CONVERSATION AVIATION

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STARTING POSITIVE CONVERSATIONS ABOUT SAFETY

EASA
European Union Aviation Safety Agency

together 4safety

CONVERSATION AVIATION SUMMER edition #01 2025

Contents

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Guest Foreword by **Yannick Malinge**

SVP Aviation Safety at Airbus

AIRBUS

Over the recent decades in aviation, we have witnessed remarkable technological advances transform our industry. Yet amid this evolution, one principle remains constant: when facing risks and uncertainty, we return to the basics.

"Fly, navigate and communicate" is the memorable phrase taught to pilots from day one. Time and again, recalling this mantra has prevented in-flight situations from becoming serious incidents or even fatal accidents. This back-to-basics principle extends beyond the cockpit to every part of our industry.

Throughout aviation, this fundamental philosophy is demonstrated in countless ways. When aircraft design engineers encounter complex technical challenges, they have to return to fundamental aerodynamic principles—examining lift, drag, thrust, and weight relationships before advancing to more complex analyses. For systems integration, they focus on redundancy and fail-safe design philosophy. To ensure structural integrity, designers and engineers analyse structural load paths and stress distribution.

Similarly, when troubleshooting complex systems, maintenance technicians have to start with the basic steps before moving to more complicated diagnostics and troubleshooting. Cabin crew reflect this approach each flight by recalling “OLDABC” (Operation of Exit, Location of Emergency Equipment, Drills, Able-bodied Passengers & PRM, Brace Position, and Commands), which prepares them to manage an efficient cabin evacuation procedure in case of an emergency situation. Air traffic control operations demonstrate the same principle in having to maintain basic separation and clear communication during deteriorating weather or complex traffic scenarios.

This mindset has to also extend throughout the production chain as well. Suppliers build reliability through simplicity, establishing robust basic functionality before incorporating more sophisticated features. Production teams have to embrace a "right first time" methodology, concentrating on fundamentals like proper torque application, electrical harness separation, FOD removal, proper protection of air data probes, completion of all outstanding out-of-sequence work, and correct configuration management for every aircraft that enters into service.

Testing has to follow the same pattern—ground test teams verify individual systems before performing integration and all aircraft tests, while flight test teams expand flight envelopes incrementally from established conditions. Each of these approaches, though tailored to different specialties, share common DNA. They all prioritise safety above commercial or operational pressures. This includes meticulously following established procedures for managing both routine and emergency situations. It also relies on clear communication, cross-checking critical information, and speaking up when something doesn't look right.

Looking ahead, our industry faces unprecedented challenges—from integrating new technologies to addressing climate concerns while meeting growing global demand. The temptation will be to seek shortcuts, but our safety record shows that our best path forward is to avoid falling into the trap of complacency by revisiting, recalling, and consistently applying the key fundamentals.

Just as pilots encountering unexpected flight conditions will fly, navigate, and communicate in that order, all of us working across the air transport system should identify with our own core principles and return to them when facing unexpected or unsafe conditions. This approach is what today's remarkable aviation safety record is built upon.

Safety is our license to operate in the air transport system. The traveling public expects nothing less than zero accidents, as we all do, and this level of expectation has never been higher. Meeting this standard requires every professional in our industry to embrace a “back to basics” mindset when confronted with complexity or unexpected challenges. ■

EASA Update

AVIATE, NAVIGATE, COMMUNICATE

Master the Basics,
Manage the Risks,
Make the Right Choices!

From John, the Regulator

Statistically, aviation continues to have a high level of safety, particularly when we compare the number of fatal accidents with even 20 or 30 years ago. Aviation also continues to be one of the safest forms of travel in terms of fatalities per passenger kilometre. It's hard to escape, however, that the past year or so has been a difficult one for the aviation community.

Having started 2024 with the runway collision at Tokyo Haneda, in August we saw the graphic videos of the Voepass Linhas Aereas accident that occurred in Brazil. The year then ended tragically with two fatal accidents in 5 days with Azerbaijan Airlines and Jeju Air accidents. As we looked with hope to a new year, we then had the mid-air collision in Washington, which was followed closely by the CRJ accident in Toronto where - thankfully - everyone escaped from the aircraft as it lay upside down on the tarmac.

You can be sure that there are staff who have been impacted emotionally by these recent events. We might not know personally those who lost their lives but, as fellow aviation professionals, we certainly feel the pain of every accident.

Looking Ahead to the Summer

As we stand at the beginning of the summer season, things really start ramping-up, and it's 5 long months to the end of September. Some days it will feel like our staff are running a 100-metre sprint. It might seem strange to remind you, but no one can run a marathon in 100-metre sprints. If we are to get ourselves safely through the whole summer, we must pace ourselves.

Whatever type of organisation you work for it is vital that safe and effective operations are repeatable, every single day. We are likely to face all sorts of challenges.

Aviate – Navigate – Communicate

When there is an emergency in an aircraft the first thing pilots are trained to do in an emergency is "Aviate-Navigate-Communicate". At times of increased stress, it's important to focus on the basics. Get those right, create more mental capacity and build as the situation comes under control.

This concept leads to the 3 key messages for the summer:

Master the Basics.

- **Clear the air:** Communicate clearly and with intent to prevent confusion
- **Stick to procedures:** Fundamentals saves lives, know them - follow them
- **Pace yourself:** Summer is a marathon not a sprint - prioritise wellbeing

Manage the Risks.

- **Expect the Unexpected:** Stay alert, adapt fast, and mitigate threats
- **Check, Double-Check:** Risk is reduced when complacency is eliminated
- **Weather the Storm:** Assess conditions, plan ahead, and make informed choices

Make the Right Choices.

- **Think Before You Act:** Mindful decisions keep operations safe
- **No Shortcuts, No Regrets:** Rushing risks lives—take the time to do it right
- **Stay Sharp, Stay Safe:** Fatigue and pressure cloud judgment—pause, assess, and decide wisely

People Create Safety

When it comes to the safety of our respective day-to-day operations the most important thing to remember is that regardless of all the rules, procedures, safety systems and risk assessment, it's people who create safety. We rely on the whole aviation system - flight and cabin crews, maintainers, ATC, ground handling et al - to ensure a safe summer. We ask our people to perform under difficult conditions in challenging situations under a lot of pressure, especially during the summer. Every organisation needs to ask the question: "do we have enough competent people who are operationally ready, fit for duty and who understand their responsibilities".

As we approach the summer season, the statement from the "People" part of the EASA Safety Map is more important than ever.

The Importance of Collaboration

Before we start talking about the things that individuals can be prepared for this summer, it is first important to talk about the invaluable role of collaboration between organisations. Every safe flight involves interactions between people from many different domains and organisations. There are three key aspects of collaboration that we should be thinking about this summer:

- **Contractual/Service Interfaces.** For organisations, it is vital to work with any contracted service providers so that any risks are identified clearly and mitigated effectively. It isn't easy to communicate to staff in other people's organisation, so this can take a lot of effort.
- **Airport/Aerodrome Specific Issues.** There are also specific risks at individual airports/aerodromes, and it is vital that collaboration takes place between all the main stakeholders involved. Of particular importance is the Local Runway Safety Team.
- **Industry-wide Learning.** Finally, the more we can share information at an industry level the better placed we are to learn from each others' experiences. We will provide updates continually over the summer through our Conversation Aviation LinkedIn Group.

Pay Attention to the Interfaces

The different aviation staff routinely do their jobs quite happily in their own domains/silos but there are key moments in the preparation and performance of every flight where different staff members come together. We must focus on these interfaces, communicate clearly with each other and give each other our full attention. Some of these key moments are:

- Discussion on technical issues between engineers and flight crew, particularly on go/no go decisions.
- Liaison between flight crew and dispatchers to ensure paperwork is completed correctly and that ground staff leave the aircraft at the right time.
- Removing steps from the aircraft [at the appropriate time] to ensure there is no risk of falls.
- Ensuring that all personnel, equipment and vehicles are out of the way before the aircraft moves under power for the first time.
- Any communication between ATC and the flight deck must use standard phraseology at all times. English native speakers should pay particular attention the recipient of your message may not be a native English speaker".

Operationally Ready and Fit for Duty

The part about being operationally ready and fit for duty goes beyond just compliance with rules of Flight Time Limitations (FTL) for flight crew. It is important to do everything you can to manage the human risks that might prevent your staff performing to the best of their abilities. Encourage open conversations about people's wellbeing. The role of leaders is not to work their staff like machines until they break with a focus only on the task.

Consider John Adair's famous Action Centred Leadership model that highlights the balance between the needs of the task, the needs of the team and the needs of the individual. If we focus only on the task element, it will truly be a horrible summer. Ensure everyone from leaders to front-line workers are asking themselves "Where are my circles?"

Figure 1 – Where are my circles (make new version with Task, Team and Individual)

Having Clear Responsibilities

We recently added to the safety model with a part to ensure that people understand their responsibilities clearly. If we do not have a clear understanding of who does what in the team and what people's individual responsibilities are then things might get missed or fall between the gaps. This is where the circles come in again. We must ensure not only that individuals know their jobs, but also that everyone in the team knows who is doing what. As always, communication is vital.

Key Decision Points

As human beings, we spend a lot of our time on autopilot, doing familiar tasks that we always do; but in many situations this can often lead to incidents or accidents. By taking mindful decisions together with others we can minimise the risk of making a wrong decision.

Here are **10 key decision points** that should be made **mindfully** to ensure safety during a flight:

BEFORE TAKE-OFF

1. **Pushback & Engine Start.** Confirm clearance, ensure a safe pushback path and verify engine start parameters.
2. **Taxiing from the Gate.** Maintain situational awareness, adhere to taxi clearances and watch for ground movements traffic.
3. **Entering the Runway.** Conduct a final approach check, confirm clearance and scan for potential conflicting traffic.
4. **Take-off Roll Decision.** Be ready to reject take-off if any anomalies arise (engine issues, ATC cancellation, traffic conflict etc).

DURING FLIGHT

5. **Climb & Transition to Cruise.** Monitor aircraft performance, adjust for weather conditions and communicate with ATC.
6. **Navigating Weather & Airspace.** Think and plan ahead and adjust routing proactively to avoid turbulence, storms and/or traffic congestion.
7. **Descent Planning.** Optimise energy management, factor in approach conditions and coordinate with ATC.

APPROACH & LANDING

8. **Approach Stability.** Adhere to stabilised approach criteria; be ready to go around.
9. **Landing & Rollout.** Execute a safe touchdown, manage speed and be mindful of braking and runway exit.

AFTER LANDING

10. **Taxiing to the Gate.** Maintain vigilance for traffic, follow ATC instructions carefully and ensure safe parking.

Each of these moments requires **situational awareness, communication and sound decision-making** to ensure a safe flight.

Finally, Report, Report, Report and Talk about Safety Continually

Learning is such an important part of safety. Throughout the summer it is vital that everyone continually talks openly about safety. Make sure that staff *feel* suitably empowered to raise a concern if they consider that there is a problem".

Most components part of aviation operations are conducted by small teams, often working in relative autonomy, so incident reporting to your organisation's SMS should be actively encouraged; this is vital not only to sharing information with the wider team, but also to ensuring that new or evolving risks are captured, highlighted and managed openly and proactively.

We must all encourage our teams to consider the specific risks in our respective operations: there is no "cry wolf" when it comes to safety reporting. From reports received, potential trends can be identified and system-wide mitigations put in place - it could be an issue at a specific airport or with a specific piece of airspace where common challenges are starting to emerge.

Keep an eye on the EASA Air Ops Community to read and learn about the evolving risks this summer being shared form other areas of the aviation operation. ■

Innovation, People & Safety

From Nuno, our Safety Manager

The aviation industry is at a crucial turning point. Emerging external threats, rapid technological progress and evolving safety issues create a complex landscape that, each season, requires renewed vigilance and adaptability from everyone involved. At Safewings, we adopt the "Aviate-Navigate-Communicate" philosophy; not only is this a guiding principle for pilots in critical moments, but this is also a strategic approach to address the wider challenges the aviation sector faces today, regardless of our role within it.When we identified operational challenges we worked together to solve them. Then we made sure to capture them in our reporting system so that we could learn from them - changing procedures when needed, providing the right resources in the right place or working differently with the many service providers and partners who help keep our operations running.

This means getting the basics right so we also have the capacity to focus on any new, surprising challenges that we might have to deal with.

Addressing Emerging Challenges

The rise in GNSS spoofing and jamming incidents, coupled with growing geopolitical tensions, highlights the need to reassess our reliance on electronic navigation aids. While technology enhances efficiency and safety, it can also present vulnerabilities. When automation fails, everyone must know how to revert to fundamental skills and to maintaining operational control. Reinforcing manual skills, situational awareness and critical thinking is not a regression but a strategic safeguard against uncertainty - one that must never be overlooked. Embracing a critical mindset and seeking mitigation measures are essential steps to ensuring robust responses when automated systems falter.

Tackling Ongoing Safety Issues

Equally, it is important to remember that traditional safety issues remain a constant significant concern. At Safewings, we are keenly aware of the challenges posed by an increased workload, operational pressure, mechanical failures due to poor maintenance oversight, instability in ground operations and adverse weather. It is important to talk more about these main safety challenges that we see routinely in our operations every summer season.

- **Operational Pressure.** Pressure is inherent in the dynamic and complex aviation environment. Intense levels of operational activity due to increased flight schedules and tight turn-around times often overwhelm decision-making capacity. Thus, we are working hard to ensure that all our teams have the time and resources required to adhere to all safety procedures without compromise.
- **Fatigue.** Addressing fatigue remains one of our top priorities. Ensuring that flight, cabin and ground crews have adequate rest and know how to manage workload is essential to mitigating the risks associated with a busy summer of operations. We have a specific article in this edition of Conversation Aviation on fatigue and the wider challenge of staying operationally ready and fit for duty.
- **Sub-optimal Maintenance.** Insufficient or delayed maintenance, particularly in critical components, continues to be a significant risk. We prioritise ensuring that maintenance teams are staffed and trained adequately to mitigate this issue. It is also crucial to foster awareness among teams, preventing them from getting caught up in the rush of operations, instead encouraging them to identify and address emerging trends, threats and/or failures that could escalate into serious incidents before allowing the operation to proceed.
- **Severe Weather Management.** Enhancing our ability to detect and manage effectively adverse atmospheric phenomena must be a key priority. This can be achieved not only by incorporating new technologies, but also by fostering greater coordination across company sectors, from flight preparation to execution with the assistance and support of external stakeholders, such as ATC and other service providers. At Safewings, we try to adopt predictive and proactive strategies, rather than reactive approaches, as we believe shared responsibility is essential for preparing and managing weather-related risks better.
- **Instability in Ground Operations and Monitoring**. Staffing shortages and training gaps, combined with difficulties in hiring and retaining adequately trained staff, can lead to a lack of accountability and awareness in identifying safety issues. One way to address this is by guaranteeing the continuous training and qualification of service providers' staffs to maintain operational standards. Additionally, conducting risk-based audits of handling agents and strengthening reporting campaigns are crucial to ensure the timely identification and resolution of safety concerns.

The Role of People in Creating Safety

How, then, can individuals contribute to building a safer environment and mitigating some of the risks outlined above?

Firstly, by recognising that safety is not just about rules and regulations, but about people engaging actively with their work, understanding broader safety objectives and adopting a critical mindset while using the necessary tools to make informed decisions.

We recognise that human factors play a decisive role at every stage in our operations. From pilots and air traffic controllers to engineers, ground staff and all other aviation professionals, everyone must focus actively on key human performance skills:

- **Maintaining Awareness**. Stay vigilant to the environment and anticipate potential risks.
- **Managing Workload**. Organise and prioritise tasks to ensure control and safety.
- **Mindful Decision-Making**. Evaluate situations accurately to make confident, timely decisions, involving others in collaborative, deliberate decision making.
- **Clear Communication**. Share information and communicate clearly and with purpose to avoid misunderstandings and ensure coordination.
- **Teamwork**. Work together proactively, fostering an environment where small actions lead to significant safety improvements.

At Safewings, we also encourage open discussions about risks and near-miss experiences, making sure that lessons identified learned are quickly disseminated and integrated into operational practices. By maintaining transparent communication channels, we enable our teams to express concerns and suggest improvements, reinforcing a collective commitment to safety and preparing them for future scenarios. Our reporting system is at the heart of this, and we encourage everyone to submit safety reports when needed to help better understand our risks and ensure wider organisational learning.

The Path Forward

Whilst innovation is very much at the core of the aviation industry, ultimately, it is the “human factor” that truly makes the difference. Safety is created by the people who drive it, and our people will always be the driving force for progress.

The Aviate-Navigate-Communicate philosophy is not just a mantra for pilots, but a call to action for all of us. By integrating emerging and traditional safety concerns and, through a comprehensive approach, that includes critical thinking, continuous learning, training, open dialogue and a focus on both the basics and the evolving threats, how we ensure a resilient and safe aviation environment for all. ■

Fatigue and Operationally
Ready and Fit for Duty

Imagine a moment in the Bernabeu Stadium in Madrid, Spain. Real Madrid are playing Athletico in the semi-final of the European Champions League. A place in the final against Liverpool or Bayern Munich awaits the winners of this epic football derby match.

From Gunnar the HF Expert.

Imagine also that Real Madrid decide not to care about the preparation of their start striker Kylian Mbappe. They don’t care how much sleep he had the night before, or whether he is rested properly since the last game. They don’t care what he’s eaten before the match, how he’s been looking after his physical and mental fitness or what he’s been doing in the hours before the game. Get out there Kylian and just do the best you can.

Such a situation is impossible to consider. Football teams want their whole team to be able to perform like finely tuned machines, so they have the best chances of success. The same is true of us here at Safewings, and this is particularly relevant as we approach the busy summer season.

Our goal is to help everyone perform to their best - a team of who understand their individual roles and come together to deliver a safe and effective operation.

Not Just Compliant but “Operationally Ready and Fit for Duty”

Some of our staff, the pilots and cabin crew have specific flight time limitations (FTL), these are specific EASA rules that govern how long they can work in single duties, over specific periods of time and in specific situations.

Some people are of the impression that simple compliance to the flight time limitations is enough. Doing this, without any risk management or data collection, however, has not met compliance requirements since EASA’s Organisational Requirements (ORO FTL) was published. Instead, airlines sit on one of the three higher level steps in the image below.

Figure 1 - Managing Fatigue

Currently, at Safewings we have what is called an 'Appropriate FRM'. We demonstrate effective management of fatigue through Operator Responsibilities, using the elements of our Safety Management System (SMS) to identify key contributors to fatigue and manage them appropriately. This is why fatigue reporting is so important.

The next step is a 'fully-fledged FRM', where we can identify elevated risks and control them in a way that our aviation authority approves. We aim to continually increase the maturity of our system for managing fatigue.

It is important to mention that other staff members don't generally have specific rules governing/mandating how long they can work, other than what is required in the EU rules on working time.

The main point is that helping all staff perform to their best is vital for the whole Safewings operation.

Our Journey with Fatigue Risk Management

When working with fatigue it's easy to get overwhelmed and lose track of the bigger picture. So, to ensure the aim was clear and that there was a consistency within the FRM(S), four objectives were set at the beginning:

1. The company FRM should be practically oriented
2. The company FRM should be built on core principles derived from the ICAO definitions of fatigue (Figure 1, above).
3. The company FRM should work towards future FRMS approval
4. The company FRM should be a shared responsibility between safety and operational departments.

The Core Principles of our FRM(S)

The ICAO definition of fatigue contains a lot of information that was used when we built our FRM. Firstly, ICAO highlight that sleep, workload and circadian rhythm play a role. Secondly, they specify fatigue as a physiological state of reduced mental or physical performance capability that can impair alertness and/or safety performance. From this we created "Four Key Fatigue Factors": sleep quantity, sleep quality, circadian rhythm and workload. We then decided that "sufficiently free from fatigue" would mean that crew would be sufficiently alert and free from safety-related errors (we'll get back to this later).

Structure & Plan

The next step of the process meant splitting the necessary FRM processes as stated in Doc 9966 into areas of responsibility and identifying what current processes were in place and what processes were missing. Smart-art and colour coding then gave us both a foundation to build on and the roadmap for the future (and now, nearly three years later, also a bit of nostalgia).

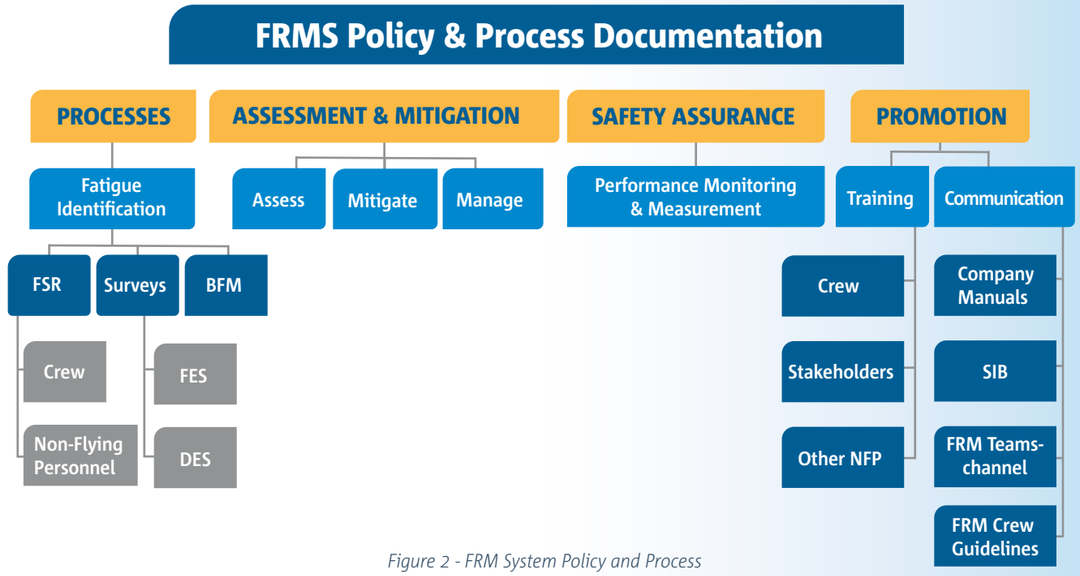


Figure 2 - FRM System Policy and Process

At a later stage, we decided that *reactive*, *proactive*, and *predictive* processes should be identified for all four component levels - creating a red thread and continuous focus on mitigating, rather than simply managing, fatigue.

Metrics

"You can't manage what you don't measure" - Peter Drucker

Given the first objective, we quickly needed to figure out how to measure fatigue levels. As I guess you already know, this is sometimes easier said than done, particularly when you're on a budget. Initially, we didn't have any fancy fatigue models, very little reporting data and were still figuring out a lot of the functions of our rostering system. What we did have was our SMS, where we set up the risk register for FRM to allow for monitoring using a common measure (i.e. a risk score), with a dedicated process for continuous improvement.

Setting up the SMS

The way we went about it was to start with the four fatigue factors mentioned earlier. We then identified parts of the operation that would fall under each category that were *specific* for our operation (given rostering metrics would be covered by the rostering system). We also set up triggers and a process to identify more detailed sub-hazards.

Figuring out the Rostering Data

Whilst rostering systems do measure fatiguing rostering practices (as required by the regulations), the devil often lies in the details. Our operation is highly complex with night, alternating day/night, ACMI (Aircraft, Crew, Maintenance and Insurance)/charter and short and long-haul duties. Not to mention we also have multicultural crew bases spread halfway across the world. Based on the reporting we got and the newly created risk register, we soon noticed that there was more to fatigue than just rostering. We also recognised, however, that we'd need both systems to work together. This wasn't an easy task, but we figured we'd take it back to the basics - block hours!

The good thing about this is that we can find out the trailing block hours of any crew at any date, meaning we could track it on a per-report basis (we'd argue this should be a common Safety Performance Indicator (SPI) for all of us, but that's for a later discussion). For us, this gave us our first SPI showing *output* rather than input. We have since then expanded on this and now track block hours over multiple different periods as well as compare it to averages to get an indication of efficiency (trailing block hours(BLH)/ average BLH per crew).

This isn't the only thing we measure with the rostering system, but it's one of the things we'd argue any operator can use regardless of size or resources. It's also simple to understand *and* is tied to cost - if someone calls "unfit due fatigue" at 50 block hours, you're technically losing half of their potential...

Sufficiently Free From Fatigue

It's useful to finish with an explanation of both what *we* consider as sufficiently free from fatigue and an example of how we turned a base from being *insufficiently* free from fatigue to one of our most productive ones!

Firstly, remember the part about alertness and performance? Remember also the SMS Competency Based Training (CBT) you had about "safety barriers" and "likelihood"? Well, we structured those two parts and merged them with the SMS Risk Matrix to create an "FRM Risk Matrix", ensuring we get an objective measure of risk for every report.

Secondly, given that the definition states both performance and alertness impact, we use both within our report-templates and can cross-check them with the BFM to determine acceptable levels of fatigue (there's no such thing as zero fatigue in aviation). Which brings us to what's acceptable? Well, that's for you to decide, but we used a mix of the Samn-Perelli scale (which contains more performance-oriented statements), and the Karolinska Sleepiness Scale (aimed more at sleepiness) to come up with our values.

From Insufficient to Sufficient

With the above processes in place, we noticed at one point that one of our bases were at increased risk levels (largely due to the type of flights they were doing), had increased sickness and reported fatigue more frequently and at higher severity than other bases. Unions were also starting to bring up the subject, meaning we were all agreeing that something had to be done.

So, what did we do? We first used the risk register to figure out what the main hazards were. This was followed by a block-hour analysis (for different trailing periods) and finally a biomathematical analysis. They all came out with more or less the same conclusion. Whilst the easy thing could have been to simply reduce frequency or change departure times, that wasn't really an option - so we had to get a bit more creative.

Together with crew planning, we created multiple versions of flight pairings, which we then reviewed with the BFM, resulting in a few restrictions but none that included reducing efficiency. Total off-days, timing of duty and rest-times all stayed the same; we simply changed the order of trips and long-term structure of rostering. I even attended the union meetings myself to explain how the whole process had been carried out, the alternatives we considered and the final conclusion. Then, we agreed to give it a go.

The following year, the base we had identified as being at increased risk levels flew the most hours of any base in the network, with less sickness, less reporting and happy unions. Showing that FRM will have an impact on your bottom line; it's simply up to you to determine which way you want it to move it.

A Hazard That has a Shared Responsibility

Hopefully by now, its clear that we treat fatigue as simply another hazard that is managed through risk assessment, risk mitigation/management activities and safety assurance. Fatigue is also something that can only be managed through joint responsibility. How we act in our personal lives impacts our safety due to fatigue at work and *vice versa*. So, both the individual and the organisation have critical roles to play in ensuring fatigue is managed appropriately.

The Main Challenges Related to FRM

Looking at the whole FRM picture, here is a summary of the main challenges that most operators face (not just us):

- Concern that reducing fatigue levels may cause a significant increase in staffing levels, or prevent operations that are currently undertaken.
- Balancing 'subjective' and 'objective' data and concern around "fitness for duty" being applied inappropriately.
- Ensuring appropriate competency across the organisation to support fatigue management.
- Identifying appropriate metrics and data, as fatigue is physiological and can be seen as difficult to measure.
- Having sufficient resource within operational and safety teams to support the additional data collection and informing operational decision-making to manage fatigue.
- Identifying effective mitigations that can be implemented to reduce fatigue.

Some of these challenges may seem insurmountable, especially when taking first steps to manage fatigue through the SMS; however, as experience grows, solutions can be found. Moreover, the simplest solutions can often be the most effective; for example, skilled roster writers can adjust roster patterns to reduce fatigue without an increase in headcount, or a reduction in flights, one way this could be achieved is by simply changing the order of duty days.

Learning from other operators and wider experience in the industry can also support you. An excellent resource is the EASA FTL/FRM Checklist for Inspectors, which provides a series of checks for inspectors to undertake. In addition, the checklist can also be used by operators to audit their own system(s), identify checks that you cannot provide answers to and allow gaps to be filled.

Fatigue at a Personal Level - Operational Readiness and Fitness for Duty

Whatever your role, we want you to be operationally ready and fit for duty. For pilots and cabin crew, this is a legal requirement and includes fitness for duty relating to sleep and fatigue. But what does this really mean?

Fitness for duty can be difficult to determine - particularly, if you are experiencing cumulative fatigue where fatigue slowly builds over weeks, months and even years. As individuals we can underestimate how much our performance is affected.

When it comes to acute fatigue, we are more capable of identifying our fatigue levels. We provide all staff with training and useful 'rules of thumb' regularly, which help with your own decision making. Hopefully, organisational safety culture makes it more likely that you feel you can make the right decisions about your fitness for duty.

The Elephant in the Room (at Least for Some Managers...)

We know that some managers might be concerned that some crew will use the system for a 'free' day off. Yes, this *could* happen. In our experience and based on surveys, studies and the experience of our supporting consultants at Baines Simmons who have worked in fatigue management for over 10 years, however, the proportion of crew who will declare themselves unfit due to fatigue when they want a day off is significantly lower than the proportion who continue to operate, when in hindsight it probably wasn't a good idea.

Ultimately, this is a trust culture thing; but we like to assume that everyone is doing their best and doesn't want to let their colleagues or passengers down.

If an individual feels unfit for duty, we would encourage them to declare themselves unfit to operate and remove themselves from the operation as early as possible - ideally before the start of a duty period. As a last line of defence, an individual might need to do this during a duty period; we appreciate that this is not an easy decision and, if this is the case, we must be there to support them.

To increase the effectiveness of this mitigation, there are some recommended additional steps:

- Submit a fatigue report identifying that you are not fit to operate. This is not to apportion blame, but to support work to identify the cause(s) and develop (and implement) corresponding mitigation(s).
  > If the cause was personal action (for example, due to coming back from holiday late before an early duty start, then it may be necessary to remind the individual of their responsibilities). We do acknowledge, however, that everyone's lives are always changing, and - where practicable - we want to support people manage life's challenges.
  > Just Culture approaches apply to fatigue reporting and, as such the goal is to identify fatigue risks just like any other in our operation.
- Removing oneself from duty due to fatigue must be seen as one of the responsibilities of a professional crew member. Whilst we welcome crew going the extra mile, continuing to operate and not wishing to let others down, if someone is not fit to fly safely, it is important they remove themselves from duty.
- As an organisation, we aim to provide you with the tools and means to identify signs of potential elevated fatigue, including how much sleep is not enough to perform as a safety critical member of the crew and signs of elevated fatigue.
  > FRM training is competency-based training. We continually improve and update the training using information we get from fatigue reports and other information sources such as surveys.

Controlled Rest

Controlled Rest on the flight deck (also called *in-seat napping*) is an emergency mitigation for unexpected periods of high fatigue that might arise during a flight. Controlled rest cannot be relied upon. If, for example, there is excess turbulence, or the cruise period is not low workload, crew would not be able to take controlled rest. If, before a flight, any crew member suspects that they might need controlled rest, they should declare themselves too fatigued to operate (as described above).

Key elements of controlled rest include:

- It is an emergency countermeasure.
- It can, however, be used proactively. If during cruise you experience high fatigue levels are likely to accumulate before approach and landing, taking a controlled rest at that point could be pragmatic to improve alertness during the most challenging parts of flight.
- The cruise period must be long enough to allow for preparation for the controlled rest, the rest period itself and a recovery from any post-rest inertia prior to rejoining operations.
- There must be a clear handover of roles around controlled rest, both before and after.
- Keep such rest periods shorter than 30 minutes to minimise the likelihood of entering deep sleep can reduce the intensity and duration of subsequent post-rest inertia.

For more guidance on controlled rest, the flight safety foundation has produced a guidance document: https://flightsafety.org/asw-article/controlled-rest/.

Other Staff Groups?

As mentioned earlier, FRM outside flight and cabin crew is not as specifically legislated for; however, it's as much a hazard for everyone else and must be managed.

As SMS is being introduced into Part-145 for maintenance organisations, there are specific requirements for the consideration of fatigue in organisations' manpower plans. Line maintenance organisations often conduct detailed and complex tasks during the middle of the night and could therefore be vulnerable to the effects of fatigue. Fatigue risk assessments should be undertaken and identified controls and mitigations implemented.

The same will be true of ground handling organisations as the new EASA Ground Handling rules come into force in 3 years' time.

It is important that we continually ask ourselves the following questions:

- Do our current shift patterns support adequate sleep opportunities between shifts?
- What does working overtime mean for fatigue levels?
- Where is our highest likely fatigue level during a shift? What tasks are being done at that time?

There is a lot of focus on fatigue modelling, which may be available and could support identifying fatigue levels and timing; however, it is not mandatory.

Ultimately, that is why reporting is so important, so that staff can continually provide feedback to understand the situations that lead to problems, so we can adjust things as needed.

Shift Smarter Not Harder

For those of you who work on the ground side of things, jobs can often involve a lot of repetitive work that creates both physical and mental demands. We need to think about the specific activities that might be highly repetitive, highly concentrated and even very physical. Where possible, we must look to identify control measures to help reduce the risk of fatigue. These include:

- Consider where the work takes place and seek to improve that environment to help reduce fatigue. For example, working in a well-lit hangar requires less exertion than performing maintenance is near darkness with a grey floor.
- Ensure that adequate machinery and equipment is installed so that it can be used in the workplace.
- Design tasks to reduce or eliminate repetitive or monotonous work, sustained mental or physical effort, and/or overly complex tasks.
- Introduce job rotation to limit the accumulation of mental and physical fatigue.

Nutrition

Healthy eating and good nutrition are important for everyone, here are some useful tip:

- Prefer/favour protein-rich foods that promote alertness (stimulating effect): meat, eggs and fish in reasonable quantities and provided they are not fatty meats.
- Avoid snacks consisting solely of sugary foods like energy bars (fast-acting sugars and fast-burning carbohydrates induce sleep).
- Remember to stay hydrated (drink plenty of water).
- While flights are in the cruise, alternate captains' and first officers' meals to avoid the risk of simultaneous drowsiness.

Summary

Managing fatigue seems complicated, but it is just another hazard. As an organisation, the amount of time, effort and resource that we invest depends on our risk exposure of the operation and our operational aims. This is where managing change in our management system is so important, so that we can identify (and mitigate) potential risks as early as possible.

Managing fatigue through the SMS is the key requirement for us all - and not just in-flight operations. Fatigue is another hazard, so must be managed as we do any other hazard.

If you remember nothing else from this article, you are encouraged to be part of our FRM efforts and especially to report hazards whenever you identify something. It is only with your reports that we can ensure that we are always operationally ready and able to help our passengers and cargo reach their destination safely. ■

Clear Messages, Safe Journeys:
What We Want Passengers to Know This Summer

Summer is always a busy time in aviation - full flights, packed airports and plenty of pressure on everyone. When it comes to keeping passengers safe, however, some of the most important actions start with clear, confident communication; that includes how we talk to passengers about safety - especially when it comes to their own actions.

From Sven, Cabin Manager

Whether you're working at the airport or in the cabin, this summer we're asking everyone at Safewings (and our partner airports) to get behind three simple safety messages. They won't just help prevent incidents, they'll also build passengers' trust and help them feel more confident in the crew and the systems around them.

First, however, let us share a quick story with you.

The Power Bank That Didn't Power Down

Last summer, one of our flights returned to stand after a passenger's bag began smoking in the overhead locker just after pushback. It turned out they'd placed a power bank inside a backpack, connected it to a device and zipped it shut. Nobody could see it and, when it started to overheat, the only warning was the smell of burning plastic.

Thankfully, the aircraft was still on the ground, our cabin crew and airport fire service reacted quickly so that the aircraft returned safely with no injuries. The message is simple: **if you can't see it, you can't react to it**.

This is why the first key message we want to reinforce with passengers is about charging personal electronic devices.

1. "Charge Smart, Stay Safe"

Here's what we want passengers to hear:

- **Carry e-cigarettes and power banks** where they can be monitored. If something goes wrong, we need to see it quickly.
- **Only charge devices using the aircraft's power supply**, keep an eye on the device while charging and don't charge your devices from a power bank during a flight.
- **When spare batteries** (including power banks) or e-cigarettes are in carry-on baggage, they must be protected from short-circuit, unintentional activation, stowed as far as possible from any other battery and/or potentially flammable item (e.g. perfume) and cannot be charged during a flight.

These aren't just comfort tips, they're fire prevention advice. Devices can overheat, batteries can fail and we've all seen how fast those incidents can escalate. The key is visibility: if a device starts to smoke in your hand, you can deal with it; if it happens out of sight in a closed bag, the whole aircraft is at risk.

2. "Put Yourself in Flight Mode"

This isn't just about your phone, it's about your mindset.

Disruptive passenger behaviour continues to rise across the industry. Most incidents aren't dramatic - no viral videos, no emergency landings - but, they still create risk, delay flights and wear down our teams. It can start with ignoring basic instructions, arguing over seats, or refusing to stow a bag - critically, such incidents can escalate very quickly.

Our message to our passengers this summer is simple:

- **Get in the zone:** be prepared, respectful and ready to fly.
- **Listen to the ground crew and cabin crew** - they're there to keep you safe.
- **Disruption delays everyone:** think before you act.

When passengers "put themselves in flight mode," they're calm, cooperative and tuned in to what's happening around them. This helps the whole team - on the ground and in the air - deliver a smoother, safer experience for everyone on board.

3. "Leave Bags Behind"

In an evacuation, time matters: every second counts. Yet, we still see videos of passengers grabbing their bags during real-world emergencies. The rule is clear, but do passengers *understand* why?

Our job is to help them understand that it's not about losing their stuff - it's about saving lives. Luggage blocks aisles. It damages escape slides. It slows people down and puts everyone at risk.

So, what should we be saying?

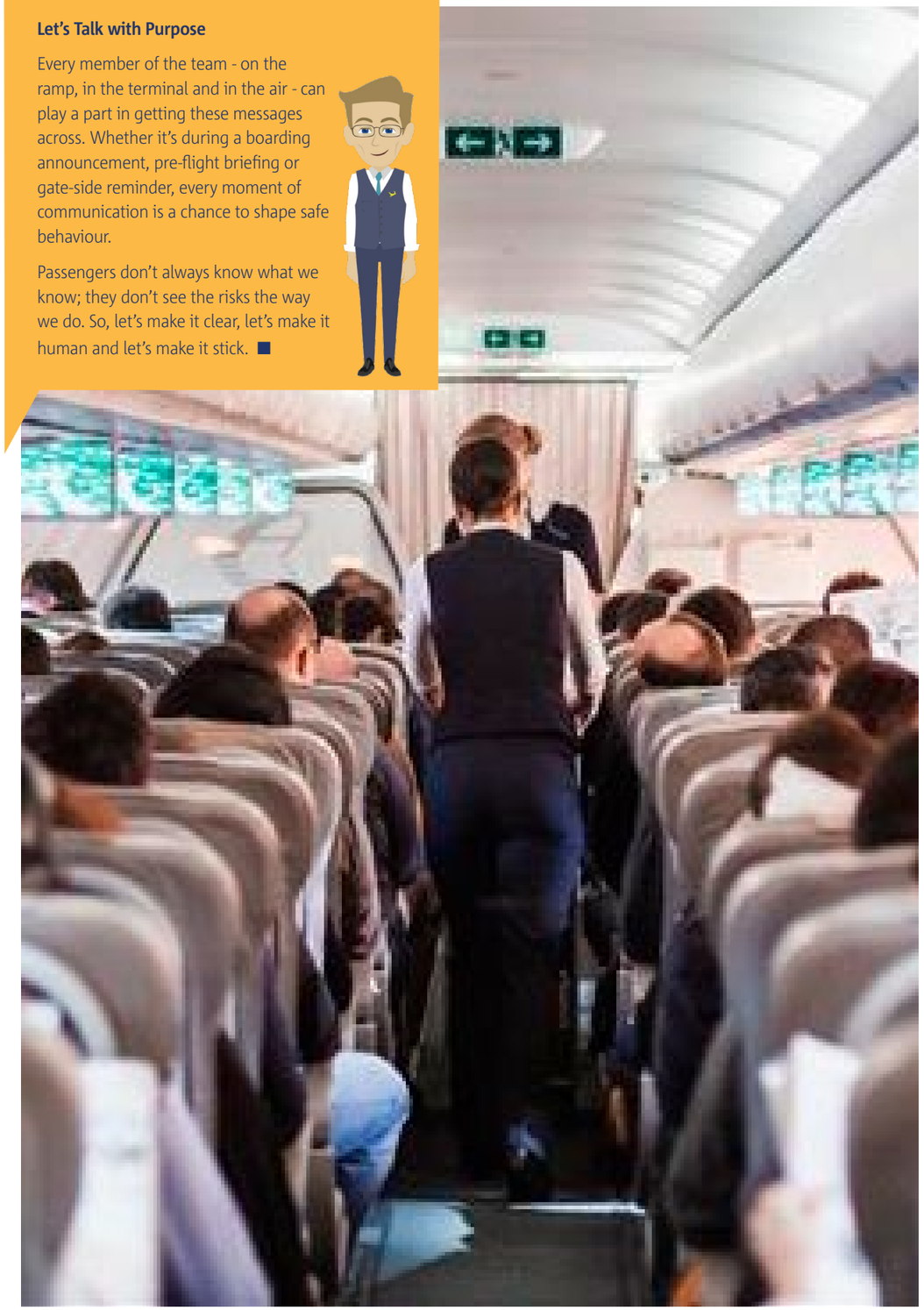
- **In an evacuation,** leave everything and just go.
- **Your bags can be replaced**, your life can't.

This needs to be said proactively, confidently and with clear intent *before* an emergency happens.

Let's Talk with Purpose

Every member of the team - on the ramp, in the terminal and in the air - can play a part in getting these messages across. Whether it's during a boarding announcement, pre-flight briefing or gate-side reminder, every moment of communication is a chance to shape safe behaviour.

Passengers don't always know what we know; they don't see the risks the way we do. So, let's make it clear, let's make it human and let's make it stick. ■



Wildlife Hazard Management

Population growth, urban expansion and rising air traffic have heightened the risk of wildlife strikes to aircraft. This means that it is important that airline, airport and other related staff members understand the important role of Wildlife Hazard Management (WHM) and the specific actions that the different types of organisations and their staff can take to mitigate these threats effectively.

Guest article provided by Baines Simmons

What is WHM and Why it Matters

Aircraft are at greatest risk from bird strikes on take-off and on final approach when they are reasonably close to the ground. In these critical phases of flight, aircraft are typically flying at speeds of between 80 and 160 knots (depending on the aircraft types) when even a relatively small bird could cause considerable - even catastrophic - damage to an aircraft. Bird strikes also happen at higher altitudes where aircraft are in the cruise and flying faster; wildlife strikes (birds and - yes - other wildlife) are also possible while aircraft are on the ground. Aircraft have been hit by all sorts of animals including deer, cows and even a fish that once fell from bird's mouth and went through the windscreen of an aircraft on approach.

Whilst aircraft design requirements are such that it takes a lot to cause a major issue, a large bird or a flock of birds can pose a significant risk to aviation safety. Any damage to an airframe from any object could impact an aircraft's flying/handling characteristics markedly, which is never a good thing. While wildlife strikes can often lead to costly (time and materiel) repairs, they also disrupt our schedules, leading to additional operational pressures on many parts of the aviation system.

Different People Have Different Parts to Play

Like many safety issues, different people in the system have different parts to play in mitigating the risk of wildlife to operations. It is probably no surprise that the largest part of the effort falls on aerodromes' WHM teams. These teams play a vital role in aerodrome safety, working to minimise risks through measures including dispersal, removal, habitat modification, deterrent, and management of the environment around the aerodrome. These airport measures reduce the likelihood of bird strikes and other wildlife incursions that could endanger passengers, crew and aircraft.

Flight crew, ground staff and aircraft maintenance engineers, however, also have their parts to play in ensuring that any damage to aircraft is identified and reported. Such reporting ensures that any wildlife remains are sampled to identify the bird type and to support the collection of other information that will help to mitigate future risks.

It is important to know that effective wildlife management is more than a basic regulatory requirement, it is a crucial investment in both safety and efficiency.

The Safewings Safety Team conduct regular analyses of our wildlife hazards, including location identification and the team work closely with the teams at those airports with the greatest risk to help practical mitigations. Both our insurance company and our supporting consultants help us analyse the data and work closely with airports and national authorities across our network.

For Flight Crew, Ground Staff and Aircraft Maintenance Engineers

Whilst WHM prevention measures at aerodromes are vital (more of that in a moment for our airport colleagues), there are some key things that flight crew, ground staff and engineers can do to identify damage and help with the follow-up information.

- Firstly, whatever your role, if you see damage on an aircraft from birds or other wildlife report it to the aircraft captain.
- If you are the captain, report any damage via the safety reporting process and initiate the WHM follow-up procedure.
- If there are no flight crew, perhaps you are the post-flight inspecting engineer or one of our supporting ground staff - please inform Safewings ops control in Cologne.

The WHM follow-up procedure then captures information about the potential location of the strike and, where possible, involves analysis of any wildlife remans recovered. Collection kits for wildlife remains are in all airctaft cockpits and all maintenance vehicles.

For Airports in Our Network

Airports have the biggest role to play in mitigating wildlife hazards and keeping passengers and crews safe. Airports that prioritise dedicated, experienced WHM teams have less delays, fewer aircraft damages and a much easier time demonstrating compliance with aviation safety regulations to their respective national authorities.

In recent years, there has been an increase in bird populations in the sky and mammals on the ground.

training and hangar clearance services.

This is due to various factors including climate change, the expansion of natural habitats, efforts to protect endangered species and the restoration of ecosystems to promote biodiversity. With air traffic growing year-on-year, the need for effective wildlife hazard management and associate aviation safety measures become increasingly evident.

Specifically, there are 3 key activities for airports:

- Developing Wildlife Hazard Management Plans (WHMP) to manage the habitats at and around the aerodrome.
- Implementing training programmes for operational staff to help WHMPs to be as effective as possible.
- Reporting wildlife hazards and strikes.

The Blueprint for Successful WHM

Wildlife activity is inherently unpredictable and shaped by a variety of factors, including natural events and human developments. There are some key questions that we should be able to answer at any time:

1. What are your identified WHM risks associated with the changes imposed by the COVID-19 situation?
2. What are your current active wildlife hazard control procedures and why are they needed (what hazards are they there to mitigate?).
3. What are your current airside habitat management procedures?

It might be that you are unable to answer these yourselves with the resources you have at the aerodromes. WHM is a specialised activity so you might need to call for the help of a dedicated wildlife management service.

What Success Looks Like

Successful WHM blends active and passive measures to maintain a constant airfield presence and an understanding of surrounding risks.

Active measures involve direct deterrence, best achieved by equipping wildlife control operatives with high-performance vehicles and advanced deterrents such as birds of prey, pyrotechnics, decoys, bioacoustics and firearms. Wildlife control logs should be data-driven, allowing for the analysis of wildlife patterns and refinement of strategies to improve decision-making.

Equally important, passive measures focus on habitat monitoring to detect hazardous birds in the vicinity of the airfield, as well as habitat management to reduce site attractiveness as much as reasonably practicable.

The Runway and Beyond: Importance of Off-airfield Monitoring

Off-airfield monitoring is both a regulatory requirement and a critical element of an effective WHMP. Aerodromes are in lots of different places, including urban, coastal and rural areas, each with features that attract different species and pose individual challenges. Identifying these species and assessing their potential risks of moving onto the airfield is crucial to preventing wildlife hazards. By understanding the dynamics of the surrounding areas, airports can take proactive measures to reduce the likelihood of wildlife-related incidents.

As part of your WHM activities, 13 km wildlife assessments should be carried out to assess the types of sites surrounding the aerodrome and the risks associated with them. Based on these findings, detailed monitoring plans can be developed to ensure any significant changes in wildlife activity are quickly identified and addressed.

Observations made from the aerodrome by staff or supporting services can then logged for long-term data analysis, helping detect feeding sites, breeding grounds and migration patterns. This information can support efforts to manage on-airfield habitats, reducing their appeal to species that could pose risks to aviation safety.

WHM teams should also collaborate with stakeholders, such as land operators and environmental groups, to ensure air safety priorities are balanced with land management needs, fostering mutually beneficial cooperation.

Summary

The goal is to prevent wildlife strikes in the first place through proactive, effective WHM activities at the aerodrome. If you don't have the skills yourselves, do not be afraid to ask for external support to ensure that your planning and risk management is as effective as possible.

Do everything you can to understand the risks at your aerodrome and to develop and implement the appropriate mitigating measures.

For everyone - airport staff, flight crew, ground staff, engineers et al - reporting and effective follow-up is key to understand the types of wildlife causing strikes and damage. ■

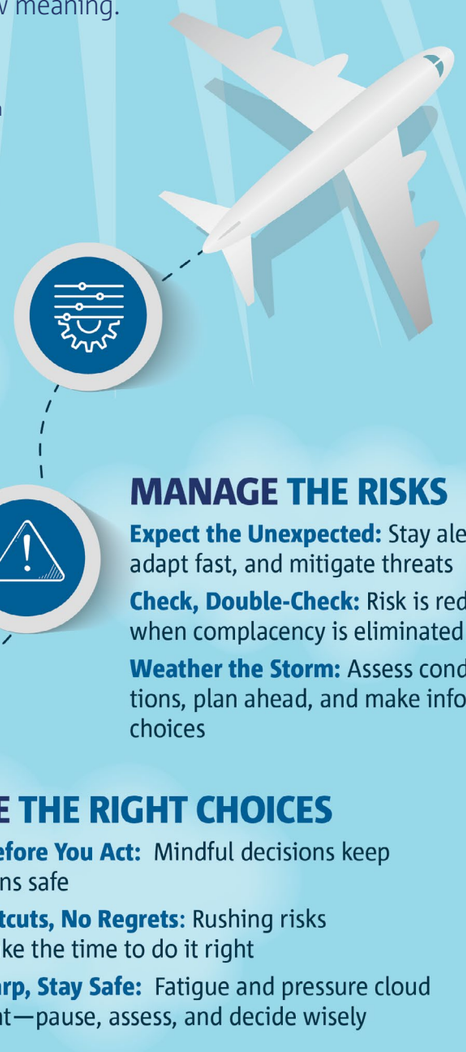
Safety on the Ramp this Summer

From Val,
Ramp Worker

When the summer season is in full swing the ramp becomes a very busy place; there's always a lot going on. There are risks and hazards everywhere, from aircraft, vehicles of every kind, equipment and baggage and cargo. Add in lots of seasonal staff who might not be so familiar with the environment, and the ramp is a place where our Summer Safety concept of "Aviate-Navigate-Communicate" takes on a completely new meaning.

The Ramp View

Firstly, let's take our summer safety tips and apply them specifically to the ramp environment.



MASTER THE BASICS

Clear the air: Communicate clearly and with intent to prevent confusion

Stick to procedures: Fundamentals saves lives, know them - follow them

Pace yourself: Summer is a marathon not a sprint - prioritise wellbeing

MANAGE THE RISKS

Expect the Unexpected: Stay alert, adapt fast, and mitigate threats

Check, Double-Check: Risk is reduced when complacency is eliminated

Weather the Storm: Assess conditions, plan ahead, and make informed choices

MAKE THE RIGHT CHOICES

Think Before You Act: Mindful decisions keep operations safe

No Shortcuts, No Regrets: Rushing risks lives—take the time to do it right

Stay Sharp, Stay Safe: Fatigue and pressure cloud judgment—pause, assess, and decide wisely

Let's share a story of something from last year

The following event occurred at our home base in Cologne during the departure activities of one of our regional turboprop aircraft.

The ground crew consisted of a headset operator and a trainee, who had just completed the aircraft pushback. The towbar had been disconnected, and the headset operator and his trainee were completing the final items when suddenly they felt that the aircraft had started to move.

They immediately backed away from the aircraft and managed to establish visual contact with the pilot-in-command who subsequently stopped the aircraft.

What came next....

When the Safety Team were first notified of this occurrence, the first thing we asked ourselves was "how could such a thing happen?" An in-depth analysis of the event revealed what had led to this narrow escape, which - thankfully - did not result in an accident.

Both groundcrew (headset operator and his trainee) were standing on the forward left-hand side of the aircraft, next to the connecting point for the groundcrew interphone system. The groundcrew were in a blind spot and, as such, not visible to the cockpit crew. The groundcrew were about to disconnect the headset and close the panel when the aircraft started to move.

One key question was "why did the pilot-in-command start to taxi without having received and acknowledged the "all-clear" signal?" From the pilot's perspective, before commencing the taxi he was convinced that the area around the aircraft was clear and that he was good to go.

A clear communication had been established between the groundcrew and the pilot-in-command; the latter had informed the groundcrew to disconnect and give him the "all-clear" signal once ready.

The analysis revealed that pressure had been a significant contributory factor in this incident. The flight had already been subjected to a delay and the cockpit crew wanted to depart as soon as possible, as most of the passengers on board had connecting flights at the destination airport. Additionally, the cockpit crew wanted to clear the way for an arriving aircraft that had just vacated the runway.

Factors that reinforced the flight deck's understanding that the groundcrew had cleared the aircraft

Whenever there is an occurrence report or hazard report, it's always important to dig beneath the surface to really understand the human factors at play. It might be easy to sit in an office and try to identify what might have contributed to someone making a specific decision, but that isn't the learning mindset that is critical to helping us identify lessons and manage our risks every day.

Although the headset operator was still connected to the interphone system, the pilot-in-command was sure that the operator had already disconnected. The pilot's assumption was based on the crackling noise that could be heard when the headset is being disconnected. During on-the-job training (OJT), however, the groundcrew use a sharing splitter that allows the connection of two headsets to the interphone system. The crackling noise that pilot-in-command heard was the disconnection of the trainee, whereas the headset operator remained connected to the aircraft interphone system. The analysis revealed that the cockpit crews were unaware about the usage of a sharing splitter on the interphone system.

Being busy with the after-start items and the associated checklist, the cockpit crew did not monitor the activities of the groundcrew. After having finalised their checklist, the cockpit crew saw the pushback truck driving away from the aircraft towards the airport terminal. The cockpit crew assumed that the headset operator had given the "all-clear" signal while they were going through their checklist and that they had simply missed it. Furthermore, the elapsed time since the removal of the towbar had already exceeded the usual time span for this kind of operation; it turned out that it had been the trainee's first OJT session, hence the extra time.

The cockpit crew had had no doubts, as at this airport it had become the norm that, after having given the "all-clear" signal to the pilot-in-command, the headset operator boarded the pushback truck to return to the terminal. On this specific day, however, the pushback truck was needed for another departure and had been dispatched to another position without taking the headset operator.

After having sorted out what just happened, the pilot-in-command apologised to the groundcrew, and the aircraft departed for its one-hour journey. It was only later, during cruise when the pilot-in-command suddenly started to realise how close they had been to a potential accident.

Immediately after their return flight back to the home base, the cockpit crew went to see the groundcrew to discuss and analyse the event together. The occurrence was reported via the internal reporting system by both ground and cockpit crews and it really helped to have both teams capture their initial thoughts immediately after the occurrence.

Follow-up Communication and Learning

Everyone involved in this occurrence agreed that there were lots of lessons that the wider organisation could benefit from. This led to a lessons learned briefing being created by the safety team with input from everyone involved. This was then shared with both cockpit and groundcrew groups across the company - hopefully, you saw it at the time of the occurrence.

This occurrence highlighted the importance of a specific procedural barrier; namely the reception and confirmation of the “all-clear” signal. The event also highlights how easily we can run into the trap of confirmation bias by not challenging our own assumptions.

Organisational Improvements

At the organisational level, the occurrence led to a review of the associated ground procedures. For groundcrew OJT, it is important to keep the cockpit crew in the loop to avoid different mental models of the situation and to reduce training related debriefings in the vicinity of the aircraft to a strict minimum. Last but not least: on an individual level, it is important to perform a recap of the situation with the involved colleagues after such a near-miss event.

Learning in action - what safety is all about

As well as the operational aspects, this occurrence highlights some really important things about our safety in general.

1. **Safety is For Everyone.** The first key point is that safety is not something just for the safety team to do. At Safewings, we do safety together as an integral part of our day-to-day operations. Front-line staff, operational managers, support teams - everyone has a role to play in keeping each other and our passengers safe.
2. **It’s All About Learning.** In the bad old days of safety, we might have blamed the pilot for not following the procedure and moved onto the next thing without taking the time to analyses and understand the situation from everyone’s point of view. Safety is about understanding everyone’s perspective and then understanding how we can learn and improve so our risks are managed effectively.

The Main Ramp Safety Issues

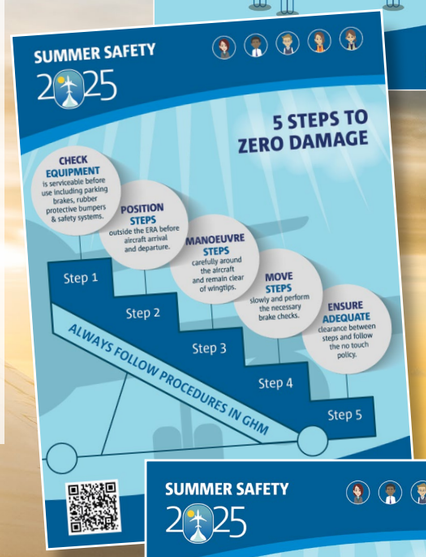
The occurrence in this article highlights one of a number of ramp safety issues that we need to pay attention to this summer season; here are our Top 5 is below:

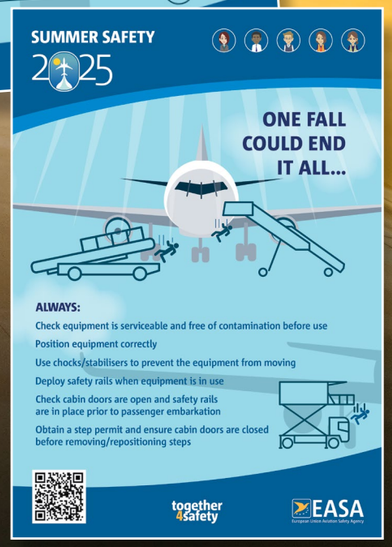
- **Vehicle Collisions with Aircraft (and Vice Versa).** Every year, aircraft are hit by baggage tugs, belt loaders, catering trucks, fuel bowsers and GPUs. Aircraft also collide with parked vehicles equipment. When things are busy it can be easy to overlook something. Always check areas on stand when aircraft are approaching and monitor marshalling vehicles when they are close to aircraft.
- **Injury Risk During Turnaround.** As we saw in the occurrence, there is a risk of injury to ground staff during turnaround, particularly when the aircraft is coming onto stand and departing. These are key moments for mindful decisions and positive communication.
- **Falls from Height.** Ground staff and even cabin crew spend a lot of time working at height around the aircraft. We have had people falling from catering trucks, belt loaders, aircraft doors, or stairs, especially during wet or icy conditions. Again, communication is key, particularly when removing steps from the aircraft.
- **Misloading of Baggage or Cargo.** Incorrect loading, unbalanced Unit Load Devices (ULDs – that we put baggage and cargo in for the uninitiated), or skipped load sheet updates can affect an aircraft’s centre of gravity and stability. There is also a risk from mishandled or incorrectly labelled dangerous goods. It’s important to use the correct document, follow procedures and secure loads correctly.
- **Weather-related Hazards.** The summer weather can often lull us into a false sense of security. Weather can change quickly and pose risks to safe operations. It can be sudden rain or wind, sun that can make it harder to see and high temperatures that make it uncomfortable to perform certain tasks. Continually be on the look-out for weather-related hazards, think ahead and take the necessary precautions in advance. This can be as simple as tying down equipment if winds are picking up to wearing sunglasses if the sun is likely to cause glare during a task.

We have also made some posters and other promotion material on some of these to help focus everyone’s minds over the summer.

Finally, Communication is Everything

To finish our focus on Ramp Safety, the most important thing is clear and deliberate communications. Safe operations on the ramp require lots of people - often from different companies and with different native languages - to interact together . When things get busy it can be hard to take those extra moments to make mindful decisions and communicate clearly; as we saw from the occurrence we highlighted, someone’s life may depend on it. ■





Say What You Mean:
Communicate Clearly to Reduce the Risk of Confusion

From Milena, our CEO

In our business, clarity isn't a luxury, it's an essential tool that safe operations rely upon. Misunderstandings can result in delays, damage or worse. That's why one of the core messages of our summer campaign is simple but powerful:

"Communicate clearly and with intent to prevent confusion."

It's not just about speaking. It's about **thinking before you speak**, using a **shared common aviation language** and recognising the responsibility each of us has - especially those of us who speak English fluently - to support clear understanding with everyone involved in ensuring a safe flight/operation.

Every flight requires lots of interactions. Routinely, these interactions are between many different people who carry out different jobs and functions, working for different organisations and who all come from different countries, with different language skills, different backgrounds and different points of view. The fact that all these amazing people come together to deliver over 35 million safe flights each year is remarkable.

Let's examine a flight from end to end and explore some of the key communication points that deserve our attention this summer.

1. Planning and Pre-departure Briefings

Who's Involved. Flight crew, dispatch, engineering and cabin crew.
Key Communication Risk. Talking past each other or assuming shared understanding.

Ops staff may be aware of weather threats that the flight crew haven't seen yet. Engineers might assume the flight crew has been briefed on Minimum Equipment List (MEL) items. Cabin crew may not realise a last-minute aircraft change means the PA system works differently. There are lots of challenges to be faced.

Helpful Habits:

- Speak in complete thoughts, not shortcuts.
- Use standard terms like "MEL deferred item" not just "a snag".
- Confirm shared understanding, for example, "can I confirm you've seen the updated NOTAM about the ILS at the destination?".

2. Pushback and Taxi Out

Who's Involved. Groundcrew, flight crew, cabin crew and ATC.
Key Communication Risk. Misinterpreting movement instructions or timing.

Whether it's confirming that the tug is ready, the cabin is secure, the steps can be removed or that it is safe to start the taxi, this is a high-density communication phase. Ground handlers and flight crews often juggle multiple tasks and the chance of talking across/ over each other or missed cues is high. Focus on these key moments.

Helpful Habits:

- Always wait for confirmation ("brakes released; confirm towbar connected and clear to push?").
- Avoid vague terms like "ready when you are" or "OK"; be explicit.
- Pause to verify understanding from non-native English speakers.

3. Engineering Interactions

Who's Involved. Flight crew and engineers.
Key Communication Risk. Assumptions about technical terms or deferred items.

This is where standard phraseology and intent-based communication are essential. Saying "it's probably fine", for example, might be an everyday phrase, but it's ambiguous and inappropriate in aviation.

Helpful Habits:

- Say what you ***mean*** and what the ***implication*** is: "the aircraft is serviceable under the MEL for 10 days. Here's what you need to know operationally."
- Flight crew: repeat back key information and confirm implications for dispatch or flight ops.
- Don't be afraid to ask for clarification - "sorry, can you repeat that in simpler terms?" is not a weakness.

4. Air Traffic Control (ATC) and Flight Crew

Key Communication Risks. Misheard clearances, misunderstood speeds/headings and non-standard phraseology.

This one needs no introduction. Miscommunication with ATC has played a role in numerous incidents and accidents. Non-standard or casual phrases like “OK,” “yeah,” “uh-huh,” or “go ahead” (when you meant “proceed”) can create real risk.

Helpful habits:

- Use ICAO standard phraseology - no freelancing.
- If in doubt, ***ask again.*** "say again" and "confirm (stand/heading/level etc)" are there for a reason.
- Native English speakers: slow down and pronounce clearly. You may understand slang or idioms easily, but others may not.

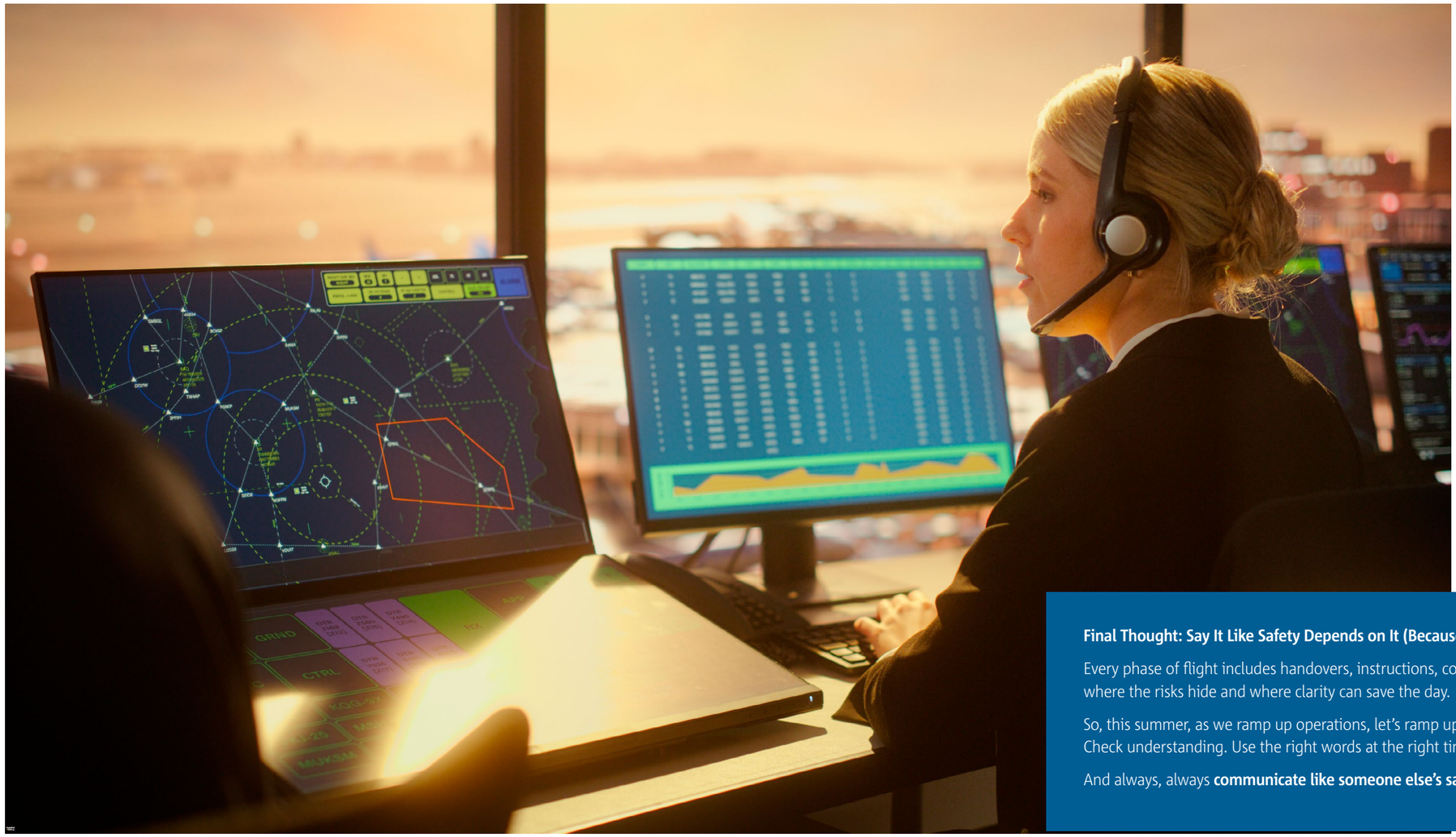
5. Arrival, Taxi-In, and Turnaround

Who’s involved. Groundcrew, flight crew, cabin crew and ops teams.
Key Communication Risk. Confusion over stand entry, safe zones, or disembarkation timing.

The end of a flight is *not* the end of safety-critical communication. Cabin crew may be dealing with stressed passengers while waiting for stairs. Flight crew may be relying on hand signals or headset guidance in busy apron conditions.

Helpful habits:

- Use proper hand signals and standard ground communication phrases.
- Cabin and ground teams: confirm visually and verbally before opening doors or deploying stairs.
- If anything’s unclear, stop and ask; rushing creates risk.



6. A Word About English: Native Speakers, This Is on You

English may be the international language of aviation, but not everyone speaks it equally. **If you’re a native speaker**, you have a special role to play.

Here’s what helps:

Speak slightly slower, especially when using numbers or directional info.

Avoid idioms and slang, such as "give it a go," "it's a no-brainer," "touch base"; these confuse, not clarify.

Listen actively; was the other person nodding, but still confused?

If you're stuck, ask “how do you say this in your language?”; it builds mutual understanding.

Remember: **good communication isn’t about being clever, it’s about being understood.**

Final Thought: Say It Like Safety Depends on It (Because It Does)

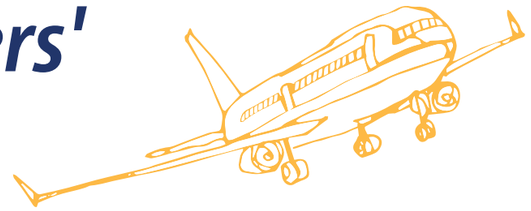
Every phase of flight includes handovers, instructions, coordination and verbal cues. These are where the risks hide and where clarity can save the day.

So, this summer, as we ramp up operations, let’s ramp up our intent behind communication too. Speak clearly. Check understanding. Use the right words at the right time.

And always, always **communicate like someone else’s safety depends on it - because it does.** ■

'Over RTF, usually I have more problems with native speakers than foreign speakers'

- Italian Pilot



English is the common language of international aviation. Therefore you might think that native English speakers would be the exemplars of safe, efficient communication. However, this is not always the case.

- ***'Native speakers compromise safety when they assume everybody speaks and understand same level as they'*** - Mexican pilot
- ***Most native speakers are unable to adapt their level of English to the level of non-native speakers'*** - German Pilot

ICAO has explicitly acknowledged that native English speakers are sometimes part of the problem in international aviation communication.

'Many native speakers of English who use local jargon and idioms and who speak with a heavy and poorly articulated regional accent at high speed may well not comply with the ICAO requirements'.

'Trainers must recognize that native-speaker idiomatic speech is not the model to be achieved'.

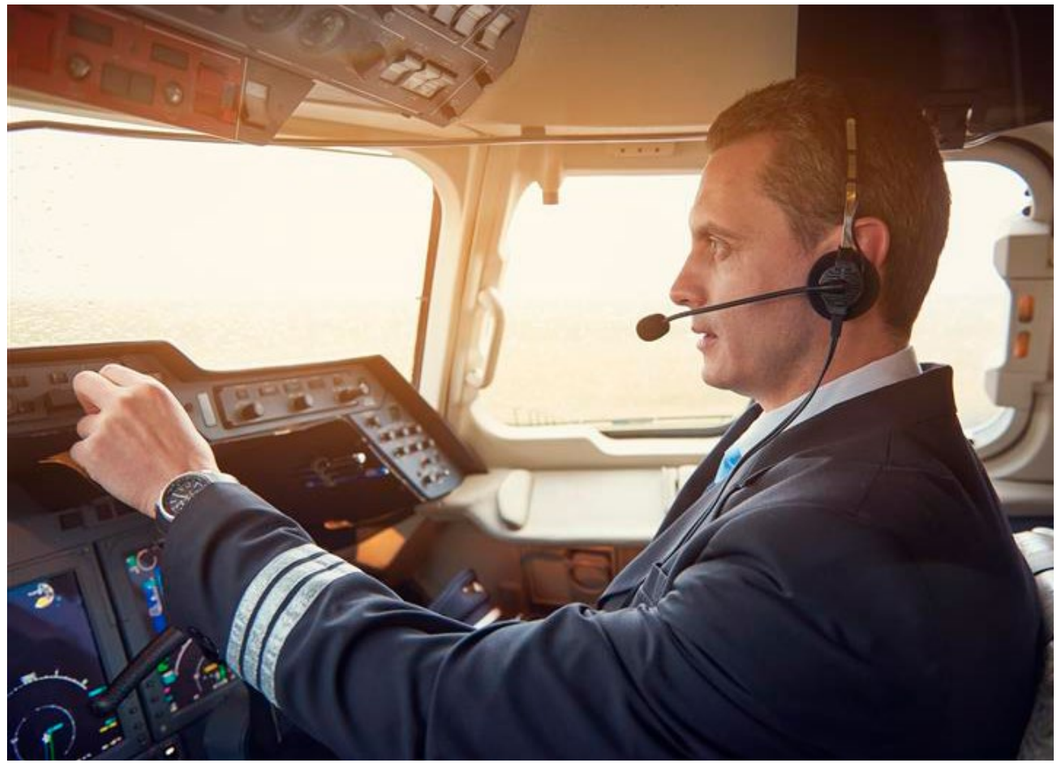
ICAO Circular 323: "Guidelines for Aviation English Training Programmes" (2009)

'The expectation that all native speakers will consistently perform at the highest level of proficiency in all areas of the language is not founded on real observations'.

'The burden can be shared in a number of ways:

- native and other expert users of English can acquire strategies to improve cross-cultural communications;
- native and other expert users of English can refrain from the use of idioms, colloquialisms and other jargon in radiotelephony communications and can modulate their rate of delivery;
- native speakers are under the same obligation as non-native speakers to ensure that their variety of English is comprehensible to the international aviation community.'

ICAO Doc 9835: "Manual on the Implementation of ICAO Language Proficiency Requirements" (2010)



There is ample evidence that native speakers often revert to informal or non-standard English in the cockpit or on the radio. For example, 'hang on a sec' or 'you're good to go'.

They also tend to speak quickly and with reduced articulation, making it harder for non-native English speakers to process transmissions.

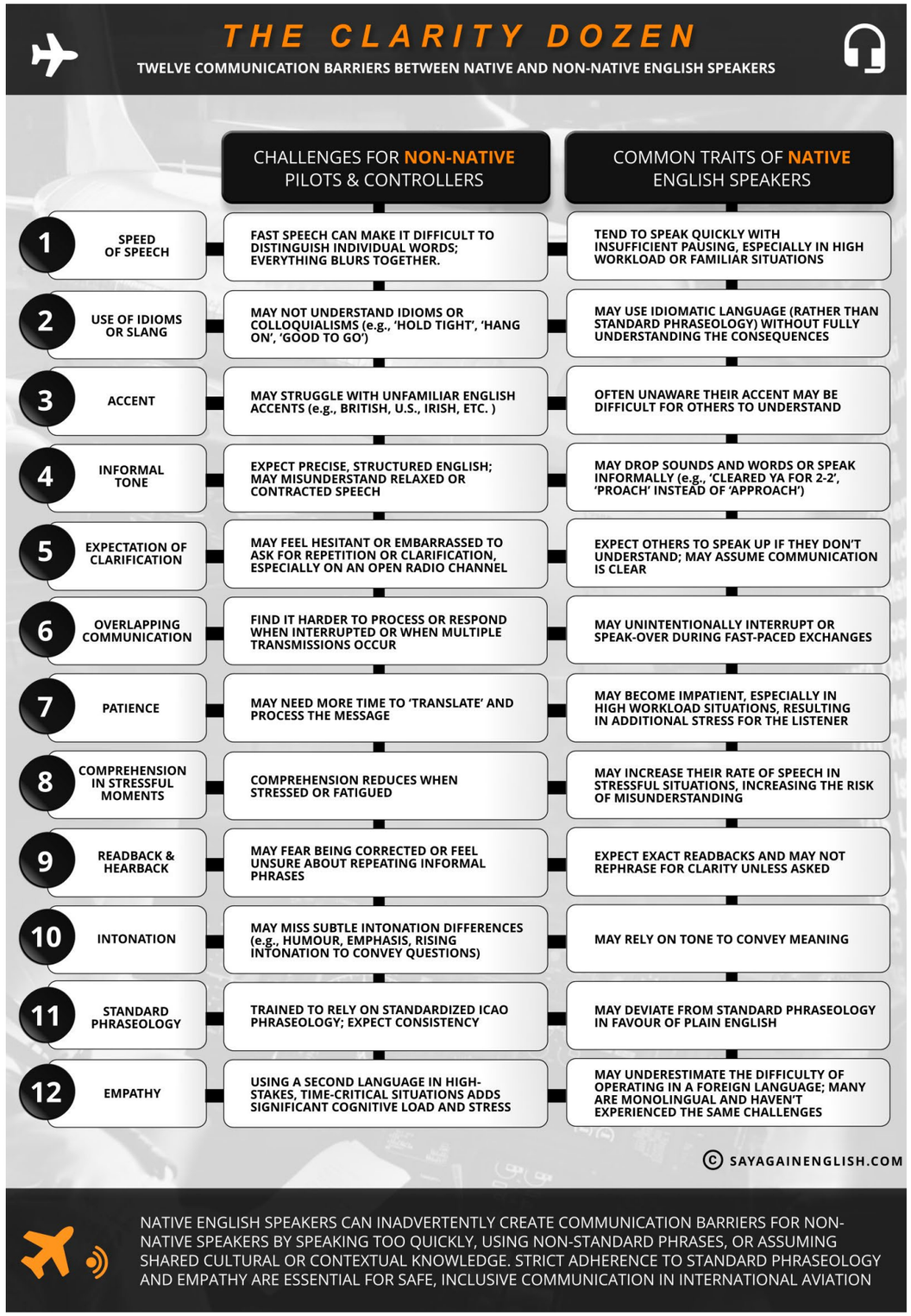
Also, native speakers don't always stick to Standard Phraseology and may underestimate the challenges faced by non-native English speakers - especially in such a high-pressure industry as aviation.

So, how can native English speakers improve?

- **Use ICAO Standard Phraseology Consistently:**
  Even if it feels unnatural or robotic, phraseology ensures predictability and clarity across language barriers.
- **Speak Slowly and Clearly:**
  Prioitize clarity over speed, especially when communicating with non-native speakers.
- **Avoid Idioms and Slang:**
  Use plain, unambiguous English, and avoid expressions that are not universally understood.
- **Undergo Communication Awareness Training:**
  Training in intercultural communication and English as a lingua franca (ELF) principles can build empathy and awareness of the challenges faced by non native English speakers
- **Practise understanding internationally-accented English:**
  Research shows that exposure and practice improve our ability to understand unfamiliar accents.

Native English speakers can unintentionally undermine safe communication in international aviation due to informal habits, rapid speech, and assumptions about mutual understanding. ICAO urges greater awareness, consistent use of Standard Phraseology, and communication strategies that prioritize clarity and mutual understanding over native fluency. This is a crucial shift as aviation continues to rely on English as a global lingua franca rather than a native language.

Safe, efficient communication is a **shared** responsibility and everyone must play their part.



Ensuring Airworthiness: Strengthening Maintenance and CAMO Practices for Safety

The integrity of aircraft maintenance and airworthiness management is paramount. Maintenance and Continuing Airworthiness Management Organisation (CAMO) teams are tasked with ensuring that aircraft always remain fit for flight and adhering to both regulatory requirements and operational safety standards. As highlighted by recent safety occurrences, however, gaps in processes, communication and decision-making can jeopardise safety.

From Helena, our Engineer

This is partly what the recent introduction of Safety Management Systems (SMS) in Part 145 is designed to solve, the challenge is still how to really put the concepts of SMS into practice in day-to-day work. Identifying and addressing the different risks in our organisations are critical to improving safety.

The Overdue Inspection Dilemma: a Case Study

A case study from a recent internal company safety review sheds light on the issue of overdue inspections not being managed in a timely manner. The failure to ground an aircraft immediately after identifying a non-airworthy condition serves as a stark reminder of the consequences of delayed maintenance actions. In this instance, an overdue repetitive inspection had been pending since July of the previous year but was only carried out 6 months later (in the following January), after the aircraft had flown in a non-airworthy condition for the intervening period.

The crux of the issue was identified as poor communication and a lack of urgency in handling safety-critical occurrences. Instead of ensuring that the aircraft was grounded promptly, the issue was simply reported via email to the Maintenance Control Centre (MCC), without a clear escalation. This delay in addressing safety concerns highlighted inadequacies in the decision-making processes and safety reporting mechanisms. Eventually, the aircraft underwent the necessary repairs, but this incident could have had farther reaching consequences.

Addressing the Root Causes: Training and Protocols

The findings from this occurrence underline the importance of training and clear protocols for all personnel involved in maintenance and airworthiness management. It is essential for the CAMO team to have a comprehensive understanding of safety risk assessments, classification of findings and occurrence reporting. Establishing a robust, standardised reaction plan for overdue maintenance tasks is vital to ensure immediate grounding of non-airworthy aircraft and to prevent similar incidents in the future.

Mandatory training programmes should focus on enhancing

communication and escalation protocols. CAMO teams must be trained to inform key personnel, including their CAMO Nominated Postholder (NP) and Quality Management, of any overdue items as soon as they are identified. These immediate notifications will help ensure that the appropriate corrective actions are taken swiftly and effectively.

Additionally, implementing a well-defined escalation protocol could prevent delays in addressing overdue inspections. As part of the preventive measures, airlines should enforce stricter adherence to timelines and prioritisation of critical inspections, avoiding complacency in maintenance scheduling.

Effective Reporting: a Safety Culture Imperative

Another key take-away from a series of reviewed cases is the need for a stronger reporting culture within maintenance operations. Both case studies highlighted gaps in communication between the crew, MCC and other relevant personnel. In one incident, the captain of a long-haul flight reported concerns about low oxygen bottle pressure, yet MCC initially underestimated the risk, which delayed the necessary corrective actions.

The subsequent diversion of the flight to resolve the issue was a direct result of proactive reporting by the captain, but the situation could have been handled more efficiently with a clearer and more immediate communication flow. Strengthening decision-making protocols for handling safety-related system degradations, especially during in-flight observations, would help mitigate risks before they escalate.

While aviation safety regulations, such as Regulation (EU) No 376/2014, require that both mandatory and voluntary occurrence reports (on hazards etc) be submitted to monitor safety trends, the simple reality is that the more information any organisation has the better it can understand and manage its risks. Clear and open communication of risks and timely responses, ensure that all personnel can be aligned in their approach to safety.

Other Summer Safety Issues for Maintenance and CAMO

Deferred Defects and MEL Creep

Issue. Accumulation of deferred defects under Minimum Equipment List (MEL) allowances.

Risks. Normalisation of degraded configurations and risk of stacking multiple allowable faults.

Mitigations. Monitor MEL trends across fleet, enforce stricter limits on concurrent deferrals and avoid MEL expiry overlaps.

Thermal Stress and Environmental Impact

Issue. High temperatures affect hydraulic systems, battery performance, brake wear and aircraft cabin materials.

Risk. Unplanned component failures, especially for older aircraft or those parked in direct sunlight for prolonged periods.

Mitigations. Incorporate heat risk into maintenance checks (fluid levels, tires, seals) and, where possible, use shaded parking or cabin cooling.

Fatigue and Roster Pressure in Maintenance Teams

Issues. Increased shift work, overtime and back-to-back maintenance schedules.

Risks. Human error in inspections, misreading task cards and skipped steps during repetitive checks.

Mitigations. Fatigue awareness briefings, workload balancing, enforce rest breaks and support for peer-checking critical tasks.

Poor Maintenance Recordkeeping Under Pressure

Issues. Incomplete or rushed logbook entries, unverified sign-offs and poor documentation of discrepancies.

Risks. Loss of traceability, regulatory non-compliance and downstream confusion or repeat findings.

Mitigations. Implement digital logbook tools, run weekly record audits and hold short "quality first" team briefings.

CAMO Oversight Strain

Issues. CAMO teams overloaded with flight planning changes, revision cycles, and maintenance scheduling.

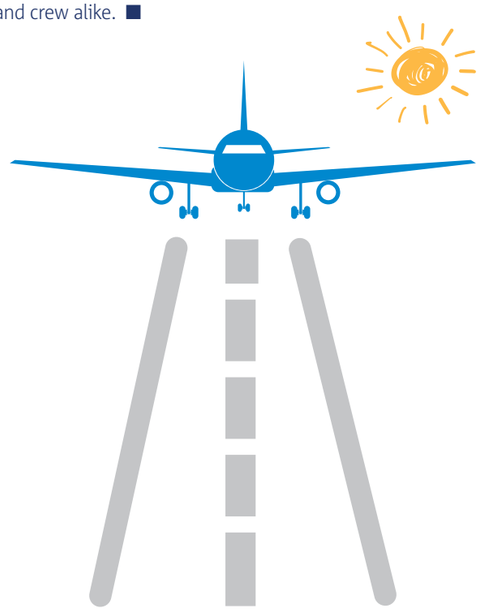
Risks. Poor AMP compliance tracking, missed AD deadlines and communication delays between MCC and MROs.

Mitigations. Designate summer “watch points” in fleet plans, assign backup responsibility and review workload by fleet and station.

Enhancing Safety Through Action

As aviation professionals, it’s crucial to foster a safety culture that prioritises timely and effective maintenance actions; this involves not only adhering to regulatory standards but also reinforcing internal protocols for communication, decision-making and escalation. By improving training, implementing stronger safety reporting mechanisms and ensuring immediate actions for overdue inspections, we can significantly enhance aircraft airworthiness and reduce the risk of safety-critical occurrences.

To build a safer aviation environment, everyone involved in aircraft maintenance and airworthiness management must take proactive steps in addressing weaknesses, improving communication and reinforcing the urgency of timely corrective actions. By fostering a robust safety culture, we ensure that safety remains at the forefront of every maintenance decision, ultimately protecting both passengers and crew alike. ■



EASA Part-26

Before we dive into Part-26, let's clear up a common point of confusion: the difference between the Part-145 maintenance organisation and the Continuing Airworthiness Management Organisation (CAMO). Both are essential to keeping aircraft airworthy—but they play very different roles.

Guest Article provided by EASA

The CAMO is responsible for managing the ongoing airworthiness of the aircraft. That means planning maintenance, ensuring compliance with airworthiness directives and regulations, reviewing technical data and making decisions about when and how changes are applied.

The Part-145 organisation, on the other hand, is responsible for doing the work, i.e. carrying out the inspections, repairs, modifications and routine servicing.

So, when a regulation like EASA's Part-26 introduces a mandated change, the CAMO leads the planning and compliance and the Part-145 team carries out the physical implementation.

So Now onto Part-26

We all know that modern aircraft are built to last. Keeping those safe over decades of service, however, means more than just good maintenance, it means understanding how design continues to evolve after an aircraft enters service. This is where EASA Part-26 comes in."

Whilst it might not be the most well-known piece of aviation regulation, for anyone responsible for operational safety or airworthiness oversight, it's something you need to be familiar with and understand why it matters. This article is here to help you understand your role, especially as EASA rolls out new changes under Part-26.

What is Part-26?

Part-26 is a set of EASA rules focused on continuing airworthiness and safety improvements. It specifically affects aircraft which have already a type certificate; i.e. they are already in operation or will be manufactured in short/medium term.

There are two scenarios, and this is where it's important for operators.

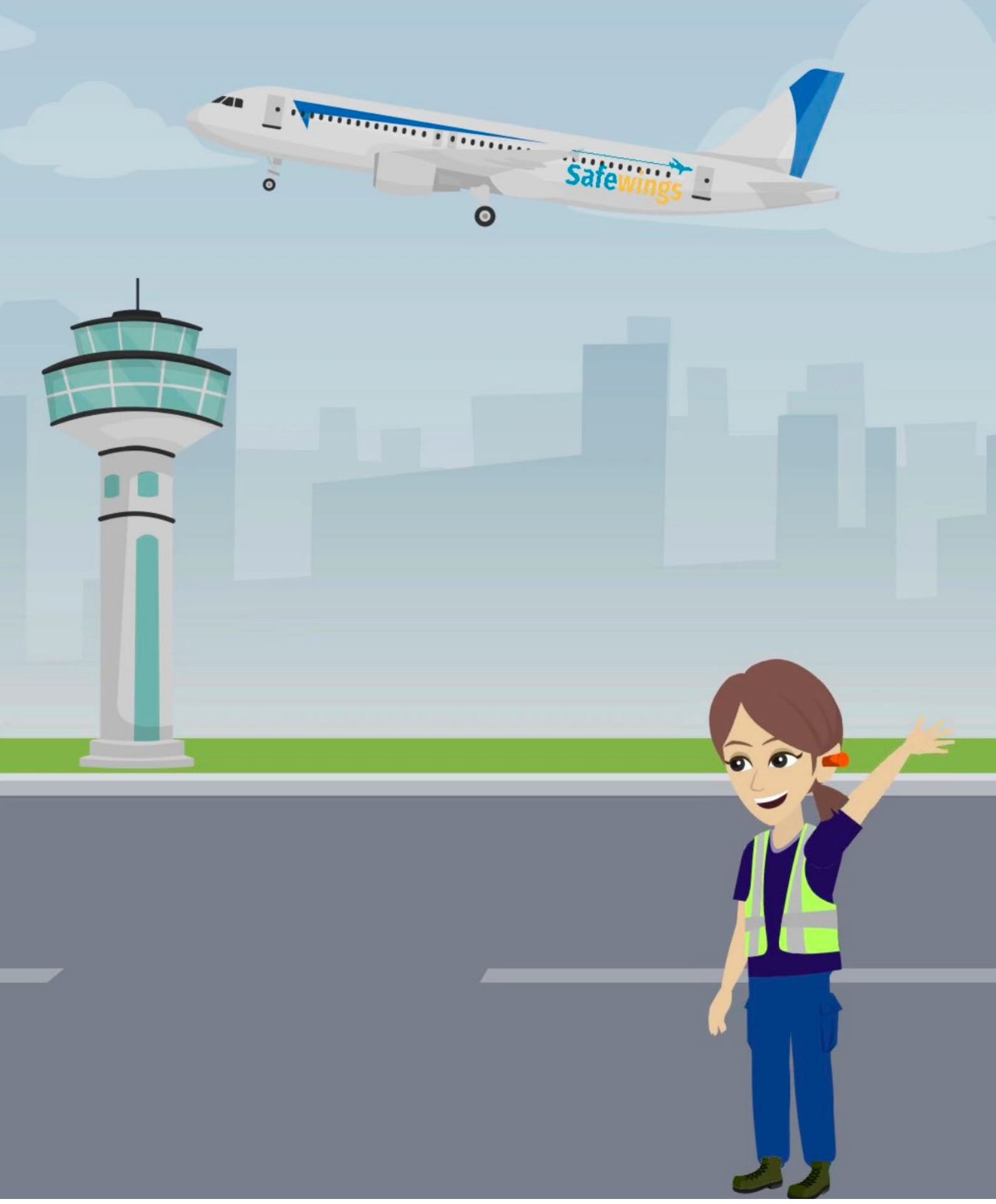
In many cases, the type-certificate holder (usually, the original equipment (aircraft) manufacturer – the OEM) will evaluate their older aircraft designs against new Part-26 requirements and then develop compliance documents or retrofit solutions to support their operators upon request. This is certainly true for operators of aircraft manufactured by EU design holders like Airbus and ATR who fall under the oversight of EASA, but this is not always the case for manufacturers in other parts of the world.

As the operator of a particular aircraft, however, it is your responsibility to make sure all your aircraft meet any relevant Part-26 requirement. The aircraft cannot fly anymore without the right changes indicated in Part-26 being implemented at the time of the Certificate of Airworthiness (CofA).

Reinforcing Why It Matters to Operators

So, while you might have been thinking, "this sounds like a job for the manufacturer," hopefully this last point really hits home.

The moment EASA mandates a design change under Part-26, operators often become responsible for implementation. ■



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