

GA FEEDBACK

No: 20

May 2004

RULE 5 & SVFR CLEARANCES

Whilst air traffic controllers are, quite rightly, concerned about intrusion into controlled airspace, I find it regrettable that their safety concerns do not extend to breaches within their zones of CAP 393 - Air Navigation: The Order and the Regulations; SECTION II - The Rules of the Air Regulations 1996, Rule 5.

There are pilots who continually put their lives and the lives of others at risk by ignoring this regulation. A further aspect is that were an accident to occur involving an aircraft being flown under such conditions, the reputation of all GA activities would suffer. Nevertheless, it is commonplace for some commanders of single-engined aircraft to request and receive SVFR clearance into ### Controlled Airspace stating their intentions to overfly the city and its surrounding built up environs.

It may be that there is widespread misunderstanding of the rules and that it is believed that an SVFR flight provides exemption from Rule 5(1)(a)(i), the glide clear requirement, which surely it does not.

It would seem to me that the standard response to requests under these circumstances would be for ATCs to point out that the requested flight would be in breach of the rules and that the aircraft commander, if he/she were to proceed, would be reported.

I have witnessed several recent instances of such breaches; these include single-engined aircraft routing directly over or close to the centre of the city on a Special VFR clearance not above 1,500 feet on the QNH. A further example was a photographic flight over the city centre not above 1500 feet.

As noted above, whereas a fixed wing aircraft operating under a Special VFR clearance or on a notified route such as a low level corridor is exempted from being required to fly at 1,500ft above the highest fixed object within 600 metres of the aircraft (Rule 5 (2)(a)(i, ii), it must be at a height that would enable the aircraft to alight clear of the area without danger to persons or property on the surface, in the event of failure of a power unit (Rule 5 (1)(a)(i).

As to ATC's responsibility to warn pilots requesting a SVFR clearance, only the pilot can decide whether

he/she is able to glide clear and thus pilots of single-engine fixed wing aircraft are responsible for ensuring that the route over large, congested areas is planned so as to permit the aircraft to be able to glide clear and land in a safe area following an engine failure. Finally, the CAA advises that the 'glide clear' requirement is not satisfied by a large park within a large metropolitan area.

PLANNING, ANTICIPATION AND DISTRACTIONS

A significant number of incidents described in CHIRP reports arise from an unanticipated event or sequence of events which contribute to a loss of situational awareness. The four reports below highlight the importance of always planning a cross-country flight even a relatively simple one before departing, and paying particular attention to en route hazards and possible runway options/joining procedures at the destination. (See LASORS 2004 - Safety Sense 1 - General Aviation Good Airmanship Guide and 5 - VFR Navigation). Remember, it's much easier to think on the ground than when flying in demanding conditions.

DISTRACTED

In the cruise at 1,000ft QNH. Actively looking for AAA gliding site. Squawking for nearby military ATC unit. GOT DISTRACTED when ATC commented that the transponder was not showing on their screen. I look down and check fuses/CB's; all OK. Turn transponder off and back on. My passenger points out a glider at two miles (circling) above me/in front. I turn right to remain clear. I look out to my left and there is AAA. I had allowed myself to be distracted from avoiding the gliding site. My intention was to track the East of AAA and I HAD BEEN looking out before the distraction.

In retrospect I was lucky that a launch was not taking place. As soon as I realised I was circa 1.5 miles to the East of the gliding site, I broke right to clear.

Trying to spot a green gliding site, even when you are looking for it, is hard. I fly in that area a lot and try to stay clear.

A General Aviation Safety Newsletter

from the Confidential Human Factors Incident Reporting Programme

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I guess the root cause of this incident is I let myself get distracted. I did have a comms failure earlier in the trip and this may have contributed to the distraction.

NB: I had a fully working Skymap II but did not have AAA as a user waypoint.

As the reporter notes, it is most important to maintain a good lookout when flying in the vicinity of a gliding site. Good pre-flight planning and making use of available navigation aids (GPS in this case) to identify the position of gliding sites in advance and planning to pass upwind if possible will also assist in avoiding a nasty surprise.

A WAKE UP CALL

I am a PPL with 700 hours and have received both IMC and Night training though these are currently lapsed. Nearly half of my hours are in my own homebuild aircraft. I trust I am a responsible pilot who takes the privileges of the PPL seriously – the more so since I work in an extremely safety conscious environment. The effective Safety Management of flying has many parallels to a highly safety conscious organisation both in the practice and in the review and learning processes. CHIRP reporting is an excellent method of that learning process, as in my experience the best pilots share their experiences to help others. I really hope this helps prevent a reoccurrence of what happened to me

My wake up call was pretty severe. On a return trip covering almost the length of England I planned as near a direct route as possible from VOR to VOR. The line on the map, also programmed into the GPS, passed through a number of airfields and one promulgated as an area of intense parachuting activity. I had flown the route before and intended diverting to one side to maintain safety and airspace clearance as required. On the outward leg I initially chose to merely maintain a listening watch on the radio. My recollection is of avoiding the danger area – by ground observation I clearly did not, probably due to incorrect identification, as there are a number of airfields in the area.

Worse, the sin was repeated with a vengeance on the return journey. Prior to arriving in the same area I had major weather diversions to contend with and was extremely grateful for the various en route radio/radar services. When that was all past and I was in good VFR weather conditions and back on my route, I was content to settle and merely monitor the area frequency. Relatively familiar territory passed and suddenly to my absolute horror I saw parachutes to my left and below and observing another above took avoiding action to increase spacing. I had not anticipated the track deviation which I had planned to make!

On my arrival I was quite rightly asked to telephone the Airfield concerned. The ensuing discussion indicated I

had passed over the field on the way out (my outward avoidance had obviously not been as I thought) and obviously failed even to recognise it on the return journey, endangering myself and even more importantly others. Collision with a parachutist doesn't even bear thinking about – and I now have thought about it. The event and the conversation were major wake up calls. Apparently a parachute drop had been halted due to my observed position on the outbound leg and the inbound was as I described. Absolute horror.

So what went wrong and what can be learned. The major and prime error was not to specifically plan the route round a known identified area that MUST be avoided, not just a route diversion –especially if you know of it. Five nm must be the minimum. It was in fact even worse in this case, as the red line largely obliterated the area on the map, which is why I think I made the error on the way back. It simply is not good enough to know it is there and plan to avoid during the flight, I should have routed to avoid the airfield completely. Second, what you see is what is there and be sure it is what you are looking for – I had evidently incorrectly thought I had avoided the area on the way out. The third error was to practice listening radio watch rather than be in direct communication with an appropriate station. In this case I could and should have contacted the airfield concerned, particularly as on previous flights (I have probably done that trip two or three times before in the last 5 years) I had been asked to contact them as I was passing nearby by the local radar service.

Thankfully nobody was hurt. The lessons in brief are: plan precisely and safely to avoid hazards; fly the plan and use the radio appropriately. And why a wake up call? Well, how many mistakes might one make without knowing it, here I experienced my mistakes with a vengeance. A bit basic really!

The reporter is to be commended for his honesty and for subsequently correctly analysing his mistakes. As noted, a preplanned deviation from a direct track is easier than an ad hoc avoidance manoeuvre and will provide an additional safeguard against a distraction.

When planning to avoid parachute sites, remember that the drop may commence a significant distance upwind from the designated landing zone.

NOT THE USUAL RUNWAY

After a short flight returning from a maintenance check with a passenger (one of my first) we approached AAA as I have done on many previous occasions. We reported “Three miles deadside” as requested and were given a downwind join for runway 03 left-hand circuit. Being used to taking off and returning from runway 21, the prevalent runway, I steered the aircraft at the 03 numbers, crossed and turned right onto downwind for runway 21.

On the inbound approach to the 03 numbers, the windy weather conditions were making the aircraft more difficult to control than I was used to, as an inexperienced and hence sometimes nervous pilot, this took the greater proportion of my mental capacity. Also, I was pre-occupied with my passenger who was having difficulty hearing due to a medical hearing problem, which was compounded by technical intercom difficulties. He was taking photographs and I could see arm movements in the corner of my eye, which were distracting.

After flying the downwind leg for 21 right-hand the Tower Controller asked me if I was sure I was downwind left hand for 03, I went over his words in my head and then realised my positional error. I immediately informed him, "I have made a mistake, I am late downwind right-hand for runway 21".

I asked him what he wanted me to do and I was instructed to turn the aircraft through 180 degrees and take up a position downwind left-hand for runway 03. I did this and after a short R/T apology landed, taxied and shut down without further incident.

What I think I did wrong:

- On the outbound sector earlier that day I had made sure that the audio level and quality for my passenger was satisfactory. As the day wore on the wind picked up and I wanted to return to AAA as soon as the maintenance was complete. In doing this, I didn't pay sufficient attention to ensuring that my passenger's intercom operation was satisfactory prior to take-off.
- I did not pay enough attention orientating myself correctly with AAA airfield when given my joining clearance.
- I did not listen sufficiently carefully to the joining instructions and, even though I had a tiny doubt about the clearance, I did not ask for clarification. I had, due to previous inbound experience, decided on where I was going to steer the aircraft (i.e. 03 numbers for the 'usual' join) and when this didn't match my visualisation of the clearance instruction and I didn't challenge my assumption and continued to the 03 numbers.

What I think I did right:

- I made sure my primary concern when inbound in gusty conditions was to fly the aircraft.
- When I realised my mistake, I immediately owned up and transmitted that I had made a mistake and gave my correct position as downwind right-hand for 21 in the hope that any aircraft that may be in the circuit would know my mistake. At the time I didn't think that any other aircraft were in the circuit but my situational awareness was not good.

- Before making any correcting turns, I asked the controller what did he want me to do to rectify the situation and then followed his instructions.

The combination of inexperience, anxiety as to the weather conditions for the return flight, turbulence and an in-flight distraction were contributory factors to this incident. It is commendable that the reporter, having recognised his error, requested appropriate assistance from ATC.

When approaching an airfield to join, keeping the airfield positioned on the same side of the aircraft as the circuit direction will assist in avoiding an error such as that described.

SEVERAL LESSONS LEARNED!

On the final approach to touchdown on a grass airfield, with which I was not familiar, I experienced a rotor effect, over buildings, which caused my left wing to drop. As this area was the narrowest part of the landing strip and close to trees on the port side, I decided to abort the landing and power out. The left wing was still low (probably slow reaction or response) which caused the aircraft to track left over the boundary of trees.

On climb out (approx 20ft agl) I clipped the end branch of a tree, which caused a left moment. Unfortunately, I was unaware of a double 33kVA power line running at an angle behind and away from the trees. This I struck with my undercarriage (and, as I now believe, the end of my left wing). The force of the cable strike was registered by witnesses as to cause the pole (which appeared to be within 15ft of the strike) to vibrate violently.

Somewhat shaken, I managed to control the ascent, gain height and maintain controlled flight back to my base airfield ten miles distant, touching down with a left drift but a safe landing.

Damage:

Remedial work required the replacement of an outer port wing spar - main (vertical) spar and top bracket.

Causes:

1. Earlier in the day I had visited another airfield and had intended to fly directly back to my home airfield to obtain permission to fly into the incident airfield (where a fly-in was in progress) and the radio frequency in use. I elected not to ask permission to land or, more importantly, to obtain landing instructions. I learned later that the airfield was operating an opposite direction landing and take-off procedure.
2. It was in the back of my mind that I was in serious default of recognised procedures and that I should not have been in a position of landing unannounced and without landing instructions.

3. Had I obtained the radio frequency, I would have been aware of the specific landing/take-off procedures and landed in the appropriate direction.
4. If I had followed the correct procedure, my approach would have been from the opposite direction, which would have allowed me far greater length and width of runway for my approach which would have allowed greater ease of landing with a CLEAR conscience.

The reporter has drawn most of the lessons from this incident. Most if not all fly-ins provide either a written or telephone briefing for visiting pilots; this report is a clear example of the inherent safety risk in electing to arrive without receiving such a briefing.

If an aircraft suffers in-flight damage, always consider landing as soon as possible. As reported, the damage incurred during the aborted landing was sufficient to make this a reportable accident.

ANOTHER CLOSE ENCOUNTER

On a visit to an aircraft museum, I joined the circuit overhead, for a right hand circuit for runway 03. The wind was a light north easterly directly down the runway. The airfield is non-radio except on days with flying displays. On short final approach I suddenly became aware of another aircraft directly above me (estimate at 10-20 feet), also descending on finals. His approach speed was greater than mine, and he continued to descend directly in front of me, and landed. My immediate action was to turn left on to the dead side of the runway and carry out an emergency go-around, thereafter completing another circuit and landing safely.

The other pilot stated that he did not see me, but the incident was witnessed from the ground by aeromodellers who were at the airfield.

I reported the incident to the staff at the museum.

I consider the other pilot had not maintained a good look out for other aircraft and consequently put us both in danger.

This report emphasises the importance of maintaining a good lookout when operating in a non-radio circuit. Also, this airfield has an allocated RTF frequency. At times when the ground station is not operating, it is still worthwhile to make the appropriate R/T calls to assist other aircraft also listening out on the airfield frequency to determine your position.

FORCED LANDING

Whilst on a local evening flight, taking a route around the outer edge of a nearby town and back to my take off point, I experienced a momentary loss of power, probably about 4 or 5 seconds. The engine then regained

normal power for about 20 seconds and then once again lost power slightly. This time I pumped on the fuel bulb and increased the throttle position. The revs were now down to 4,000, as opposed to the normal 5,900 RPM.

I knew that the engine wasn't going to recover from that, so I carried out my routine of searching for a suitable landing place, (not having required it before in this aircraft for an actual emergency).

The engine died completely as I reduced the throttle. The countryside below didn't look inviting, as all the larger and flatter fields were a dark green, indicating growing crops - these later proved to be potatoes.

The best light green/brown field, which I knew would be recently cut silage, was an odd shaped one and from several hundred feet I could see it was on the side of a hill. I decided to descend into the valley, approach the field from the lower end and use the uphill slope to slow down. Luckily, I judged it just right and carried out a smooth but fast landing. The momentum carried me nearly to the top of the field, without using the brakes.

As the aircraft came to a stop on the hill, I put the brakes on and I stepped out, very glad to have got away with it so lightly. Just a little shook up. I walked to a nearby house and the very kind owner offered to drive me back home, for which I was very grateful.

The next morning I went back to the site with a friend. We changed the spark plugs and tried to restart the engine but to no avail. As we were doing that, a couple of police cars arrived at the nearby gateway. Also a paramedic car and then to our astonishment, a fire/rescue engine complete with crew ready for action. Someone had noticed the aircraft, but only the day after the event. Coming down without any sound, no one had noticed on the evening it happened.

The cause of the engine failure was due to a broken piston ring on the rear piston. My answer to this sort of problem has been to go four-stroke.

One week after this event, I got a phone call from the Customs & Excise wanting to know why I had decided to land in that area at 2 a.m. in the morning. Apparently this is the information that the police had passed on to them!!

This report raises a number of issues related to forced landings.

First, if flying a single engine aircraft, whenever possible, route over terrain that contains suitable landing sites within gliding range.

Second, the size and shape of a field relative to the wind direction, together with the approach/surrounding obstacles are usually more important factors than the surface itself.

Also, if you plan to leave your aircraft after a forced landing, let someone, such as the landowner or the local police know of its location and your intention