Luxaviation
Safety Matters

Welcome to the Luxaviation Group Safety Matters Newsletter

We aim to publish this newsletter quarterly to enable information sharing across all Group entities. We will include safety reports submitted from across the Group as well as articles that we feel you may be interested in.

If you have any comments, suggestions or wish to contribute, please contact:

Luxaviation Safety Matters

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www.luxaviation.com

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Is Fate the Hunter?

Some of you recognize the title of my favorite book by Ernest Gann, Fate is the hunter, first edited in 1961, describing the infancy of aviation transport world from the 30s to the 50s as pilot for American Airlines. My "story" would have been to entertain you through this.

Then yesterday, a Greek Canadair, crewed by Christos Moulas and Periklis Stefanidis, collided with the ground while engaging in one of the noblest missions that aviation provides: fire suppression. If you ever were around water bomber crews, the humility of these modern Prometheuses are impressive, their state of mind is safety driven and ALARP is lived to the fullest. Their flights are an impressive collection of constant windshear, violent turbulent hot air, massive change of center of gravity close to the ground at low speeds and at the edge of the performance envelope.

Coming back to low as reasonably practicable.

ALARP can then be defined as a compromise between a safety concept and the time and budget needed to control it. Which then, inherently, represents a tool to control this risk. Risk management being part of our industry, I am rather proud of the time and budget allocated through management commitment. Looking at the results of the survey last year, one can see a tendency towards a sustaining Safety Management Model. We are shifting in our safety management from a regulatory conformance to an effective model. This would not have been possible without our own Prometheuses and they will never be applauded enough for the gift of fire received by us, the general population. Thank you to all people involved in our safety management efforts.

Our hunting fate became faith in the safety management system.

Robert Fisch
Chief Aviation Officer

Emerging Risks During Summer

After two years of significant traffic reductions, the aviation industry experienced a strong recovery in summer 2022. However, the recovery came together with significant travel disruptions. Travel demands and traffic levels for summer 2023 are forecast to be significantly higher than in 2022.

The industry continues to face significant challenges in having sufficient qualified personnel, availability of aircraft, spare parts, and traffic slots to cope with the increased demand. Precursors of possible disruptions have already been evident in May 2023.

EASA have published a Safety Information Bulletin (2023-05) which identifies the possible risks emerging during summer 2023, as follows:

*   Ineffective management of change
*   Shortage of operational and technical staff (not limited to flight and cabin crew)
*   Various aspects of cyber-attacks
*   Loss of knowledge, expertise and transfer of experience following staff turnover
*   Ground handling training programmes disruption
*   Missing suppliers and low availability of parts
*   Disruptive passengers
*   Capacity issues

Luxaviation are monitoring these risks through the safety risk management process. We ask that if you experience any of the above issues, to please raise a safety report so that we can gather the data required for the risk assessments and identification of suitable mitigation.

If you require further information, please contact your safety team, or refer to the following website
https://ad.easa.europa.eu/sib-docs/page-1

Suzy Gautrey
Editor- Safety Matters

Feeling Fatiiiiiiguedddddddddd……zzzzzzzzzz…...?

> *"It amazes me that contemporary work and social culture glorify sleeplessness in the way we once glorified people who could hold their liquor. We now know that 24 hours without sleep or a week of sleeping four or five hours a night induces an impairment equivalent to a blood alcohol level of 0.1%. We would never say, "This person is a great worker! He's drunk all the time!" yet we continue to celebrate people who sacrifice sleep. The analogy to drunkenness is real because, like a drunk, a person who is sleep deprived has no idea how functionally impaired he or she truly is."*
>
> *Fryer, B., & Czeisler, C. A. (2006). Sleep Deficit: The Performance Killer. Harvard Business Review. Retrieved from https://hbr.org/2006/10/sleep-deficit-the-performance-killer*

The importance of Self-Assessment:

During Summer Ops (long flight duties, long commutes, airport diets, lengthy flights, jetlag, etc.) make sure to find personal preventive strategies that best suit your personality and workload:

- Make use of good Sleep Hygiene (at home or on layover)
- Pre-flight Nap strategies – daytime naps, before shift work decrease fatigue and increase performance, as do naps during a night shift and,
- During challenging missions consider the possibility to brief your team on fatigue management or inside the cockpit to raise possible decreased performance if you're not feeling as fresh as usual.

Teamwork is often the best immediate mitigation measure for dealing with potential fatigue.

The ideal life of a fatigue risk management:

Fatigue statistics can prove to be extremely valuable leading indicators, but you need to remember that for the SMS, "paperwork" and "performance" are equally important. Why? Simply having policies, training, and promotion dedicated to fatigue management is not enough.

The first thing the SMS can do is understand fatigue in the organizational context and this safety data (your safety reports) will be the most important source for clarifying if there is a fatigue concern and its severity.

How does it work? After collecting the data, we can establish trend reports, the exposure to fatigue, how much the employees are affected (or feel that are affected) by fatigue, etc. We need meaningful data to work on and find the best mitigation measures possible.

How to report then? From your mobile or other friendly tool simply drop 3 or 4 lines on how you feel affected by fatigue. Possible contributing factors, duty period, physical or cognitive symptoms, level of alertness, etc.

If reluctant why not use our user-friendly way to confidentially report? After all, it is normal in the aviation environment to become overly fatigued at times.

Never underestimate the power of fatigue, especially during the high peak seasons. Effects such as impaired alertness, decreased performance, and long-term health effects such as anxiety and feelings of depression are just a few of the possible consequences.

> *Fatigue is a very real problem for flight crews. While aviation operators can help mitigate the risks of pilot fatigue through education, changes to flight hour limitations and other fatigue management programs, the ultimate responsibility of fatigue management lie with pilots themselves.*
>
> Pilot Fatigue - A Serious Threat
> (flightlineweekly.com)

For any additional information on Fatigue Management contact your AOC Safety Manager.

Isabel Quina
LXEA OPS Safety Manager

Reporting Fatigue

As you are all aware, we score felt fatigue on all flights using the Karolinska Sleepiness Scale (KSS), in order to monitor trends within the company and on individual fleets or aircraft. These scores are collated at the end of each month where they are analysed and published in Centrik. However, we have identified missing fatigue reports related to KSS scores greater than or equal to Seven on several occasions.
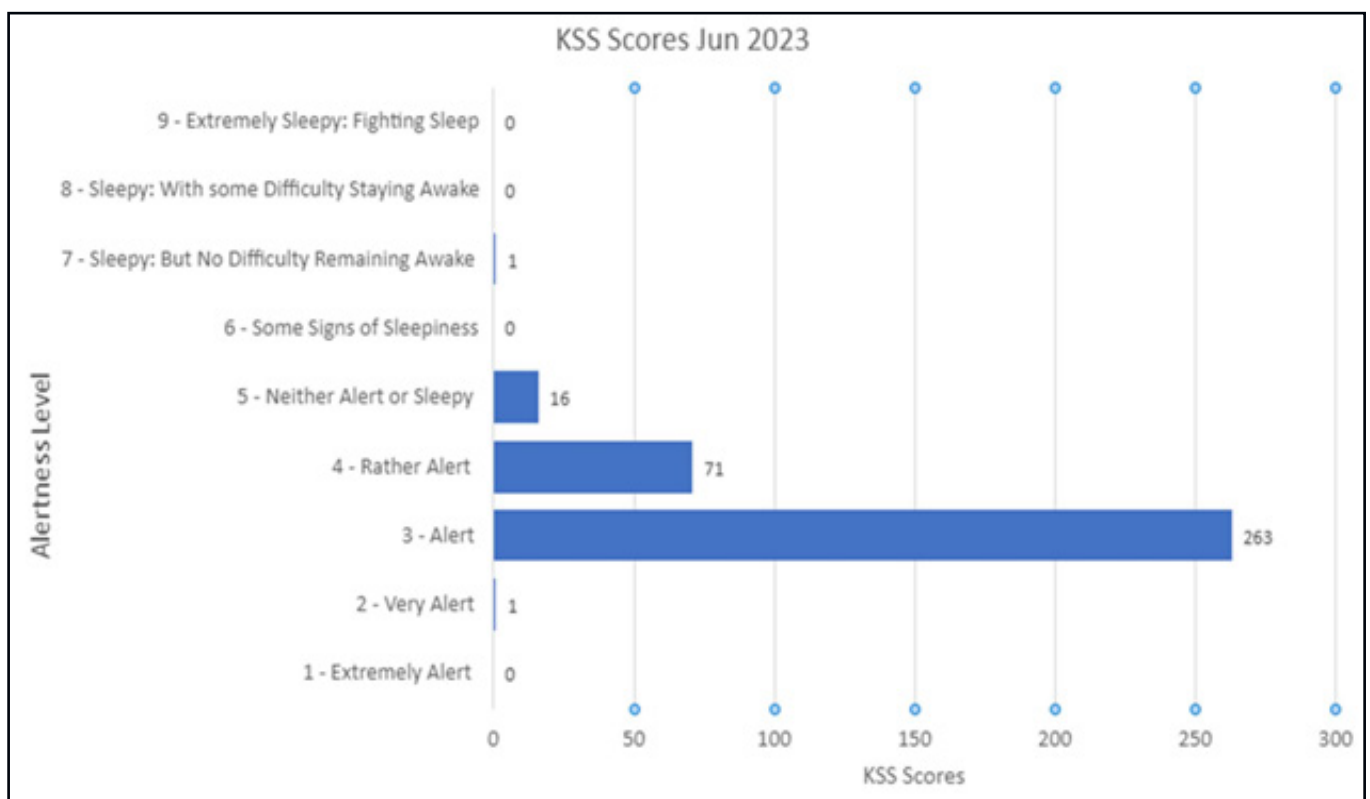
It is important to remember to submit a Fatigue Report in Centrik whenever you score Seven or greater on the KSS. Likewise, if a Fatigue Report is submitted, we would generally expect to see a KSS score submitted that correlates with the level of fatigue felt by that crew member. These figures and reports are key identifiers in order to establish a root cause and create mitigating actions. If you have any questions, please do not hesitate to ask the Safety Team.

Mike Kokuz
Flight Safety Officer Lux UK

Image from Pexels https://www.pexels.com/photo/man-sitting-inside-a-cockpit-of-an-airplane-7058348/

KSS Scores Jun 2023

Alertness Level	KSS Scores
9 - Extremely Sleepy: Fighting Sleep	0
8 - Sleepy: With some Difficulty Staying Awake	0
7 - Sleepy: But No Difficulty Remaining Awake	1
6 - Some Signs of Sleepiness	0
5 - Neither Alert or Sleepy	16
4 - Rather Alert	71
3 - Alert	263
2 - Very Alert	1
1 - Extremely Alert	0

Commercial Pressure

What is Commercial Pressure in Aviation?

Commercial pressure by itself is not exclusive to the aviation industry. It is present in most professional industries. The main reason it's such an infamous topic in aviation, is because it can have serious consequences in a relatively short timeframe.

So what is it? Well, there's no official ICAO definition, but for the scope of this article, let's define it as:

"The perceived or real pressure to satisfy customers or achieve profitability, regardless of safety implications."

This by itself does not necessarily mean it has automatically a bad outcome. Let's say a helicopter pilot feels pressure to depart, but the external circumstances are such that it's safe to do so anyway, the actual outcome might be absolutely fine.

The point here is though, that despite the good outcome, there's still a problem. A problem that unfortunately will often only come to light once things spiral out of control (sometimes literally..).

The real problems are the days where that same pressure is present, but now the weather is crap, the pilot is not current, or there's an airworthiness issue with the helicopter. The question is, will this pilot still depart?

Unfortunately history suggests he could still depart or push on despite worsening conditions. However, this depends on his personality, training, company SOP's, culture, and the amount of commercial pressure the pilot is experiencing.The textbook example is this AW139 crash in the UK, which demonstrates how commercial pressure and lack of crew training can cause direct and latent threats.

So how can we recognise commercial pressure, and how can we see if we're being influenced by it, to the point where the operation can become unsafe? Let's have a look!

How to recognise the influence of Commercial Pressure? Just as the UK CAA notice states, there is an elevated risk for operations where pilots interact with owners or passengers directly, such as private jets and rotary aircraft.

This risk increases even further if pilots are paid directly by whoever owns the plane as well.

Luckily it's still very common in today's industry to have pilots that are employed by a company, which then serves a client. This provides a layer of protection from direct pressures from clients.

The problem is of course, that even entire companies can be pressured by clients, which they then could place completely upon the pilots.

So what sort of pressures are we talking about and what does the UK CAA have to say about it? Well, it mainly looks like this:

- Pressure originating directly from passengers
- Perceived pressure by pilots due to matters of urgency (important events, medical emergencies, high status clients)
- Pressure from various company HQ departments
- Pilot awareness of commercial needs for the company, due to difficult financial situations
- Pilot awareness of reputational needs for the company

Any of these are not limited to the industries talked about above. It could happen in all sorts of aviation industries such as the airlines, HEMS, SAR, or Firefighting.

Generally speaking, the more layers are inbetween pilots and clients, the lower the risk factor for passenger induced commercial pressure.

The problem with industries such as SAR, HEMS, or firefighting, could be the realisation that cancelling the mission might have severe consequences for whoever needed the service in the first place.

You could argue that some of these pressure are 'self induced'. The problem is that there's a very thin line that can get crossed to turn 'self induced' into 'textbook commercial pressure'. More on this later, let's talk about the actual threats first.

Commercial Pressure

What are the biggest threats caused by Commercial Pressure?

These types of pressures can lead to various types of poor decision making. In general, history suggests these are the main ways decision making can be compromised:

- Flight crew or operational crew accepting or continuing flights into a destination with marginal or unacceptable conditions, or restricted performance criteria.
- Flight crew continuing an unstable or rushed approach
- Crew operating outside their Flight Time Limitations.
- Flight crew departing with unserviceable equipment or without adhering to the Minimum Equipment List
- Lack of reporting of safety incidents or potential safety hazards

What about the eventual consequences? Well, we've seen quite a few of those unfortunately in the last few decades, and we discussed why helicopters crash in our previous article.

From pilots taking off while in clearly unsuitable weather (and even fog), texting in flight, refusing to divert, pushing on into unsuitable landing sites, and inadvertently entering Degraded Visual Environments and eventually unplanned IMC. This can also happen when there is a lot of cockpit gradient and the captain also happens to be a senior manager within the company.

What can companies and pilots do to avoid unsafe situations due to commercial pressure?

So the million dollar question here is: "What can we do about it?" The answers unfortunately are (as always) easier said than done.

Let's break it up by what we can do as pilots, and what operators can do to improve these types of threats.

What pilots can do?

For pilots it comes down to setting boundaries. Awareness is obviously a requirement to see if you're doing things you would normally not do. The CAA states the following steps to take:

- Understand and fulfil your own responsibilities based on the regulations, OPS manual, aircraft flight manual, and local procedures
- Involve the operational department (if there is one) in the decision making process
- Brief passengers, owners, ground crew, and managers of the limitations and importance of not breaching them
- Report safety impaired instances and stand up for flight safety. This includes reporting commercial pressure itself.
- Have a plan B and communicate this beforehand to other parties

These solutions are a lot easier said than done. Aircraft owners can potentially be difficult to deal with if they have unreasonable expectations, and directly pay your salary.

However, only through standing up to what is safe can we progress the industry. This needs to come from both directions, not just pilots, so let's talk about the other side of the equation.

What operators can do?

There are 4 main solutions for operators that are required to tackle most threats related to commercial pressure in aviation:

1. Recognise and Train

Firstly, operators need to consider and recognise commercial pressure itself as a hazard. This might seem like common sense, but it is still very common to find aviation companies that do not talk about the fact that commercial pressure (or even perceived pressure) is a threat by itself.

By calling it out, recognising it, and providing training for it, employees will be more conscious of how they interact with each other and how they deal with pressure during the decision-making process.

This includes educating aircraft owners on what the limitations of the airframe are from an operational perspective.

Commercial Pressure

If the owner gets told by the aircraft manufacturer (who wants to sell the airframe) that it's an 'all weather aircraft' and he can 'go anywhere', this will lead to unrealistic expectations. Start educating aircraft owners and this will improve over time.

2. Establish a Just Culture

The next step is to make sure there is a Just Culture within the company. What is a just culture? Eurocontrol has an excellent definition:

> *"A culture in which front line operators or others are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated."*

Without a just culture, having your front line staff be open and honest about mistakes will be very difficult and can lead to more latent threats. We will cover this topic in a future article so stay tuned for that.

3. Communicate

Making sure there are clear communication channels available between management and operating crew is vital to learn from mistakes and improve as an organisation.

Learning from mistakes is one of the variables that has made the aviation and aerospace industry so succesful in the first place. This learning is dampened if mistakes are punished and crew are unable to debrief themselves honestly. Reporting is a requirement, which won't happen if it doesn't get encouraged.

There should be regular 2 way communication that emphasises learning from mistakes and discussing ways to improve as a system.

Preferably the safety department within the organisation should be separated from your direct managers. Some safety reports would never have been submitted if it wasn't possible to file them anonymously.

If the safety department is also the direct manager at the same time, pilots might feel reluctant to report pro-actively.

Two way communications in this case means pro-active exchanges of information between staff and management. This could be in the form of safety reporting, surveys, meetings, or feedback forms. If staff do not feel confident to say no in the interest of safety, the operator should be willing to understand why and improve the internal culture.

4. Crew / Client Separation

The separation of operational crew and the client can make a massive difference. If the crew is directly paid and hired by the very person sitting in the back of the aircraft, there is more pressure on the pilots to 'get the job done' and 'not upset the client'.

If however, there is a company between these 2 parties, it acts as a layer of protection, where pilots will feel more empowered to make decisions that might not resonate with the client.

Even in HEMS or other industries there are instances where clients could unconsciously put pressure on crews into certain decisions. Having a clear line between crew and client can help avoid this.

Conclusion

Commercial pressure is present in various branches within the aviation industry. It has caused many accidents already, especially in the corporate fixed wing and helicopter industry. If we do not pro-actively start solving this problem, it will just keep causing issues.

While the solution isn't straight forward or easy to implement, hopefully this article can serve as an introduction to those who need it.

This article was firt published in pilotswhoaskwhy.com

Reporting of Human Factors

Some of you may be aware that EASA recently published a Safety Information Bulletin regarding *'the reporting of occurrences involving human interventions linked to flight deck design, operating procedures, training, or a combination thereof'* (SIB 2023-08). But what exactly does this mean?

Most of us have already had the opportunity to undertake 'Human Factors' training, so will be aware of the importance of flight deck design in reducing human error. Research has identified that it is important to keep the location of flight instruments consistent to avoid a negative transfer of skills from one aircraft to another. This is why you will find the airspeed indicator to the left, the attitude indicator in the middle, the altimeter to the right and the HSI at the bottom middle, not matter which aircraft you fly! This concept is known as the 'Basic T' in flight deck design.

Figure 1: The Basic T

However, this does not apply to all aspects of flight deck design and there will be variations from one aircraft to another. For example, on the citation XL/XLS/XLS+ fleet, there are three variations of the location of the Alt SEL knob and the location of the gear handle.

As an example, the Citation XL has the Alt SEL knob on the main MFD, highlighted in red below, and the gear handle on the left-hand side.

Figure 2: Citation XL location of Gear Handle and Alt Select

Whereas on the XLS, the handle is now on the right-hand side and the Alt SEL knob to the left.

Figure 3: Citation XLS location of Gear Handle and Alt SEL knob

In the XLS+, talthough the gear handle is in the same location as the XLS, the alt SEL is in a third location on the MCP:

Figure 4: Location of Alt SEL in the XLS+

The table below gives some examples of the events which would welcome a safety report.

Table 1 - Non-exhaustive list of events and/or conditions		
Category	**Outcome**	**Definition**
PERCEPTION	No/wrong/late visual detection	The operator's flight crew does not detect (or detects too late or inaccurately) a visual signal necessary to formulate a proper action plan or make a correct decision.
	No/wrong/late aural detection	The operator's flight crew does not detect (or detects too late or inaccurately) an aural signal necessary to formulate a proper action plan or make a correct decision.
	No/wrong/late kinaesthetic detection	The operator's flight crew does not detect (or detects too late or inaccurately) a kinaesthetic signal (e.g., stick shaker or pusher) necessary to formulate a proper action plan or make a correct decision.
PLANNING AND DECISION MAKING	Incorrect/late/ absence of decision or plan	The operator's flight crew was not able to develop an adequate action plan or decision to manage the situation.
RESPONSE EXECUTION	Timing error	The operator's flight crew takes an action which is appropriate for the situation but executes it either too early or too late.
	Sequence error	The operator's flight crew carries out a series of actions in the wrong sequence.

This is information only. Recommendations are not mandatory.

Category	**Outcome**	**Definition**
	Correct action on the wrong object	The operator's flight crew takes an action which is appropriate for the perceived situation but executes it wrongly by selecting an object (e.g., lever, knob, button, any other HMI element) different from the intended one.
	Wrong action on the right object	The operator's flight crew selects the correct object (e.g., lever, knob, button, any other HMI element), but performs an action that is not the correct one.
	Lack of physical coordination	The operator's flight crew takes an action which is appropriate for the perceived situation but executes it in a wrong manner.
	No action executed	The operator's flight crew intends to take an action which is appropriate for the perceived situation but does not execute it.
COMMUNICATING	Incorrect/unclear transmission of information	The operator's flight crew transmits to other actors' information, which is incorrect or unclear, e.g., use of incorrect entry.
	No transmission of information	The operator's flight crew does not transmit information which is necessary for other actors to operate safely/ effectively.

Source: 'SHIELD (Safety Human Incident & Error Learning Database) human factors model'
Stroeve S., Doorn B., Jonk P., Kirwan B., Navas de Maya B., 2022

Suzy Gautrey
Group Safety and Compliance Manager

Therefore, if you fly more than one aircraft and find that some aspect of the aircraft design contributes to a reduction in safety margins, please do submit a safety report.

Similarly, if you encounter operating procedures or training that lead to confusion, please do submit a safety report.

Maintenance check flights – Are you prepared?

(image from Top Gun https://www.youtube.com/watch?v=KI1G6HKcaDc)

Maintenance Check Flights (MCF) are post-maintenance flights carried out for troubleshooting purposes or to check the functioning of one or more systems. But who can conduct a MCF? Your OMA will identify that a MCF will always be conducted with 2 qualified and experienced pilots, but in addition to this, for Level A maintenance check flights, specialised training is required. Therefore, if you have been asked to conduct a MCF and have not received specialised MCF training, it is likely that you are conducting a Level B MCF.

The difference between Level A or Level B MCFs?

1. "Level A" MCF is a flight where the use of abnormal or emergency procedures, as defined in the aircraft flight manual, is expected, or where a flight is required to prove the functioning of a backup system or other safety devices;

2. "Level B" MCF is any MCF other than a "Level A".

Operators often wonder which category to use for a given MCF, as any of the systems that need to be checked in the MCF is to be identified as potentially unreliable and the Flight Manual reports abnormal and emergency procedures for most failures. The NP Flight Operations and NP Continuing Airworthiness will review the requirements of the MCF and shall determine the applicable level of the MCF. In case of level B flights, no further requirements exist regarding flight planning and crew dispatch.

What if?

Most MCFs are uneventful but if you are an MCF pilot, are you aware that the systems you check are potentially more likely to fail during an MCF than in a normal flight? Do you know what can go wrong when checking potentially unreliable systems or equipment, how likely failures or malfunctions are to occur and how severe the

consequences can be? Are you sufficiently equipped to cope with any failures or malfunctions that may occur and their consequences? After all, this is the reason why a check flight is performed: to verify that everything is working correctly because that might not be the case. Be prepared to any eventuality and to cope with any emergency promptly and effectively.

Preparedness starts well before the MCF. You should know which maintenance operations were performed to know which systems could fail. You should also plan an adequate flight path and operating area in case of emergencies requiring an immediate landing (e.g. autorotation).
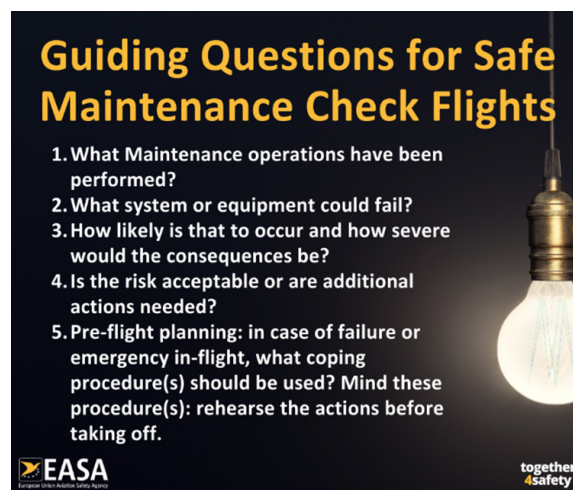

Image from EASA https://www.easa.europa.eu/community/topics/maintenance-check-flights)

MCF is a multidepartment activity

MCFs are not standard flights, they require the involvement of three departments in your organisation: the CAMO, the Maintenance Organisation, and the Operations Team. All have their own internal MCF procedures and responsibilities, but they must communicate and work together to ensure a safe and effective flight.

Planning will ensure that there is sufficient time for proper preparation, communication, planning and pre-flight, all of which are essential. If in doubt, do not hesitate to delay the flight if not completely satisfied with the time allocation for thorough preparation.

For further information, please refer to your OMA or your NPFO.

Operations Outside of Controlled Airspace

The OM-A states that operations should plan to route all flights within Controlled airspace where possible. However, due to the nature of our operation, it may be necessary to fly outside of controlled airspace on occasions. If flight outside of controlled airspace is unavoidable crew must adhere to the following:

- Speed appropriate to the phase of flight. e.g., Below 5000 feet speed below 200kts / below 10000 feet to 5000 feet 250kts maximum above 10000 feet to FL245 speed subject to aircraft limitations.
- No non-essential paperwork - Checklist only below 10000 feet see sterile cockpit (please refer to your OMA for specific details)
- De-confliction Service - default request.

If you find yourself tasked with conducting a flight that will totally or partially be flown outside controlled airspace and cannot reasonably be changed to within controlled airspace, look at the following suggestions to help mitigate any factors that might impact the safety of the flight.

TEM/Risk Assessment - PAVE:
Pilot │ **A**ircraft │ En**V**ironment │ **E**xternal Pressure

General Mitigations

There are some precautions you can take:

- TCAS on and close range and coverage above and below.
- Speed as stated above in the OM-B
- Using ATC Deconfliction service or next best available as standard.
- Apply Threat and Error Management when planning and flying.
- When airborne, avoid distractions. Try to recognise the potential for distractions including those from passengers, unfamiliar equipment or its malfunction, aircraft problems or weather as well as personal problems or stress. Ensure that you positively shift attention from them back to flying, operating and navigating the aircraft.
- For VFR operations, you should aim to have your eyes inside the cockpit no more than 25% of the time and one crew member should always be looking out.
- See and be seen – maximum external illumination.
- Electronic Conspicuity such as transponders and ADS-B where possible.
- Hang gliders and para gliders often launch from, and congregate around, hill sites facing into wind, often in large numbers. An active site may contain tens of gliders circling in 'gaggles' and they are likely to depart on cross country routes, normally in a downwind direction.
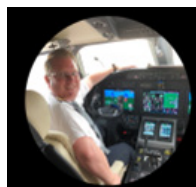
David Jenkins
Deputy Director Of Flight Operations
Captain Citation Excel/XLS/XLS+

Mini Updates

Green items in Centrik

The majority of us use Centrik for either document management, safety reporting or other functions. Centrik operate a 'traffic light system, where red is overdue, yellow is typically due within 30 days and green is in date.

Figure 1: Example of traffic light system in Centrik
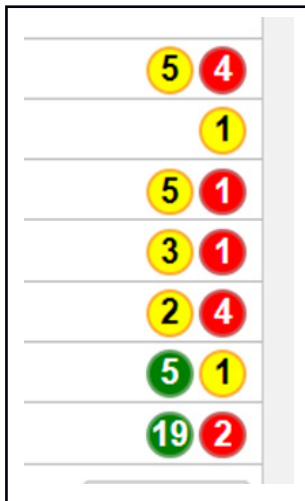
The aim is to ensure all items on your dashboard are green, with no reds. When documents are distributed, please ensure that you read the required documents and 'mark as read'.

Figure 2: Personal Dashboard
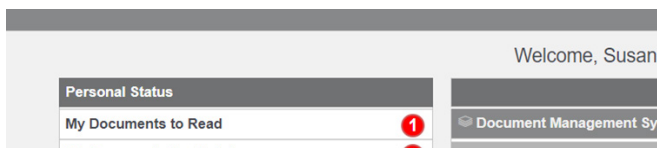
If you find that you are receiving documents that are not intended for you to read, for example they may be from another AOC, or a different department, please contact your Centrik administrator so that they can ensure that you only receive the documents relevant to you.

Alternatively, contact safetymatters@luxaviation.com and we can provide you will details of your Centrik administrator for your AOC.

Flight Data Monitoring (FDM) Policy

Following a review, I am pleased to announce that we now have a new FDM Agreement, now referred to as the 'Flight Data Monitoring Policy'. If this applies to your aircraft, your Safety Team will be in touch in the near future asking you to review and sign the new version.
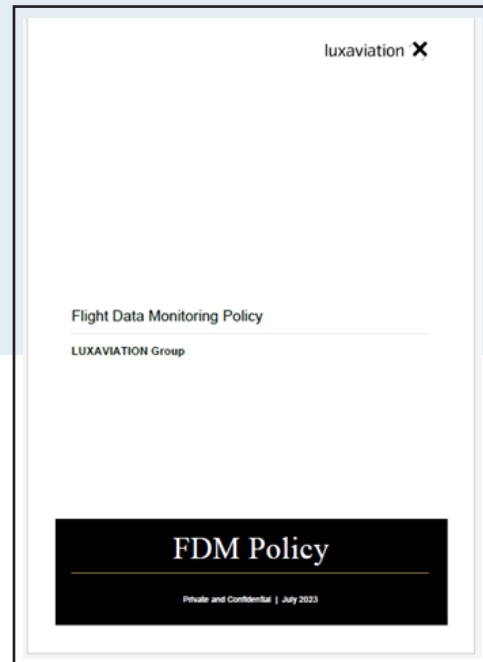
Using Web-Based Applications

We have received a number of safety reports where crew using shared FBO computers have not log out of their web-based applications after use. I am sure that you are all aware that this represents a security risk so please ensure that following use on a shared computer, that you ensure you log out.
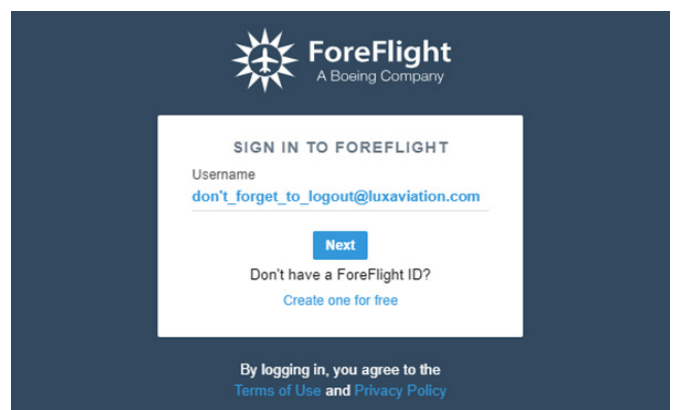
Mini Updates (Cont.)

Monitoring of 121.5

ICAO Annex 10 Volume II identifies that aircraft should monitor the emergency frequency 121.5 MHz to the extent possible. Your OMA will also identify the circumstances which require you to maintain a continuous listening watch of 121.5. However, a number of safety reports have been received where this frequency has been turned down due to the distraction or chatter on the frequency, or following obtaining the ATIS and omitting to revert back to 121.5. We are all aware of the importance of monitoring 121.5 and in particular, should the aircraft loose communications with ATC, 121.5 is the means by which the lines of communication can be restored

As a pilot, you may not even know that you have lost communication with the ATC as there are no systems warnings. The frequency may appear quiet and therefore it is important to remain vigilant if nothing is heard on the radio.

Defences

- Do not switch immediately to the next sector frequency following read back of controller's instruction. Ensure confirmation of your read back is received.
- Do not alter the previous frequency on the pre-select position on a COM radio used for primary ATC communications until two way communications have been established on the new frequency.
- Always follow standard procedures for copying, setting and cross-checking RTF frequencies. As soon as a loss of communication is suspected, check radio equipment settings and audio panel settings and carry out a radio check.
- If any part of a message for you is garbled or unclear, request confirmation or clarification.
- Always use headsets during times of high RTF loading. Always wear a headset when members of the flight crew are involved in other tasks and may not be monitoring the RTF.
- If the squelch control is adjusted to reduce the effect of interference, take care to ensure that transmissions from ATC or other aircraft are not cut out.
- Always report any radio interference experienced whether or not it affected safe operation.
- Make use of other aircraft to relay messages when operating at extreme range or when poor propagation is suspected.
- If there is no suitable frequency on which to initially re-establish communications, then 121.5 MHz can be used. This frequency should also be selected if it is impossible to re-establish communications on any frequency so that any transmission from intercepting military aircraft might be heard.
- Refer to your Operator SOPs which require 'contact calls' to be made to ATC at a regular interval appropriate to the radio environment in the event that there is no other exchange during that time period.

Safety Report Summary Q2 2023

A positive reporting culture is an important indication of an effective safety culture. Therefore colleagues are encouraged to report hazards pro-actively so that they can be assessed and monitored. There were a total of 246 safety reports submitted in Q2, excluding ExecuJet South Africa

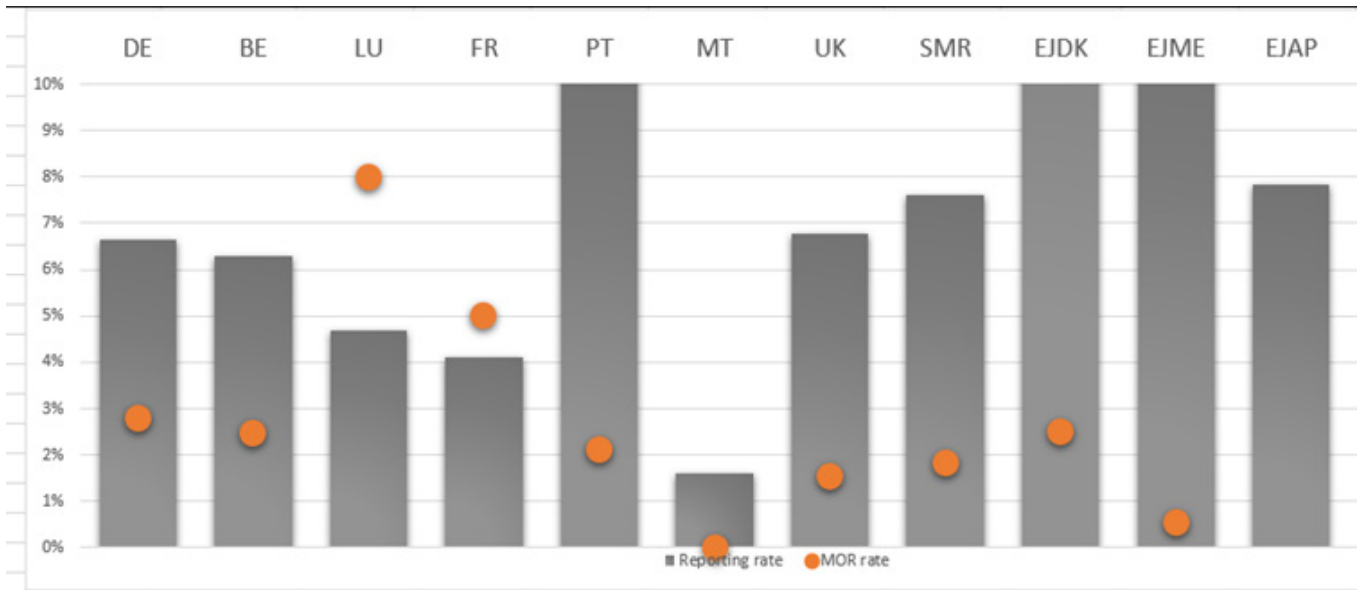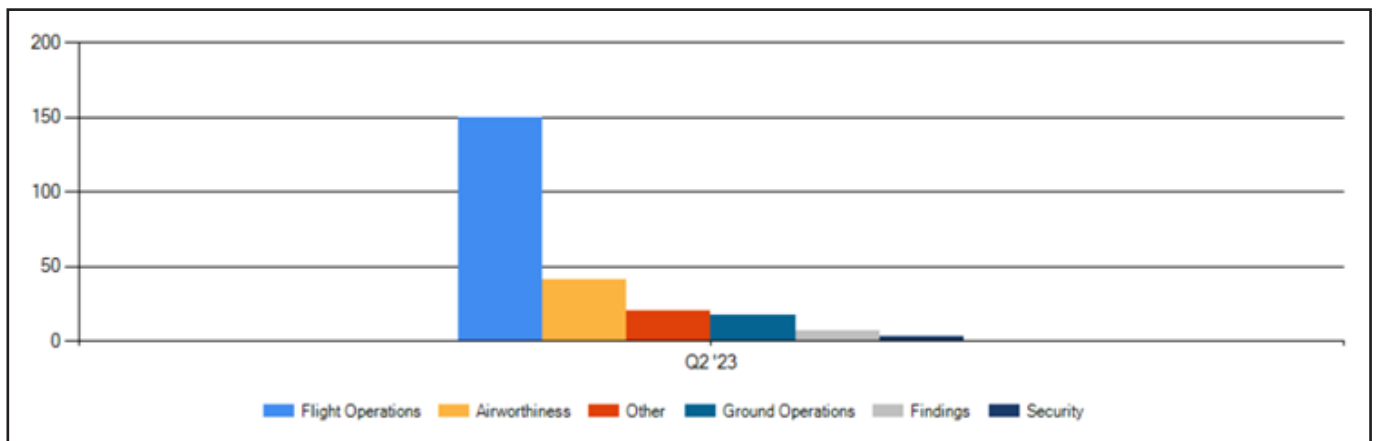**Figure 1: Total number of reports submitted in in Q2 2023**

Figure 2: Reports broken down by Operational Area

Summary of Reports

The section below gives some examples of the safety reports submitted across the group in Q2 2023. Comments from the respective AOC's safety department are added, where appropriate.

Safety Reporting

Call Sign Confusion in the USA

When flying in the US, ATC frequently refers to Luxaviation UK, call sign LNX, MEDEVAC. In the USA LN in a callsign is being reserved for Medevac flights. I would suggest on item 18 RMK/ VOICE CALL SIGN: "LONEX" to be added.

Safety Comments

Thanks to the valuable feedback received by the crew, item 18 has been amended and no further reports have been received.

Aural Warning Landing Gear

During take off from RWY 21 performing the SID LYDD2 on climb at approximately 1200' ASL we had an aural warning Landing Gear. This SID requires to level off at 2400' and to be flown 185kts or less. With those limitations, at 1400' ASL (800' over the ground, 800' radio altimeter) maximum we must reduce the VS to 1000' and avoid airplane to increase speed over 185 kts, that require an important reduction on the thrust levers, close to the 59 degrees of TL.

This situation on those SID's add an undesired stress to the crews in a very busy traffic scenario, that unfortunately recently coincided with a TCAS RA without having any relationship between the landing gear aural warning and the TCAS RA.

Two days later in a positional flight from EGKB doing the same SID I delayed the selection of the landing gear to up position until being clearly above 1200' RA to avoid warning. The fact of leaving the landing gear down, apart of cancel the chance of the aural warning also makes much more easy to fly 160-170 kts to be well below the 185kts SID limitation.

I think this could be a good procedure for this special kind of SIDs or at least pilots should be aware about the high possibility of having this aural warning when performing this SID.

Safety Comments

Following the report, the airfield brief was updated to include the details contained in the report and crews are recommended to include this item in their threat and error management briefing. Crews are being asked to please submit a safety report for any re-occurrences.

Safety Reporting (Cont.)

Departure not compliant with noise abatement procedure

Departure to the South from R08 from EGHH. This departure on the FMS only keeps the aircraft on 075° course until 438ft and not until D4.1 IBMH. Even though we covered the noise abatement procedure on our briefing, we initially didn't notice this and started the turn following the FD, and just before we made the correction on our own ATC advised us to keep straight ahead as per the Noise abatement procedure. In hindsight, we should have paid more attention to the coding on the FMS for this departure and kept the HDG mode for longer to avoid this occurrence.

Safety Comments

The FMS manufacturer was contacted by the AOC investigating team. The root cause was identified as an incongruence between the AIP charts and the AD2 EGHH document. The database is coded correctly according to the AIP charts ands therefore cannot be changed. The remaining barrier is the procedure for crew to always check that what is in the FMS against the SID/Departure instructions.

Incorrect Frequency

Approaching LECU we were given an incorrect frequency by Madrid of 124.230. We called two times with no answer and checked onboard PLAY to reconfirm this freq was correct. As we were in the final descend towards LECU (10 NM out) we changed straight to Tower frequency 118.7 who gave us final descend and clearance to final for RWY 27 at LECU.

Safety Comments

There has been an increasing number of occurrences related to incorrect frequencies and lost comms and we thank all reporters for their honesty in submission of such reports. This provides an opportunity to remind yourselves on your AOCs lost comms procedures. Please also refer to the article, above, discussing the importance of monitoring of 121.5.

Drone Airprox

During an approach to CDG, we saw from a far an object on our side. As we passed it, we realized it was a drone… distance 15 meters from our right wing tip. We were at 6000ft at 220kts. No need for an evasive action.

Safety Comments

A drone encounter at 6000ft is very unusual. This was reported to the ATC and the police informed. If anyone else experiences any drone encounters, please do raise a safety report to identify the extent of this hazard.

Safety Reporting (Cont.)

Departure not compliant with noise abatement procedure

When transferred to Malaga approach, the controller sounded very muffled making understanding ATC instructions challenging for both crew members. The controller instructed the crew to descend to what was comprehended and read back 2,000 feet and this was not corrected by the controller. This clearance was not congruent with the expected descent profile for the position of the aircraft and therefore the crew asked for clarification on the cleared altitude prior to commencing the descent. ATC clarified 6,000 feet and although the weather was CAVOK, this potentially could have led to a level bust if the crew had not questioned the cleared altitude.

Safety Comments

Malaga Approach were contacted and asked to investigate the root cause of the degradation in communications. Following analysis carried out by the CNS Engineering Department, the root cause was identified as failure of radio coverage in the area. The crew were correct to clarify a questionable clearance in challenging circumstances. For anyone requiring clarification of clearances, please be reminded that it is important to observe standard RT phraseology when requesting clarification and not to include the perceived clearance in your question. Such as "say again cleared altitude", rather than "are we cleared to 2,000 feet", to avoid confirmation bias. For more information, please refer to CAP 413. FMS against the SID/Departure instructions.

Fuel Contamination

Aircraft detected for fuel contamination at LAGOS. The A/c was grounded to replace fuel tanks.

Safety Comments

It is of critical importance that the fuel taken onboard at uplift is not contaminated in any way since the effects of any such contamination are likely to affect all engines and this may not be evident until after an aircraft has become airborne. Therefore there are procedures in place to ensure that fuel quality is maintained. Unfortunately, on occasions fuel contamination is detected and the Nigerian Civil Aviation Authority (NCAA) confirmed the issue was not confined to that one occurrence, describing the situation as 'dire.'

The NCAA has issued an urgent All Operators Letter to refuelers and operators to follow the proper procedures – but with sixty days to comply. That's over two months of potentially contaminated fuel still being used at airports in Lagos, Abuja, and Kano – without mandatory procedures in place to check it. The NCAA note requires a thorough inspection of refuelling equipment, and testing of the fuel it carries or pumps. More notably, there will also be a mandatory requirement to take samples from fuel tanks before and after refuelling too. This will apply to anyone operating an aircraft in Nigeria. Be vigilant of anything going into your tanks there at the moment. Of course, perhaps the best mitigator right now is not to refuel at all, and to tanker instead.

For your local procedures, liaise with your safety team and operations. Please refer to opsgroup for more information https://ops.group/blog/contaminated-jet-fuel-in-nigeria/

Good Call

Welcome to this edition's Good Call, where we recognise and celebrate pro-active, safe behaviour. All nominees for the good call have been contacted in advance of publication and have given their permissions for the details to appear in the bulletin. Nominees will each receive a Luxaviation travel mug. If you know someone who goes out of their way to promote safety or acts proactively to prevent arising safety issues, then please let us know by sending your nomination to safetymatters@luxaviation.com.

This quarter, the award goes to Alexander Zundl for raising the following report.

The aircraft was cleared to line up and hold. Crossing the holding point the crew realized the landing British Airways on the final approach. The crew stopped the aircraft shortly after the line to reconfirm our clearance. Meanwhile the BA was cleared to land. The crew informed the tower and told the controller that they have technically already enter the runway. The BA was commanded to go-around.

Safety Feedback

This report highlights the importance of maintaining a vigilant lookout and situational awareness when entering the runway. The airport was contacted as asked for the findings of their internal investigation and have not responded.

FDM Statistics

Since 2022 we have been experiencing decline on level 3 events which is consider a good trend.

In Q1 our top level 3 and level 2 events are still the rate of climb and descend before level off which potentially can lead to TCAS so the recommendation will be to continue working on reducing vertical speeds when (exceeding 1500 ft/min) approaching a cleared level and there are other aircraft in close proximity.
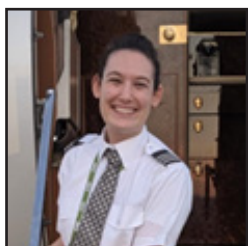
Viginia Castellvi
Deputy Safety Manager - Luxaviation UK

A Declining Trend in Rate of Level 3 Events over 12 Months
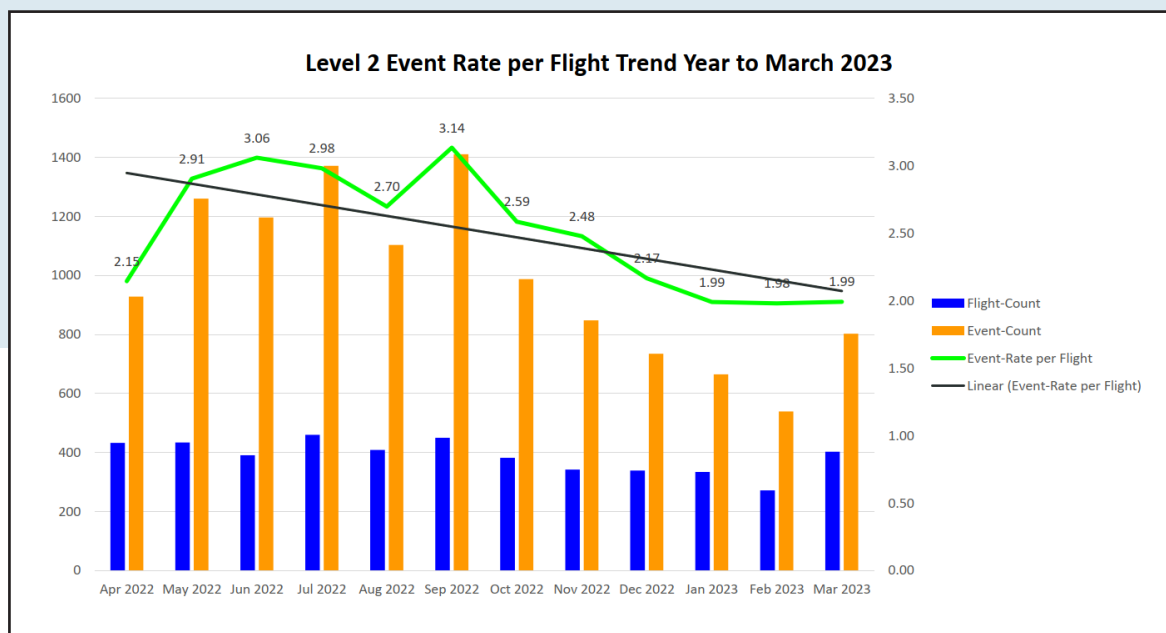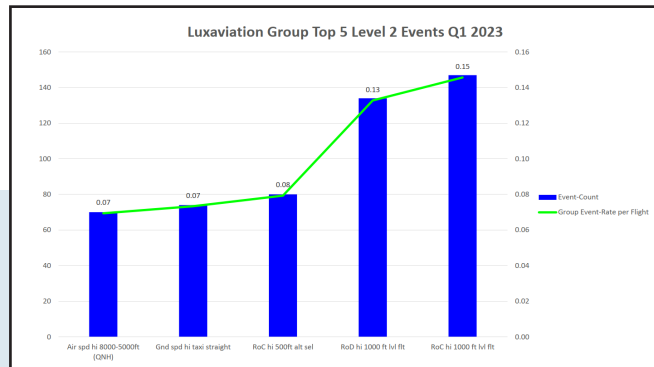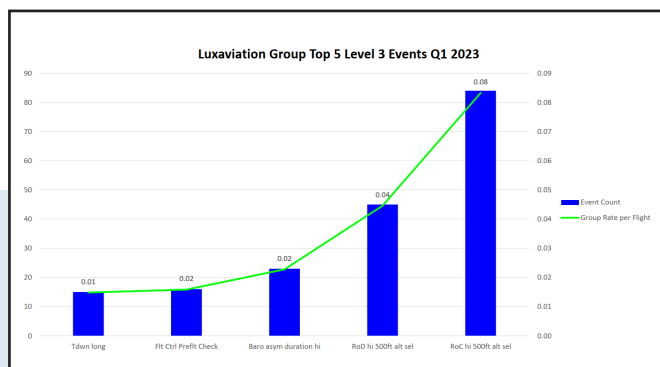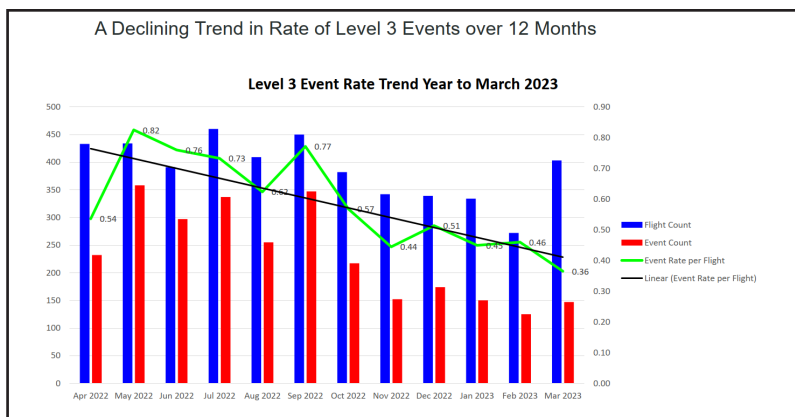
How to write a safety report

What to include in your safety report

Luxaviation processed approximately 870 safety reports in 2022, to which we thank all of our safety reporters. We conduct regular training in how to complete a safety report, as there are a number of options to choose from.

Start New Safety Reporting Report			
Report Type			**Report**
Individual occurrence or event	OCC	Occurrence Report	
Ongoing hazard or risk	HAZ	Hazard Report	
Proposed change	CHG	Proposed Change	
⊖Flight Data Services ONLY [FDM]⊖	FDM	Flight Data Services ONLY [FDM]	

Regardless of whether you submit an occurrence report, hazard report or a proposed change (please do not submit an FDM report as this is for L3 Harris only), your safety team will appreciate as much detail as possible.

Below are some pointers as to what to include.

- Description and Sequencing of Events
- Time factors and working conditions
- Description of task(s) being performed when the incident occurred, including date and number of charts, if relevant.
- Characteristics of any equipment associated with the incident, including frequencies in use if relevant.
- Your observations of any causal factors
- Your recommendations for any corrective actions
- Recordings and photos (where appropriate), including charts being used, crew briefings, plogs.

Are You Okay Today?

We hope that you are doing well because the well-being of our flight crew is paramount to us and our operations.

But there are days when things are just a little bit more difficult. And then talking to someone can make all the difference – even more so if this person knows the stress and challenges of our jobs in the aviation business.

To support these situations we are proud to let you know that we have partnered with a company called Kura Human Factors. Kura Human Factors offer our crew a confidential exchange platform which is completely independent and neutral. They already work successfully with several other operators.

The platform allows flight crew to engage in conversation with another person from a trusted and external 3rd party. The peer will have been selected and especially trained by Kura so that they can support in tackling on going challenges together. The peer is likely to have had similar experiences to you and will have a job similar to you too. The goal is to share highs and lows and improve overall communication as an aviation community.

So, how are you today?
Let's talk openly and confidentially

If you feel like you need some additional support, please use this link:
https://kurahumanfactors.com/about-maps/

REPORT IT!

All Luxaviation regions have established Hazard and Incident reporting mechanisms. In the interest of yourself, your colleagues, the company, our clients and the broader aviation community please avail yourself of this medium.

There is no telling what the outcome of your report might be and how many injuries or even deaths it might prevent.

Remember that when reporting a hazard you have done your part. However when you see a hazard and choose not to report it you then take ownership of that hazard and all which might result from it.

luxaviation ✗