

# CHIRP FEEDBACK

Issue No: 23

Winter 2004/05

## EDITORIAL

In this first issue for 2005 the format of GA FEEDBACK has been revised in response to comments from the CHIRP Survey, conducted last year. In addition to the layout and font changes, we have also added some trend information in response to requests. If you have any comments on the content/layout please let us know.

In just over five years, we have received 493 GA reports; however, it would appear that some GA pilots may still be reluctant to submit reports on the basis that the item might be published and thus lead to their identification. It is important to understand that we always seek the reporter's consent in any action that we take with a report, including publishing the item in GA FEEDBACK. If you are unsure, why not call us on our **Freefone** number or, if you would prefer, our admin number (01252-395013) for a chat.

### Number of Reports Received Since the Last Issue:

14

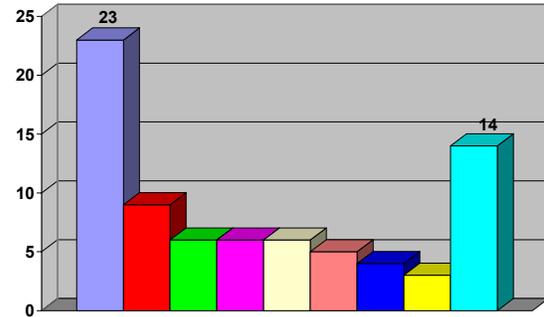
Report Topics Have Included:

- Microlight landing accidents
- Poor airmanship -overbearing attitude in circuit
- Aircraft blown over during taxi
- Autogyro rotor strike on a hangar
- Cessna water drain checks
- Engine problems: failure/oil leak/loss of coolant
- Helicopter wake problems

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Issues Raised in CHIRP GA reports  
Feb 2004 - Jan 2005



- Pilot Error/Misjudgement**  
Poor judgement/airmanship; lack of situational awareness; omission/inappropriate action; flight handling skills.
- Un-airworthy aircraft/Maintenance & Design problems/Component failures**  
Carburettor throttle failure; fuselage water drains blocked; flap motor failure; faulty engines; unauthorised mods.
- Airprox/Airmiss/Unauthorised formation flying**  
Airprox with helicopter in the circuit; near miss with glider over NDB; near miss with Seneca in high density traffic area; Airprox with aircraft crossing a circuit pattern.
- ATC instructions/problems with ATC**  
Confusion about reporting at VRP and ATC instructions to circuit traffic; ATC assuming local landmark knowledge; ATCO with commercial duties as well as ATC; use of 'stand-by' by ATC to indicate other priorities.
- Inappropriate/dangerous flying**  
Flight under VFR when IMC conditions prevailed; unusual circuit join and traffic conflict; low flying over city centre; straight in approach causing circuit traffic to overshoot.
- Class D airspace failures/problems**  
ATC refusal to permit entry to Class D airspace.
- Emergency landings due engine failures**  
Burning oil smell; sudden engine failures; performance reduction.
- Weather**  
Weather problems (excluding turbulence)
- Other**  
AIS website problems; parachute/gliding site problems; fumes in cockpit; turbulence; engine starting; Rule 5; chart information

ALL BACK ISSUES OF GA FEEDBACK ARE AVAILABLE ON OUR WEBSITE: [www.chirp.co.uk](http://www.chirp.co.uk)

GA FEEDBACK is also available on the **CHIRP** website - [www.chirp.co.uk](http://www.chirp.co.uk)

A General Aviation Safety Newsletter

from **CHIRP** the Confidential Human Factors Incident Reporting Programme

# REPORTS

**CHIRP Narrative:** Throughout the past year or so we have received an increasing number of reports that are indicative of a poor standard of airmanship/self-discipline exhibited by some experienced pilots when operating within or in the vicinity of the visual circuit. Regrettably, some of these might be best described as an aviation version of 'road rage'.

## (1) RIGHT REPORT - WRONG PLACE!

**Report Text:** I was returning to AAA from the west. I called AAA Information at eight miles out and was given, as is normal - "Report ### VRP for Rwy ## QFE ###" which I read back. Approx one minute later another aircraft (non-UK registration but pilot with English accent) called inbound from a neighbouring airfield which is to the north west and was given the same information.

The airfield at which I was arriving suffers complaints about noise and the published approach from the west or north is to remain several miles north of the field, turning "base" to the VRP which is at approx 4 miles on final approach track. As I turned "base" the other aircraft reported at the VRP (therefore ahead of me) and was told, as is normal, to report at two miles. I was uncertain of the other aircraft's position, had not had any visual contact but the visibility was good and as I flew the base leg towards the VRP I was scanning the whole area. The other aircraft then reported "Two miles final". I could still see no sign of it.

I reported at the VRP and proceeded on the final approach track, still searching for the other aircraft. Shortly before I reached the "Two mile final" point, the other aircraft called "Right base for runway ##". The FISO immediately asked for the aircraft's position and he confirmed right base for short final. The FISO asked if he had called at the VRP and 2 miles, the pilot responded "yes and you acknowledged the calls." At that point I still did not have the aircraft visual and was preparing to go round but asked the FISO to confirm the position. The aircraft was turning final at about 300 feet very close to the runway threshold; I then acquired visual contact. I was able to land after the other aircraft had vacated, having flown a minimum speed approach.

I discussed the matter with the FISO who was less than happy with the pilot of the other aircraft, and who would be "spoken to".

This is a busy training airfield and there are often three aircraft in the circuit plus successive departures and arrivals. The arrival procedures work very well BUT can only do so if pilots give calls which relate to their true positions. The FISO can do nothing if pilots report at certain points when they are nowhere near them.

There is no doubt at all that this pilot called at the VRP when he was nowhere near it and his very tight base leg indicated that he had been nowhere near the "two mile final" point. Had the pilot questioned the FISO as to the location of the VRP he would undoubtedly have been told where it was. As it was, this pilot's actions could have caused extreme distress to students or tyros in the circuit or on final.

I am a part owner of another licensed airfield and we have problems with pilots inbound who report they have "field in sight" or give their positions when they are nowhere near the field. I believe this problem makes the task of A/G and FISO much more difficult. If only pilots were honest and acknowledged that they didn't know where VRPs - or indeed they - were, it would make the airfield environment a safer place.

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## (2) UNANNOUNCED ARRIVAL

**Report Text:** I was awaiting departure clearance on a very busy day with five aircraft in the circuit, positioned to see the runway and aircraft on finals. I was in no hurry or pressure to fly and was happy to watch the arriving aircraft. Having called "Ready for departure" approximately 10 mins previously, I was given "Line-up after landing Piper" by ATC. "Line-up after Piper" I replied. There was a small delay as the Piper was clearing the runway. "G-##, clear immediate take-off right-hand turn out". I repeated the instructions "G-##, cleared immediate take off". A quick look out and I commenced the take off.

As I was rolling at close to rotate speed the controller issued an instruction "Cessna ### go around maintaining centre line". I was amazed as I had heard no mention of this Cessna until now. I rotated and climbed out at 800fpm. ATC "Cessna ###, turn left now". I was now at 300ft halfway down the runway with no sign of the Cessna! A few seconds later ATC asked me "Do you have the Cessna in sight?" Yes, 50 yards at my height at 2 o'clock!

I learnt later that day that the visiting Cessna had flown a shortened right-hand downwind leg and a very tight base leg. He had neither called nor was given clearance to land. The pilot apparently was intent on landing with me lined up for take-off. A concerned club instructor contacted me and explained that he thought the Cessna's port wing would take my tail off!

Later I met the ATC controller. He stated that ATC had reprimanded the Cessna pilot and explained that the delay of the Piper exiting combined with the very tight pattern of the Cessna had eroded the safety margin separation. Plus the Cessna right-hand circuit had also put a helicopter at risk!

I stated that in future I would wait to enter runway until I was cleared for take-off!

**CHIRP Comment:** As these two reports demonstrate the importance of conforming to the standard circuit

pattern and making R/T calls in the right place for the benefit of other pilots cannot be overstated. If you are unable to make the call in the right place, let others know by a call such as "Late Downwind" (CAP 413 refers).

Also, if you are unsure of a VRP position - ask; there is no excuse for not conforming to the relevant joining procedure

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### MISPLACED OBSTRUCTION

**Report Text:** My son and I were flying from a private strip in Ireland in conditions of low cloud and poor visibility following the Grand Canal which links the Irish Sea at Dublin with the River Shannon.

Passing the town of Tullamore we noticed on the ½ mil CAA aeronautical chart (current edition) a lighted obstruction shown on the north side of the canal. We were following the right-hand traffic rule so were on the south side of the canal flying west to east expecting to see the mast on the north side, as shown on the chart.

Suddenly, we saw the mast in our 12 o'clock and my son who was flying had to suddenly bank to the right to avoid any guy cables which we could not see, nor could we see the top of the mast for cloud.

I was not surprised as I always expect the unexpected but I would suggest showing the mast on the correct side of the Grand Canal when the chart is updated.

**CHIRP Comment:** This matter was raised initially with the Directorate of Airspace Policy, who confirmed that the co-ordinates of the mast corresponded with those on the Irish Aviation Authority (IAA) chart and published in the Irish AIP.

Subsequent discussions with the IAA revealed that the obstacle was old and the resolution of the co-ordinates was in minutes, thus the precise location of the obstruction could vary by up to 0.5nm from the location plotted on the 1:500,000 chart. The IAA's current surveying standard requires resolution in seconds of Latitude/Longitude. The precise co-ordinates of the mast are being re-checked and future chart depictions will be corrected as necessary.

The above emphasises the importance of equipping yourself with an appropriately scaled VFR topographical map if you elect to fly en route VFR at relatively low altitude. Also, when overseas it is strongly recommended that you use one published by the relevant National Authority to ensure that the obstruction information is as current as possible.

In the UK, if you notice a chart discrepancy, check whether it is listed among the chart amendments posted on the Directorate of Airspace Policy website; if not, you can use the website feedback facility ([vrcharts@dap.caa.co.uk](mailto:vrcharts@dap.caa.co.uk))

### MICROLIGHT LANDING TECHNIQUE

**Report Text:** A nice flight in my flexwing from AAA to BBB, turbulent but not unusually so. A clear windy day forecast to be 15kts westerly, Called BBB radio when I had the airfield in sight. Joined overhead at 2,000ft. Whilst descending into wind on the deaside I glanced at the GPS and noted the ground speed was 25mph. My hands-off trim speed is 50mph. I called joining downwind and asked for the surface wind. The reply was 8 to 10kts, I don't remember the direction but it was consistent with the windsock and roughly down the runway.

It was turbulent in the circuit, to the point of being quite difficult to maintain position and turn the corners accurately. I turned onto final to pass over the white arrow and began what I considered to be a steep glide approach. The lower I descended the more bumpy it got. I was trying to keep an eye on the ASI to maintain 50mph. Over the threshold I turned to the right to line up with the centre-line but got kicked quite hard to the left. I was attempting to correct this and preparing to flare when the plane dropped down forward and to the right. I hit the ground hard nose wheel first. I bounced and pulled the bar hard in to jam the plane back down onto the ground. The damage to the front of the trike jammed the foot throttle on and I skidded down the runway holding the bar in and reaching for the kill switch with the other hand. I came to rest after about 50 metres.

At the time I assumed that the turbulence had simply batted me down onto the ground, but on reflection I think that perhaps my approach speed was inadequate for the wind gradient and turbulence and I may have stalled the right side of the wing. My stalling speed is around 30mph.

During my NPPL (M) training almost all of my landings were glide approaches. I think I need to start practising powered approaches in order to maintain a greater margin of safety in the face of landing in stronger headwinds.

**CHIRP Comment:** In conditions such as those described in this report, it is possible at heights below around 30 feet to experience a significant windshear (a reduction in headwind component) of up to approximately half the value of the gradient wind; this can occur almost instantaneously. The presence of significant turbulence is an indication that windshear might be encountered and, in these conditions, a pilot flying a light aircraft should increase the final approach speed by at least 10 knots.

The British Microlight Aircraft Association recommends that a powered approach be flown in blustery conditions; this will permit a normal final approach path to be flown at a higher speed than that for a glide approach. In addition to providing additional protection against a sudden loss of airspeed due to windshear, the higher speed provides better controllability. The principal reason

for teaching a glide approach is to position the aircraft such that it can land safely on the strip in the event of an engine failure during the final approach; however the improved reliability of modern two-stroke engines and the increasing use of four-stroke engines has led to the increased use of powered approaches which provide the attendant benefit of improved controllability.

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### MILITARY RTF PHRASEOLOGY

**Report Text:** I was flying a SEP Class Rating Renewal Skill Test with an experienced military rotary wing pilot. Normally at this aerodrome we land at the 1,500ft point and exit onto a taxiway 3,000ft further down the RW. However, in order not to delay a Four-engine jet approaching the Holding Point, I advised ATC that we would land on the threshold and exit 1,200ft further down the RW. At 200ft AFTER receiving clearance to land, we were surprised to hear ATC clear the 4-jet to 'Line Up!' Fortunately, the 4-jet crew replied 'NEGATIVE!' and we landed without further incident.

At a civil aerodrome, no doubt a conditional clearance would have been issued to the 4-jet (e.g. AFTER LANDING TRAFFIC, Line up and wait" or similar); however, it seems that the UK military does not use such phraseology.

With ever increasing dual civil/military use of many military aerodromes, surely there is no valid reason why civil and military R/T phraseology should not be brought into line with each other?

**CHIRP Comment:** This report was forwarded to the Defence Aviation Safety Centre (DASC) for comment. In their response DASC noted that military controllers do not issue conditional clearances. The incident was apparently the result of a controller error.

A review of military phraseology from an ATC perspective is currently being undertaken to harmonise, where possible, with ICAO standards.

CAA General Aviation Safety Sense Leaflet 26 - Visiting Military Aerodromes, issued in September 2004, provides useful advice on the topic.

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### HEAT, BRAKE OR CHOKE?

**Report Text:** I have been flying long enough to make most mistakes at one time or another but on this day I made yet another classic mistake. I started off flying in shirtsleeves but I got colder so put the cabin heat on about 5 minutes before joining the circuit.

In the circuit I thought it's still cold so I will leave the cabin heat on. Normal circuit, approach and initial landing. When I used the brakes to slow for the first turn off, the aircraft continued to veer towards the port side of the runway.

I fairly soon realised that I had landed with the parking brake set to "ON". No mishap this time

because the runway was normal with tarmac, I touched down not much above the 40 knot stall, and the brakes on this aircraft are not particularly effective, but it could have been a ground loop or worse if I had been on a narrow grass strip.

On the aircraft type I was flying there are 3 identical buttons at the centre bottom of the panel - choke, cabin heating and parking brake. From my seating position I cannot see the labelling without bending my head down. Of course I had pulled the wrong button and got the parking brake and no heat.

My amended landing checklist will now include "ALL BUTTONS IN". That way I will be sure I don't land with parking brake, choke or possibly carbon monoxide producing cabin heat, selected "ON".

**CHIRP Comment:** Locating identical or similar controls adjacent or close to each other is a poor design, since the risk of mis-selecting is always present, particularly at busy times. Therefore it is important to check that actual selection is that intended

The use of a simple checklist, as noted by the reporter, is a useful aid to avoid errors of this type, and remember when making any selection: (1) Check limitation, if applicable; (2) Identify control and select; (3) Confirm correct operation.

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### FLAP FAILURE

**Report Text:** During a standard dual check the PPL holder was told to make a standard approach using power and flap. On touch down I told the PPL holder to apply full power for a touch and go.

I informed the PPL that I would operate the flaps. I selected 10° flap and we continued down the runway (runway in use on that day was 450mts grass - uphill). As we started the climb-out it was obvious that something was amiss. The PPL looked quite stressed as the aircraft was not climbing very well. I asked the PPL what the problem was. He couldn't answer the question. When I told him to look at the flaps, he could see that we had full flap.

An R/T call was made and we continued a bad weather circuit to land. On inspection the engineer confirmed that the flap motor had failed.

**CHIRP Comment:** In this incident, having assumed the responsibility for selecting the flap during the touch and go landing, the instructor also assumed the responsibility for ensuring that the flaps had moved to the correct position. The importance of confirming correct operation also applies to this report