

# CHIRP

## Air Transport FEEDBACK

Issue No: 123

3/2017

### CONTENTS

[EDITORIAL](#). Selecting Air Safety Reports for submission as Mandatory Occurrence Reports

[Engineering Editorial](#). Manpower resources.

[Comment on Air Transport FEEDBACK 121](#). Weather avoidance: whose responsibility?

[ATCO Night Shift Working Hours](#). Avoiding fatigue is the priority.

[Fatigue Monitoring and Crew Shortages](#). Pressure to operate; perception is reality?

[Descent below Designated Altitude](#). A human error shared.

[Distraction during the Departure Process](#). An unnecessary frustration.

Advertisements: [A licenced engineer to work for CHIRP](#).

[Engineers and ATCOs to join the Air Transport Advisory Board](#).

[Pilots to support controller training](#).

### EDITORIAL

We periodically receive comments about Air Safety Reports (ASRs) and the criteria and processes for selecting ASRs for submission to the CAA as MORs. The issue is complicated because of the many different types of manual and electronic reporting systems currently in use. However, there are some principles with which all operators and their systems should be compliant. Industry organisations are required to review ASRs to determine whether they meet the criteria for onward transmission as MORs. The list of classifying occurrences to be mandatorily reported is contained in EU [Implementing Regulation EU2015/1018](#). Determination can be by manual interpretation of these requirements or by automatic processes. In either case there exists the possibility that the circumstances, complexity or severity of occurrences might require a different interpretation to the norm. Some organisations automatically forward ASRs as MORs if the reporters have indicated it as a requirement/recommendation by ticking a box and/or as part of the narrative; others review every report against the criteria in EU 2015/1018 or rely on electronic filtering by coding.

The safety net underpinning industry's filtering of ASRs is the requirement to provide feedback to reporters on whether their reports have been forwarded as MORs or remain within the operator's SMS. Reporters then have the option of independently submitting an MOR; independent reports are treated no differently by the CAA from those raised through company schemes. There is no evidence that operators suppress MORs; the CAA oversees operators' processes and would expect to detect any systemic issues. However, if there are specific examples the CAA would wish to investigate them.

Ian Dugmore - Chief Executive

[Back to the Top](#)

### ENGINEERING EDITORIAL

A number of CHIRP Engineering reports cover concerns over a shortfall in manpower resources when taking account of the maintenance workload to be carried out.

It is difficult to establish if there is a shortfall in the manpower that is being allocated without a detailed review of the workload, the allocated manpower and the available downtime, which is an activity the company

[www.chirp.co.uk](http://www.chirp.co.uk)

CHIRP, Centaur House, Ancells Business Park, Ancells Road, FLEET, GU51 2UJ

T - 01252 378947 Freephone - 0800 772 3243 Email - [reports@chirp.co.uk](mailto:reports@chirp.co.uk)

has a regulatory requirement to monitor and manage. This depth of analysis is not something that CHIRP can undertake, however these should form part of the UK CAA's surveyor audits of the organisation.

Regulations require engineering organisations to monitor and manage workload and manpower capabilities through a manpower plan and Acceptable Means of Compliance (AMC) give guidance on how to meet those requirements.

To raise awareness of the requirement regarding the provision of adequate manpower resources against the anticipated workload, I have summarized the relevant elements of the regulations and Acceptable Means of Compliance (AMC):

As per section 145.A.30 Personnel requirements (Regulation (EU) No 1321/2014) an organisation must:

- Appoint a manager responsible for ensuring all maintenance can be carried out
- Ensure resources are available to carry out work
- Have a man-hour plan that can ensure work can be performed and supervised
- Have a process that allows workload be adjusted as necessary.

AMC 145.A.30 (d) Personnel requirements (ED Decision 2015/029/R) requires organisations to have:

- A sufficient and stable workforce
- An accurate and achievable man-hour plan for work to be carried out
- Sufficient quality monitoring staff
- A process to review the man-hour plan every 3 months
- A process to identify and notify significant deviations from the plan to senior managers

These are specific items upon which organisations will be audited by their national authority. If an organisation can't or doesn't fulfil these requirements, it will no longer be operating within the scope of its approval and can have its approval removed.

Should you want to study these regulations in greater detail, search for [Regulation \(EU\) No 1321/2014](#) and the [Acceptable Means of Compliance](#) ED Decision 2015/029/R which are available on the [EASA website](#).

**Dave Tattersall - Deputy Director Engineering**

[Back to the Top](#)

---

## **COMMENT ON AIR TRANSPORT FEEDBACK 121 – ATC INAPPROPRIATE INTERACTION**

**Report Text:** -What pilots should know-

Controllers cannot see thunderstorm cells on their radar. I know that, but many people won't know that, especially pilots from foreign airlines where in their countries controllers do have the thunderstorm cells on their radar!

The question that must be asked is, why don't the controllers have this information on their radar? It is clearly available in other countries, so it is only a cost issue not a technical issue. Given the crowded airspace in the UK and the fairly frequent occurrence of thunderstorm cells that need avoiding (although not as bad as in some countries) it would seem this ought to be a good investment. It might also give a reduction in delays due to easing the controllers workload as they can pro-actively route aircraft around the cells, rather than having everyone managing their own diversions, thus it will save money for the airlines who obviously should be the ones to pay for it, indirectly. It is amazing really that this information is still not available to UK controllers, when it has been available for many years in the USA and some other countries and in the USA many small GA aircraft can get weather feed on devices like iPads and mobile phones in the air!

This report also highlights again the problems in the UK with controller workload and on many sectors pilots not able to get a word in for many minutes due to continuous controller or other aircraft transmissions. I know the UK airspace is very congested, but we don't seem to help ourselves by continually radar vectoring aircraft off the SID/STAR, creating massive extra RT. Why in France or Germany do we manage to just follow the SID/STAR and in the USA now nearly always descend via the STAR, although in some places radar vectors are given initially after take-off? Also why doesn't the UK use CPDLC properly, which would also significantly reduce RT?

**CHIRP Comment:** Having weather information displayed on ATC radar displays could be helpful and reduce the time spent referring to the separate weather displays that were available in the Ops room. However, there is already a lot of information displayed on ATC radar displays and any weather display would need to

be selectable on/off to reduce the clutter. Some foreign ATCUs do have weather displayed on the controllers' screens but the utility of this is dependent on the way the airspace is configured and controlled. In the UK where airspace is limited, proactive re-routing by controllers would be impractical except in the most extreme conditions. There are also many variables; pilots are likely to have a more dynamic and accurate appreciation of the conditions from their aircraft weather radar or visually and there is considerable variation in the willingness of different pilots to penetrate any weather event. Proactive avoidance would also risk unnecessary route deviations. Eurocontrol policy is that pilots should decide in which direction they intend to avoid bad weather and ATC's role is to separate other traffic. Controllers should avoid giving weather avoidance instructions regardless of whether or not they have weather information on their screens. There is a great deal of preparatory work by ANSPs to prepare for bad weather but, on balance, pro-active vectoring by ATC is a last resort.

At times it may be necessary to vector aircraft off the SID/STAR in order to make the airspace work. Systemisation of airspace, where inbound and outbound routes are procedurally separated is coming (first deployment in the UK is due on 9<sup>th</sup> November 2017 in Prestwick Centre IoM sector (DB-FL285)). This will reduce the amount of tactical interventions and eventually pilots will become responsible for monitoring track keeping accuracy. The IoM deployment will see RNAV1 routes introduced but ATC will remain responsible for monitoring track keeping accuracy. Ironically, all of this systemisation will go out of the window during weather avoidance!

Turning to the use of Controller Pilot Data Link Communications (CPDLC), the mandated maximum time lag between sending the message and reply (up to 120 seconds) is not quick enough for safety critical instructions in busy, complex airspace. The facility is more suited to en-route situations than those in a TMA and, in any case, many aircraft are not fitted with the equipment. Furthermore, its use in tactical weather avoidance would deny SA to the other flights that currently benefit from hearing relevant transmissions on the RT. That said, CPDLC is in widespread and increasing use abroad and greater use of it in the UK would alleviate RT congestion.

[Back to the Top](#)

---

## ATCO NIGHT SHIFT WORKING HOURS

**Report Text:** I am an Air Traffic Controller at [ ]. The current rostering of staff for night shifts (which has always been the norm) is for 2 ATCOs to man Tower and Approach, one of whom may only have a single validation. My understanding of the regulations, is that a controller may work up to 4 hours in position during a night shift (subject to SARG approval) before a suitable rest break from operational duty.

At [ ] on every night shift as there are only 2 controllers staffing the unit, it is impossible to have a suitable rest break during the night shifts without closing one of the positions (usually radar) issuing a NOTAM advising that services are not available from that position and a procedural service is available from tower or (in the event of a single validated tower controller), no radar services are available.

At [ ] this is not done, controllers are expected to take ad hoc breaks whenever they can (subject to traffic), which in the summer months can be 6 or more hours after the start of the shift.

I have questioned this with watch management and unit management who advise that they don't have the staff as it would take somebody (usually a watch manager) from having a day shift where they complete administrative duties, to provide additional cover for a night shift. The roster theoretically allows for an afternoon controller to stay until 01:00 (assuming a max 10 hour shift starting at 1500, however this rostered shift starts at 1400) but this still does not allow for a proper rest break for 2 controllers working from 01:00 until 06:30

I have queried the legalities, again with watch management and unit management and have been told that:

- A) SARG see the rosters and haven't stated they are unhappy with anything
- B) The Airport senior management team wouldn't like having positions NOTAM closed
- C) The airlines want a seamless service 24 hours a day
- D) You can always get a break in when there's a gap scheduled movements

I am concerned about the legalities of this practice, especially should an incident occur for which a controller was partly, or wholly responsible and more so for fatigue management, which watch management, unit management and airport management seem to have a lack of understanding or a blatant disregard for.

**CHIRP Comment:** The critical issue is the avoidance of fatigue. There is a presumption that if controllers are rostered in accordance with the Scheme for Regulation of Air Traffic Control Officers' Hours (SRATCOH) published in CAP670 they will not be subject to fatigue. There is provision in CAP670 for Air Navigation Service Providers (ANSPs) to authorise their staff to work beyond these hours provided it is recorded and provided that none of the controllers affected are suffering from fatigue. Similarly the CAA can authorise extended periods of working if it is satisfied that the Provider had made a satisfactory case that these extended periods of working can be completed without undue risk of controller fatigue. This is usually done to cover periods of known light and intermittent traffic - typically at night or at weekends. Notwithstanding any exemption, it remains the responsibility of the Provider to ensure controllers are not exposed to fatigue issues and it remains the controller's personal responsibility to ensure they do not work if suffering fatigue. To do otherwise would contravene the law.

It is not uncommon for controllers to arrange their required fatigue breaks around planned movements of traffic. This facilitates the needs of the airport users and provides controllers with some notice of when breaks will take place. If this arrangement resulted in an operational position becoming unmanned during periods when the sector was promulgated as being open, Providers would be expected to arrange for another suitably qualified controller to monitor the frequency and be in a position to respond to unexpected calls. This additional monitoring role must be compatible with other tasks assigned to the controller and must not be a cause for distraction. This practice would not be considered acceptable unless there was forecast to be no calls on that second frequency. Where this was not possible, it would be necessary to promulgate the closure of the sector (and the associated service) for the period of the fatigue break. Using controllers to monitor frequencies allocated to another sector for which they did not hold a unit endorsement would not be acceptable and this has been emphasised to the reporter's Unit. Controllers who undertake a frequency-monitoring role should not be considered to be on a fatigue break.

The reporter was concerned about the legalities of the working hours rather than having been fatigued themselves. SRATCOH rules are an aid to complying with the obligation to avoid fatigue and controllers may only be extended beyond the SRATCOH limits if they are not fatigued. Reports of operational duties in excess of SRATCOH are examined carefully by the CAA; receipt of several forms would likely result in an investigation. The key point is the avoidance of fatigue. SRATCOH rules are not the law. Article 191 of the Air Navigation Order 2016 is the law and requires controllers to exercise their licence privileges only when fit to do so.

[Back to the Top](#)

---

## FATIGUE MONITORING AND CREW SHORTAGES

**Report Text:** On [ ] morning my colleague and I planned a flight to an offshore installation. The flight planning was all as usual but my colleague looked tired and I asked him if he was feeling ok. He confirmed he was ok but said he had been working several days overtime on his normal days off. I asked why he was doing so much overtime. His answer was, 'I feel pressured to do so as I think the next selection for redundancies will be based on flexibility. I don't want to report fatigued as sickness absence was used in last year's Matrix to select redundancies.'

We did a normal start up and my colleague who was on the radios asked for taxi clearance with ATC. We were cleared to taxi and hold at a normal helicopter holding point. There was a little morning rush where a few fixed-wing aircraft were ahead of us before it was our turn. After several minutes of holding (in a sterile cockpit) Ground asked us to switch to the Tower frequency. My colleague did not respond to the call, and when I looked across I noticed he was asleep. I answered the call, which woke my colleague up. He replied to Tower and followed normal procedures. We continued the flight as normal.

**CHIRP Comment:** Severe commercial pressure for offshore helicopter operators and the threat of redundancies for their staff have become routine. The veracity of the threat of redundancy in this case is unknown but the reported pilot's perception that demonstrating flexibility through working overtime was material. It should also be noted that overtime attracts financial rewards; newcomers to the industry in particular might not appreciate the possibility of cumulative fatiguing effects.

The problem of pilots pushing themselves beyond sensible limits may be compounded by the unwillingness of colleagues to take action. In an earlier redundancy round (with a different operator) one Captain described how some of the First Officers he flew with appeared to be unfit/stressed/distracted and that he kept an especially close eye on them. He may have spoken to them informally and offered advice but he didn't say that he had reported his concerns to the operator. The bottom line is that we need to acknowledge that pilots

are not pieces of machinery. They are human beings and when faced with prolonged uncertainty and the threat of redundancy, with all that means for themselves and their families, their judgment and decisions may not be based entirely on professional factors.

[Back to the Top](#)

---

## DESCENT BELOW DESIGNATED ALTITUDE

**Report Text:** We were on arrival into [an airport in the London TMA] from Belgium. While on arrival we were with London Control and given an assigned heading which took us off the assigned STAR. This is not unusual as we rarely stay on the assigned Arrivals and Departures when with London Control. I was given a descent on our present heading to FL100. I set 10000 in our altitude selector and continued an approx.1500 fpm descent. During that time my Co Captain, Pilot Monitoring, was off frequency communicating with [handling agent] in preparation for our arrival. We were issued a frequency change to a new sector and we checked in. We were next issued a turn direct to [ ] and were continuing to descend to FL100. Around FL103 the controller called and asked what we were doing. My colleague responded, going direct to [ ]. The controller said, no you were assigned FL110. Our response was to ask if he wanted us to climb. He responded no continue descent to FL90.

Lessons Learned - Well the obvious answer is to always check and double check altitude assignments. In this case ATC had several chances to catch the mistake, if it was a mistake. I repeated what I thought to be our assigned altitude to two different controllers. ATC also has the capability to see what I have in my altitude selector so it shouldn't have been a surprise that I was descending to FL100. The Arrival phase into the London Area is an extremely busy and complex time. We always need to be vigilant to maintain a high level of situational awareness. In the US, ATC has adopted much less of a "positive control" concept for arrival flow. Aircraft are metered using the arrivals which aids in reducing errors and increasing flow. It would be great to see a more effective arrival airway system in the UK.

**CHIRP Comment:** We are grateful for this honest account of an incident from which there are several lessons for the benefit of other pilots. In essence, a simple error was not detected or corrected by the barriers which might otherwise have prevented a level bust. The RT tapes record that the crew was instructed to descend to FL110 to be level by [ ]. This was correctly read back but FL100 was selected in the autopilot and the aircraft began to descend. The incorrect level was challenged by ATC as the aircraft was descending past FL103. No other aircraft were affected by this level bust and the controller immediately cleared the aircraft to FL90.

The erroneous selection of FL100 selected altitude was a typical and common example of a human performance error: a correct read back but an incorrect action. One of the barriers for catching this type of error is monitoring by the other pilot. Unfortunately he was speaking to the handling agent when the ATC descent clearance was issued and read back correctly by the handling pilot. Although FL100 is typically the level below which flight decks go sterile, many operators use FL200 for operations into the London TMA because the airspace is so busy and complex. If it is essential for one pilot to go off the operating frequency below FL200 and a descent is instructed while they are away, on their return they should ask ATC to confirm the altitude cleared; this is not uncommon and controllers would prefer to be asked for confirmation than risk a level bust.

Another potential barrier was the downlink of the altitude selected in the aircraft FMS. However, the controller did not detect the incorrect altitude selected by the pilot and pilots should not expect them to do so. Controllers are not mandated to check the selected altitude because it would be impractical given the amount of traffic in the TMA and the variable delay that occurs between clearing aircraft to descend and the altitude being selected. If controllers do see a discrepancy they will try to resolve it, but it is not currently practical to expect them to do so routinely. In future controllers will increasingly make use of electronic flight strips (rather than the paper ones) and these, in some situations, will alert the controller if there is a discrepancy between the cleared altitude and the Mode S indication. Unfortunately, the utility of the selected altitude function may not be compatible with RNP procedures and step-climb SIDs. Therefore, while technical solutions will be welcome and beneficial, from a human factors perspective the old adage – ‘never assume, check’ – comes to mind in circumstances such as occurred here.

Once again, kudos to the reporter for providing the opportunity to highlight some important lessons.

[Back to the Top](#)

## DISTRACTION DURING THE DEPARTURE PROCESS

**Report Text:** The issue of servicing Flight Crew Bunks is not new. Recently I was operating on a flight and the 'heavy' captain had exactly the same problems that I remember from years past: ground staff failing to supply the agreed quantity of bedding. From my observation this happens on just about every 4-pilot departure - predictable and very sad. The 'heavy' captain was new to the fleet and didn't know the rules; I had the rules 'screen shot' on my iPad, which is why I got involved. I actually think that it is quite funny that a company like ours allows this to go on in a safety related industry. I suspect that CHIRP has bigger fish to fry than this but I also suspect that this is an industry-wide issue that takes various forms in different companies, which is why I've decided to share this little frustration with you. I know that it is an old model, but the Swiss cheese model still applies.

Lessons Learned: Treat such minor issues as light entertainment!

**CHIRP Comment:** Distraction is a serious safety issue and the reporter is correct to encourage colleagues to try to rise above such irritations. But the irritation should not be there in the first place. Bedding is simply another element of the paraphernalia that is required for extended range operations. It should not be necessary for flight crew to bring sleeping bags to facilitate the rest they require in flight.

The operator has advised that it is aware of a number of issues on bedding provision at present, due in the main to two factors. It had been seeking to agree a common provision for different aircraft types as it currently had different agreements based upon aircraft type. In addition, the operator had changed provider and there were a few teething problems. The operator was attempting to improve the reliability of the provision but with many flights and destinations, different fleet agreements and a new supplier, it was taking some time.

[Back to the Top](#)

### CHIRP Deputy Director (Engineering)

We have a vacancy on the CHIRP staff for a licenced engineer to replace Dave Tattersall. The role is to process reports submitted to CHIRP by engineers and ground handling staff and to manage the CHIRP MEMS programme. It is a role that requires up to an average of 2 days' work each week, much of which can be carried out remotely on line. Only occasional visits to the CHIRP office in Fleet are required plus attendance at Air Transport Advisory Board meetings in London or Farnborough. Employment is on contractor basis with payment by a daily/hourly rate plus expenses.

The vacancy is open to any suitably qualified and experienced person but would ideally suit someone who wishes to work in a part-time role with great flexibility.

For more details please contact Ian Dugmore, by e-mail: [ian.dugmore@chirp.co.uk](mailto:ian.dugmore@chirp.co.uk)

### Wanted: Licensed Engineers and ATCOs to Join the CHIRP Air Transport Advisory Board.

CHIRP relies on the expertise of its Advisory Board members to ensure its assessments are realistic, relevant and credible. We have a pool of licensed engineer and ATCO members but are looking for additional volunteers to join as independent members to increase our resilience and ensure that there are always experts available to attend the 4 half-day Board meetings each year. Meetings are held in either the Farnborough area or Central London.

If you are a licenced engineer or ATCO interested in helping CHIRP provide an independent and confidential safety reporting service please contact Ian Dugmore, by e-mail at [ian.dugmore@chirp.co.uk](mailto:ian.dugmore@chirp.co.uk) or by phone 01252 378947.

## COMMERCIAL PILOTS WANTED

NATS advise as follows:-

### ART – ATCO Refresher Training

ART (formerly TRUCE & ABES) involves both classroom and practical simulator sessions and they are greatly enhanced by the presence of a commercial pilot. ART takes place at the Corporate and Technical Centre (CTC) at Whiteley (approximately 3 miles from Swanwick). The session will commence 1300 for Area Control or 1400 for Terminal Control and finish at approximately 2000 hours.

There will be an opportunity to visit the Ops room at Swanwick before the ART session but please be aware that this will be subject to staff availability on the day.

**STAC - Scenario Training for Aircrew and Controllers**

STAC aims to improve communication between pilots and controllers. It is solely classroom based but uses some radar replays to enhance discussions; with a mix of controllers from Area & Terminal Control and other aviation professionals including pilots. A member of the Swanwick Training Team and a pilot CRMI, facilitate mutually constructive conversations during a 0900-1530 day session. There will be an opportunity to visit the Ops room at the end of the session.

Mileage expenses up to the maximum of 260 miles towards the cost of a journey to Swanwick is offered.

If you would like to participate in an ART or STAC session, please contact the Training Support Team by email at [ART@NATS.co.uk](mailto:ART@NATS.co.uk) . Confirmation will then be sent along with details of the security arrangements and a map.

[Back to the Top](#)

[Follow us on Facebook at CHIRP\\_Aviation](#)



[Follow us on Twitter at @CHIRP\\_Aviation](#)

**Reports received by CHIRP are accepted in good faith. While every effort is made to ensure the accuracy of editorials, analyses and comments published in FEEDBACK, please remember that CHIRP does not possess any executive authority.**

**FEEDBACK is published to promote aviation safety. If your interest is improving safety, you may reprint or reproduce the material contained in FEEDBACK provided you acknowledge the source.**

### Contact Us

**Ian Dugmore - Chief Executive**

**Dave Tattersall - Deputy Director (Engineering)**

Flight Crew/ATC Reports

Maintenance/Engineer Reports

**CHIRP, Centaur House, Ancells Business Park, Ancells Road, FLEET, GU51 2UJ**

**Freephone (UK only):** 0800 772 3243 or **Telephone:** +44 (0) 1252 378947

**E-mail:** [mail@chirp.co.uk](mailto:mail@chirp.co.uk)

Registered in England No: 3253764

Registered Charity: 1058262