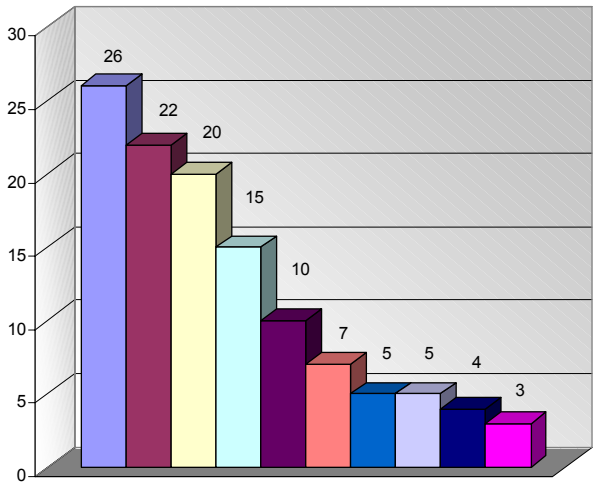
GENERAL AVIATION

CHIRP FEEDBACK

Issue No: 25 Summer 2005

Most Frequent GA Issues Received
August 04 - July 05



Handling/Operation
Handling of A/c, Near Miss, Airmanship

Communications - External
With ATC, With CAA, With Emergency Services

Procedures
Use by Reporter, Adequacy, Use by Others

Aircraft Technical
Propulsion, Systems, Airworthiness

Regulation/Law
Compliance With, Knowledge Of

Situational Awareness
In the Air, On the Ground

Environment
Turbulence, Visibility, Wake Vortex

Maintenance
Standards/Workmanship, Modifications/Repairs

Documentation
Availability, Suitability/Adequacy, Currency/Validity

Training
Adequacy, Examination/Assessment

WHAT'S IN THIS ISSUE?

Number of Reports Since the Last Issue:

14

Report Topics Have Included:

- Navigation Errors
- Microlight Landing Accidents
- Communications with ATC
- Ineffective Brakes
- Near Mid-air Collision
- Nose Landing Gear Extension Difficulties

REPORTS

ZERO? - PERHAPS NOT

CHIRP Narrative: One of the more frequent causes of inadvertent infringements of Controlled Airspace is an incorrect altimeter setting. The following report is a salutary reminder of how easily an altimeter can be mis-set and the possible consequences.

Report Text: Prior to take-off I set the altimeter in my Quantum microlight to zero. During the Pre-take-off checks confirmed altimeter set to zero, QFE read off as 1028mb. During climb out I checked the altimeter and thought, "That was quick to 1,500ft".

Called ### MATZ for a Flight Information Service expecting to add 6mb to my zero setting of 1028mb seen pre take-off. FIS QNH given as 999mb. I scratched my head, had a think and then AGAIN asked for a regional QNH; again given 999mb. I nearly called back to say I thought he MUST be wrong, when the penny dropped. Between my last flight and this one, the pressure had dropped by just the right amount to leave my large altimeter needle close to zero. I simply moved it to line up zero but failed to notice I was actually indicating 1,000ft. I then compounded my error by seeing what I EXPECTED to see during my take-off checks.

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Had I not been crossing a MATZ, I might possibly have 'bust an ATZ' by accident which would have been inexcusable given the cause. I also failed to reconcile the visual picture with my erroneous reading, my altimeter said 1,500ft so I must be at 1,500ft.

Luckily no-one else was aware of my faux-pas; thank goodness I didn't 'argue the toss' with the military controller! I now POSITIVELY check that BOTH needles read zero pre take-off.

The moral? CHECK PROPERLY, it is easy to overlook a problem when you only give a cursory glance, seeing what you expect to see.

LARS & ATC HANDOVERS

Report Text: Flight safety improves when ATC takes the trouble to hand over an airborne flight plan. This considerably reduces the workload for the pilot and the new ATSU receiving the aircraft into its airspace. Zone transit through Class D is assisted by handovers.

Flying from Sheffield to Perth, Leeds never hand over to Leeming or Teeside or anybody, but recently Newcastle has started to hand over to Scottish, which is great. Teeside and Leeming never hand over to Leeds, but do so to Newcastle. It seems there is a lack of co-operation between Leeds and the northbound airports, which needs to be addressed.

CHIRP Comment: **We all need to be aware, when flying in the open FIR, which Air Traffic Services Units (ATSUs) provide what level of service. This should form part of your pre-flight planning.**

Leeds ATSU is not a nominated Lower Airspace Radar Service (LARS) unit and as such is not staffed to provide such a service. Neighbouring RAF units do provide a LARS; when these are closed, Leeds ATSU may offer a LARS, however, this will always be subject to the limitations of controller workload and equipment performance.

Co-ordination between ATSUs is more practical between Units with dedicated telephone land-lines, as Leeds has with RAF Linton on Ouse. However, in the absence of such dedicated lines, telephone handovers to other ATSUs are not always possible. When providing a radar service in the FIR, Leeds will attempt a controller-to-controller handover, but this is not practical for aircraft receiving an FIS, given the level of traffic and other priority tasks.

NAVIGATION/AERODROME SENSE

CHIRP Narrative: **Cross country flights present particular traps for the unwary, especially those which involve landing at an airfield with which you are unfamiliar, as these reports detail:**

(1) LOST EN ROUTE

Report Text: The flight was my qualifying cross-country. En-route from ### to a turning point at Fleetlands I flew over a friend's house, making two quick circuits around his house, before proceeding to Fleetlands. I followed the Direction Indicator (DI) and headed for what I thought was Portsmouth, however, the two circuits around my friends house had misaligned my DI.

This, coupled with the poor visibility caused me to mistake Southampton for Portsmouth - the result being me flying up and down Southampton Water looking for Fleetlands.

Southampton had to divert three aircraft as I flew up and down in front of their runway. I was eventually told to contact Southampton Radar who directed me to Fleetlands.

(2) WRONG DESTINATION

Report Text: We planned to fly Shoreham to Stapleford, via Mayfield VOR. Although using GPS, we had difficulty identifying Stapleford. Eventually, the non-flying pilot identified Stapleford and we called down wind

Pilot flying's attention was drawn to the convergence of two microlight aircraft and our need to take avoiding action. The downwind leg continued for a "long time", but neither pilot realised that the runway in sight was now North Weald, where we landed before realising our error.

(3) WRONG ARRIVAL

Report Text: I had planned an excursion from my home airfield to another airfield about 45 minutes' flying time away. I had already visited the same airfield on two previous occasions this year. The airfield in question has one runway with all circuits flown to the South of the field. Circuits are flown left-hand or right-hand depending on the direction of take-off/landing. On the downwind leg and at the point where one would normally turn onto a base leg if landing in an easterly direction there are particularly noise-sensitive areas, and I had been warned on a previous visit that if these areas are over-flown there is a high probability of strong reactions from the local inhabitants. I was therefore very anxious, in order to avoid getting the airfield management into difficulties with their neighbours, to ensure that I complied scrupulously with the local noise-abatement procedures.

Arriving at the airfield, I called the Air/Ground radio, and receiving no response, informed local traffic of my intention to rejoin on a downwind leg for the runway in use. It was at this point that I became totally preoccupied with getting the correct distance from the field and well clear of the noise-sensitive areas when flying the downwind leg. In this I

succeeded admirably only to discover, having begun the final approach, that I was looking at the wrong figures on the runway threshold. I had, quite simply, flown the whole circuit in the wrong direction. At no point on the downwind or base legs had I become aware of the error of my ways because all my attention was focussed on being in exactly the right situation for noise-abatement purposes. Fortunately there was, at the time, no traffic on the runway or on the approach and I was able to get clear of the circuit and start again in the correct direction. So, apart from a severely dented ego, I finally arrived in one piece at my destination.

This incident reminded me forcefully and dramatically of the danger of allowing oneself to become fixated on just one problem or issue, to the exclusion of other even more vital factors. It occurred to me that it might be helpful to share it with my fellow pilots.

CHIRP Comment: **The reporters are to be congratulated for sharing their experiences for the benefit of other pilots. The reports provide salutary lessons in relation to distractions and the importance of avoiding a specific mindset. Good pre-flight planning and employing 'best practice' in en route and circuit joining procedures, as detailed by John Brownlow in the item on Activity Plans - Page 4, would have assisted in preventing all of the incidents.**

Prior to departing on a cross-country trip, your pre-flight planning should include studying the best identifying features at each turning point and the layout, including runways, taxiways, buildings, etc. at your destination aerodrome, how they should appear in relation to your planned direction of arrival, and the local procedure for joining the visual circuit.

Applying best practice in the VFR circuit, including the use of the overhead join (unless local procedures require otherwise), noting the signals square (where available), and the windsock will assist in reinforcing your awareness and contribute to a safe arrival and landing.

CAA General Aviation Safety Sense leaflets No. 5 'VFR Navigation' and No. 6 - 'Aerodrome Sense' published in LASORs, provide a wealth of good advice.

SHOULD I STAY OR SHOULD I GO (AROUND)?

Report Text: Returning from a local flight in my tail dragger microlight I joined the right hand circuit and final approach for runway 21. Touched down 50 yards past the threshold but bounced badly, the third contact being the worst as usual. In endeavouring to control the aircraft I drifted to the right and despite applying left rudder and left independent brake the aircraft slewed onto the long grass, and finally tipped forward onto its nose with the engine still running on tick over. The propeller hit the ground and smashed and superficial damage was done to the lower engine cowling. I believe that the cause of this accident was my inability to control the aircraft effectively after its first contact with the ground.

CHIRP Comment: **Maintaining directional control during a series of landing bounces is most important, but difficult to achieve when you are concentrating in trying to control the aircraft in pitch. For this reason, it is worth considering the option to make a go around from a poorly executed landing flare.**

If you find it difficult to achieve a smooth landing consistently, it might be the right time to consult an instructor.

PLANNING A TRIP TO FRANCE?

Report Text: Incident 1: On a clear sunny day I joined the circuit at Quiberon (S Brittany) flying an M20 Mooney. I was no.4 to three Jodel aircraft already in the circuit. This airfield depends on auto-announcing on the correct frequency. The airfield does not support English as a language. There is no tower.

Joining the circuit behind me was a Pa28 and a Reims Rocket. After calling final, and close to the 'hedge' a Beech Bonanza side-slipped 'from nowhere' and landed at the wrong end of the runway. I was forced to make an emergency go around.

The British pilot, when challenged in the flying club, just stated 'English is the international language and it was pointless to communicate.'

Incident 2: In the visual circuit at Sarlat, again, with the French language in use, I was surprised to find a British Piper Arrow flying in the opposite direction downwind. I was met with the usual reply and was told that he was in communication with Bergerac (English ATC) so he was in the right!

Incident 3: While on the airfield at Rodez, two British aircraft landed at the wrong end of the runway while a military transport was on final for the correct end. The transport was forced to go around. There had been total silence from the British pilots, who, as usual were unable to respond to angry officials as they spoke no French at all.

It would appear that training in the UK, and CAA information on operating outside the UK does not stress that pilots who do not speak the national language of their visited country must only land at fields where English is provided for by ATC.

I feel that it is essential that this is known before a major incident takes place. I have cited just three incidents, but as a person who flies more in France than the UK, I should state that I meet at least two serious incidents of this nature every year.

CHIRP Comment: **There is a commonly held assumption that because English is the international aeronautical language, competency in the relevant national language is not required when operating outside the UK FIR. This is not the case; as has been highlighted in several GA magazine articles recently, it is essential to be able to communicate effectively**

in the national language at many airports in France, Spain and other European countries.

Thus, it is most important to consult the relevant AIP/ airport guide when planning a trip outside the UK FIR.

Additional advisory information is available on the internet, for example: www.pilotfriend.com and http://flyinfrance.free.fr

Pilots who break the law in foreign States place themselves at risk of prosecution. Remember, ignorance is no excuse.

USE AN ACTIVITY PLAN!

Leisure flying, whilst being a very enjoyable and rewarding past-time, can also be very unforgiving of relatively minor errors/omissions. A significant number of the fatal/serious accidents investigated by the Air Accidents Investigation Branch and incidents reported to ***CHIRP*** and other GA safety reporting programmes could have been avoided if a more self-disciplined approach had been adopted.

John Brownlow, a former military test pilot, is the PFA member of the ***CHIRP*** GA Advisory Board. John has gained a wealth of light aircraft experience over many years and offers the following thoughts for avoiding some of the potential pitfalls.

Check Lists have been accepted for many years as memory aids – in military flying years ago the Pre - Take Off Checks were called Vital Actions, perhaps a more compelling description of the need to ensure that your machine is correctly prepared and configured for flight. However, Check Lists only cover some of the items in an activity plan that pilots should develop and use to ensure that every flight is conducted safely.

Ask yourself these questions.

Do you complete after take off checks on climb out? These should include flaps up, engine temperatures and pressures and RPM all normal, plus any other actions your particular machine requires.

Do you make gross error checks on taking up your initial heading, and immediately after large changes of heading? These checks should prevent your falling victim to the 020/200, 120/210, 300/330/030 confusion.

How often do you compare your DI with your compass and realign when necessary?

The FREDA checks have been designed to remind you of some of these activities. Remember?

Fuel – sufficient and correct tank selected.

Radio – select the frequency as appropriate to the flight, and maintain contact with a unit that can help in emergency, also have your next frequency pre-selected whenever possible.

Engine – Ts & Ps within limits, mixture correctly leaned, carburettor heat - if appropriate, select as recommended to minimise risk of carburettor icing.

DI – synchronised with compass; always check after manoeuvring.

Altimeter(s) – One set to the Regional Pressure Setting in the cruise, or as required by the unit you are working.

FREDA checks should be part of your activity plan and should be completed every 10 – 15 minutes on every flight.

Do you always complete the HASELL checks before stalling and steep turn practices? Often elements of these checks are missed, particularly before steep turns.

Do you prepare a map before flying from A to B, and keep a navigation log? For many flights nothing elaborate is required, but you should be able to report your position at any time and pass a sensible ETA whenever requested.

Do you formulate a take off briefing? And an approach and landing briefing, particularly when using an unfamiliar airfield? These can be self-reminders of required procedures and the actions you plan to take in emergency. If you are flying with another pilot brief these actions so that you both know the plan. Again, nothing immensely complicated is required, just plan ahead for eventualities.

Do you set up and check, whenever possible, your radio and/or GPS navigation aids before departure, and frequently in flight? Always double check the setting up of GPS waypoints. The setting of longitude is susceptible to error because of the number of zeros needed around the UK.

Do you discipline yourself and brief other crew members to maintain an effective look out?

The above suggests using an **Activity Plan** that combines items in the Check List with the actions demanded by good airmanship, and hence flight safety. The actions mentioned are not intended to be exhaustive, and nor are they new. However, there is clear evidence that these actions are not always followed.

Don't be one of the non-followers! Develop your own **Activity Plan** matched to your specific aircraft and purpose of flight.

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 Information Data Department on 01293 573220