**CHIRP** Aviation and Maritime Confidential Incident Reporting



# Editorial

Winter is coming! Those who are aficionados of 'Game of Thrones' will recognise those words and the dread that they instilled within the storyline. But it's time for us also to think about the implications of a return to the cold, wet and often gloomy days of winter. For some, it's a question of hanging up the flying kit and hibernating until next Spring, but for other brave souls there are enough crisp blue flying days to be had that justify that everhopeful check of the met forecast each day.

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# Contact us

Whilst being weather-aware is always important, it's even more so in the winter months when things can change rapidly and unexpectedly in flight, or there's a temptation to get airborne when the weather is close to the limits. Concerns about variable levels of instrument flying ability have troubled CHIRP for some time, and this summer we sent a note to the CAA that highlighted our concerns about a lack of instrument experience that can sometimes be evident during skill tests and the arguably minimal amount of practical instrument time that is now in the overall PPL(A) syllabus.

All of which was prompted by a report we received a while back about the 180° 'get out of trouble' turn when encountering rapidly deteriorating weather. Pilots, in general, tend to be goal-orientated people who often feel pressure to complete a flight and get to their destination. 'Press-on-itis' is a well-documented human factor that is particularly evident, and there have been a number of accidents and incidents in the past involving PPL(A) holders who may have falsely believed that they could fly adequately in the sub-optimal conditions they encountered. In the report I mentioned above, the reporter commented that they "...felt very rusty" when flying on instruments, and that they "...definitely did not feel in control of the aircraft at this point!". The reporter's telling final comments were, "Finally, I would recommend that any non-IMC rated pilot regularly practises the 180° degree turn in simulated IMC in any type you fly (with a safety pilot of course). When was the last time you practised it? I know that it saved me on this occasion."

Wise words indeed; when was the last time that you practised that 180° turn on instruments? Why not seek out an instructor and gain some proper instruction on instrument flying before the bad weather really settles in and you may have to turn to those skills for real? Weather patterns and visibility levels encountered in this country can quickly catch out experienced and inexperienced pilots alike; you may technically be flying legally, but you need to be able to cope with those conditions confidently and safely, especially in reduced visibility situations approaching 1500m.

The bottom-line? Don't push the weather, especially in winter, and have a Plan B for when things start to deteriorate. That way you hopefully won't have to fall back on your instrument flying skills – but be ready and practised in at least the 180° turn just in case things go quickly and unexpectedly pear-shaped. Whilst on the topic of winter operations, although it's largely focused on icing and bad weather rather than instrument flying, the <u>CAA Safety Sense Leaflet No3</u> on 'Winter Flying' contains many good gems that are worth reviewing before the hard weather arrives – why not take the time to sit by the fire in the clubhouse with a hot cup of cocoa and have a read? And whilst you're at it, and especially having now entered a second period of lockdown, have a think as well about all those issues that we learnt about regarding returning to flying after the last COVID-19 long lay-off so that you're ready for when this lockdown ends and/or the weather improves.

Safe flying!

Steve Forward Director Aviation

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# **Comments on Previous FEEDBACKs**

# Comment No 1 – Transition Level vs Minimum Sector Altitude

**Comment**: Report No.5 in Edition 85 states: "We are now mandated to inform every aircraft of the Transition Level (TL). At my unit, this is done via the ATIS... outside CAS in the UK, TL is based on the standard 3000ft. At our unit in Class G, we must work on that, despite our Minimum Safe Sector Altitude being 5600ft. This means we transmit a Transition Level which is not Terrain Safe and is below Minimum Sector Altitude (MSA). This is inherently unsafe... ". Perhaps a naïve suggestion but, if TL is being announced on the ATIS, would it not be possible to add to the broadcast something on the lines of "TL is FL nnn, which is below MSA for this Sector"?

**CHIRP Response**: CHIRP's plea for many years has been to reduce extraneous comments on ATIS so that transmissions are succinct, temporally relevant and not something that just contains standard unchanging information – enduring information (arguably such as the relationship between TL and MSA) should be in the AIP. In this case, it was also CHIRP's view that it was the responsibility of the IR pilots to know that, if they were below MSA when IMC, then they still had to ensure that they were more than 1000ft above the highest obstacle within 8km. At some point you have to assume that IR pilots take responsibility for how they operate within the required rules and procedures, and so we shouldn't be replicating the rule book on ATIS and telling them how to operate their aircraft. And if the pilots are VMC then it's not an issue anyway because the rule then changes to simply 'visually avoid the ground/obstacles' irrespective of TL versus MSA.

# Comment No 2 – Introducing changes

**Comment**: Regarding Report No.6 in Edition 85 –Brushing up on weak points. The comment "... starting your engine/s with your headset off" should be qualified. If you are familiar with starting with your headset on, that is your reference point; be careful if considering a change of reference point. With a headset, all frequencies are not attenuated equally, so without the headset, it is not just louder, it is quite different. I scared myself several years ago by not putting my earplugs in after a fuel stop on a motorbike, as when back on the road, the (normal) noise from the drive chain sounded like a serious engine fault. Refitting my earplugs fixed the engine! The noise and vibration when starting an engine come from both the engine and the airflow, and cover a wide range of frequencies. I generally start my engine with headset on, but noise-cancelling off. I turn noise-cancelling on after completion of the initial climb.

**CHIRP Response**: All good points thanks, we all need to be careful not to introduce too many new variables when making changes to our routines, otherwise we're creating our own problems. In the commercial world, change management is an important part of their safety management processes and each new procedure must be exhaustively reviewed to ensure that new problems aren't introduced. Whilst we're sure that not many GA pilots will have access to ICAO documents on a routine basis, the ICAO Safety Management Manual (Doc9859 for those keen to look it up) offers the following wise words:

Hazards may inadvertently be introduced into the aviation system whenever change occurs. Existing baseline safety risk mitigation processes may also be impacted. Safety management practices require that hazards resulting from change be systematically identified and strategies to manage the consequential safety risks be developed, implemented and subsequently evaluated.

In summary, *ad hoc* unplanned changes can easily lead to their own safety issues and so changes should only be made that have been properly thought through and planned.

#### Comment No 3 – Passenger flying

**Comment**: August's CHIRP report of the nervous Chipmunk passenger reminded me of happy days long, long ago when I finished my slot at an air display and removed my helmet to find myself gazing into two huge blue eyes. Beneath them was a shapely fuselage beneath a T-shirt bearing a picture of a biplane above a tight-fitting pair of shorts which in those far-off days were known as Hot-Pants. She wanted to be a pilot, her only flight had been to Majorca and back for package holidays. Her smile would melt the hardest of hearts. Well, I suppose she could sit in the Tiger Moth to have her photo taken. Yes indeed aerobatics were great fun... the display had another hour to run, but perhaps after the airfield reopened...

I borrowed a helmet and a pair of coveralls. There was no intercom so I explained I would be very gentle, and we agreed that one dainty thumb up would mean good, thumb down meant take me smoothly back to the airfield, please. I wanted novices to enjoy their first aerobatic flight so that they would come back for more, and best of all learn to fly themselves. We began very gently with chandelles, then loops, then a barrel roll which produced both thumbs held high and a dazzling smile over her shoulder. The 90-deg stall turn and Cuban eights went equally well, indeed so well that I decided she would enjoy a slow roll. Big mistake. Turning upside down and falling into the straps was too much for my pretty passenger, who grabbed the handle which Mr de Havilland had conveniently situated in the centre of the cockpit, pulled it back and held it tight. My first reaction was that the controls had jammed as the Tiger Moth fell out of the roll into a half-loop and started up the other side before the beautiful one remembered her briefing and released the stick just in time for me to avoid a tailslide which might have taken off the full-up elevator. In fairness she was very apologetic and gave me a big hug as I helped her down from the wing.

My grizzled old CFI, who had 2000+ hours on wartime Tiger Moth instruction, said he had known one or two pupils freeze on the controls, and said we should always be ready for the passenger or student who does something unexpected when they encounter something they don't expect. Next day I removed the 2BA bolt securing the front stick and replaced it with a spring-secured cotter pin so the tempting 'handle' could be stowed out of harm's way when necessary. I know you're wondering ... well, I never saw her again and I've no idea whether she became a pilot.

**CHIRP Response**: Different times...but the message remains the same, flying with passengers requires careful consideration, risk management and briefing. If it's possible to remove or disable any sources of likely embarrassment in case over-eager passengers act unexpectedly then it's a good idea to do so, but only provided it doesn't affect your own ability to fly the aircraft properly and safely – and CHIRP certainly doesn't advocate the adaptation or removal of cockpit controls and levers etc when not an approved modification. The same is of course true for any flight – ensure all hazards are secured or removed before going flying, including things like passengers' camera straps, cushions, removable ballast or anything else that might be carried in the cockpit that isn't well secured or bolted in. As for pilots being seduced by hot pants, a dazzling smile and bright blue eyes (or well-honed abs and a manly beard in these days of equality and diversity!)...enough said!

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# Reports

# Report No.1 – Class D Airspace Incursion

Report Text: I was involved in a Stansted incursion overhead Ware on my way down to North Weald in my [aircraft type]. I realised what had happened immediately and took over the flying and dropped down to below the base of their zone. I wasn't flying at the time, but I was in command and so it was my fault. The other pilot is a relatively low-hour pilot and we were on our way to North Weald to have some snags looked at on my [aircraft type] after I had only picked up the aircraft earlier in the week. As we started to approach the zone, I told him to drop down to 1000ft QNH well before the town of Ware to ensure we were well below the Stansted CTA. I glanced at the altimeter my side and simply misread what it was showing me. I was listening out on Essex Radar and heard the controller advising another aircraft about an aircraft infringement and potentially conflicting traffic, I realized with horror it was us and I am truly very sorry. I immediately called up Essex Radar and apologised to them and explained that it was me and I would ring them as soon as I landed. After landing at North Weald I called them immediately on the telephone and explained what I had done and apologised for the inconvenience and problems I had inevitably caused. It was a classic Swisscheese-model issue with a number of individual problems with a new radio, the transponder apparently not working properly, an unfamiliar old altimeter, and a problem with my headset. I had become distracted whilst trying to sort out these issues at a critical moment of the flight when I should have been concentrating on the flight in hand and what the other pilot was doing.

I made a classic error in terms of threat and error management (TEM). I was aware of the threat of going into the airspace, but what I had not anticipated was that I would misread the old altimeter, thinking that I was at 1000ft, when I was actually at 2000ft. The other error I made was not squawking 7013, the [listening squawk] for the zone as soon as I transferred from Luton Radar. This was because I was confident, incorrectly, that I was at the right height, and I would have to change over to North Weald Radio in literally a minute or so after setting the new code. If I had set the code, then Essex Radar might have had a chance to contact me to give me the heads-up that I was about to enter their airspace and alert me to the fact that I was misreading the old altimeter. Although I was not flying the aircraft, clearly it was my responsibility as the commander; the pilot flying said that we were at 1000ft when in fact we were not. I suspect that this was as a result of confirmation bias as he had struggled to maintain level previously due to what appeared to be quite gusty or thermal conditions, and there was probably quite a steep cockpit gradient between us because he had been a student of mine.

**CHIRP Comment**: We're grateful to the reporter for this frank and honest report, and his own analysis which highlighted the problems of distraction and confirmation bias. It is only through the altruistic contributions of aviators like him that we can highlight such things, and the report is a useful reminder to all pilots, be they experienced or inexperienced, of the need to guard against complacency. It should also prompt us all to double check the important things like height and location near to controlled airspace – GASCo promotes the '<u>Take 2</u>' initiative as one such example of how we can provide a little buffer for ourselves when possible. The other issue that the reporter mentions is that of <u>listening squawks</u> (aka Frequency Monitoring Codes (FMC) – current version at link). As ever, it's a balance between priorities at the time but, if at all possible, pilots should set the FMC and listen out on the appropriate frequency near controlled airspace even if they can only do so briefly before selecting their airfield frequency.

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#### Report No.2 – Badly-worded de-activation NOTAMs

**Report Text**: Recently, I found myself planning a flight from the South Coast to Suffolk via the Eastern edges of Southend's controlled airspace. In planning this route, I would make use of various NOTAM sources: NATS AIS; Sky Demon; and NOTAM Info (by email and via the map). For the flight in question, Southend was affected by the following NOTAM:

Q) EGTT/QAECD/IV/NBO/AE/000/055/5135N00045E017 A) EGMC B) FROM: 20/06/18 15:15C) TO: 20/06/30 19:00 E) SOUTHEND CTA, CTR, ATZ DEACTIVATED. AD CLOSED. NO ATS AVBL SCHEDULE: 1515-1900 This is a fairly 'common' NOTAM during the COVID-19 pandemic to reflect aerodrome limited operating hours or closure. I'm concerned that the poor wording of such NOTAMs presents a very real increased risk to airspace infringements simply because the daily schedule of airspace deactivation is not communicated very effectively. The wording is sufficiently confusing to suggest the airspace might be deactivated from the start time on the start date to the end time on the end date, rather than 'daily'. Other pilots I have spoken to seem similarly confused.

In the example shown, is Southend closed between 15:15 on 18th June through to 19:00 on 30th June, during which time their airspace is deactivated, or is it closed DAILY between 15:15 through to 19:00 between those dates? Could guidance not be provided to improve the wording and avoid confusion like this? Specifically:

- 1. Rather than 'AD Closed', perhaps 'AD Closed Daily (between)'; or,
- 2. Rather than 'AD Closed', perhaps 'Limited AD Operating Hours'?
- 3. Rather than the FROM and TO times being 15:15 and 19:00, would it be less confusing for the NOTAM period to be from 00:01 to 23:59, but the schedule being 15:15 19:00, to make it clear that the deactivation times have been deliberately specified.

Furthermore, on SkyDemon, the software successfully colour-codes the CTR and CTA to show if deactivated, but it is not sufficiently advanced so as to deactivate the airspace based on the time of flight, and it has not deactivated the ATZ. So, you now have a situation where a pilot can check Sky Demon, AIS and various NOTAM info type maps and get three different answers, with significant ambiguity due to the NOTAM wording.

**CHIRP Comment**: NOTAM clarity is a long-running issue for CHIRP. Wording and field content are the subject of fairly strict ICAO limitations that are in place to cater for all countries irrespective of first language but, as a result, can sometimes seem a little opaque. On a positive note, we understand that the CAA is participating in a world-wide review of NOTAM content in order to bring the NOTAM system into the modern age. We agree that although some standard phraseology is required, better guidance to NOTAM compilers to ensure that the contents of free-text fields are easily interpretable would be beneficial.

More specifically, we agree that some of these deactivation NOTAMs have been very poorly composed, with detailed and careful reading required to divine what they were saying. We're aware that the Airspace Infringement Working Group (AIWG) have already addressed this issue, and the CAA have published guidance to NOTAM compilers about the need for plain English text rather than cryptically composed messages. The relevant Airspace Safety Initiative (ASI) link is at Item 17 of <u>https://airspacesafety.com/local-area-information/</u>, and this provides some excellent information about NOTAM and moving map interpretation. We also asked the CAA the extent to which deactivation NOTAMs had contributed to airspace infringements but, at the time of writing, we haven't had a response yet - the link above indicates that 'a number' of infringements have resulted from misinterpretation of deactivation NOTAMs, but we don't have hard numbers and will continue to follow this up.

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#### **Report No.3 – VFR vs IFR interaction**

**Report Text:** I operate out of [Airport] as an [Airline] Captain. Additionally, I instruct part-time and operate a light-aircraft out of a strip inside the CTR. In my opinion, many controllers at the unit have a poor practical grasp of GA. Light-aircraft are regularly held for lengthy periods, little is given in the way of Traffic Information, and they are generally treated as an IFR aircraft in terms of separation. I regularly, reluctantly, find myself 'pushing' for Traffic Information and give a confirmation that I have the IFR traffic in sight. Usually this does result in a clearance to proceed, but it shouldn't be like this! A typical example today was as follows. I was inbound to the strip, which involves flying through the [Airport] final approach at 3 miles. Upon reaching a point 4 miles from [Airport] I was instructed to hold due to IFR traffic I am following: "Helicopter at 8miles" I am informed. After advising that I have this in sight, again after a delay, I am permitted to cross final approach behind the helicopter, keeping it in sight. I'm VFR, it's IFR: basic stuff yet poor over-controlling results in inefficient multiple transmissions and the unnecessary need to really push ATC to do their job!!

Lessons Learned: it's a mixed-use airfield but many of the controllers need more practical experience/exposure of GA traffic. They also need reminding of the clear notion of Traffic Information to VFR aircraft on IFR traffic, and see-and-avoid the conflict.

**NATS Comment:** The integration of VFR traffic with IFR is often raised by GA pilots with ANSPs. An aspect which is sometimes forgotten is that the controller has to maintain the ability to pass Traffic Avoidance if requested by the IFR pilot depending on the airspace classification. Therefore, sometimes it may appear that controllers operate in a defensive manner. Assuming that a VFR pilot will see-and-avoid based on Traffic Information may sometimes not be enough, so the onus is on the controller to try and maintain control of the situation and it is necessary to obtain a full understanding of the traffic situation before being able to provide an assessment. In other words, a controller cannot assume that the VFR pilot has situational awareness unless he has called that he is visual with the other traffic and, until that point, the controller has to assume that he will be required to intervene despite the fact that the onus is on the VFR traffic to avoid the IFR traffic. As a result, controllers err towards ensuring that their airspace remains a 'known environment' with the result that they may sometimes 'over-control' VFR traffic to the extent that, occasionally, Class D airspace can, for all intents and purposes, effectively feel a bit like Class C airspace.

**CHIRP Comment**: Safe operation of IFR traffic in the CTR is a fundamental responsibility for ATC, and they need to ensure that VFR pilots are fully aware of the IFR traffic and their responsibilities for avoidance before they clear them into their Class D airspace. But within their associated Traffic Information, they should not be applying specific separation or delays to VFR traffic which will be operating under see-and-avoid criteria. That being said, VFR traffic also needs to be fully cognisant of the need to avoid IFR traffic by a suitable margin, especially if the IFR traffic is TCAS equipped. In the latter respect, although a VFR pilot may do all that is required to avoid a collision, they may legitimately fly sufficiently close to IFR traffic to cause TCAS warnings that an IFR pilot is obliged to action, with the associated potential need to deviate from their flight path and ATC clearance in what can sometimes be very busy controlled airspace with numerous other IFR aircraft in proximity and at critical stages of flight. As a result, controllers often try to make sure that VFR traffic is routed around IFR traffic, despite the fact that, technically, in Class D airspace VFR traffic bears the responsibility for their own avoidance.

It is probably true to say that some controllers have little experience of GA traffic depending on where they are controlling, and so they may also 'over control' on that basis. Equally, the capabilities, qualifications, skill-sets and attitudes of some GA pilots can be uncertain, and so controllers have to cater to the lowest common denominator when interacting with GA. There is uncertainty on both sides of the debate, GA pilots sometimes cannot be sure of a controller's skills and attitudes towards GA traffic, and controllers cannot be certain of the GA pilot's skills and attitudes when entering controlled airspace. That being said, CHIRP supports the need for better standardisation within the controller community regarding how VFR traffic is treated and routed in Class D airspace.

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#### **Report No.4 – Transponder Accuracy**

**Report Text:** I have a hand in maintaining a club motor glider which had a transponder (XPDR) issue; the aircraft in question has a ModeS XPDR. Various pilots reported multiple ATC requests to confirm altitude, with one in particular needing to prove that he had not infringed controlled airspace. There appeared to be a discrepancy of approximately 400ft.

I took a flight with one of the reporting pilots and we checked readings with ATC, which appeared to be within limits. Some head-scratching followed as this result did not confirm reports. The issue was subsequently confirmed to me when asking for a transit clearance; the associated check of altitude and pressure setting confirmed approximately 400ft excess altitude being transmitted by the ModeS XPDR in ACS mode with extended squitter - I put the XPDR U/S. I then took to the books and tried to figure out what could be amiss. Eventually it became clear – as a motor-glider, as well as normal Pitot and Static pneumatic connections there is also a Total Energy (T/E) connection. I did the sums for the pressure reduction provided by T/E at the cruise airspeed and this related to about 400 feet! A quick look behind the panel revealed that there were 2 (unmarked) black pneumatic tubes and - yes you have guessed – the T/E was connected to the XPDR and the Static to the variometer (a

sensitive rate of climb instrument - T/E is used to remove speed variation indications (stick lift) in gliding so that you only 'read' energy gain (or loss)). Problem solved! The tubes are now labelled and will, in due course, be replaced with new colour coded (and labelled) replacements! Unmarked connections of the same type and colour with different functions is not good engineering practice!

**CHIRP Comment**: Some excellent sleuthing by the reporter eventually revealed the problem and it's likely that not many pilots would think to delve behind the instrument panels to check the connections if they were being told by ATC that their altitude readouts were in error. Although the fault was perhaps specific to motor gliders and gliders in this case, if ATC do query your transponder outputs then it's important to do something about it and have the system checked out by a qualified engineer. It may not be something as simple as misconnected pipes as in this case, but it's not something to ignore. CHIRP understands that the specification for transponder readout is +/- 125ft; whilst ATC use +/-200ft as their tolerance for pilots being at the specified level – it doesn't take much of an error in the transponder before ATC will rightly be asking questions. Given the current focus on airspace infringements, the need to ensure accuracy of transponder outputs is therefore critical, and pilots should regularly check their aircraft's transponder outputs with an ATC radar unit to make sure they are within specification.

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#### **Report No.5 – Farnborough Airspace Changes**

**Report Text**: I am writing to you about my experience in the hope it will alert other pilots to the impact of the changed Farnborough airspace, particularly on visitors to Blackbushe. This is not a criticism of the changes themselves, which were implemented in February 2020 during about 6 weeks of fairly poor flying weather before [COVID-19] lockdown occurred.

In pre-flight briefing for a visit to Blackbushe, I checked my route on SkyDemon, plotted it on the CAA charts, read the documentation on the Blackbushe website and the FAQ's from Farnborough. I previously trained and was based for [many] years at Blackbushe, so considered I was familiar with the procedures and locality. I called Farnborough and stayed with them until 5 miles out when I transferred to Blackbushe where I was given RWY25. As I entered Crosswind, I was advised and spotted a C152 climbing after go-around. Aware it might be a student or inexperienced pilot regaining currency, I chose to orbit to give space and not harass. I slowed to safe minimum of 75kts with full flaps to allow space. I was visual for most of the circuit, but for a moment lost sight on his base turn. Now mid-downwind, I chose to extend over the lake as had been normal so I could continue safely to land. I turned base on the east edge of lake with the other aircraft now on runway.

The following day I received by email a notice of an MOR from Farnborough for infringement of their airspace whilst I was downwind. I checked my SkyDemon logs, and I could not have entered the CTA by more than 200yds. I checked back on the documentation and the information is there about the route and warning about downwind leg extension. To be fair, 'Rules is Rules' and an MOR is required but, as the email report advises, there was no conflict with other aircraft from Farnborough. I have been advised that a better course would have been to abort circuit, go around at circuit height, remaining within ATZ and re-join at Crosswind. However, at the time I was concentrating on the aircraft ahead to ensure I did not close too much - I was sure I could safely continue if I extended a very short distance as had been common practice. The new CTA was not uppermost in my mind at that time.

I have nearly 2000 hours of recreational flying, and this experience gives me concern for less experienced pilots who may be in a similar situation and not have fully appreciated the strict CTA administration at the end of downwind. Whilst I am told my infringement was minor, no conflict, and will probably not result in further action other than a CAA letter and noted on records, it may be different for other pilots. I feel more flexibility could be shown in these early stages by Farnborough in issuing an MOR. It is no surprise that in FAQ's by Farnborough, extension of the downwind leg is raised. AOPA bulletins and EASA 'Sunny Swift' articles recommend extension downwind as a safe and preferred option in the circuit with other traffic.

I don't feel adequate warning is given in the plates, and few will look at Blackbushe's website. The SkyDemon plate does not show the lake, an essential feature to turn on RWY25 downwind [CHIRP note: in fact, SkyDemon has since been updated to show the lake, and also has a link to the NOTAM

that highlights the information about joining Blackbushe and its downwind legs]. Pooleys does show the lake, but there is insufficient text or a circuit line to warn pilots of the danger of extending beyond the end of that line or crossing the western edge of the lake. In 12 months it may be OK, but now, so soon after the changes, more emphasis and warnings need to be given on the plates pilots normally use in planning. If it is possible, I feel an article highlighting these airspace changes would be valuable, including the impact on Blackbushe circuit and the need to observe a tight turn before the lake on RWY25 Downwind.

**Blackbushe Comment**: We've spoken to every recent infringing pilot and tried to resolve the issue immediately by email so that by the time they get the MOR letter from the CAA it is a quick reply and it's dealt with. Regarding infringement awareness, we're already on the case with the CAA Airspace Infringement Team [see their comment below] and have recently updated our website to clarify the procedures. Although the introduction of the Farnborough CAS has created the problem, and extending the Blackbushe Local Flying Area (LFA) out to go over the lake might make most of the infringements go away, as at any aerodrome pilots should try to contain their circuits within the ATZ boundary and should look at aerodrome AIPs / website briefs / use moving maps to identify the ground features they will use to operate accurately in the circuit. At the time of writing [7 July 2020], we've had over 5,000 landings since the airspace went live, and 16 infringements. In some of those cases pilots were unaware of the new airspace or had not read the published material.

**CAA Comment**: The circuit procedures on the Blackbushe website have been amended regarding Hawley Lake to offer more clarity, and a narrative to highlight the risk and help pilots is now on the Airspace and Safety Initiative (ASI) website (<u>https://airspacesafety.com/updates/</u> at Link 19).

**CHIRP Comment**: Notwithstanding the fact that Blackbushe have subsequently made some minor changes to their website, and the CAA have published their infringement hot-spot update since this incident, it's clear that the reporter had made himself aware of the changes but had seemingly not realised or had forgotten the significance of the LFA/CTA boundary in flight and had reverted to previous practices by extending downwind. The introduction of new airspace can often be the cause of infringements and therefore good reason for a thorough threat and error management review before flying nearby or within. It's certainly unfortunate that the changes came into force just prior to the COVID-19 flying restrictions came about and so caught this pilot out when they flew there for the first time significantly afterwards. The airspace is tight, and a minor airspace modification to accommodate such contingencies when operating in the Blackbushe visual circuit would be a positive step. When we spoke with Blackbushe about this they commented that they were already considering a request for such an alleviation as part of the Farnborough airspace post implementation review (now delayed until 2021 due to COVID-19), and CHIRP fully supports such a change.

CHIRP noted that infringements in this location were currently being sympathetically handled during the introduction of the new airspace but, at some point, pilots need to be aware that infringements may no longer be 'tolerated'. That being said, an Airspace Infringement Working Group (AIWG) member on the CHIRP Board commented that less than 40% of infringement MORs result in action other than a simple letter highlighting that the infringement had taken place and that greater care was required. Ultimately, pilots should understand that there is a legal requirement for controllers to raise an MOR if their airspace is infringed. But these MORs are a vehicle for reporting occurrences and safety issues within a Just Culture so that associated trends or issues might be identified and addressed, they are not intended as a precursor to 'punishment' in themselves.

As for extending downwind, whether or not to do so versus going-around from downwind is always a difficult one to decide depending on the circumstances pertaining. Notwithstanding the AOPA and EASA Sunny-Swift comments that the reporter highlighted, and allowing for the occasional need to do so to make minor adjustments, extending significantly downwind, even at airfields with no restrictions, can end up causing unintended disruption because those following may also then have to extend and so problems can soon start to snowball.

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#### **Report No.6 – Maintenance Tracking**

**Report Text:** My report involves an aircraft used by a part-time flying school and owned by a partnership who are not involved with its day-to-day operation or management. My company was the CAMO and maintenance organisation for this aircraft, and had been for several years. In mid-2019 we informed the owner that we were no longer able to maintain the aircraft due to other commitments; we would carry out a structural repair and 50hr check that were due in Autumn 2019 and hand over responsibility to another company of the owner's choosing. The CRS (Certificate of Release to Service) issued on completion of the repair/50hr check correctly identified when the next servicing was due. In the event, no servicing was due before the Airworthiness Review Certificate (ARC) was due in mid-February 2020 so we issued an ARC, emphasising to the owner and operator that the annual was due on 28th February.

The owner did not engage another maintenance company, and the operating club continued to fly the aircraft. On 1st July 2020 (4 months after the annual was due), a representative of the club contacted me asking whether the aircraft was due a 50 or 100hr check. On interrogating the maintenance database, I discovered the annual had been due on 28th Feb. The club grounded the aircraft, began the search for a maintenance company to carry out the servicing, and asked me to arrange a ferry permit.

Lessons Learned:

- 1. This appears to be a case of communication breakdown coupled with a lack of understanding of ARCs and maintenance requirements by the operating club.
- 2. We gave the owner several months' notice of our intention to stop being his CAMO and maintenance organisation, but perhaps we could have pointed out what that meant more forcefully to the operating club.
- 3. The owner remains responsible for ensuring the required maintenance is carried out on his aircraft.
- 4. The operating club pilots do not appear to understand the CRS data and did not realise the annual was due. They kept flying the aircraft until it was about to run out of hours.
- 5. Despite the chaos caused by lockdown, and everyone's desire to fly once again, a thorough check of maintenance requirements by the club would have identified this oversight.

**CHIRP Comment**: This report highlights several issues, not least of which being that, for organisations serving external customers, the customer does not necessarily do what is expected of them. Fundamentally, Part M, M.A.201 regulations state that the owner of an aircraft is responsible for its continuing airworthiness. Associated maintenance activity can be transferred to a Part M Continuing Airworthiness Organisation (CAO), or to a person or organisation that leases the aircraft from the owner, but for 'permit' aircraft, the owner remains ultimately responsible. In this case, once the CAMO informed the owner it would no longer maintain the aircraft, the clock was counting down to the point where their involvement would cease. It would have been terrific if the CAMO had realised that they had not been contacted about records by the organisation that replaced them but, in this busy world, very few of us would have thought of that. Ultimately, the CRS and the next maintenance due should have been readily available by scrutinising the aircraft's Tech Log, and the Operator (Flying Club) should have ensured that the aircraft was in date within the Maintenance Schedule and was legally permitted to fly.

NPA 2014-27 CAMO and Part-145 organisations' responsibilities were derived from AAIB Bulletin 9/2010 recommendations after a serious incident involving a B737 over Norfolk. The key thing is that the relationship between different organisations must be assessed to ensure every organisation is aware of their responsibilities so that a "too many cooks" scenario does not occur. In short, robust procedures need to be in place when multiple organisations are involved, and a risk assessment should be carried out with emphasis on how the different organisations interact with one another and their respective responsibilities, especially when there are changes to who is responsible to whom, and for what - robust change management is a key part of ensuring safety. The Flying Club were paying for the use of this aircraft, and it therefore had to come under a CAMO because it was being used for hire and reward. Although the previous CAMO had written to the owner several times to inform them that they would withdraw from the aircraft maintenance market and had set out the last servicing and airworthiness review activities they would perform, neither the owner or the club took

steps to ensure that continuity of CAMO coverage was being maintained or that the information on the CRS was correctly interpreted. It appears that the club overlooked the date of the next servicing and only looked at the hours - the aircraft's Tech Log should have had a running total of hours remaining and the date of next servicing clearly annotated, and this should have been checked prior to each flight. If the club had realised the aircraft was out of check and made the point to the owner, he would have arranged for a maintenance company to carry out the servicing. Fundamentally, all the organisations needed to know who was doing what, and who was ultimately responsible for delivering the 'Part M' outcome, including establishing whether the Engineer (Authorised under Part 145), should take on the Part M responsibility of entering the hours in the Tech Log. In this case, it seemed that the combination of an oversight and a lack of communication had resulted in the required processes falling between the cracks.

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