# CHIRP

Confidential Human-Factors
Incident Reporting Programme

# Aviation FEEDBACK

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# AIR TRANSPORT

CHIRP AIR TRANSPORT FEEDBACK
Confidential Human-Factors Incident Reporting Programme

# Relationship building

**Getting back in the air will have its issues and good communication between management and crews is vital**

*Director Aviation: STEVE FORWARD*

Reporting to *CHIRP* in 2021 remains suppressed compared to norms due to the obvious fact that reduced flying during lockdown conditions means that there is less exposure to operational Human Factors issues. Nonetheless, there has been a steady flow of reports, increasing in recent months, mostly concerning the stresses and distractions caused by loss of income, short-notice rostering changes and new procedures introduced to address COVID-19 requirements.

The uncertainty caused by short-notice political changes for countries facing red/amber/green travel restrictions has exacerbated the situation and, to be fair, airlines are facing existential circumstances that mean they are also having to make very difficult decisions in an uncertain world.

Against that background, we've received a troubling number of associated reports concerning a seeming breakdown in relationships between some management and crews, which is clearly to the detriment of safety, especially where a climate of fear may be growing in respect to reporting incidents or concerns. We've reported these issues in a generalised manner to the companies and regulators concerned in the hope that we can raise an awareness of the need to ensure that reporting remains fully supported through a Just Culture during these difficult times for all.

I've included two charts that illustrate the key factors that CHIRP has seen in recent reports, and a breakdown of the latent failings for the Top-5 of these. We are unable

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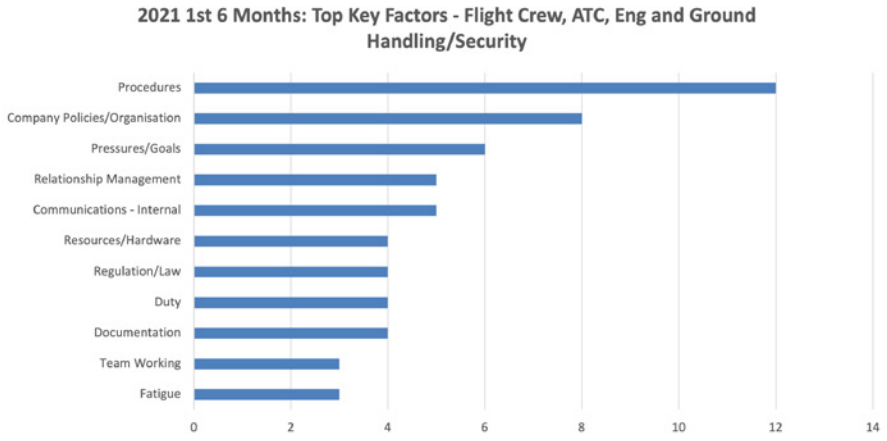
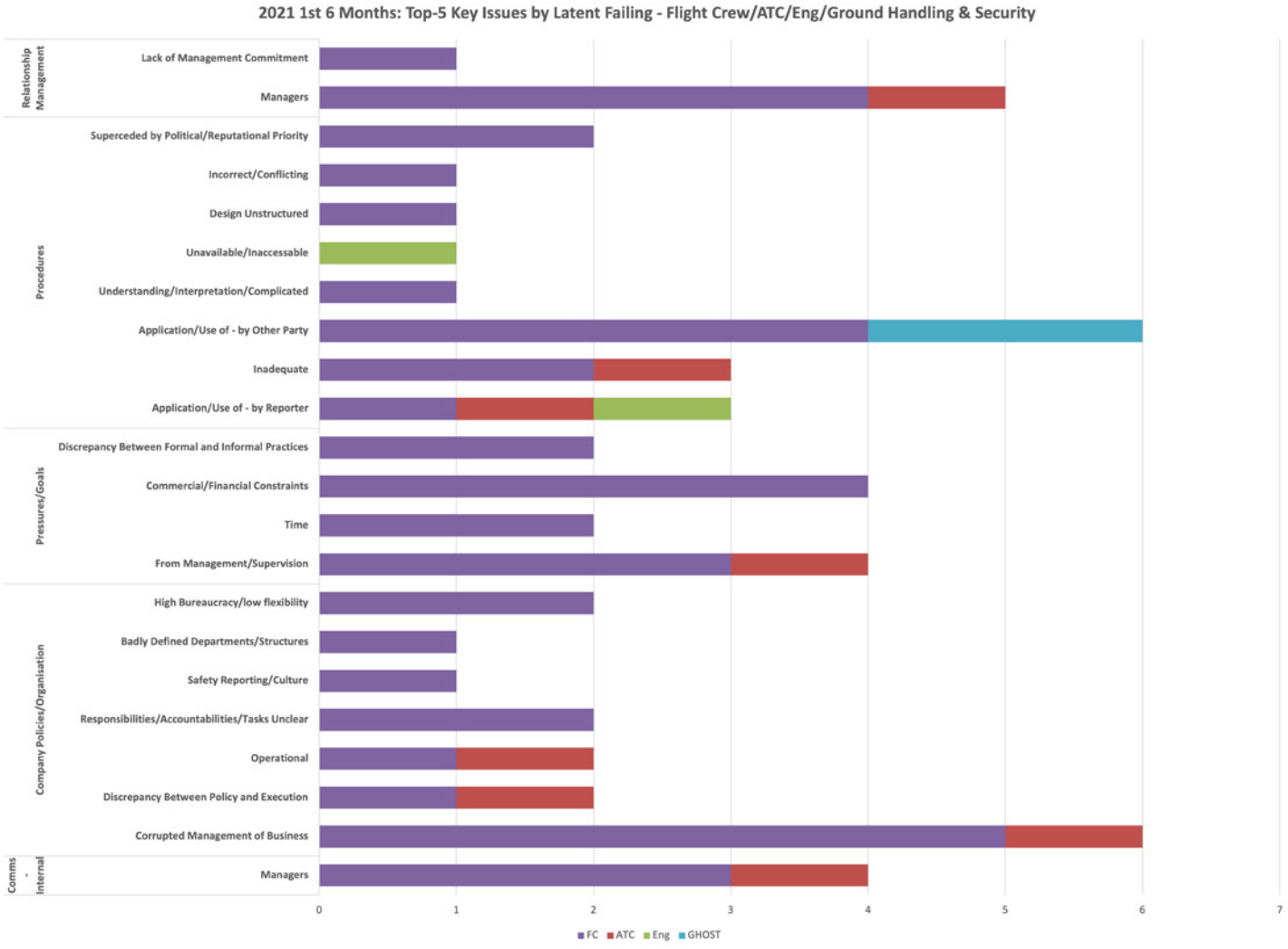
to publish many of the associated reports due to confidentiality concerns, but what we can do is show the aggregate factors to give an indication.

From these charts, it's clear to see that concern about company/management policies and procedures and how they have been implemented is a common thread. Digging down further, perceived and actual operational pressures are high, with the attendant risk of people potentially cutting corners. This includes commercial pressures to achieve departure times irrespective of COVID-19 implications (which add time to the previous report-to-departure calculations); reduced resources (and therefore higher workload for those who remain in place) as a result of COVID-19 absences due to furlough or redundancy; and cases of information




overflow where crews are receiving vast amounts of changing information as circumstances evolve, all of which requires mental capacity and time to absorb.

The latter aspect is particularly relevant in respect of distractions and processing ability – the human brain is only able to absorb so much before it starts shedding overloading tasks or information. Our sister organisation has just produced a short YouTube video on this topic titled '[Sea of Distractions]' which, although focusing on maritime-specific issues, has parallels with many aspects of aviation workload and is therefore worth a look.



Within all of this, we need also to be aware that others' risk appetite for post-COVID-19 operations may differ – including other crew, passengers, engineering and ground handling staff who may not have the same level of acceptance of the health aspects, and this needs to be taken into consideration.

Leaders, managers, captains, senior cabin crew et al must be aware that overt pressure to 'carry on' and the desire to cope and achieve targets irrespective of prevailing circumstances can be construed as bullying or a source of stress that can have safety impacts of their own in those they are leading. This applies not just to flight operations, but also ATM managers/SATCOs, engineering teams, ground handling and security teams etc.

Everyone is undoubtedly trying to do their best; there needs to be an acceptance that some tasks may take longer than expected due to changed circumstances. Poor safety culture due to management-employee relationships breaking down; undue focus on achieving departure times; overbearing management of crews, engineers or controllers; short-notice changes to rosters causing stress; delays in passing through security gates and border controls impacting FTL; and the uncoordinated imposition of new procedures are all examples that CHIRP has seen in recent months.

Hopefully, the return to historic levels of flying will start soon, but it will likely be a stop-start process for many airlines as countries come in and out of any residual traffic-light system. There will undoubtedly be many associated problems and concerns that need to be aired for the benefit of all so that we can learn from them before we experience them ourselves.

If you feel able, please do use the formal ASR/MOR system to report these because that will normally ensure the quickest and fullest response to a safety issue. However, if you do not feel able, CHIRP stands ready to help where we can, and also to publicise issues that may already have been formally reported elsewhere so that the wider community can benefit. One thing's for sure, it'll be a challenging time ahead; we all need to focus on maintaining safety and looking out for our colleagues in all aspects of aviation.

Finally, one of the best ways of learning can be from listening to the experiences and tales from those who have been there before. Whilst we can't help much with listening, I have in mind setting aside a page or so in future FEEDBACKs to publish stories in the vein of 'I learnt about flying from that' (ILAFFT). I'm sure there are plenty of things that happen 'down route' that don't necessarily get written up but which might just give someone else pause for thought in a similar situation. If anyone has any such engaging tales that have a definite safety message then please do send them in, we promise full confidentiality!

***Steve Forward, Director Aviation***

***'Ops teams should have someone, or a team of people, to check on any changes'***

## Engineering Editorial

This *CHIRP* Feedback features an Engineering Report in relation to difficulties with IT systems. The CHIRP Comment stresses that up-to-date IT issues are not confined to one branch of our industry and are waiting there to catch the unprepared, especially once the recovery gets into full swing.

We also must not forget the challenges of multiple organisations working together (Airworthiness Management, Maintenance, Design & Production) not just physically, but also from an IT communications perspective. Multi-team organisations, multiple contractors and dispersed or remote working practices can very quickly lose situational awareness of changes in the other areas and so it is imperative that someone is maintaining an overall view to ensure that all areas are operating to the same, most up to date, regulations and procedures.

There has been a tsunami of information and changes over the last few months of COVID-19/post-Brexit and so CAMOs and operations teams should have someone, or a team of people for larger organisations, whose role it is to check on any changes, understand what they mean, and make sure that they are promulgated and understood by all relevant areas.

There have been many redundancies and furloughs in recent months that may have seen many maintenance staff either removed or out of touch with the working environment – one of the most important actions during the return to flying should be to review all regulatory, OEM and procedural changes or guidance that have been issued in the last 18 months so that everyone is working to the latest information.

This might be a pertinent time to look back at the Pratt & Whitney JT8D engine, fitted to the British Airtours B737-200 that caught fire in Manchester on the 22ndAugust 1985. Combustion-Can cracking and migrating had been an ongoing issue with the JT8D. There had been twelve cases of explosive rupture and sixteen cases of burn through the outer combustion casing prior to the Manchester Fire.

Whilst not suggesting the root cause of the accident was information/communications related, the AAIB accident report 8/88 (www.skybrary.aero/bookshelf/books/374.pdf) also notes; "Inadequate exchange of information between operator and manufacturer led to under-reaction by the operator to previous similar

incidents, which were notified to them through the medium of advisory communications. The content of these communications gave insufficient information to enable the operator to make accurate judgements regarding their subsequent course of action and the operator did not seek clarification".

The information relating to previous failures was firstly a Service Letter in January 1980. A Service Bulletin was then issued in November 1980. A second letter, referencing Cans cracking and P&W's development programme on progressing the situation came out in December 1980. Another letter in April 1983, suggested Combustion-Cans with a ceramic coating but the compliance was level 8 "Accomplish based on experience with prior configuration" (Compliance 8 currently says "Optional at operator's discretion"). An All-Operators Wire (TELEX for you youngsters) was issued in February 1985. This type of information no longer arrives in the Royal Mail and not even by telex but by your "trusty" Computer.

It is good engineering practice whenever interrupted to review the last two (or more) stages of the task at hand. The COVID-19 pandemic has caused a fairly massive "interruption" in engineering activities so perhaps we should approach our IT systems the same way. The Manchester fire was a particularly significant aviation tragedy in many ways, not forgetting the 55 people who lost their lives.

Attention to the various communications could arguably have led to a different outcome and so we owe it to ourselves not to repeat the situation. There have been many CAA notices published in the last few months regarding various changes, guidance and the implications of returning aircraft to flying, are you aware of them, and have you reviewed their content properly rather than just a cursory scan? Now is the time to thoroughly review them if you haven't already.

***Phil Young,***
***Engineering Programme Manager***

# COMMENTS FROM PREVIOUS FEEDBACKS

***Comment No 1 – Meaning of 'For Information Only' in the Tech Log***

I have just read FEEDBACK Ed 138 and had a few comments on the only engineering report contained within it (Report No. 7 – ENG687 – Concern for the management of defects). I must admit that it almost sounds like a page from my history book, as I found a very similar situation when I was promoted into a post holder role in a previous job. Eventually I rectified it by resurrecting the 'flying spanners' after justifying the cost against employing engineering staff at each of the locations that we flew through.

That aside, I was a little confused with the 'For Info Only' statement being used against aircraft defects and, what reads to be, a casual acceptance of its use. From my understanding, an aircraft can only be released to service with defects that are included in the MEL (Minimum Equipment List) or CDL (Configuration Deviation List). That said, I am aware of the use of cabin logs and husbandry logs; however, these are purely for minor issues that clearly do not affect the airworthiness of the aircraft. I am not sure of the context that the 'For Info Only' statement was used or the defects that they related to, but it would be very concerning if these related to aircraft systems.

**"CHIRP *Response*"**

The report we received did indeed refer to 'For Info Only' being used for aircraft defects that were incorrectly deemed not to impact routine flight operations during daily 'round-robin' multi-stop tasks and should have been reviewed as part of the MEL.

Many operators accept the use of 'For Info Only' in circumstances where, although the equipment is still available (and hence satisfies the MEL), there are minor concerns with its use or operation that need to be heeded. Examples might be: "Pilot's escape rope access-cover continually opens during flight, rope remains in situ however"; or "Unable to stow Observers O2 mask correctly".

We agree that there are clear risks that some such entries, which might seem innocuous in routine circumstances, can end up either being accepted without proper thought to their implications or might become an issue if circumstances change during the flight. CHIRP's view is that the use of 'For Info Only' should: be clearly defined with regard to what sort of defects can be carried in such a manner; have a plainly stated defect explanation (rather than a cryptic code or reference) and a clear end date for their rectification or engineering review; and should make specific reference to the Flight Crew member or maintenance organisation technician who has authorised the entry.

The use of such entries cannot be condoned simply for convenience; great care needs to be taken in using 'For Info Only' (if at all) and any pilot or engineer seeing such an entry in the tech log should carefully review the nature of the defect as part of a defined procedure to ensure that it can be sensibly mitigated or resolved and does not affect the safe flight of the aircraft or contravene the MEL.

# Reports

## Report No.1 – FC5080– Drowning in company notices

**Report Text:** My company has a long established method for issuing notices. These are received via the company-issued tablet. It seems that little or no thought is given to whether the volume of said notices is appropriate. This has particularly been the case since the start of the pandemic. I just counted that there are 181 current notices on my tablet. Yes: one hundred & eighty one! These range from one pagers to multi-paged tomes. I'm sure the powers that be would blame the pandemic. It's true to say that a lot of the admin type notices are generated by changes required by coronavirus, so a modest uptick in their number is to be expected, but the numbers are truly ridiculous nowadays! Are flight & cabin crew really expected to usefully absorb such a tsunami of information?

Bafflingly, some examples look to be merely down to poor admin; there were several notices issued in mid-December which update the OM C re particular airfields. How can it be that 2 months later, that info hasn't been transferred to the (all electronic) OM C & the notices withdrawn?

I fear that the current approach, which seems to allow any Tom, Dick or Harriet to issue a notice to the great unwashed from his/her laptop, will result in something important being missed amidst the information overload. Of course if that does happen, we will be reminded 'well, we told you all about that in notice XX/YY'.

There was a time when it would be highly unusual to see more than a couple of top priority notices and maybe a few dozen at most of the other types. Common-sense seems to have taken a back seat, as with so many things in the company. (I suspect the company needs to have a think about their prioritisation process, too. What is 'UK Customs - Declaration of Goods' doing as a top priority notice? There are others like that….).

What has gone wrong is that, despite the advancements of technology, managers now see the notices channel as a pipe down which they can pour almost limitless amounts of information - it seems zero thought is given as to whether the recipients will be able to usefully process the information. If they can't, then the opportunity to improve safety (or efficiency etc) with this technology is being squandered.

**Company Comment:** Notices are priority coded for urgency within 4 categories in the EFB application: 1) Urgent mandatory operational information you must know before you next fly; 2) Operational mandatory information that isn't time critical; 3) Time critical non-operational data, such as alleviations to agreements or notification of personal events; and 4) Non-operational and not time critical. Operational Safety Notices (OSNs) are also prioritised.

We are endeavouring to stick to a single day a week publishing cycle for anything other than urgent changes; however, ad hoc operations, COVID-19-related and industrial changes make immediate notices or changes to existing notices difficult to avoid. We aim to avoid comms overload by sharing business updates via email and focussing all operational communications through specific channels. All notices are reviewed prior to release to ensure the release is immediately required – e.g. could the change to the Ops Manual included in this notice simply be delayed until the next revision of the manual itself? Enhanced functionality is being reviewed to see if the system can be simplified further in the future.

Overall, in the midst of a global pandemic with airlines having to respond to rapidly changing requirements, as well as operating flexibly and innovatively (e.g. seats-out freighter operations), the volume of notices is understandably higher than in an 'ops normal' environment. However at the same time, due to a global reduction in flying volume, our flight crew have longer periods of time between trips where notices can be reviewed compared to any previous time in living memory. The professional standards of all commercial flight crew requires them to maintain awareness of the latest content of their Ops Manual, updates to the regulatory environment and any relevant safety notices. Flight crew reviewing current notices and revising changes since they last operated is a key part of the safe resumption of flight operations across the industry.

### ❝ CHIRP *Comment* ❞

The reporter's complaint was not particularly that they have to spend too much time reading the many notices but that, in their opinion, there is no way a pilot or cabin crew member could conceivably commit all of the required information to memory. They recognised that not all the information contained in each notice needed to be memorised but, in their words, "… there is definitely a need to know of the existence of a notice to be able to say (at any time, but most crucially in the middle of a 'non-normal' situation) "oh wait, isn't there a notice about xyz - let's look".

The problem with large flows of information is both the time it takes to read it and the ability to assimilate the information. Aviation has always been a world where a myriad of rules and regulations need to be committed to long-term memory, but at some point the brain's short-term memory buffers get full and it becomes impossible to recall all the quick-change notices that might get sent out.

There is also the issue of important notices getting lost in the forest of other information, much as a proliferation of NOTAMs can mean that important ones can get overlooked. The problem that managers face is that they are damned if they do and damned if they don't. If they didn't make the information available then not only would it be indefensible if an incident/accident did occur but

we'd also criticise them by saying "if only management had told us…" In an increasingly litigious society, the default therefore often becomes 'send everything' for fear of someone apportioning blame for not passing on the 'vital' bit of information that would have stopped someone else making an error. But there has to be a better way of doing it.

In the days of paper-based systems years ago, not much changed on a day-to-day basis but we now live in an increasingly ephemeral world of information where things sometimes change minute-by-minute and so we need a system that helps us access the right information at the right time.

Usable search engines are a key part of that for hunting through the many notices that are presented, and a common taxonomy for documents will aid such searching (for example: 'take off', 'takeoff' or 'take-off' are all used interchangeably, and 1000ft can variously appear as '1000ft'; '1,000ft'; '1 000ft'; or 'one thousand feet' depending on who compiles a document. This all makes searching documents very labour-intensive and prone to error if the correct version of text is not input into the search engine). Ultimately, perhaps someone can invent an AI system akin to a smart speaker that can feed us the required information exactly when we need it during the appropriate phase of flight, but that's probably a long way away at the moment.

The bottom-line is that messages need to be promulgated in a timely, digestible and consistent manner. It is heartening to see the Company accept that some messages may have been unnecessary and that they are looking again at whether they can enhance the functionality of their system to see if it can be simplified. Endeavouring to stick to a publishing cycle so that crews know when they can anticipate non-urgent or business-update notices/emails will also help. The ability to send out information about anything and everything without great thought these days is the real point.

It takes discipline to keep things to the necessary details (to paraphrase Churchill, he apparently once said in a letter "I'm sorry this is so long but I didn't have time to make it any shorter") and so we all need to avoid the temptation to simply 'cut-paste-send' whatever comes into our own areas of responsibility. Is this important? Is this urgent? What is the key message? Can extraneous material be deleted? Have I used the common taxonomy? These are all questions that we need to consider when transmitting information onwards.

***'The bottom-line is that messages need to be promulgated in a timely, digestible and consistent manner'***

## Report No.2 – ENG701 – Access to approved data

**Report Text:** At our [Location] line station we have been reporting our extremely slow internet connection for some time — I myself have reported several times since joining the station. We are now in the position where the desktop PCs are operating on an obsolete Windows system with a LAN internet connection that is so slow that, at times, we can barely access maintenance manuals. It has been reported multiple times and the problem has been largely ignored up until recently where it has been raised to [top-level management].

I have recently suggested that we as engineers are simply issued with laptops with a wireless access sim card/dongle until the infrastructure problems can be solved (which given the age of the buildings and the current financial situation in the industry will take some time). If these problems are not resolved soon there will be a situation where we as engineers are forced into a situation where we are unable to access the maintenance manuals to carry out our safety critical jobs. There are enough pressures in the current environment without having to deal with something that is a relatively simple fix but is routinely ignored because as engineers we seem to 'make do'.

I have raised it through the [Company] reporting system several times, with the matter remaining unresolved, hence my report to CHIRP. I have also raised the issue with IT several times — the current status is, it seems, that [top-level management] are discussing with [Location] line station a way forward. But nothing happens quickly within [Company] and, given that it requires investing in infrastructure, it probably won't happen soon.

Only the other day my colleague was forced to use a different operator's AMM as they couldn't access the correct customer manuals due to the slow web speeds. In part due to Covid, our [Manager] is working from home but even he doesn't come into the office as much, because he can achieve far more at home with stable IT whilst we are left to struggle on (our [Manager] has also tried to get the issues fixed). I can't remember the last time we had an audit, and staff across a variety of departments have been furloughed at different times during the COVID crisis.

'Learned helplessness' is a condition that is endemic within [Company] engineering. To provide some context for that statement, I myself have worked across a variety of airlines and at [Company] for [several] years; I have worked at both [Base] and now [Location] for [Company]. I like to think that I have maintained my own standards and don't fit into the 'learned helplessness' description. However, a lot of my colleagues both formerly at [Base] and some at [Location] certainly do, where problems go unreported simply because they don't see any possibility of resolution.

From my own perspective, I have often

found that to achieve anything within [Company] it is a battle from addressing IT issues to seemingly simple tasks like getting a new piece of uniform. And, unfortunately, across all levels within the business, people simply give up. I hope that goes some way to demonstrating the situation we as engineers within [Company] are facing. I am more than happy for you to approach [Company] with these concerns.

**Company Comment:** The individual did report this issue internally and this was not acted upon. Having reviewed this, it seems that the internal occurrence report was closed in error, when it was sent to the wrong manager. I have discussed this both with my Quality Engineers and the responding manager to raise awareness that if he was not responsible for this issue he should have returned the action to Quality. Moving forwards, my Quality Engineers will also more likely hold onto reports of this nature rather than transfer to local managers to action. [More specifically, the following comments were provided by the Company]:

**Local station IT issues.** Following this report we escalated the 'local bandwidth issue' with our IT infrastructure group. Initially we deployed new equipment to the station but this still did not resolve the issue. Whilst IT are working on fixing the infrastructure at the airport, [Company] have deployed mobile dongles to this station. Initial reports seem to be positive.

**Wider review (survey) of IT infrastructure.** A wider review (survey) of IT infrastructure has been carried out at all line stations (Company and Company suppliers). Through this I have identified several other line stations where either the internet speed or the equipment did not allow easy access to aircraft manuals. These are being progressed through our IT group (the number now stands at 4 stations). In the interim all the stations have been made aware of the Operator Business Continuity Plan for IT system outages. Whilst new generation aircraft (Aircraft types) have onboard maintenance laptops, for the ABS operation, it involves manuals being downloaded onto their local laptops (this may have to be done during downtime or from a remote location). All station Maintenance Managers have reported that their stations have done this.

**Escalation of IT issues.** I have spoken to all the Line Maintenance Managers and asked that if an IT issue exists they should escalate to the highest fault level (Level 1) and if not resolved this should be escalated to the Nominated Postholder or myself.

**Infrastructure issues.** Infrastructure issues are recognised as one of the safety concerns resulting from the pandemic. As such we are recording these on our post pandemic Management of Change. All stations will have to confirm their readiness.

> ***'IT infrastructure should be considered a compliance requirement'***

**Quality audits.** Quality audits of line stations have been suspended due to current government guidelines. We have been auditing foreign line stations through MS TEAMS, which does checkout the IT infrastructure. We had planned to physically visit [Location] last autumn but this was delayed because of the rise in COVID cases. Now that the situation is easing we are planning to audit [Location] this month and also restart some other stations as the situation permits. All QE have been made aware that IT infrastructure should be considered a compliance requirement for maintenance data access requirements.

**CHIRP *Comment***

This is a great example of CHIRP reporting working at its best. Needless to say, staff access to approved data is subject to CAA oversight and internal auditing but seems to have deteriorated to an unacceptable level in this location. The subsequent engagement and comprehensive response from the Company provides CHIRP readers a chance to appreciate the outcome when all parties are motivated to improve safety standards. It's worth noting too that the Company's slip with the initial internal report may well not have taken place had the industry been working normally rather than under pandemic circumstances.

Although the IT shortcomings were not specifically related to pandemic issues, the recovery guidance from EASA below does quote various information technology shortcomings we might all face.

> "*The shutdown means that several types of information may be out of date and difficult to update in time for a return to service. Staff will need time to get up to date on return to operations. Documentation and database updates may not have been applied, resulting in outdated or inconsistent information. Relevant updates of operational procedures and documentation, especially temporary revisions/updates may have been missed. In addition, aircraft databases such as TCAS, TAWS Nav DB, AIS, may be out of date. Remote access to various IT tools/systems require ensuring the integrity of connected tools/systems, that no unapproved software has been installed or connected to the aircraft and that no unapproved aircraft system access or modification has taken place during parking/storage*".

In the same vein, Airbus Safety Magazine June 21 also stresses the importance of Correct Aircraft Configuration. For example, aircraft potentially being dispatched with a computer standard that is not authorised to be installed on that aircraft.

IT issues are not confined to aircraft or operators, there may also be IT issues in Continuing Airworthiness Organisations and MROs in respect of ensuring relevant updates have been applied during times of greatly reduced activities and decreased IT support.

## *Report No.3 – ENG704– EASA Licence Exam coaching App on Google Play Store*

**Reports Text:** I recently became aware of an app on the Google Play Store that purports to hold actual EASA Pt66 (and now potentially UK Pt66 Licence by default) exam questions. In the app details it even mentions the ability to upload your actual exam papers. The app is listed as "EASA Part66 Questions Paper" and published by Aviators World. It appears that this app has gained access to actual EASA Pt.66 exams and is now disseminating the questions as well as enhancing their acquired question bank by accepting submissions from app users.

It was my understanding that Pt.147 exam questions were meant to be secure to enhance the Engineer Licensing standards, and to prevent students learning exams and questions rather than gaining the actual systems and aircraft knowledge to be able to carry out aircraft maintenance to the required high standard.

I recognise that the spread of information in our technological world is easier but this app does call into question the security of schools' question banks. I have even seen uploaded videos on social media of some students coaching other candidates by reading out proprietary course notes on a live stream (luckily, in the example I saw the student presenting appeared to not understand some of the subjects himself).

I believe that this app should be withdrawn and, if possible, the publisher's question bank acquired to review the source of the questions; any schools involved should be investigated and appropriate action taken if required. Anecdotally, I have heard of a number of schools, mainly outside of Europe, with 147 approval that operate as coaching schools to get people through exams rather than teaching technical ability. I suspect that these schools are the primary source of the leaked questions.

**CAA Comment:** All Engineer Licensing question banks are separate, unlike the flight crew where it's a common question bank. Therefore, all Part 147 organisations and each Authority will have a unique question bank. With that said, if its basic questions then there are only so many ways you can ask a question about Ohms Law, for example, so there is commonality.

This App sounds no different to a number of others other than the ability to use the App to quickly get students to upload questions they recollect from exams. This has been a perennial problem to secure databases and that is why each organisation should be completing an analysis of each exam to confirm if the pass rate is too high and therefore the questions are either compromised or cheating has occurred. We also do this as part of our question bank for engineer licensing exams, where a review is carried out and questions are retired or reformatted to keep on step ahead of the question bank becoming stale due to being in the public domain in these forums.

Technology does evolve, and it's important we keep one step ahead, but examination is only one element of the journey to be a licensed engineer, it's the practical application of this knowledge in the maintenance environment which tends to catch people out, especially if they have to gain 5 years' experience as a self-starter. If under the control of a Part 147 school, then they would understand someone's competency not just from the exams but also the practical sessions held as part of the approved courses.

There is not much we can do to stop this App because they are not doing anything illegal unless all organisations have a copyright on all exams questions which is very difficult to police and enforce. Hopefully this explains the situation and what is in place to monitor it. As a reminder, we will push out a SkyWise notification to highlight the situation and remind everyone of their responsibilities.

**"CHIRP *Comment*"**
There is a very high likelihood that information compiled by students could be misleading at best and wholly incorrect or even made up in the worst case. Unfortunately, it seems that there is nothing that can be done to prevent individuals or organisations developing and using such Apps as they wish. A few years ago, following a similar concern about cheating, EASA suggested anyone who passed modules from that particular European school should have their competency re-established by way of an "Interview"; many of us would call this an Oral, which used to be a UK licensing requirement.

***'I was surprised to see one of my colleagues still at security'***

## *Report No.4 – FC5076 – Airport Security, again*

**Report Text:** We were three pilots attempting to carry out a long-haul cargo flight out of [Airport]. We have been told recently by our company that the CAA have given flight crew an alleviation to be able to carry up to 3 Litres of liquid through airport security. On presenting a 500ml bottle at the beginning of the security search at [Airport], I was told I could not take it through. Apparently only [Airport] pass holders are trusted to carry a bottle of water. I then placed my small suitcase on the belt, only to be told it was too big and I had to go back and check it in (the same case that I had been allowed to go through this checkpoint the previous week). I told my two colleagues that I would meet them at the gate.

When I eventually returned, I was surprised to see one of my colleagues still at security, being interrogated. It transpired he had had the audacity to carry a yoghurt through the search, despite being told it was OK to do so at the start of the process. He was being asked, by a clipboard holding guard, such questions as "How long have you held an

airside pass ?" (23 years), and "Have you ever set off an airport security detector?"(!!). My other colleague started telling the security supervisor that we really needed to go and do our job, and that the yoghurt was now immaterial, but he said that they had to fill in all the forms for the CAA. We were all now agitated, knowing that time was passing and that (as humans) we would end up rushing our pre-flight procedures to try to get away on time.

I know that this subject has come up many times before, but please could you again make representations to the CAA and DfT. Please ask them not to reply with such statements as "we have to treat everyone the same" because, to be blunt, the pilots are not the same as passengers or cabin crew. Only the pilots have the ultimate responsibility for not crashing the aircraft.

The following will, no doubt, get the DfT's back up, but it is plainly true: There is absolutely no point in a pass-holding pilot being searched; if they should wish to crash the aircraft they do not need the use of a bottle of water or a yoghurt or the axe in the flight deck; they need only their hands (vis Germanwings 9525). If the DfT and CAA officials had to go through this palaver every single working day with the possibility of no food or water for hours on end whilst carrying out a life-critical task, then I'm sure things would change very quickly.

**DfT Comment:** It has long been the UK position that persons other than passengers must also be screened on entry to a security restricted area, regardless of the function such persons may carry out once airside. This is also an international aviation security standard (4.2.5) which is set by the International Civil Aviation Organisation (ICAO) and states that "Each Contracting State shall establish measures to ensure that persons other than passengers, together with items carried, are screened prior to entry into security restricted areas". This is one of the means by which the insider threat is addressed, and also affords protection to those that have access to security


restricted areas in that, with all persons being subject to the same screening process, none are seen as a means of circumventing such controls.

It is for airports to determine how best to configure their operations to ensure that persons other than passengers are screened to the required standard. We do not, or intend to, prescribe how these operations should be managed. Some airports in the UK have dedicated staff entry points or control posts where airport workers and aircrew enter the security restricted area; a few may have entry points which are used exclusively by aircrew, and others may use passenger entry points for the screening of airport workers and crew.

**CAA Comment:** The responsibility for implementation of mandatory aviation security requirements falls to the aviation industry, with staff screening undertaken by the airport. Airports are free to adopt and implement their operational processes and any additional requirements based upon their own local risk assessments as long as these comply with aviation security regulations.

It is possible that procedures may differ at certain entry points to the security-restricted-area dependant on the security processes undertaken, which may include the availability of specialised screening equipment (note that some airports do not have LEDS (liquids screening equipment) at all staff/crew posts).

All liquids are subject to screening; anything above 100ml needs to be screened by LEDS equipment. Depending on the equipment available for LEDS screening, there are limits on the volume that can be screened; the maximum (if the LEDS allows) is 2 litres in one container for crews. We appreciate that crews will not be aware of the LEDS capability at all security posts, but this does explain why there are differences in what is allowed to be carried by crew members.

**❝ CHIRP *Comment* ❞**

Security checks for crew are a perennial issue that gets raised mostly out of frustration from those who are held up on occasion as they transit to the aircraft and find that they've left something in their bags that contravene the current restrictions.

In the case mentioned, the yoghurt was likely in excess of the allowable liquid volume and so the security operatives may have had no choice but to react in accordance with their instructions. That being said, it seems that they may have adopted a somewhat officious manner, but we're all prone to human failings in that respect.

But the root of the issue is whether there should be security screening of crews at all, and ensuring a consistent application of those checks that are necessary.

ICAO set the overall security requirement as highlighted above;

the CAA and airports enact whatever enabling policy DfT then decides in such matters. DfT are clear that they see a need for screening because crews pass through a public access point. They are not solely focused on the insider threat from pilots and crews deciding to cause the aircraft to crash per se, but also on the fact that crews could be impersonated pretty easily with fake uniforms and airside passes and so terrorists could gain access to airside in that manner if there were no security checks.

Whether we perceive the same risk is a matter of debate, but crews get security checked when passing through international airports worldwide, and so the concern is clearly not just DfT's alone. DfT set the minimum standard for security (e.g. the amount of liquid that can be carried through by crews), but how the airports satisfy the security requirements is up to them and they can impose more stringent limits if they perceive the need (perhaps dependent on the type of scanners etc that they have installed for example). CHIRP's view is that all airports should operate to the same minimum standard rather than any stricter variation so that crews can plan ahead and will have a clear understanding of what can or cannot be carried through security areas.

## Report No.5 – GHS53 – Random baggage security searches

**Report Text:** Myself and my colleague arrived at security to report for our flight. There were two security staff members present in the security hut: a man, who was monitoring the X-Ray machine, and a woman who appeared to be observing him. After all of my belongings had gone through the X-Ray machine without any issues, the man asked if he could carry out a random search through one of my bags, which I agreed to. He chose the suitcase and asked if I would open it up for him, which I was happy to do.

After opening up the case, the man started emptying my suitcase and putting all of my personal belongings into a tray clearly visible for all to see.

He took out my clothes, including items of my underwear, and also emptied my handbag. I felt this was unnecessary as nothing had been detected through the X-Ray machine, and felt it was an invasion of my privacy. I questioned his actions and asked if it was completely necessary for him to take everything out. The woman replied by saying it is just a random search and that is what they are told to do.

I have never been through security before where the staff have had to empty a suitcase and put the personal belongings into a tray for all to see. Having felt uncomfortable and disappointed with their actions, I notified my company and raised a formal complaint with the airport. We, as a company, have had the following response – "*After screening the baggage through the X-Ray machine, a manual search was carried out in accordance with the National Aviation Security Programme (NASP), and that the search could have been carried out in private had this been requested*".

On the night in question, the staff gave no indication that they weren't happy with the result of the X-Ray machine, nor had the machine detected anything untoward. When questioned why they were doing the search, their response was that it is procedure to carry out a random search, without any justified reason to do so.

Regarding the search being carried out in private had this been requested, I was not aware when I gave consent that my personal belongings were going to be emptied into a tray for everyone to see. Having looked into this issue further, I understand that some airports can impose stricter rules regarding security procedures; however, I find it hard to believe that carrying out a search to this extent is really necessary once baggage has successfully passed through the X-Ray machine.

### CHIRP *Comment*

This incident was further exacerbated by the fact that a private location was not offered for the search and none was visible to the reporter. If an offered private location is remote from the security area then crew, or any staff for that matter, may then have to weigh off the possibility of a delay in reaching it versus privacy.

CAA AvSec stated that a private search area is available at the location and they have no concerns with the adequacy of the current facility. They went on to say that searches of persons and items carried are only conducted with the consent of the person concerned. They further commented that crew members should be aware that they have the option of submitting an MOR for any incident at security which they believe has created a potential risk to flight safety.

From CHIRP's perspective, we understand the need for random security spot-checks, but the initiation of such searches at the behest of the individual security teams is not helpful for crews in anticipating associated delays; neither is the fact that searches can range from a simple hand/feel

check with contents in place to the full unpacking of bags. Distractions or frustrations caused by stressors at security can have safety implications, and it's easy to say that crews should try to factor delays into their timings if possible but this is not always viable in FTL terms.

*'If delays or frustrations do occur then include a review of the team's mental state within the Threat and Error Management (TEM) process prior to flight'*

However, if delays or frustrations do occur then include a positive review of the team's mental state within the Threat and Error Management (TEM) process prior to flight to make sure that everyone is aware of the potential for distractions to be a factor and that they must focus on the task in hand. Departure delays due to security problems should also be reported to the company for them to pursue with the airport management team.

Whilst it may be tempting to simply refuse consent for the 'request' as suggested by CAA AvSec, it's not clear what the consequence of declining a random search might be other than a likely further delay in processing as supervisors are called etc. Finally, we note that there was no provision for the reporters' clean clothes, which were placed in a standard tray that may very well have contained other contaminants (including, potentially, COVID-19 from a previous user) moments previously; bio-security is an important issue these days, and security staff should have suitable procedures for ensuring that such searches are carried out with appropriate facilities for preventing contamination.

## Report No.6 – ENG693 – Lack of correct procedures

**Report Text:** I have major concerns regarding the testing and repair of electronics test equipment used for avionics components (EASA 145) at [Organisation], this has been raised with the Company's quality department/ organisation and things have now deteriorated with the number of redundancies within the Company to a level where non-skilled workers or non-qualified workers are working unsupervised or on live electrical equipment, blind stamping and working to incorrect work instructions. I have submitted an email to the company regarding my concerns.

An un-authorised technician cannot certify any work given to them and should have the work overseen by a [competent] certifying technician. Unfortunately, this is now not the case with [only] Approved Technicians overseeing the work in the test equipment area and with there not being a work instruction fit for purpose in the area at my time of leaving; this may now be different but nothing had changed since the email was raised. I strongly disagree with [Organisation]'s attitude towards the work carried out in this area of the business, as it can be highly complex and requires skilled technicians with many years of experience to work the variety of equipment we calibrate and repair, paperwork does not follow a standard format, which allows an un-authorised technician to work up to a point, which I am sorry to say is to the point of release.

### CHIRP *Comment*

This report was submitted prior to a large number of redundancies within the organisation concerned. We have previously reported in Edition 137 about concerns with competencies and de-skilling after redundancies in another organisation, and this is also a clear risk for companies that downsized during the COVID-19 hiatus in flying. Hopefully, on gearing back up and re-hiring post pandemic, this organisation will address staff competencies. In order to flag this up and formally ensure that competencies are reviewed, the report was passed to the CAA with the reporter's permission. The CAA have advised that the organisation is scheduled for audit this summer and that the relevant surveyor is aware of the report; they will ensure that competency of test staff is audited, and will also review any previous findings regarding workshop competency.

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