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Edition ATFB 152 October 2024

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Lingering challenges and pressures

Human Factors in Aviation

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Steve Forward Director Aviation

This will likely be my last Air Transport FEEDBACK editorial before I relinquish the reigns of CHIRP Aviation later this year so I thought I could be forgiven for indulging in a retrospective view of the last 4½ years. Allowing for the extraordinary events and specific COVID-related issues during the

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2020-2022 pandemic, we've continued to see recurring themes during my tenure, and sometimes it feels like our efforts might be better likened to those of Sisyphus.[1] As we all understand, aviation is an industry where precision, safety, and human performance intersect. Yet, even in this highly

regulated field, human factors continue to pose challenges that can impact operational safety and efficiency as evidenced in this edition's reports that reflect some of the key themes we've seen during my time at CHIRP.

Fatigue remains a significant challenge across various aviation sectors. In one report in this edition, flight crew members share concerns about inadequate rest periods between long-haul flights. Despite adhering to legal Flight Time Limitations (FTLs), these schedules can push the boundaries of human endurance, particularly when shifts transition between day and night duties or span the WOCL. Whilst these duty patterns may be "legal," they can fail to account for the body's natural circadian rhythms, leading to chronic fatigue that undermines performance and safety. As aircraft become able to fly ever longer routes, this will become increasingly relevant. Similarly, another report details how "in-seat napping" or Controlled Rest (CR), originally intended as an occasional tool to combat tiredness, is now becoming a more routine practice. While CR is acceptable in short, planned intervals, the seeming growing reliance on this method suggests that fatigue is not always being adequately managed at the scheduling level. This puts unnecessary pressure on pilots and increases the risk of errors during critical phases of flight. The CAA are conducting a review of the assumptions within the whole UK rostering and FTL/FDP regulatory set and will report their findings towards the end of the year. See the associated article in this edition for the scope and intent of this review; we look forward to reading the outcome and seeing what is proposed to ensure regulations are fit for purpose, now and in the future.

Pre-flight briefings are a crucial aspect of flight preparation, but time constraints are often putting this essential safety step under strain. A report from a flight crew at a major airport revealed that the time allowed for briefing was so compressed that crew members were arriving early to complete the process. Rushed briefings, particularly when combined with time pressures, can lead to omissions or mistakes that compromise flight safety. On a positive note, the company in question responded to these concerns by extending briefing/reporting times, but the fact that it became a recurrent issue points to a broader industry trend of operating under compressed schedules. This is a stark reminder that safety must come before efficiency – ensuring enough time for critical tasks like pre-flight briefings is not a luxury but a necessity.

Another concerning set of reports from our cabin crew colleagues involved pushback procedures being initiated while passengers were still standing or stowing their luggage. In one instance, the cabin crew advised the flight crew of unsafe conditions in the cabin, including unseated passengers and open overhead bins. Despite this, the pushback proceeded, creating a potentially hazardous situation for both passengers and crew. This issue points to a deeper communication breakdown between cabin and flight crews, compounded by systemic pressures to maintain ontime performance. Whilst the regulations may technically allow pushback with passengers still standing, this practice is inherently risky due to the potential for injury during unexpected sudden stops or emergency situations. With pushbacks and tows to the runway likely to become more the vogue in future to save fuel and emissions, we believe that this is an area in need of review.

In a digital age, the expectation for constant connectivity is increasingly blurred between professional and personal life. One report raises concerns about airline staff being required to use personal devices to access work-related information, even during off-duty periods. This 24/7 connectivity not only infringes on work-life balance but also contributes to fatigue and mental strain. More critically, safety could be compromised if important operational updates are missed due to employees being unavailable or unwilling to use personal devices during their time off. Companies must address this issue by ideally providing dedicated equipment for work-related activities and respecting boundaries between on-duty and off-duty time.

This edition's reports collectively underscore a fundamental truth about aviation: human factors is a critical element of safety. Whether it's managing fatigue, improving communication, or balancing operational pressures, human performance needs to be at the heart of decision-making processes. As the industry moves forward, there is an urgent need for operators to consider not just what is legally permissible, but what is humanly sustainable. Only by addressing the human factors at play can we hope to enhance safety in aviation so I wish my successor every good fortune in continuing CHIRP's relentless efforts to improve safety by highlighting aviation human factors safety concerns to those in a position to resolve them and enact changes.

We've had a number of reports from flight crew expressing their concerns about flights in conflict airspace. In reviewing them, it's clear that there's a degree of uncertainty about who makes the decision about whether airspace is safe to fly in, and what the process is for assessing the risks. Although we'll publish the associated reports at a later date if possible, we thought that it'd be interesting for all to understand what the processes are and so l've included in this newsletter a note from DfT that sets out what the process is and who is involved in making the risk assessments.

Finally, we've just produced our latest short video (10mins) explaining what CHIRP does, voiced-over by 3 of our Advisory Board Chairs. Why not click on this <u>link</u> to have a look and find out what we're all about?

Steve Forward, Director Aviation

[1] Sisyphus was the legendary King of Corinth who was condemned eternally to repeatedly roll a heavy rock up a hill in Hades only to have it always escape him and roll down again as he neared the top.

Report to CHIRP!







Reporting to CHIRP is easy by using either our <u>website</u> portal or our App (scan the appropriate QR code shown or search for 'CHIRP Aviation' – ignoring the birdsong apps that may come up!). In our reporting portal you'll be presented with a series of fields to complete, of which you fill in as much as you feel is relevant – not every field is mandatory, but the more information you can give us the better. Although you'll need to enter your email address to get access to the portal, none of your details are shared outside CHIRP, and we have our own independent secure database and IT systems to ensure confidentiality.

Engineering Editorial

Training of managers and supervisors has been a topic in my Engineering Editorials in recent months, as has training in maintenance paperwork and time provision for its completion. Many CHIRP reports cite managers as a contributing or causal factor, so what skills do supervisors have to keep them from falling into being one of the problem managers? Additionally, CHIRP has received a number of reports about staff competence across a number of operators. What training are supervisors receiving to assist them when it is clear that a new member of staff obviously has not got the skill or knowledge level to carry out basic tasks or hold the licence they proport to have in their possession?

Supervisors may think that if Quality/ Safety/ Compliance have assessed these new staff then it is not their responsibility beyond submitting an internal report. Many of us would immediately think that the good old oral interrogation sorts the men from the boys (and, as applicable, sorting the women from the girls). Might a shop-floor oral by the supervisor achieve the same outcome nowadays as well? We can all think of a handful of complex open questions, especially in subjects where we were struggling in our youth. Supervisor training might possibly improve this activity.

For example, precautions prior to running an engine requires five answers at the very least, prior to even entering the aircraft. Once on the flight deck, one does not need to be type-rated to know Fuel, Oil and a Fire Test are pretty helpful prerequisites. So, there we are, just ask everybody that question. Except, with social media it would probably only test three individuals before everyone has learnt the answers by heart. That is where good training would come in, a good choice of questions, no closed questions, no academic questions, just stick to practicalities. Why is the correct oil level different on each engine in the sight glass of the IDGs for example?

If one were to draw up a table of supervisor duties (as shown), how many boxes would receive a tick for training completed? The table may seem rather harsh on the poor supervisor, and some of it is tongue in cheek of course. Perhaps it needs a column titled "I'd ask someone else". Please feel free to fill in the blanks.

Supervisors Roles	Training Provided	Make It Up As One Goes Along	Not Interested/ Not My Job
Human Factors Refresher	···· <i>·</i>		
Regulations & Procedures Refresher	✓		
Electrical Wiring Interconnect System EWIS	✓		
Fuel Tank Safety (SFR 88, CS-25) & Critical			
Design Configuration Control Limitations	1		
	· · · · · · · · · · · · · · · · · · ·		
Type Refresher	IWish		
Mental Health		· · · · · · · · · · · · · · · · · · ·	······
Sickness & Absence			
BHDV			·····
Paperwork Procedures		✓	
			Depends how
Competence Assessment			short staffed
Manpower Allocation			
Authorised Release Certificates		0	V
Tooling/Unserviceable Tooling		Stort A/C & hope	Unserviceable
Approved Data		it's sent through	
IT Systems	√	MS Office	
		When it affects	
Mandatory Reporting		me	
Communications		If it affects me	
Internal Reporting			
Inspection Standards (e.g. MSG-3)		I always do it my	
Risk Assessments/Root Cause Analysis		way	·····
Maintenance Errors			
Maintaining The Just Culture			✓
Procurement of Items, Parts and Materials			
PPE, Uniform, Wet Weather Protection			✓
		Start A/C and	
Customer Requirements		hope for best	
Disagreements, Statt/Suppliers/Customers		If it affects me	
Health & Satety/Sate Working Practices		Depends on ETD	
Company Aims/Ethos/Culture			·····*
company Amarcinos/culture	•		

As stated previously, a wide list of cover and plenty of experience is an essential precursor to a senior role, but should leadership skills training not be required by regulation? Also, no matter what the amount of licence cover and experience, it does not necessarily make a person a good leader. It is said that to know your aircraft you need to know your way around the manuals. How many Mechs, Techs and even Supervisors have picked up navigation of the (now electronic) manual through the help of colleagues? Is employee induction training perceived as the beall-and-end-all for new staff? It would certainly include the company motto and aims, but would it cover everything in the table shown? Might the induction training assume the supervisor will fill in any shortfalls, and the existing supervisors assume the staff member already knows everything from the induction training? Also consider that the new hire might be taken on as a supervisor. A one-size-fits-all induction is probably insufficient.

Adequate training gives the supervisor the big picture but the table does suggest that supervisor (and manager) training is not what it could be. CHIRP reports suggest the same theme, and an untrained individual with influence could affect flight safety and destroy the company safety culture, management relations and customer relations.

Phil Young, Engineering Programme Manager

CAA FTL Review

We have reported many times this year that one glimmer of light on the horizon is that the CAA have commenced a post-BREXITimplementation review of the assumptions within the whole UK rostering and FTL/FDP regulatory set so that they can determine whether there are any areas that could be better defined, harmonised or re-evaluated now that we are no longer part of the EASA regulatory regime. We look forward to the outcome of this review as a potential reset and clarification of many parts of the FTL AMC and GM material and the CAA have provided us with the following details on the TORs, scope and progress of this review which we thought would be of interest to our readership.

FTL Review TORs – core tasks. The review will include the following areas:

- Effectiveness of existing regulations and associated Certification Specifications (CS), Acceptable Means of Compliance (AMC) and Guidance Material (GM) for Commercial Air Transport Operations;
- Identification of regulatory gaps, (such as, Remotely Piloted Aerial Systems (RPAS) Air Operator Certificate (AOC) operations, and Non-Commercial Operations with Complex Motor-powered Aircraft (Part NCC) and Specialised Operations (SPO);
- Review of external published research studies, fatigue surveys, parliamentary enquiries, and other National Aviation Authority fatigue management regulations;
- Establish a roadmap to enable ultra long range (ULR) operations (>16 hours flight time and 18 hours flight duty periods);
- Identification of areas of influence, including other regulations that are outside of the CAA's regulatory remit (*civil aviation working time regulation*);
- Effectiveness of CAA regulatory approval and oversight.

More specifically, the review will assess the impact of at least the following on the alertness of aircrew:

- Duties of more than 13 hours at the most favourable times of the day;
- Duties of more than 10 hours at less favourable times of the day;

- Duties of more than 11 hours for crew members in an unknown state of acclimatisation;
- Duties including a high level of sectors (more than 6);
- On-call duties such as standby or reserve followed by flight duties; and
- Disruptive schedules.

The CAA has engaged with the industry stakeholders in a focused way – a questionnaire has been sent to all ORO.FTL operators and CAP371 Air Taxi operators with the intent of determining:

- Are there areas in the regulations where compliance creates unintended consequences for managing fatigue?
- Are there areas in the regulations that create confusion in their application?

Once the stakeholder questionnaire responses have been collated, digested and recommendations have been formulated, the next step will be to consult with the wider aviation community to ensure that the views of those engaged in commercial aviation activities are taken into account. Ultimately the CAA wants to ensure that Fatigue Management regulations in the UK are fit for purpose, now and in the future.

Conflict Airspace Risk Assessments

UK Airspace Security Warnings

DfT is responsible for providing advice to UK registered aircraft operating in overseas airspace where there are risks linked to ongoing conflict. It is a host state responsibility to issue warnings of potential risks to civil aviation operations but, where this is not done, the UK will issue its own advice. This is done through issuing Notices to Aviation (NOTAMs). The UK follows a threetiered approach to NOTAMs as follows:

- Level 1 (Advisory) is the lowest level of advice and highlights concerns for airlines to consider in their own risk assessments.
- Level 2 (Recommendation) recommends airlines do not operate either below a certain altitude, or at all, over specific airspace.
- Level 3 (Legal Prohibition) the NOTAM is accompanied by a legal Direction under the Aviation Security Act to UK airlines, making it an offence to enter certain airspace.

DfT issued NOTAMs **only** apply to UK airlines and UK registered aircraft and HMG has **no ability** to require airlines registered in other countries which may be carrying UK nationals to avoid using particular airspace. NOTAMs are published by the CAA through NATS on DfT's behalf.

Aside from a Level 3 NOTAM which utilises legal powers, **it is ultimately down to individual airlines to decide if they will operate or not** based on their own risk assessments, however going against formal HMG advice may impact on their liability and insurance should an incident occur.

Industry will (and do) take operational decisions on pausing flights where they judge the risk has reached their threshold. Different airlines have different thresholds. DfT remains in regular contact with UK airlines operating in the wider region.

Industry Engagement

DfT is in regular contact with all UK air carriers on a regular basis. This includes:

- Ongoing bilateral engagement with individual carriers on route specific queries
- Bi-annual "all carriers" meetings on overflights risks (including a threat briefing at SECRET from UK intelligence partners)
- Ad-hoc "all carriers" meetings in response to developing events (a crisis response mechanism)

All of the major UK air carriers have security cleared staff within their security departments who are able to be briefed by appropriate HMG partners.

International Engagement

DfT represents the UK in a number of expert forums including the Safer Skies Consultative Committee (SSCC) and the Expert Group on Risk Identification for Conflict Zones (EGRICZ) which bring together states-level experts in this area to develop best practice and guidance in this area; EGRICZ also has a coordination function in a crisis to try and align state responses where possible.

We work closely on a bilateral basis with key like-minded partners including the 5Eyes as well as France, Germany and EASA amongst others.

Airspace Assessments

DfT assesses the level of threat to civil aviation in overseas airspace, in line with ICAO guidance (*Doc 10084, 3rdedition, published October 2023*). This is informed by information from the Joint Terrorism Analysis Centre (JTAC) and Defence Intelligence on state-based capabilities.

There is a rolling programme of assessments for those areas where DfT has existing airspace advice, ensuing advice does not remain in place when it is not required. For fast developing situations (e.g. Sudan, Israel/Hamas) DfT uses fast-time reporting from HMG and open-sources to make an initial assessment of the situation and issue relevant advice which is then refined as more information and considered assessments become available.

I Learnt About Human Factors From That

Getting your game face on – time to focus on the task in hand

It was Autumn 2014 and it was an afternoon shift. At the time, there were numerous 'Getting Your Game Face On' posters around the Tower; they'd been on display for a while but if you weren't into rugby they were pretty easy to walk past. I thought it would be an idea, therefore, to share an experience of mine that shows why 'Getting Your Game Face On' is essential for all of us prior to plugging in.

I had a problem with staffing that day due to sickness and no AAVA cover available; it meant that there would only be 2 controllers on duty after 2000hrs. The traffic was fairly straightforward and not horrifically busy. I did a stint on Radar and then was given a break at 1430hrs. During the break I constructed a break plan which, to my astonishment, worked perfectly, with none of the usual drama associated with break plans and less than optimal staffing. Now, those of you who do break plans will know that this usually means you've left somebody in position for 2½ or even 3 hours, so I was a bit suspicious of it.

OK, I don't have time to check any further because I've got to do a couple of breaks in the VCR. Up I go and plug in on Tower. Its straightforward and reasonably quiet. We're on O5 and there's one at the Golf 1 holding point and one on final to land. Even I can do that, so I take responsibility for the position and clear the arrival to land. Then an Ops vehicle calls me wanting to cross from Charlie to Yankee. I tell them to hold position and decide that I'll cross them after the landing traffic has passed the intersection.

Meanwhile, as I wait to put my cunning plan into operation, I'm mentally running through the break plan I've done, trying to find where it has obviously gone wrong. The arrival lands and, as it passes Golf 1, I line up the waiting aircraft, warning the crew that there will be a vehicle crossing further down the runway in front of them. *I must have made the mistake somewhere around tea break time. Probably got somebody working an extra hour.*

"Ops vehicle cross Charlie to Yankee report vacated". Then, "Arriving aircraft vacate right at Bravo and contact Ground on 121.7", something I've done for more than 30 years, but don't tell my trainees to do. *If I haven't made the mistake there, maybe I've done it later. Can't think exactly when, though.* Ops vehicle reports clear of the runway. I look up and think, no you're not, you haven't crossed the holding point at Yankee, yet. *Maybe the break plan's fine. Maybe I haven't made a mistake and it has just worked out.* Then I see the vehicle cross Yankee and acknowledge it. *I'd better check the break plan again when I'm finished here.* Right, the vehicle's off the runway and I clear the departure for take-off.

As I'm transmitting this I'm carrying out my usual visual scan of the runway. I start at the O5 threshold, progress down to the 23 end and then start ba... what the hell is that doing there? I've just finished my transmission when I see the arrival still on the runway, just turning towards Bravo but, before I can say anything, the crew of the departure aircraft point that fact out to me. Sod it!

Now I'll be honest. My first thought, combined with a sneaky wee look around, was 'Did anybody notice that? Could I get away with it?' Then of course I realise the ridiculousness of that thought. I acknowledge the pilot's report, cancel their take off clearance, tell them to hold position, and apologise for my stupidity. I watch the arrival turn onto Bravo and then I clear the departure for take-off.

What an eejit, I'm thinking (well not exactly, but I don't want to damage anybody's sensibilities this early in the New Year). Still, it could have been worse. I get relieved and go back downstairs to send my colleague up to recommence the breaks. Did I say it could have been worse? Well, it got worse. Somebody looked at the Veristore recording of the SMR and spotted that when I'd cleared the departure for take-off the second time, the arrival hadn't left the clear and graded area.

So that's pretty impressive. In the space of a couple of minutes I'd had two runway safety events. I hadn't exhibited that level of genius since winning the inaugural Golden Shovel award on my Radar course for having 2 technical losses of separation BEFORE clocks on. My reaction was one of anger at myself for being so stupid, coupled with embarrassment that it had happened because it was other ATCOs that did that sort of thing, not me.

The root cause was me being too busy worrying about other things instead of paying full attention to what was going on in front of me. Would it have solved things if I'd kept the arrival on my frequency and its strip in the runway bay? Possibly, but even after completing an HF interview, I wasn't as convinced as others were. I was distracted by my brilliance with the break plan and my conviction that there must be something wrong with it. It distracted me to the extent that I forgot completely about the arrival, and it persuaded me that the traffic preventing the departure was the Ops vehicle. I'm not sure I would have properly registered another flight strip in the runway bay. I failed to concentrate properly on what was going on around me and let myself drift off whilst I mentally checked a plan that I could do nothing to change whilst I was plugged in. This was an excellent demonstration of not getting your game face on. My game face was still in the dressing room trying to spot nonexistent errors in a break plan. Don't let that sort of stupidity bite you. When you're plugging in, your entire concentration needs to be on what you're doing. When you're working traffic, your entire concentration needs to be there, not on some bizarre conversation you're having with a colleague, not on a book, certainly NOT on a smartphone and definitely not on something you were doing before you plugged in.

It's incumbent on all of us to avoid distraction from our main task. If you feel you are being distracted by whatever method, be it conversation, noise, whatever, just tell the individual(s) to shut up. Likewise, if you see something that could be a distraction then deal with it, and if you're responsible then take it on the chin and shut up or move away. Watch Managers and Deputies have to be aware that they need to leave non-operational things behind when they plug in. I didn't and got bitten and bitten badly. Don't let it happen to you.



We need your ILAHFFT stories!

The value of ILAHFFT is that it provides insights from those who have been there, done it, and have lessons for all of us to learn. If you have any anecdotes or amusing 'there I was...' stories then please do share them with us so that we can pass on the messages and inform others (ideally in a light-hearted and engaging manner). Send any interesting tales to <u>mail@chirp.co.uk</u> and put ILAHFFT in the subject header – we promise full confidentiality to protect the innocent (and not so innocent!).

Reports

Report Nol - FC5353 - Briefing time

Initial Report

The time allowed to brief for the flight at [Airport] on the [type] fleet falls far short of the time required. Either crew are prebriefing or, as is now customary, turning up 10/15mins early in order to complete the required brief. 10mins is wholly inadequate to brief/join cabin crew briefing and pass through security. This has a direct impact on FTL but, more importantly, means that crew are rushing the brief which is resulting in mistakes and omissions.

CHIRP Comment

Complaints to CHIRP about insufficient time being allowed to report and brief have been increasing in the last few months and are just one of many indicators of the burdens on crews to operate under increasing time pressures. In this instance though, although we can't claim sole responsibility for the change, it's pleasing to note that the company have listened to their crews and have increased the time available at this airport to 1hr30mins as of September and so the reporter's concerns are now addressed.

This reinforces the value of people reporting their concerns and thereby influencing associated data collection, SMS review, and changes to company behaviours. We commend the company for their positive response to the feedback.

Report No2 - ATC850 – Inappropriate NOTAM

Initial Report

Earlier this summer, [Airport] issued the NOTAM that I have attached a copy of. NOTAMs are a contentious issue for nearly all involved in aviation and in my view this NOTAM is an example of how the system should not be used. There is far too much text – 222 words in the main body of the NOTAM. Essentially the NOTAM is a reminder to crew to comply with speed restrictions and MROT, but includes a lengthy explanation of why. Whilst I appreciate what the airport is trying to do here, a NOTAM is not the place to explain these reasons and the airport should be finding alternative means to communicate with operators. The NOTAM should be short and to the point as to what is required. The risk here is the NOTAM becomes meaningless as there is too much to be read. In fact I had to read it several times to interpret what it is actually asking for.

Whilst I understand the issues [Airport] has in trying to sequence arrivals, I don't think this NOTAM will do anything to help the situation. It may in fact make it worse in the short term by increasing confusion for the reasons I have outlined above. I'm based at [Airport] and operate in and out several times a week; whilst I don't pretend to always get it right, I have a pretty good idea of what ATC expect from us. I can see a crew visiting [Airport] for the first time would read the NOTAM, then their plates, and probably be at a complete loss as to what ATC were expecting from them.

NOTAM Text PROCEDURES FOR INBOUND AIRCRAFT:

PILOTS SHOULD TYPICALLY EXPECT THE FOLLOWING SPEED RESTRICTIONS TO BE ENFORCED: 220KT FROM THE HOLDING FACILITY DURING THE INTERMEDIATE APPROACH PHASE THEREAFTER, AND UNTIL ESTABLISHED ON FINAL APPROACH, THE HIGHEST POSSIBLE SPEED WITHIN THE BAND 160-180KT WHEN ESTABLISHED ON THE ILS AND THEREAFTER UNTIL 4DME, 165KT WITH A TOLERANCE OF +/-5KT. THESE SPEEDS ARE APPLIED FOR ATC SEPARATION AND RUNWAY CAPACITY PURPOSES AND ARE MANDATORY. IN THE EVENT OF A NEW (NON-SPEED RELATED) ATC CLEARANCE BEING ISSUED (EG AN INSTRUCTION TO DESCEND ON ILS), PILOTS ARE NOT ABSOLVED FROM A REQUIREMENT TO MAINTAIN A PREVIOUSLY ALLOCATED SPEED. ALL SPEED RESTRICTIONS ARE TO BE FLOWN AS ACCURATELY AS POSSIBLE. AIRCRAFT UNABLE TO CONFORM TO THESE SPEEDS SHOULD INFORM ATC AND STATE WHAT SPEEDS WILL BE USED. IN THE INTERESTS OF ACCURATE SPACING, PILOTS ARE REQUESTED TO COMPLY WITH SPEED ADJUSTMENTS AS PROMPTLY AS FEASIBLE WITHIN THEIR OWN OPERATIONAL CONSTRAINTS, ADVISING ATC IF CIRCUMSTANCES NECESSITATE A CHANGE OF SPEED FOR AIRCRAFT PERFORMANCE REASONS. THE SPACING PROVIDED BETWEEN AIRCRAFT WILL BE DESIGNED TO ACHIEVE THE MAXIMUM RUNWAY UTILISATION WITHIN THE PARAMETERS OF SAFE SEPARATION MINIMA (INCLUDING VORTEX EFFECT) AND RUNWAY OCCUPANCY. IT IS IMPORTANT TO THE VALIDITY OF THE SEPARATION PROVIDED THAT RUNWAY OCCUPANCY TIME IS KEPT TO A MINIMUM CONSISTENT WITH THE PREVAILING CONDITIONS.

Airport Comment

The issue we had was the urgency to get this out to the community; the NOTAM bridged the gap between implementation and the AIRAC Cycle. Unfortunately the length of the NOTAM was unavoidable due to it having to be exactly as the proposed AIP entry. This NOTAM has since been removed as this information is now published in the AIP.

CHIRP Comment

Notwithstanding the Airport's comments about the need for urgent publication of the procedure, the reporter has a point about the NOTAM's length and the safety implications of pilots becoming word-blind when reading long and complex NOTAMs. That being said, and whilst sympathising with the reporter about always striving for brevity in NOTAMs, there's a balance to be made in ensuring enough information is passed on. But including things like "ALL SPEED RESTRICTIONS ARE TO BE FLOWN AS ACCURATELY AS POSSIBLE" and "THE SPACING PROVIDED BETWEEN AIRCRAFT WILL BE DESIGNED TO ACHIEVE THE MAXIMUM RUNWAY UTILISATION WITHIN THE PARAMETERS OF SAFE SEPARATION MINIMA (INCLUDING VORTEX EFFECT) AND RUNWAY OCCUPANCY" seems like the sort of extraneous content that is probably unnecessary.

With regard to the reporter's criticism of confusion about the NOTAM and the exisiting operating procedures, the point of the NOTAM was to highlight a change from the standing procedures and so it would have primacy over those. We think that that would be understood by those reading the NOTAM but the bottom-line remains that NOTAMs should be as brief as possible and probably only need to replicate the absolutely essential parts of any AIP entries when outlining new procedures.

Report No3 - ENG747 – Undercarriage handle inspections

Initial Report

I believe that in [month], base maintenance discovered their [Airbus Fleet] Landing Gear safety locking device for the cockpit lever was defective. The hook that protrudes from the item into the Landing Gear lever was missing. No one knew how long it had been missing, therefore not knowing how many Landing Gear levers it had been used on or if it was lost in an A/C or elsewhere. A work order was raised to inspect the Landing Gear lever of all the company [Two Airbus Types] on the line at [Base]. The initial thought was to remove the Landing Gear lever unit and shake it for sounds of the hook (FOD) in the unit. It was decided this was not suitable for certification reasons.

The next proposal was to examine the lever internally with a camera for signs of the hook. This entailed first inspecting with the lever in the down selection position then, if nothing seen, to proceed and move the handle to the gear up position after first putting the A/C in the "Air" to be able to move the lever. This involved fully pinning the landing gear, then pulling over 50 CBs [on one type] to enable the A/C to simulate being in a weight-off situation before the baulk is removed to enable the lever to be moved up. Then a second camera inspection is carried out.

We were assuming the hook was coated RED and would be easy to spot. These fleet-wide inspections were expected to be carried out during normal turnaround times on the line, with no extra manpower or time, and with all the normal routine and non-routine maintenance continuing. Also, with all other agencies carrying out their tasks, cleaners, caterers, fuelling etc. Towards the end of the task, we had aircrew in the flight deck and all the usual "noise" of A/C departure preparations. (This quite normal).

I understand the broken hook has not been found. The first inspection [on a second type] took 6 hours, again on a normal turnaround. As the engineers carrying out these inspections, we asked for the aircraft to be moved to Base for the inspections. We asked for dedicated teams of engineers separate to the routine work to be used. We suggested overtime to be called to facilitate this. We asked for longer turnarounds. None of these questions were answered or acted on.

I personally voiced my objection to all of the above and especially to how they were allowed to keep flying the A/C with this potential FOD hazard. All fell on deaf ears. There is a lot of speculation as to how we ended up carrying out this maintenance on the line and that the fleets were allowed to continue flying. I believe the maintenance should have been much better planned and organised, and possibly not carried out on the line. If an A/C had ended up on its nose, we as engineers would have carried the FULL weight of blame immediately for sure, my main concern is how the A/C were allowed to continue to operate. What were the processes that justified this decision?

CHIRP Comment

The operator was contacted with the reporter's consent. After considerable time, during which a number of attempts to receive feedback were made, no response was received. Did the last user of the tool notice it was missing a part? If so, presumably it should have had an unserviceable tag attached on return to tool stores. The staff member in tool stores should have inspected the tool before placing it in its store location. One or both of these protections obviously failed. Should the maintenance record not have the tool serial number recorded in the same way a torque wrench is recorded for follow up if it does not perform as per the calibrated standard?

One can understand that once a decision was made to check both fleets of aircraft then it should be carried out as soon as possible. However, the risks should have been assessed and would likely have required more manpower and/or staff seconded from Base to assist or carry out the work, leaving the Line staff to continue their normal duties. The dangers of time pressure and also distraction by the procedures carried out by various others prior to departure are well understood. Planning was obviously less than helpful to say the least. From a Human Factors perspective, we are looking at examples of Complacency, Communication, Pressure, Resources, and Distraction.

Report No4 - CC6640(A)/ CC6660(A)/ CC6764(A)/ CC6769(A) – Pushback with PAX standing

Initial Report

CC6640 Report text: The flight was full in all cabins. Boarding was from door 2 Left. Lots of hand baggage. The last pax boarded and the ground staff requested for the main pax door to be closed. I closed the pax door and immediately called the Flight Crew to advise of the situation on the cabin. Advising them that the last pax had just boarded but the gueue for the pax making their way to their seats was congested and backed all the way back to door 2. So pax queuing from door 2 Left and Right virtually down to door 4 Left and Right. I also advised them that all the overhead lockers were still open, loaded with heavy bags. I asked the flight crew to hold off pushing back until we had the situation under control. Despite this, a couple of mins later we started to push back. This delayed us being able to arm our doors as some crew on the left hand side could not get to their door due to the congestion in the cabin and them being in the cabin trying to manage the situation of hand-baggage and the queue of pax still making their way to their seats.

After the off, I spoke with the captain and asked why after communicating the situation in the cabin did we still push back? I was told to look at OM-B [reference] where it states that "This procedure should not prevent the aircraft from pushing back" So, in my opinion, to pushback with a situation like this in the cabin with pax literally queuing all the way to door 4 making their way to their seats and all of the overhead lockers open, loaded with heavy bags, seems unsafe. It says in the manual that we can push back with pax stood up, it seems that no consideration is given to the situation in the cabin. For example: the amount of pax stood up literally walking to their seats, having literally just boarded the aircraft; the level of congestion in the cabin; and all the overhead lockers still open full of large heavy bags.

CC6660 Report text: As soon as boarding was complete and door closed the beacon light came on and we started pushing back as soon as Jetty was removed. No consultation from flight crew regarding this. We had many passengers still in the aisles locating their seats and trying to find overhead bin space. Many pax voiced their concern at this stating they felt uneasy and unsafe. I have to agree as I was made to try to locate spaces for many bags having to take them myself and also situate passengers quickly all whilst pushing back and trying to remain stable. This coupled with arming doors is not a safe procedure and could really make someone blow a slide if they were prone to distraction/heavy workload. Just because we are able to do so in our manuals doesn't make it right to. We can pushback but can't taxi under own power, I feel this should be changed to cannot pushback whilst pax are still moving about. I understand time constraints etc, but for the sake of a few minutes delay surely operating in a safe manner/preventing mistakes should be the priority.

CC6764 Report text: Whilst operating a flight as a cabin crew member, there were still a lot of passengers who had not taken their seats or put their bags in the overhead lockers, nor were the overheads closed. We then noticed we started to pushback and continued to do so until our senior cabin crew member phones the flight crew that we were not yet prepared. This could have had a seriously dangerous outcome since many passengers were still in the aisles with luggage around on the floor. We did not have enough time as cabin crew to clear what needed to be clear and stow and secure equipment. The most dangerous part was that we had an aircraft change and had a 10 crew compliment which is the minimum requirement. The crew had to work extra hard and took longer to make sure the pax and the plane was ready for taxi and take off. Ground staff, flight crew and the company should have given us more time to prepare as an incident could have occurred.

CC6769 Report text: On a recent flight, we were slightly delayed so the ground staff were very keen to get everyone onboard. The door was closed fairly quickly after the last passenger boarded and we started pushing back soon after that. The pushback happened when there were a good 50-60 passengers, complete

with baggage, still standing in the aisles. We then had a frantic time trying to get everyone seated and have their baggage stowed away – most customers having more than their allowance, and bags having to be spread around the aircraft. This made us look very unprofessional and wasn't a good start to the flight. Another concern was that we were moving and the doors were unarmed at this point. I find this is happening more and more in an effort to improve on time performance. I feel there was a breakdown in communication between the SCCM and flight crew and, on relaying my concerns, I was told ATC were pressuring us to go.

Company Comment for CC6640

We know that boarding is the busiest time of the crew members' duty. During boarding, it is important for crew members who do not have door ground responsibility to manage the cabin, overhead lockers and stowage of passengers' smaller items under the seat in front. The SCCM may consider crew from other cabins to assist where required and reduce the offering of the pre-departure service until after take-off. We would recommend completing the required report. The reporter is correct that our procedure cited in the manual permits the aircraft to push back, yet taxi will not commence unless the cabin is in an acceptable state, which relies on the SCCM maintaining communication with the flight crew, which it appears in this situation did occur. If it is felt that the conditions in the cabin are not being taken into consideration we encourage reporting on this also.

CAA Comment

Pushback is not specifically covered under regulatory requirements as other phases of flight, including taxi, are.

CAT.OP.MPA.225 Seats, safety belts and restraint systems

(b) Passengers

(1) Before take-off and landing, and during taxiing, and whenever deemed necessary in the interest of safety, the commander shall be satisfied that each passenger on board occupies a seat or berth with his/her safety belt or restraint system properly secured.

CAT.OP.MPA.230 Securing of passenger compartment and galley(s)

(a) The operator shall establish procedures to ensure that before taxiing, take-off and landing all exits and escape paths are unobstructed.

(b) The commander shall ensure that before take-off and landing, and whenever deemed necessary in the interest of safety, all equipment and baggage are properly secured.

AMC1 CAT.OP.MPA.160 Stowage of baggage and cargo

(g) checks should be made before take-off, before landing and whenever the 'fasten seat belts' signs are illuminated or it is otherwise so ordered to ensure that baggage is stowed where it cannot impede evacuation from the aircraft or cause injury by falling (or other movement), as may be appropriate to the phase of flight.

CAT.GEN.MPA.105 Responsibilities of the commander

(a) The commander, in addition to complying with CAT.GEN.MPA. 100, shall:

(1) be responsible for the safety of all crew members, passengers and cargo on board, as soon as the commander arrives on board the aircraft, until the commander leaves the aircraft at the end of the flight.

Under CAT.OP.MPA.225 and CAT.OP.MPA.230, the provision of *'whenever deemed necessary in the interest of safety'* is intended to cover eventualities such as turbulence, decompression and other emergencies or unforeseen circumstances. Amending the regulations above, or CAT.OP.MPA. 205, is not a quick process (as inferred by CHIRP), and is not currently on the Flight Operations Rulemaking programme. Amending implementing rules is currently a 2-3 years-long process.

If an operator permits passengers to be standing during pushback, what would be of interest is what risk assessment has been performed, and how identified risks are managed/mitigated.

CHIRP Comment

There are clear risks in conducting pushback whilst passengers are not seated, and even greater when they may still be stowing bags; it wouldn't take much for a sudden stop during pushback to cause chaos and potentially passenger injuries. Also, if there was not enough room for bags in the overhead lockers then some might need to go into the hold so, if the aircraft doors are closed and pushback has begun, this would obviously not be possible. The fact that the cabin crew could not make their way to the doors in some of these situations during pushback also has clear safety implications if an emergency were to occur. We do not think that it is sensible to pushback whilst passengers are not seated, no matter what the operational pressures might be to do so.

More philosophically, passengers will be unlikely to be able to differentiate between pushback and taxiing and so, if they perceive that the aircraft is moving for pushback and they are not required to be seated, they will not understand why there is a restriction when the aircraft is taxiing (either before take-off or

after landing); in their minds there is, understandably, no difference.

In regulatory terms, <u>The Air Navigation Order 2016 PART 5</u>, <u>CHAPTER 2, SECTION 2, Article 71</u> states that:

Passengers to be seated and properly secured

71. The pilot in command of an aircraft other than a balloon must ensure that:

(a) prior to and during taxiing, take-off and landing; and

(b) whenever deemed necessary in the interest of safety,

each passenger on board occupies a seat or berth and has their safety belt or restraint device properly secured.

Whilst the ANO is clear about passengers being seated during taxi and 'prior to taxiing...', there's no specific reference to pushback; so, provided that passengers are seated prior to taxiing (i.e. moving under the aircraft's own power and after pushback) then the regulation could be said to have been complied with.

Similarly, as noted by the CAA, <u>CAT.OP.MPA.230 Securing of</u> <u>passenger compartment and galley(s)</u> does not include any reference to pushback and simply requires operators to have procedures for securing the cabin for only taxi, take-off and landing, not during pushback.

For its part, <u>AMC1 CAT.OP.MPA.205 Push back and towing –</u> <u>aeroplanes</u> seems to refer to pushback and towing as '*pre- or post-taxi positioning...*' thereby implying pushback is not a part of taxiing and seeming to reinforce the inapplicability of Article 71 to have passengers seated.

It appears then that there is a loophole in the regulations because pushback is not necessarily within the definition of 'taxiing'. It seems common-sense to us that passengers should be seated before pushback and that this loophole could be closed by the ANO including something like: "Prior to and during **pushback**, taxiing, take-off and landing...' but we recognise that ANO changes are not a quick solution.

In the interim, the CAA might consider amending CAT.OP.MPA. 205, CAT.OP.MPA.225 and CAT.OP.MPA.230 to specifically include passengers being seated for pushback. With some airports moving towards aircraft being towed to the holding point in future to save fuel/ noise/ emissions etc, this issue will only become more pertinent.

For those companies that allow pushback with passengers standing and potentially stowing bags, we assume that they have processes in place to risk-assess such practices; this risk assessment should probably involve their legal teams in consideration of any potential injuries that might be caused to passengers from falls or from baggage drops from overhead bins should an abrupt stop, abnormality or unsteady progress occur during the pushback.

Report No5 - FC5354 – Company sickness policy

Initial Report

Following [a few] short periods of sickness, I was placed in the first stage of managed operational performance. All sickness periods were legitimate, short term and I was acting in accordance with the Air Navigation Order and company guidance. As a result of this, I was called in for a meeting to discuss my sickness. This was not a simple welfare check, it appeared to be calling into question whether I should have been sick or not. I asked for all periods to be discounted, which was refused. This policy has now left me feeling under pressure to go to work when I might not feel fit to fly. I strongly believe that this sickness policy is inappropriate for pilots and that it poses a safety risk.

Company Comment

The [Company Sickness] Policy applies to all colleagues across the business. The primary purpose of the policy is to provide support and guidance to colleagues in the event that they need time off work due to illness or injury. Support can include a return-to-work conversation when the pilot reports fit. The Attendance Team will check that the pilot is fully fit to return to work, ask if there is ongoing support they may require as a result of their absence, and also ask whether the pilot wishes to disclose the reason for the absence as it may be something the team can discount.

When deciding if an absence should be discounted, the team will consider the pilot's overall absence record along with the reason for the absence and apply a discounting. Therefore, the number of pilots who progress into an Improvement Plan stage is small.

Support during a short-term absence will also include a duty of care calls to check on the pilots wellbeing, general prognosis for a return to work (if known), and whether any additional intervention is required.

In addition to providing support for colleagues, the policy also aims to encourage regular attendance at work, minimise absence levels across the company and provide a framework for colleagues to be treated in a fair and consistent manner. If a pilot has a concern with how they have been treated, this can be raised with the Fleet Attendance Manager. The policy is not a disciplinary policy, although if a colleague reaches the final stage it could result in termination of employment. However, to put that in context, no pilot has ever been terminated, to date, as a result of this part of the policy. The letters and emails the team send do not make any reference to it being a disciplinary process.

CHIRP Comment

Absence management policy has been something of a longrunning issue for CHIRP over the years, and it's often a matter of perception of policies and subsequent management actions rather than the reality of the application of the procedures themselves. People understandably become anxious about management engagement but, once they get inserted in the sickness management system, they often find that the process is supportive.

That being said, not all companies are equal in their treatment of absences and there is a case for a generic best-practice solution for flying crew that would achieve operators' requirements to discourage inappropriate absences, meet their obligations regarding the health and wellbeing of their staff, and be seen as fair by flight and cabin crew. The search for this solution should be industry-led with inputs from HR specialists, legal advisors, trade unions and aviation medical specialists.

CHIRP understands that the CAA/Industry Flight Operations Liaison Group (FOLG) 'Well-being' and 'Fatigue' forums are discussing the potential for such an outcome and we welcome this initiative. What is required is a common and pragmatic approach to sickness/absence that recognises the unique situation that aviators are in, ensures that long-term or repetitive sufferers are able to receive appropriate attention and medical care as necessary, and removes the fear or stigma that might be attached to reporting sick on multiple occasions: all whilst giving companies the necessary tools to ensure that those who might take advantage of 'pulling a sickie' are not able to do so.

Report No6 - ENG753 – Poor line-maintenance practices

Initial Report

We have been the maintenance provider for this airline for many years. There have always been problems with the airline's crew not reporting faults, but lately it seems to have got worse. It is now commonplace for there to be no defect entries in the log but a number of status messages on the EICAS. In addition, there has been an increase of their own maintenance engineers extending deferred defects (Deferred Maintenance Item – DMI) by clearing a fault in the Tech log on the day the MEL restriction expires or a few days before, then immediately raising another DMI with the same fault and the same MEL reference for another period. e.g. Cat C of 10 days. I have seen evidence of this being performed up to three times, effectively extending a Cat C MEL restriction to 30 days. This clearly violates international regulations.

In addition, very recently a VVIP flight transited through [Station] and the aircraft taxied on to stand with flames around the left main landing-gear bogie. There are video images available. [Station] emergency services attended, the 'fire' selfextinguished with no intervention by fire services. On inspection, 'sooting' was clearly visible on one of the electric brake actuators of the #5 brake unit. As this was a VVIP flight the aircraft carried its own certifying engineers. We attended to assist only. The certifying engineers from [operator] took a guick look at the brake and, as far as I know, took no further action. I found this a bit odd. I would have, at the very least, carried out a spin-check to check for brake binding and a function test to ensure the fire was not caused by an electrical fault. I did not have access to the tech log that day so I have no idea what, if any, trouble shooting was carried out from the flight deck or if indeed the incident was reported.

I could go on, there are regular issues with non-compliance of regulatory requirements. A recent example is of a cargo hold lining that is clearly unserviceable. It has been found detached from the rear of the forward hold on several occasions. This week we took a stand and made the forward hold inop I.A.W. the MEL. This caused problems as no cargo or bags may be carried in that hold. We were begged by the station manager to allow use of the hold because they would have to off-load 50 bags, with the promise that it would be fixed at main base. Considering that we have seen this problem multiple times on the same aircraft for months and it hadn't been fixed in that time, we had no confidence that it would be dealt with effectively on this occasion either.

It is getting to the point where I and my colleagues no longer feel confident certifying these aircraft, the turnrounds are stressful and invariably the aircraft arrives late and pressure for a quick turn round is obvious. SAFA inspections do not seem to be working.

CHIRP Comment

The reporter's employer was contacted with the reporter's permission. The initial response was that the Quality/ Safety/ Compliance Department were aware of the issues and were reluctant to cancel the contract because it would effectively reduce the workload at the station and loss of contract could in turn be detrimental to staffing requirements. No follow-up communication was received due to Quality/ Safety/ Compliance work pressures.

Flying with EICAS messages that are no go, or cannot be deferred by the MEL, is obviously unacceptable but the manufacturers of a modern aircraft would 'see' these and therefore the ADDs would not align with the electronic history of the aircraft. The extension of ADDs can also be checked with the electronic history. Perhaps these were Rectification Interval Extension defects (RIE). Although the re-raising of a defect three times would be very strange unless it's non-airworthiness related, e.g. CAT D. The fire should have been addressed in accordance with the Aircraft Maintenance Manual and its cause established.

A great many of us will have experienced these difficulties in both Line and Base maintenance. The Base environment has a certain amount of time and speed alleviation in this situation. The MRO can take the required time for rectification whilst sending in a raft of MORs as applicable. The Line is a different thing altogether; fewer staff, with possibly only a sole engineer. The pressure from the customer is face-to-face, and the MRO's commercial department may be thousands of miles away. Discussions can be difficult, possibly stressful with differing cultural practices and expectations.

AMC1 145.A.50(e) Certification of maintenance Para 2 Note

states: "Whether or not the person or organisation responsible for the aircraft continuing airworthiness does have the authority to defer maintenance, is an issue between that person or organisation and the CAA. In case of doubt concerning such a decision, the approved maintenance organisation should inform the CAA of such doubt, before issuing the certificate of release to service. This will allow the CAA to investigate the matter".

These situations should hopefully get picked up during Safety Assessment of Foreign Aircraft Audits (SAFA) in normal circumstances, and good reporting from the suffering engineer/s may lead to an increase in surveillance by SAFA audit. It is not that unusual to find that certain operators, or just certain types in their fleet, become excluded from our airspace.

Report No7 - FC5347 – Roster patterns

Initial Report

Our company produces a great number of short-haul trips that necessitate a large shift in sleep patterns in a very short period of time, making it difficult to achieve sufficient rest. The trips inevitably involve reporting for an afternoon/evening duty on Day 1, followed by a clear Day 2, but with an extremely early report on Day 3. As an example (not from my personal roster), Day 1 could see a report time of 11:35am in the UK, and finishing after three sectors in a European night-stop destination at 10pm UK time, realistically not getting to bed at the hotel until around midnight. On Day 3, pick-up from the hotel is at 4.30am UK time (using the time to which one's body clock is acclimatised), so realistically the alarm is going to go off at 3.45am. This day usually consists of three sectors again, as on Day 1. In order to achieve a proper night's rest before this wake up on Day 3, I would usually try to go to bed at around 8pm on Day 2. However, given that my body clock has been set up to operate "lates", I find it incredibly difficult to switch to extreme "earlies" within the space of one day, and find I'm unable to get to sleep.

While I am aware of my responsibility to report unrested if I haven't achieved sufficient rest, there isn't a hard line between rested/unrested, and I've had to make a difficult judgement call on a number of occasions. I know that my performance has been negatively affected due to lack of sleep. I believe that while these trips are strictly legal as the minimum rest period is achieved, rosters should try to avoid transitions between early and late duties for this very reason. At our airline, trips constructed in this way are very common. I have five during this and next month. Additionally, our rostering system makes it very difficult to avoid these trips because they are very difficult to swap off (not least because they are so unpopular).

CAA Comment

The CAA's role in monitoring rosters is to ensure that roster patterns are legal and that any fatigue issues raised by the rostering practices are appropriately mitigated. Any systemic issues would be addressed with the operator concerned.

CHIRP Comment

The roster pattern described is similar to circumstances we've seen before at CHIRP wherein an 18-30hr period between duties is troublesome because, although it's 'legal' and would appear on first sight to give plenty of time for rest, it's renown for being problematic due to the difficulty of fitting in 2 sleeps during the period. In the example given, if arriving at the destination and getting to bed at around midnight then that would imply a wakeup of around 8-10am or so on Day 2 depending on how tired the subject was. So it's not surprising that their body then finds it difficult to get to sleep again about 10-12hrs later as they prepare for Day 3's wake-up. Having such duties rostered is sometimes unavoidable and is not ideal, but they should only be rostered occasionally rather than frequently rostering people for such duties. The rostering algorithms for dealing with fatiguing rosters differ from company to company but there should be a recognition that repeated rostering of such duties, although no doubt 'legal', can be very debilitating. It may be that the other crew member in the cockpit might be on a different rostering cycle and can compensate for any lack of alertness on a one-off basis, but consecutive rosters with 18-30hr duty gaps will soon lead to chronic fatigue in those rostered in such a way.

We asked the company to comment on their policy for such 18-30hr duties on a one-off basis, and whether they had any processes in place to avoid repeated application to individuals' rosters so that cumulative effects could be avoided. Unfortunately, we got no response, but the CAA have agreed to look into the concern as part of their oversight activities.

The CAA is also currently conducting a study into FTL/FDP assumptions in an effort to make them more coherent for UK purposes now that we are free from EASA oversight. One of the things they could usefully review within that is the frequency of

people being rostered with 18-30hr periods so that more comprehensive guidance could be given to operators on how it is deployed, and how frequently.

Report No8 - CC6506(A) – No Flight Crew for disembarkation

Initial Report

Landed after a 12-hour flight. During disembarking, the Business Class passengers disembarked the aircraft then, to our surprise, followed by all 3 Flight Crew with one saying 'I have a flight to catch' so all 3 of them left with all the Economy Class passengers still on board. No word to the crew at the rear of the aircraft. If there was an issue or we had to do a rapid disembarkation we would have not been able to facilitate this because they were not there.

Company Comment

We have received cabin safety reports about this topic and, along with this CHIRP report, we have updated the procedure in the operations manual. Working with the team in Flight Operations, the revised procedure was communicated in April [2024] which states that when there are passengers onboard one flight crew member must be on the aircraft. There is an exemption during a transit stop for a very small (1-2) number of destinations on the route network, these are supported with a specific process in the operations manual.

Our company procedures have been updated by Flight Operations as below. [Changes highlighted in italic]

While passengers are onboard, one flight crew member must be on the aircraft, unless exempt under [OM B reference regarding transit stops]

One flight crew member should normally be on the flight deck. Cabin crew changes should not be made until the passengers due to leave the aircraft have disembarked. When cabin crew are scheduled to stay on the aircraft:

- A cabin crew member must stay by each open door at all times;
- SCCMs must obtain permission from the Commander before allowing cabin crew to leave the aircraft;
- When flight crew are not present, Cabin crew must ensure that unauthorised people cannot enter the flight deck.

CAA Comment

<u>AMC2 ORO.GEN.110(e)</u> Operator responsibilities permits passengers to be on board the aircraft in the absence of Flight

Crew provided that suitable procedures are in place to alert aerodrome services in the event of an emergency. It is for the operator to ensure that appropriate procedures are in place, they are being applied correctly, and that they have been robustly communicated to all relevant parties.

CHIRP Comment

We commend the company concerned for their rapid response to our observations and the subsequent changes made to their procedures to reflect the reporter's comments; this reinforces the value of reporting concerns.

However, other companies seem to be more relaxed about no flight crew being present when passengers are on the aircraft and AMC2 ORO.GEN.110(e) Operator responsibilities (reproduced below) permits this to occur as long as someone can contact the emergency services if something happens. We do not think that this is a particularly robust policy. If an emergency happens, then the cabin crew will be absorbed in getting the passengers off in a hurry and, for their part, ground handling personnel may or may not be quick enough to call emergency services depending on where the emergency starts: they may not even be aware of an emergency for a considerable period (for example an internal cabin fire at the back of the aircraft from a lithium battery runaway might not be obvious to ground handlers for a long time).

In regulatory terms, <u>CAT.GEN.MPA.105 Responsibilities of the</u> <u>commander</u> simply states at Para (a)(1) that: "*The commander... shall be responsible for the safety of all crew members, passengers and cargo on board, as soon as the commander arrives on board the aircraft, until the commander leaves the aircraft at the end of the flight;*" but it is silent as to who this responsibility falls to if the commander leaves the aircraft at the end of the flight before the passengers. At the very least, we consider that CAT.GEN.MPA105 should require commanders to positively ensure that someone else takes on their responsibilities if they leave the aircraft before the passengers and other crew.

We also think that more consideration ought to be given to the appropriateness of AMC2 ORO.GEN.110(e) given that if an aircraft emergency did occur without flight crew on the aircraft, what is the reality of the cabin crew being able to coordinate aerodrome services in a timely manner whilst potentially simultaneously trying to evacuate passengers from the aircraft?

AMC2 ORO.GEN.110(e) Operator responsibilities

GROUND OPERATIONS WITH PASSENGERS ON BOARD IN THE ABSENCE OF FLIGHT CREW

For ground operations, whenever passengers are embarking, on board or disembarking in the absence of flight crew members, the operator should: (a) establish procedures to alert the aerodrome services in the event of ground emergency or urgent need; and

(b) ensure that at least one person on board the aircraft is qualified to apply these procedures and ensure proper coordination between the aircraft and the aerodrome services.

Report No9 - FC5352 – Flight Crew additional voluntary trips

Initial Report

My employer, like many others, overreacted during the pandemic and went from making pilots redundant to having a significant shortage. As a 'short term' measure last year, pilots were asked to volunteer to work overtime during their leave – leave credit would be 'sold' back to them, making the extra work mildly lucrative. This is popular with many pilots who especially suffered financially during the pandemic and who welcome any extra funds.

This 'short term' measure has now lasted over 12 months. Leave is sold and not returned – no days in lieu are offered, and so potentially crew can work continually without a proper break, with only 900 hours/12 months to protect them. With lots of USA 2 crew/ 3-day/ night flights, this may not be triggered, but the roster would be exhausting. I have flown with many of these pilots and they are tired. Worn out. They need a break. They need protecting against their own urge to repay debts quickly. I am concerned that their mental and physical health will suffer – which can only be bad news for a continuing safe operation.

CHIRP Comment

The practice is voluntary and so it could be argued that those who wish to partake of the offer to fly extra duties have the right to do so provided that they consider carefully what they are signing up for. The occasional extra trip is likely not of considerable consequence, but repeated additional duties can soon become detrimental in fatigue terms depending on their composition, required task levels, and interaction with the individual's main roster.

Whilst recognising that it is for individuals to ensure that they are fit to operate as part of their responsibilities to manage their own fatigue, the impact of foregoing holidays and rest periods should not be underestimated when it comes to cumulative fatigue; although financially tempting, we all need down-time not only to protect from fatigue but also to reset energy and attention levels. The old proverb '*All work and no play makes Jack a dull boy*' is more than just a comment on social behaviour, it also illustrates the need to have a break from work so that we do not start to suffer from habituation and complacency. The mind's structure is such that it can work for a long time but, at the same time, proper

relaxation is absolutely necessary to keep it from getting overtaxed or dulled by continuous focus on work. Recreation revitalises the mind's inborn abilities and makes for a properly balanced person.

We asked the company if they had any policies for monitoring participation in such voluntary extra duties but we received no response.

Report No10 - FC5355 - Inferred pressures to operate

Initial Report

This report relates to an incident where I feel there seems to be organisational drift at [Airline] in relation to crew informing the company that they may be fatigued or unfit for a duty. I feel on this occasion that commercial pressure was used to protect the operation in priority of safety. Having spoken to other pilots, it appears that this isn't a one-off, and many have had decisions relating to fatigue, fitness and FTL's inappropriately questioned by crewing supervisors or management pilots.

CHIRP précis to protect confidentiality: There had been an 18hr period between duties in the FO's roster (a midnight finish followed by an 1830 report the next day). We all know that the 18-30hr gap is troublesome because it's difficult to get 2 sleeps in and so it's often the case that people report for the second duty having been unable to get an appropriately timed sleep to ensure they're fit to operate. To cut a long story short, the FO initially said that they would be OK to operate but then there was a series of unfortunate delays that meant they were pushed further into WOCL to the extent that they then didn't think they'd be fit to operate the return sector. The Management Pilot became involved, had a conversation with the FO, and it was agreed that they'd operate. Inevitably, the FO felt very tired during the flight, made many mistakes, and regretted agreeing to operate. The FO felt that there had been a certain amount of implied pressure from the Management Pilot's involvement. To be clear, they stressed that the Management Pilot did not apply pressure *per se*, but their mere involvement in the issue meant that the FO felt that there was subconscious pressure that induced them to agree to operate.

Company Comment

Although they are not subject to a blanket restriction, we are always mindful of the difficulties with 18-30hr duty gaps because they are contextually dependent on previous duties and the crew member's circumstances at the time. There are algorithms within our rostering program that take this into account, along with the expected circadian cycle of the crew member. If a crew member reports that they need a fatigue absence either before or during a duty then they will be 'fatigue offloaded' at that point and hotel accommodation will be arranged if required.

The Management Pilot will likely have become involved in the situation because the Captain will have potentially reported that the flight may require a replacement FO or be cancelled down route. The Management Pilot's intention will not have been to put pressure on the FO, and our crews should be reassured that they should not be concerned to make fatigue-offload requests because the company policy is to accommodate an offload rather than pressure crews to fly fatigued. It is regrettable that such pressure might be inferred from the Management Pilot's involvement, but that was not the intention.

CHIRP Comment

Although the company comment is reassuring in as much as explaining the fatigue-offloading process and that individuals should not be concerned about fatigue-offload requests because "...the company policy is to accommodate an offload rather than pressure crews to fly fatigued", the key issue was the influence of the Management Pilot on the reporter's decision to operate when they felt they should not. The engagement by the Management Pilot in the matter was not unreasonable because the company would need to understand and make plans for any potential delays to the flight but, although likely well intentioned, engaging with the FO rather than the aircraft Captain had consequences. Perceived pressures on a potentially inexperienced FO by being contacted by a Management Pilot should not be underestimated and, although no such pressure might have been intended as a systemic outcome, this clearly influenced the reporter.

Report Noll - FC5358 – Not free from duty

Initial Report

The company does not provide devices for work, we are expected to use our own personal devices to access manuals, read notices and emails from the company. Unfortunately, we are receiving constant emails seeking crew to cover missing flights and emails to action various instructions from the company. These are received through our personal devices on days off, annual leave and after performing a duty; it's like 24/7, the company is constantly in your face. The company have not made any contributions to the cost of using or obtaining a new device specifically for work purposes to perform our role. The company must provide equipment and define a reasonable separation of work and off-work balance, as the company expects employees to do and respond to emails on their days off.

Company Comment

It is the organisation's policy not to provide electronic devices (e.g. phones, tablets etc.) to frontline employees. This is because some pilots actually prefer using their personal devices rather than a device provided by the company and so, considering the differing views, the company made a policy decision not to provide any devices but to support its employees by an additional monthly payment as they are expected to access company manuals, read notices and respond to emails by using their personal devices.

Employees are not expected to respond to any telephone calls or emails that they may receive from the company when off-duty. We are not aware of any case that employees have been asked to meet a deadline while they are on leave. Some pilots are happy to be contacted during off-duty days so that they can potentially accept any additional work, but the company policy is that no employee is obliged to respond to any telephone calls or emails during their leave or rest period, and they are certainly not penalised for not doing so.

Nevertheless, we will monitor these issues via our reporting system and consider necessary actions should the same or similar issues are highlighted by any reporting trend. To date, there is not a single report raising the same or similar issues since it started its operation in March 2023.

CHIRP Comment

There are two elements to the report: the lack of provision of company e-devices; and the expectation to monitor and action company communications when not on duty.

Regarding the first element, the reporter states that the company does not contribute to the cost of personal devices but the company comment contradicts this; it may be that the company contribution is not widely known about or understood, and so we have suggested that they may wish to clarify this to their crews. Having made a contribution to costs, the company expects crews to access company email on their personal devices, along with documents and manuals.

Although it's not unreasonable to expect employees to have mobile phones and be contactable by email etc, we don't think that the assumption that everyone has a personal laptop or tablet that they will be able (or willing) to use for company business is particularly robust. Most companies provide tablets to their crews if they expect them to review documents or conduct company business away from the work environment; the safety angle being that if someone refuses to download company apps, documents etc to their personal devices, what method would the company have to provide them with access to company material? Also, in allowing people to use their own devices to access company materials, there is potentially increased cyber security risk from malware or viruses. Company devices can have robust anti-virus/malware measures incorporated by the IT department, whereas that is not assured for personal devices and so people who access public routers or click on links during personal browsing might easily inadvertently transfer malware into company emails or websites.

In respect of 24/7 communications, this is something that we have engaged with many times in the past with various companies and their personnel. The simple fact is that you are not required to be contactable when off duty. That is not to say that the company can't send emails etc for information or alerting, but they have no right to expect a response or for people to action such emails when off duty. The reporter's company say that they do not expect anyone to respond to company material during offduty hours but this somewhat ignores the implied (and sometimes overt) pressures that can be perceived by those who receive 'urgent' or 'time-bound' company communications and so we have suggested that the company may also wish to clarify their expectations and policy to their crews in this respect.

CHIRP's view is that there's a balance to be made between an expectation that, as professionals, there's a certain amount of offduty reading to be done, but companies should not make unreasonable demands on people who are off-duty. The right to a private life away from work is something that is currently a topic of conversation in the wider community and may well lead to national legislation in future (already so in parts of the EU for example). We would agree that crews need to be contactable around the fringes of their duties so that they can be made aware of changes, but it should not be an expectation that people are constantly required to respond to emails and other communications when off duty or, even worse, when on leave.

Fundamentally, off-duty time should be free from work, and it is unacceptable for a company to expect people to respond to emails or conduct work activities during such periods. The safety and fatigue implications for disturbed rest are obvious, but, even outside of rest periods, a company has no right to expect employees to conduct work business when off duty and in their personal down-time. People might chose to do so, but it should not be an expectation or requirement.