

# **CHIRP GA FEEDBACK**

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## **EDITORIAL**

The good weather is on its way (hopefully) and thoughts are turning to longer, more adventurous flights in the UK and abroad. Great attention will no doubt be paid to ensuring aircraft and equipment are ready but are we tempted to ignore the most important component of all? The pilot. The sunglasses are cool but is it time to get prescription lenses? Caution though: polarised lenses may be incompatible with some modern avionics screens. Also, is your hearing as sharp as it might be? It might be your headset or those foreign accents but it might be your lug-holes. Are you physically fit, Maverick? Even the most benign flights are more physically and mentally demanding than waiting for the weather to improve so do something to prepare yourself; mental alertness, G-tolerance and the ability to resist fatigue can all be helped by being physically fit. And having done all your preparation, don't spoil it in the execution by over-imbibing during night stops on tour. A hangover can seriously degrade your performance and with the legal limit for pilot blood-alcohol at just 20mg of alcohol per 100ml of blood (compared with 80mg/100ml for motorists in England and Wales) there is a real risk you could be intoxicated rather than hungover. Also, the after effects of alcohol on balance and quick thinking last long after blood alcohol returns to zero – up to 48 hours! No good going on holiday and failing to make it back...

Ian Dugmore – Chief Executive

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### **ALUMINIUM SPEED TAPE FOR A/C SKIN REPAIRS**

**Report Text:** I was very surprised to see the photographs on the Internet of an engineer utilising speed tape around an engine nacelle to close a gap and therefore reduce vibration. I also see that it was being used on flap repairs. This tape made by 3M on their data sheet claims that the 425 and 426 variety can be used for aircraft repair. I have seen this tape in our consumable cupboard but have never seen it being used on airframes as a temporary repair as the tape does not have an approval or batch number on it. It has a FAR flammability rating but I was very intrigued when I saw the photos of it being used on an aircraft. Would love to know how you would certify this type of repair for flight as 3M as far as I can remember do not issue a batch or approval number for this product.

Look forward to your comments on this and only hope it is not an industry standard as I have never seen it mentioned in chapter 20.

**CHIRP Comment:** Metallised adhesive tape has been used to carry out temporary repairs on aircraft on non-structural applications for many years. Typical applications are to cover up minor impact damage on tertiary (non load-bearing) panels until a permanent repair can be effected. It can be used in some instances on flying controls (e.g. flap trailing edges) where cracks in the composite structure have appeared and to prevent moisture ingress, freezing at altitude and further damage. It is not intended for long-term repair and damage should be properly assessed. Although regarded as a consumable, speed tape should still have a batch number to show its provenance.

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### **PRESSURE FROM ATCO**

**Report Text:** Experienced PPL training for IMC rating in own aircraft. Called to join for booked training slot at [ ]. Told to remain well clear to south-west until slot time. Carried out holds at 3500ft 10 nm south-west in clear airspace. ATC requested ETA for the beacon; student misread watch and stated time 5 mins in error, implying one minute to go. ATC responded with admonition that we were told to hold well clear (we were actually 10 miles clear). Instructed to climb to 5000ft and proceed to beacon. During tear-drop entry to the hold, instructed to descend to 2500ft. Whilst descending, turning, configuring the aircraft, consulting approach plate, ATC gave clearance for NDB approach. Heavily loaded student omitted 3 words from read-back; aggressive reply from ATCO repeating clearance; student even more loaded by admonition and still performing complex flying task again read back incomplete response, triggering sharp response from ATC. As we approached the beacon in the hold, ATC cleared us for the procedure which the student understandably began (without calling beacon outbound). ATC then advised clear for the approach next time round the hold, when we were already established on the approach. At this point I abandoned the exercise for return to base (we were VMC throughout). Final aggression from ATC - I called leaving the frequency and ATC insisted on knowing who we would call. Good VMC so I intended to call nobody but use listening squawk; in Class G airspace you don't have to speak to anybody!

Lessons Learned - ATCO demonstrated no understanding of the high workload and pressures in the cockpit, and the associated human limitations. Student was technically in error, but matters were compounded by the critical and admonitory tone of the ATCO. It is the instructor's role to pick up and correct the errors; R/T slips should be publicly corrected only if there is a risk to flight safety.

**CHIRP Comment:** Unlike Information or Instructions, ATCOs have no discretion with Clearances; they have to be read back verbatim. In this incident it appears that both the pilots and controller were working hard and, given the routine difficulty of knowing how busy a pilot or controller might be at any particular moment, it is vital that pilots and controllers should use clearly-enunciated standard phraseology with no hint of emotion, frustration or disapproval. There is no requirement for pilots in Class G airspace to declare their next intended frequency but it can be helpful for controllers to know in some circumstances. When there is no intended frequency the expression “going/switching en route” can be used - or for traditionalists the following was heard a few years ago, “I am heading north and switching off my wireless!”

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### **AIRPROX**

**Report Text:** I was PIC of a PA28 returning from [ ] to [ ]. My passenger, also a PPL holder, had flown outward. On the first two legs of the return flight we were going directly into low sun and I had been flying mainly on instruments due to the poor forward visibility, with my passenger performing lookout. I hold an IR(R). We had been receiving a Basic Service and a new squawk. We were flying at 105 KIAS and 2700ft on the Brize QNH. We were tracking the 162R outbound from DTY, which put the sun in about our 2 o'clock, improving forward visibility significantly.

One or two minutes after the radar service changeover, at approx. 1447Z and 5 nm SE of DTY - roughly 3nm E abeam Turweston, my passenger emitted a sudden exclamation and several expletives. I was confused as to what his concern was for about 5-10 seconds; then I saw another [similar type] in my 9 o'clock flying directly away from us and 50-100ft (estimate) below.

My passenger was quite shaken by the incident and said that the aircraft had appeared to be coming directly at us and was close enough for the people on board to be visible. By the time I saw the aircraft the incident was over and it was separating from us.

The other aircraft's subsequent movement suggested it may have been on a track of about 140 degrees. We surmised therefore that it must have been approaching our starboard side from behind. The sun's position meant that our starboard visibility was still poor.

No traffic information regarding this conflict was passed to us by Brize Radar. As far as we could deduce from RT exchanges after the incident, the other aircraft was not on Brize frequency. We were unable to note its registration. We considered it might have recently departed Turweston, but given our proximity to the airfield we felt it unlikely that a PA28 could have gained sufficient altitude for the conflict.

I fully accept that responsibility for conflict avoidance is the responsibility of the PIC. However, we felt strongly that as the other aircraft would have had the sun further behind it, our aircraft should have been much more obvious to its crew than it was to us.

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Lessons:

1. Lookout in the vicinity of ground-based nav aids needs to be especially vigilant.
2. My passenger admitted that he may have been momentarily distracted with inputting next frequencies after the radar service handover.
3. A hand-held LPAT\* is certainly worth considering.

[\*LPAT: Low Power ADS-B Transceiver. (ADS-B: Automatic Dependent Surveillance – Broadcast). Hand-held, battery-powered, supposedly “low-cost” receiver for airborne transponder signals. Technology apparently still undergoing trials, nothing available yet, maybe next year. See [Clued Up Spring/Summer 2015](#).].

**CHIRP Comment:** Airprox incidents can be investigated more thoroughly by the UK Airprox Board (UKAB) than by CHIRP because the UKAB has ready access to radar and RT recordings and the resources to trace the pilots and controllers involved to ask for their recollection of events. Nevertheless, from the CHIRP perspective there are several aspects of the report that bear comment, including agreement with the reporter’s lessons identified. It is not clear when LPATs might become available but we encourage the fitment and use of electronic conspicuity and alerting devices. The Airprox occurred in Class G airspace where the pilots in both aircraft shared an equal responsibility to see and avoid other aircraft. The reporter did not see the other aircraft in time to take avoiding action; without a statement from the other pilot, it is not clear whether he saw the reporter’s aircraft and stood on his course, or whether he did not see the reporter’s aircraft in time to avoid it by a greater margin, or didn’t see it at all. The reporter was in receipt of a Basic Service from Brize Norton. Under this Service there was no obligation on the Brize ATCO to provide Traffic Information and he did not do so. In conditions of poor visibility and/or busy airspace it is recommended to ask for a Traffic Service; if it is not available don’t expect any Traffic Information under a Basic Service.

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### **SERA 5005 - ATC SUSPENDING OPERATIONS**

**Report Text:** I was engaged on an instructional cross country flight with a TAF at my destination [in Class D airspace] of ‘EG\*\* 2112/2118 21013KT 9999 FEW012 TEMPO 21122118 21018G30KT 6000 RA BKN 008’. The flight went very well and the student learnt a great deal due to the strength of the wind and commented on the high ground speed and the need to keep ahead of the navigation. He carried out all radio calls and handled the aircraft throughout. Approximately 10nm from [our destination] the student called and was surprised to hear we could not join as the visibility was less than 5 kms! We had good ground contact and the visibility was between 3 and 5 kms. I advised we would continue and assess the situation from closer in. The student was still flying the aircraft, as the forecast stated TEMPO, I felt that this was a passing shower and would clear, allowing for our relatively low ground speed we had a little time to pass. Some 3 miles from the airfield, still at 1400’ and with good ground contact and the student still flying the aircraft, we were again told we could not join as the visibility was less than 5000 metres. I confirmed I had good ground contact and was happy to continue, this request was refused. I had no option other than divert. I tried an airfield downwind but they were water logged, so the next option was [ ], although it is considerably higher field elevation than our planned destination. ATC at [ ] were as ever excellent and initially offered a downwind join. However, due to deteriorating weather we were forced to climb and eventually landed uneventfully from an ILS. The wind was quite strong so when the hangar was offered I accepted. Shame the total bill came to £243.00 with the taxi as [ ] do not accept weather Diversions!

Lessons Learned: I have been instructing for many years and have always believed that the pilot has ultimate responsibility for the safe conduct of the flight, taking into account available weather information and any ATC observations. Now it seems that an airfield in class D airspace can just close. The major concern I have is that SERA states:

It does not matter what the pilot can see it is the official aerodrome meteorological report that determines if flights can take place. When two visibility values are reported the lower value is used.

Surely there should be an element of common sense. When the controller is fully aware of the pilot’s ability, as some months earlier I had landed in much worst conditions.

**CHIRP Comment:** The reporter is correct that it is the SERA regulations that have reduced the minima to be applied for VFR flight in control zones. SERA.5005 Visual flight rules states:

- (b) Except when a special VFR clearance is obtained from an air traffic control unit, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or aerodrome

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traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:

- (1) the ceiling is less than 450 m (1 500 ft); or
- (2) the ground visibility is less than 5 km.

This aerodrome is equipped with cloud base and visibility measuring equipment. The controller had no other option when he advised the reporter that he could not join the circuit because the weather (4000m, few at 900ft and broken at 1500ft) was below VFR minima for arrivals and departures. The aerodrome was not closed and would have been available for use in an emergency. However, this was not an emergency situation as the instructor was always fully in control of a serviceable aircraft and at no stage was his situational awareness compromised, including his options for a diversion. The incident also demonstrates the importance in poor weather flight planning of identifying a diversion airfield with weather that is forecast to be suitable for the duration of the flight.

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### HELICOPTER HAZARD

**Report Text:** I was carrying out circuits at [ ] on the unlicensed runway when the controller put a helicopter on the hover square [about 500m from the upwind end of the runway]. I pointed out this area was below the climb out, I was told in no uncertain terms that the aircraft was on the ground (at this stage it was not) and it did not encroach on the climb out. Either way the helicopter was in position for two circuits and only touched down after my comment. This distracted the student, and when you consider any number of things that could have gone wrong: we could have had an engine failure or the helicopter needed to lift off for some reason. Is it normal aviation practice to take off over a hovering helicopter? I suppose I should have declined to touch and go?

**CHIRP Comment:** As the runway in use is unlicensed, responsibility for safe operations on and from it lies with the aircraft commander. That said, Commanders are always responsible for the safety of their aircraft and, if concerned about the proximity of the helicopter, it would have been prudent to go around.

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### AUTOMET TRIAL

Following successful pilot trial at Cardiff and Glasgow, there is currently a further trial being held at Bristol, Edinburgh, Heathrow and Stansted airports into the use of automatic met observations. The trial has now been extended until the 17<sup>th</sup> June 2016. The details are promulgated in [AIC Y 069/2015](#).

The AIC contains useful information about the trial and the differences between manual and automated reports. It also contains an e-mail address for requesting further information about the trial. However, it does not contain the link for pilots to feedback any comments they may have about the automated service. The easiest way to submit feedback, which would be welcomed by NATS, is on line form at - <https://www.surveymonkey.com/r/Automet>

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