrome | Innovations Centre | 01634 869969 |
| 03/11/10 | Shobdon Aerodrome | Airfield Clubhouse | 01568 708 369 |
| 04/11/10 | Penkridge, Staffordshire | Haling Dene Centre | 01889 882871 |
| 11/11/10 | Bristol International | Bristol & Wessex Flying Club | 01275 472514 |
| 15/11/10 | Sandbach, Cheshire | tbd | 01889 508406 |
| 24/11/10 | Bournemouth | Bournemouth Flying Club | 01202 578558 |
| 12/01/11 | Elstree Aero Club | Mike Grant | 02089 533432 |
| 26/01/11 | Sandtoft | Airfield Terminal | 01427 873676 |