

GA FEEDBACK

No: 22

Autumn 2004

RULE 5 AND SVFR CLEARANCES (GA FB20)

SOME ADDITIONAL THOUGHTS

(1) PARKS

It is perhaps worth reminding pilots that a large park or recreation field within an otherwise built-up area is not (legally) suitable for a forced landing, as such an area comes itself within the definition of a congested area - see the Air Navigation Order.

Thus it would be no defence to say that you "hopped" from being within gliding distance of one park to another park on your way across the city!

(2) WHAT ABOUT HELICOPTERS?

The inclusion of the words "fixed wing aircraft" at the beginning of the reply implies, incorrectly, that the rule is different for rotary wing aircraft. Whilst the rule is written slightly differently for helicopters, the tenet is the same, i.e. you must be able to alight clear if the engine stops, but this is not brought out in the reply.

Both comments are correct, except that the requirement for a helicopter is to be able to "alight without danger to persons or property on the surface"

(3) ATC CLEARANCES

I am reading Issue No.20 of GA Feedback and would like to add the following comment.

The report states that pilots of single-engined aircraft often request and receive SVFR clearance to overfly cities at a height that would not permit them to comply with Rule 5.

It does not always happen like that, however. Last summer I was flying off the south coast shore line at 1,000 feet when the ATC unit of the large airfield I was talking to offered me, completely unprompted, clearance to overfly the adjoining large town at that height. No doubt this was done with the best of intentions as it

would have expedited my journey. I declined the offer and stated the reasons why. The controller I was talking to sounded quite put out that I had rejected his offer. Many pilots may have believed that this offer from an authority figure such as ATC would have been in order and accepted it thus putting themselves, and others, at risk. Whilst the ultimate responsibility rests with the pilot, ATC units should not make offers which might trap the unwary or inexperienced.

COMMON GA FREQUENCY

When landing at a farm strip in company with another aircraft piloted by a less experienced pilot I landed first and wished to bring a hazardous downdraft on short finals to his attention. I was faced with a problem that there is no nominated frequency for aircraft to aircraft communication. Luckily we were both still tuned to the frequency of our departure point (only 20nm away) and I was able to pass the relevant PIREP to him. I justified the transmission on the grounds of safety.

My purpose in writing is to suggest that there is a demonstrated safety need for a nominated aircraft to aircraft or air to air frequency for light aviation where aircraft frequently operate from airstrips with no formal radio frequency allocation. The precedent has been set in the gliding world where 130.400 is nominated for pilots to exchange information on entering cloud.

In other administrations there are frequencies for such information exchange ie Unicom in the USA etc.

From 11 November 2004, a common frequency 135.475 MHz, known as SAFETYCOM, is available for use at those aerodromes/landing sites that do not have an assigned frequency for RTF communications - Aeronautical Information Circular AIC 103/24 (Yellow 153) refers. The AIC contains specific restrictions on the use of the SAFETYCOM frequency and should be read carefully to ensure correct usage.

A General Aviation Safety Newsletter

from the Confidential Human Factors Incident Reporting Programme

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MOTHS TO A FLAME

The following incident is typical of many that have happened recently. Usually in an area where there is an NDB holding facility adjacent to an airfield, but which is actually in the open FIR.

In the hold at the CIT at 3,500' - cleared there procedurally by Cranfield ATC (no radar). Intermittent VMC/IMC on a day with building cumulus clouds. Ideal for gliding!

Going over the CIT in the right turn a glider appeared right alongside my aircraft. Distance 50m horizontally. No risk of collision, but he was circling and looking for thermals and obviously unaware of the real danger. It was just sheer good fortune that we turned right when we did - otherwise!!!

Cranfield ATC was advised and they in turn put out an all stations broadcast.

- * This is an increasingly common situation
- * The gliding fraternity seem to be unaware of beacons and their implications
- * Inexperienced light aircraft pilots also seem to be unaware of beacons as above
- * This is now a really serious problem with lives at risk!

Can aviation provide more comprehensive training to all airspace users?

It is important to remember that Class G airspace is available to all airspace users, with widely varying levels of experience. An awareness of choke-points, such as that above, by all users will assist in avoiding similar close encounters

POSITION REPORTING

I was recently on a VFR flight, in the right hand seat. We were passing within a couple of miles of an ATZ, under flight information service from the local LARS/Approach Controller. Visibility was good, and there was not too much traffic on the frequency.

The ATCO requested a position report by asking if we were over ### Island. This feature is not named on the half-mil chart, and in the short time that I spent looking for it, and asking for clarification, a potential Airprox developed. This was noted by P1 and averted in good time by an evasive manoeuvre.

It left the other aircraft, a light twin, and ourselves rather annoyed by the lack of traffic warning, and it left me angry that the LARS ATCO caused confusion by referring to a local feature not recognisable to a transiting pilot. This was a distraction to the pilot and me that we did not need, being close to an ATZ. We were squawking 7000 Mode C, so I would have thought

our position was known. If not, or if there was more traffic than usual on screen, maybe the ATCO should have asked for a specific squawk.

It seems that ATCOs should be aware that non-local pilots only have charted features by which to navigate. Local knowledge should not be taken for granted.

The reporter makes a valid point. If you can't readily identify a ground feature specified by ATC, tell the controller. In such a situation, lookout remains of prime importance.

EARLY TURN TO CROSSWIND LEG

I was joining downwind right-hand at 1,000' QFE close in to maintain clearance from another aircraft turning downwind approx 1 mile out, being flown by a student. There was ample separation. Suddenly, I was aware of a Flexwing Microlight which had just departed the runway coming at me on a collision course from my 'one o'clock' position. He did not appear to have seen my bright yellow aircraft. I took immediate avoiding action to starboard and noticed the other pilot do the same. We passed close to one another.

In my opinion the near miss was caused by the ability of the other 100hp aircraft to climb to circuit height well before the end of the runway coupled with the pilot's early right turn onto crosswind before reaching that end. I feel that any departing performance aircraft should pass the numbers at the far end straight and level before making such a manoeuvre.

One of the principal purposes of a circuit pattern is to provide an element of predictability, thus conforming to the standard pattern is important, even in mixed traffic circuits, which can encompass all elements of the performance spectrum.

If you elect to commence your cross-wind turn early, remember that it is your responsibility to ensure that it is clear before doing so.

PREDATORY CROPS

Coming in to land on a hill-crest end of a downward sloping runway with a strong headwind (28kph difference between airspeed and ground speed and 5° difference between course and runway track), my tail-dragger was on a steady 500ft/min glideslope from 500ft at 1 mile with the groundspeed at the landing-desirable number - all looked well. I hadn't landed here for many years, but was being prudent as the fuel level was in the bottom ¼ and my home field was 40m away. I did not realise that a very tall (5 ½ ft), tenacious and tough crop of mature oilseed rape was very near the threshold. The

threshold didn't move in my screen but the crop seemed to rise up as I flared - it caught my tail-wheel and caused a very heavy arrival.

If making an unplanned landing, whenever possible recce the approach/strip before landing (CAA General Aviation Safety Sense Leaflet No.12 - 'Strip Sense' refers) and remember, an oil-seed rape crop is not always yellow!

GPS equipment manufacturers may be incomplete and also is not updated; thus such information should not be assumed to be correct.

Unless specifically approved, standalone GPS should not be used as the primary navigation aid (See CAA (SRG) General Aviation Safety Sense Leaflet No.25.

(2)

AIRSPACE INFRINGEMENTS

(1)

An experienced Air Taxi pilot on a regular passenger flight in a light twin from the Continent to an airfield in Northwest England. Decided to go VFR as nice CAVOK weather and to save Euro-charges for company.

All OK but workload increased as I approached the Midlands due to lower TMA, radio, traffic. Passengers very talkative; caused a distraction throughout the flight but not a hindrance. After receiving no reply from ### (Military ATC), after several calls it was decided to call ### Approach who informed me after squawking I was in fact in Class A Airspace. Vectors were given to me and the flight continued without further incident. Just goes to show, however many hours you have, pilots will still screw-up!

On reflection I feel that I overlooked a marked 5,500ft step-down in the TMA level on the north side of ### close to a Control Area. I only clipped by 500' or so but still an infringement! Quite hard to spot unless you are looking for it; wonder if anyone else has made this mistake? Also seating a passenger in the P2 position is not a good idea. It's nice to have a PPL up front but it caused a lack of concentration, with a barrage of questions about aircraft and procedures etc.

My biggest concern was, however, my GPS unit. It is a ### model with the latest updates and database but guess what? An inaccurate base map of Controlled Airspace in this area. Other pilots in the Company have noted other omissions; the database supplier is aware of these problems but does not appear to be interested. As an Air Taxi operation I know GPS is not approved for sole navigation but why offer such fancy models and terrain detail if basic info is misleading? We all know pilots are using GPS more and more, in fact in our job navigating to certain airway waypoints would be impossible without it, but I know I am less confident of using the GPS for VFR flight than for IFR, which the equipment manufacturer seems far more interested to make accurate, even though units are not approved whatsoever for this type of flight.

Currently, the information on Class A Airspace in the UK FIR (Airways and TMA) provided by standalone

I was on a VFR flight from SE England to Northern England. I had filed a flight plan: Direct BPK; Direct BOU; Direct GAM; Direct.

The weather had deteriorated a little from an hour previously when I had arrived from Europe. Cloud was scattered at 1,800 ft, and broken about 3,000ft. Vis: about 15K and light turbulence. I had planned the standard N departure: Right turn, expecting a clearance over city, or being asked to maintain clear, going to the QE bridge. I was given a left turn out to route for the QE bridge. I had to take a somewhat circuitous course to avoid cloud and maintain VMC. Arrived at the Bridge Radar. Given FIS and warned that Lambourne was busy. I therefore altered track to the left to try and avoid overflying Lambourne. Abeam LAM VOR I set course to intercept the 305 degree radial toward BPK VOR. Arriving at the BPK VOR, and still having to work hard on lookout and cloud avoidance, I looked down at my Flight Log and in error noted the next VOR radial as 335 degrees for BOU. The correct Magnetic Track was in fact 008 degrees, but I had missed out a line, probably because I had in my mind completed two VOR changes. The 335 degree track was in fact the next track from BOU to GAM, not BPK to BOU. Consequentially I infringed Controlled Airspace. I was squawking 7000 mode C. I only recognised my error when a few minutes later I had put BOU into the GPS as a back up, and realised that I was heading well to the left of track. I had already called for frequency change and went to ###, who were already having to re-position aircraft because of "unknown aircraft". I contacted ### and told them that I was the unauthorised infringer, by which time I had altered course toward BOU.

With the benefit of hindsight, the weather was less than ideal, and I should have planned a less taxing route in the circumstances, such as going around the east of Stansted via Colchester, rather than being one step behind at each stage. The pressure of flying the aircraft, avoiding cloud and keeping a good lookout in poor visibility meant that my spare capacity for accurate navigation was compromised. I made a stupid error, by reading the wrong line of the flight log, thus causing me to enter CAS. Although not relying on GPS, I relied on VOR tracking as my primary navigation, and with the poor vis had difficulty visually confirming my position.

Keeping a wide berth from CAS in these circumstances, particularly operating a twin, single crew, would have been much more sensible.

This is a good example of 'capacity overload' and serves as a reminder that single pilot twin-engine operations can be extremely demanding, particularly in changeable weather conditions.

As the reporter notes, planning an easier route would have been appropriate. Also, inserting the planned route into the GPS prior to departure, as recommended, would have assisted the navigation task.

TIME PRESSURE ...

To prove that all incidents generally are an accumulation of smaller factors.....

My story began late on a Friday prior to travelling to Belgium on the following Monday for a client; this necessitated an early morning departure of around 01:00 and driving through the night. Knowing that I was going to be deprived of sleep on Sunday night, I had decided that I would get a good nights sleep on Saturday to make up for it....1st Factor: Having been up early that morning taking a relative to catch a flight at Gatwick, my son decided to stay out late at a party and we eventually picked him up at 02:30 !! So there went my plans for an early night.

During the day of Sunday I had flown with a friend to West of England for lunch and had returned at about 15:00 hrs, parked the plane, put the covers on and driven home, with a mind to watch a TV programme then to get some sleep prior to my all night drive. I decided to pack my overnight bag, find my passport and wallet and prepare everything so that when I got up I could leave without disturbing anyone!! It was then I realised I couldn't find my wallet. Having tried to recollect where I might have left it, I decided it must be in the plane and as all of my credit cards were in it I would have to go and pick it up.

By 17:05 I arrived back at the airfield and checked the aircraft without any success. After a while I remembered using it at lunchtime. So I phoned the restaurant and to my joy they had found it and it was behind the bar. The time was now ticking by. They closed at 18:00 and couldn't stay any later! I must have my wallet to get to Belgium! (Pressure now Building). OK, made the decision; should just make it. Then I realised I had no flight bag. That's OK; I keep a spare set in the back of the aircraft. What else do I need? No map. So I ran back to the club and borrowed a map. OK, I have flown this route many times, so I am happy I can navigate OK.

So I have now made the decision to go. Everything went as normal but obviously I am now under time pressure.

Start up checks complete (from memory, as checklist is in flight bag). After receiving taxi clearance I head for the runway. Normal taxi and power checks completed - all OK. Asked for and received a departure clearance, lined up and expedited an immediate take off. Everything as normal, airspeed increasing OK, started to climb away then at approx 200ft the engine misfired and cut out. I looked at the end of the runway and decided that whilst there was insufficient left to land on and stop at least I would be on the ground when I struck the trees in the golf course rather than be in the air when I struck them! Having lowered the nose to glide I then scanned the instruments and switches quickly to see if there was anything obvious and there was! I had accidentally turned the fuel to off instead of to the left tank in my haste to depart. The ground seemed to be coming up fast but I knew my best chance for survival lay in attempting to restart. At my first attempt I failed, time for one more go before landing and fortunately I managed to turn the fuel back on, the engine with the wind-milling prop started straight away and then I eased the aircraft into a climb avoiding the trees. The rest of the trip was completed without further complication and my wallet retrieved.

This incident could have and probably would have had grave consequences.

Lessons Learned:-

I now keep a spare checklist in the aircraft.

Promised myself never to allow time considerations to overshadow good airmanship.

Regularly now read emergency drills to stay current.

Always double check fuel lever prior to take off.

The checklist is there for a reason and none of us is above making mistakes.

Had I not been so tired then it may not have happened.

If you are not one hundred percent fit to fly then don't.

Never allow outside factors to influence sound judgement.

There will always be occasions when time or other pressures are present. The most important factor is to recognise these pressures and make time for checklist/vital actions.

This reporter was very fortunate that the engine restarted.

ACCIDENT TO REPORT? Call AAIB: Tel No: 01252 512299

AIRPROX TO REPORT? Call UK Airprox Board: Tel No: 01895 815121/2/5

OCCURRENCE TO REPORT? Call CAA Safety Information Data Department: Tel No: 01293 573220