

CHIRP GA FEEDBACK

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FEEDBACK is going electronic.

We are still in the planning stage but it is likely that the August edition (61) will be produced both in hardcopy and electronic versions; the November edition (62) will be electronic only. One option for distribution is to use the CAA's list of e-mail addresses to distribute FEEDBACK and/or a link to our web site. There will also be an App for phones and tablets.

Question: Does the CAA have your current e-mail address and your permission to use it for the distribution of safety material? If not please contact them; details of how to do this are on page 4.

EDITORIAL

How close is close? Reports to CHIRP include examples of pilots flying too close to other aircraft while overtaking or crossing flight paths. Have these pilots considered how their selected miss distance might appear to the pilot in the other aircraft? Similarly, CHIRP reports often describe incidents that stem from planning to fly too close (vertically and/or horizontally) to controlled airspace, ATZs, glider launching sites and parachute drop areas. When planning your flights, do you plan to overfly aerodromes or do you plan to give them a wide berth? There are good reasons for both alternatives and, in some areas of the country, congested airspace may leave little choice. However, if you do have the option, what do you do? Aerodromes may provide good navigation features and are easy reference points when speaking to ATC. Also if you fly well above the circuit pattern and aircraft joining overhead you will be clear of most of the traffic. However, if the weather is not as good as you anticipated, and you can't fly as high as planned, you are faced with flying through the traffic pattern or going off route; sometimes this is a drama - sometimes not. All too frequently, however, we see pilots flying past too close and without calling on the RT. Another consideration if you are planning to over-fly a glider launching site, do you know the top height for the winch cable agl? In addition to the cable, on a thermic day you can also expect gliders up to the base of any clouds. So, why not plan to avoid controlled airspace and areas where other aircraft are likely to be by as large a margin as possible? That way you are more likely to be able to fly your route as planned and, because you are on your plan, you can devote more attention to looking and listening out and, of course, enjoying yourself.

Ian Dugmore – Chief Executive

GPS SET-UP

Report Text After take-off from [] I decided to climb to FL80 en-route to have a half hour above all clouds until I would have to descend. My co-pilot kept telling me I was heading west when I should have been heading north but with concentrating on the climb and occasional glances at the GPS it took me some minutes to realise that the GPS was telling lies. Then I realised what the problem was. I had reversed the route to [] before launching and had done this in SIMULATOR mode consequently nothing was moving. Once levelled at FL80 and the GPS correctly working, the brain realised what had been happening. I had two concerned warnings from Brize Radar and two track corrections to keep me away from Bristol's airspace. After downloading my GPS data into Google Earth I could see that I was very close to or possibly inside Bristol's airspace.

Lessons Learned: Make sure your GPS is in ACTIVE mode before take-off, especially if you are using it as the prime navigation source and head in a sensible direction towards your first waypoint.

CHIRP Comment: This honest report provides several useful lessons and reminders for us all. At the planning stage it is important to write down (or print out) all of the headings for the track legs that you intend to fly.

As the reporter notes, before take-off make sure your equipment is working correctly and cross check all equipment as far as possible; even if a GPS is certified as a primary navigation aid, it must be cross-checked by an independent source. Before take-off know what your first heading should be and, having turned on to it, do a gross error check across all your available navigation aids, compasses etc. – does it all make sense? If the GPS looks about right then by all means consider it as the most accurate method of determining your position but continue with regular cross checks. Use all available resources, including the co-pilot, and don't forget that if you get conflicting information from your nav kit, there is no shame in using ATC or D&D to resolve the situation. That is what they are there for!

PROTOCOL FOR AIRSPACE INFRINGEMENTS

Report Text: Flying near the [] CTA, squawking the appropriate conspicuity code and listening out on the corresponding frequency, I overheard ATC asking another aircraft with the conspicuity code to respond. The other aircraft appeared to have infringed CAS. ATC asked this aircraft a number of questions related to the infringement, where the aircraft had come from and so on and a little while later another controller who sounded like a supervisor asked a couple more. The pilot of the aircraft sounded distraught at the error and although the questioning was not aggressive it seemed to be mainly

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related to recording the event rather than establishing safety.

I formed the view that the pilot was now so focussed on the error and the reason for it that the safety of the aircraft during the remaining flight was compromised. The pilot would need to be very resolute to be able to put those considerations aside and concentrate properly on safe recovery and landing. I understand the importance of analysing infringements but data collection could come later. I wonder if there is a protocol for the immediate actions that recognises the Human Factors (HF) impact of these events on the pilot? Once airspace safety had been assured the pilot could have been told, which would have moved the mental focus from the cause of error to the solution. The pilot could have been advised that the aircraft was clear of CAS or given a simple clearance confirming the situation was now under control again, re-establishing normal procedures and the situational awareness which would have been lost in the event. In this case the pilot had used the listening squawk system to mitigate infringement risk and it had been effective so he/she could have been told that, which would have also helped the transition back to safe flight. It would be unfortunate if the process of dealing with an infringement resulted in a HF related accident later in the flight.

The Air Navigation Service Provider comments: On average [] airspace is infringed over 10 times per quarter, often resulting in a rapid increase in ATCO and pilot workload. Air traffic controllers are required to provide extra separation between IFR traffic and unknown traffic within controlled airspace. The incident reported was resolved by the radar controller turning a departing IFR jet away from the unknown traffic. This traffic was using the [] listening out squawk and was subsequently identified after two blind transmissions by ATC, allowing normal ops (from an ATC perspective) to resume. The questions asked by ATC were timely, relevant, and appropriate given the stage of flight of both aircraft. The pilot contacted [] ATC after landing and explained the situation from his point of view, allowing us to complete an internal investigation as per company procedure.

ATCOs understand the need for CRM and can appreciate the workload of a pilot during normal ops. This workload no doubt increases when the pilot finds themselves in an unusual or unplanned situation, just as a controller's workload can increase when faced with an airspace infringer. There is no set way in which a controller deals with an infringement. They are trained to do whatever they see fit (with the exception of issuing a reprimand on the RT) to ensure safety and regain standard separation against traffic whose intentions are unknown.

CHIRP Comment: Although considerable work has been done to avoid ATC messages causing concern, pilot distraction caused by analysing a mistake and concern over potential implications of an error are well-known phenomena. Pilots finding themselves in this situation have to fall back on the old mantra of Aviate, Navigate and Communicate. The infringing pilot above was doing all the right things by squawking and listening out. He then followed this up by telephoning ATC after landing.

Mistakes happen; the professional thing to do is to minimise the impact.

AIR/GROUND SERVICE – INCORRECT R/T

Report Text I had planned and briefed a cross country land away with my student to an airfield that neither of us had landed at before. I had PPR'd and received a very comprehensive brief on the phone due to the intense parachuting on the airfield and was asked to call no later than 10nm to run to the overhead. I briefed my student in some depth the fact that the destination airfield operated an Air/Ground (A/G) Radio like ourselves and rehearsed some of the RT that we should expect. The flight was uneventful until we called up with 15nm to run. We were then given the airfield information and asked to report overhead. I found this unusual from an A/G operator but appreciate that even an A/G Operator can ask an aircraft to give position reports for safety reasons and at some airfields is common practice. We followed instructions and reported overhead and were subsequently asked to report downwind. Again, I found it a little pointless and unnecessary to ask us to do this since CAP 413 details where pilots should report. By now I was discussing this with my student and the Human Factors involved in incorrect RT and even contemplating the possibility that I had got it wrong and that the airfield was in fact a FISO. Reporting downwind we were then asked to report final and were subsequently told to "land at my discretion", a definite FISO phrase. I hesitantly read back the clearance as it was a phrase my student was unfamiliar with and something we had not discussed on the ground for obvious reasons. I tried to not let it get to me at this critical phase of flight but we were both a little perplexed. We landed safely but then compromised airfield safety further by sitting on the runway waiting to receive taxi instructions after calling three times as I was now under the impression that I was talking to a FISO. When we shut down I was a little annoyed to find out that they were in fact only an A/G.

On departure we received a variety of FISO expressions, such as "Taxi holding point A", "report ready for departure", "enter runway [] backtrack", "take-off at your discretion", all of which I was willing to ignore and forget since I know that "this was how it was done in the old days". However, 100 feet after take-off I was told to "turn right 100 degrees for noise abatement". This was unacceptably dangerous and was when I decided to write this report. Not only should a controller avoid talking to an aircraft at this critical stage of flight, but clearly headings should not be given by A/G, especially when this heading takes you towards a wind farm. As well as the safety issues, I also wanted to highlight the instructional issues. I found it imperative to thoroughly debrief my student afterwards and why this was so wrong for the fear of a less experienced pilot blindly following these instructions.

Lessons Learned: 1) Always fly the aeroplane first as the number one priority. 2) Make sure students understand why this is so wrong.

CHIRP Comment: It can be difficult to do, but pilots must guard against being distracted from their primary task – in this case instruction – and always Aviate, Navigate and Communicate in that order. The callsign '[] Information'

indicates that you are speaking to a FISO whereas the callsign '[] Radio' indicates an A/G Operator. Although this A/G Operator's efforts could be interpreted as trying to assist, the use of non-ICAO procedures and/or phraseology frequently contributes to misunderstandings and unintended consequences. A/G Operators should also be aware of the potential for legal consequences of inappropriate RT. The 'instruction' to turn shortly after take-off was particularly ill-advised and should have been raised directly with the aerodrome after the flight.

NOTAM INFORMATION

Report Text Since the accident last year to the A109 over London, the list of NOTAMs now contains a huge list of cranes; today I counted eighteen over London. Most of these are insignificant due to their size but clearly there is an impetus from somewhere (probably pressure from the CAA?) to NOTAM all cranes as a consequence of the accident. Unfortunately this is counterproductive as instead of noting the few important cranes, most pilots I know now simply brief along the lines of 'multiple cranes over London', which defeats the purpose.

I used to brief the cranes individually and specifically remember the one where the accident occurred because I used to brief it regularly, but now it's just one of many and there often simply isn't time to go through them all and/or to mark them on a map prior to getting airborne.

In the helicopter world we don't have the luxury of an ops team to do this for us and we can get tasking almost the minute we walk through the door. Please can we reintroduce common sense and NOTAM only those cranes that are significant, otherwise the blanket reporting of all of them is perversely more likely to cause an accident than selective reporting would.

CHIRP Comment: The CAA has initiated a project with the aims of reducing NOTAM proliferation, standardising the content and structure of NOTAMs as well as looking at other, and better, means of promulgating navigation warnings. An area of particular concern is the number of warnings that relate to tall structures adjacent to even taller buildings within the London region. It is recognised that too many warnings become unworkable and only serve to lead pilots to miss essential warnings. The project will look for both quick-wins as well as long-term enhancements to the notification system.

LARS

Report Text: During a recent flight I was a passenger with a CPL (H) and IR. Due to generally poor visibility, I took some load off the aircraft Captain by doing the radio work. We elected to take a Traffic Service from the LARS network for most of the flight. Whilst receiving a TS from [a military airfield en route], approaching the end of the day, the cloud base and visibility began to deteriorate intermittently below what was expected, although within the bounds of VMC (for helicopters). We discussed our options. I told the controller that the weather was below what was expected and requested the weather [for the next aerodrome en route, some 70nm away]. The controller responded by telling me that he did not have this information. We elected to continue [with the military

ATC] until able to speak to the next aerodrome directly, who were extremely helpful for the remainder of the flight. Some points to note: Our helicopter only had a single radio, so speaking with another agency would have meant loss of radar service. I felt this was not an appropriate course of action. There was very little activity on [] VHF frequency. In fact I do not recall hearing anything except for transmissions specifically meant for us. The controller appeared calm and available to us, and at no point indicated high controller workload.

Lessons Learned:

1) File the report early: I did not originally intend to file this report. It was prompted by a conversation with other pilots this week. It seems that the LARS/ATSOCAS system is widely misunderstood and underutilised by private pilots. Given the definition of a Traffic Service (which included those of a Basic Service), I have to disagree. That said, I am keen to learn if my understanding is wrong.

2) Request again: The situation warranted a second, more insistent request for the information. Had I made a second request, perhaps the controller would have understood the urgency.

3) VFR/IFR: I do not recall whether I indicated VFR/IFR to the controller. Again, perhaps this would have helped him understand the reasons for my request.

HQ Air Command and the Military Aviation Authority (MAA) Comment:

Pilots can expect exactly the same services from Military ATC as those provided by civilian controllers. [] ATC obtain weather information for the aerodrome requested by the reporter by phoning direct. When the incident occurred there was only one Radar Controller on duty at [] and they can often get busy with aircraft on VHF/UHF. [Pilots on VHF may not be able to hear transmissions on UHF and vice versa; it depends on the equipment in use and the modes selected]. The controller was unaware of the urgency of the request or that the aircraft had no other means of obtaining the weather. The controller was also preparing to hand the aircraft over to [the aerodrome whose weather was requested], which would have allowed passage of the information first hand.

If information is not forthcoming, it would be advisable to ask again and explain any urgency. This would be a good subject for discussion in the Regional Airspace Users' Group or one of the GA 'fly-in' days. The Regional Airspace Users' Groups are mixed civil/military airspace forums, held on a geographical basis and generally organised by the Senior Air traffic Controller of the appropriate RAF base. The composition is pilots, ATC and airfield operators and will normally focus on a number of 'hot topics' before opening the floor for general discussion. They tend to be held 2-3 times a year. All airspace users are encouraged to attend. The User Groups are an initiative from the RAF Safety Centre at:

<http://www.raf.mod.uk/organisation/rafflightsafety.cfm>

CHIRP Comment: The LARS systems is widely used but there is evidence that many pilots do not fully understand the provisions and limitations of ATSOCS, now known as UK Flight Information Services. A good, clear refresher guide for both LARS and ATSOCS/UK FIS can be found in the CAA Safety Sense leaflet from Jan 2013 at:

<http://www.caa.co.uk/docs/33/20130121SSL08.pdf>

It important to use correct RT phraseology whenever possible. However, the phraseology does not cover every eventuality and it is sometimes necessary to speak 'in clear'. Although it may have been the case that the most expeditious way of getting the requested weather information was to hand the aircraft over, it seems likely that if the controller had a more complete understanding of the reporter's circumstances and concerns he would have been better able to assist.

PILOT TRAINING

Report Text: I used to fly a 2-stroke (3-axis) microlight; the possibility of engine failure was something we lived with. More recently I have converted to a conventional light aircraft. Microlight and GA engines are now pretty reliable; we do not really expect an engine failure in normal flight. We also have GPS which means that we don't get totally lost very often, and have radio to help us out. In my part of the world we have a wealth of war-time bomber fields to land on too. So 'all in all' we don't expect to have an engine failure, and we don't expect to have to land in a field. However, the most likely need for a 'precautionary' landing is weather. (And as I found to my own discomfort) 'weather' can come out of a clear-blue sky very quickly indeed. When it does, there isn't 3,000 feet of ceiling, there's unlikely to be much forward visibility, it is probably quite turbulent - and your direction of flight can be 'what you are given'. Moreover, we have probably 'already put off the inevitable as long as possible'.

I understand that 'pre-war', precautionary landings in random fields were a way of life with commercial pilots - probably, like us, more because of weather than catastrophic mechanical fault. Which leads me to ask:

A) Should we really be teaching precautionary landings on the basis of "suddenly deteriorating weather" rather than engine failure or steadily deteriorating conditions?

B) Should we be teaching precautionaries from 350 feet, crosswind with 800 yards visibility?

C) Should we be teaching 'precautionaries' as a part of the general cross-country / navigation part of the syllabus (rather than, & I speculate, 'aircraft handling')?

CHIRP Comment: The precautionary landing with power is part of the PPL syllabus; the AirPilots' instructors' guide, currently in preparation, places it in the navigation phase: a 500ft oval pattern. It may be because examiners don't want to extend the PPL skill test more than necessary that it is seldom tested, or it may be the difficulty of finding suitable areas to carry them out that instructors regard them as a low priority. However, they should be taught to all students. If readers have not been taught the precautionary landing with power, they should ask for training during their next flight with an instructor.

LACK OF AIRMANSHIP

Report Text: I fly a flexwing microlight. I was running the engine up prior to take off when a light aircraft stopped directly in front of my aircraft and then immediately commenced pre-flight high revolution engine tests. I was directly downwind of his propeller wash and was heavily

buffeted about. I radioed the Control Tower requesting they ask the pilot to immediately turn his aircraft. He replied that I shouldn't have parked my aircraft there and continued his high revolution testing.

Lessons Learned: All Pilots have the occasional lapse while concentrating on take-off checks and procedures. A simple apology would have sufficed but the pilot blamed me for the incident. This triggered me to write to CHIRP.

CHIRP Comment: Pilots of powered aircraft need to be aware of the extreme vulnerability of light aircraft (particularly flexwing types) to prop, rotor and jetwash. It is a Captain's responsibility to do his utmost to prevent his actions having an adverse effect on others and aerodrome operators should not tolerate poor behaviour on their turf. In this incident the submission of a report through the CAA's Mandatory Occurrence Reporting System would have been appropriate.

Contact Us

Report forms are available from the CHIRP website or can be submitted via email and post.

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