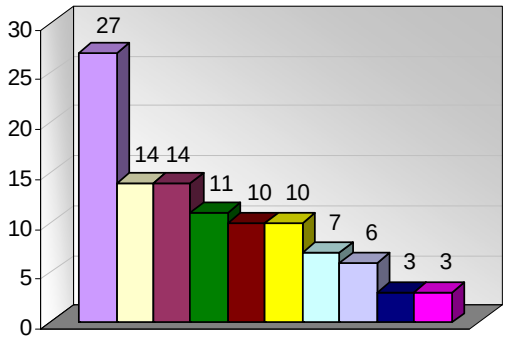
GENERAL AVIATION

CHIRP FEEDBACK

Issue No: 34 Winter 2007

Most frequent GA Issues Reported 12 months to October 2007



- **Handling/Operation** — Airmanship, Handling of A/c, Operation of Equipment
- **Procedures** — Use by Reporter, Use by Others, Adequacy
- **Situational Awareness** — In the Air
- **Aircraft Technical** — Propulsion, Design, Systems
- **Air Traffic Management** — Level of Service, Separation
- **Near Miss** — Airprox, Near Collision with Terrain, Loss of Separation
- **Communications - External** — With ATC
- **Maintenance** — Standards/Workmanship, Base
- **Licensing** — Flight Crew, Engineering
- **Physiological** — Illness, Health, Injury

Number of Reports since the Last Issue: 15

Report Topics Have Included:

- Infringements of Controlled Airspace (3)
- Inadvertent door opening in flight
- Unauthorised aerobatics
- Landing gear emergencies (2)
- Take off performance
- Bad weather encounter - Uncertain of position
- Landed at wrong airfield

WHAT'S IN THIS ISSUE?

EDITORIAL

AIR RAGE?

CHIRP Narrative: Many of you will be aware, either through a personal experience or that of a family member, friend or colleague, of the increasing incidence of serious 'road rage' incidents in which the rights afforded to all drivers by the Highway Code have been overridden by an arrogant, selfish and sometimes confrontational attitude on the part of another driver; too often these incidents go unreported. For many years, General Aviation flying in the UK has been insulated from behavioural patterns similar to those described above, except in a very small number of cases. However, anecdotal evidence suggests that similar incidents involving GA pilots are now occurring more frequently.

Incidents like those described in the first two reports in this issue will eventually lead to a serious/fatal accident which would have been entirely avoidable. Perhaps it is worth reflecting on how each of us can prevent the day-to-day pressures of modern living from influencing unduly our own and other pilot's attitudes/actions/ decisions when flying and the safety implications of inappropriate behaviour. For example:

- **Do those of us who are experienced pilots always set the right example?**
- **Are we tolerant of mistakes/errors made by less experienced pilots?**
- **Do we take the time to discuss and promote good practice among our associates and peers?**
- **Do we place ourselves under unnecessary time pressures when flying, leading to frustration/anger?**
- **Finally, do we always consider ourselves to be 'our brother's keeper' in matters related to flight safety?**

Peter Tait

CHIRP, FREEPOST (GI3439), Building Y20E, Room G15, Cody Technology Park, Ively Road, Farnborough GU14 0BR Freefone:(24 hrs) 0800 214645 Fax 01252 394290

www.chirp.co.uk

REPORTS

CIRCUIT INDISCIPLINE

Report Text: On the day in question, I took off from our local farm strip with two friends, each of us flying Quantum 912 aircraft; our destination was a fly-in in Southern England. We tuned in to the ### Frequency and it was clear that they were very busy.

We joined overhead in line at 1,000ft AGL as per the FISO's request and after descending to circuit height, we joined downwind for the active runway. There were two aircraft in front of me on the downwind leg, one on base and three on final. I joined the queue with my friends behind me and we all flew the circuit in line. On short finals above trees at approx 300ft I glanced behind me and noticed what I thought was a Eurostar descending straight for me. I began to panic thinking that he was going to descend into me and I weaved left and right. He then moved off to my right-hand side - I thought that he was going to keep to my right and fly on the deadside before rejoining the circuit for another go.

Relieved that he had seen me, I continued the approach and readied myself for landing. Approximately 200 yards from the threshold, a MCR01 BanBi overtook me on my starboard side approx 50 ft away at the same level. I thought to myself 'he's going to have to go around as I have the right of way'. He then drifted over to my intended flight path (cutting me up) and proceeded to land. For a few seconds I continued my approach thinking that he would overshoot but then quickly decided to perform a go-around. I climbed away and rejoined downwind.

After I landed and taxied in, I saw the BanBi parked in the next row of aircraft. The pilot was nowhere to be seen (In hindsight, I am glad he was not there as I was very angry over what he had done). I then spoke to my friends who told me that he had 'pushed' in on the base leg and had weaved in between them and overtaken them before overtaking me on short finals.

I now have been flying for approx 6 years. In all of this time, I have never seen this type of arrogant disregard for other pilots. If the pilot had been incapacitated or had got it wrong with his approach speeds etc, I would be the first to sympathise - However, if this had been the case, I'm sure that he would have hung around after parking to apologise. The dangerous actions of this pilot could kill somebody in the future. I keep thinking about what could have happened if I had been a little lower on the approach (and had hit his wake) or if I had been an inexperienced pilot out on my first significant cross country after gaining my licence etc - This could have caused a new pilot to panic and make an error that could have led to an accident.

CHIRP Comment: **Events such as fly-ins often bring many aircraft of different performance standards together in the visual circuit and consequently require all pilots to maintain a good standard of circuit discipline; following an incident such that described it would have been appropriate to have submitted an Occurrence report (MOR) to the CAA to have permitted the matter to have been investigated.**

The reporter was understandably upset by what he perceived to be inconsiderate flying and a lack of circuit discipline; however, it is important to remain calm when airborne. Anger and stress can lead to errors and misjudgements.

Finally, it is possible that the BanBi pilot did not see the reporter's aircraft on the final approach. Even if you have the right-of-way, be prepared to take avoiding action as the reporter did; it is little consolation being in the right.....but dead.

RIGHT OF WAY?

Report Text: Returning from a flight I called AAA Radio for the airfield information for joining, was given the runway in use, right-hand circuit and the QFE. I responded with a call notifying I would join from the dead side.

I joined and called downwind. Another microlight called from the south for information and was given the same details. A third microlight did the same. A Robin light aircraft then called from the north and received airfield information. He responded that he would join on right base for the runway in use.

I completed my circuit and landed. I turned to backtrack and was surprised to see a glider circling at about 300 feet on the approach and base leg to the active runway. The glider was approximately 400 metres from the runway threshold. My first reaction was horror that it must have been in that position as I had approached to land and that I had not seen it. My passenger, also a pilot, had not seen it either. I held for a short time until it became clear that the glider was attempting to thermal not land. I backtracked and cleared to the parking area.

We watched the glider for up to 10 more minutes circling on the approach. During that time a light aircraft on the ground managed to take off to the west. The approaching Robin held away from the airfield to avoid the glider and eventually made an approach to land around the circling glider. The other two microlights joined and landed although only by flying around the glider as it flew in the wrong direction on the base leg to final approach turn. As the second microlight backtracked the runway to clear the glider stopped circling and landed on the runway next to the backtracking microlight.

At no time did the glider pilot make a radio call. AAA radio did not warn pilots of the glider on the approach. (Being an Air/Ground Radio service there is no requirement for them to do so).

The owner of the local flying club went to speak to the glider pilot; the glider pilot offered little explanation and swore.

I approached the glider pilot who had been on a cross-country flight. I asked why he had continued to fly in the path of aircraft attempting to land at the airfield, which I considered had endangered them, and why he had not made use of the airfield radio. His response was that he had seen the other aircraft, he did not consider it dangerous and he did not know the radio frequency. Also, he did not consider it dangerous to land on the runway with another aircraft backtracking; he did not

seem concerned that his behaviour was thought to be unsafe by all the other pilots concerned.

CHIRP Comment: **Gliding does not take place from the airfield in this report. Whereas some gliding sites have local rules about thermal flying in the vicinity of the landing area, notwithstanding the right-of-way precedence of 'steam giving way to sail', a glider is not permitted to operate contrary to the normal circuit procedures for powered aircraft without the express consent of the airfield concerned. The fact that the glider pilot elected to operate as described very close to an active visual circuit without making RTF contact was extremely poor airmanship and, combined with his post-flight attitude, warranted an Occurrence report (MOR) being submitted to the CAA.**

STUCK THROTTLE

Report Text: At the end of a positioning flight the aircraft refused to land. On the second attempt I realised that the engine was still giving 50% power with the throttle fully closed. As I was solo I decided to land at this 500m grass strip and set up to land 1/3 of the way into the field.

At 400 metres to the start of the strip and 200ft agl I switched off the engine and turned off the fuel, having already tightened my straps etc. I was surprised by the lack of inertia of the Europa with the engine off (I had not flown a Europa for 10 years apart from a short check flight before this one).

With hindsight I should have set the prop to coarse and not switched off the engine until I was over the field. I have been flying an RV6 for the past 8 years i.e. a totally different and heavier type. My attitude was that it was better to hit the far hedge at 40kts than the near one at 60kts. In the event I cleared the near hedge, came to a stop and turned the aircraft round manually. A salutary lesson on flying new types!

The problem was a loose housing protecting the throttle linkage which had come loose at the forward end, thus preventing the throttle from closing fully. I rectified the problem in less than 10 minutes.

CHIRP Comment: **With the reported condition, particularly in an unfamiliar aircraft type, attempting to land in a relatively short strip is not without risk. In most cases, the most appropriate course of action is to select a long runway and then position the aircraft at a safe altitude that will permit the engine to be shut down and an engine-off forced landing to be completed.**

SEAT LOCK FAILURE

Report Text: On booking out a Cessna 150 at the flying club I noticed there had been an occurrence of the pilot's seat unlocking in flight. As there had been no reports in the days immediately before my flight I "assumed" that the defect had been rectified. On final approach, as I applied rudder to counteract the crosswind, the seat moved back. I immediately applied full throttle and adjusted the pitch trim to fly the aircraft out of immediate danger. With the aircraft at a safe height, and stable, I repositioned the seat, and it seemed to lock. The landing was uneventful, but on parking, as the brakes were applied, the seat again moved back.

The defect was written up on the authorisation sheet as being dangerous, but a few days later, I noticed that the seat was recorded as having moved again. Was it in fact "rectified"? Defects on Cessna seat locking have been known for years and years and are supposed to have been sorted, they obviously have not!!

Having been trained as an aircraft engineer, I tend to use a philosophy of "what if", and mentally rehearse the possibilities together with the necessary actions. Had I grabbed, and pulled the control column at 300 feet and 65 knots as the seat slid back a stall/spin could well have resulted. Opening the throttle fully caused the nose to pitch up and using the trimmer allowed the aeroplane to be controlled in pitch. My feet were too far back to reach the rudder pedals.

I can only conclude that other pilots must be taller than I am (being only 5ft 6ins) and the seat would then be in a different lock position, and maybe is locked. The pre-flight checks call for the seat to be adjusted and checked for security. This I had done and it seemed correct.

CHIRP Comment: **This can be a relatively common problem on some training/club aircraft through increased use of the seat adjustment mechanism. In the specific case of the Cessna 150 seat mechanism, an Airworthiness Directive has been issued.**

Involuntary seat movement can be extremely dangerous and sometimes catastrophic. In this incident the reporter handled a difficult situation very well by not instinctively grasping/maintaining hold of the control handwheel but electing to control the aircraft pitch attitude by power and trim.

UNSECURED OIL FILLER CAP

Report Text: Following an apparently uneventful 15-minute solo general handling sortie and a successful PFL at my home base, a plume of smoke was seen emanating from the engine cowling intake after engine shutdown. A significant amount of engine oil was found dripping from the rear of the lower cowling and the fuselage under-belly was completely soaked. Removal of the engine access cowling revealed that the oil filler cap was insecure and found resting, cocked to one side, in the oil tank neck. It was only retained by the inserted length of the attached dipstick. Approximately one litre of oil had been lost. Inspection of the filler cap and the oil tank neck revealed that both components were serviceable. This was verified through independent inspection.

I must conclude that the only reason that the two had become separated was because the cap had not been fitted properly in the first place. I had checked the oil level earlier in the day, but the check was cursory and without any intention to fly. This check was made as I passed my aircraft, but I was actually otherwise engaged in an unrelated off-aircraft task. Later that evening, I made an impromptu decision to make use of the last of the daylight and the very calm conditions. This flight was the only one made by the subject aircraft and its pilot that day. I felt fully rested; there was no

pressure and no need to hurry. The planned sortie length was to be about 15 minutes and there was over 30 minutes of daylight remaining. Although I completed the usual walk-round checks, including the engine, I consciously didn't check the oil as this had been done earlier in the day and the aircraft had not been flown.

The oil filler cap on this engine is a bayonet type with a dipstick attached. Similar caps are common to a range of engine types. Once the dipstick is inserted, the cap requires a quarter turn to the right to be secured. There are no witness marks and it is apparent that the cap can sit on the oil tank neck, and not be locked, whilst giving a visual impression of being correctly fitted. I have no explanation as to why I failed to correctly secure the filler cap after reinserting the dipstick earlier that day and I am minded that this was very careless.

However, the real error was in my modification of a tried and trusted pre-flight check, in the belief that I had completed part of it earlier that day. Simply unforgivable! During the flight all engine indications were normal and there was no smell of burning oil. Had my planned sortie not been curtailed by the prospect of fading daylight, I calculate that the oil level would have become critical in another 15 minutes. It is ironic that I terminated the flight with a PFL without realising that I was actually having a real emergency! Following a lengthy cleanup, the aircraft has since been ground-run and flown without reoccurrence.

The incident is a reminder that there is no substitute for the tactile check and I have amended my before-flight checklist accordingly.

CHIRP Comment: **An excellent analysis of how to avoid a not infrequent error.**

THUNDERSTORM ENCOUNTER

Report Text: A few years ago I was flying from the south of France to the south of England. Three quarters of the way across France, with visibility about 25 miles, we entered cloud at 3,000 feet. It started to rain with a few drops, till it got worse and black. We decided to turn back, but before we could we encountered thunder and lightning, so we thought it better to stay on track.

The lightning was like you see in the movies, every time the lightning happened you could see the heavy rain and the lightning strikes. It lasted for about 15 min.

On clearing the bad weather the visibility was 25 miles again, we continued our course - 360 degrees. We were map reading to find our position; we checked the compass, DI and 2 VORS then the other pilot said he didn't think we were on course. Having just taken my IMC rating, I told him that we must fly on instruments till we find our position.

After a few minutes, he said that if we are flying north, how come we are heading into the sun? After a few moments I agreed with him, so he turned the plane so that the port wing was facing the sun. We were in radio contact with Jersey; they could not find us.

It was now getting dark and the fuel was low, we saw an airfield below so made an emergency landing. ATC were not very pleased and sent an engineer to check the fuel and instruments. We stayed the night. Next morning all the instruments were OK again. We checked the compass which was OK. We continued our flight with no problems.

CHIRP Comment: **The reporter and his pilot colleague were very fortunate and this incident serves as a good reminder about flying in the vicinity of thunderstorms, particularly when embedded in more general cloud. If unable to make an en route detour maintaining VFR, the most appropriate course of action is to fly a Rate 1 turn through 180 degrees and when clear, if required, seek assistance from ATC.**

Magnetic compasses and RMIs may be inaccurate in the vicinity of large thunderstorms and must be cross-checked carefuly when clear; also, reset the DI. If the aircraft is struck by lightning, the aircraft compass should be swung at the earliest opportunity.

CONTROLLED AIRSPACE INFRINGEMENT

Report Text: After departing Duxford I took up the recommended route to the BKY VOR then to the BPK VOR squawking 0013 monitoring 129.55 as detailed in the Aeronautical Information Circular.

Having successfully routed to the BKY VOR, I tuned the BPK VOR, identified it and set the inbound radial. I then proceeded to tune my DME when the LCD display went blank. I tried various methods to re-establish the display but to no avail. I then attempted to carry on following what I thought was the A10 to Ware but with about 4 NM to run I realised it was a much larger town and couldn't be Ware, so I initiated a 180-degree turn.

As I started this Luton Radar put a call out for an aircraft that may have infringed Controlled Airspace. I immediately called back and told them I thought it was me and they then gave me vectors to exit the control zone where I regained VFR navigation and continued our journey uneventfully but the DME remained Inoperative.

CHIRP Comment: **By following the trial procedure recommended in Aeronautical Information Circular (AIC) 4/2007 (Yellow 228) for flying in the vicinity of Luton of listening out on the Luton Radar frequency and squawking SSR code 0013, the reporter had the benefit of navigational assistance from Luton Radar and thus was protected from a more serious incursion of Controlled Airspace. The AIC also details a similar procedure for Stansted.**

It is also worth remembering that navigation equipment can fail at any time. When planning a flight using radio aids, particularly when flying in close vicinity to Controlled Airspace, study the route and prepare a map/VFR flight plan to permit you to revert safely to VFR navigation should the need arise.

Do You Know Why It's Good to Squawk Mode C?

If the answer is no, see the item on the Aviation Page of the CHIRP website at www.chirp.co.uk or read AIC 15/2007 (Pink 112)