

CHIRP FEEDBACK

Issue No: 83

Summer 2007

EDITORIAL**SECURITY - A FURTHER UPDATE**

Since publishing examples of the difficulties that flight crew, engineers and air traffic control officers are continuing to experience with the current airport security procedures in the last issue of FEEDBACK, the Programme has received further allegations of inconsistencies in search procedures, inappropriate search methods and personal harassment.

After careful consideration of the continuing concerns reflected in more recent reports, the depersonalised texts of more than 70 reports received since the introduction of the new security measures last year have been forwarded to the Civil Aviation Authority.

However, it is acknowledged that the CAA, whilst having responsibility for safety regulation, has no responsibility for the security arrangements at UK airports. Therefore, as indicated in the last issue, having previously represented the concerns to the Head Transec, the potential flight safety risk arising from the current situation has again been raised in a further letter to the Department for Transport, which we believe holds the accountability for balancing security and flight safety. On this occasion the matter has been brought to the attention of the Permanent Secretary.

As confirmed recently by the Security Minister, enhanced airport security procedures will be required for a considerable time, if not indefinitely. In view of this, there is an urgent need for a consistent standard to be applied to those personnel employed in safety-critical roles to provide the appropriate balance between security and flight safety. In the longer term, improved Security Pass arrangements, in the form of a single Pass for aircrew (flight & cabin crew) and licensed aircraft engineers that is valid at all principal UK airports, should be introduced, possibly incorporating biometric technology and based on improved screening of individuals prior to issue.

Over many years the professional groups involved in air transport operations have been identified as being a vital part of the solution to improving the safety of the system. Many of these same individuals have a direct interest in successfully countering the security threat; therefore, it defies logic that they would appear to be now perceived by some to be part of the problem.

Peter Tait

SECURITY (1)

Report Text: Thought this incident might be of interest to you, the action of just going to work resulted in me electing to retire early and very nearly having a criminal record.

Over the years I have made some good friends with security personnel but there are some who seem to interpret a set of rules to suit themselves.

On the morning in question, I was going through security in preparation to start my day shift. I was dressed in only uniform trousers, shirt and stocking feet, the rest of my attire and personal belongings being processed through the scanner.

I went through the body scanner which did not bleep but was subjected to a random search, with which I willingly obliged and fully cooperated with until during the lower body search the guard touched me on the right testicle; at which point I cautioned him that I objected. He then proceeded to touch my left testicle at which point I put my left hand out touching him on his chest to confirm that enough was enough. He then stated that I had just assaulted him and that I had punched him in the chest.

Because of his rash attitude and the way in which he demanded my airport pass, I declined to hand it to him fearing that he might damage it in some way. However, I did state that I would willingly hand it over to a security supervisor and requested one should attend to redress the situation. A male supervisor did attend and had a calming influence on the situation in hand but stated that the police had to be informed. A police officer subsequently attended.

I was duly cautioned, charged and taken to #### police station, where I was divested of all my personal belongings, had my finger and palm prints taken as well as my shoe size, along with a DNA sample. This I gather is a code of practice, but nevertheless along with the scene at the airport, it was one of the most humiliating and embarrassing experiences I have ever encountered and caused me great stress and anxiety.

Towards the end of the morning I was bailed, my personal possessions were returned and I was taken back to the airport terminal. I must state that during my time with the police their treatment of me was impeccable.

Later, during the afternoon the police contacted me to say the CCTV tapes had been viewed, various people had been interviewed and as a result no action would be taken, all charges had been dropped and the bail was also lifted.

An Air Transport Safety Newsletter

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

Hooray for CCTV, it proved that I was telling the truth all along.

SECURITY (2)

Report Text: Sadly I find the need to write due to the ongoing (& deteriorating) situation regarding personnel getting airside to carry out their duties. The attitude towards ATC, Airport Fire Service & Airport Authority staff by security personnel here is at best rude, often offensive, rarely consistent and the standard of cleanliness in the checkpoint is poor.

I find myself spending the beginning of each and every shift calming down at least one member of my staff who have felt 'harassed' and, quite frankly, are not in the correct frame of mind to control upwards of 55 aircraft movements per hour.

It is a sad day when this is what Team Resource Management has become at this (and I suspect most) airports.

I only hope someone does something before it becomes a causal factor in a serious incident.

SECURITY (3)

Report Text: I read CHIRP # 82 with total horror, regret and resignation to the fact that I will be treated as a criminal for the rest of my working life.

All the described pilot related incidents have happened to me at one time or another to the point that passing the security point has become a threat to flight safety.

The stress is compounded by the inconsistencies in the system that were clear from the CHIRP reports.

The biggest problem is that voicing even polite disapproval with a situation results in instant threats to confiscate your airport pass and in effect would make it impossible to work for the weeks that they will take to resolve the situation and at worst destroys your career.

Apart from private legal action there is no way to effectively complain about a situation; when I did submit a complaint, the Airport Authority took four months to even acknowledge it and did nothing to address the situation.

When dealing with the Police one has certain rights and a well defined procedure if you are not treated correctly; this is not so with airport security who seem to be a law unto themselves using the knowledge that you are on a tight time schedule to ride roughshod over any rights that you might have.

The DfT have failed in their task to make flying safer, the security regime that they have put in place may have had the impression of tightening security but the way that it has been implemented has so alienated aviation professionals that "security" is now seen as at the very least an obstacle to normal daily life and at worst a bunch of jumped-up numptys on a power trip.

I was involved in an incident very much the same as that described in Report No.2 (Alleged indecent assault during personal search); the result of my complaint to the airport management was an instant dressing down from a security supervisor, whose attitude was "we can do whatever we like". My experience with security

management has resulted in me concluding that if I should be unfortunate enough to have another incident of this nature I will call the Police; at least I know where I stand when I make a complaint to them.

Good security requires every one involved to work together and most airport security departments have totally lost the trust of the airport staff. It is very sad that after thirty years in aviation I feel that the only recourse when dealing with security is to use the forces of law and order to protect my human rights.

Please keep up the good work on this issue.

CHIRP Comment: A final footnote; publication of these and other security reports should not be interpreted as promoting a less tolerant attitude towards personal security checks.

If you do experience difficulties of the type described, avoid any confrontation with those individuals directly concerned but report the matter as soon as practicable to your company, particularly if your ability to perform your primary duty safely might be in question.

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

Engineer - 16

Alleged Poor Maintenance Standards
Security of Aircraft on Ramp
Airport Security Procedures - Access
Inappropriate Security Searches
Inadequate Certification Procedures
Possible Causes of Maintenance Errors
Manpower Levels/Excessive Workload

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**ATC - 5**

More on Speed Control  
Non observance of Rule 39  
Non-UK Query - Initial RTF call on departure  
Negative Impact of Airport Security  
Unauthorised Use of ATC Facilities

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Flight Crew - 75

Airport Security - Inconsistent Standards
Airport Security - Inappropriate Searches
Rostering Issues - Split Duties/Discretion/Scheduling
ATIS Broadcasts - Interference
Passenger Supervision during Refuelling
Disposal of Contaminated Fuel
Fumes on Flight Deck
Operational Safety - Helicopter Site
Compassionate Leave Policy
Inadequacies in Computerised Flight Crew Information

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## ENGINEERING EDITORIAL

### 1. ENGINEERING SURVEY 2007

Firstly, thank you to all who responded and for the frank views expressed. 60% of the survey responses were submitted on-line, which indicates the way we need to go to improve the CHIRP website to make it more user-friendly. Over 90% of respondents felt that **CHIRP** was a helpful, independent body and stated that they found FEEDBACK a useful document, albeit requiring a higher engineering profile.

93% said they had company issued maintenance related material which was also readily available. The survey indicated that the engineering community has a wealth of experience, the majority being in the 16-40 years of service range. This indicates that there is a knowledge base which can be used in a more proactive way to improve safety.

Comments on why engineers are reluctant to raise concerns through the Programme included the following; contracted engineers not wanting to raise reports, individuals working in smaller companies feeling that they could be compromised. One respondent felt that the integrity of the **CHIRP** process

was open to question as the recently appointed Engineering specialist had joined **CHIRP** from a management post and thus would not be independent. In relation to these comments it is important to remember that we will take no action in relation to a report without the consent of the reporter, thus you retain control as to how any concern that you report is handled.

Other comments suggested that some **CHIRP** responses appeared negative or 'played down' a particular situation, or perhaps lacked the ability to act, perceptions that we will take on-board.

As stated earlier, the CHIRP website is currently undergoing a further upgrade. When this has been completed, a full report on the survey results will be published.

More recently, the number of reports submitted by engineers has increased, as has the range of report topics. Also, in response to some of the feedback received, the Engineering Reports section has been afforded a higher profile in this issue.

### 2. MAINTENANCE ERROR MANAGEMENT SYSTEM (MEMS)

The MEMS database managed by **CHIRP** on behalf of the member airlines and maintenance organisations now contains over 750 reports of company MEDA investigations into maintenance errors that have been submitted by member companies.

A recent analysis of 525 disidentified maintenance reports revealed that, perhaps not surprisingly, installation errors occurred most frequently (39%). Looking at some of the solutions that were implemented as a result of a maintenance error investigation, simplification of maintenance instructions and improving access to approved data (particularly with computer based systems) were the most effective.

Poor inspection standards were indicated in 67 cases (12%), with 17 failures of an Independent Inspection identified.

In most cases, companies elected to raise awareness among engineers to such problems and solutions through Continuation Training and/or briefings that are given, typically at a shift level.

From the data it was identified that the highest frequency of error occurred on engines (122 reports), with flight controls (75 reports) and landing gear (68 reports) the next most frequent categories.

Errors are never intended, but the thought that 'it'll be alright' is sometimes at the back of our minds. What happens if it is not right? - do we actually consider the possible consequences?

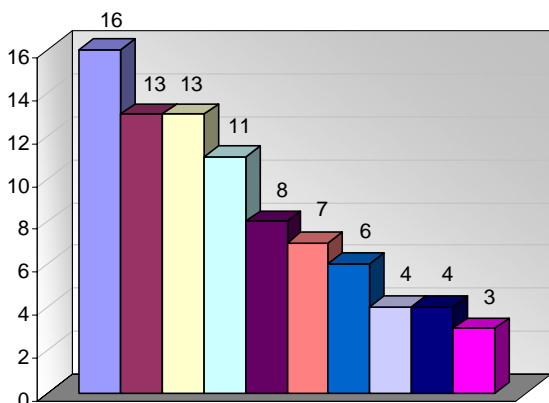
The perception of a lack of discipline associated with the 'modern culture' has been suggested as a possible cause for some individuals' more relaxed approach to safety consciousness. This leads to the question of what is acceptable behaviour towards the job and other people at work. Also, have some of us become too complacent, driven particularly by the reliability levels of modern equipment?

A good safety culture requires involvement and commitment at all levels in an organisation, together with a recognition of individual responsibilities and accountabilities. Maintenance is a practical world that requires a pragmatic approach; we can all learn a lesson or two, but we need to communicate with each other!

Mick Skinner

## ENGINEER REPORTS

**Most Frequent Engineering Issues Received:  
12 Months to June  
2007**



- Security**  
(Ground)
- Procedures**  
(Use by Others, Adequacy, Existence)
- Regulation/Law**  
(Compliance with)
- Company Policies**  
(Operational, Safety Reporting, Disciplinary/Grievance)
- Maintenance**  
(Line, Base, Repairs)
- Pressures**  
(Commercial, From Management/Supervision, Time)
- Licensing**  
(Engineering License)
- Documentation**  
(Suitability/Adequacy)
- Resources**  
(Manpower/Personnel, Tools/Equipment)
- Aircraft Technical**  
(Systems, Propulsion)

### MAINTENANCE PRESSURE

**Report Text:** I work for a maintenance provider at a UK airport, mainly for one customer. In the recent past, heavy maintenance checks have taken longer and longer to complete, partly due to lack of spare parts/support, but mainly due to the poor state of repair of the company operated aircraft.

I have just been informed that a senior manager has been fired for informing the customer that repair times and costs have spiralled out of control due to their poor maintenance.

Well, nothing the CAA can do about that, as in my view the situation can only get worse, particularly if the repair agency is bullied into pretending all is well.

I cannot comment further without running the risk of falling foul of the law. Its up to you guys; the passengers are at risk if aircraft are not maintained correctly.

**CHIRP Comment:** The matter was referred to the CAA who elected to conduct a review of the maintenance policies between the operator and the maintenance provider.

### PRESSURE TO BOARD

**Report Text:** The Company has a new policy to automatically board an aircraft 40 minutes before departure. When I say board, what actually happens is passengers enter the air bridge regardless of the state of the aircraft e.g. cleaned, catered, security checked or serviceable. They are held outside of the door until the Captain or Engineer gives authorisation to allow them onto the aircraft.

Today I witnessed rushed, although as far as I could see, complete and satisfactory security checks by the crew because they could see passengers waiting just outside of the aircraft door. The crew boarding at the door appeared to be new to the airline, as the cabin manager was dealing with catering at the front; the assistant cabin manager was 30 rows away. I could clearly see that they were giving signs of being under pressure because they could see passengers waiting.

I had just finished sorting out a problem with portable oxygen, and had to go to the stores to replace an extension seatbelt; the toilet servicing chap had just informed me about a problem servicing one of the toilets. Although these were minor defects, they could have been of a greater significance to the serviceability of the aircraft. If they had been, I would have been under greater pressure.

My job entails working under pressure, but to see passengers standing in front of you as a matter of routine, every day when you have a problem, before you enter into fault-finding, is a human factor that I have not ever worked with.

Prior to the new policy, if I had an engineering problem that might have affected the on-time departure of the aircraft, I would inform Maintenance Control of the problem, but also speak to a ground representative who, liaising with our handling agent, could hold the passengers at the gate. The ground representatives have been removed under the new arrangements. I still inform Maintenance Control, but to effectively stop boarding, many phone calls have to be made, where previously, I could just speak to a colleague standing next to me; today, I cannot do this.

These changes take my mind off of delivering a serviceable aircraft. I hope I will still deliver a serviceable aircraft, but I now have a level of distraction that I did not have before .

**CHIRP Comment:** The competitive commercial environment and the need for operators to achieve an on-time departure can generate pressures, real or perceived, on key personnel involved in the dispatch of aircraft. The drive to reduce costs also leads to changes in established practices/manning, which can have an unintended affect. In this particular case,

organisational changes also appear to have had an adverse effect on the operating procedures during the transition.

Becoming distracted is not difficult in such a situation; this is when errors can occur and it's not always easy to stay focused on the objective - providing a safe and serviceable aircraft.

The effect of the changes in this and several other similar cases reported was represented, in general terms, to the CAA, who are monitoring the effect of these organisational changes.

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### CUTTING COSTS?

**Report Text:** I started with the maintenance organisation earlier in the year as a licensed aircraft engineer and during my employment I found that the company did not comply with a specific 500hrs engine ignition system inspection covered by a Service Bulletin, it was also identified in a special inspection in the maintenance manual.

I explained to the manager how important it is to comply with 500hrs inspections and the reply I got was that the service bulletin is not mandatory and they will only change the component if it causes problems. I advised that failing to comply with 500hrs inspection could lead to engine failure as a result.

I was asked by the manager to provide evidence which proves that the ignition test should be conducted at the required RPM and I gave him a copy of the service instruction which states how all engines of the type should have the ignition test conducted. I was instructed by the manager and supervisor not to conduct the test at the stated RPM, but I refused to do so.

I advised the supervisor that I needed to gain access to the component file in the computer in order to know the life limit for each component and I was refused access.

I was told that only the chief engineer is allowed access to the computer, which I regard as completely unacceptable. I feel that as a licensed aircraft engineer I am entitled to gain access to the information as it is part of my duty.

I have terminated my employment with the organisation as I believe the company has a poor approach to maintenance.

**CHIRP Comment:** The report was referred to the CAA who subsequently confirmed that the matter was being investigated. It is understood that a number of findings were raised regarding the technical aspects of the case; these are being discussed between the organisation and the Authority.

A key issue arising from this report is that if the decision is taken to conduct a maintenance task then the manufacturers approved data should be followed, including any specified test programme.

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### MORE ON LICENCE EXAM WAITING TIMES

**Report Text:** I am a Senior Licensed Engineer in the East Midlands of UK. I must take issue with you regarding your, and the CAA's, response to the Report in CHIRP FEEDBACK 82 on the subject of Exam Waiting Times for Part-66 Modules at CAA Examination Centres.

I feel your previous correspondents report may have been diluted by its focus on the LGW Examination Centre and the attendance of foreign candidates. I would certainly expect that all candidates, from whatever background and nationality, receive equal treatment. No profession on the planet has a greater national/ethnic mix and that is one of our greatest strengths; wherever we finish up working.

I would also support the contention that a CAA-EASA Licence should be earned through the highest standards of objective examination and assessment.

I think the point being missed is the sheer, inexcusable, failure of the CAA examination network to cope with demand, particularly since the closure of the Silsoe Centre at the end of 2006.

A number of my employees are at various stages of qualification for B1 or B2 licences and are now faced with a 280 mile round trip and overnight stay at Manchester or Oxford. This would be tolerable if they could get bookings! A year ago it was sometimes possible to book within a month of a date. However, one of my guys applied at the beginning of March 07 for an exam in May; we are now in May but he still hasn't had confirmation for May, June or any other date, and the lack of an exam places is compounded by the lack of communication. (Your readers will not be surprised to learn that his examination fee was extracted within a fortnight).

This makes a shambles of his study regime, and he is not alone. The recommendation of setting out a plan is laughable; OF COURSE WE SET OUT A PLAN, but this has to be amended to accommodate work, domestic issues and re-sits. If we all start booking 3-months early all that will happen is that those dates will also dry-up. The simple truth is that THERE ARE NOT ENOUGH EXAMINATION PLACES.

The proposal to extend the current timescale from 5 to 7 years is a way of working around the problem, but can't we just fix the problem instead?

Why don't we have more examination centres, perhaps making more use of provincial colleges and universities? The concentration of CAA centres in the West of Scotland, Northwest England and the Thames Basin is restrictive in geographic terms as well as the sheer number of places. I suppose I'm a bit naïve, but to run an additional exam centre don't you just need an invigilator, a big room with desks, and a bank account for your cheque? If that's too difficult for the CAA, perhaps someone else should be organizing it.

**CHIRP Comment:** The CAA Licensing Department was able to respond by suggesting that additional examination capacity is available through CAA approved Part 147 basic training organisations, which are able to offer external candidates exam places.

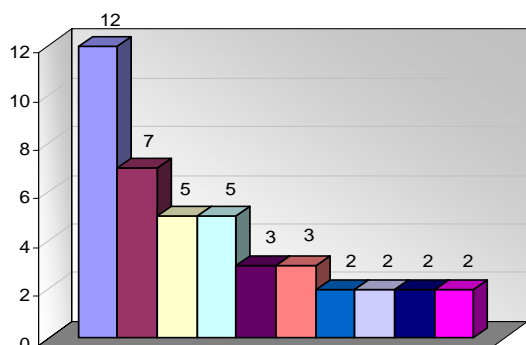
A full list of the nine approved facilities is available in CAA Document No. 70, version 28, which can be accessed via the CAA website.

However, there are two points to consider; the CAA will only allow the organisation to conduct exams within the scope of their approval and the organisation will normally give priority to their own staff before considering external applicants.

Mindful of providing more exam capacity, the CAA has increased the number of dates available at the Gatwick centre.

## ATC REPORTS

**Most Frequent ATC Issues Received  
12 Months to June 2007**



- Communications - External**  
(Pilots)
- Air Traffic Management**  
(Separation)
- Handling/Operation**  
(Operation of Equipment, Airmanship)
- Procedures**  
(Use by Others, Adequacy, Use By Reporter, Lack of)
- Company Policies**  
(Operational, Safety Reporting)
- Duty**  
(Length, Rest)
- Security**  
(Ground, In-Flight)
- Environment**  
(Visibility/Cloud Base)
- Pressures**  
(Commercial, Domestic, Management)
- Relationship Management**  
(Managers, Team/Shift/Watch)

### SHIFT SHORTAGES

**Report Text:** On a recent set of night shifts, operating with AAA/BBB sectors combined and CCC/DDD sectors combined we were short-staffed. As far as we understand the absolute minimum manning for night shifts should be 3 ATCOs for one sector group and 4 ATCOs for the other sector group. The staffing on this occasion dropped from 7 to 6 when one ATCO went sick (this was still in plenty of time for us to find a replacement but no-one was rostered so we had to continue with 6 staff).

Unfortunately, on a subsequent night shift another controller also went sick - leaving us 2 ATCOs short. It was only by luck that the Local Area Supervisor (LAS)

that night held the relevant validations. The LAS stepped in to help out - although he also had his LAS duties to carry out.

Another problem was that there was only one ATCO due to start at 5.30am and because of a recent re-sectorisation and training this controller only held a BBB sector validation. (The system should ensure that ATCOs starting at 5.30am have validations which complement the night shift staff). This meant if we needed to split CCC and DDD sectors we had to 'borrow' the Watch Supervisor to work on DDD - while the LAS was still on AAA/BBB; this situation would leave only one LAS responsible for the whole ops room and acting as Watch Supervisor. This time the sectors split until the morning shift staff arrived at 6.30am. Not a very satisfactory way to run a professional, safety-oriented operation.

The minimum of 7 ATCOs per night shift is already cutting staffing far too tight - there is no flexibility to allow for incidents, sickness or other unexpected occurrences - or even to allow for sectors to be split.

The sectors are generally busier much earlier and much later in the day. Night shift staff are dealing with far more traffic, with fewer controllers and shorter less frequent rest periods leading to higher levels of fatigue.

The minimum number of staff should be 4 per sector group each night. The above scenario is the worst I have seen but I know that night shifts are also frequently run with only 6 controllers in total on other Watches. Various e-mails have been sent to management concerning this problem but so far nothing has been resolved.

**CHIRP Comment:** With the reporter's consent, the concerns about staffing levels were forwarded to the ATS provider, who had also received a number of similar representations directly, as noted by the reporter.

The management elected to adopt a minimum night shift manning of 4 ATCOs per sector group pending a more detailed review. Subsequently, after reviewing the issue with staff, the minimum night shift manning is to be retained at 4 per sector group throughout the summer.

A further review is planned for October to determine the night shift manning levels throughout the winter period.

## CAA (SRG) ATSINS

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

**Number 102 - Issued 17 April 2007**

Communication with Air Traffic Standards Department About ATSINS

**Number 103 - Issued 24 April 2007 - Superseded**

Change to All UK Altimeter Setting Procedures

**Number 104 - Issued 30 April 2007**

Change to UK Altimeter Setting Procedures

**Number 105 -**

Single European Sky (SES) - The Interoperability Regulation

**Number 106 - Issued 17 May 2007**

Procedures for Verbal Co0rdination Between Air Traffic Services Personnel

**Number 107 - Issued 25 June 2007**

Deemed Separations : MATS Part 2

**Number 108 - Issued 4 July 2007**

Introduction of RNAV (GNSS) Instrument Approach Procedures

**Number 109 - Issued 12 July 2007**

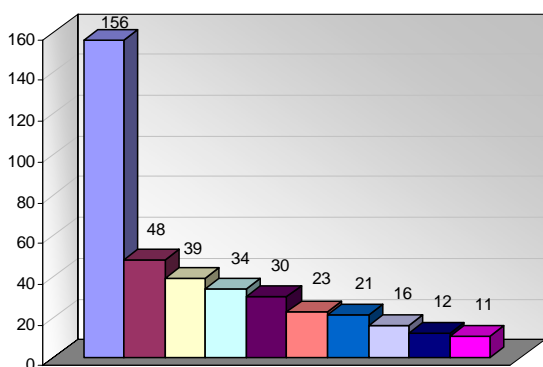
Display Technology

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 June 2007



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

### EMERGENCY DESCENT PROCEDURE

**Report Text:** During many years of flying the vexed question of what the pilot should do in an Emergency Descent - whether to turn off the centre of the airway or not - has never been resolved. Each instructor seems to have his own point of view; most of them seem to know an Air Traffic Controller who has his own (differing) advice.

The latest I have heard from an instructor is that ATC would rather you kept present heading and allowed them to turn other aircraft away from you. With GPS navigation so accurate now that aircraft are exactly in the centre of airways, and with emergency rates of descent in the order of 6,000 feet per minute, it seems to me that ATC (and the crews of the other aeroplanes) would have to be pretty quick. Others, sensibly to me, advocate a small turn, in the order of 20-30 degrees to at least give yourself a fighting chance of avoiding a collision.

So what would our ATC colleagues prefer? And also would they like us to set 7700 straightaway on our transponders?

**CHIRP Comment:** The reporter's query was passed to NATS. In the specific case of an emergency descent being required in the UK en route structure, the advice received from NATS is to squawk Code 7700 immediately and descend MAINTAINING TRACK until otherwise instructed by ATC.

The rationale for this procedure is that NATS en route radar displays have the capability to retain the aircraft identifier on selection of Code 7700 heading. Also, the Code 7700 squawk is automatically made visible to other NATS en route controllers in those areas where the airspace is sectorised vertically.

As a reminder, when operating with a non-NATS ATS unit, make the initial emergency RTF call on the frequency in use and maintain the assigned transponder code, if other than the Conspicuity Code 7000, until instructed to squawk Mode 7700 by ATC.

As the above advice does not appear to be currently promulgated, the matter has been referred to the CAA

### RTF PHRASEOLOGY - HEADINGS

**Report Text:** I wish to offer some feedback on the relatively new UK policy of using the word "degrees" in respect of a heading ending in 0 (to differentiate from flight levels). This seems a good idea, but is not being well adhered to. A significant proportion of Air Traffic Controllers add "degrees" after all heading instructions, including those that end in 5, and pilots are picking up this bad habit.

It difficult as a Training Captain to endorse the correct policy as laid down in CAP 413 (and the very good supplement that now accompanies it), when its general use is poor.

Please can we either have an education programme to follow the current guidelines correctly, or change the guidelines to say "degrees" after all headings!

**CHIRP Comment:** The addition of the word "degrees" in the manner described was a NATS initiative to reduce one area of communication error. It is understood that NATS proposed the addition of the word "degrees" to all headings as the best human factors solution, but this proposal was not accepted by the CAA RTF Phraseology Working Group.

It is understandable that some ATCOs experience difficulty in using the word with only some heading instructions and thus default to the safe option of adding the term to all heading instructions.

If the addition of the word "degrees" can be shown to have been effective in reducing communication error and a significant number of controllers have elected to add the word to all heading instructions, as this report suggests, the NATS proposal merits re-consideration.

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### LATE CHANGE IN PROCEDURE

**Report Text:** The First Officer (F/O) was acting as Pilot Not Flying (PNF) on his first flight of line training. An experienced F/O was acting as safety pilot on jump seat. This was 2nd sector of a long day returning to a UK regional airport. Nearing the final approach point we were advised to expect a VOR DME approach, as the glidepath had failed. I commenced descent on the procedure at 12.3nm on the ### DME. This is 2.0nm early, as the correct descent point is 10.3nm. The mistake was picked up quickly by the safety pilot and corrections were made to rejoin the notional glide path. I believe the causes of my error were a combination of:

- lack of flying currency, having been heavily involved in simulator training in recent months
- A high workload, late change of approach type and uncharacteristically poor radar vectoring with the PNF working at capacity on a complex new type
- Primarily, the poor approach chart presentation, which shows 12.3nm on the plan as the start of the procedure turn, but repeats the number, unnecessarily, on the vertical profile.

**CHIRP Comment:** This incident is a good example of how a late change in a procedure, issued at a time when the flight crew workload is high, combined with a lack of clarity in the published information can lead to a breakdown in CRM and an experienced pilot making a simple but significant error. On this occasion, the safety pilot performed his intended role.

The reporter's comment on chart presentation has been passed to the chart manufacturer.

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### ALMOST A LEVEL BUST

**Report Text:** Whilst I received a cabin secure call from the In Charge Cabin Crew Member, therefore not listening on the ATC frequency, the Captain received a further descent clearance with a speed control instruction. When I resumed radio duties the Captain updated me on our clearance, "FL90 with speed control" (230Kts, I think).

Descending through FL200 we received a clearance, "Descend to FL150". Slightly surprised by this I read back, "Stop descent FL150." ATC replied, "You were cleared FL190 and now cleared FL150." I read back, "Descending FL150."

Obviously, we came very close to a level bust (possibly less than 20 seconds) had ATC not issued us a further descent when they did. Whatever level the controller had cleared us initially, the Captain explained to me that in his initial readback he read back "FL90" and asked ATC to repeat the speed instruction. ATC repeated the speed instruction, to which the Captain read back the entire clearance again, "FL90, speed 230Kts". The controller therefore missed two opportunities to detect a readback error. The first readback error may have been

missed because the Captain's request for speed clarification distracted the controller. Unfortunately the second opportunity was also missed. We were subsequently held at FL150 due outbound traffic crossing below.

An additional point was that ATC communicated in Spanish with the outbound aircraft; therefore our situational awareness had no chance of alerting us to its significance. When the traffic below was clear, we were instructed to descend FL90.

**CHIRP Comment:** This report is a further reminder of the reduction in situational awareness that can occur when more than one language is used for ATC RTF instructions.

The reporter notes that the Captain stated that he read back the ATC instruction incorrectly; however, it is relevant to note that approximately one in three level busts result from an incorrect action following a correct readback.

If the readback was incorrect, the ability of an air traffic controller to detect and correct a wrong readback should not be assumed, particularly when the ATCO's first language is not English. The SOP adopted by many UK operators, which requires both pilots to maintain a continuing listening watch on the ATC frequency throughout the descent and approach, offers the best defence against an incident such as this.

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### MISSED CHECKS

**Report Text:** On turn-around at a Southern European destination after a sector on which I was the Pilot Flying, I noted that although the standby altimeter read 1014mb, the Captain's and my altimeters both read 1013mb. I realised that we must have neglected to run the Approach checklist, thus the navigation aids were not 'identified' or checked, the QNH was not set or the altimeters checked!)

I can only imagine that as we were cleared to an altitude and passed the airfield QNH we were immediately distracted. The distraction may have been related to the less than straightforward ATC service that we received. We were cleared for the VOR DME ILS DME approach onto the northerly runway but were held high over the beacon; I imagine I was distracted with recalculating my descent profile and missed the checks.

A lesson learned by me - check and check again! I'm glad the QNH was just 1014.

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### OXYGEN ESCAPE ROUTE PLANNING

**Report Text:** I would like to draw your attention to a situation regarding a sub-contract that my company is doing.

We have been operating regular long-haul sub-charter flights for several months, the routing for which takes us over mountainous terrain in Iran, which requires the use of Oxygen Escape Routes (OERs) in the event we have a rapid decompression that necessitates an immediate descent.

When the company commenced operations on this route, enquiries were made about the Escape Routes,



the company stated that there were none; however the company was working on them.

Eventually, as a result of pressure from crews about operating the flight without this critical information, unofficial copies of the Escape Routes that were being compiled were provided, but crews were advised that these were not yet company official documents.

These flights have been operated on this basis for several months and still the OER's have not been published. This is unacceptable and we feel very uncomfortable operating in an environment where we are not supplied with the tools that we need to operate safely. The aircraft that the company was using on this route has now been changed; therefore the photocopied OERs that we were using are now no longer available. This situation is a serious safety issue and must not continue.

**CHIRP Comment:** The provision of Oxygen Escape Routes information when overflying areas where the minimum en route safe altitude is such that the aircraft is unable to descend to and transit at 10,000ft following a decompression event is a planning requirement. It is the operator's responsibility to ensure that the OER requirements can be met on the planned routing and the aircraft commander's responsibility to ensure that OER information is available on routes where this is required

In some aircraft types the emergency oxygen on-board provision may be such as to require the aircraft to re-route to avoid areas of extensive high ground. There is anecdotal evidence to suggest that some short-term/ad hoc long-haul charter flights are operated without consideration of the OER requirements or provision of OER information.

This matter has been brought to the attention the CAA (SRG) Flight Operations Inspectorate.

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### IN THE COMPANY'S INTEREST?

**Report Text:** A recent experience has made me feel that I have unwittingly compromised safety in favour of commercial priority. I was recently asked if we could operate an additional sector as there were crew shortages at one of our outstations. The originally planned sectors were to be our last two of the day and our base airfield, our final destination, officially closed at 21:00 Hrs.

The problem arose when getting ready for departure from ###; I realized I was not in possession of a current Runway Analysis Chart. All Runway Analysis Charts were removed from the aircraft 2-3 yrs ago on the grounds of cost. We were required to download the required charts from our intranet site in the crew room. If you were stuck, you could obtain them from a crew room if there was a company base there or you could request the company to fax a copy to you.

Both these options were open to me at ### but I fell into the trap of deciding to get back to base before we incurred an Airport Extension Charge for remaining open after 21:00Hrs; we arrived at 20:55Hrs. The Runway Analysis Chart that I elected to use was for our base airfield on the grounds that the runway was shorter, the

obstacle which determines the MSA was actually behind us at the threshold of the runway in use and after take-off from ### our departure routing was straight out over the sea and so no obstacles were ahead of us.

However, with hindsight, accepting this has serious implications, I made enquiries with the company management why there were still no Runway Analysis Charts on the a/c when the company had issued a NOTAC in the first half of last year stating that the charts would be reintroduced on the a/c and also they are already on several other fleets. I have been told that we should be moving towards Electronic Flight Bags, but this will not happen for 18 months or so and that the company does not have the resources to reinstate these charts on my fleet; thus the present situation will stand. I was also politely reminded that it is the commander's responsibility to ensure that he has all the necessary documentation with him before he departs.

Should a situation like this arise again I will accept the Airport extension, but I don't think I or any other crew should be put into this situation and all documentation should be on the a/c.

**CHIRP Comment:** It is one of the aircraft commander's responsibilities to ensure that all required documentation is on board prior to departing. Whilst the provision of Runway Analysis Charts on board would have facilitated an on-time departure, in view of the company policy not to provide this information, the correct course of action would have been to have delayed the departure and obtain the correct chart or, alternatively, seek company approval to use an appropriate alternate chart with similar runway/obstacle information.

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### HIGH WINDS

**Report Text:** Recently, I was operating a delayed flight into a UK regional airport where the forecast wind was given as being virtually down the runway 30-35kts gusting up to 48kts.

On contacting the handling agent whilst in the descent, I was informed that they would be unable to get steps to the aircraft until the persistent gusts dropped, as the excessive wind could cause damage to structures and injury to passengers and other personnel. The approach was very interesting but safe, requiring a good degree of concentration, followed by a normal landing.

Once on stand, it was impossible to put the steps up to the aircraft and, as we had no Auxiliary Power Unit, ground power was connected. One hour went by with no change to the wind but with no air conditioning, the cabin began to get warm and stuffy. The passengers became restless. We could not open any doors fully due to the excessive wind but managed to obtain a bit of through draft by opening the DV window and 'cracking' door 4R. A further hour went by with no change in the wind; the passengers became extremely frustrated and restless in spite of being kept informed of all events.

Eventually the aircraft was taxied to a position in the lee of the airport terminal after another aircraft had taxied off stand. Steps were put on and the fire tenders positioned themselves to give a bit of shelter and the passengers disembarked.

Later, on reviewing the sequence of events, one considers other alternatives in spite of this flight getting the passengers to their destination, albeit late. But what if? What if, on landing, something had gone wrong, requiring an emergency evacuation? What would have happened to the slides and how many passengers would have been injured, or possibly worse?

We so rarely meet these conditions; that is why I decided to write this for others to consider. Continue or divert; if all goes well, fine; but if not...?

**CHIRP Comment:** The reporter handled the situation well in circumstances that are relatively unusual.

In addition to promulgating maximum demonstrated crosswind limits for an aircraft type, some aircraft manufacturers specify wind limitations associated with opening cabin/cargo doors and deploying airstairs. In high winds cabin crew should be reminded of the potential danger in opening/closing cabin doors if not parked on a jetway.

Some airport authorities impose limitations on the use/movement of ground equipment in extremely high winds. At destinations that are susceptible to high winds, where the passenger facilities available require the use of ground equipment, company advice on any ground equipment limitations would assist the aircraft commander in deciding whether to land or divert.

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## LESS SPEED - MORE CONTROL?

### (1)

**Report Text:** I am a minor minion for a UK operator and as such get to see the company post-flight reports from XXX-based crews. The following event however happened to me.

We were in descent to a UK regional airport with ABC123 about 5 to 10 miles behind. The ATCO instructed us to maintain above 280KTS and ABC123 to maintain below 270kts. We could see him on TCAS gently overtaking and, by the time we got to the next reporting point he had in fact overtaken us, so the ATCO reassigned us to be behind ABC123 in the pattern. As he overtook us the ABC123 pilot was asked what his speed was; to which he replied "Just slowing down to 270kts". This apparently was accepted as OK. I am aware of at least one other such event to another crew.

I have the distinct impression that what we are dealing with here is a very small minority of ABC crews who transgress since the frequency of occurrence is low, but nevertheless the practice of apparently deliberately not complying with speed control instructions does exist.

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### (2)

**Report Text:** Called for taxi. The controller asked us to standby and asked XYZ789 to give way to the ### 757 (our aircraft) exiting the apron. No response from XYZ789 who in the meantime could be seen taxiing at an estimated 30-40 kts on the parallel taxiway.

ATC asked XYZ789 a second time to give way to us but again no response. We stayed in position whilst XYZ789 taxied past us. Another voice on ATC asked if XYZ789 had a radio failure. ATC spoke again to XYZ789, who

finally answered explaining that he had a slot to make. ATC advised, "So does the ### 757" and made XYZ789 wait at the Holding Point whilst we departed.

Does this belligerent culture permeate through XYZ airline as a whole? If it does then surely flight safety is being eroded. It is confrontational and wasn't a good way for us to start the day.

**CHIRP Comment:** In a situation such as those described in these two reports, the most appropriate course of action is to submit a MOR on the incident with sufficient information to enable the non-compliance to be followed up both with the company and the pilot concerned.

Pilots are reminded that Mode S transponder information permits suitably equipped ATSU's to display and monitor Indicated Airspeed to ensure accurate compliance with ATC speed instructions.

In relation to taxiing, at ground speeds in excess of approximately 20 knots, tyre temperatures can rise significantly with possible adverse effects on tyre wear and tyre life. Some operators monitor taxiing speed as part of their flight data monitoring programme.

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## MARSHALLING AND TAXIING

**Report Text:** Whilst in the initial stages of aircraft and rotor start on the apron of a UK regional airport, a twin-engine aircraft taxied past the rear of my helicopter. The aircraft was under the guidance of a marshaller from the handling agency; the aircraft commander was seen to be looking directly at the marshaller as he taxied past the rear of the helicopter. The marshaller, from his position, was unable to see the helicopter as his instructions had positioned the aircraft between him and the helicopter, thus making it impossible for him to offer any wing tip clearance to the aircraft commander.

Another light helicopter was displaying anti-collision and navigation lights and the rotors were starting to turn as the aircraft entered the apron and subsequently passed behind it. The helicopter commander estimated that the aircraft wing tip passed within 12 inches of the tail rotor of the light helicopter. The incident was witnessed by numerous personnel including a fixed wing instructor who was waiting for clearance to taxi and a helicopter instructor who was refuelling an adjacent helicopter. I believe that there was a serious risk of collision between the aircraft wingtip and the helicopter tail rotor which could have resulted in a very serious incident as the helicopter was being run up.

Unfortunately, this was not the first incident of fixed wing aircraft being taxied dangerously close to helicopters either in flight or whilst during start up/shutdown procedures. However, this incident was all the more disconcerting due to the fact that the aircraft was being marshalled at the time. Later in the day the incident was discussed with the pilot of the twin-engine aircraft, who also thought that the taxi route took him 'very close' to the helicopter.

I believe that the handling agent is having extreme difficulty coping with the number of aircraft requiring parking slots and is under pressure to squeeze too many aircraft too close together on the apron. Worryingly, the handling agent's staff display little or no

concept of aviation safety and do not seem in the slightest concerned.

**CHIRP** Comment: Notwithstanding that an aircraft is being marshalled, the pilot-in-command remains responsible for maintaining a safe separation from other aircraft/equipment on the ramp. In an aircraft type such as that described in this report, this would include ensuring adequate wing tip clearance.

Also, it should be remembered that the safety of aircraft operations on the ramp falls within the scope of the CAA Mandatory Occurrence Reporting scheme; if safety concerns such as those described in this report cannot be resolved locally, the submission of a MOR would be appropriate.

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### SMOKE HOOD TRAINING

**Report Text:** As part of our safety training we must don a smoke hood and enter a smoke-filled mock-up cabin to retrieve a human dummy. I wish to highlight the futility of this requirement and propose it be removed. The onus for its removal lies with the licensing authority that insists on the procedure as a training requirement.

My airline has gone to great lengths to become a smoke-free, non-smoking company. This is primarily because of health worries, and possible future legal claims, concerning the effects of breathing secondary smoke. Allowing artificial smoke to pervade our training centre for the day and insist we breathe in this smoke rather contradicts this smoke-free policy. The smoke used in filling the mock-up cabin is similar to that found in discos. Does this make it all right then? Well, have a search on the Internet and you will find reports where even this type of harmless "smoke" can affect sensitive lungs - particularly those with mild asthma. Disco smoke cannot claim to be harmless. It is, after all, a suspension of very fine particles that can penetrate deep into the lungs and remain there. How can anyone say it is safe to breathe this fine dust? At best it can do us no harm.

Why practice putting on a smoke hood to enter an aircraft cabin full of smoke anyway? In reality this would never happen. After a crash we would expect the aircraft to have been emptied of all occupants within the certified (sic) time limit. So practicing the deliberate action of going back inside is rather contradictory. This is best left to the emergency services who are the experts. All we need do is get out and run, not seek out a smoke hood and return to the hazard.

Should it be deemed necessary to rehearse walking around wearing a smoke hood in conditions of reduced visibility, then a smoke hood with a frosted glass visor in a darkened room could simulate this. An alternative to smoke could be dry ice. A large bucket or two filled with a few lumps will lower the visibility inside the mock cabin to simulate the required conditions. It is also far safer than smoke.

Please can CHIRP tell me who makes it a legal requirement that we must suffer a dose of fine particulate smoke every three years? This is the person who will be legally responsible for any future lawsuits that may result from damage to our health as a result of this triennial "safety" requirement.

Does Health and Safety have a view on this?

**CHIRP** Comment: Exposure to a smoke-filled environment without prior training can be a daunting experience, particularly for cabin crew members; however, it is important that training scenarios are realistic and relevant to an individual's role. In this particular case, the latter might be open to doubt and the matter has been referred to the CAA.

As to the Health and Safety aspects raised by the reporter, the advice of the CAA Medical Department was sought. In their response the CAA noted that most smoke generation systems use either water-based or oil-based solutions; the water-based chemicals are approved for use in the USA as food additives and for cosmetic use, thus the hazard associated with crew training scenarios is minimal.

## CABIN CREW REPORTS

### COMMUNICATION

**Report Text:** Approximately 2 hours before landing I noticed a noise I'd not previously heard before (though this was my first time operating on this aircraft for a while) so I telephoned the In Charge to let them know. I was put on to the Captain who was standing in the forward galley, he said that it was probably a seal from one of the hold doors, he also said our nearest diversion was our original destination therefore there was nothing he could do.

Approximately 2 minutes later we all noticed a pungent acrid burning plastic smell; alarmed, we immediately called the flight deck while searching for the source of the increasingly pungent smell. The Captain told me he was too busy to talk to me and hung up. The In Charge appeared, and by this time a colleague had found the source of the smoke in the galley. All circuit breakers were pulled and the In Charge pulled the coffee/tea brewers from the galley leaving them there. By the time the In Charge had returned to the forward galley there was still smoke and fumes emitting from both brewers so I called the In Charge once again expressing my concern. I also notified the flight deck (Captain told me that now it had been disconnected from the power source that was impossible.) Finally the In Charge came back up and agreed to put the brewers in an empty cart and told me to stop panicking the crew (who were all acting in an extremely professional manner with BCF extinguishers to hand).

We continually monitored the area, the crew and I were experiencing discomfort in our throats and eyes and I was aware that heat was still emanating from the brewers. I called the In Charge and asked again if a passenger qualified as an engineer could at least take a look; they reluctantly agreed.

The passenger discovered both brewers were still acting as capacitors and that heat energy was still stored in them; he disconnected several electrodes and the smell seemed to lessen a little.

The whole event was treated like a major inconvenience and I am shocked that I was not taken seriously in the

whole matter. With all the training we are given it is not acceptable that matters like this, no matter how insignificant they may seem at first, are not treated with the utmost integrity.

**CHIRP** Comment: The reporter was advised to report this incident directly to his/her company to permit the circumstances to be investigated; this was done, following which an internal investigation was carried out.

The report serves as a useful reminder of the importance of maintaining good communications between the cabin and the flight deck and vice versa, particularly in a non-normal situation. In the post locked flight deck door era, it is more difficult for the flight crew to assess a cabin equipment problem and, similarly, for cabin crew to assess the flight crew workload at a particular time. What was assessed to be a real safety concern by the reporter and other crew members was perceived by the Captain to be nothing major; the situation could probably had been handled better by a more detailed explanation from the Captain, in order to allay the concerns of the reporter. The In Charge cabin crew member might also have assisted both the Captain and the other cabin crew members by taking their concerns more seriously and ensuring that the Captain was briefed in sufficient detail and kept informed as to the status of the electrical problem.

One further point, the reporter was advised that it is wise to treat offers of assistance from passengers with extreme caution; although well-intended, they are unlikely to be familiar with aircraft equipment/wiring; this point has been emphasised in the latest issue of Cabin Crew FEEDBACK.

## CAA (SRG) FODCOMS

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

- 10/2007**  
Operational Requirements for Flights Into/Out of Aerodromes Outside a Controlled Airspace Environment
- 11/2007**  
Demonstration of Compliance with the Requirements of The Air Navigation Order 2005 (Schedules 4 and 5), JAR-OPS 1 and 3 (Subparts K and L) and JAR-26
- 12/2007**  
Consultation By The CAA Aerodrome Standards Department On The Proposal To Amend The United Kingdom Rules Of The Air Regulations (2007) Rule 42(2) - Right Of Way On The Ground
- 13/2007**  
CAP 413 Supplement - A Quick Reference Guide To UK Phraseology For Commercial Air Transport Pilots
- 14/2007**  
Civil Aviation Act 1982 Section 23 - Notification of Intention to Publish AOC Holder Details
- 15/2007**  
Flight Operations Inspectorate (Training Standards) Training Symposium and Crew Resource Management Forum - 2007
- 16/2007**

Letter of Consultation: Proposal to amend the Air Navigation Order 2005 - Regulatory Impact Assessment for the Amendment of the Air Navigation Order 2005 to Reflect the Coming into Force of Provisions of the European Council Regulation (EEC) No. 3922/91 Annex III (EU-OPS).

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'

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