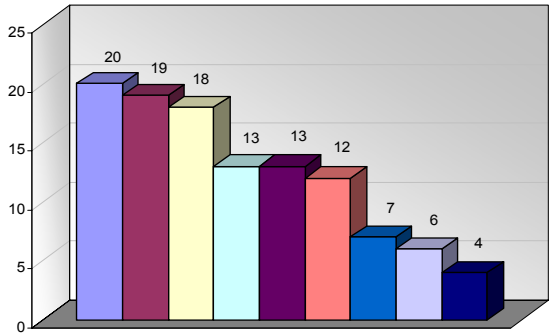
GENERAL AVIATION

CHIRP FEEDBACK

Issue No: 27 Spring 2006

Most frequent GA Issues Reported 12 months to January 2005



Communications - External
With ATC, With CAA

Procedures
Use by Reporter, Use by Others, Adequacy

Handling/Operation
Airmanship, Handling of A/c

Near Miss
Airprox, Forced Landings

Regulation/Law
Compliance With

Aircraft Technical
Propulsion, Systems

Environment
Visibility

Situational Awareness
In the Air

Maintenance
Standards/Workmanship

WHAT'S IN THIS ISSUE?

Number of Reports since the Last Issue:

12

Report Topics Have Included:

- Near Miss in Circuit
- Engine Failure after Take Off
- Runway Misidentification
- Distractions in Flight
- Take Off with Tow Bar Attached (ouch!)
- Defective Fuel Cock

REPORTS

SAFETYCOM (135.475 MHz) - A SAFETY BENEFIT

Report Text: I was invited to a fly-in and lunch at a private strip at AAA. The strip has two runways, E-W and N-S, with variable circuits depending on the runway in use, to avoid conflicting with any traffic using BBB, a larger airfield, which lies a couple of miles away to the west.

The weather was good, visibility 10 to 12 miles with a light and variable wind of less than 5 kts. Approaching from the north, I was listening out on the SAFETYCOM frequency as we had been advised, and heard that the duty runway was changing to the northerly runway, having previously been the southerly.

Radio reception was good, with moderate traffic, good discipline and quite uncluttered. [This frequency was also being used by other aircraft flying into another landing site, some 20 miles to the west. Interference from this traffic was minimal].

On arriving in the overhead at 1,100 feet AAL, I immediately saw two aircraft on the approach to the N-S runway from opposite directions. Obviously the aircraft approaching from the north had not heard the runway change instruction.

I made an immediate transmission to AAA TRAFFIC drawing attention to the situation and was very gratified to see both aircraft commence immediate Go Around manoeuvres to their respective RIGHT.

The important fact of this incident was clearly that the radio discipline being exercised by all at the time was good, crisp and efficient.

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It is clear to me that the use of the SAFETYCOM frequency by all participants on this occasion almost certainly prevented an accident to two aircraft and their crews.

Afterwards I was advised by the airstrip manager that the SAFETYCOM frequency was invaluable to safe operations on this strip, as the North/South runway cannot be seen from the East/West runway; this in pre-SAFETYCOM days had led to a few near-miss incidents.

CHIRP Comment: **This report is a good example of the benefits of the SAFETYCOM frequency, and of the importance of maintaining strict RTF discipline in its use, particularly where the frequency is in use at two or more adjacent airfields/strips.**

The reporter's use of the SAFETYCOM frequency in the situation described was fully justified on grounds of flight safety, even though the call does not strictly comply with the conditions for use stated in AIC 103/2004 (para.2.3). Whilst the importance of restricting the use of the SAFETYCOM frequency to essential RTF calls is acknowledged, the current wording of the AIC could discourage pilots from transmitting messages such as that made by this reporter and thus be detrimental to flight safety.

If there is a genuine safety reason for using the frequency to notify another pilot of a condition/ situation, make the call.

BEWARE A CHANGE IN ROUTINE

Report Text: I keep my Cessna 172 in a hangar with several other aeroplanes. It occupies a rear position, but this suits me because the aeroplane immediately in front is flown more frequently.

There is a concrete apron in front of the hangar and I usually pull the other aeroplane out to the right and my own aeroplane to the left, keeping it on the concrete rather than taking it onto the grass which is often wet and muddy. I then push the other aeroplane back into the hangar and close the doors.

Invariably, I do the external inspection and other pre-start-up checks before moving my aeroplane. Having towed it out, I stow the tow bar in the locker.

On this particular occasion a vehicle was parked on the apron and I therefore pulled my aeroplane straight out onto the grass. The vehicle driver offered to help me push the other aeroplane back into the hangar, an offer I accepted with alacrity.

I taxied to the hold and took off on the airfield's main grass runway. On the climb out I was called from the ground to say that I had taken off with the tow bar still on the nosewheel. I did one circuit and landed, keeping the nosewheel well up as I flared and touched down, stopping immediately after exiting the runway.

An instructor from the flying school came out in a Land Rover to help me check the aircraft for damage. There was none. The tow bar had, in fact, fallen off as I raised the nose of the aircraft on take off.

What conclusions have I drawn from this incident?

1. Never be hurried with checks and other pre-flight procedures.
2. A change in a regular routine is more likely to result in something being missed, double check.
3. I was extremely fortunate not to have any damage to my aeroplane. I think that this was due to the fact that the tow bar was an old type which opened up as it fell over the tyre of the nosewheel.

I now have a cardboard notice which I leave on the control yoke reminding me about the tow bar.

CHIRP Comment: **The reporter has correctly identified the need to be aware that a change in the normal routine can result in a vital check being forgotten; thus additional care should be taken in such circumstances. The reporter's suggestion to use a cardboard notice is not a fool-proof form of protection, as its use can be subject to a similar human error as that which led to the tow-bar not being removed.**

This incident is not a unique occurrence; we have previously published a similar incident involving a tow-bar, which separated only after take-off, and a recent incident reported to the Air Accidents Investigation Branch involved an aircraft getting airborne with a tie-down in the form of a concrete-filled tyre still attached.

READY TO FLY?

Report Text: I was taxiing prior to take off and found myself following a light single from the nearby hangar. Whilst I and the other aircraft were waiting at an intersection to enter or cross the active runway, I noticed a 'Remove Before Flight' ribbon flapping in the area of the tailplane of the aircraft ahead of me. I was not initially sure whether this aircraft was going to cross the active to taxi for fuel, or whether its intention was to backtrack to the holding point prior to take off.

When the aircraft entered and backtracked (followed by a Cessna, and then myself), I made a radio call along the lines of "Golf XXXX entering Runway## to backtrack in turn with two ahead. [Other a/c call-sign], for information, you appear to have a 'Remove Before Flight' ribbon flapping in the vicinity of your tailplane"

The other aircraft replied, "Thank you very much for your call", and pulled off at the next intersection and shut down to investigate.

Two points are worth mentioning from this incident. First, I was initially reluctant to make this call until I

was sure that the aircraft was definitely intending to fly immediately. This was due to a reluctance to broadcast a message which could embarrass the other pilot, were he to be only taxiing for fuel and fully aware of the aircraft configuration. Nevertheless, I was in no doubt of the need for the call once it was clear that the aircraft was indeed preparing to depart.

Second, it occurred to me that it is worth emphasising to others that if you have 'Remove Before Flight' items – pitot covers, control locks, intake blanks, static vent plugs, etc – put a long red ribbon on them. It should help you remember, but if you forget it's a good idea if the 'flag' is large enough to be seen at a reasonable distance by third parties.

For myself, I would certainly appreciate being told in advance of an error, even if in a necessarily public fashion, rather than find out the hard way.

CHIRP Comment: **As the reporter notes, items that are required to be removed before flight should have tags/ribbons appropriately sized, to be clearly visible if not removed. A positive check that all such items have been removed should be part of your pre-flight checks.**

If such a tag or any other apparent abnormality is observed on another aircraft, the pilot should be informed of the condition.

UNANNOUNCED ATZ INCURSION

Report Text: All circuits at AAA are to the south; additionally we have several noise sensitive areas. We had changed runways several times during the day, but were operating on the south westerly runway for this late afternoon instruction detail.

I was flying in the circuit with a mature student, and during the detail we observed 3 balloons launch from a field to the south east of the airfield. The third balloon to launch climbed to height and passed over our ATZ. The other two settled at around 800ft QFE tracking approx NW into our ATZ and through the active circuit. We had two aircraft flying circuits and others joining. On one circuit I had to climb to 1,500ft and pass over a local (noise sensitive) village to avoid one balloon; on another circuit, I had to full stop as they were both blocking the climb out path within ½ mile of the airfield. They did not call the airfield at all. They busted our ATZ and circuit without permission and caused me and other aircraft to take avoiding action.

If these balloons were making passenger flights then I consider that the pilots concerned endangered their craft and passengers as well as upsetting my student and myself.

CHIRP Comment: **This matter was referred to the CAA and subsequently the operators of 2 of the 3 balloons involved were reminded by the CAA that their Operations Manual required that in the course of a public transport balloon flight, if it was reasonably possible that the balloon would infringe Controlled or Special Rules Airspace, an Aerodrome Traffic Zone or a Military Aerodrome Traffic Zone then an aeronautical radio station was required to be carried. If the balloon's flight took it within 3nm of the above mentioned airspace then 2-way communication was required to be established with the appropriate ATC unit.**

Additionally, all balloon pilots should be reminded that many general aviation aerodromes may have unlicensed aircraft movements outside of their published periods of operation. Whilst their ATZs would not be active at such times, best practice is for any aircraft [including balloons] overflying to make blind calls on the appropriate frequency. This practice will ensure that any interested parties are aware of their presence in the area and of their intentions.

SITUATIONAL AWARENESS

Report Text: The planned flight was VFR, from AAA (Southern UK airfield) to BBB (A major UK regional airport). PPR had been obtained previous day with all details given to handling agent. At 15 miles to BBB, I called Approach for FIS and joining/landing instructions. I gave full details including my aircraft type (AA-5) and was given an initial inbound heading and then a subsequent heading (330deg) at 4 miles to join LH downwind for runway 15. Handed to Tower at 3 miles and told to turn left onto heading 240deg and to cross runway 15/33 centreline via the threshold of runway 24 under Radar Control Service. A B737 was at take-off point for Runway 15. I read back the instructions assuming I was being vectored for a RH downwind and commenced my turn to 240deg.

At 1.5 miles I queried instructions and was asked my aircraft type. On receiving my response of AA-5, there was a sharp intake of breath from the controller, followed immediately by an instruction to turn right immediately.

After landing, I was informed by the handling agent that ATC had mistaken me for a helicopter! (As they did not have much GA traffic - which at their prices isn't surprising!).

CHIRP Comment: **There are useful safety lessons to be learned from this incident from both a flying and an ATC perspective.**

From a pilot's point of view, it is important not to blindly follow an ATC instruction, but to consider carefully all ATC routings/clearances and if not clear as to their intent to question them, as the reporter quite correctly did.

AERODROME SENSE

Report Text: The planned flight was a short VFR navigation cross-country flight AAA - BBB - AAA in a club motor glider. Airfield BBB is grass with defined

runway directions. The aircraft was serviceable, other than a warning notice above the compass "inaccurate compass". Taxi compass checks and end of departure runway compass check were all acceptable. Pre-briefed that gliding and powered flying would be taking place at BBB.

On arrival at BBB, the wind was from approximately 300°. Listened out and heard a local aircraft call for the SW runway. I looked at the airfield and identified a cluster of vehicles at the usual glider launch point for a westerly wind direction and also noticed an aircraft climbing out in a southwesterly direction.

I commenced a circuit for the SW runway, taking into consideration local the local noise sensitivities and made a downwind call. I had convinced myself that I was flying to the SW runway but, as I was about to realise, I had fooled myself into flying to the westerly runway - and I unconsciously moulded the circuit accordingly.

During the downwind leg, I became slightly concerned that the runway in use should actually be identified as Runway 25 or 26 - something didn't look or 'feel' quite right. 'Maybe the compass is out?' went through my mind.

I turned base, rolled out onto final and then identified the cluster of vehicles as an airfield repair team or similar. I elected to go around from about 100', realising at this point that I had misled myself, and eased left to climb out in a southwesterly direction taking the usual noise avoidance route. A further circuit to the SW runway occurred without incident.

Why this report? I fell into a trap of seeing what I expected to see and jumped to a conclusion, despite the cues that should have made me think. I am well aware that airmanship involves assessing information and carefully forming a decision rather than leaping to conclusions. Perhaps low arousal ('done this sort of trip lots of times') led to complacency. I also believe that if I had even just glanced at the Pooleys airfield layout, as I arrived in the area, the error would not have occurred.

Fortunately I didn't get in the way of anyone else, so the only damage was a red face. However, as I have, I hope others can learn from what I perceive to be a classic HF error.

CHIRP Comment: **The reporter has made an excellent self-assessment of the contributory factors.**

Compasses should be swung regularly and accompanied by a deviation card; although a compass is not a requirement for a VFR cross-country flight, careful consideration should be given to setting off with an unreliable compass, as it can lead to uncertainty as the reporter describes.

Notwithstanding this, the pilot's low arousal (an easy task) and not briefing himself on the airfield layout prior to arrival were the principal factors. Also, an overhead join, if permitted, may have prevented the subsequent disorientation.

Finally, remember the simple adage - If is doesn't feel right, it probably isn't!

AIRFIELD OVERFLIGHTS

Report Text: A twin-jet aircraft transited north to south via the Duxford overhead, very close to the ATZ. A call to neighbouring ATC on landline confirmed the aircraft had not spoken to them.

Further enquiry to the London Terminal Control Centre confirmed that the aircraft (possibly military) was operating @ 2,400ft.

Note: A Sabre Jet had displayed earlier up to 3,200ft; similar traffic had been seen during the morning southeast of the ATZ, again without calling on FIS frequency (with Spitfire traffic late downwind).

CHIRP Comment: **Large displays are normally protected by a Temporary Restricted Airspace (TRA) notification for the duration of the display, and must be avoided by non-participating aircraft; this should provide protection for participating aircraft throughout the display. Smaller events are often NOTAMed to raise awareness to other pilots who are flying or transiting in the vicinity of the display. There is no requirement to notify ad hoc aerobatic displays.**

Operations in Class G airspace are conducted on a 'see and avoid' basis; therefore, in the case described, in the absence of a TRA notification, the aircraft was operating legally in Class G Airspace above the Duxford ATZ. However, it is good practice when transiting close to an ATZ to notify the airfield and other traffic of this.

Low level aerobatic sequences that are conducted without the protection of a TRA must also rely on the 'see and avoid' principle when operating above or outside the confines of an ATZ, which in the case of Duxford is 2nm radius, 2,000ft aal. It is strongly recommended that pilots intending to practice aerobatic manoeuvres outside an ATZ consider notifying the local Air Traffic Services Unit of their intention. Also, if transponder equipped, selecting Code 7004 five minutes prior to commencing aerobatics will alert ATS Radar Units and aircraft receiving a Lower Airspace Radar Service that aerobatic manoeuvres are about to be performed.

ACCIDENT TO REPORT?
Call AAIB on 01252 512299

AIRPROX TO REPORT?
Call UK Airprox Board on 01895 815121/2/5

OCCURRENCE TO REPORT?
Call CAA Safety Investigation & Data Department on 01293 573220