

WAYPOINT: SAFETY

ISSUE 1
SUMMER EDITION
JUNE 2026

9

ALL ROUTES LEAD HERE

TIPS TO PUT YOURSELF IN FLIGHT MODE

+

PASSENGER SAFETY

Are you summer ready?

+

REGULATION UPDATES

Updates explained without the complexity.

+

General Aviation

iConspicuity 'See and be Seen'. Plan Continuation Bias explained - how to mitigate against it.

+

Emerging Technologies

From GADSS to AI -what you need to know.



ÚDARÁS EITLÍOCHTA NA HÉIREANN
IRISH AVIATION AUTHORITY

Contents



05

Right on Board

Passenger safety considerations for the busy summer travel period.

08

PROPer Talk

Summer is the perfect time for General Aviation flying, but remember to 'See and be Seen'.

Have you planned for flight contingencies? Don't be biased - have a read.

We look forward to summer Fly-Ins but remember - safety first.

11

Eye in the Sky

Airspace rights and drones: from ownership to stewardship. UAS Manager - Enda Walsh dismantles airspace complexity, highlighting historical context and the pathway forward for drone integration.



13

CAT Corner

Explore technology to 'ensure that no aircraft is ever lost again', and the genesis of such requirement.

Read about GNSS Interference in Rotorcraft Operations.



16

GOPS

The new Ground Handling Operations Regulation is broken down and explained. Now the regulation is in effect are you or your organisation meeting the regulatory obligations and timelines?

17

Cleared to Land

The Digital European Sky: A Plan for the Future of Air Traffic Management Artificial intelligence is already in use across aviation. Understanding the framework around it, regulatory, organisational, and individual is part of using it well.



19

Strategic Safety

A brief review of Ireland's State Plan for Aviation Safety and what's coming next.

20

I learned from that...

One of the many ways to promote safety is to share our learned experiences.

21

Aviation Career Q&A

We speak to an aviation professional on what it takes to fill a role, central to the aviation safety system.

23

Notice Board

Get your information here.

Click on image to access the link when the  is illustrated.

Introduction



Declan Fitzpatrick
Chief Executive

FOREWORD

It is a pleasure to introduce Waypoint: Safety, a new IAA publication developed to support and strengthen safety promotion across the Irish aviation community.

Aviation is a system built on collaboration, shared responsibility, and continuous learning. This publication reflects that reality. It brings together operational insights to include regulatory developments, human factors and emerging risks in a way that is accessible.

Safety promotion sits firmly within the IAA's broader safety strategy, the State Safety Programme and the State Plan for Aviation Safety. It is a practical expression of our commitment to safety intelligence, safety promotion, and meaningful engagement with the aviation community. By sharing knowledge, highlighting lessons learned, and encouraging open dialogue, Waypoint: Safety contributes to the continuous improvement of safety performance across the system.

Importantly, this publication reflects the collective effort of a wide range of stakeholders across the aviation sector, from commercial air transport and general aviation to ground operations, unmanned aircraft systems, and supporting organisations. This cross sectoral approach is essential. Safety does not exist in segregated silos, it is the product of coordinated action, shared understanding, and mutual trust.

I would like to sincerely thank everyone who has contributed to bringing this first edition to fruition. The professionalism, expertise, and commitment demonstrated throughout are a testament to the strength of Ireland's aviation community.

As we look ahead, the challenges facing aviation continue to evolve, from technological change and increasing operational complexity to new and emerging safety risks. Publications such as Waypoint: Safety can play an important role in ensuring that we remain connected, informed, and aligned in our approach to managing those challenges.

I encourage you to engage with this publication, provide feedback and contribute to future editions, and continue to support the shared goal that underpins everything we do, a safe, secure, sustainable and consumer-focused civil aviation environment for Ireland.

Declan Fitzpatrick

Introduction



Barry Waldron
Manager Safety
Intelligence and
Safety Promotion

WELCOME

Welcome to the first edition of Waypoint: Safety – a new publication developed by the Irish Aviation Authority for, and with, the aviation community.

As Manager of Safety Intelligence and Safety Promotion (SISP), and as someone who has had the privilege of seeing this idea grow from concept to publication, I am delighted to share this with you.

Aviation has always been a learning system, built on shared knowledge, professional curiosity, and an unwavering commitment to safety. This magazine is designed to support that system, providing practical insights, highlighting emerging risks, and, importantly, promoting the conversations that make aviation safer for everyone.

At its core, Waypoint: Safety reflects a simple belief: every route leads here – to safety. Whether you are operating in commercial air transport, general aviation, ground operations, unmanned systems, or supporting the wider aviation ecosystem, you are part of a connected system where safety is a shared responsibility. This publication aims to bring those perspectives together in one place.

This first issue captures that spirit. From regulatory updates and emerging technologies to human factors, operational insights, and real-world learning experiences, the content has been shaped by professionals working across the industry. It is practical, relevant, and grounded in the realities of aviation today.

I would like to take this opportunity to sincerely thank all those who contributed their time, expertise, and energy to bring Waypoint: Safety to publication. In particular, I would like to recognise Brian Thornton, Aeronautical Officer, SISP, whose commitment and attention to detail were instrumental in turning this concept into a finished product. His contribution exemplifies the professionalism and collaboration that define the IAA's approach to Safety Promotion.

This publication is only the beginning. Its value will be shaped by you the aviation community – through your engagement, feedback, and shared experiences. I encourage you to get involved, contribute, and continue the dialogue.

Thank you for your ongoing commitment to aviation safety.

Barry Waldron

Barry Waldron is the Manager of the Safety Intelligence and Safety Promotion Division at the Irish Aviation Authority. With over 25 years in aviation, including 15 years as a Captain and Line Training Captain, he brings extensive operational and safety expertise. He holds an MSc in Air Safety Management and focuses on strengthening safety intelligence, culture, and promotion across the aviation system.

Right on Board

PUT YOURSELF IN FLIGHT MODE

Are you summer ready? As the busy summer travel period approaches we ask all passengers to 'Put Yourself In Flight Mode'. Passengers are reminded to prepare for their flight, show consideration for staff along your aviation journey and be courteous to air crew and fellow passengers. Each passenger is responsible for complying with safety rules when onboard the aircraft and to follow instructions given by staff. Aviation is an exciting way to travel, don't spoil it for others, put yourself in flight mode. Below are some handy reminders... Safe travels!

<p>1 BE READY</p>  <p>Think ahead. Plan your journey. Be on time and know where to go.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>2 RESPECT THE CREW</p>  <p>Follow instructions—they're there to keep everyone safe.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>3 DRINK RESPONSIBLY</p>  <p>Too much alcohol can quickly become a safety issue.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>
<p>4 NO SMOKING</p>  <p>Smoking or vaping is strictly prohibited at all times.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>5 BATTERIES IN THE CABIN</p>  <p>Always carry electronics and lithium batteries with you.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>6 CHARGE SAFELY</p>  <p>Keep devices in sight—never charge in overhead bins.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>
<p>7 REPORT DEVICE ISSUES</p>  <p>If it overheats, smells, or smokes—tell crew immediately.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>8 SEATBELT ON</p>  <p>Keep it fastened whenever you're seated.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>	<p>9 LEAVE BAGS BEHIND</p>  <p>In an evacuation, every second counts.</p> <p> PUT YOURSELF IN FLIGHTMODE</p>

Credit: EASA

Right on Board

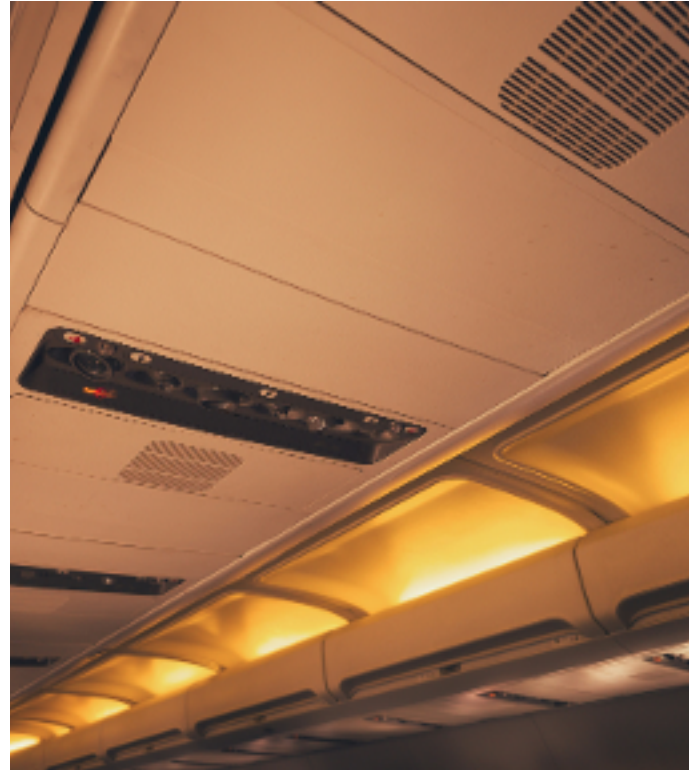


Geraldine Hickey

Geraldine has worked with the Irish Aviation Authority for over 20 years, taking up various roles across the operations domain. Geraldine leads the Dangerous Goods section within the Flight Operations Department.

BATTERIES AND AIR TRAVEL

Dangerous goods are articles or substances that can pose a threat to people, property, or the environment. Some articles or substances like explosives or flammable liquids are clearly dangerous goods. But common household products may also be classified as dangerous goods; such as aerosols or Personal Electronic Devices (PEDs) containing batteries. Batteries are considered to be dangerous goods. This article will focus on air travel with PEDs.



SAFETY CONCERNS

Air passengers take an increasing number of Portable Electronic Devices (PED's) on board an aircraft that contain batteries, e.g.: mobile phones, tablets, vapes, power banks, laptops, ear bud cases and smart luggage tags, are just a small selection of items found in the average passengers' travelling kit.

The main safety concern with batteries is a process known as Thermal Runaway. This is a phenomenon in which a battery enters an uncontrollable, self-heating state. Manifestations of which might include: ejection of battery gas & shrapnel, battery swelling, extremely high temperatures, smoke and fires.

Thermal Runaway risk is higher if the batteries have been damaged (punctured or impacted), overcharged, using improper chargers, high heat or using low quality batteries.

BATTERY PERSONAL USE

The ICAO Dangerous Goods Panel (DGP), the world governing body on such matters, recommended that an addendum address an urgent safety risk, in a consistent manner worldwide to prevent further inconsistencies around batteries. The addendum was issued to states, and is effective since the 27th March 2026. Previously power banks were treated as spare batteries, going forward a distinction between power banks and spare batteries is made: Spare batteries are for insertion into a device, Power banks are used for charging devices.

WHAT ARE THE UPDATES?

Power banks:

- limited to two per passenger
- prohibited to recharge power banks during flight
- recommendation not to charge other devices using power banks onboard
- power banks must be carried as carry on luggage, never checked-in
- Power limit of 100 Watt Hours.

Spare Batteries:

- No more than two spare batteries may be carried per person.
- Existing requirement that spare batteries must be carried as carry-on luggage, never in checked in luggage.

OPERATOR VARIATIONS

The above restrictions are the standard restrictions; different airlines may have more restrictive provisions. Take note of information provided by your airline at ticket purchase, boarding pass issue, luggage acceptance points. Listen carefully to onboard safety announcements for any operator variations onboard an aircraft.

If you notice anything unusual with your device while on board an aircraft, such as smoke or fumes, heating up or battery swelling, immediately notify a crew member.

See [dangerous-goods](#) for more information.

Right on Board



Alec Elliot

Alec manages the Corporate Affairs Division of the Irish Aviation Authority, supporting the organisation in safety promotion and external communications activity. He has spent over two decades managing public affairs, marketing and public relations programmes in global markets. Alec has a keen interest in aviation with a strong focus on drivers of behaviour and communications engagement in the aviation industry.

UNRULY PASSENGERS: PROTECTING IRISH AVIATION'S SAFETY CULTURE

Unruly passenger behavior has become one of the most visible and high-profile challenges facing aviation today. Incidents involving disruptive, aggressive or non-compliant passengers impact everyone across the aviation sector, from passengers and frontline staff to airlines, airports and regulators. Importantly, the issue is not static. Reported cases of unruly passenger behaviour in Ireland have increased significantly since 2019, reflecting wider international trends and underlining the need for a coordinated, industry-wide response.

While disruptive behaviour has existed since the early days of commercial aviation, the scale and severity of incidents has grown in recent years. Factors such as increased passenger volumes, alcohol consumption and heightened post-pandemic pressures have contributed to this trend. Between 2019 and 2023, reports of unruly passenger behaviour in Ireland increased three-fold, bringing renewed focus on the need to address the issue as a safety concern rather than a customer service problem.

In response, the Irish aviation industry established the Unruly Passenger Industry Forum, led by the Irish Aviation Authority and supported by a broad partnership of stakeholders. The forum brings together all Irish AOC holders, Irish airports, ground handling service providers, An Garda Síochána and trade unions to address unruly passenger behaviour as a shared safety issue requiring collective action. The forum has evolved steadily since its formation, providing a structured space for information-sharing, trend analysis and the development of consistent industry responses. The IAA also participates with our European partners through

EASA's Safety Promotion Network, where CAA's collaborate and share initiatives to mitigate risks associated with unruly passengers. These initiatives are presented to the Unruly Passenger Industry Forum on a regular basis.



A key strength of the forum is its collaborative and cross-sectoral nature. It recognises that unruly behaviour can occur at multiple points along the passenger journey, in terminals, at boarding gates, onboard aircraft and within ground handling environments. Addressing the issue effectively requires high standards of training, consistent messaging, clear behavioural expectations and aligned enforcement across all parts of the aviation system.

The growth of the forum reflects the increasing importance of the issue. The recent onboarding of SIPTU and FORSA has strengthened frontline worker representation and reinforced the forum's focus on staff safety and wellbeing. Their involvement highlights that unruly passenger behaviour is not solely a regulatory or airline issue, but an industry-wide occupational safety challenge.

Safety promotion sits at the centre of the forum's work. The vast majority of passengers travel responsibly, comply with instructions and respect staff. The forum's approach builds on this reality by prioritising awareness-raising, early communication and positive behaviour reinforcement, while clearly stating that unacceptable behaviour will not be tolerated.

This commitment is formalised through the Joint Declaration on unruly passenger behaviour and the #NotOnMyFlight campaign. Since 2019, these efforts have supported improved reporting, closer engagement with An Garda Síochána, clearer passenger messaging and the introduction of stronger consequences, including fines and travel bans for serious incidents.

As passenger numbers continue to grow, the work of the Unruly Passenger Forum is increasingly important. Through collaboration, safety promotion and consistent enforcement, the Irish aviation industry is delivering a clear and unified message: unruly behaviour has no place in airports or on board aircraft. Visit [unruly-passenger-behaviour](https://www.iaa.ie/unruly-passenger-behaviour) for more.

PROPer Talk



Ruth Bagnell

Ruth has an aeronautical engineering background and is also a General Aviation pilot. She manages the continuing airworthiness (non scheduled) division of the IAA.

SEE AND BE SEEN

Need for a digital co-pilot

There are some assumptions built into VFR outside of Controlled Airspace flying. The sky is big, Traffic is sparse, and if something gets close you'll see it. Most of the time, that assumption holds. But not always—and when it doesn't, it tends to fail quickly and without warning. This is especially true as pilots now share the airspace with more drones and other recreational flyers.

Human eye limitation

"See and avoid" has served aviation well for decades. It's simple, elegant, and requires no batteries. The premise being that the pilot does their best to look out for other airspace users and makes every effort to ensure their aircraft is noticeable – lights, varied colour scheme, a radio, and perhaps a transponder. This way, we avoid mid-air collisions.

There are limits to what a pilot can see while flying:

- Aircraft on a collision course show no relative movement
- Small GA aircraft are surprisingly hard to spot
- Haze, sun glare, and terrain can hide traffic in plain sight
- Cockpit workload means you're not always looking outside when it matters.

Modern thinking – driven by regulators like the European Union Aviation Safety Agency – has shifted the philosophy: Seeing isn't enough. You also need to be seen – electronically.

New Technology

This is where electronic conspicuity (EC) or iConspicuity comes in. Instead of relying purely on eyesight, aircraft can now broadcast their position electronically, allowing others to detect them – even when visual acquisition fails. It's like giving your aircraft a constant, polite radio call: "Traffic, I'm here. Right now. At this altitude." These broadcasts can be from a mobile phone, a device carried on board, or a unit installed on the aircraft.

For years, ADS-B (Automatic Dependent Surveillance – Broadcast) has been the benchmark technology. This is what is fitted to large transport category aircraft and can be seen on flight tracking apps on your phone. ADS-B is highly accurate, but also expensive with certification and installation considerations. ADS-B is powerful – but not always practical for the entire VFR community.

Developed under EASA's recent "iConspicuity" initiative, ADS-L (Automatic Dependent Surveillance – Light) is designed to bring electronic visibility to e.g. light aeroplanes, helicopters, gliders, powered parachutes/ hang gliders, and even drones. Think of it as conspicuity without the complexity. It is designed to be low cost, simple and accessible to every pilot. It has an advantage over using a mobile phone broadcast, as its broadcast can be seen by larger aircraft, it has reliable short-range broadcasts, and future-proofed to align with drones. Starting with its version 2, ADS-L will support the uplink of RemotID messages, enabling ADS-L receivers to process drone information rebroadcasted by ground stations. This enhances the safety and situational awareness of GA pilots of drone operations and vice versa.



ADS-L increases situational awareness by enabling more aircraft to see and be seen by other ADS-L aircraft. This is particularly useful in busy airspace however it is currently not recognized by Air Traffic Management (ATM) services in EASA countries, but it could be used without restriction in any airspace (controlled or uncontrolled) for enhancing pilot's situational awareness. There is ongoing research in ATM (ref. European Plan for Aviation Safety task RES.0032) which will identify cases where ADS-L could be beneficial for use in ATM.

Flight Information Services, Search and Rescue and access to Transponder Mandatory or Radio Mandatory Zones are being considered. Results are expected by mid-2026.

It is not expected that certified avionics for commercial aircraft will support ADS-L in the near future. However, EASA is working on promoting the use of ADS-L also for ATM use cases such as improving air traffic controllers' situational awareness in complex airspace's. The visibility of ADS-L to controllers and other airspace users will enhance safety and reduce the risk of collisions.

Electronic conspicuity doesn't replace "See and avoid", it backs it up. It's an additional visual reference where you can see other traffic to assist with situational awareness.

PROPer Talk

PLAN CONTINUATION BIAS

Reference - Final Report: Accident involving a Robinson R44 Raven II Helicopter, Registration N999RL, at Kennycourt Co. Kildare, on 11 December 2022. Report 2024-007.

In the final report the Air Accident Investigation Unit (AAIU) determined that the probable cause of the accident was a loss of control due to spatial disorientation following a loss of external visual references during an attempted or aborted descent in sub-optimal visibility conditions. The contributory causes were determined to be plan continuation bias when the flight was continued in meteorological conditions in which visual contact with the surface was deteriorating, and possible increasing pressure to land, or get to EIKH, due to a decreasing fuel quantity.

One Safety Recommendation is made as a result of this Safety Investigation: "The IAA should promulgate information on the effects of Plan Continuation Bias and on strategies to counter the effects of such biases, particularly in relation to General Aviation".

On the 07th May 2025 the Irish Aviation Authority published [OAM No. 16 - Plan Continuation Bias](#), in response to the AAIU's recommendation. The Operations Advisory Memoranda is summarised below.

Plan Continuation Bias has been defined as an unconscious mindset:

"when the desire to get to a destination overrides logic, sound decision-making, and basic instinct".

This unconscious bias can sometimes urge pilots to 'push on' regardless of indications that the plan should be modified in the interest of aviation safety. The effect of this bias can become stronger the closer a pilot gets to a planned destination. This urge to continue with a plan can often result in reduced safety margins, an aviation incident or a serious or fatal accident.

Human factors such as "biases" can distort the way a pilot perceives situations and makes decisions. For example, when flying VFR, if the flight conditions en-route or at a planned destination deteriorate, a pilot may tend to continue with a planned flight due to external influences. These influences on a pilot's decision making could be commercial or social pressure to get to a destination for events such as meetings with family or friends or perhaps hotel bookings.

Other influences may be personal factors or prior experience where a pilot has managed to reach a destination on a previous occasion in poor conditions and 'feels' now that it will 'all work out ok' if they push on with the planned flight despite obvious danger(s). Sophisticated avionics fitted to many General Aviation aircraft including automation and GPS may also tempt pilots to 'push on' into deteriorating conditions that they are not qualified to fly in.

By understanding Plan Continuation Bias, a pilot can help prevent it influencing the decision-making process and pause to consider all available options. A revised or new plan of action can then be implemented if more appropriate to ensure the safe outcome of the flight.

Recognising the Warning Signs

Ignoring or downplaying changing weather signs: has the weather changed unexpectedly or beyond your capability?

Rushing procedures or skipping checklist: If the flight or its preparations cannot be conducted at a normal pace, it is a clue something is not right.

Anxiousness and/ or Irritability: As circumstances change around us unexplained anxiousness or irritability can be a sign of stress. Excess stress can have catastrophic consequences for flight safety.

Pressure to get to a destination without delay: Arrival plans will usually accompany any planned flight however these pressures must be acknowledged and carefully managed to avoid influencing safety-related decisions.

Mitigation Strategies

Have an alternative plan - While your day might start off with blue skies, things may change. Have your alternate plan worked out already in advance to make it easier to switch between plans. Changing your plan is not a failure.

Don't fixate - Make continuous assessments during the flight. Has the weather changed? Are the headwinds stronger? How is your fuel burn? Avoid tunnel vision and stay aware of the possible threats.

Know your limits - Everybody's limits are different. Consider your own. Monitor yourself for stress and fatigue. Maintain situational awareness, a small problem dealt with now, may avoid a much larger problem developing later.

Recognise "Get-there-itis" - We've all been in situations where we really wanted to go flying or once airborne to reach our destination.

Remember your training - At any point in a flight you can Pause, Evaluate, Decide.

- Pause - take a moment to reassess the situation, recognise the warning signs, don't allow a pre-occupation with pressing on to take away the capacity to make sound decisions in the interest of flight safety;
- Evaluate your situation and determine the options for a safe outcome to the flight, even if this is not the original planned destination;
- Decide the best option for the safe outcome of the flight and if appropriate execute a revised plan.



PROPer Talk

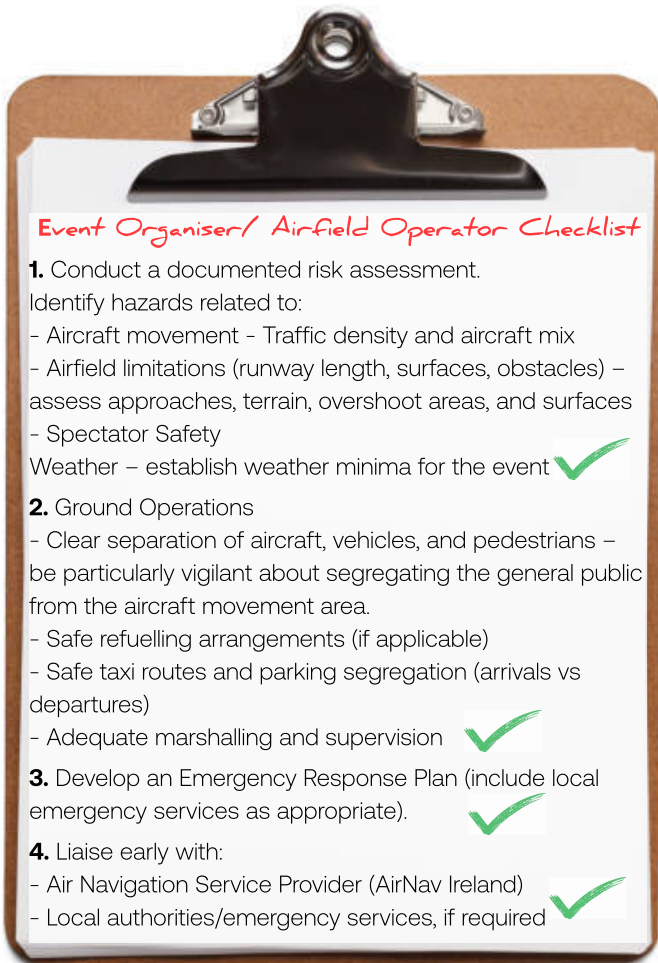
FLY-IN SAFETY IRELAND

by Ruth Bagnell

This article provides safety guidance for fly-ins conducted in Ireland under the normal European Standardised Rules of the Air (SERA). These events are a great opportunity for pilots to visit airfields and meet fellow aviators. Fly-in safety relies on disciplined planning by organisers and predictable behaviour by pilots. The biggest risks are airborne congestion, unclear procedures, and ground movement conflicts with aircraft, vehicles or persons — all can be mitigated by simple procedures, strong briefing(s), and good airmanship.

Event organisers/ airfield operators must consider the overall event safety, including pilots, ground personnel, and the public. Safety is achieved through proportionate planning, risk assessment, and clear procedures scaled to the planned event size and complexity.

See Event Organiser/ Airfield Operator Checklist and Pilot briefing pack examples.



Pilot Briefing Pack

Pilot Briefing Pack (should include, as applicable):

- Airfield layout (runways, taxi routes, parking)
- Standard arrival, joining and circuit, and departure procedures
- Local noise abatement / avoidance areas
- Frequencies and ATS arrangements, or clear non-radio procedures
- Airspace and nearby activity
- Emergency procedures

Use simple, standard, and familiar procedures wherever possible to reduce complexity.

Good practice for pilots:

- Ensure you have PPR to attend the event and receive a briefing pack
- Use electronic conspicuity (inconspicuity) where possible
- Maintain strict lookout and spacing – high collision risk environment.

Mixed Operations & Hazards

Manage risks from:

- Mixed aircraft types (fixed-wing, helicopters, gliders)
- Non-radio traffic
- High traffic density.

Specific hazards:

- Unauthorised drones must not be permitted
- Avoid hazards such as gas-filled balloons near aircraft

Public & Airside Safety (For events with spectators)

Maintain physical separation between crowd and active airfield. Implement:

- Crowd control measures
- Supervision of children/animals
- Consider additional guidance.

Emergency Planning

Develop an Emergency Response Plan (ERP):

- Aircraft accident/incident
- Medical emergency
- Fire response.

Ensure:

- Staff/Volunteers are briefed
- Access routes are maintained
- Emergency services coordination is considered.

Eye in the sky



Enda Walsh

Enda Walsh is Manager of the Unmanned Aircraft Systems (UAS) Division at the Irish Aviation Authority, where he leads the team enabling safe, scalable, and innovative drone operations. With over a decade of experience across aviation regulation, airspace management, aeronautical information, instrument flight procedure design, and air traffic control, his team is responsible for Ireland's transition to EU UAS regulation and in laying the groundwork for advanced UAS integration, including U space.

AIRSPACE RIGHTS AND DRONES: FROM OWNERSHIP TO STEWARDSHIP

For more than a century, aviation law has operated on the premise that higher altitude airspace belongs to the public, while the land below belongs to private owners. That division has worked well while only manned aircraft populated skies, usually well above the everyday activities of the people below.

However, the rapid rise of drone operations in Ireland over the past decade has disrupted this long settled balance. Very low level airspace, below 120 metres above ground level, has become a shared and ever more congested environment.

It is now a zone of contest, ambiguity, and unavoidable conflict, in which drone operators, property owners, and the wider public now have overlapping interests. Unsurprisingly, this has brought questions of airspace rights into sharper focus.

As Ireland embraces drones for all their many benefits (logistics, surveying,



media, infrastructure inspection, agriculture, public safety and recreation, to name but a few) the question of who owns the air just above our homes, businesses, and fields, and who gets to use it and on what basis, is no longer an abstract one. At present, Ireland has no definitive answer and that gap is becoming increasingly untenable. Yet the solution may lie less in redefining "ownership" of the sky, and more in developing a "stewardship" framework of co-operative and managed use.

The legacy of an Outdated Legal Concept

Long before the birth of aviation, the idea that property rights extended "up to the heavens and down to hell" influenced thinking around people's property rights. While this is a catchy maxim, modern courts have long rejected its literal interpretation, recognising that no landowner can reasonably claim ownership over the entire volume of airspace above their land and into space.

Justice Griffiths in *Baron Bernstein of Leigh v Skyviews & General Ltd* captured the problem succinctly, describing the task as one of balance between a landowner's right to enjoy the use of their land and the public's right to use airspace made accessible by technological progress. He concluded that limiting private rights to the airspace necessary for the ordinary use and enjoyment of the land and structures upon it could achieve this balance.

The issue however is that no one has clearly defined a height at which that zone begins or ends.

Eye in the Sky

Irish Law

Irish case law does recognise that intrusions into very low-level airspace over private property can be classed as trespass. A classic case is *Keating v Jervis Shopping Centre*, which involved crane oversailing. It confirmed that an unauthorised physical intrusion into very low level airspace may be actionable even where the land itself is untouched.

Yet these decisions deliberately avoid fixing a specified altitude. Instead, focusing on interference with use and enjoyment.

Statute does not offer much further clarity. The Air Navigation and Transport Act 1936 grants exemption to aircraft flying at a “reasonable height,” but this was enacted long before drones flying low over our homes were ever envisaged. Similarly, the Land and Conveyancing Law Reform Act 2009 defines land as including airspace capable of occupation by a structure, without defining explicitly just how high that extends.

What we are left with today is ambiguity. No height limit is defined either through statute or case law, and drone regulations address safety but not property rights.

The Rise of Drones

Drone use in Ireland has grown exponentially over the past decade with over 10,000 registered drone operators and 21,000 remote pilots. Ireland was one of the first States internationally to develop regulation for drone operations in 2015. This was followed four years later, in 2019, with the publication of the harmonised EU regulatory framework under Regulation (EU) 2019/947. These regulations have ensured a high level of safety for drone operations. However, they do not answer the underlying question of property rights.

Where do private rights end and public airspace begin?

As drone operations frequently occur near people, homes, and infrastructure, this unresolved issue affects public confidence, operational planning, and perceptions of fairness.

A European Approach

EU regulations provide us with an alternate approach. Rather than setting rigid heights to defining private airspace, EU States are turning to operational management tools that allow airspace to be used safely, flexibly and transparently.

U space, Europe’s answer to traffic management for drones, implements digital services to manage high density drone operations. UAS Geographical Zones allow States to prohibit, restrict or enable drone operations for safety, security, environmental (including noise), or privacy reasons. Remote identification improves accountability. Risk based authorisations improve safety. The recently published EU Action Plan on Drone and Counter Drone Security takes this model further by strengthening identification, detection, and situational awareness mechanisms as drone activity scales.

This approach shifts the perspective on airspace from one of ownership and defined height limits to a stewardship model of airspace as a shared, managed resource.

Developing Ireland's Drone Policy

Ireland has already begun integrating this approach into national policy. The National Policy Framework for Unmanned Aircraft Systems sets out a clear commitment to the safe, secure and sustainable integration of drone operations. It recognises that very low level airspace must be actively managed with due regard for safety, privacy, environmental impact and societal acceptance.

One of the key action items falling out of the policy framework is the establishment of a National Working Group on UAS Geographical Zones. This will be led by the Irish Aviation Authority and supported by the Department of Transport. The Working Group is tasked with developing transparent processes for the establishment of UAS Geographical Zones and, critically, with addressing a key policy requirement, identifying and empowering appropriate competent authorities for privacy and environmental zones.

By appointing appropriate competent authorities and enabling coordinated input from State agencies, local authorities, and regulators, this will allow UAS Geographical Zones to be used as intended, as a flexible tool to manage drone activity according to local context and risk. Examples include limiting hours of operations over residential areas, introducing noise limits over environmentally sensitive areas, or imposing requirements for prior permission.

In doing so, Ireland is laying the groundwork for effective stewardship of very low level airspace, one that balances the needs of drone operators, landowners, communities and the wider public, without resorting to rigid boundaries that cannot accommodate technological change.

In practical terms, this represents a significant shift from unresolved questions of ownership toward a stewardship model of collaborative governance. When implemented fully, it gives Ireland a credible, proportionate way to manage the airspace where drones now operate, while maintaining public trust and supporting the continued growth of a safe and innovative drone sector.

CAT Corner



Credit: Irish Press



Tomás Kelly

Capt Tomás Kelly is a Flight Operations Inspector with the Irish Aviation Authority, working in the Specialised Operations and Coastguard Aviation section. With a background as a military, airline and SAR pilot, he brings operational experience from both commercial and mission-critical

From Silence to Signal: The Development of the Global Aeronautical Distress and Safety System

I recently attended a talk hosted by the Bray Historical Society and presented by Mr Bill Nelson on the 1946 crash of a Junkers JU-52 aircraft close to where I live on Djouce Mountain, Co. Wicklow. The aircraft was carrying 21 French Girl Guides along with five crew, from Paris to Dublin, when the aircraft entered poor visibility over the Irish Sea. The Girl Guides had been invited to Ireland for a three-week camp by their Irish counterparts with the intent of providing some recuperation in the aftermath of World War II.

Miraculously, and despite the inhospitable terrain where the aircraft crash landed, all 26 onboard survived, although some were seriously injured. Two of the Girl Guide leaders and the aircraft Captain set off in different directions to raise the alarm. The rescue mission was launched after one of the leaders, Chantal de Vitry, having trekked for 5 hours – including a perilous descent of Powerscourt Waterfall, reached a hotel and managed to find a French-speaking guest and informed her of the accident.

R.W. O'Sullivan, who was the Chief Aeronautical Officer for the Department of Industry and Commerce at the time, subsequently reported in his book, 'An Irishman's Aviation Sketchbook', that the two Armée de l'Air Officers dispatched to Ireland to investigate the crash took a cursory look at an air plot that had been drawn up from the navigator's log and 'the senior officer threw his hands up in a typically Gallic gesture and cried "Erreur de Navigation"... 'in a tone of firm conviction and it was clear that things didn't look too good for the future professional prospects of the unfortunate N.C.O. navigateur'.

Fortunately, we have come quite a way in terms of accident investigation and Just Culture. ICAO Annex 13 – 'Aircraft Accident and Incident Investigation' enshrines the principle that 'The sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability.' This cultural change has created an environment conducive to open reporting and information exchange, safety promotion, allowing us to learn valuable lessons from accidents, incidents and near-misses.

Of equal importance are the technological advancements in the last 80 years, which assist rescue services and investigators in locating downed aircraft. In 1946, once Dublin ATC realised that the JU-52 was overdue, they initially focused their search effort in the Irish Sea. Following a 5-hour trek, it took almost 4 more hours for the first search party to locate the wreckage and survivors. Of course, Ireland was a different place then, but this amounts to 9 hours to locate a 3-engined transport aircraft that crash landed less than 24km due south of the capital city, Dublin.

The development of this technology has been iterative over the years, however, following the loss and subsequent failure to locate the wreckage of Malaysia Airlines Flight MH370 in 2014, ICAO spearheaded the development of the Global Aeronautical Distress and Safety System (GADSS) initiative to ensure that *no aircraft is ever lost again*, even in remote or oceanic environments. GADSS has three main components:

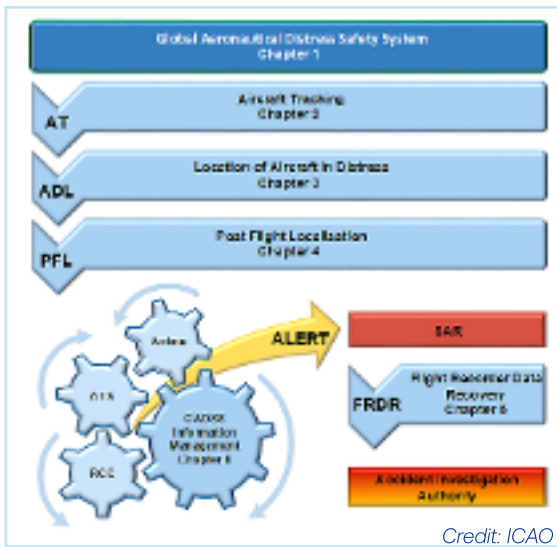
Aircraft tracking during normal operations - providing automatic '4D' (latitude, longitude, altitude and time) position reporting every 15 minutes. This became mandatory for all newly built aircraft > 27,000 kg in November 2018.

Autonomous Distress Tracking (ADT) – providing 4D position every 1 minute once the aircraft is detected in a distressed state i.e. unusual attitude, critical EGPWS warning, major systems failure, loss of control, etc without the need for crew action. This became mandatory in January 2023.

CAT Corner

Post Flight Localisation and Recovery – providing accurate location of wreckage within 1 nm or better to support SAR and Timely Recovery of Flight Data (TRFD). Mandated in January 2021.

GADSS defines the responsibilities of ATS, the aircraft operator and Rescue Coordination Centres (RCC) for aircraft tracking and location. Both ATS and the operator have an active role in tracking flights. If ADT is activated, then ATS and the operator must alert the RCC. If an ELT is activated, then the RCC will become aware and inform ATS and the operator.



Credit: ICAO

GADSS achieves 100% global coverage for the first two elements by integrating a myriad of different tracking solutions including; radar feeds, Aircraft Communications Addressing and Reporting System (ACARS) information, ADS-C data, ground-based ADS-B data, Multilateration (MLAT) (more on this below) and the jewel in the crown – space based ADS-B data.

Unfortunately, in today’s world bad actors involved in jamming and spoofing of GNSS signals make GNSS systems vulnerable to potentially very dangerous error. According to IATA, GNSS interference rates increased 175% between 2023 and 2024, while spoofing incidents surged by 500%.

Multilateration (MLAT), mentioned above, is an existing technology, which was primarily used for ground surveillance in airports, with some navigation applications in low radar / satellite coverage areas when originally deployed. However, it is increasingly being integrated universally as a complementary surveillance technology to monitor signal integrity of GNSS systems and improve surveillance and navigation accuracy. It achieves this as it operates independently of GNSS derived position or timing. MLAT uses the aircraft’s transponder signal,

timing its differing arrival times at multiple ground stations and/or satellites. Based on these relative arrival times it calculates the aircraft’s position. Unlike ADS it does not depend on external satellite signals that can be jammed or who’s time and navigation data can be spoofed.

The final element of GADSS - Post-flight Localisation and Recovery - relies upon the last known ADT signals to significantly reduce the potential search area, next generation distress tracking Emergency Locator Transmitters (ELT-DT) to pinpoint aircraft post-crash and the means to collate the information and make it available to the right agencies.

The advantages of modern ELT-DT are based on their pre-crash autonomous activation, their ability to provide a Return Link Service (RTL) (informing the user that their distress signal has been successfully received), improved batteries and signal range, and their enhanced encoded location and distress related information transmission capabilities.

Most modern ELT-DT link to Medium Earth Orbit Satellites (MEOSAR System orbiting between 2000km – 35,786 km) as opposed to the low earth orbit COSPAS-SARSAT constellation (orbiting between 160km – 2000km). This allows for less terrain masking and greater global coverage resulting in dramatic reduction in alerting time and higher accuracy (<5km radius in under 10 minutes with rapid amelioration thereafter).

The Location of an Aircraft in Distress Repository (LADR) launched in 2024 by ICAO and managed on their behalf by Eurocontrol, allows all capable aircraft to feed in and store their last known positions – no small task given the proliferation of air travel globally. It then permits stakeholders, including SAR agencies, to rapidly access this data should a distress situation be suspected.

The last 80 years has seen incredible advances in tracking and location in the aviation domain. The implementation of the GADSS initiative was too late for MH 370, but the most recent searches for the wreckage have been driven from technologies outside our safety domain: satellite observations of CO2 emissions and analysis of recording of hydrophones designed to monitor for breeches of nuclear testing bans in the Indian Ocean. Hopefully these technologies and novel ways to leverage them will eventually lead to a successful outcome for MH 370, while GADSS will, in future, ensure that no aircraft is ever lost again.

CAT Corner



GNSS INTERFERENCE IN ROTORCRAFT OPERATIONS

The Global Navigation Satellite Systems (GNSS) are now fundamental to modern rotorcraft operations. They enable instrument flight procedures that give helicopters safe, predictable access to airports, heliports, hospitals, offshore platforms, and remote or infrastructure-limited locations – often the very places where public service, medical, and rescue missions matter most. As GNSS interference grows across parts of Europe and beyond, the European rotorcraft community faces a clear safety priority: build operational resilience, ensure robust contingency planning, and elevate pilot awareness and specific training on this area so mission continuity and safety margins can be maintained even when satellite navigation is degraded or provides erroneous data.

Low-Level IFR Routes (LLR), Point-in-Space (PinS) procedures, and Required Navigation Performance Approach (APCH) approach operations to Localiser Performance with Vertical Guidance (LPV), Lateral Navigation/Vertical Navigation (LNAV/VNAV), and Localiser Performance/Lateral Navigation (LP/LNAV) minima are entirely dependent on **GNSS integrity**.

These are framed within ICAO's performance-based navigation concept, where Area Navigation (RNAV) provides area navigation capability and Required navigation Performance (RNP) adds onboard performance monitoring and alerting capability assured by the Flight Management System-Required Navigation Performance (FMS-RNP) system.

IFR-capable rotorcraft certificated in CS-27 and CS-29 rely extensively on these capabilities and are among the principal beneficiaries of satellite-enabled procedures.

At the same time interference, both jamming and spoofing, has increased in frequency and complexity, with data showing a steep rise in GNSS signal integrity loss events since 2021 and notable regional hotspots. The practical effects for helicopters are most acute when GNSS interference affects PinS approach, PinS departure and Low-Level Route (LLR) operations into uncontrolled airspace, and operations at remote sites in Instrument Meteorological Conditions (IMC). In these conditions, crew workload is critically elevated at the most demanding phase of flight, often in terrain-constrained environments where the safety margin is already narrow. European and international initiatives now focus on improved reporting, enhanced prevention and resilience, better airspace and infrastructure use, and coordinated preparedness. For rotorcraft, the overarching shift is from reliance on GNSS to resilience in the face of its disruption.

The Annex (see link 2 below) provides a Rotorcraft Pilot Quick Reference Handbook. It addresses recognition cues (jamming, spoofing, degradation), immediate pilot actions, crew resource management, and after-landing/post-event steps. It also delivers a core safety message encouraging pilots to treat every integrity warning as real. Pilots are invited to assess the situation, adapt speed and flight path as necessary, transition to backups or visual navigation, and report promptly.

EASA and EUROCONTROL released, on 26 March 2026, a joint Action Plan to strengthen the safety and resilience of European aviation operations in response to the growing challenge posed by GNSS interference. This Action Plan is not used in this article; readers are therefore encouraged to consult it [here](#) [1].

Credit: EASA (27 March 2026) See [GNSS Interference in Rotorcraft Operations](#) for full article [2].

GOPS



Jonathan Heavey

Jonathan is a Ground Operations Inspector with the IAA for over 11 years and previously work for Ryanair Ground Operations for 21 years. Jonathan has been instrumental in the creation of EASA's Ground Handling Regulation. His work was recently recognised when he was awarded with the Innovation in Safety and Risk Management Award at the Irish Aviation Industry awards.

GROUND HANDLING REGULATION EXPLAINED

The safety of an aircraft does not begin when it departs an aerodrome, but on the ground when it is handled by the multiple players that ensure it is fuelled, serviced, cargo is loaded, passengers are boarded, and the aircraft is pushed back. With over 300,000 people employed in EU aerodromes ensuring these activities are conducted safely, the importance of this area in the aviation operational chain remains safety critical. Despite this, compliance with any type of industry good practice or standards has always been voluntary, with a heavy reliance on sometimes sporadic oversight by airlines and aerodromes each assessing compliance to their own, differing, standards. This has now changed with Ground Handling being added to the EASA safety regulation framework following the conclusion of a 6-year regulatory rule making undertaking.

On the 27th of March 2025 EASA published mandatory ground handling regulations with a 3-year transition period under Commission Delegated Regulation (EU) 2025/20. These regulations provide requirements for organisations performing handling of aircraft at aerodromes under the Basic Regulation, and Commission Implementing Regulation (EU) 2025/23 with requirements for competent authority oversight of ground handling services. The Acceptable Means of Compliance (AMC) and Guidance Material (GM) were then added on the 7th of July 2025 through EASA decision. The final step of the regulatory creation process was taken on the 5th of November 2025 when the Easy Access Rules for Ground Handling were published on the EASA website.

Some key items within this regulation are;

- A mandatory scalable management system proportionate to the type and complexity of the ground handlers' activities, the size of the organisation, and the operational context. This management system must include clearly defined lines of accountability through an accountable manager, and persons responsible for the operation, training, safety and oversight.
- Within that management system a safety management system (SMS) encompassing the set items we already see in SMS at aerodromes and aircraft operators, and a compliance monitoring process.
- A training and assessment programme to ensure ground staff achieve the necessary competence to perform their

tasks to the standards and objectives established within the operational requirements (ORGH.GEN.110(c)) and to ensure continued competence of personnel.

- A process to ensure that the ground service equipment (GSE) is operated and maintained in line with the operating instructions and procedures and is appropriate for the task and type of aircraft it has been applied to.
- Operational requirements to cover safety objectives through compliance with either set, pre-assessed and approved industry standards or internally developed and safety assessed operational procedures.

For operators and competent authorities, a key part of this regulation is 'cooperative oversight'. With over 1,400 Ground Handling Organisations (GHO's) operating in the EASA member states, a process to ensure more relevant, worthwhile, risk-based oversight was integral to the success of this new regulation. A "hub-and-spoke" model for overseeing pan-European GHOs has been developed to ensure oversight can be shared among all competent authorities and prevent repeat audits using the same set of rules.

The "Hub" competent authority would be the authority of the Member State where the GHO has its principal place of business (PPoB). This authority will have responsibility for oversight of the organisation's management system. The "Hub" competent authority can be supported by "Spoke" competent authorities with the PPoB oversight. The "Spoke" competent authorities then just need to conduct oversight of the implementation of the GHO's management system and provision of GH services at individual stations (the 'spokes') in each Member State where the organisation operates.

Compliance with this regulation will be managed through a declaration process with all existing and future GHOs declaring they are compliant with the regulation and this being assessed through a 4-year oversight cycle.

The European Council Directive 96/67/EC of 15 October 1996 for Ground Handling issues Ground Handlers a licence for an aerodrome is entirely separate to the EASA regulation and remains unchanged. It will still be handled by the IAA's Licensing Department as this is not a safety regulation, but an access to the market process. There are over 4,700 Ground Handlers in Ireland and approximately 30 organisations will fall under the new regulation.

The transition period for this regulation was set at 3 years, meaning the regulation will fully apply on the 27th of March 2028. However, given GHOs are coming from no regulation to a full set of rules, it has been written into the regulation that Declarations can be submitted from the 27th of March 2027 to allow GHO's a 12-month window to benefit from advice from their competent authority without findings being raised. For further information or to review this new regulation you can follow the link [easa/ground-handling](https://easa.europa.eu/ground-handling) for more.

Cleared to Land



Emmet Riley

Emmet Riley is a Civil Aviation Inspector (CNS) with the Irish Aviation Authority, where he works within the Air Navigation Services Division conducting oversight of ANSPs and CNS departments. He previously held senior engineering roles at the IAA, including a technical lead for the fit-out of Dublin Airport's new Air Traffic Control Tower and principal engineer for the IAA's SESAR-funded remote tower trials. His current interests include the development of AI and automation-based tools to ease the burden of compliance, safety management, and complex regulatory processes in aviation.

THE DIGITAL EUROPEAN SKY: A PLAN FOR THE FUTURE OF AIR TRAFFIC MANAGEMENT

Artificial intelligence is already in use across aviation. Understanding the framework around it - regulatory, organisational, and individual - is part of using it well.

Artificial intelligence has arrived in the workplace. Not gradually, not theoretically - the tools are here, they are capable, and they are within reach of every professional in every sector. Aviation is no different.

The AI tools available to professionals today can draft documents, interpret complex information, perform calculations, and answer technical questions. They are built into widely used platforms and accessible on personal devices. Like any capable tool introduced into a professional environment, AI comes with a framework - regulatory, organisational, and individual - that is worth understanding.

It is also worth noting at the outset that current AI tools, including the generative variety are now in wide use, can produce outputs that are plausible but incorrect. This is not a reason to avoid them, but it is precisely why the human oversight principle that runs through every framework discussed in this article is not incidental. It is essential.

THE REGULATORY LANDSCAPE

The EU AI Act - Regulation (EU) 2024/1689 - is now in force across all sectors. It establishes a horizontal framework for artificial intelligence, categorising systems by risk level and setting corresponding obligations around transparency, data governance, human oversight, and conformity assessment. Its provisions are applying on a phased timeline, with the most significant obligations for high-risk AI systems taking effect from August 2026.

The Act applies across both the public and private sectors. It covers not only those who develop and place AI systems on the market - defined as providers - but also those who use AI systems in a professional context, defined as deployers. That definition is broad: any organisation using an AI system in the course of its work, whether a public authority, an airline, an air navigation service provider, or a ground handling company, is a deployer within the meaning of the Act.

Cleared to Land

A DIRECT OBLIGATION: AI LITERACY

One provision of the AI Act deserves particular attention for any organisation currently using AI tools. Article 4 places a direct obligation on both providers and deployers to take measures to ensure, to their best extent, a sufficient level of AI literacy among staff and other persons dealing with the operation and use of AI systems on their behalf. The obligation takes into account the technical knowledge, experience, education and training of those involved, and the context in which the AI systems are used.

This is not a future obligation. Article 4 has applied since February 2025. It does not prescribe what an AI literacy programme must look like — that is left to each organisation to determine in its own context — but it does place the responsibility to think about this firmly on the organisation rather than leaving it as a matter of discretion.

AI AND THE BASIC REGULATION

The AI Act also formally amends Regulation (EU) 2018/1139 - the basic regulation that underpins the EU's civil aviation framework and the legal basis for EASA's authority. Article 108 of the AI Act inserts provisions into several articles of the basic regulation requiring that, when the Commission or EASA adopts future implementing acts or delegated acts that concern AI systems functioning as safety components, the high-risk AI requirements set out in the AI Act must be taken into account.

This is not a direct obligation on aviation organisations, but its significance should not be understated. It formally embeds AI governance into the regulatory architecture that aviation has operated within for decades, and it sets the direction for how future EASA rulemaking will treat AI in safety-critical contexts. EASA is already responding: NPA 2025-07, published earlier this year and currently in consultation, proposes a trustworthiness framework for AI as a safety component in aviation, directly in response to Article 108. The rules that will govern how AI is used in aviation's regulated functions are being written now.

THE PLANNED FUTURE

AI in aviation is not only a matter of office productivity tools or administrative efficiency. At the strategic level, it is envisaged as a central enabler of how aviation will operate. The European ATM Master Plan - the planning instrument for air traffic management modernisation across Europe, published by the SESAR Joint Undertaking in its 2025 edition - identifies machine learning and AI as key components of the data volumes transformation lever that will underpin the future ATM system. The automation roadmap embedded in the Master Plan explicitly aligns with EASA's AI Roadmap, and higher levels of automation in ATM - including for certain phases of flight - are among the envisaged outcomes of the Digital European Sky programme by 2045.

The point is worth making plainly: AI is not something being introduced into aviation at the margins. It is planned, funded, and progressing as a core element of how the sector intends to manage increasingly complex operations at scale. The governance frameworks being built around it reflect that ambition.

EASA - A FRAMEWORK FOR TRUSTWORTHINESS

For anyone working in aviation who wants to understand the direction of travel on AI governance today, the EASA Artificial Intelligence Roadmap - now in its second version - is the natural starting point. While not itself legislation, it is the authoritative expression of how EASA is approaching AI in aviation, and it has been developed to be compatible with the requirements of the EU AI Act.

The Roadmap establishes a framework for AI trustworthiness built around human oversight, technical robustness, safety risk mitigation, and accountability. It defines levels of AI based on the degree of human agency and oversight involved, from decision support through to confined automation. These categories are practically useful beyond their formal regulatory application: they offer a vocabulary and a set of principles that any organisation thinking about how it uses AI - and what oversight is appropriate - can draw on when developing its own understanding of what AI literacy means in practice.

“AI should augment human capability and judgement, not replace it. Responsibility for AI outputs rests with the people and organisations that act on them.”

ORGANISATIONAL AND INDIVIDUAL RESPONSIBILITY

Across all of these frameworks, two principles run consistently. The first is organisational: those who deploy AI tools bear responsibility for the environment they create, the tools they make available, the policies they set around those tools, and the oversight they maintain. Having clear policy on which AI tools that are approved for use, and in what contexts, is part of that responsibility. So is ensuring that staff have the understanding they need - an obligation now reinforced by Article 4 of the AI Act.

The second is individual. Aviation has always placed responsibility with the qualified professional acting on information. The introduction of AI tools does not alter that. A professional who uses an AI tool in the course of their work remains responsible for the work. A professional who uses tools contrary to their organisation's policy bears responsibility for that choice. These principles are not new to aviation. What is new is their application to a class of tools that can produce confident, fluent, and sometimes incorrect outputs — which makes the exercise of professional judgement more important, not less.

AI should augment human capability and judgement. Responsibility for AI outputs rests with the people and organisations that act on them. In aviation, that clarity of accountability is not incidental. It is foundational.

Strategic Safety

IRELAND - STATE PLAN FOR AVIATION SAFETY

The State Plan for Aviation Safety (SPAS) in Ireland is published by the Irish Aviation Authority on behalf of the State. Its purpose is to communicate the strategic safety priorities and principal safety issues in Irish civil aviation and to outline the associated actions programmed at State level.

To support this, the IAA has established State level aviation safety management processes aimed at identifying key safety risks and driving continuous improvement in aviation safety performance. These processes are fully compliant with the requirements of ICAO Annex 19 and are aligned with the safety management frameworks of ICAO and EASA.

The SPAS focuses on the most significant risks to civil aviation in Ireland, while considering safety risks identified at both the global and European levels through the Global Aviation Safety Plan (GASP) and the European Plan for Aviation Safety (EPAS). The IAA actively contributes to the development of both GASP and EPAS through its participation in relevant ICAO panels and EASA advisory bodies.

The SPAS has a three-year cycle to account for the strategic aspects of the plan. During the last SPAS cycle, 2023 – 2025, there were two volumes, Strategy (vol I) and Actions (vol II), and volume II was updated annually to provide a document the progress of safety actions. Below are examples of current SPAS actions - click on the image to download the latest SPAS actions.

ACTIONS	TARGET DATE
<p>13 The IAA will assess the safety culture in Irish Air Operators and support EASA in developing standardised guidance and practical tools necessary to support the assessment.</p> <p>EASA Reference MST.0942.</p>	Q4 2025
<p>14 The IAA will conduct a review of the effectiveness of regulatory provisions concerning crew-pair support programmes.</p>	Closed
<p>15 The IAA will encourage the generation of high-quality occurrence reporting data by reporting entities, through its safety promotion process.</p> <p>16 The IAA shall organise training or workshops with organisations regarding data quality in occurrence reports.</p> <p>17 The IAA shall deliver training to its own personnel on occurrence reporting system with focus on data quality and risk classifications, ensuring continued compliance.</p> <p>EASA Reference NS7.0043.</p>	Q4 2025
<p>18 The IAA will review IAA/FAA Vol 1 Recommendations Action Dec 2023 to identify areas suitable for regulatory recommendations. This review will include a gap analysis from DARR v2 recommendations.</p>	Q3 2025

12.8 Status Highlights

- SPAS safety priorities aligned with latest update to ICAO (GASP) 2023-2025 and EPAS 2023-2025.
- Continued support to ICAO (SAF, SMEDS) and EASA Advisory Bodies, Collaborative Analysis Groups, Network of Analysts, Safety Promotion Network and DataSafety.
- Ongoing improvements to State-led risk management and performance monitoring processes, including enhanced safety review process.
- Encouragement of industry led safety culture improvement mechanisms in airports such as the Eurocontrol Safety Culture Stack, as an indicator of SMS maturity.
- System development projects to support deployment of EOCARS 2 and ERCS on the IAA occurrence reporting platform were completed and related training and instructional videos on the use of EOCARS 2 platform were conducted with staff and industry. The related SPAS action (2) above was closed in last year's SPAS update.

2026 is the beginning of a new SPAS cycle, 2026 – 2028 and will bring with it a new document structure. The new edition of the SPAS will be contained in a single document, detailing the strategic priorities being addressed with reference to the IAA Statement of Strategy 2026 – 2028, as well as safety issues and safety actions.

In SPAS 2026 – 2028, top safety topics and key safety issues have been identified and prioritised through a newly implemented IAA process for 'safety issues prioritisation'. This process is designed to better identify and prioritise cross-domain safety issues from a risk-based perspective.



As the SPAS continues to evolve in a proactive manner to address the known operational risks and the risks emerging from new technologies, operating concepts and environmental commitments in aviation, the IAA will continue to work with stakeholders in the civil aviation system to help identify and mitigate the risks and to strive for continuous improvement in aviation safety.

The SPAS 2026-2028 will be published shortly and will be featured in the next edition of Waypoint: Safety. The IAA will issue an annual SPAS update during 2027 and 2028 which will provide a status update on the progress of SPAS safety actions, including indicators on the implementation status of these actions.

I learned from that...



THE IMPORTANCE OF A GOOD LISTENING WATCH

Each Waypoint: Safety Issue includes a real world scenario where an Aviation Professional shares an experience they recall and think 'I learned from that'. Sharing experiences of this kind attempts to inform, educate and promotes just culture for safe aviation.

"A number of years ago I was the pilot-in-command of a training flight in a Pilatus PC-12. The First Officer had recently qualified on type and this training flight was being conducted for hour building and gaining experience in UK airspace. The training detail was quite straightforward, three sectors around the UK with a landing in Gloucestershire, before returning back to Ireland.

The initial portion of the flight went well and we were conducting an ILS approach to land into Gloucestershire. For those unfamiliar with the airport, it houses a number of maintenance facilities as well as helicopter and fixed-wing Approved Training Organisation's. With all this in mind you can imagine how busy the circuit traffic can be.

The First Officer was flying the leg into Gloucestershire and I was working the radios, which was a challenge in itself as there are a number of VFR items in the circuit. We were given clearance for the approach and at about five miles from the threshold we were given clearance to land. Truth be told I felt a sense of relief once we received that clearance, and I began to relax.

No sooner did I start to think about lunch, when a clipped "turning finals" came across the tower frequency. I immediately scanned outside but the PC-12's rather large and long nose

didn't offer much assistance. I asked the First Officer if he could see anything out his side but to no avail. We executed a missed approach and once in the climb I could see a light aircraft in close proximity directly beneath us. We came around for a second approach and landed with significantly less drama than the first attempt.

On the ground we discovered that the light aircraft had suffered a fuel line rupture, inadvertently making the light aircraft instantly become a glider. The pilot immediately turned for the landing runway and landed successfully. I thanked him for his prompt radio transmission, as it most certainly saved both aircraft.

That was the day I learned the importance of a good listening watch.

On reflection this incident has stayed with me throughout my recent flying career, and is a story I share with all new and aspiring pilots. The many technological improvements in our industry undoubtedly improve safety on a daily basis however these pale in comparison to the basics of an effective listening watch and thorough lookout. It doesn't matter if it's a single engine piston or a multi-engined airliner, the basics remain the same.

The best advice I can give from my own experience is to use every available resource to create a mental model of the situation around you, and never forget the basics of good airmanship."

Would you like to share an aviation experience that you learned from? Email: waypointsafety@iaa.ie

Landing a career in Aviation - Aircraft Maintenance Engineer



Each issue we explore how an aviation professional 'landed' a career in aviation. In this issue we chat to a recently qualified aircraft maintenance engineer. Every individual's career story serves to inspire the next generation of aviation professionals.

Hi Ciara, tell the readers a little about yourself?

"Hi, my name is Ciara Spencer, I'm 29 years of age, from North County Dublin."

What initially drew your attention to aviation?

"I always had interest in aviation growing up, my Dad was a pilot, my cousin works in ATC and Grandad enjoyed planespotting. Dad flew for Aer Lingus. When I was younger Dad brought me to the local airfield - Ballyboughal Airfield. Also, when I did transition year in secondary school I got the opportunity to do work placement in Aer Lingus and Simtech at the the airport. At that time it gave me a good insight into what goes on in an airport."

It's fair to say aviation is in the family but what made you consider a career in aviation?

"When I was in school I had an interest in technical and hands-on subjects, such as Technology, Applied Maths, Physics and even Geography. Technology was great as I got the chance to build things from scratch, such as electronics circuits."

Is there any other aspects of your life where you enjoy technical or hands on things?

"Yes, I have a motorcycle which I use for commuting and pleasure. I maintain my own motorcycle which is fun to do."

On completing your school leaving certificate, did you go straight into aviation?

"Initially, I completed an engineering entry course in Colaiste Dhulaigh and then planned to study engineering in Carlow IT

or TUD. That summer I applied for an aircraft apprenticeship position in Aer Lingus. After a number of interviews and assessments I was selected with nine other Aer Lingus apprentices, three of which were female. I began my apprenticeship in September 2017."

Tell us about the aircraft maintenance engineer apprenticeship?

"The training was a four year apprenticeship with Solas. The first two years involve working towards your Category A maintenance license. During this period the class completed theoretical modules and practical training in Shannon. I liked the connection between what we learned in class and the hands on work in the hanger and in flight line maintenance. We had to upkeep our training log books as we progressed."

On what aircraft did you complete your practical training?

"As part of the training syllabus I completed maintenance training tasks on Airbus - A320ceo, A320neo, A321 Neo and A330, throughout the whole apprenticeship."

When you successfully completed the Category A training what did you do next?

In Year 3 and 4 of the apprenticeship we covered respective modules for our Category B maintenance license. Further to Category A training, theoretical modules and practical training are covered in great depth. During this time we elected to study for Category B1 or B2 exams. I chose the B2 route."

What is the difference between B1 and B2 engineers?

"A B1 maintenance licence is for engineers who work primarily on aircraft airframe and power-plant systems, while B2 maintenance engineers work on electrical, software and navigation systems."

Landing a career in Aviation - Aircraft Maintenance Engineer

What training modules did you enjoy studying the most?

"During my studies I most enjoyed Module 11 and Module 13 relating to aircraft aerodynamics, structures and systems. For the B2 license you have to successfully complete twelve modules."

What qualifications did you receive on completion of your apprenticeship?

"I received my trade certificate from Solas and my aircraft maintenance engineers license issued by the IAA."



As a qualified maintenance engineer what are the most enjoyable aspects to your role?

"I enjoy the technical challenge when working on wiring snags and modifications. I am also looking forward to obtaining my aircraft certifier approval, which is 90% complete."

What does a typical working day look like for a maintenance engineer?

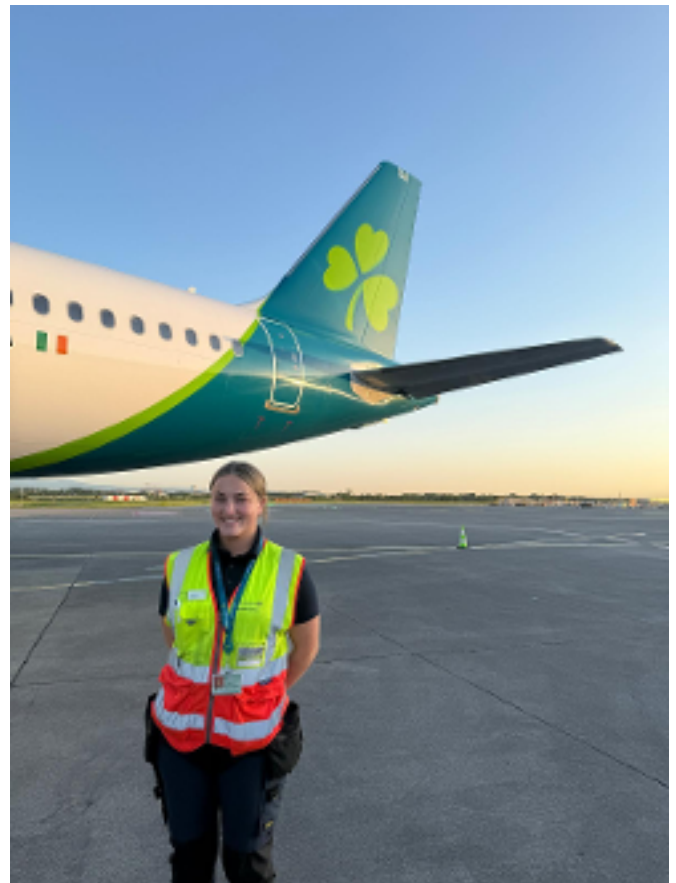
"I work different shifts, two 12-hour day shifts followed by two 12-hour night shifts, followed by four days off. The day shift involves aircraft preparation for ETOP's flights to the U.S. and across Europe. The team manages aircraft ramp and transits, deferred defects resolution, pre-flight checks and communication with pilots on various matters. During night shift I primarily complete assigned flight line maintenance tasks."

What are the challenging aspects to your role?

"Time pressure to get aircraft ready for safe flight can be stressful at times, particularly when the aircraft is full of passengers. I'm not a morning person so the 5am starts can be a challenge, however my body clock has adjusted to the working hours now."

What advice would you give to an aspiring aircraft maintenance engineer?

"You get out of a job what you put in! Don't be afraid to ask questions and ask for help as most other people around you have been in your position and are always willing to help. It can be a challenging job but anyone can get through it once you have the right attitude!"




Would you like to share your aviation career story. Email: waypointsafety@iaa.ie

Notice Board

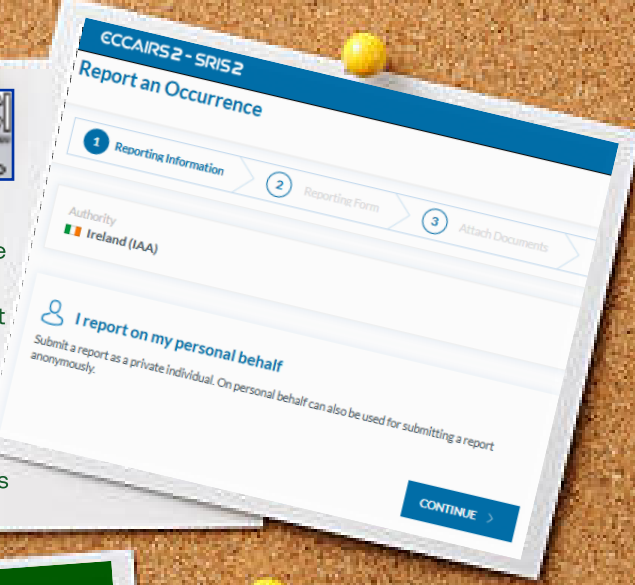


EASA SIB No.: 2026-04
EASA European Union Aviation Safety Agency
Safety Information Bulletin
 Airworthiness / Operations / Aerodromes
 SIB No.: 2026-04
 Issued: 08 May 2026
Subject: Aviation Turbine Fuel – Use of Jet A Grade Fuel in a Jet A-1 Environment
Applicability: Aviation fuel suppliers and producers, organisations involved in storing and dispensing of aviation fuel at aerodromes, National Competent Authorities (NCAs), aircraft operators, aerodrome operators, Design Approval Holders (DAH).

Would you like to contribute to Waypoint: Safety?
 Send your suggestions to:
waypointsafety@iaa.ie



The General Aviation Safety Council of Ireland held a safety meeting in the Greenhills Hotel, Limerick on the 23rd April 2026. Presentations on the night included Electronic Conspicuity, Propeller Safety, Plan Continuation Bias and GA Occurrence Reporting. There was lively discussion, sharing of safety information and experiences across the GA community.



ECCAIRS2 - SRIS2
 Report an Occurrence
 1 Reporting Information 2 Reporting Form 3 Attach Documents
 Authority: Ireland (IAA)
 I report on my personal behalf
 Submit a report as a private individual. On personal behalf can also be used for submitting a report anonymously.
 CONTINUE >



IAA INTERNATIONAL
AVIATION TRAINING & CONSULTANCY
 World-Class Aviation Safety, Security and Legal Experts
 IAA/E/INTERNATIONAL



The information, articles, and commentary published in this magazine are provided for general informational and safety purposes only. While the Irish Aviation Authority (IAA) makes every reasonable effort to ensure that the content is accurate and up to date at the time of publication, no representations or warranties, express or implied, are made as to the completeness, accuracy, or reliability of the information presented.

Readers are reminded that, in the event of any inconsistency between the content of this magazine and applicable laws, regulations, or officially published guidance material, the latter shall prevail.

The Irish Aviation Authority shall not be liable for any loss, damage, or expense incurred as a result of reliance on the information contained in this publication.