CHIRP GA FEEDBACK

Issue No: 77 3/2018

Editorial Page 1 Reader's Comments on GA FEEDBACK Edition 76 Page 2 Pilot Error of Incorrect RT Frequency Page 2 Poor Maintenance – Rutted Taxiway Page 3 Damage During Taxi Page 3 Incorrect Join Leading to Potential Conflict Page 4 Lack of Lighting Page 5

EDITORIAL

'Be suspicious' is the theme in several reports in this edition of FEEDBACK. Not receiving the response you expected over the RT? Not receiving any response? Things that go bump on the ground. Probably OK? Worth checking? Worth checking thoroughly! We don't want to spoil our enjoyment of aviation by approaching every flight in such a state of apprehension that it is difficult to enjoy it or achieve our aims. At the same time we don't want to ignore the clues that might indicate that all is not well. It is helpful to develop a sense of curiosity and hugely important to learn from other people's experiences. Once again, we are indebted to all the reporters whose experience has contributed to this Edition of FEEDBACK.

<u>Drones</u>. The UK Airprox Board receives many reports about encounters between manned aircraft and drones; 15 out of 65 Airprox reports between February and May 2018 involved drones. How should GA pilots mitigate the risk of encountering a drone? First, it is important to realise that it is difficult to see small quadcopter drones in time to be able to focus your eyes, determine what it is and avoid it. Therefore the best option is to avoid flights in airspace where drones are likely to be operating.

The Light Aircraft Association has published advice that we are pleased to be able to repeat here. Before departure, particularly from small strips, look around; is there anyone - over the hedge - near a car with the boot open - who looks like he might be a drone operator? In flight remain above 500ft agl and on arrival at a landing strip orbit at a safe height to allow any drone operator in the area the opportunity to avoid the circuit and final approach. For those who wish to read in more detail about the rules covering drones, here is a <u>link</u> to the Drone Safe Website and here is a <u>link</u> to the PDF explaining the rules for non-commercial drone operators.

Note that UK Airprox Board (UKAB) advice is to fly above 3000ft where possible to minimise the risk of Airprox with manned aircraft. Anyone wishing to know more about the UKAB, their work or how to submit an Airprox report should visit their <u>website</u>. There is also a UKAB tablet/smartphone App available from Google Play and the App Store.





<u>Partial Power Loss</u>. In FEEDBACK Edition 76 we included a section on the hazards associated with partial engine failure on climb out. Readers are recommended to read the Australian Transport Safety Bureau briefing on partial power loss available on its <u>website</u>.

Ian Dugmore - Chief Executive

Back to Top

COMMENT ON GA FEEDBACK EDITION 76 - LISTENING SQUAWKS

With reference to the latest poster to be issued for listening squawks, surely the sequence is wrong. It does not make sense to select the squawk before listening out because there will be a period, brief or otherwise, when the transponder is indicating that the frequency is being monitored when it is not. The correct sequence should be to listen on the frequency then squawk the listening code once confirmed.

CHIRP Comment: We agree. On the majority of occasions it will make little difference whether the squawk is selected first or the frequency. However, there exists the possibility that some distraction may occur between the 2 selections and on balance it is better to have selected the frequency first.

COMMENT ON GA FEEDBACK EDITION 76 - NOTAMS

I read FEEDBACK GA edition 76 and felt I needed to make a comment.

Top of the list on your CHIRP Briefing to the CAA about GA Pilot Training Issues was 'Pilots not reading/assimilating NOTAM information'. I am a 'Bizjet' pilot as well as a flight instructor and examiner for GA. If you read NOTAMs regularly as I have to do you will understand why pilots struggle so much with this issue. It's all in secret code and more than 50% are irrelevant to their operation, so the NOTAM they should read is buried in the noise. The poor old pilot gets the blame for a broken system.

I have enclosed a <u>link</u> to OpsGroup web pages who recognised this some time ago and are now working with ICAO to try to improve things. Personally I think CHIRP should look into this as well and if they see the same issues put pressure onto the CAA to look at safety improvements in this area.

CHIRP Comment: The NOTAM system has weaknesses that make life difficult for pilots in many aviation disciplines. We do not know enough about the Flight Services Bureau to endorse its work but readers may wish to participate in its survey of NOTAM users by following this <u>link</u>. That said, until it is revised, pilots must work through the difficulties with the current NOTAM system and be meticulous in checking for relevant NOTAMS whenever they are planning a flight.

COMMENT ON GA FEEDBACK EDITION 76 - LOOKOUT AND DISTRACTION

Very interesting recent edition of CHIRP, particularly re lookout and cockpit distraction. BGA published guidance is available on the BGA website, accessible via this <u>link</u>. The aids should be there to help to direct and prioritise lookout, of course, not replace it. In a way it's a similar problem to over-reliance on controllers.

Until verbal audio warnings of potential collision become commonplace, eg 'left 11 o'clock low and closing' - which we're seeing in some FLARM informed kit - there's a growing distraction hazard out there that everyone needs to wake up to.

Back to Top

PILOT ERROR OF INCORRECT RT FREQUENCY

Report Text: I was conducting a cross country flight. After take-off I contacted Farnborough LARS then I was supposed to contact my destination. However, by mistake I returned to the frequency for my departure airfield and called them for join information.

So basically, I was in contact with the wrong station all the way in the circuit (overhead join, dead side, downwind, to final).

I did a safe circuit while maintaining visual contact and separation with other traffic, then landed. Once I vacated the runway, I then spent time changing the radio frequency to the correct frequency to let them know about my mistakes (calling the wrong station + land without permission) and then I request a Taxi clearance.

I only realized I was calling the wrong station while on final as the indication of runway 26 was not aligned with runway 24 and the AFISO at my departure airfield mentioned that they could not see me while I was on final, before I lost RT transmission/reception completely while on the last stage of my landing.

Lessons Learned:

Check the Frequency on the RT system before pressing the PTT button (not done).

Identify the station clearly on the initial call (Done it but ATC failed to correct it).

Spot and list of the confusion elements (Runways and frequencies).

Read about radio failure procedures (Done but no practice yet).

CHIRP Comment: Calling on the wrong frequency is an easy mistake and many of us have done it. Therefore, the reporter's first lesson learned is spot on! The AFISO at the departure airfield may have missed an opportunity to intervene by advising the reporter that he was on the wrong frequency. However, the first parts of many transmissions are clipped and it is possible that the AFISO simply did not hear the name of the airfield being addressed. The bottom line is to be suspicious when things begin to go awry but don't be distracted from looking out and flying the aircraft safely - as this reporter did following the Aviate, Navigate Communicate order of priorities!

Whilst it is a routine part of pre-flight planning to check the frequencies that will be required, the progressive changeover to 8.33 kHz Voice Channel Spacing has created more opportunities to be on the incorrect

CHIRP - Confidential & Independent Reporting

frequency. Before every flight during the changeover period it is essential to check whether the frequencies you plan to use have been updated. The definitive sources of information on the dates and channels are the <u>AIS Supplements</u>. However, a non-authoritative source that has proved reliable and which can be used for an easily-searchable cross-check is https://www.newfrequency.co.uk/

In addition, and in accordance with the 'belt and braces' principle, it is a good idea to check whether your destination airfield has changed its RTF channel when you telephone for PPR. Don't expect this information to be offered as a matter of routine: you need to ask! And remember, you can phone your destination to check even if PPR isn't required.

Back to Top

POOR MAINTENANCE - RUTTED TAXIWAY

Report Text: Taxying from the hold to the runway prior to take-off when a deep rut jolted the aircraft. Turned back to find cause. Nothing to be seen. The aircraft handled OK. Report to tower, "I think you have a hole there." Taxi to [runway] and took off.

On landing at [] it was found that the nose leg was bent.

CHIRP Comment: See the comment after the next report.

Back to Top

DAMAGE DURING TAXI

Report Text: We were due to fly our [tail dragger aircraft] on a cross country flight to []. Aboard were myself as handling pilot and [another experienced pilot on type]. While taxying out on the grass to the east of the active runway, a slight bump was felt and we turned and back tracked the taxiway for a short distance thinking we had gone into a rabbit hole or perhaps one of the concrete runway edge markers. Nothing was seen and we continued our taxi to the hold. All essential actions undertaken prior to take-off were as one would expect.

The take-off was normal, as was the landing at []. However when parked, we identified that there was now some damage to the rear of the light alloy fairing on the port undercarriage leg. Whilst still secure, this was distorted.

This was a mystery to us as to how it had occurred, since it was behind and effectively above the rear of the wheel. A thorough check of the aircraft revealed no other damage or marks. Our surmise was that something had come round with the wheel and caught the fairing.

On Friday morning, a phone call from the airfield manager advised that there had been a report of something falling from an aircraft on the Thursday from a member of the public. The observer had been just to the east of the airfield and on the path of the left hand circuit. I am not sure where the report was received. The object was collected from the caller on the Friday morning and proved to be a yellow airfield marker cone. Many of the cones on the airfield had been modified previously by having the top cut off because of previous incidents involving them and low wing and bi-plane aircraft due to the height of the pointed top of the cone hitting the underside of the wings.

It is surmised that this truncated cone had been in the track of the port wheel and that due to the top being cut off, it allowed the wheel to roll into the aperture so that the cone became a collar around the wheel. With the top cut away the moulded cone is quite flexible and it is assumed, had allowed the wheel to roll into it without any significant load. Shortly after the take-off, it is assumed the cone was blown off due to slipstream.

Now as handling pilot, I accept responsibility. With the benefit of hindsight, perhaps after the slight bump we should have disembarked to inspect but as it was only a minor bump and with various rabbit holes not unexpected and minor bumps are par for the course.

Secondly, with the very poor vision forwards from the cockpits, particularly the rear cockpit, maybe the weaving taxi which I employ to improve vision should have been more of an angle to track. The width of the taxiway does inhibit this with rough and poor ground to the east and the concrete inset markers marking the runway edge to the west.

I am not clear why the marker was on the taxiway, it may have been to mark previously soft ground but on previous occasions the airfield brief had included the advice concerning this. Normally the brief would have included the instruction to back track the runway to avoid the soft ground. Previously, smaller but taller cones had in my experience been on the edge of the taxiway near the rough grass.

However, I should have seen the cone, but didn't.

CHIRP - Confidential & Independent Reporting

CHIRP Comment: This comment covers both reports about problems encountered while taxiing for take-off. The second report is a good example of a solution to one problem causing a different one. The base of the cone would have been almost impossible to see from either seat of the aircraft before running over it and impossible to see once it had been picked up by the wheel. When taxying on natural surfaces bumps and jolts are to be expected and the difficulty arises in deciding what is normal and what requires further investigation. In the occurrences above, both reporters wisely turned back to investigate the cause. Hindsight again – but as the second reporter correctly notes - if there is enough of a jolt to inspect the ground for the cause it would be wise to shut down and conduct an external inspection of the aircraft.

Back to Top

INCORRECT JOIN LEADING TO POTENTIAL CONFLICT

Report Text: I was conducting a flight from [] to Blackpool, and the weather was IMC for most of the route. Due to controller workload, I was unable to obtain a crossing of the class D airspace between Liverpool and Manchester from Manchester Radar. I was offered either to try Liverpool Radar or to use the Manchester low-level route. Due to proximity to CAS, and that I had planned a parallel track, I opted to descend from 3000' to 1250' to use the low-level route. After descending into visual conditions, I followed the route, and then requested a frequency change to Warton for the MATZ penetration. This was obtained and within the MATZ, after obtaining the ATIS, I was told to contact Blackpool Approach.

The ATIS was broadcasting runway 10 in use, with wind of 140@14. I was aware that runway 10 was the preferred option when I called for PPR, and that conditions were VMC. Runway 10 doesn't have an ILS, instead using an NDB/DME approach, and considering the weather overhead at the time (10k vis, FEW 4900), I opted for a visual join and landing.

Upon contacting Blackpool, approaching from the south, I was asked how I wished to join, and I asked for an overhead join. Clarification was needed to see if I wished runway 10, or 13, which was also in use. I opted for 10, and was asked to join right base for runway 10. I believe that due to the quick changes between IFR flight and VFR flight, and that runway 10 is normally a left hand pattern, and the transfer between IFR and VFR arrivals, I was confused about the joining instructions. I remember thinking that joining base was odd, as I was on the opposite side (south) of the airfield pattern. I overflew the airfield, descended on a left hand circuit, and positioned to on a left base. When I reported, I stated that I was on a right base. The controller queried this, and I corrected to say left base.

After landing, I was asked to call the tower and had a conversation with the controller, who explained that with 13 active on a left pattern, 10 was on a right pattern, and that my actions may have caused a conflict (although thankfully, nothing occurred, partially due to my turning on to final at approximately 1000'). The controller emphasised that if confusion should occur, I should raise a query.

Lessons Learned:

- * Transferring between an IFR and VFR approach changes what you expect to happen. Any approach in VFR could be briefed in a similar manner to an IFR approach. Why not take a minute to work out where your joining will likely be, and what entry would work best for you, with the consideration that this may change?
- * Don't worry about doing an instrument approach in VMC if you have sufficient lookouts. Had I done this, I would have followed a set procedure and not had to essentially self-position for a join after a challenging IFR flight when not expecting it.
- * Just because a pattern is usually in one direction, doesn't mean that it will always be in that direction.
- * The controller was completely correct, something felt odd with the joining instructions, and I should have queried.
- * One mitigation could help with perhaps prompting me out of my expectation bubble use of the word 'non-standard'.

If there are procedures in place when a non-standard pattern is in use, saying "non-standard right base join" may help alert pilots to something being different than usual.

CHIRP Comment: The reporter had clearly planned his IFR flight thoroughly with a contingency option for using the Manchester VFR corridor. He was aware from the Blackpool ATIS that RW10 was in use. But the ATIS did not suggest that RW13 would be offered as an option by ATC and he could not have been aware that, with both runways in use, there would be a right hand circuit for RW10. However, the right base option for RW10 need not have come as a complete surprise as it is the most expeditious join for an aircraft approaching from the south. As it was, he could not reconcile the instruction to report right base with the standard left-hand pattern he had anticipated and he is correct in his lessons identified that he should have

CHIRP - Confidential & Independent Reporting

sought clarification. Pilots should always comply with ATC instructions in an ATZ rather than following a published procedure.

We are grateful for the airfield operator's comment that at Blackpool particularly, despite the circuit direction usually being to the north (LH 10 and RH 28), joins direct to the circuit from all directions are frequently used. Whether runway 13/31 was in use or not the joining instruction from the south would still have been a direct join to right base for runway 10 rather than an overhead join to the left hand circuit. Due to the proximity of Warton and the nature of the operation at Blackpool, there are frequently variable and multiple circuit directions in operation which, once again, highlights the importance of following ATC instructions and querying them if not understood. There are frequently issues with pilots who expect a particular join and continue on what they were expecting instead of understanding what they are being asked to do. At this airfield it is really important that this doesn't happen.

Back to Top

LACK OF LIGHTING

Report Text: It has become noteworthy recently how many helicopters and fixed wing aircraft operate both in and out of controlled airspace with only anti-collision lights in use when all have further lighting available. This applies in areas of high traffic volume as well as low light and low visibility (marginal VMC) situations. Modern helicopters and aircraft are fitted with position lights in addition to anti-collision lights, and often high intensity strobe lights yet often neither are switched on. Landing lights also are rarely used despite being mandatorily fitted.

Lessons Learned - Compared with FAA regulations in the USA where if operating HEMS, SAR, Police or Firefighting it is compulsory to have landing lights on at all times and fitted with a pulsing mechanism for visibility, which is also proven to aid in bird strike prevention. Given a recent fatal mid-air collision and the volume of lower level bird strikes in UK airspace an increase in awareness and further understanding of the benefits of being more visible could be considered. The commercial airline industry along with the offshore helicopter industry mandate use of lighting within checklist as appropriate aiding visibility and collision avoidance despite operating predominantly in the perceivably safer controlled airspace environment more often.

CHIRP Comment: It makes good sense for pilots to make their aircraft as conspicuous as possible to other pilots and birds. Caution is required on some aircraft types in which the selection of landing lights to 'on' automatically dims the cockpit lights, including the undercarriage greens. But all things being equal, if you've got them – flaunt them!

Back to Top

Reports received by CHIRP are accepted in good faith. While every effort is made to ensure the accuracy of editorials, analyses and comments published in FEEDBACK, please remember that CHIRP does not possess any executive authority.

FEEDBACK is published to promote aviation safety. If your interest is improving safety, you may reprint or reproduce the material contained in FEEDBACK provided you acknowledge the source.

Contact Us

Ian Dugmore

Flight Crew/GA and ATC

CHIRP, Centaur House, Ancells Business Park, Ancells Road, FLEET, GU51 2UJ

Telephone: +44 (0) 1252 378947

E-mail: <u>mail@chirp.co.uk</u>

Registered in England No: 3253764 Registered Charity: 1058262

Follow us on Facebook at CHIRP Aviation





Follow us on Twitter at @CHIRP_Aviation