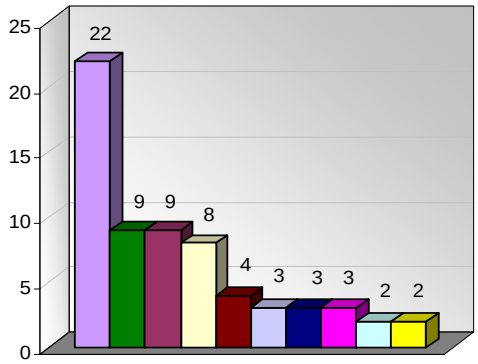
GENERAL AVIATION

CHIRP FEEDBACK

Issue No: 37 Autumn 2008

Most frequent GA Issues Reported 12 months to July 2008



- **Handling/Operation**
  Airmanship, Handling of A/c, Operation of Equipment
- **Aircraft Technical**
  Propulsion, Design, Systems
- **Situational Awareness**
  In the Air
- **Procedures**
  Use by Reporter, Use by Others, Adequacy
- **Air Traffic Management**
  Level of Service, Separation
- **Airports**
  Runways, Bird Control
- **Communications - External**
  With ATC
- **Regulation/Law**
  Compliance Of, Knowledge Of, Absence Of
- **Individual Error**
  Conflict, Lack of Leadership, Insufficient Team Work
- **Ground Handling**
  Loading, Refuelling, Servicing

NEW NATIONAL PRIVATE PILOT LICENCE REVALIDATION REQUIREMENTS

Instructors, Examiners and Private Pilots should be aware that there are new revalidation criteria for NPPL Class Ratings.

The new requirements can be found in Schedule 8 of the Air Navigation Order downloadable as CAP 393 from www.caa.co.uk and are explained in further detail in AIC 30/2008 White 146 which is available on the AIS web site at www.ais.org.uk

Number of Reports since the Last Issue: 17

WHAT'S IN THIS ISSUE?

REPORTS

CIRCUIT INDISCIPLINE

CHIRP Narrative: **We continue to receive reports that suggest that some pilots either do not know the Rules of the Air as they apply in the visual circuit or elect not to comply with them. Whilst we are unable to confirm all of the details in each case, some reports are indicative of a poor standard of airmanship and/or a lack of flying discipline. The safety implications of such incidents and the possible consequences to licence privileges merit serious consideration by those who might be tempted to act similarly.**

(1) A FISO'S PERSPECTIVE

Report Text: An inbound aircraft called positioning for a straight-in approach; I informed the pilot that the circuit was active with two other light aircraft, and reminded the pilot of the requirement to give way. The joining aircraft elected to continue with the straight-in approach, I provided the two other aircraft with traffic information, including the intention of the joining aircraft to fly a straight-in approach. Inevitably, a confliction occurred on final approach, which was resolved by the pilot turning final from the downwind leg taking avoiding action on the joining aircraft.

After landing, the pilot of the joining aircraft (a senior instructor) telephoned assertively claiming his rights and priority because he was already established on final approach, albeit on a straight-in approach to a busy circuit. The pilot of the other aircraft telephoned questioning the motives of the instructor in persisting with a straight-in approach towards known conflicting circuit traffic

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Lessons Learned: I am a Flight Information Service Officer (FISO) at a busy VFR GA aerodrome situated in Class G airspace; the environment is therefore 'uncontrolled'. In such an 'uncontrolled' environment it is important that traffic behaviour is predictable and that RTF reports are accurate in order to enhance situational awareness for all parties. This greatly assists the FISO to fulfil his responsibilities for passing accurate and timely traffic information to assist pilots to decide the appropriate course of action to be taken to ensure the safety of flight.

The local procedures are simple. The circuit pattern and noise sensitive areas are clearly depicted in Flight Guides; the 'Standard Overhead Join' is clearly depicted in CAA publications. However, on a daily basis, I observe many airborne manoeuvres which compromise flight safety.

Such manoeuvres include the following:

- Unannounced orbits for 'spacing'.
- Straight-in approaches into a busy circuit.
- Aircraft extending downwind for 'separation' thereby leaving the ATZ and rejoining on an extended final.
- Aircraft joining 'midfield'.
- Turns within the ATZ in the wrong direction especially on the 'deadside'.

None of the above manoeuvres appear to be compliant with that part of Rule 12 which requires pilots to 'conform to the pattern of traffic formed by other aircraft'. Most FISOs do their level best to ensure that pilots are in receipt of essential traffic information. FISOs are discouraged by the CAA from making any 'suggestions' which might make life easier for all parties, and from issuing 'reminders' e.g. to 'give way' (Rules 12/13/14) or 'maintain listening watch whilst within the ATZ' (Rule 45) or 'Report entering/leaving the ATZ' (Rule 45).

Some pilots do not seem to be aware of the reasoning behind some of the Rules of the Air; others seemingly elect to blatantly disregard them in their own interest, thereby creating the potential for a serious airprox or mid-air collision.

I implore CHIRP to urge the CAA to issue a comprehensive reminder to pilots to comply with Rules 12 and 45 at uncontrolled aerodromes and to take advantage of the benefits of the Standard Overhead Join before a FIS has to be upgraded to ATC as a result of a mid-air collision.

CHIRP Comment: **As the reporter notes, Rule 12 (1) (a) requires an aircraft commander to conform to the pattern of traffic formed by other aircraft intending to land at that aerodrome. A pilot who elects to join an established circuit by a straight-in approach must give way to other aircraft in the visual circuit unless assigned a position in the landing sequence by an ATC service.**

Also, as regards the order of landing (Rule 13), the right-of-way afforded to the lower of two aircraft is conditional on the pilot of the lower aircraft not cutting in front of another aircraft established in the visual circuit.

The reporter's comments have been passed to the CAA.

(2) Setting a Good Example?

Report Text: At CCC, local rules give straight-in traffic priority over circuit traffic; an inbound aircraft is required to call at the VRP and again on final approach. I commenced my approach making the relevant calls; the Tower was not staffed at the time, so no replies were received. Immediately after my second call another aircraft called on final approach.

My student and I were concerned that the other aircraft was very close, and might overtake us, or worse land on top of us. At that moment we saw a twin overtaking us on the right and not on the centre line. We asked the aircraft's intentions, and the reply was "To land if that is OK with you". I replied, 'not really, but I am going around'. At this point I initiated the go-around procedure.

After landing I went to see the pilot of the other aircraft, who was a senior instructor flying with a student. He claimed neither to have seen me or heard me. This could not have been true, as otherwise he would have been on the centre line of the runway, not a considerable distance to the right to overtake me.

As I was on an instructional flight myself, I did not think the incident set a good example to either student. I was very annoyed that we had been placed in such a potentially dangerous situation. If I was neither seen nor heard, then what was the pilot doing in the other aeroplane?

Lessons Learned: Procedures should be followed even if they might be inconvenient to an individual pilot when flying a faster aircraft. When on an approach it is important to look out for and listen out for other aircraft. Anarchic behaviour can cause accidents and sets a bad example; from an instructor it is totally inexcusable.

CHIRP Comment: **Rule 13 (2) is unambiguous; overtaking on final approach is not legal.**

Not Minded To Reply

Report Text: I was flying close to AAA and maintaining a listening watch but not in two-way contact with AAA. I heard another pilot call "AAA Information" on two separate occasions. There was no response from AAA, so thinking that there might be a problem with their equipment I called "AAA Approach" and received an immediate response.

After another call from what appeared to me to be a student pilot, the instructor/2nd pilot called AAA Approach and also received a response. The instructor asked for the controller's name, as he said he wished to discuss the matter post-flight but this was refused.

This may seem like a minor incident but if the student had been alone and under pressure then a difficult situation might have arisen. Surely the correct response to a mistake of this nature is a reminder from the Approach service of their correct call sign on reply.

Anything which discourages low-hour GA pilots from speaking to local ATC is unhelpful to everyone.

CHIRP Comment: **There is no justification for an ATSU to ignore an incorrect call of the type described, as appears to have been the case.**

It is not appropriate to request a controller's name over the R/T; if you wish to follow up on an ATC related matter, this is better done on the ground immediately after the flight. As a reminder, ATC RTF tapes are required to be retained for a minimum of 30 days to permit them to be reviewed if the need should arise.

RIGHT INTENTION - WRONG AIRCRAFT

Report Text: You listen to what you are told but... You also see what you expect to see. Or at least, I did.

I'm a 150 hour PPL and I sometimes fly a Robin. Two control zones are near to my home airfield and occasionally I negotiate to fly through their airspace; so.....I ask for a zone transit through ZZZ's zone, VFR in excellent visibility. I've listened to the ATIS; I know that there is arriving airline traffic, so I'm hoping to be cleared over the runway threshold as usual.

I'm given a discrete transponder code, identified and then given a simple (in hindsight) ATC instruction: "Traffic is an ### (company) Airbus A319, 9 miles final, report visual". Looking to my left, I see an aircraft on finals at about my height (1,800ft); its colours look correct, so I immediately reply "G-XXXX visual with the Airbus"

I'm then cleared to arrange my track to pass behind it, over the runway threshold, not above 2,000 ft, which I acknowledge. Calmly watching it land and then turn off onto the taxiway, I begin to have doubts about whether I'm actually looking at the right Airbus A319, but I'm now very close to crossing the centreline. Looking back up the ILS approach I can see what is definitely an ### Airbus A319, but it's below me and about to land, so I decide to continue with my crossing.

While I'm crossing the centreline of the runway, I begin to wonder what would happen if the landing aircraft has to go around, as I appear to be blocking its path in that event, but decide that the controller must have considered this when he cleared me through.

Subsequently I'm called up by Radar Control and told that I was cleared behind the Airbus, not in front of it, that I would have been an obstruction in the event of a go-around, and that 'they' – I assume later this means the Tower Controller - have phoned to complain about me.

So, simple lessons learned:

1. How big would a commercial jet appear at 9 miles range – much smaller than I had assumed.
2. All the subsequent problems arose from my identifying the wrong aircraft. After the event, I asked myself if I could have expected the Radar Controller to have noticed the error and pointed it out to me, although the fact that the Airbus was probably too far away for me to identify reliably would probably not have been apparent to ATC.
3. Coming from a quiet GA environment, I forgot that the final approach for commercial aircraft covers quite so much ground – however, it would have helped me immensely if my original instruction had been '### Airbus A319, number 2 on 9 miles final, height 3,000 feet' as I might have disregarded the closer traffic and looked for traffic above rather than level with or below me.
4. Commercial aircraft fly much faster than GA traffic. I was genuinely surprised how quickly an apparently safe situation decayed into a problem.
5. If uncertain, ask.

I finished this episode confused and angry (mainly with myself). The anger came from the fact that I had listened to, understood and acknowledged the instructions given to me, but still contrived to create an unsafe situation. The confusion came from the fact that in the heat of the moment I couldn't work out what had gone wrong - of course being openly chastised by the Radar Controller for all the other traffic to hear didn't make me feel any better.

CHIRP Comment: **It is very easy in some weather conditions to misjudge the size and thus the range of medium/large airliners. In this case the reporter was not helped by the imprecise ATC instruction and the radar controller subsequently failing to monitor the position of the reporter's aircraft relative to the arriving traffic. If you are in any doubt at all about an ATC instruction, the safe option is to seek clarification immediately.**

It is inappropriate on grounds of flight safety for ATC to admonish a pilot in flight; in these particular circumstances it was also not justified.

WHO'S IN CONTROL?

Report Text: It was the first flight away from home base for our newly completed homebuilt aircraft following the successful completion of its test programme.

Since I had not had any opportunity to be checked out on type, it was agreed that one of the co-builders would fly it to our destination and that I (also a co-builder with two other friends) would occupy the rear seat as a passenger on the way out, but fly it from the rear seat on the way back with my colleague in the front seat taking over control for the landing back at our base.

The outward flight was uneventful. For the return leg we decided that once airborne my colleague would hand over the controls to me and I would fly back to base, join the circuit and press on round to final, whereupon my colleague would take control for the round out, landing and ground handling (there is no brake control from the rear seat). All went well and I thoroughly enjoyed the splendidly balanced and precise controls, bringing it nicely down the approach to the runway as planned.

As my colleague took over for the round out I "followed through" on the controls to get a feel for how they behaved during this phase, agreeing comfortably with the way my colleague was handling the situation. The aircraft settled nicely on to the runway in a three-point attitude at which point I took hands and feet off the controls - and was alarmed to find it starting to skitter wildly from side to side on the tarmac. The headphones were filled with expletives as my colleague actually now did grab the controls and brought things back to order.

Lesson Learned: The moral of this anecdote could hardly be more obvious. When transferring control from one pilot to another, never omit the confirming dialogue

"You have control" - "I have control", no matter how confident you are that a prior agreement is in place.

CHIRP Comment: **Several serious accidents have been caused by failing to hand over/take over control correctly and the correct method of doing so is an important element of instructor training.**

Giving a colleague 'experience' is in practical terms a form of instruction and the method of transferring control should be briefed and clearly understood by both pilots, including how this is to be achieved following an intercom failure (e.g. Fore/aft stick movement - front seat; side/side stick movement - rear seat).

RIGHT SELECTOR - WRONG ACTION

Report Text: This was the second night flight with a PPL holder to obtain a night rating. On the first flight, a navigation exercise, the pilot had experienced no problems with fuel selection. During the second flight, a circuit detail, after 45 mins, I told the pilot to switch tanks; this seemed to take longer than usual, so I flashed my torch on the fuel selector and saw it was in the OFF position. This was quickly put right and the engine continued to run. This was the second occasion this had happened to me in a PA28; on a previous occasion the left hand seat occupant had switched the fuel OFF, this time in the cruise at night at 3,000ft!

Both night rating candidates had been checked out on the Warrior after flying the PA38 where the fuel selector is in the centre between the two pilots. Both pilots had said that under stress, whilst undergoing night flying training they had switched from RIGHT TANK all the way to OFF thinking they had selected LEFT TANK. How they managed to bypass the safety device is a mystery.

My advice to all instructors when changing tanks on a PA28 in the dark is to first take your torch and shine it on the fuel selector, then tell the left seat occupant to change tanks; you will then be certain he has done so correctly. Do not rely on that safety device to prevent inadvertent selection OFF; it has let me down twice.

CHIRP Comment: **Although the purpose of this training is for the student to become competent in single pilot operations at night, it is important to monitor a student's actions, particularly when he/she might be working at close to his/her maximum capacity.**

With regard to the inadvertent operation of the safety catch, Human Factors research has shown that if a pilot routinely operates any device, such as automatically operating the safety catch when switching the Tank Selector to OFF at the end of a flight, he/she will be vulnerable to carrying out the same action inappropriately, particularly when stressed. This type of 'motor action' error can be prevented by always consciously following the sequence: Limitation; Selection; Operation.

RUNWAY INCURSION

Report Text: I was preparing for an airways flight from Europe to the UK and was listening on Tower frequency for about 15 minutes after start up and before take off. I was well rested and prepared for the flight and free from any undue pressures/anxieties and distractions. It was a very quiet day at the airport with only one other aircraft on frequency, also taxiing.

I had received ATC clearance prior to taxi. I was cleared to an initial taxiway intersection hold, but then cleared onward before reaching the intersection to 'holding point runway ##'. I did not require the full length of the runway and on approaching holding point Charlie, I requested 'Take off from Charlie' and was cleared (As I heard it), '...through Charlie'. I recall that I repeated back 'through Charlie' without being challenged. As I crossed the edge of the runway, Tower instructed me to stop and challenged me as to whether I 'Had received take off clearance?' to which I replied 'No'. I was then effectively told I had entered the runway without clearance.

There then followed about a minute of my trying to establish whether I should go forward and line up or vacate the runway. As it was, I was left in a position of being perpendicular to the runway with the front of the aircraft on the runway, and the rear on the taxiway. After a further period of time I was cleared for take off. Interestingly, but possibly just coincidentally, the other aircraft on frequency also taxiing, crossed a hold line and was reprimanded by the controller, seconds before my incident. As the controller said to me several times, this incident created a potentially very dangerous situation. In actuality, I believe no danger or disruption was presented to any aircraft or vehicle as the weather conditions were good, I had visually checked the runway and approaches before entering, Ground frequency was not in use and I had been continuously monitoring the Tower frequency.

Lessons Learned: The prime responsibility for this incident was mine, because although I believed I was cleared 'Through Charlie' and had repeated it back without challenge, 'Through Charlie' does not of course constitute standard RT phraseology to enter the runway. I should not have entered until I heard either, 'Line up and hold' or, 'Cleared take off'. I therefore apologised to the controller for the misunderstanding. I think that the period of time since receiving my clearance, the lack of other traffic on frequency, and the immediate clearance beyond the initial holding point all led me to expect an imminent departure.

My personal learning is that I will not enter a runway without explicitly hearing either 'Line up' or 'Cleared Take- off'. I believe also it should be emphasised again to all controllers that adding 'and hold' to aircraft taxiing after receiving airways clearance would be effective in preventing similar incursions.

CHIRP Comment: **If the reporter's recollection is correct, the use of non standard RTF phraseology by both ATC and the reporter contributed to this incident; however, as he concedes, the principal cause was that the reporter made an impromptu change of plan and then misunderstood the subsequent ATC instruction.**

It is most important to use only standard RTF phraseology, particularly in a case where the ATCO's first language is not English. Also, if in the slightest doubt as to an ATC instruction, request a repeat before proceeding.