

# CHIRP FEEDBACK

Issue No: 82

Spring 2007

## EDITORIAL

### SECURITY CHECKS - CONTINUING CONCERNS

Since publication of the editorial in the last issue of FEEDBACK, I have received more than 20 further reports detailing incidents in which individuals on duty have been either frustrated by inconsistencies or subjected to alleged harassment whilst undergoing airport security checks. I have also received numerous telephone calls and e-mails supporting my contention in my previous editorial that, far from bedding-in, the varying standards of security applied by individual security agents are continuing to cause significant problems to individuals who are required to undergo airport security checks on a routine basis as part of their duty, and that attempting to resolve these varying standards at a local level, as proposed by the Head of Transec in a written response to a previous representation of the reported concerns, is not a practical solution.

The frustration caused by what are perceived as aggressive and intimidatory searches continue to be reported by both pilots and engineers. Similar concerns have been reported by air traffic control officers at locations where they are required to pass through airport security prior to and following their watch duty.

The **CHIRP** Air Transport Advisory Board, which reviewed the reports published in this issue of FEEDBACK and other similar reports, reflected on further anecdotal evidence that pilots, engineers and some air traffic control officers are continuing to suffer from the inconsistent application of the DfT guidelines, inappropriate behaviour of security agents and the questionable competence of some Transec inspectors. The Board concluded that the ongoing difficulties represent one of the most significant current human factors flight safety issues, and endorsed a further representation to the Department for Transport.

Peter Tait

The following are a small selection of the most recent reports received on this topic:

(1)

**Report Text:** Early morning report at 0530 but fully rested. I know as well as everyone else in the company that the security staff at ### (UK regional airport) are particularly over zealous with their searching of crew,

even though we go through every day and they know us all, most of us by name. It is not as if it is the busiest airport on our network.

This morning the First Officer was subjected to a totally over-the-top flight-bag search that lasted for about 15 minutes; they found nothing. The search was done in a surly manner with no conversation. This got to both of us, putting us in the wrong frame of mind for the long day ahead, a 12- hour plus duty.

Our state of mind became apparent only when London Control asked us which turning point we were heading for. We realised we had loaded the wrong route into the FMS. We had loaded our usual route instead of the different one we had been planned for today. I can only assume that with our conversation and mood during the loading of the FMS being dominated by the security treatment earlier that our usual cross-checking had been missed.

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An Air Transport Safety Newsletter

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

**Number of Reports Received Since the Last Issue and Report Topics:**

**ATC - 7**

Use of two types of display  
Airport security procedures  
Extended shift duties  
Speed control phraseology

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**Flight Crew - 65**

Airport security procedures  
Fumes on flight deck  
Rostering/Crewing concerns  
Operations at non-UK airports  
ETOPs- Cargo bay fire suppression  
Inadequate on-board documentation  
Comments on ATC speed control  
Ice on wings - not detected by engineers

~~~~

**Engineer - 10**

Airport security procedures  
CAA examinations -excessive waiting times  
Contract working - long hours  
Job Description- accountabilities  
Reintroduction to service

**(2)**

**Report Text:** Day 1: Stopped and frisked even though the alarms did not sound; not something I enjoy but normally undertake in good humour; even if the security guard doesn't!

Day 2: Stopped again by security even though again I didn't set off any alarms! On this occasion I was frisked by a very zealous individual who touched my genitals no less than three times. This I consider to be nothing short of indecent assault; of course it is an entirely different thing to prove that in a court of law! They then found it necessary to rip my Nav-bag apart, justifying their actions by saying they were interested in a pair of plastic dividers with a point approximately 5mm long. I have never had this interest shown in the dividers before; indeed, the previous day the same security check point had paid no attention to them.

It has left me feeling singled out for whatever reason. I have complied with every directive in good humour, although now that I have been assaulted, that humour is no more.

Due to the above I arrived at the aircraft literally shaking with rage at the way I had been treated. It took me a good 15-20 minutes to calm myself down before I could concentrate on doing my job effectively.

Is it really going to take a catastrophe before TRANSEC wake up to the damage they are causing flight safety?

**(3)**

**Report Text:** On arrival at a major UK airport to operate a charter flight to Southern Europe, my crew and I were refused access through the crew security channel. We were delayed by 15 minutes at a quiet time of day,

adding pressure to a tight schedule for departure preparations.

Following a discussion with the Security duty manager, we were informed that our security ID cards had been "Parked" and would not allow a right of access through the crew security channel. The reason given was that we had not used our ID cards at this airport in the recent past. In my own case I had not travelled through this airport as operating crew in several years.

I explained that my crew and I had all operated the previous day through another major UK airport and several other international airports without a problem, and we all had valid ID cards which should allow right of access through this airport or any international airport for that matter. In my case my ID had been re-validated at my base only a couple of weeks previously.

With respect to the current security climate, we as crew, undergo detailed security background and professional checks, yet still seem to come up against a security regime which tries to obstruct us from carrying out our professional duties. Our situation on the morning was resolved when I requested that the security team offer an alternative method of us getting to our aircraft to operate our flight, whereupon the duty manager instructed his minions to allow us to pass through - even though our ID cards were still "Parked"!

I hope that writing this report will help the security authorities to iron out some of the inconsistencies in their operation.

**(4)**

**Report Text:** Here is one of my recent security experiences. We arrived at security check for our bags and us to be screened before being driven out to our aircraft at a major UK regional airport. We are a freighter crew, and carry our own baggage, which is stored on the main deck of the aircraft. The female security agent asks if there are any liquids in our bags (note ANY; not more than 100ml in a container). We answer "Yes" and are now told that we cannot take these items through security. We politely explain that we are a freighter crew and are leaving the UK for at least 7 days and cannot do without some of the liquids involved (contact lens solution in my case). Immediately, another woman appears from behind the x-ray machine and rudely insists that unless we comply with her instructions, our ICAO ID passes will be confiscated. We are speechless!

The Captain defuses the situation by asking if our driver/handler could bring the bags to the aircraft. Reluctantly this is agreed by the security agents, as long as they "don't travel with us and are placed in the hold". We are short of time and agree. Our bags are x-rayed and then placed at the end of the x-ray machine. Our handler drops us at the aircraft. Both pilots are stressed about the attitude of the security agents but get on with the pre-flight checks, complaining about the different attitudes of security staff at different airports or indeed different gates and no method of redress for flight crew who often have to get security screened several times in a day. The handler then returns with our bags and carries them into the cabin.

Later, we realise that we have been exposed to a far more serious threat. Our bags were left, without our supervision, for some 20-25mins. During this time, anyone could have tampered with our luggage.

(5)

**Report Text:** Near the end of a normal 8-hour shift I was asked to go from my base to a nearby UK regional airport to help our third-party engineers with a technical problem; as I felt reasonably fresh, I agreed.

After driving 50 miles I arrived. My company maintenance control had forwarded my details to Security and they were expecting me. My escort was waiting. That was as far as we got because I didn't have my passport. A side room was provided and I had to talk through the technical problem in there.

I asked the security staff how come aircrew can get through with just a licence and a pass from another base but engineers can't. A suited 'gentleman' told me, "An engineer is more likely to do something to an aircraft then go away, a pilot has to fly it" I was also told in a roundabout way to be careful what I said if I wanted further access.

This attitude from a manager is sadly typical, and one that causes the biggest grievance with engineers. I now have to carry my whole life/identity around when I go to work. God forbid me loosing my bag or someone borrowing from it. PLEASE can we have ONE ID that fits all sites?

(6)

**Report Text:** It is very frustrating getting airside. Two people on the same shift tried to bring a tin of baked beans, one was allowed; one was not! I had a tube of toothpaste taken off me because it was not in a plastic bag. Came back ten minutes later with a plastic bag; I got the toothpaste! You just don't need this before a cold 12-hour night shift.

(7)

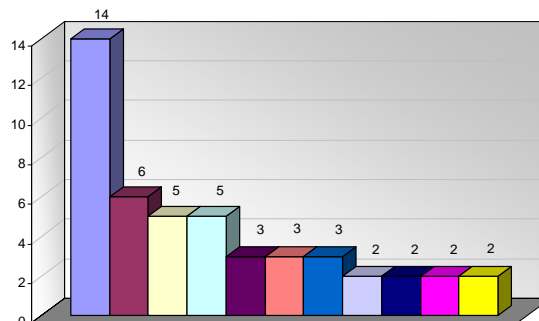
**Report Text:** I am a Certifying Engineer working for ### at a major UK airport. Engineers in my Company are required to pass through passenger security to access their workplace on the line. As well as top-coat removal, shoe removal and briefcase searches, in line with passenger searches, security guards seem to pay particular attention to packed lunches, confiscating many of the items randomly.

On a 12-hour night shift there are very few canteen facilities available and many Engineers rely on pack lunches brought from home. Our Managers are subject to the same problems, one having to prove that a pile of Business Cards was not a banned substance.

No, we are not starving but this is hassle we don't need; it doesn't do much for your frame of mind at the start of a gruelling night shift. It should be noted that all these "Banned" items are freely available on day shifts providing we buy them "Airside" at airport inflated prices!

# ATC REPORTS

Most Frequent ATC Issues Received  
12 Months to March 2007



- Communications - External**  
(Pilots)
- Handling/Operation**  
(Operation of Equipment, Airmanship)
- Company Policies**  
(Operational, Safety Reporting)
- Procedures**  
(Use by Others, Adequacy, Use By Reporter, Lack of)
- Air Traffic Management**  
(Separation)
- Duty**  
(Length, Rest)
- Resources**  
(Manpower/Personnel)
- Environment**  
(Visibility/Cloud Base)
- Documentation**  
(Suitability/Adequacy)
- Relationship Management**  
(Managers, Team/Shift/Watch)
- Regulation/Law**  
(Compliance with)

## DIFFERENT DISPLAYS

**Report Text:** I am concerned by a proposal to introduce a split sector procedure using two different types of radar displays, despite the expressed opinion of a significant majority of the ATCO community stating they have safety concerns about using two different types of radar displays to work the same sector airspace.

Currently some of the sectors are controlled using 28-inch displays, whilst the rest of the sectors all utilise 21-inch displays; the latter are older, smaller cathode ray tube displays of a lower definition than the 28-inch large flat screen LCDs, which were introduced on the major sectors for well documented reasons. A particular shortcoming of the 21-inch displays is that in high traffic situations the screen becomes cluttered with SSR data blocks which no amount of label rotation or filtering can alleviate. This is still an issue for those sectors that are still equipped with them.

When the dual screen configuration was first introduced a few years ago, the management guidance was to "ensure ATCOs had an adequate break between working the different displays" (and therefore different airspace). Practically, this equated to taking 5 to 10 minutes away from the radar environment to let your brain readjust

before plugging in on the new sector and using a different display. However, in the passing of time I have witnessed more and more ATCO's jump from one sector to another without any kind of break between displays. I admit that I have done this myself, because either I forgot, my colleague needed help or the person needing out had reached his/her duty limits. I had immediately regretted it and scabbled for the Range and Bearing Marker to check radar separations that I had applied. Bear in mind this is when swapping between completely different sectors and therefore different airspace. I have heard anecdotally that a controller lost radar separation and that shifting between radar displays was a contributory factor.

At present the sector operates using two 28-inch displays. The proposal is to open the new split sector, at peak periods throughout the day using two 21-inch displays. The remaining part of the sector will continue to operate using 28-inch displays, and when the sector recombines it would operate using the 28-inch displays. I understand that formal representations have been made to the managers running the project regarding ATCO's concerns about the use of different radar displays for the same airspace and the inadequacy of the 21-inch screens for the planned use. The managers have been informed that ATCOs believe it safer to work the sector using only the 28-inch displays.

After limited consultation with the ATCO community it would appear that management are insistent on going ahead with this change on the proposed date, using the 21-inch screens. (They are asking us to come in to receive familiarisation training on the sector for one day; I believe this will deliver 1 hour of radar familiarisation.)

My fear is that pressure, and this will be in many forms - peer group pressure, ridicule, and subtle intimidation etc, will be brought to bear on individuals to work the new sector. Also, a management sponsored Human Factors report is due shortly and I'm sure this document will offer a compromise situation whereby ATCO's are to take "x" minutes break between periods of operation on the different displays. As stated above, I'm sure this recommendation will disintegrate with time. All of this will push the cognitive abilities of ATCOs to the limit on what is one of the busiest sectors at this Unit. Overall, it appears to me, that this is a nonsensical situation whereby management are asking us to justify the commonsense solution i.e. using the same displays all round, whilst they believe their proposal to use different displays to have no flaws. I think that the question that needs to be asked of management is, "How can you justify the safety of the system you propose?"

Finally, and most importantly, I and nearly all my colleagues totally support the division of the sector in order to achieve a safe, orderly and expeditious flow of air traffic. This will ultimately deliver much needed capacity during the peak periods and for the future.

**CHIRP Comment:** With the reporter's consent, the concerns, appropriately disidentified, were forwarded to the organisation concerned. Subsequently, the

#### **following response was received from the Unit management:**

The use of two display types at this Unit has been in place for the last 18 months. It was implemented in line with normal company project processes including a full safety case and associated human factors assessment and report that recommended the mitigation of a period of break before moving to a different screen size. During the first 18 months in service there have been no reported safety incidents or observations.

During the initial discussions on planning a split of the sector in question safety concerns were raised regarding the use of the different screen sizes for this sector split. These concerns were raised by the Trade Union to the Director Safety who commissioned a further Human Factors report. Whilst this human factors assessment was underway three safety reports were filed citing concerns about moving between different screen sizes.

The second human factors report reached a different conclusion from the first in that it concluded that there was no evidence to suggest that a break offered sufficient mitigation. The report went on to recommend a workshop to identify possible mitigations and this workshop, including TU representatives, took place. Further work is needed to successfully resolve the issues identified and, until these are complete, the work on the sector is on hold. The company does not use pressure, subtle or otherwise, to introduce operational change and the actions outlined above underline this.

We are committed to working together with the Trade Union to successfully resolve this situation and to deliver the airspace changes necessary to cope with future traffic growth. These changes will only be introduced on the basis of company project and safety management processes ensuring a safe and effective implementation.

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### **OVERTIME & WORKLOAD**

**Report Text:** I am writing this report for two reasons, the first relates to being contacted by my employer to do overtime.

When about to take leave you can almost guarantee the phone ringing for overtime, with one occasion being asked to do more days work than I had leave! On several occasions I have had work ringing whilst sleeping in between night shifts asking if I will do overtime. Even when I point out that I am on nights trying to rest, they seem indifferent to me needing rest; implying that finding someone for overtime is more important than me resting between shifts. I also know that I am not the only ATCO that this is happening to.

The other reason relates to a particular sector/airfields managed by this Unit. In the last few years the steady traffic increase around this already complex sector is becoming unmanageable (let alone train) to the extent that there has been an increase in incidents and even though meetings have taken place to try to ease some of the problems very little has changed.

My biggest fear is when you put these two items together- staff shortages and a complex/busy sector with no improvements planned, a major incident is more to likely to occur.



**With the reporter's consent, these concerns were represented to the Unit management, who responded as follows:**

The reporter raised a concern about being contacted to do AAVAs (Additional ATCO Voluntary Attendances) while on sleep days between night shifts. AAVAs are *voluntary* attendances and any requests made can be declined without any reason being provided. In addition, staff have the right to ask to be removed from the contact list for AAVAs. The Resource Office is very mindful of checking the controller's roster and only contacts someone who is on a sleep day as a last resort. When they do need to contact someone in such a position they try to time the call to have the minimum disruption. The reporter's concerns highlight that it is timely to raise awareness of the importance of taking steps to minimise possible disruption in these circumstances. As a result, the issue has been raised with the Resource Office and Watch Management.

The reporter also raised a concern about the traffic increase in a particular sector and suggested that there had been an increase in incidents with little action taken. It is not the view of the majority of controllers or management that the growth in traffic is unmanageable. Strong safety leadership and supervision in the ops room ensure that traffic peaks and unusual occurrences are proactively managed with safety always being given the first priority.

Whilst it is true to say that there has been an increase in incidents on the sector quoted, an analysis of the detail shows that the increase has been largely in events not attributable to this Unit (in other words, events which suggest that staffing/complexity has not been a significant factor). Predominantly, this has been the result of a large rise in controlled airspace infringement incidents.

The Unit constantly reviews the staffing situation and is very mindful of anticipating the impact of future areas of rapid growth. A Working Practices Partnership (WPP) has been negotiated and agreed with local Trade Unions. TC is currently up to the staffing levels agreed in the WPP for the sectors mentioned.

**CHIRP Comment: The significant increase in the total number of reported infringements of Controlled Airspace has been assessed as being due, in part, to the focus on reporting all such incidents; this has been one of the key elements in the initiative by both NATS and the CAA to identify effective mitigating strategies for such occurrences.**

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### SPEED INSTRUCTIONS - PHRASEOLOGY

**Report Text:** On quite a few occasions recently, trainees using speed control have used various different phrases to issue a speed instruction to an a/c both prior to and after transition from a Mach No. to an IAS. For example "Fly Mach .77; on transition 300kts".

The problem is occurring in what to actually say with regards to the switch to IAS. I have heard: "On transition (which I believe is fail-safe although one pilot did interpret it as a transition level), "On switching", "When able", "In the descent".

To me the best and least ambiguous is "On transition". The problem with "In the descent" is does the pilot resume his own speed when he levels?

I would be Interested to hear other opinions.

**CHIRP Comment: The preferred options of the CHIRP Air Transport Advisory Board were either, "ABC 123, maintain Mach.77/300kts until advised" or the reporter's choice of "ABC 123 maintain Mach .77, on transition 300kts".**

**Any other thoughts/suggestions?**

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### SID STANDARD OPERATING PROCEDURES (FB81)

**Report Text:** I work at a UK regional airport as a Tower and Radar valid ATCO. Regarding the report in FEEDBACK 81 Page 5, I have no knowledge of where CCC (UK Regional airport) is and whether they have any specific issues requiring special departure procedures to be adopted. However, it is my understanding that a STANDARD first call on departure should include ALL the following;

- Callsign
- Type of departure i.e. SID name
- Cleared level/altitude
- and **Passing level/altitude**

I understand that the pilot is making a point about the difference between an altitude and a FL, but maybe he is always being ASKED for his passing level because he is always OMITTING it on 1st call???

Admittedly, at this airport, our SIDs stop at an altitude so we would ask for his 'passing altitude' rather than 'level'. However, we would only ASK for it if it isn't given in the first place.

**CHIRP Comment: This comment is a very good reminder of the required content of the initial departure RTF call.**

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### SPEED CONTROL - MORE ATC SUPPORT

**Report Text:** Re: Feedback 81 'Reminder on Speed Control'. I work Approach Radar for two of the busiest airfields in the South of England and I have to agree totally with your reporter's comments on speed control.

The standard of speed control, particularly on final approach is poor to say the least. Most of the foreign operators are very good - it is our own UK based operators that cause problems. A speed restriction just seems, so often, to be a series of numbers to be read back and then ignored. The worst times are when established on the ILS and a restriction of "Maintain 160kts until 4 DME" is issued. Intermediate approach is almost as bad. 320 kts at BKY is not uncommon. Do you ever wonder why, when you arrive at BKY with 320kts on the clock at FL110, you get vectored for a left hand circuit onto the south westerly runway?

We have long thought that our restrictions were being ignored by a lot of pilots but, now that Mode S is with us, it is blatantly obvious that the instruction is being ignored much of the time by far too many crews. I recently had two aircraft from the same operator established on the Runway ## ILS, 3 miles apart. Both were given 160kts to 4 miles and transferred to the tower. Immediately after transfer #1 reduced to 125kts at 8 miles range whilst #2 maintained 180kts.

Think about the implications when, in IMC, both the radar and the tower controller are very busy and it takes

a little while to get our scan back to you to check that all is OK! Aircraft routinely increase or decrease speed without bothering to inform ATC resulting in us having to work harder to maintain separation. A pilot wouldn't dream of climbing or descending at will. Once locked on a radar heading, he wouldn't dream of turning without clearance from ATC; so why change speed?

Speed control is an essential separation tool - if you don't want to fly the ATC speed then tell us or get rear view mirrors fitted!

## CAA (SRG) ATSINS

The following CAA (SRG) ATS Standards Department ATSINS have been issued since January 2007:

**Number 100 - Issued 29 January 2007**

Use of SSR In The Vicinity of the Aerodrome Traffic Pattern

**Number 101 - Issued 16 February 2007**

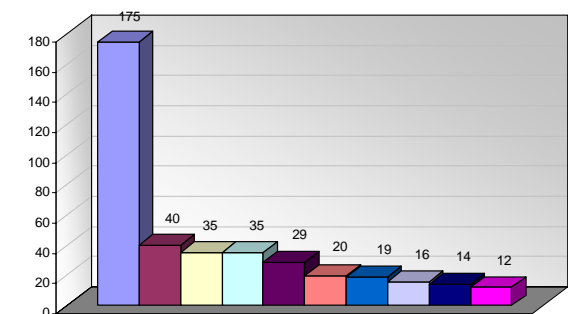
European Action Plan for Air Ground Communication (EAPAGC)

CAA (SRG) ATS Information Notices are published on the CAA (SRG) website -

[www.caa.co.uk/default.aspx?categoryid=33](http://www.caa.co.uk/default.aspx?categoryid=33) and click on the link 'Search for a CAA Publication'

## FLIGHT CREW REPORTS

**Most Frequent Flight Crew Issues Received:  
12 Months to March 2007**



- Duty**  
(Rosters/Rostering, Rest, Length, Crewing, Disruption)
- Communications - External**  
(ATC, Regulators/Government)
- Company Policies**  
(Absence, Operational, Safety Reporting)
- Procedures**  
(Use by Others, Adequacy, Use by Reporter)
- Security**  
(Ground)
- Handling/Operation**  
(Aircraft Handling by Crew, Airmanship)
- Physiological**  
(Illness/Incapacitation, Health/Fitness/Lifestyle, Absence)
- Air Traffic Management**  
(Separation)
- Aircraft Technical**  
(Systems, Propulsion)
- Pressures**  
(From Management/Supervision, Commercial, Time)

## SPEED CONTROL - TWO FLIGHT DECK RESPONSES (1)

**Report Text:** In the report 'A Further Reminder on Speed Control' that appeared in FEEDBACK Issue 81 page 3, the final sentence reads, "if we could think about speed control (spot the word control), it would help".

I do not want to enter into a slanging match with ATC because I would like to consider them "friendly forces" but the way this report reads you would think that all pilots ignore speed control and we are all naughty boys and girls and need to be put in our place.

I would very much like this controller to come and get some real-time flying experience with me; preferably with a strong southerly wind when arriving at AAA (major UK airport) and he/she might understand some of the problems that we (the pilots) face.

The incident described by this controller sounds just like one that I reported to AAA tower after I landed and had received a short sharp telling off from the area controller.

If that controller had wanted me to break off the approach (it was touch and go), continue to believe that only you (the controller) can be right and all pilots deliberately ignore instructions and don't understand the dynamics or the autopilot ability of the aircraft that we fly.

On the night in question the wind at 4,000ft was 47kts from the south which gave a groundspeed on base leg that was well above the normal. The controller had already got me in very close downwind and I had already said to my F/O that I thought the controller might like to know the conditions but the RT was too busy to get a word in. I finally told the F/O to tell the controller (when he could) that I needed 160kts or I would miss the LOC capture that close in. The F/O never got the chance. The controller gave a vector that was from downwind to a finals intercept, (no base leg) and although slowing up we still went through the LOC and only just managed to get on the glide because the vector was that tight. Almost in the same breath we were cleared for the ILS and told to maintain 160kts till 4 DME and change to tower. At that point the F/O had the chance to volunteer the fact we were already reducing to 160kts. The retort from the controller can only be described as "vicious". I elected not to involve myself in an exchange but changed to tower. In forty years of aviation I have not heard any pilot spoken to like that by a UK controller.

I then reported the incident to ATC after I had parked the aircraft. I attempted to explain that we do our best but it was clear that on this occasion complying with instructions would have resulted in a missed approach which is not in the interests of either party.

Just like controllers, we the pilots work long hours and in very trying conditions. The short haul pilot with a low cost airline gets to be very practised and knows when the dynamics are wrong and the aircraft won't do what ATC wants.

We as a professional body of men and women do not deliberately ignore any ATC instruction unless it's vital and we always try to advise the controller why. ATCOs

must understand that all pilots appreciate the job you do but also remember that we must work together and neither party should treat the other as a subordinate.

**CHIRP Comment:** This incident, although very similar, was not that reported in the last issue; however, both incidents are indicative of the relatively small margin for error in approach sequencing, particularly at some major UK airports.

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## (2)

**Report Text:** This does not concern an incident; I write to comment on item 'A Further Reminder on Speed Control'. FEEDBACK 81 - Winter 2006

A simple: "Maintain 180 until advised" would ensure that the flight crew would comply and advise air traffic when they needed to reduce speed. In the absence of such an instruction, pilots will reduce speed in accordance with company standard operating procedures and their own judgement of factors including wind speed and direction, crew experience level, weather conditions, crew workload etc. Moreover, if pilots are used to being slowed to 160 Kts at a certain point on the approach anyway, they may tend to slow down at this point even when not specifically instructed to do so.

**CHIRP Comment:** The key points to be drawn from this and the two previous reports are:

1. ATCOs regard speed control as an equally important separation tool as height and heading and expect strict compliance.
2. On occasions, pilots will not be able to comply with a specific ATC speed instruction.

It follows that if a pilot should require to fly at a different speed than that instructed, he/she should let ATC know as early as possible and before the change is made.

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## MORE THOUGHTS ON DESCENT PROFILES

**Report Text:** I have always thought that a "Direct To" instruction to a waypoint a long way down track really means that the controller has no traffic near you and wants you to get out of his sector. If the controller has traffic near you, you will be on a heading.

Strangely enough, most pilots seem to get very worked up about very accurate navigation when cleared (for example) direct to Lambourne from several hundred miles away. In this instance you know you will be on headings long before you get there and you know your descent will be based on some waypoints in between. Going in the general direction would seem to be good enough.

Also, giving a "Direct To" a waypoint that is only a 1 or 2 degree change of track is pointless, it saves no time and only serves to tidy up the FMS. My vote is, if we are likely to be starting a descent soon, don't bother to give us "Direct to" if there is no appreciable change of track as, even if the "Abeam Points" option is used, we still have to re-enter the constraints at those points (with the possibility of incorrect data going in). On the Airbus, a "Copy Primary" into the secondary flight plan

before the "Direct To" at least gives you the option to go back to the original. The B737 doesn't have this option.

The other option is to tell us of the possibility of an altitude constraint involving somewhere we are removing from the FMS, before or at the time of the "Direct To" instruction.

Before the long haul people jump on me, these thoughts only apply to radar controlled North West European airspace.

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## NON-UK AIRPORTS

**CHIRP Narrative:** We regularly receive reports relating to operations into/out of non-UK airports, in which reporters are keen to raise awareness to a particular experience/issue. The following four reports have been submitted recently.

### (1) UNFORESEEN PROBLEMS

**Report Text:** On report we found that the fuel required to reach AAA (Southwest European destination) with the forecast 70kt headwind component would not allow all passengers to be carried, as the planned diversion required a lot more than the usual diversion fuel. We agreed to reduce our fuel-load to a lesser figure to allow all passengers to be carried, as per company manual, as the destination weather was fine except for occasional thunderstorms (Cbs), and there are several runways in use or usable.

Prior to commencing our descent, we picked up the ATIS, which confirmed the likelihood of Cbs. Commencing our arrival routing for 18R the usually weak DDD radar R/T frequency was totally unreadable for most of the next 20 minutes. Probably as a result we were asked to hold - fuel check still sufficient for 20 min delay.

Out of the hold, we continued to experience extreme difficulty hearing ATC instructions due to static interference. Approaching our ATC clearance limit, we started to take-up the hold as several calls were not heard (ignored?) by ATC; by now we were concerned about our height (10,000') and possible fuel situation. Vectored from outbound in the hold to intercept 18R ILS, still no descent; full IMC conditions with Cbs and continuous static. Due to our range/height when established on localiser, when we were cleared to intercept the glide slope (G/S), this had to be done by slowing down and getting everything out (gear, flaps) even into a headwind of around 60kts to intercept the G/S from above. ATC then called - "Increase speed" (we were at 170kts) - this was followed shortly after by a TCAS RA 'Climb'; we had noticed proximate traffic behind and below. By the time we had completed the TCAS manoeuvre we were never going to intercept the G/S - ATC give us a climb to 10,000' and said "Sorry". Our next approach was OK apart from continuous Cbs.

In summary, many factors combined to produce a very unpleasant 20-30 minutes of flight. Of key concern to me, as we are taught never to intercept G/S from above, is why this arrival is authorised? It may be acceptable in good VMC conditions, but if not good VMC why not use the straighter arrival for 18R to which I think we were vectored on the second approach.



Also, aircraft for 18L (I assume the other traffic involved in the 'RA' was inbound 18L) should be better coordinated, particularly as almost all the other RTF transmissions were in the National language, which did not help us. AAA ATC are helpful but there can be language/comprehension problems.

One final point, our TCAS training is good but I had never expected a confliction from behind and below on finals.

**CHIRP Comment:** This report is a reminder of how easily the presence of adverse weather such as thunderstorms, albeit forecast as "occasional", can lead to a significant disruption of the normal arrival sequencing, if not effectively countered by ATC.

Whilst it is good practice to plan the approach vertical profile in order to intercept the glidepath from below, certain circumstances, such as weather avoidance or the increasing use of Continuous Descent Approach procedures, may sometimes leave pilots with no option other than to capture the glidepath from above. In such a situation, it is important to cross-check height/range to ensure that a false glidepath lobe has not been captured.

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### (2) DIVIDED ATTENTION?

**Report Text:** I was in the hold at BBB (Southern Europe) as the airport was closed due to a Security Issue. A Company aircraft joined the hold 2,000 feet above me. Twice he took clearances that were intended for me which would have resulted in him descending through my level. The controller thanked me for my somewhat brusque interventions to prevent that happening. Perhaps a reminder to all that, notwithstanding the wonderful FMS holds that we now do, holding puts a lot of aeroplanes in very close proximity!

A second point is that BBB is now requiring aircraft to call on the approach to get their stand number. I suspect that the Captain of the other flight was busy on Box 2 doing this. I believe the rule of both pilots remaining on Box 1 throughout the descent and approach should be adhered to, and BBB should be told that this new requirement is not acceptable.

**CHIRP Comment:** The CAA has recently re-issued best practice advice on level bust prevention in Flight Operations Department Communication (FODCOM) No.8(2007); this includes SOPs, as described above, to avoid non-essential RTF calls during climb and descent below FL120 (Para 5.4 refers). In cases where local ATC procedures do not permit both crew members to monitor the ATC frequency continually, submit an MOR to permit the matter to be followed up.

This particular issue has been referred to the CAA (SRG) International Services Department for representation to the relevant National Authority.

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### (3) ARRIVAL/DEPARTURE PROBLEMS

**Report Text:** Yet another exciting incident at CCC (Southwest Europe). On the approach to 25R at about 8 miles we noticed a medium twin-jet fairly close to us joining the approach ahead of us. A small amount of wake turbulence was experienced and we were then

informed that we were number 2 to an Airbus 319 two miles ahead and 30 knots SLOWER than the 180 knots we had been asked to maintain!

Despite querying this in the hope that perhaps an orbit in the CAVOK conditions could be carried out to ensure proper separation, nothing was forthcoming from ATC so a go-around was commenced from about 2,000 ft. ATC seemed surprised at this, no doubt looking forward to a display of low level aerobatics; an uneventful missed approach and subsequent landing was carried out.

On our departure after the five-mile taxi to 25L behind a corporate jet we were instructed to line up "after the lining up aircraft". Or was that "after the landing aircraft"? Difficult to tell with a strong local accent and ATC messages to/from National aircraft in the National language not giving us a full picture. I know 25L is not normally used for landing but at DDD.....who knows????? We read back, "Cleared to line up and wait behind the departing ### aircraft" which produced no adverse response from ATC.

At least this time they did not advise us of the next R/T frequency when at about 80 knots on the take off roll like they did last week.

**CHIRP Comment:** As well as highlighting the operational difficulties that can arise at some destinations, this report is a further reminder of the reduction in situational awareness that may occur when RTF messages between ATC and other aircraft are made in the National language.

If unsure of an ATC instruction, rather than reading back the assumed instruction and relying upon the ATCO to detect any error in the readback, the safe option is to request a complete repeat of the instruction using the phrase "Say again".

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### (4) DEPARTURE GOTCHA

**Report Text:** DDD Ground Clearance (Major Northern European Airport) cleared me to destination on a ####2B departure from Rwy 24, which consists of a climb straight ahead to the XXX VOR 2.8d and then a right turn to intercept an outbound track from XXX VOR.

When lined up, Tower said (in the same transmission as the take-off clearance): "After departure, standby for right turn to #####". I interpreted this as "Expect an instruction to turn right to ##### shortly after departure."

Passing XXX VOR 2.8d I turned right for #####. Tower queried this. He expected me to maintain runway heading. He had intended the instruction to mean: "Climb straight ahead and do not turn right until advised." I suggest that the words "standby for.." are ambiguous and should not be used in an attempt to modify an existing clearance. The instruction must be positive e.g. "After departure, climb straight ahead until advised."

**CHIRP Comment:** As the reporter notes, there is a risk that a well-intended but non-standard ATC instruction may be incorrectly interpreted. As with the previous report, if in any doubt, challenge before actioning.

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## ATC PHRASEOLOGY - MORE EXAMPLES

### (1)

**Report Text:** An observation about what appear to be the facts about the recent Comair Flight 5191 accident in the USA:

A Bombardier CRJ-100 commuter plane operated by Comair, Inc., a subsidiary of Delta Air Lines, crashed August 27, 2006 shortly after takeoff at Blue Grass Airport in Lexington, Kentucky, killing 47 passengers and two crew members. The only survivor was the first officer/co-pilot, who was critically injured. The aircraft attempted to take off from the wrong runway. Damaged sod and structures extend to the crash scene from the end of Runway 26, the shorter of the two runways at the airport. Runway 26 is a 3,500 foot strip used solely by small general aviation aircraft. The two-engine jet was cleared to take off from Runway 22, which was in excess of 7,000 feet in length."

Apart from the question of "was the appropriate runway designator actually included in the take-off clearance?", I would offer the following comment on an aspect that does not seem to have been picked up in any reports that I have seen.

When I was employed as an ATC Instructor with NATS, I proposed a change, through the company channels, to the UK Manual of Air Traffic Services in respect of the requirements for when a take-off clearance could be issued. This is now partly reflected in the Manual which states:

"Take-off clearance may be issued when the aircraft is at or approaching the holding point for the runway in use or when the aircraft is lined up on or entering the runway in use."

However, in my original submission, I included another sentence to the effect that take-off clearance should only be passed when the aircraft had passed any intersection that could be mistaken for the correct route to the intended departure runway. The CAA chose to ignore this. I rest my case!

**CHIRP Comment:** The reporter's comments were considered to be worthy of further consideration and were forwarded to the CAA. The matter is to be debated at the next meeting of the CAA RTF Phraseology Working Group.

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### (2)

**Report Text:** During a routine departure, the Ground frequency cleared us to taxi to the holding point and, as it was a short taxi from stand, to contact the Tower when ready for departure. When the 'Cabin secure' was received, and the before take-off check list was completed, as PNF, I contacted the tower that we were 'Holding at ##, ready for departure.' We received the reply: 'Two to land before I can get you away' I replied that I copied the landing traffic.

As the second aircraft approached, we received the following: 'After the landing Gulfstream at two miles, line up and wait Runway ##.' I read back the clearance, and received no acknowledgement or corrections from the controller. As the Gulfstream passed over, we began to taxi forward and line up. As we entered the runway the tower called: 'ABC123, you did not have a

clearance to enter the runway.' The controller then called an A330 also waiting at the hold: 'XYZ789, your line-up clearance is cancelled.' The reply from XYZ789: 'Negative, you actually cleared ABC123 to line up.'

The tower controller denied that he had cleared us, insisting again that he had instructed XYZ789 to line up. XYZ789 then replied suggesting that the controller go and check the tapes, as it had been our aircraft that had been instructed to line up. We were then cleared to take-off. A normal departure followed. No other aircraft was required to go around or abandon its approach as a result of our entering the runway.

**CHIRP Comment:** An incident such as this is within the scope of the MOR scheme and it is essential that a report be submitted, not to seek to allocate blame but to permit the ATC tapes to be analysed and any lessons to be learned.

As a reminder, ATC voice/radar tapes are required to be retained for a period of 30 days for reference purposes.

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### (3)

**Report Text:** Recently, there was the all too frequent confusion about the various taxiways at EEE (UK major airport). Following an early morning arrival, I heard the latest "warning" being given out by ATC when various aircraft asked for clarification as to which route to take, all stating that "the greens are going to the left and to the right" The ATC response in all these cases was, "That's a 'ghoster' to the left - continue on Echo", or similar to meet the particular circumstances.

My concern is that this seemed to be an entirely routine phrase that has somehow crept in at busy R/T times in an attempt to explain the problems quickly. As active runways are never far away at EEE, and not all pilots will understand the implications of what is being said, I believe the situation is now risky and confusing. Recently, when remarking to the ATC Supervisor that the greens were very bright and dazzling, the reply was, "That's because they've cleaned them"!

**CHIRP Comment:** The matter was referred to the ATSU concerned. It is understood that ATCOs have been issued with a reminder not to use non-standard phraseology and colloquialisms, such as the term 'ghoster'. In areas where lighting faults such as these are known to exist, controllers issue daylight taxi instructions and monitor traffic either visually or by use of the Advanced Surface Movement Radar as per the Manual of Air Traffic Services Part 1.

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## MAINTENANCE STANDARDS

**Report Text:** Reference the report on poor maintenance standards (Issue 81):

My reply.

As I need a screwdriver to undo the oil inspection door on my aircraft, I now, because of "security" reasons, cannot take a screwdriver through security. So therefore cannot check the oil level! None-the-less, I dutifully sign that I have checked it, because if I don't, we can't depart.

**CHIRP Comment:** If a flight crew member requires a screwdriver to perform a maintenance task and is no

longer able to carry one in his/her flight-bag, the matter should be raised with the company to permit arrangements to be made for a suitable tool to be available to permit the task to be undertaken.

## CABIN CREW REPORTS

### SUITABLE SUITCASE STOWAGE?

**Report Text:** On boarding the aircraft the Captain came on with a suitcase. I enquired whether he planned to take this onto the flight deck; he stated, "I always do". I then asked if there was an emergency wasn't there a risk that it would fall onto the centre console/control panel. He stated it wouldn't because it was jammed beside the third crew seat. Not so - there is no way to stow a suitcase and nothing to restrain it on the flight deck. (Pilots on this fleet often bring suitcases on board and into the flight deck for the flight).

Everything is meant to be stowed securely in the cabin; surely the flight deck is the last place an unrestrained/loose article should be in an emergency.

**CHIRP Comment:** The assumption that an unusual manoeuvre and/or an extremely rapid deceleration will not result in the suitcase becoming a projectile on the flight deck in an emergency situation is a classic case of 'risk shift' behaviour.

The report was forwarded to the operator concerned; the company reaffirmed that its policy is that suitcases must not be stowed in the flight deck.

### SMELL OF FUMES

**Report Text:** On the evening in question, we were running late from the Far East. The other cabin crew and I became aware of a strong smell of what we concluded was like diesel, mainly in the mid-main cabin area. On calling the flight deck, I was abruptly told that, "It's obviously the refuelling truck parked near a pack", before he hung up.

During taxi the smell became very powerful and passengers and crew were now worried. The In Charge called the flight deck and was informed that the fuel tanks were full and some might be getting into the bleed air. Still not happy, we insisted that one of the flight crew came to see for themselves [heavy crew]. The First Officer appeared to be concerned but stated that he thought it would clear after take-off and they would set the pack flow to high. He stated that the Captain wanted us to call at any time to advise them of anything worrying to us. In relation to performance issues, the packs were switched off for take off.

About a minute after we were airborne, the smell came back stronger than ever. The flight deck was bombarded with calls from both cabins, reporting the smell. We were again told it would clear and it eventually did.

I sincerely hope I have not wasted anyone's time by submitting this report.

**CHIRP Comment:** The reporting of any unusual smells, sounds or observations by cabin crew members should be encouraged; the reporter should be commended for

persisting in his/her attempts to alert the flight crew to the perceived problem.

Although there was nothing untoward on this occasion, other incidents have shown that this might not always be the case.

## CAA (SRG) FODCOMS

The following CAA (SRG) FODCOMS have been issued since January 2007:

**3/2007**

Regulation (EC) No 1899/2006 - Implementation of EU-Ops

**4/2007**

Reorganisation of Flight Operations Division

**5/2007**

JAR-OPS 3 - Introduction and Use of NPA-OPS 38

**6/2007**

Avoidance of Controlled Flight Into Terrain (CFIT) - Operational and Training Considerations

**7/2007**

Operations Manual Requirements for the British Formula 1 Grand Prix Event, Silverstone 8 July 2007

**8/2007**

Level Bust Prevention - Best Practice

**9/2007**

European Aviation Safety Agency (EASA) Permit to Fly Requirements for the Recovery of Damaged Unserviceable Aircraft - Non-revenue Ferry Flights

CAA (SRG) Flight Operations Department Communications are published on the CAA (SRG) website - [www.caa.co.uk/default.aspx?categoryid=33](http://www.caa.co.uk/default.aspx?categoryid=33) and click on the link 'Search for a CAA Publication'

## ENGINEERING EDITORIAL

### MAINTENANCE ERROR - THE CAUSE

Depending on your point of view, statistics can be considered to represent a sound case or have very little relevance to the real world. In regard to maintenance error it can be shown that the number of reported events has been declining in recent years. This might be attributed to improved training, better build quality by manufacturers, or the fact that maintenance is continually being designed out of the machine with the objective of improving reliability and reducing operating costs.

However, as discussed in the last issue of FEEDBACK, although the overall numbers of errors may be in decline as the human interface is reduced, the types of error have remained unchanged, certainly over the last ten years. These errors largely involve basic skills and perhaps the level of self discipline being applied.

On the flight deck actions are monitored by a system of cross-checking, by both the other pilot and computer controlled system management. Maintenance tasks, whilst frequently involving a computer interface for checking system integrity, can be carried out independent of any external overview.

For example, a wheel change, possibly one of the most common tasks undertaken; engineers are very conversant with the process and whilst working to the intent of the AMM rarely refer to the instructions when carrying out the work.

However, there are many reports of wheel vibration on take off, or in some extreme cases a wheel has actually departed from the axle; this has been caused by the simple omission of a wheel spacer during fitment. Simple checks, during or after wheel fitment, can detect a failure to fit the spacer, but it appears that these are not carried out on such occasions.

I am sure that you are aware of other examples where simple or straightforward tasks could be overlooked, possibly due to familiarity with the task, complacency or perhaps assumption that all is well. Whatever the reason, basic errors continue to occur - but why?

If you are interested in providing your views please send me an email or a letter (details on front page). I look forward to your informed views with interest.

**Mick Skinner - Deputy Director (Engineering)**

## EXAM WAITING TIMES

**Report Text:** Just a note to say how unhappy I am with the waiting period for exams at LGW administered by the CAA at the moment; it is 3 months for an exam date and, with the requirement that you have to pass all modules within 5 yrs, it means that you have probably got to take exams every 3 months religiously to get it within that time frame, given that it takes 3 months to revise for the subject plus working shifts, living your life and everything else.

I met someone the other day who had to take an exam after a 12-hour night shift at nine in the morning, if they had said no they probably would not have got a date in 3 months.

The CAA are so busy with examining overseas people there is very little room left for home grown engineers and places in the schedules are full up with overseas students flying in to take modules.

In my view this is not beneficial to British companies or engineers and just shows which way the system is going, looking after everyone else instead of us tax paying people that service UK industry. We should have priority over foreign students and try to rebuild and promote our engineering resources.

Also, does anyone actually know why the CAA has a 5-yr cut-off for licence module banking? After 5 years if you cannot gain all modules and you have all modules except one you have to take them all again!!! It's ridiculous.

Belgium, Holland and a few other EU countries have 12-months work experience on type and you get a licence, It can't say much for European Community fairness, given that we have to take module after module, waiting 3 months for re-sits then get told all your modules are wiped out as the 5 years are up; very Victorian and typically English letting us get walked all over by other legislation.

As the decline of engineers is growing in the UK and more people are leaving the industry because of difficulty and sheer frustration at the CAA exams and difficulty in obtaining them, the CAA should approve companies to give exams.

The CAA should also provide information if they are writing policy and changing it; they should allow module training in-house for their licences and courses approved to be held in more locations to make it easier than it is; I am one of the thousands of people waiting 3 months to take modules.

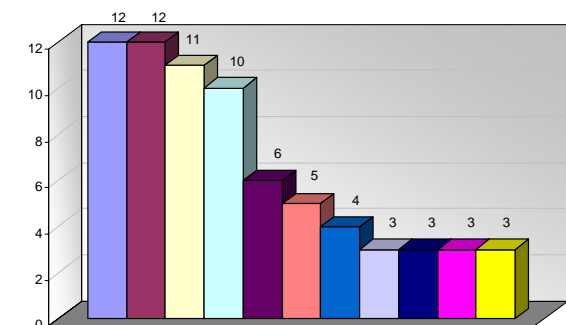
in my view, the Cat A licence should be awarded by the CAA on a recommendation from the company QA department, provided the necessary experience is gained. Come on CAA sort it out! Overcomplicating the system has nearly strangled it and put a lot of people out of this industry.

**CHIRP Comment:** The reporter's concerns were represented to the CAA, who advised that as with other National Aviation Authorities, they are bound by EC Regulation 2042/2003 which they are unable to waiver.

Unlike the UK, the vocational education systems in some other EC States provide modular programmes that meet some of the EC licensing requirements.

## ENGINEER REPORTS

**Most Frequent Engineering Issues Received:  
12 Months to December 2006**



- Company Policies**  
(Operational, Safety Reporting, Disciplinary/Grievance)
- Regulation/Law**  
(Compliance with)
- Procedures**  
(Use by Others, Adequacy, Existence)
- Security**  
(Ground)
- Licensing**  
(Engineering License)
- Pressures**  
(Commercial, From Management/Supervision, Time)
- Physiological**  
(Health/fitness/lifestyle, Illness/incapacitation)
- Documentation**  
(Suitability/Adequacy)
- Training**  
(Inadequate Specification/Requirements)
- Communications - Internal**  
(Managers)
- Resources**  
(Manpower/Personnel, Tools/Equipment)



The CAA stated that all applicants, irrespective of their nationality or the company they work for, are treated with equal priority in setting exam dates.

In addition to the four CAA examination centres at Gatwick, Oxford, Manchester and Glasgow, CAA (SRG) has approved a number of organisations to undertake examinations for the issue of a licence; these are listed on the CAA website.

Licence applicants can assist greatly by setting out a plan for themselves as to when they expect to achieve each module; exams can then be applied for in advance, which would reduce considerably the waiting time.

The current timescale of 5 years to gain all practical and theoretical aspects for the issue of a Licence is currently under review by EASA and a Notice of Proposed Amendment (NPA) No. 2007-02 has recently been issued proposing extending the period to 7 years.

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### TAXIING AIRCRAFT

**Report Text:** Reference "more pressure to vacate" in the last issue, as a senior engineer with taxi approval, the company had a similar aircraft with steering also on the co-pilot's side.

When this aircraft was taken between the line and the hanger the control tower was asked to supply a controller, who was allowed to take control during the taxi with the engineer in charge.

To cut a long story short, most said "that is not as easy as it looks". One could steer, brake or talk on the radio and remember the instructions he had been given but had a problem doing all together.

My point is, if it could be arranged, it would help controllers to understand the problems that go with taxiing aircraft if they had the chance to have a go. Also, we gained a good stock of brownie points with the tower.

We all work in the system and it helps if all concerned have a good understanding of other people's problems.

**CHIRP Comment:** An individual's ability to carry out a function is often a measure of their familiarity and experience, aircraft taxiing is no different and the reporter correctly reflects on the skills required. Whilst an experienced pilot may think nothing of making quick decisions to meet changing operational demands of ATC, particularly in expediting a runway crossing, a less experienced engineer may react differently.

It is easy to recognise that an aircraft under tow has manoeuvring limitations; it is not so easy for an ATCO to recognise or take account of varying levels of ability of engineers who carry out aircraft taxiing. When taxiing is being undertaken by engineers it is important that the individual is authorised in accordance with JAR-OPS 1.095 and exercises an appropriate level of caution.

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### LACK OF TERMS OF REFERENCE

**Report Text:** Lack of Terms of Reference for any operational staff can lead to confusion, in some cases it is the direct cause of much frustration.

In spite of many appeals for the company maintenance control engineer to have his/her scope of responsibility described in a job description, it falls on deaf ears.

I consider it a Human Factors issue, particularly when the goal posts are moved, causing concerns over who should be doing what.

Assumption has been the cause of many safety related incidents.

**CHIRP Comment:** Any organisation that works in a safety oriented environment like aviation should ensure that all staff members are aware of their role, their responsibilities and the limits of any authority that is part of the role. Job descriptions and terms of reference are essential for key personnel; particularly those individuals who are influential in decisions regarding aircraft operation or safety.

As well as defining what is expected of an individual, the qualifications and competences required to enable the individual to be effective in their role should be defined.

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–00–  
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