



SUBMIT A REPORT

CHIRP always protects the identity of our reporters. All personal details are deleted from our system once a report is completed.

ONLINE

Reports can be submitted easily through our encrypted online form www.chirpaviation.org/submit-a-report



You report it, we'll help sort it

Reporting can sometimes be an issue, which is why CHIRP aims to bring issues into the open through its independent, confidential system



Steve Forward
Director Aviation

This year is the 40th anniversary of the CHIRP aviation programme and so perhaps a good opportunity to reflect on what it's all about and how it's been going.

Although commercial air transport accident rates are extremely low, they have remained relatively constant over the past few decades and a major challenge for the air transport industry has been to develop and promote effective processes to identify key causal factors that in some circumstances might lead to an accident, before the accident occurs.

Reports fall into two broad categories; those indicative of an undesirable trend, and those detailing discrete safety-related events, occurrences or issues. As part of this, since its inception, CHIRP's role has been to improve the quality of feedback from the professional groups involved in air transport operations not just through the reporting of incidents

CONTENTS

- 03 Editorial
- 04 Comments on previous feedbacks
- 05 Reports
- 05 *FC5090/5093* – Crews operating into UK extremely fatigued
- 06 *FC5098* – Report Time
- 07 *FC5102* – Removal of TC Role
- 08 *FC5117* – Fuel Tables

but also the reporting of things that nearly happened (but were averted or didn't develop into a reportable incident) in order to provide additional important information related to contributory causal factors.

Importantly, although mandatory reporting systems make an essential contribution to the feedback process, for many reasons they are less successful in gaining information on human factors related aspects due to individuals' concerns about the personal implications of submitting reports that may be critical of their companies or superiors. Confidential human factors reporting systems were introduced to address this. It is important to understand that the confidentiality part applies to the identity of the reporter not the information; whenever possible the latter is disseminated as widely as possible, but in a disidentified manner so that the reporter cannot be recognised, and only with the reporter's consent.

A confidential reporting system permits individuals who are working within the aviation system to report safety-related matters that they might not report through other 'open' systems. Reporting directly to an organisation such as CHIRP that is totally independent of the operational management and regulatory agencies allows reporters to describe the issue in their own words and ensures that reports are received without being filtered in any way.

More importantly, the confidential process permits the non-attributable reporting of deficiencies and discrepancies that may result from, or cause, human errors without exposing the reporter or other individuals within the system to critical judgement or the attachment of blame. On the other side of the coin, for companies and organisations, confidential reports provide a source of non-attributable safety information to safety management and regulatory agencies that otherwise would probably not be available. This type of information often provides organisations with early warning precursor alerts of potential problems, or substantiates other sources of information.

Within this, our mission at CHIRP – the 'what' – is to help improve aviation and maritime safety and build a Just Culture by managing an independent and influential programme for the confidential reporting of human factors-related safety issues. Our desired strategic outcomes – the 'why' – are:

- better leadership, awareness and attitude towards safety issues;
- improve safety culture by changing behaviours, so that practices, processes and procedures are as safe as they can be; and
- that safety outcomes identified in CHIRP reports are adopted by regulators, managers and individuals.

With regard to Just Culture, nobody comes to work intending to fail: mistakes & errors are part of the human condition. However, sometimes people should have known better (unprofessional), could have known better (training), or may have intentionally broken the rules with good or bad intentions. These aspects all need to be taken into account when reviewing people's actions in any incident or event. CHIRP's four key principles of operation are:

- **VOLUNTARY** - Voluntarily submission of reports concerning events related to safety for the purpose of system alerting, understanding and learning.
- **CONFIDENTIAL** - Protection of identity through disidentification of persons, companies, and any other identifying information.
- **INDEPENDENT** - Trusted, unbiased dissemination of safety information and advice.
- **JUST CULTURE** - Non-judgemental safety net for reporting occurrences that might not otherwise be reported.

With the widespread introduction of additional safety processes such as company 'open' reporting schemes, Flight Operations Data Monitoring programmes and Line Operations Safety Audits, it might be questioned whether there is a continuing need for an independent confidential reporting system when other avenues are apparently more readily available.

However, the evidence from mature confidential systems is that reporters prefer to raise some safety-related issues on a confidential basis; this is demonstrated by the fact that despite the increased availability of alternative reporting methods, the number of confidential reports submitted per annum has remained essentially the same or increased over the past ten years (the 2 years of COVID-19 hiatus in aviation activities excepted). The key is that an integrated approach is essential to ensure that human performance and environmental information are appropriately and fairly coupled with technical/operational data because although data/event logging provides insights into human actions and 'what happened' it does not inform as to 'why' an event occurred, any pertaining external influences and distractions, or an individual's capabilities and remaining capacity at the time.

A few words of caution though, the reports that CHIRP receives represent a fairly small statistical sample and so we should be careful about reading too much into them. Also, CHIRP obviously receives reports that are generally critical of things that have gone wrong and so there is a bias towards negativity that might not reflect the majority experience.

The top-15 key issues reported to CHIRP by Flight Crew over the last 12 months have seen Company Policies and Culture; Duties and Rosters; Commercial/ Management Pressures; and Management Relations well to the fore. Concerns have focused on FTL/FDP limits being regularly approached; rosters containing successive long-haul duties with minimum rest at destinations or after return to the UK; reduced resources (crew availability); pressures to operate to time schedules despite the additional constraints of COVID procedures; late rosters; and many reports of crews who feel fatigued but do not feel they can report as such due to fear of consequences.

Increased efficiency is a laudable notion that has obvious managerial attraction in keeping down costs as some airlines struggle to survive and remain viable in the immediate post-COVID economic circumstances but there's

a trade-off: as James Reason identified in his 'Safety Space' concept, at some point, reducing costs too far can have a negative impact on safety and this needs to be at the forefront of any change management risk assessment – as the old saw goes, 'if you think safety is expensive, try having an accident...'

All of which has echoes from the past and indicates a continued need for confidential reporting so that regulators and senior management remain attuned to concerns and feedback from those at the coal-face. CHIRP will continue to engage with the CAA and organisations where it can to ensure that your concerns are aired in a confidential, independent and impartial manner. The first option should always be to use the formal ASR/MOR/VOR reporting systems where you feel able to because this will hopefully gain the quickest and most complete response to any concerns. But CHIRP stands ready to assist as best we can those who do not feel able to do so or wish to report concerns about things that 'nearly happened' and might not meet the threshold for formal reporting elsewhere.

Engineering Editorial

Forty years ago, an aircraft factory's (now called a Production Facility) aircraft fuel was stored underground in one corner of the airfield, oils in another corner and oxygen elsewhere. Once the aircraft was erected, fuel was uplifted, oils and other fluids added, and oxygen systems filled. Once in service, the cabin was stocked with flammable spirits from duty free shops and, as soon as the seat belt sign extinguished, at least fifty percent of the passengers lit up cigarettes. Who thought flying is safe? Air safety is the result of the people involved, whether they be a member of a regulatory authority, a Captain, Engineer, Cabin Crew, Air Traffic Control Officer, Ground Handler, even the toilet-servicing truck driver.

The first fifty years of aviation took us from the Wright Brothers to Super Sonic Flight followed by Concorde twenty years later but has aviation improved in the last forty years since the introduction of the CHIRP Aviation Programme? Sadly, supersonic passenger flight is unlikely to really return in the short-term for environmental reasons although efforts are underway to bring such aircraft back into the commercial fleet.

Engineering input has continually decreased as Major Maintenance has become less labour intensive and this has led to changes in Line Maintenance too, where some traditional engineering functions have been delegated to non-technical staff, such as checking doors, hatches, cowlings and panels, headset on pushback and even gear pin removal.

Flight Crew Turnrounds mean that an engineer often only sees the aircraft in the dark at the end/start of the day or during night shift. If a member of flight crew does leave the flight deck on a turnround (remarkably, there is evidence that some do not but thankfully that operator no longer exists) from a Human Factors (HF) point of view, the pilot has just landed a serviceable aircraft, so what could possibly be wrong on the outside? A turnround inspection by an engineer is not influenced by any such feeling of comfort. From a training and licensing

perspective, there is no longer a requirement for Technical Orals, where one has to prove they know their aircraft (one cannot go to the maintenance manual for experience on type), and Part 147 Type Training seems to be becoming shorter and shorter. Standards being driven down by cost perhaps?

Positive engineering things from the last 40? Perhaps less engineering input will hopefully reduce maintenance error. Quality Assurance auditing, Safety Management Systems, open, objective and transparent Internal Reporting and of course CHIRP, are all designed to improve safety. Modern Health and Safety regulations and practices keep us safe whilst working in our dangerous environment and to not injure ourselves or others. The introduction of Fault Isolation Manuals improves trouble-shooting.

We have more electronic Maintenance Manuals and they are more sophisticated (sometimes even in colour which has a real HF benefit, unless your employer only gives you a black-and-white printer). Little black books of cheats are no longer allowed. We now record the approved maintenance data used, which may possibly have derived from liability concerns but does encourage us to read the data, especially as one has gone to the trouble to look the reference up anyway (although, recording a Standard Practices Chapter reference when a genuine one is not available opens a myriad of negative issues).

Shift handover is now a formal process, as is Check Flight brief and de-brief. We have improved our approach to Acceptance of Components thereby reducing the dangers of SUPs (Suspected Unauthorised Parts) and Bogus Parts. Our understanding of the safety implications of components in electrical systems and ignition sources in fuel tanks has improved with EWIS and FTS training. Human Factors training has increased our ability to predict, avoid and understand errors.

How can we improve further? We need a step change in HF training - not Computer Based Training - less on how the eye works and more engaging interactive sessions, on errors and incidents, ideally from within our organisations but at least on the aircraft our customers operate (internal and/or external customers). We can continue to report our errors and those of others, report safety concerns internally, nationally, even internationally.

We must keep reporting discrepancies in aircraft design and approved data to the OEMs and encourage our organisations to press for meaningful change. We must encourage our organisations to listen, perhaps add a suggestion scheme to the Internal Reporting vehicle, then we can share with them the day-to-day challenges so we can start to learn from everyday work, not just from errors, incidents and accidents.

We, as always, have to maintain concentration. It may seem normal to drive to work and not remember the journey on arrival but during inspections we must take at least two steps/stages back the minute we find ourselves thinking of another issue or being distracted. It may fall to the engineer to stop passengers walking under wings or baggage loaders walking through a propeller arc because you may now be the only staff member on the ramp in these times of staff shortages. Arguably Base Maintenance inspections could be subject to more interruption and not just because they

generally take longer. Base maintenance inspection could uncover a can of worms leading to an MOR and possibly an AD, so there are heroes of the good spot amongst us all, including our cleaners and detailers.

Signing the Certificate of Release to Service (CRS) is the point where you demonstrate taking responsibility for your actions and sometimes the actions of others. That responsibility starts with certification but can continue for months or even years after the maintenance has taken place unless superseded by the maintenance having been performed again. In the current climate, keep in mind stressors may be building hour on hour and day on day. Perhaps the greatest (Human Factors) improvement in modern society is that if you are having personal difficulties, there is help available and you do not have to pretend you are strong anymore.

Phil Young, Engineering Programme Manager

COMMENTS ON PREVIOUS FEEDBACKS

Comment No 1: Approach Ban

Regarding CHIRP Air Transport FEEDBACK Edition 142, Report 2 – Approach Ban. I take an interest in this issue because before retirement 17+ years ago now (hard to believe), I was responsible for Aerodrome Operating Minima in [Airline] and, through membership of several JAA committees, the development of common European rules. I understand these have mostly survived the transition from JAA to EASA, though since this occurred after my watch, I am prepared to be corrected.

Your reply correctly sets out the basic rules on commencement and continuation of (an instrument) approach with regard to RVR or Visibility, but to be fair to your correspondent, this wasn't the question they asked. I hope that the situation hasn't changed markedly since I retired, but when I was involved, what they describe ('RW visible from 20 miles') could have been termed a Visual Approach for which visual minima applied. There was always a lot of confusion and misunderstanding, particularly may I say among the regulators, how visual approach minima worked and how they could possibly 'be below' the corresponding Instrument approach visibility minima. In [Airline], visual approach minimum RVR was typically 600m. This was a compromise within the company, as there were many managers who wanted no limit at all. Later, after a fierce argument with the Flight Ops Inspectorate who insisted the minimum should be several miles, this limit was raised to ...800m... The point is that on a visual approach the descent below Minimum Safe Altitude can be done by visual means; it doesn't matter that ATC has 'cleared the X approach' or that the flight follows the tracks and profile of an Instrument approach, the path and terrain clearance are still visual, with the runway in view at all times below MSA.

The visual approach RVR was then chosen for the reasons

you state, to guard against late loss of visual reference in shallow fog, but if the Instrument approach had a high DH, the visual approach RVR could be below the relevant instrument approach RVR. And the relationship between Instrument approach DH and RVR was originally set with approach success rate in mind, so RVR increases as DH increases. Finally, there was (is?) a rule that stops people switching to 'visual' minima if they become visual below MSA, but above 1000ft...

So the crew members who your correspondent says were carrying out a LOC/DME approach in 400m, well below the 1100m limit, were indeed wrong, but not necessarily quite as wrong as implied. Incidentally some people find it easier to accept the argument if it is put to them that the visual approach minima are in effect, say, 2000ft DH/RVR 800m... so are they really lower than 400ft/1000m?

CHIRP Response: There is scope for confusion over VFR and IFR RVR minima but we took the original reporter's comments to be that people were not applying IFR minima whilst conducting an IFR approach. Above 1000ft, pilots might elect to conduct a visual approach if they can see the airfield but should declare that fact to the controlling agency so that everyone understands what criteria are being applied.

What should not be done is to conduct an instrument approach visually below 1000ft with RVR less than IFR limits because if visual references are suddenly lost as the aircraft approaches the ground then not only can an unsafe situation develop but any subsequent last minute go-around will generate significant workload both in the cockpit and for ATC.

Comment No 2 – Recycling Parts

A very interesting and informative article on the recycling of aircraft parts (FEEDBACK Edition 142 – April 2022), but I feel you missed the very final point of airworthiness control of bogus parts and that's the CAMO. There are a few reasons for me saying that but, before I mention those, let me just say that the company I work for specialises in being the CAMO on aircraft in between owners or operators and currently that means parking/storing aircraft at a scrapyard airfield and hoping they go on to be sold to an operator and not sold to the scrappers, so you can see my interest in your article.

So, the reason I wrote to you. It's difficult to convince CAMO staff that they are part of the very final part of the airworthiness chain on aircraft parts when they are not mentioned in articles like yours. The biggest problem with this is we (CAMO office staff) never see the actual part and possibly never see the aircraft. We really are the final catch point before aircraft fly away to new owners (assuming they don't cross the invisible line to the scrapyard), and this is especially hard to manage with Part 145 staff working on scrap aircraft before lunch and airworthiness-controlled aircraft after lunch...I have been very impressed by the CAMO staff finding bogus parts with only the paperwork to

go on, without seeing the actual part, but don't tell the Part 145 staff that...It's a small point but may be content for your next editorial introduction.

CHIRP Response: Reports and comments from Continuing Airworthiness Management Organisations (CAMO) rarely arrive at CHIRP and this comment is warmly received. It's unfortunate that the Continuing Airworthiness Management aspect of component control was missed out by us so we humbly accept the admonition by the reporter! It's comforting to know that CAMO staff weed out issues both in routine scrutiny of Technical Records and when the aircraft is undergoing an Airworthiness Review Certificate (ARC).

In a Part 145 organisation, the Goods In Inspectors (GII), the Licensed Engineer and his Mechanic all carry out their respective duties to establish the status of a component prior to installation. In cases where completed task paperwork is drip-fed to the Part 145 Technical Records staff and then further drip-fed to the CAMO, there is the opportunity for the Authorised Release Certificates to be examined by the CAMO staff. In cases where the Work Pack is sent to the CAMO as "dirty finger" records after the aircraft has returned to service, then the protection still exists but costly corrective action may be required if something is found to be amiss by the CAMO staff. Electronic maintenance records speed up the drip-feed process but they have their own drawbacks. Whichever channel is used, this aspect should be assessed for safety risks, or covered by the organisation's Safety Management System if applicable.

Reports

Report No.1 – FC5090/5093 – Crews operating into UK extremely fatigued

Report Text FC5090 (abridged): This report is to raise awareness of the practises of a foreign operator which contravene the spirit of the FTLs, and to raise a grave concern with regards to [Airline] flight deck crews operating into UK airports and through UK airspace. We have been continuously assigned rosters with block hours exceeding 130hrs per month based on a modified FTL that the company has been unilaterally changing to their convenience. For [Airline] it is now not only possible, but commonplace, to do a 23hr FDP which is not possibly viable or doable. Those FDPs were originally for COVID support freight ops but now have been extended to 15 destinations on our network. The passengers in the back are oblivious to the exhausted pilots and what we have to endure at the threat of being fired.

[Airline] insist that you log only half or two thirds of the flight time on augmented sectors for you to remain below the 1000hrs legal limit while your actual flight time might be in the 1300/1500hrs range. The almost universally agreed flight time limit of 900hrs a year has been imposed for a reason after civil aviation authorities have collated data and studies; [Airline] does not respect nor believe in that universally agreed limitation.

Understandably, a lot of [pilots] are very hesitant to come forward and submit reports because they are afraid of retaliation and probably termination. Unfortunately this company subsists on a culture of fear, contrary to their stated 'open door' policy and make-believe transparency efforts. We are overworked, overstretched and overstressed, all under a semblance of legality. We also have been told 'unofficially' by people in management (who still care about their pilot colleagues, and are under the same threat of termination themselves) to report sick instead of going through the FRMS fatigue reporting system because the company would look back at our operational history to find an excuse to retaliate and probably find cause to terminate your employment.

I attach [ACN Aircrew Notice]. The ACN illustrates a lot of the wrongdoings going on in terms of logging of hours and the breaches of safety that have been now institutionalised here at [Airline]. On page 3 of the ACN, in the 'general notes for pilots' section, it clearly states that for 4 crews operating a flight (as for example a flight to the United States) the relief crew logs total time minus 1:30 minus Crew A rest period, and on the way back the same crew logs total time minus Crew B rest period, which amounts to 50% of the total block time. This is illustrated in the rosters I have submitted. In view of this, we can fly (in all actuality!) 200 block hours in 28 days with the company getting away with it as we technically are allowed to log only 100 (50%). This goes against all laws and regulations and is a blatant disregard for the 100 hour in 28 days rule which is clearly stated in [NAA] duty periods regulations.

Report Text FC5093 (abridged): Pilots [at Airline] routinely fly over 1000hrs a year and fly up to 180 block hours a month. However, at the moment the flight time for 4-pilot augmented crew for a 13:30 hours flight is 07:30 for crew A and 06:00 for crew B. The latest change is that, in addition to time in 'Inflight rest' not counting, the time in the jump-seat during take-off and landing (1:30) also doesn't count. Similar rules apply to 3-pilot crew.

Company Comment (abridged): The core point raised in your letter relates to FTL. In this regard, we operate in full accordance with the 'Flight and Duty Time Limitations and Rest Requirements' approved by our regulator and are satisfactorily meeting its periodic regulatory oversight reviews.

The referenced Aircrew Notice (ACN) is not connected with FTL. That refers to the standardisation of procedures for Logbook hours, which is based upon the requirements as stipulated in [Regulator document], Aircraft Licensing; and its associated AMCs. This process too has met the scrutiny and standards of the [Regulator]. There has not been any recent change to these established processes.

Fatigue Risk Management is part of our approved Safety Management System and addresses identified subjects that may require specific mitigation or attention. This is a dynamic process and operates in active consultation with industry subject matter experts.

We also use the Boeing Alertness Model (BAM) for fatigue hazard identification as a supplement tool. This is

used in the planning phase in order to support the crew rostering team in assigning duties to more than 17,000 aircrew. Flight crew fatigue levels are closely monitored by our FRMS and based thereupon, crew pairings i.e. rotations are reviewed on a monthly basis and most of our long haul operations are operated with an extra crew complement in addition to the minimum legal requirements.

Based on the fatigue reports, we have made changes to our scheduling practices as required. This is a component of our ongoing fatigue mitigation as part of our Safety Management System. Engagements with industry subject matter experts with respect to fatigue surveys and comprehensive fatigue studies are part of our ongoing practices in this domain.

CHIRP Comment: The essence of the issue is what portion of actual time in the aircraft is included in the airline's FTL/FDP calculations? The airline's ACN states that *"Operating hours logged in [company flight time recording system] towards Flight Time Limitations (FTL) ... are based on ... the entire time Block Time minus the time spent resting in an approved rest area."* So any time resting in an approved rest area (i.e. not at the controls) appears not to be counted whereas the industry norm is that a rostered crew member is considered to be 'operating' if they carry out duties in an aircraft during a sector irrespective of their minute-by-minute actual activity in the aircraft. CHIRP sought clarification from the airline about FTL calculations but received only the statement above largely relating to the recording of logbook hours. Whilst logbook hours justifiably only take into account time spent at the controls, the whole portion of the flight time within a duty as an 'Operating Crew Member' should be used for the purposes of FTL calculations, including rest periods in flight.

The regulation of foreign airlines lies beyond the UK CAA's remit, but operations within UK airspace are conducted in accordance with protocols and responsibilities overseen by the Department for Transport (DfT), assisted by the CAA Air Safety Unit. Subsequent to receipt of this report and CHIRP's engagement with DfT, they have established an International Risk Working Group to review and prioritise issues relating to foreign airlines operating in UK airspace and say that this specific issue will be progressed within that structure.

Associated Regulations:

EASA [Regulation \(EU\) 965/2012 Annex III Part-ORO ORO.FTL.105](#) Definitions (12) defines flight duty period (FDP) as: "a period that commences when a crew member is required to report for duty, which includes a sector or a series of sectors, and finishes when the aircraft finally comes to rest and the engines are shut down, at the end of the last sector on which the crew member acts as an operating crew member".

[EASA GM1 ORO.FTL.105\(17\)](#) Definitions defines 'Operating Crew Member' as: "A person on board an aircraft is either a crew member or a passenger. If a crew member is not a passenger on board an aircraft he/she should be considered as 'carrying out duties'. The crew member remains an operating crew member during in-flight rest. In-flight rest

counts in full as FDP, and for the purpose of ORO.FTL.210 [Flight Times and Duty Periods]."

EASA [Regulation \(EU\) 965/2012 Annex III Part-ORO ORO.FTL.210](#) Flight Times and Duty Periods states that: "...(b) The total flight time of the sectors on which an individual crew member is assigned as an operating crew member shall not exceed:

- (1) 100 hours of flight time in any 28 consecutive days;
- (2) 900 hours of flight time in any calendar year; and
- (3) 1000 hours of flight time in any 12 consecutive calendar months.

Report No.2 – FC5098 – Report Time

Report Text: Our airline has changed the report point to our crew room, which is after security and bag drop. This allows a reduced FDP so that they can operate [what were] 3-crew flights with 2 crew, by not including duties commensurate with operating the flight in the duty time. It is not unknown to take at least 1 hour to get to our crew room from the first duty. Can you please clarify if this exemption is allowed? This is further exacerbated by some flights now requiring a 2 hour report for COVID testing. Do the FDP tables take into account we need to allow at least an hour and a half from the car park to report for duty with this amendment? This means that we arrive at the car park 3½ hours before departure for what could be a 11 hour 2 crew duty.

CAA Comment: The CAA Oversight Teams concluded that there is no need to mandate an extended Report Time or force an amendment to OM Part A Section 7 however, they will keep this matter under close review. The current crew report practice has been in place for several years and is designed to support crew meeting face to face for pre-flight briefings. While meeting COVID requirements were a significant burden, the potential delay at Security was factored in by the additional travel time allocated to reach the reporting point. On some circumstances, where the additional travel time may have not covered the delay, the Operator worked with the airport to improve on and mitigate the additional time/stress to an individual's commute.

CHIRP Comment: There is no 'standard' reporting location within regulations because every airport and airline's circumstances are different and so it is not possible to be prescriptive - reporting point and FDP authorisations form part of the CAA oversight of each airline's operations manual. Although now somewhat overtaken by events as COVID-screening delays subside, we approached the CAA to see whether they were aware of any change in reporting point for this airline and airport and they engaged with the Company.

Contrary to the reporter's assertion, it appears that the reporting point for this airline has been the crew room for many years and has not changed. The Company responded to the CAA by saying that they added additional time within FDP calculations to account for any COVID-induced security delays in reaching the crew room, but it could be that this and the engagement that the Company were having with the airport to ensure that any actual delays were within the additional time factored into rosters may not have been widely appreciated.

Report No.3 – FC5102 – Removal of TC Role

Report Text: [Airline] and [Ground Handling Company at Airport] withdrew the role of Turnaround Coordination (TC) in January 2021. This was not communicated to crews. It took place at a time of low levels of flying and low loads. TCs were also banned from boarding ac as a COVID mitigation. No safety control measure is visible. Local crews are using practical drift and local knowledge to overcome operational difficulties but short cuts of a safety nature are also happening.

In one example a 1-tonne plus load was loaded in the wrong hold and only spotted by the crew. At the same time [Airline] has introduced further goal-conflict by cutting 5 minutes from its boarding time. Crews are under time pressure and now must be aware that all loading and ramp activities are not co-ordinated by a single person and many are carried out by staff recruited for less safety critical roles. Staff are unable to confirm who security-checks the holds and who is responsible. They are unaware of the LIRF [Loading Instruction Report Form – the loadsheet] or able to produce one despite having signed to say they have loaded the aircraft in accordance with it.

Local management have dismissed concerns saying the trial is a success and any operational obstacles shall be overcome with further recruitment of front of house staff who are customer facing to carry out the former TC role. [Airline] are constantly piling more pressure on pilots to be the last and in many cases, only, line of defence whilst being in denial of the goal conflicts it creates with time pressures. The fact that any such changes are made whilst crews struggle with low levels of recency and high anxiety over external pressures shows a total lack of modern safety management.

The BALPA company council (CC) have engaged [Airline] management direct on this matter and quoted ASRs that members have raised, especially the tonne of load in the wrong end of the aircraft. [Airline] have responded by saying they are now conducting an investigation. BALPA are also currently challenging other ramp related programmes in [Airline] that, when brought together with the above, personify the “lining up of the holes in the swiss cheese”.

We have constantly fought fatigue battles at [Airline] over the pre-COVID years and now, whilst crews are at their most vulnerable in terms of recency and distraction, [Airline] introduces goal conflict between cabin/flight/ground ops teams by introducing boarding targets that are creating a rush-and-report-early culture as referenced by a recent survey of BALPA members.

This latest programme is called “xxxx” and has whisked away another 5 minutes of pre boarding prep time for crews who are largely mitigating this with short cuts on safety checks and reporting early as the culture priorities on-time performance before safety, albeit subtly whilst stating safety is the number one priority (of course we all know stating such a thing does not make it so). This allows for less headcount on the ground which ties into the piece above where we have inadequately trained staff in low numbers under immense time pressure now being responsible for

critical safety actions for which they feel under trained (load sheets), the effects of which we have and continue to see.

We have seen no risk assessments for the removal of TC roles and have been told by local ramp staff to not expect to see them returned as local management have quoted how much this has saved.

CAA Comment: It is a regulatory requirement that operators have oversight of their contracted activities and that the assessment of contracted safety-related activities should be included in the operator’s safety management and compliance monitoring programme. Therefore, if there was a change in the condition in relation to these activities that may affect the operations, a management of change process is required to be completed.

The Operator conducted a comprehensive investigation, after receiving several safety reports, to assess the implication of the removal of TC on their operations. This investigation extended to load control, passenger supervision on the ramp, coordination of turnaround activities and communications between ground and flight crew. Subsequently, the operator addressed its identified safety threats through the introduction of several safety recommendations as part of their mitigation strategy. It was also acknowledged that an effective usage of the management of change process would have likely identified the reduction in safety standards and would have also identified safety risks associated with the above-mentioned activities.

CHIRP Comment: Whilst there are obvious cost savings to be made by reducing head-count, some roles are pivotal and their responsibilities must be ensured by other means if the post is deleted. It is not for CHIRP to comment in detail on individual situations such as this because we do not have the full facts, but it is worrying that those affected by the change were seemingly not aware of their extra responsibilities or how the associated threats to safety were otherwise being mitigated.

The CAA are unable to share their detailed oversight outcomes with us as an external organisation, but their comment about change management and risk assessment hint that more could have been done in these respects; given the reporter’s comments about loading issues and training, we agree. If anything, as aviation recovers in this post-COVID context of constrained resources and new procedures, more supervision is required, not less, and the TC activity is an important ‘last-chance’ coordinating activity that must surely be safeguarded.

Although it may well have been deemed appropriate to persist with the removal of the discrete TC role, we understand that it was subsequently recognised that this can only be sustained in future after the introduction of several unspecified safety recommendations/mitigations, all of which should have been identified beforehand as part of a robust change management review rather than post-implementation.

Report No.4 – FC5117 – Fuel Tables

Report Text: The company I work for has produced a quarterly fuel & carbon dashboard illustrating Captains' fuel loading decisions based on a graduated position in relation to peers. Those to the left of the fleet statistic chart have loaded extra fuel in addition to company SCF (Statistical Contingency Fuel) and those to the right have loaded minimal down to nothing extra on top of SCF.

This rather blunt tool does not reflect a multitude of variables including the assessed airmanship risks of the day that may be deemed to fall outside of the SCF feed data. Much of fuel carriage assessment comes from years of experience, coupled with accurate modern data feeds such as SCF. Fuel carriage decisions include variable/extreme weather, unforeseen level or route deviations that when assessed fall outside of loaded contingency in terms of perceived risk, as well as a comprehensive knowledge of the company fuel policy.

This has never been completely black or white and no doubt never will. Indeed, an excellent decision to carry extra fuel based on the crew's judged risk which subsequently is not used will be shown as discretionary fuel "not required", perversely moving the Captain to the left of the chart. In reality this is discretionary fuel simply "not used". Whether it was "required" or not is down to the judgement the Commander utilising knowledge, experience, flight specific data and the full spectrum of the vagaries of the day ahead. The pilot's arrowed position on the chart simply and crudely represents how much extra fuel was loaded in relation to peer comparison.

Monitoring of SETO (single engine taxi out) & SETI (single engine taxi in) is however a useful area of data supplied, providing it does not encourage "competition". Pilots tend to be competitive in nature. Loading sensible fuel loads should be driven primarily on safe practice, followed by commercial awareness and further today, green credentials. Making this decision competitive in this fashion merely interferes with those safe priorities and indeed the focus ought to be equally on those on the right of the scale who think it's "clever" to blindly rely on SCF data. The unwary will find themselves with low fuel states down a "blind alley", being driven by an unintelligent and false sense of elitism, to immaturely please their positioning on the chart.

Operating at a zero cost index or selecting speeds close to the best lift/drag ratio speeds to save fuel can place the aircraft in close proximity to VLS (Airbus) causing havoc with ATC & other traffic in close proximity (.72 cruise Mach by example is not practical or ideal). This lack of awareness and due consideration results in other carriers having to alter their trajectories which in turn will damage the collective carbon footprint by increasing collective fuel burn. Further to this if unforeseen turbulence or wake is encountered the safe margins as well as decision options are also compromised.

Enough knowledge exists for all modern commercial pilots to be responsible regarding fuel usage. Intelligent safety orientated and commercial monitoring is no doubt prudent as well as showing responsible carbon footprint

awareness. However, to make a competitive incentive to see whom can carry the least fuel can be viewed from a safety perspective as an irresponsible and reckless stance from an airline employer, albeit with good but misplaced motives at heart. Indeed, if a company chooses this behaviour then perhaps a "magnifying glass" ought to be directed at those carrying the least fuel to ensure safe practice.

In summary, the importance of a decision regarding a safe quantity of fuel ought not be influenced by a position on a graph. If it does, then this leads to a question over the quality of Command selection, training and authority regarding safe fuel decisions.

Company Comment: The graph depicts whether Discretionary Fuel was loaded on a flight and whether it had SCF allocated to it or 3%/5% Contingency Fuel. As the reporter correctly explains, the judgement as to whether Discretionary Fuel should be loaded relates to multiple factors but is usually related to destination weather. The benefit of fuel plans which have SCF is that they have some statistical knowledge which can mitigate some of the unknown factors from the fuel decision - for example, a regular early descent, which cannot be flight planned.

As for some routes that may well not fit SCF rules, we agree that routes that have insufficient data to provide SCF are more exposed to requiring Discretionary Fuel to be loaded. The benefit in having SCF (95th percentile) is that it provides the crew with a question to ask themselves when deciding on the amount of fuel they are going to load for a flight – "is this the one flight in 20 that requires more fuel than has already been allocated today?" During storm Eunice we added additional fuel to all flights operating during this period and provided Destination Alternates that were not affected by the strong winds and therefore a viable option to use.

The 'ME' arrow on the graph shows where the individual is in relation to other Captains on the fleet, and simply shows the application rate of when Discretionary Fuel is loaded (not the amount). For example, a pilot who loads Discretionary Fuel on every flight they operate during the period, would be towards the left-hand side of the graph. This may be due to the fact that the individual was faced with a bad weather forecasts on every flight they operated during the period. The decision to take Discretionary Fuel in such circumstances may be wise considering traffic volumes and/or the destination airport they are operating to. However, it would be unlikely that the same pilot would be faced with bad weather on all of their flights in the next period, so their positioning within the graph is likely to change more to the right because Discretionary Fuel would be less likely to be carried. If the said individual loads Discretionary Fuel for every flight they operate, they would either be extremely unlucky in terms of weather at destination for all the flights they operate, or they lack the confidence in the fuel planning in the flight plan and/or the confidence in understanding fuel policy.

The dashboard is purely for the individual; it allows the individual to see what others are doing on the fleet, without identifying who those individuals are. It allows the individual to assess how effective they are in terms of fuel policy

knowledge and fuel saving initiatives compared with other Captains on the fleet. There are no incentives given to pilots who regularly take less fuel than others and, similarly, there are no criticisms given to those who take additional fuel on every flight they operate.

With regard to concerns about the influence that chart position has on the decision process and the risks to those carrying inappropriate low levels of fuel, we continue to monitor the amount of low fuel events we have as an airline and these trends have not changed since the dashboards were introduced. We will continue to monitor these events.

With respect to RETO and RETI [aka SETO and SETI in twin-engine aircraft], the use of the dashboard is to show how often a certain initiative is used and is simply there for the individual to see their results alone. They are also able to see what contribution their actions have (be it positive or negative) as to the environmental impact of aviation. Safety is always the primary factor for anything we do at [Airline]. We have every confidence in the quality, standard and training of our pilots, and our fuel policy and company culture ensures that crew always have the authority to make safe decisions, especially in terms of fuel loaded.

CHIRP Comment: We're grateful for the company's extensive comments explaining the rationale behind the fuel graphs and their intention to enlighten captains as to fleet norms and encourage them to improve their individual environmental carbon footprint. Notwithstanding, it's human nature to reflect on one's own performance in

relation to others, and some less experienced captains might conceivably perceive implied pressure or incentives to carry less additional fuel even if they felt they needed it in what was ultimately a safety-critical decision.

It's probably fair to say that some captains may habitually carry too much fuel but, equally, there are probably those who are at the other end of the scale and who habitually accept the bare minimum which could also be a cause for concern. Ultimately, the decision on fuel loads is dependent on many factors that are route and weather dependent and, if used in the intended manner, at least the company's charts and fuel calculations offer a basis for decision-making on the day given that they take route factors into account by using a statistical norm for what additional fuel was required from the last 100 flights.

The CHIRP Aviation Programme also provides a facility for confidential reporting of **Bullying, Harassment, Discrimination and Victimisation (BHDV)** where there is an identifiable safety-related concern. CHIRP has no specific expertise or resources to investigate BHDV reports. CHIRP's role is to aggregate data to build a picture of the prevalence of BHDV in the aviation sector. See our [BHDV page](#) on the CHIRP website for further information.



Steve Forward
Director Aviation –
ATC, Flight Crew and GA

Jennifer Curran
Cabin Crew Programme
Manager – Cabin Crew

Phil Young
Engineering Programme
Manager – Engineering

Rupert Dent
Drone/UAS Programme
Manager – Drone/UAS

The CHIRP Charitable Trust,
167-169 Great Portland Street,
5th Floor, London, W2 6BD

01252 378947
mail@chirp.co.uk
reports@chirp.co.uk
chirp.co.uk

Ernie Carter
Ground Handling & Security
Programme Manager –
Ground Handling and Security

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

CHIRP FEEDBACK is published to promote aviation safety.

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

Bullying, Harassment, Discrimination and Victimisation (BHDV) in Aviation

One-off or repeated instances of BHDV can have a deleterious effect on individual performance, mental health, stress and company culture, and these in themselves can have second-order safety implications.



In conjunction with the CAA, CHIRP has implemented a BHDV reporting portal that will log received reports and associated information within the CHIRP confidential database. Reports can be submitted using the CHIRP online reporting portal at www.chirp.co.uk

Although CHIRP has no specific expertise or resources to investigate BHDV reports, when a BHDV report that has an impact on safety is received, CHIRP's role is to anonymously aggregate the data with other associated reports to build a picture of the prevalence of BHDV in the aviation sector, the human factor and safety impacts this may have, and explore improvements that might be made. As part of this, CHIRP will provide the CAA with disidentified, aggregated BHDV statistics and information on a regular basis but only CHIRP staff will have access to report details, there is no connectivity to CAA systems.



See our BHDV page at www.chirp.co.uk for further information.



CHIRP

Confidential Human Factors Incident Reporting Programme