UK Civil Aviation Authority

United Kingdom Main National Aviation Safety Plan (NASP) 2026-2029

Produced by the UK CAA in collaboration with:

AAIB Air Accidents Investigation Branch

AIR SAFETY SUPPORT INTERNATIONAL

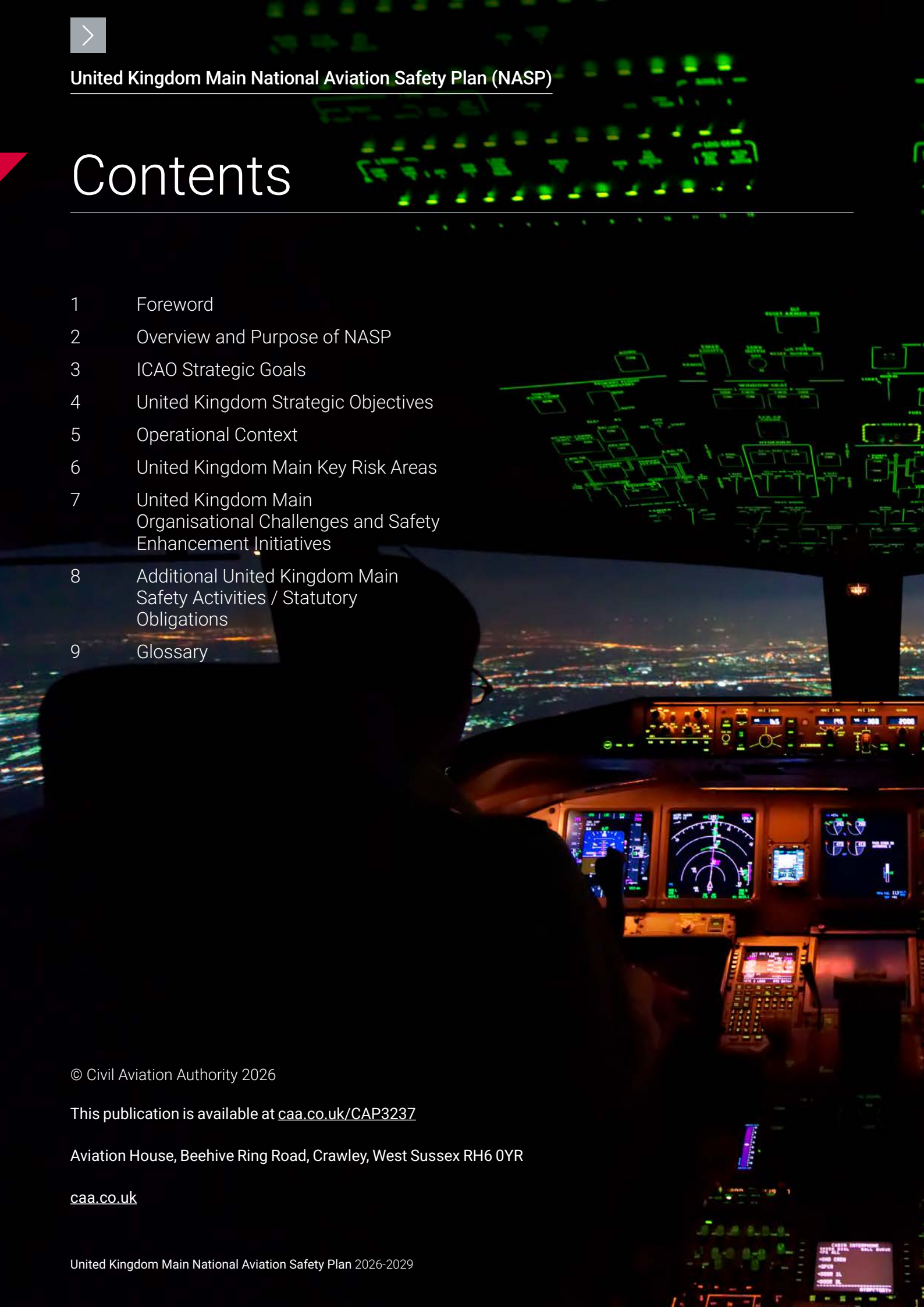
Military Aviation Authority MAA

Maritime & Coastguard Agency

Department for Transport

CAP3237

Contents



This publication is available at caa.co.uk/CAP3237

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1. Foreword

Giancarlo Buono
Group Director Safety and Airspace Regulation

The United Kingdom (UK) aviation sector is a global exemplar of safety, resilience, and innovation. As the regulator entrusted with advancing aviation safety across our skies, the UK Civil Aviation Authority (CAA) remains steadfast in its commitment to protect those who travel, work, and operate within this dynamic industry, alongside those who are overflown or otherwise indirectly impacted by aviation activities.

Our mission - to ensure the highest standards of safety and consumer protection while enabling a thriving, innovative aviation landscape - lies at the heart of this UK Main National Aviation Safety Plan (NASP).

The global aviation environment continues to evolve rapidly. Emerging technologies such as sustainable aviation fuels, electric aircraft, unmanned aircraft systems and digital air traffic management solutions present unparalleled opportunities to transform the way we connect people and places. At the same time, systemic shifts in international air travel demand, supply chain complexities, and the ongoing imperative to reduce aviation's environmental footprint are reshaping how safety is both understood and delivered around the world.

In this context, our NASP articulates our strategic priorities and associated Safety Enhancement Initiatives, firmly aligned with global best practice and collaborative frameworks such as those of the International Civil Aviation Organization (ICAO). It complements the UK Main State Safety Programme (SSP), supporting a desired level of safety performance.

Safety is the foundation upon which public confidence and sectoral innovation are built. The UK Government's objective of safely enabling innovation and growth within the aviation industry underscores our approach, recognising that technological and operational advancements must be pursued without compromise to safety. Throughout this latest iteration of our NASP, we set out how we will harness data-driven oversight, strengthen organisational and systemic resilience, and work in partnership with industry, government, and international partners to create an environment where innovation is safe, scalable, and sustainable.

Through the NASP and SSP, the various aviation stakeholders that make up the UK's aviation system affirm their commitment to the ongoing improvement of aviation safety, sufficient resourcing of activities and influential collaboration at the global, regional, and State level.

This NASP is not merely a regulatory roadmap. It reflects our proactive engagement with evolving risks and opportunities, an unwavering focus on continuous improvement, and a commitment to shaping a safe future for aviation in the UK and beyond. By aligning our regulatory activities with both our mission and the broader objectives of government and global aviation stakeholders, we reaffirm our role as a trusted guardian of safety and an enabler of industry progress.

We invite our partners and stakeholders to join us in implementing the strategic actions within this NASP as we work together to uphold the highest standards of aviation safety and realise the full potential of a safe, innovative, and prosperous aviation sector.

2. Overview and Purpose of NASP

The UK Main NASP 2026-2029 sets out the UK's strategic safety priorities and actions for the forthcoming triennium. It forms a central component of the UK Main SSP, translating the SSP's overarching safety policy, objectives and risk management framework into a coordinated programme of safety enhancement initiatives. In doing so, the NASP provides a structured, risk-based mechanism for identifying, prioritising and tracking delivery of continuous improvement activities.

Introduction

Safety must remain a primary consideration for all of the UK's Government aviation agencies. Maintaining and continually improving aviation safety is fundamental to sustaining public and international confidence in the UK aviation sector. That confidence underpins the continued health, resilience and global competitiveness of the industry. A strong safety record is also essential to enabling the Government's wider ambitions for growth and innovation in aviation, including the safe integration of new technologies, novel operations and emerging business models. By placing safety at the forefront of decision-making, the UK can guarantee that growth and innovation are achieved on a secure and sustainable foundation.

The NASP exists to ensure that the UK's continuous improvement aviation safety efforts are coherent, evidence-led and aligned across the aviation system. It articulates the key safety issues requiring national focus, establishes measurable safety objectives, and identifies the collaborative actions necessary to deliver continuous safety improvement. By bringing together regulatory, industry and investigative perspectives, the NASP enables the UK to proactively manage safety risks, strengthen safety performance, and maintain confidence in the aviation system both domestically and internationally.

The NASP is a living document. While it is subject to a structured triennial review cycle, aviation safety risks can evolve rapidly. Where critical operational safety risks are identified outside of the formal review process, reasonable steps will be taken to mitigate those risks as soon as is reasonably practicable. This may include targeted safety actions, enhanced oversight activity, or, where necessary, an unscheduled revision of the NASP to ensure that it remains responsive, relevant and effective.

Stakeholders

The NASP is written in collaboration with State Safety Board (SSB) stakeholders, including the Department for Transport (DfT), the Air Accidents Investigation Branch (AAIB), the Military Aviation Authority (MAA), the Maritime and Coastguard Agency (MCA), and Air Safety Support International (ASSI). This collaborative approach ensures that the NASP reflects a whole-system view of aviation safety, drawing on operational, regulatory and investigative insight from across the UK aviation community.

Responsibility for NASP development and monitoring

The UK CAA is delegated responsibility for the implementation and continuous improvement of the UK Main SSP, and for producing and assuring delivery of the UK Main NASP. In the context of the State Safety Programme, UK Main relates to the United Kingdom of Great Britain and Northern Ireland, and does not include the Overseas Territories or Crown Dependencies. This responsibility is administered through the SSP Coordinator within the UK CAA's Safety & Airspace Regulation Group (SARG). Through this governance structure, we ensure that the NASP is effectively embedded within regulatory oversight, performance monitoring and safety improvement activity, and that progress is transparently tracked and reported.

Further information on the UK SSP can be found here: State safety programme | UK Civil Aviation Authority.

GASP, EUR RASP & UK NASP

The UK NASP is developed and maintained within the ICAO safety planning framework. It supports delivery of ICAO's Global Aviation Safety Plan (GASP), ensuring that UK priorities are aligned with global safety goals and targets. At the regional level, the NASP reflects and contributes to the European Regional Aviation Safety Plan (EUR RASP), promoting consistency of safety focus across the ICAO European Region. It also takes account of and aligns, where appropriate, with the European Plan for Aviation Safety (EPAS), recognising the continued importance of cooperation and harmonisation in addressing shared and emerging safety challenges.

GASP
Global Aviation Safety Plan

EUR RASP
European Regional Aviation Safety Plan

EPAS
European Plan for Aviation Safety

NASP
UK Main National Aviation Safety Plan

3. ICAO Strategic Goals 2026-2050

ICAO has identified six Strategic Goals to achieve and support the vision and mission of the Organization. They serve as the guiding principles for the outcomes that ICAO strives to achieve, forming the foundation for all ICAO's programmes, projects and activities:

1. Every Flight is Safe and Secure
2. Aviation is Environmentally Sustainable
3. Aviation Delivers Seamless, Accessible, and Reliable Mobility for All
4. No Country Left Behind
5. The International Civil Aviation Convention and other Treaties, Laws and Regulations address all Challenges
6. The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All.

Further to this, the vision of the ICAO GASP is "zero fatalities in commercial operations by 2030 and beyond", which is consistent with the United Nations' 2030 Agenda for Sustainable Development. The plan's mission is to continually enhance global aviation safety performance and resilience by providing a collaborative framework for States, regions and industry.

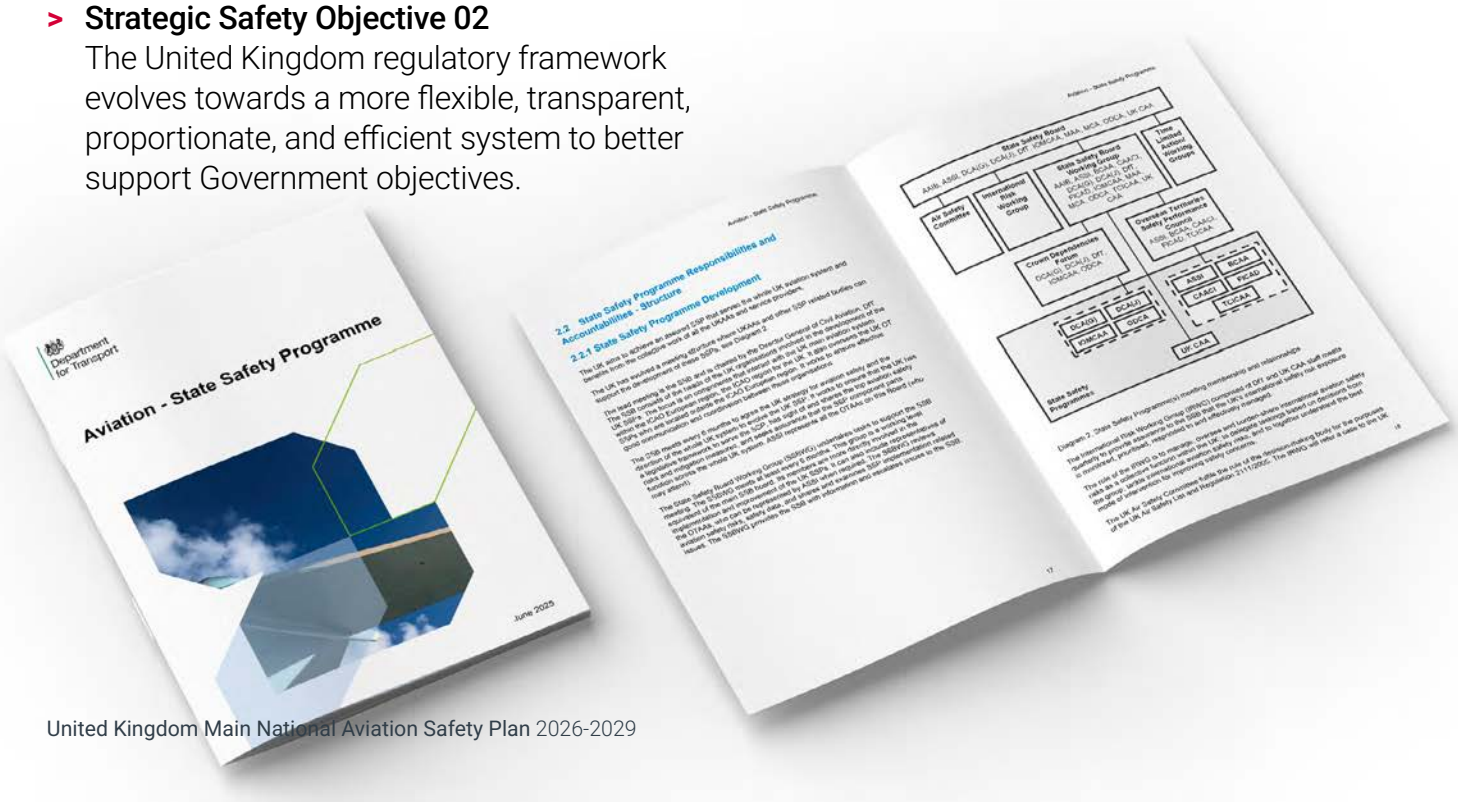
Further information about the ICAO Strategic Goals including High Priority Enablers can be found here: https://www2023.icao.int/secretariat/SecretaryGeneral/Documents/ICAO-Strategic-Plan-2026-2050-V2.pdf

4. United Kingdom Strategic Objectives

The UK SSP is established at a national level under the leadership of the DfT, which holds overall responsibility for aviation safety policy and for ensuring that the UK meets its obligations under the Convention on International Civil Aviation. The DfT SSP provides the overarching strategic framework for the management of aviation safety in all UK domains, setting national safety policy, objectives and high-level priorities in alignment with international standards and best practice.

The DfT's strategic safety objectives are derived from the ICAO framework, including Annex 19 (Safety Management), the GASP, and associated Standards and Recommended Practices. Through this framework, ICAO establishes global safety goals, targets and principles for State Safety Programmes.
The DfT translates these global expectations into UK-specific strategic objectives:

- **Strategic Safety Objective 01**
  The United Kingdom maintains a relevant and effective State Safety Programme that ensures aviation safety risks are managed in timely manner to meet the State's acceptable level of safety.
- **Strategic Safety Objective 02**
  The United Kingdom regulatory framework evolves towards a more flexible, transparent, proportionate, and efficient system to better support Government objectives.
- **Strategic Safety Objective 03**
  To ensure the United Kingdom is a trusted and reliable State partner in order to advance United Kingdom's interests through improving global aviation standards, building bilateral and multilateral strategic relationships.



These objectives are aimed at achieving our acceptable level of safety: that there are no accidents involving commercial air transport that result in serious injuries or fatalities, and no serious injuries or fatalities to third parties as a result of aviation activities.

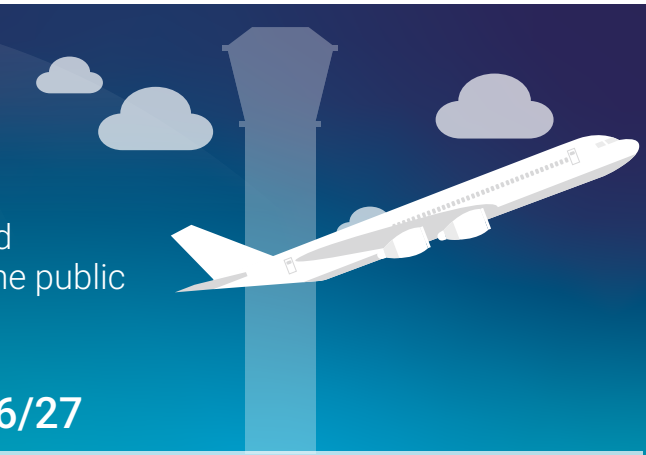
The latest version of the DfT's SSP can be found here: https://assets.publishing.service.gov.uk/media/685eafe3f85b4b993fd753de/aviation-state-safety-programme.pdf

Responsibility for delivering these strategic objectives within the UK Main is delegated by the DfT to the UK CAA, as the UK's independent aviation regulator. The UK Main SSP therefore operates as a core component of the overarching DfT SSP, providing the mechanisms through which national safety policy is implemented in practice. This includes the development of safety risk management processes, safety performance monitoring, oversight activities, and the promotion of safety management systems across industry.

Under this delegated framework, the UK CAA is accountable for implementing and continuously improving the operational elements of the UK Main SSP. It translates the DfT's strategic direction into regulatory priorities, risk-based oversight activities, and measurable safety performance indicators. In doing so, the CAA ensures that international safety objectives established through ICAO are effectively embedded within the UK's regulatory system and realised through tangible safety outcomes.

This structured delegation - from ICAO's global framework, through DfT's national strategic leadership, to the CAA's regulatory implementation - ensures clarity of roles and responsibilities across the UK aviation system. It provides a coherent line of sight from global safety goals to national policy and operational delivery, supporting a robust, risk-based and continuously improving approach to aviation safety in the UK.

The CAA Strategy



> Our Mission

Protecting people, enabling aerospace

> Our vision

Safe, secure and sustainable aviation and aerospace working for consumers and the public

> Annual Strategic Objectives 2026/27

Protecting consumers and the public

> Deliver our **safety oversight and policy** enhancements programme

> Support the sector in embedding and driving value from **Next Generation security checkpoints**

> Improve industry compliance with **passengers rights**

> **Regulate Heathrow,** including capacity expansion, to further the interests of consumers

> **Reform CAA legislative frameworks** to cut burdens and drive growth

> Deliver a prioritised set of targeted **sector resilience** improvements

Enabling aviation and aerospace to innovate and grow

> Deliver the next phase of the remotely piloted aircraft systems **regulatory pathway**

> Deliver the next phase of the **commercial piloted electric vertical take-off and landing aircraft regulatory pathway**

> Advance the **Airspace Modernisation** Programme to support Future of Flight and traditional operations

> Enable aviation's adoption of **AI** tools to enhance safety, security and consumer value

Developing global relationships

> Leverage our **global relationships** to support delivery across all strategic objectives.

Supporting aviation to improve environmental sustainability

> Develop regulatory pathways for **future propulsion** including hydrogen-powered flight

> Deliver enhanced **Environmental information and reporting**

Enhancing our organisation to deliver this strategy

> Enhance our regulatory and business operations to **drive and demonstrate service value through** operational frameworks, impact reporting and the benefits from continued AI tool adoption

> Strengthen the CAA's **Employee Value Proposition**

> Elevate Senior **Leadership Capability** Across the CAA

> Deliver a new **digital service for Flight Crew Licensing** and conclude initial phase of the **Future Surveillance Operating Model** in readiness to implement September 2027. Trial a Service Ownership model and propose a scalable solution for CAA wide adoption.

The CAA Safety and Airspace Regulation Group Strategy

The CAA's Safety activities are primarily delivered within SARG. The following illustration highlights SARG's strategic plans and how these relate to the CAA's regulatory mission, the regulatory principles through which we achieve our mission, the values and behaviours that underpin these principles, and the overarching State and statutory requirements by which we derive our strategic plans:

Our safety and airspace regulation strategy at a glance

OUR MISSION Protecting People, Enabling Aerospace

Delivering safety oversight

- Safety policy and objectives
- Safety risk management
- Safety assurance
- Safety promotion

Safely enabling growth and innovation

- Airspace modernisation
- Future safety and innovation
- Space

STATE AND STATUTORY GUIDING LIGHTS

Oversight

- ICAO Standards and Recommended Practices
- Global and Regional Aviation Safety Plans
- State Safety Objectives and DfT objectives for the CAA
- ICAO Safety Management Manual
- DfT State Safety Programme
- ICAO Safety Intelligence Manual

Growth and innovation

- ICAO Global Air Navigation Plan
- DfT Future of Flight Action Plan
- UK National Space Strategy September 2021

OUR STRATEGIC PLANS

Oversight

- UK Main State Safety Programme
- UK Main National Aviation Safety Plan
- CAA Safety Policy and associated CAA Board risk appetites
- CAA Enforcement Policy
- Performance Based Regulation Strategy and Safety Management Systems Development Strategy
- Human Factors Strategy

Growth and innovation

- Airspace Modernisation Strategy
- Future of Flight Programme
- Future Safety and Innovation Strategy and Technical Strategy
- Hydrogen Sandbox Challenge
- Spaceflight Improvement Programme

OUR CULTURE - CAA regulatory principles:

> Understanding and addressing risk | > Acting proportionately | > Delivering unique value | > Engaging proactively and transparently | > Acting on our combined insight

As a safety regulator, we support innovative sectors, our Regulatory Frameworks follow the same principles:

Enable safe operations	The first part of the CAA's mission is protecting people. We authorise operations only if they meet a pre-agreed risk appetite.
Keep pace with innovation	Industry & new technologies move at pace. The regulatory framework shouldn't hold that back.
Support the growth of industry	A good regulatory framework doesn't stop industry growing but makes it clear what standard they must meet to conduct their operations.
Are targeted and proportionate	The standard & evidence required must be proportionate to the risk of an operation.
Are transparent and predictable	Regulations & applications must be simple, easy to follow and transparent as to the requirements that must be met.

5. Operational Context

Governance of the UK Operational aviation environment is achieved at holistic State level and independent national authority level.

Both the DfT and the UK CAA are responsible for rulemaking processes regarding aviation safety ensuring ICAO obligations are met.

The UK CAA is responsible for consulting, producing and maintaining civil aviation regulations. However, where a policy change is to be effected through legislative change, the development pathway involves the UK CAA and DfT working together and only the UK Parliament can decide to change the law. The DfT works with the UK CAA to develop an evidence base and proposal for legislative change. The DfT is subsequently responsible for working with Ministers to draft the legislation and take it through the parliamentary process. The UK CAA is responsible for implementing and enforcing the legislation once approved by Parliament.

One of the current UK DfT strategic safety objectives is to ensure that the UK's regulatory framework evolves towards a more flexible, transparent, proportionate, and efficient system to better support the UK Government objectives.

5.1 Operational Statistics

5.2 Aviation Authorities of The United Kingdom

5.2.1 Civil Aviation Authorities

Alongside, and beyond the UK Main, there are a number of Overseas Territory and Crown Dependency Authorities within the United Kingdom. To achieve mutual safety objectives, there is strong collaboration amongst these authorities, however each may hold a NASP/SSP relevant to their territory:

Part of the United Kingdom	**Relationship** **CD** Crown Dependency **OT** Overseas Territory	**Aviation Authority responsible for aviation safety oversight**	**Responsible for maintaining regulation**
Great Britain and Northern Ireland	UK Main	United Kingdom Civil Aviation Authority	UKCAA
Guernsey	CD	Director of Civil Aviation	DCA(G)
Isle of Man	CD	Isle of Man Civil Aviation Administration	IOMCAA
Jersey	CD	Director of Civil Aviation	DCA(J)
Gibraltar	OT	Office of the Director of Civil Aviation	ODCA
Bermuda	OT	Bermuda Civil Aviation Authority	ASSI*
Cayman Islands	OT	Civil Aviation Authority of the Cayman Islands	ASSI*
Turks and Caicos Islands	OT	Turks and Caicos Islands Civil Aviation Authority	ASSI*
Falkland Islands	OT	Falkland Islands Civil Aviation Department	ASSI*
Anguilla	OT	ASSI*	ASSI*
British Virgin Islands	OT	ASSI*	ASSI*
Montserrat	OT	ASSI*	ASSI*
St Helena	OT	ASSI*	ASSI*

*Air Safety Support International (ASSI)

5.2.2 Military Aviation Authority

The Military Aviation Authority (MMA) is responsible for the regulation, assurance and enforcement of the defence air operating and technical domains.

The MAA is part of the Ministry of Defence and the Defence Safety Authority.

The MAA and UK Civil Aviation Authority maintain a close, strategic partnership defined by joint oversight policies, particularly regarding the regulation of civil-registered aircraft used for military purposes.

5.2.3 Air Accidents Investigation Branch

The UK Air Accidents Investigation Branch (AAIB) is a part of the Department for Transport that investigates civil aircraft accidents and serious incidents in the UK, its overseas territories, and crown dependencies to improve aviation safety.

It acts as a key component of the UK SSP by identifying causes and issuing safety recommendations to prevent recurrence.

It is independent and operates separately from the CAA and the judicial system, with the Chief Inspector reporting directly to the Secretary of State for Transport.

Its scope, in accordance with ICAO Annex 13, is civil aviation, including commercial air transport and general aviation. It also functions as the Space Accident Investigation Authority for the UK.

6. UK Main Operational Safety Risks

6.1 Global Operational Safety Risks

In the 2026-28 GASP, ICAO identified a list of global operational High-Risk Categories of occurrences (G-HRC) based on common accidents and serious incidents; these represent unsafe outcomes, or 'end states', which need to be avoided to prevent fatalities.

ICAO recommend States, regions and industry consider these G-HRCs when conducting safety risk assessments to identify Regional (R-HRCs) and National (N-HRCs), for which sufficient data exists, and to further analyse the underlying precursors and contributing factors as well as prioritise those that should be mitigated as part of national and regional aviation safety plans.

These G-HRCs are as follows:

- Controlled Flight into Terrain (CFIT).
- Loss of Control In-Flight (LOC-I).
- Mid-Air Collision (MAC).
- Runway Excursion (RE).
- Runway Incursion (RI).

In addition, the GASP identified the following further categories:

- Abnormal Runway Contact (ARC).
- System/Component Failure or Malfunction (Non-Powerplant).
- Turbulence Encounter (TURB).

These may not have a high fatality risk, such as the G-HRCs, but figure prominently in the most frequent types of accidents and serious incidents across ICAO regions.

6.2 Regional Operational Safety Risks

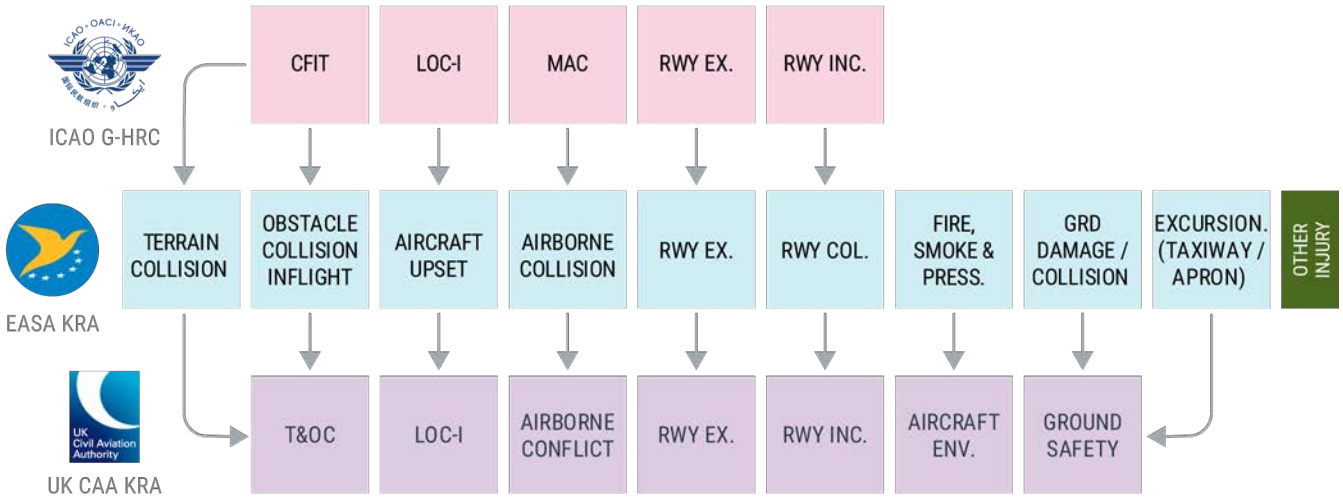
The GASP requires ICAO regions to determine appropriate versions of these, which should be captured within the respective Regional Aviation Safety Plan (RASP). This are known as Regional High Risk Categories (R-HRCs). For the EUR region, these are:

- Aircraft Upset In-Flight (LOC-I).
- Runway Safety (includes excursions and incursions).
- Airborne Conflict (Mid-Air Collision (MAC)).
- Terrain Collision.
- Fire, Smoke, Pressurisation and Cabin Air Quality.

These are predominantly focused on Commercial Air Transport (CAT - transportation of passengers and/or cargo for remuneration) and Non-Commercial Complex (NCC) - aeroplane operations.

6.3 UK Operational Safety Risks – Key Risk Areas

The following diagram highlights ICAO G-HRC and how this translates into the European Aviation Safety Agency (EASA) and UK CAA KRA model.



To support the ongoing performance of the UK's excellent aviation safety record, a Key Risk Area (KRA) model has been developed to ensure each of the national operational safety risks across the UK aerospace (aviation and space) domains are effectively monitored and areas for improvement identified and acted upon; these KRAs are, in alphabetical order:

Key Risk Area	Acronym	Relates to
Airborne Conflict	**AC**	Loss of separation between aircraft and/or spacecraft, potentially leading to Mid-Air Collision (MAC).
Aircraft Environment	**AE**	Potentially leading to any event inside the physical environment of an aircraft or spacecraft that could endanger life, e.g. fire, smoke, fumes, pressurisation, extreme temperature.
Ground Safety	**GS**	Non-Runway loss of separation between aircraft, spacecraft, with other aircraft/spacecraft, vehicles or pedestrians, potentially leading to a collision.
Loss Of Control In-Flight	**LOC-I**	Aircraft or spacecraft deviates from intended flight path/trajectory, potentially leading to an uncontrolled collision with other aircraft/spacecraft or terrain.
Terrain & Obstacle Collision	**T&OC**	Controlled Flight (or trajectory) Into Terrain (CFIT) (including water), or an obstacle, by an aircraft/ spacecraft that is under control.
Runway Excursion	**RE**	Incorrect speed/directional control on departure or recovery, potentially leading to accidents and serious incidents either on or off the Runway (includes all departure/recovery areas or platforms), including collisions with aircraft, spacecraft, vehicles, pedestrians, and accidental contact with terrain, water, or other obstacles.
Runway Incursion	**RI**	Loss of separation between aircraft, spacecraft, with other aircraft/spacecraft, vehicles or pedestrians on the Runway (includes all departure/recovery areas or platforms), potentially leading to a collision.

These operational KRAs can be directly aligned with both the ICAO G-HRCs and R-HRCs. Whilst predominantly focused on CAT and NCC operations, because of the nature of adverse outcomes in these domains, the KRAs are applicable to every aerospace operational domain.

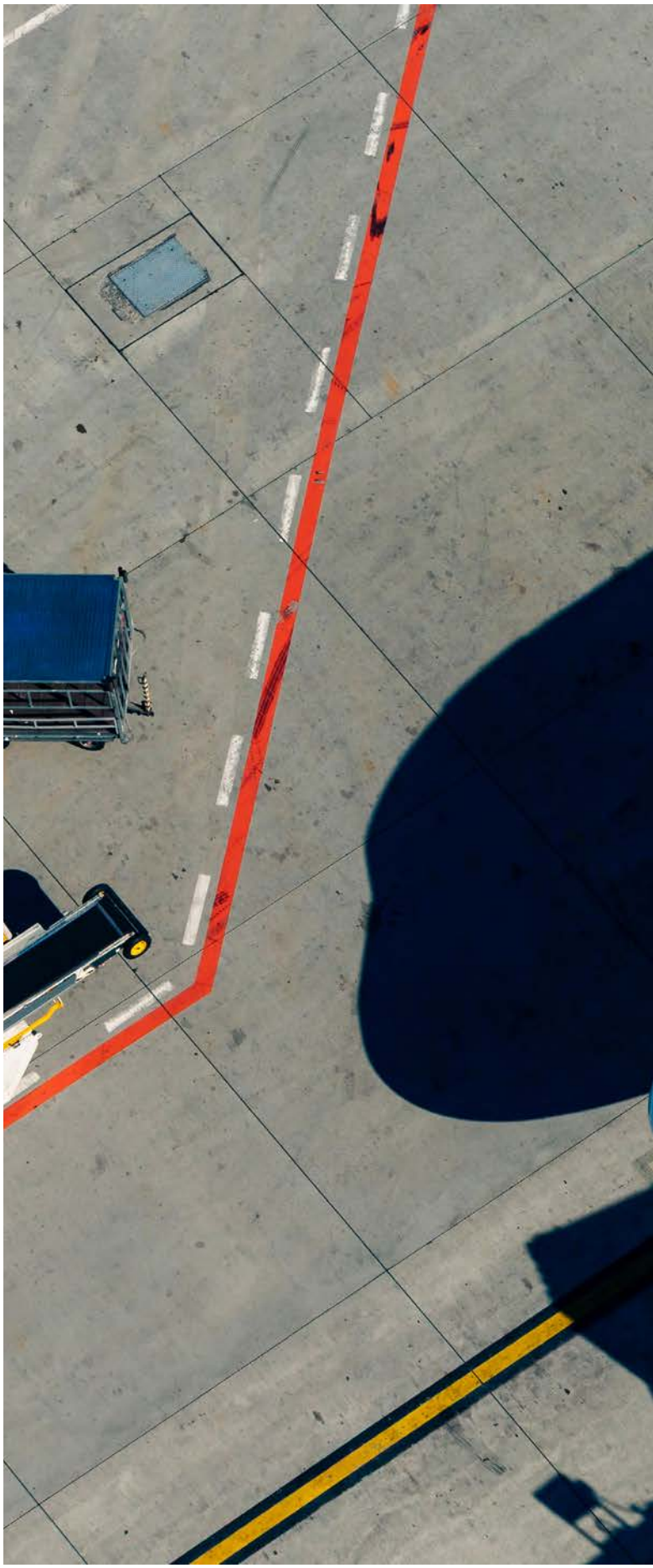
The operational context and associated areas of safety risk focus, by relative order of importance, for each domain are shown below.

6.3.1 Human Factors Considerations

The CAA acknowledges and emphasises the role of human performance across KRA focus areas. Human Factors, the study of human performance, plays a critical role in enhancing aviation safety and is a foundation of the UK NASP across all areas of aerospace. To develop, prioritise and maintain insights into Human Factors issues, the CAA has developed a Human Factors Action Plan and Strategy overseen by the CAA Human Factors Programme Team (see section 8.1.4).

6.4 UK CAT and NCC Aeroplanes

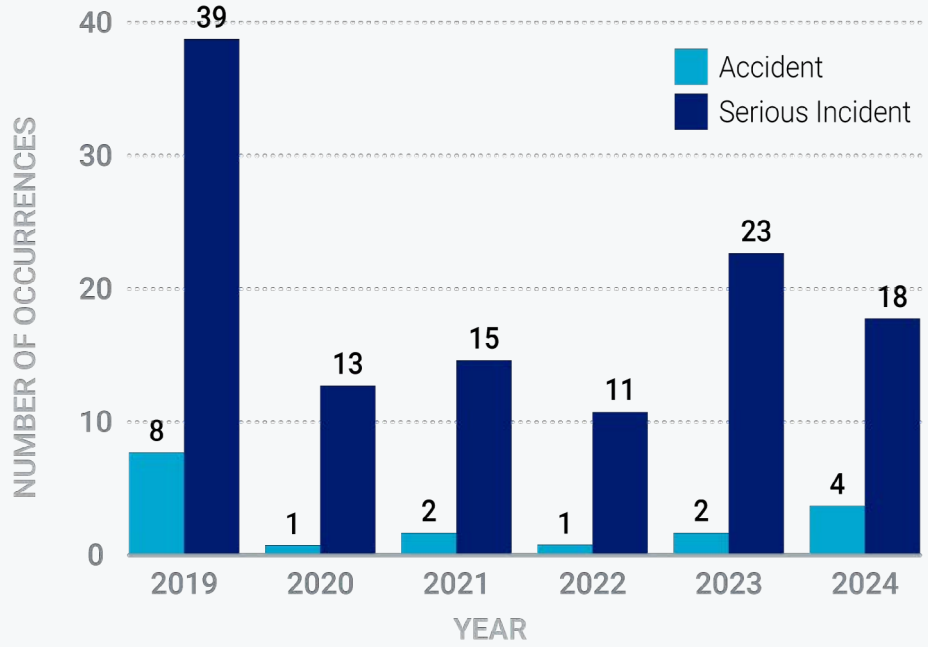
This section considers the KRAs that are relevant to all UK registered civil and non-military, state operated aeroplanes, conducting CAT and/or NCC operations within UK and foreign airspace. These KRAs additionally consider operations of foreign registered aeroplanes engaged in CAT and/or NCC operations in UK airspace, or when transporting UK citizens outside UK airspace.



6.4.1 Accidents and Serious Incidents

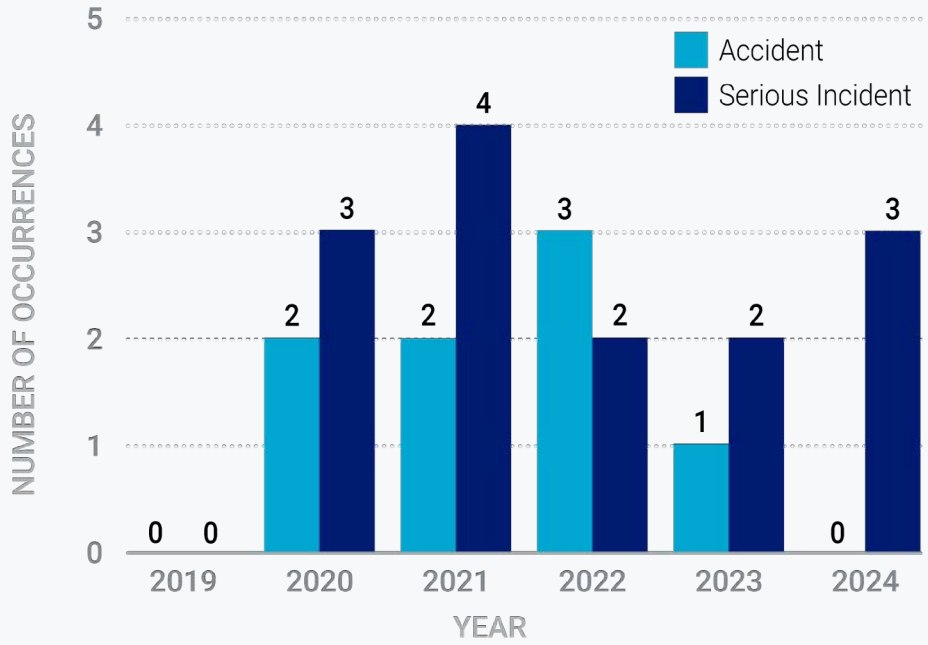
Scheduled CAT accounts for the majority of passenger and cargo flights in the UK. This sector consists of 18 airlines operating in over 800 large fixed-wing aircraft and is the most common way the public interact with the aviation system. In 2024, this sector flew over 128 million passengers on over 880 thousand flights. This is an increase on 2023, where there were 118 million passengers carried on 839 thousand flights (an increase of nearly 10 million passengers). There were 4 accidents and 18 serious incidents in 2024. Two of these accidents resulted in serious injuries to cabin crew while performing their duties when the aircraft was on the ground. Of the remaining two accidents, one involved a nose gear collapse during landing with the other involving a ground collision while taxiing. There were no injuries sustained in either of these two events.

Scheduled CAT Accidents and Serious Incidents 2019-2024



Non-scheduled fixed-wing CAT covers a variety of related flight operations, including various corporate flights and air taxi. The main difference from the scheduled sector is that aircraft in the non-scheduled area are often smaller with fewer or no passengers and they do not operate to a set timetable. The safety issues of these operations are often similar to the ones in scheduled operations, but with a different variety of aircraft types and locations that they operate to/from. The UK non-scheduled CAT sector involves close to 30 operators with approximately 22,000 flights in 2024. In 2024, there were no accidents and 3 serious incidents. There have been no fatal or serious injury accidents in the past 5 years.

Non-Scheduled CAT Accidents and Serious Incidents 2019-2024

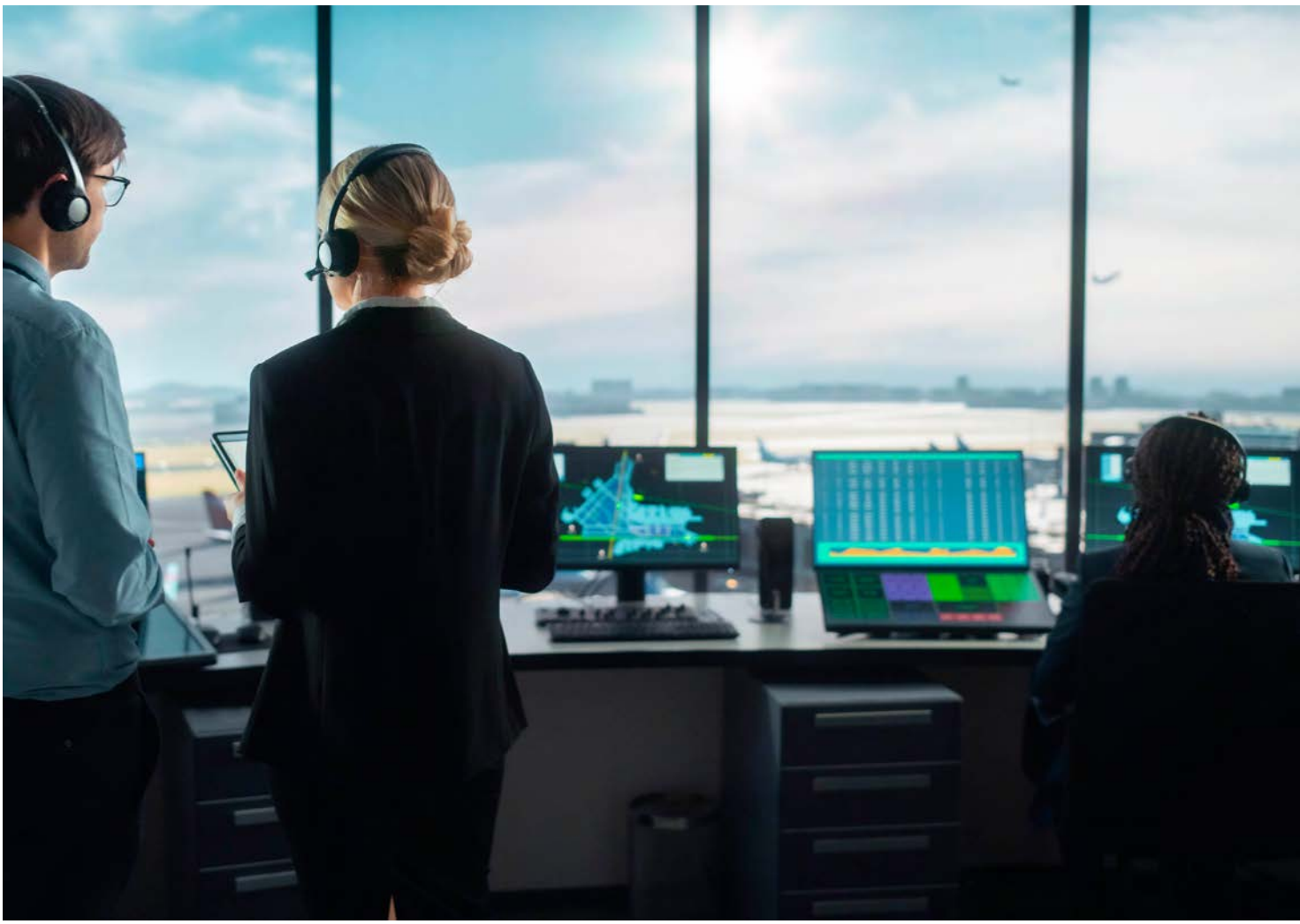


6.4.2 UK CAT and NCC KRAs Areas of Focus

Key Risk Area	Focus area
Airborne Conflict	> Controlled airspace infringements by GA/UAS. > Level busts in controlled airspace by foreign operators. > Surveillance systems: resilience, coverage and quality of surveillance technologies used to monitor aircraft positions and movements. > Traffic conditions and airspace design: considerations include traffic density, complexity and the mixture of aircraft types and capabilities.
Aircraft Environment	> Carriage of Dangerous Goods, especially Lithium batteries and products using them, in aircraft cargo holds. > Carriage of Lithium batteries and products using them in aircraft cabins. > Turbulence. > Disruptive passengers.
Ground Safety	> Ground collisions between aircraft manoeuvring on aprons. > Ground collisions between aircraft and Ground Support Equipment and other vehicles. > Inconsistent aerodrome driving standards. > Inconsistent or absent control of vehicles/pedestrians. > Lack of assurance/safety oversight and volume of incidents. > Integration of novel fuel types, equipment and methods at refuelling.
Loss Of Control In-Flight	> Inappropriate flight control inputs for example in response to environment upset and failures. > Pilot medical/health impairment.
Terrain & Obstacle Collision	> Flight in adverse environmental conditions, including turbulence. > Inaccurate approach path design and inadequate documentation for approaches with vertical guidance or localiser performance with vertical guidance. > Radio Frequency Interference effects, including Global Navigation Satellite System spoofing and jamming. > Operating procedures for avoiding, recognising, and recovering from Radio Frequency Interference effects.
Runway Excursion	> Approaches in adverse environmental conditions, including windshear and crosswinds. > Unstable approaches leading to increased RE risk (hard, fast, long, landings). > Incorrect landings reducing directional margins (for example off-centre, 'crabbed' landings). > Incorrect take-off performance.
Runway Incursion	> Inconsistent Low Visibility operational procedures. > Complex or inadequate aerodrome design, equipment and signage. > Inadequate manoeuvring area driver training and assessment programme. > Inconsistent or absent control of vehicles/pedestrians. > Unintentional deviations from Air Traffic Control clearances by flight and ground crew. > Phraseology use (such as non-standard versus standard; call-sign confusion).

Additional areas of focus in the CAT and NCC domain include:

- Human factors – especially with respect to Pilot and Air Traffic Controller performance; this includes automation dependency, which can lead to degraded pilot proficiency in manual flying, lack of awareness or competence in procedures for recovery from unusual aircraft attitudes.
- Airspace design.
- Aircraft systems availability and resilience, including:
  - > Navigation equipment.
  - > Secondary Surveillance Radar and Automatic Dependent Surveillance transponders.
  - > Enhanced Ground Proximity Warning and Traffic Alert and Collision Avoidance Systems.
- Air traffic management resilience, including:
  - > Major aerodromes or sectors of airspace become unavailable.
  - > Major Air Traffic Management system failures.
- Availability and operational resilience of Rescue and Fire Fighting Services at aerodromes.



6.5 Rotorcraft

This section considers the KRAs that are relevant to all UK registered rotorcraft conducting CAT operations in UK or foreign airspace. These KRAs additionally consider operations of foreign registered rotorcraft engaged in CAT operations in UK airspace, or when carrying UK citizens outside UK airspace.

The rotorcraft domain consists of the following categories:

- CAT Operations. (Including Passenger and Cargo Transportation)
- Onshore and to Offshore Installations. (Oil and Gas)
- Helicopter Emergency Services (HEMS)
- Police Operations
- Search and Rescue

Other notable components are:

- Commercial Specialised Operations
- Non-Commercial Operations. (Included in the GA section)

6.5.1 Accidents and Serious Incidents

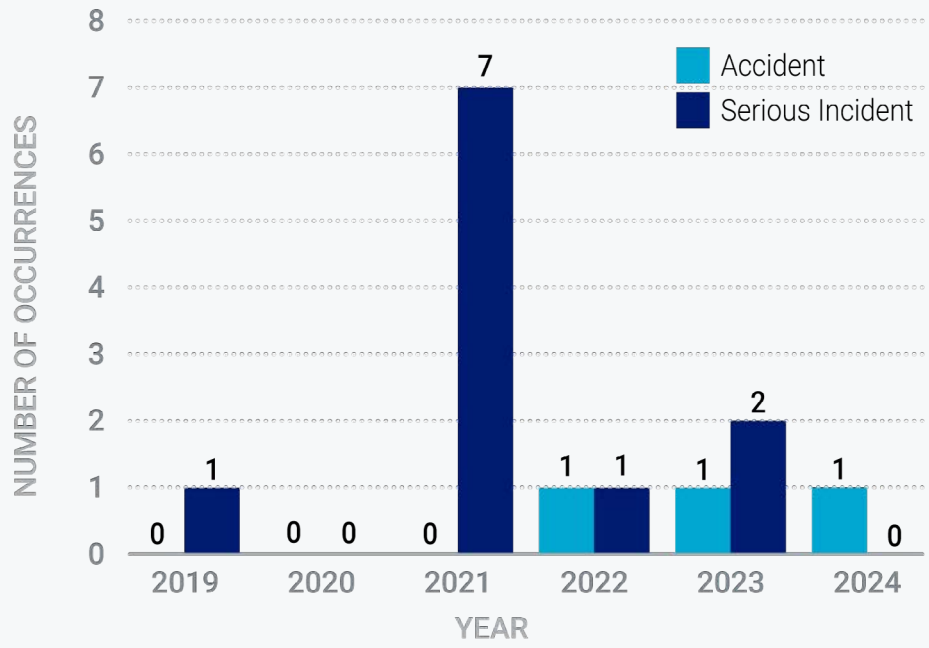
Within the UK's rotorcraft domain, the VTOL sector contuses its trajectory of rapid innovation and diversification.

Ensuring a robust and adaptive safety framework is therefore critical. From traditional rotorcraft to Advanced Air Mobility platforms such as electric VTOL aircraft, the sector is navigating a complex landscape of emerging technologies, operational models, and regulatory requirements.

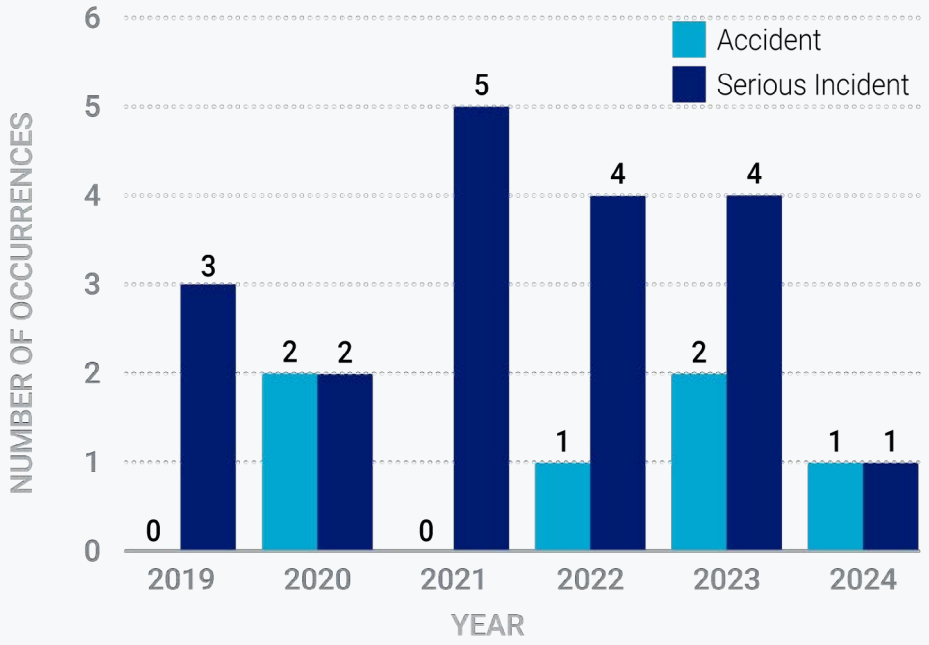
There are nearly 50 onshore helicopter operators that have been granted an Air Operators Certificate (AOC) and approximately 100 helicopters that carry out both commercial operations and/or special operations such as HEMS and Search and Rescue. For the offshore sector, there are approximately 100 helicopters used in the support of offshore operations spread between 6 air operators. In 2024, within the commercial air transport onshore helicopter sector, there was one accident and one serious incident.
The accident occurred during hover training.

The serious incident happened during a maintenance inspection where movement on a tail rotor control rod slider assembly was observed. With regards to the offshore helicopter sector, there was one accident that occurred during rescue operations in the Falkland Islands – an unresponsive casualty fell into the sea from the helicopter. Within the VTOL sector there were no fatalities for 2024.

Offshore VTOL Accidents and Serious Incidents 2014-2024



Onshore VTOL Accidents and Serious Incidents 2014-2024



6.5.2 CAT Rotorcraft KRAs and Areas of Focus

Key Risk Area	Focus areas
Airborne Conflict	> Inability to maintain adequate Visual Flight Rules (VFR) separation in class G airspace. > Damage caused by MAC with UAS - proliferation of drone activity in Class G airspace.
Loss Of Control In-Flight	> Powerplant and transmission failure.
Terrain & Obstacle Collision	> Accurate and up-to-date terrain and obstacle mapping. > Proliferation of windfarms, offshore and onshore. > Absent/inadequate Instrument Flight Rules approach procedures.

Additional areas of focus in the Rotorcraft domain include:

> Human factors - especially with respect to Pilot performance and handling of rotorcraft in critical phases of flight, including adverse weather and emergency situations.

> Novel propulsion systems, including electric and hydrogen solutions.

6.6 General Aviation - Sports and Recreation

This section considers the KRAs that are relevant to all UK registered aircraft that engage in recreational, non-commercial (ballooning and parachuting exempt), operations in UK or foreign airspace. These KRAs additionally consider operations of foreign registered GA aircraft engaged in the same type of operations in UK airspace, or when carrying UK citizens outside UK airspace.

The General Aviation domain consists of the following categories:

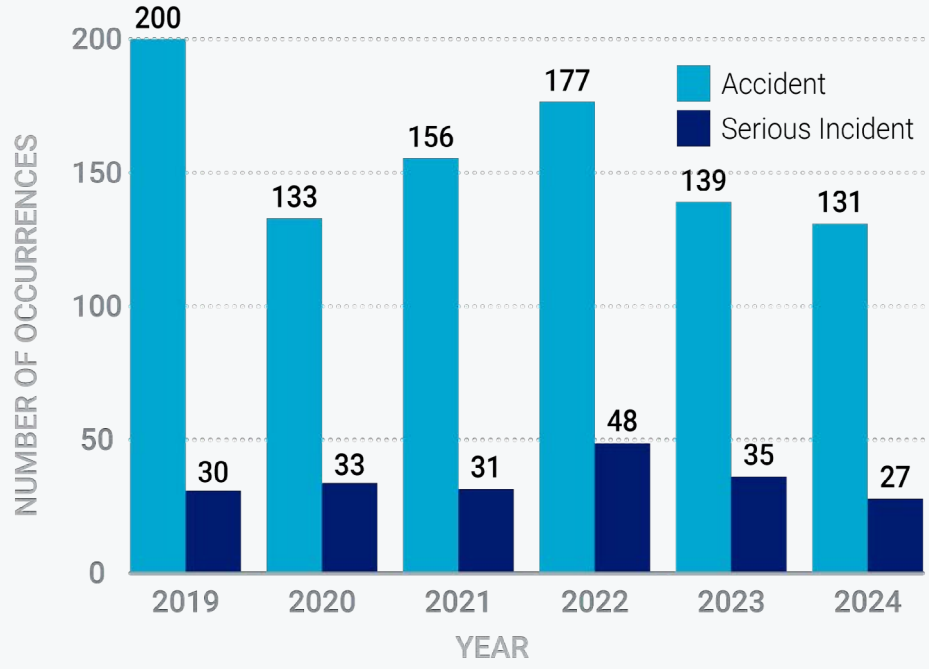
> GA aeroplanes (including ex-military).
> Non-complex rotorcraft (including ex-military).
> Air Displays.
> Parachuting.
> Sailplanes.
> Microlights.
> Balloons.
> Non-complex Flight Training.

6.6.1. Accidents and Serious Incidents

Accidents and Serious incidents have been declining over recent years. However, due to the amount of flying within the GA sector also falling this has resulted in the accidents/ serious incident rate stabilising.

The UK GA sector covers around 17,000 aircraft (mainly with a maximum take-off mass below 5,700 kg), including specialist activities such as pilot training, balloon operations, gliding, ex-military aircraft operations, parachuting and air displays. Overall, while the risk associated with GA is greater than commercial aviation, the probability of being involved in an accident remains considerably lower than most other modes of transportation.

GA Accidents and Serious Incidents 2019-2024



6.6.2 GA KRAs and Areas of Focus

KRA	Focus areas
AC	> Inadequate spatial awareness. > Airspace infringements. > Class G airspace traffic conditions: considerations include traffic density, complexity and the mixture of aircraft types and capabilities. > Limitations of VFR separation using 'see and avoid' principle. > Proliferation of UAS/drones. > Inadequate navigation planning. > Inadequate weather avoidance planning.
AE	> Carbon monoxide poisoning. > Carriage of Lithium batteries and products using them in aircraft cabins.
GS	> Ground collisions between aircraft and Ground Support Equipment and other vehicles. > Inconsistent aerodrome driving standards. > Inconsistent or absent control of vehicles/pedestrians. > Lack of assurance/safety oversight and volume of incidents.
LOC	> Inappropriate flight control inputs in response to adverse environmental conditions, including turbulence. > Inappropriate flight control inputs in response to event of a powerplant or System Component Failure — Non-Powerplant. > Inappropriate aircraft speed and/or attitude control. > Inappropriate flight control inputs in response to sudden awareness of an abnormal aircraft state, e.g. bank angle, angle of attack or stall ('startle effect').
T&OC	> Inaccurate/out-of-date/incomplete navigation tools, including terrain and obstacle mapping > Garmin's Emergency Autoland system.

Additional areas of focus in the GA domain include:

> Human factors, including pilot performance related to decision making, handling, recency, competence in emergency/unusual situation handling, medical standards, physical and mental health.
> Public flying displays.
> Novel technology, including operation of electric and hydrogen powered aircraft and rotorcraft.

6.7 Specialised Operations (SPO) Aeroplanes and Rotorcraft

This section considers the KRAs that are relevant to all UK registered aircraft that engage in specialised operations in UK or foreign airspace. (e.g. advertising, aerobatics, agriculture (spraying), calibration, construction, observation/surveillance, patrol, photography, surveying.

These KRAs additionally consider operations of foreign registered aircraft engaged in SPO operations in UK airspace.

6.7.1 SPO KRAs and Areas of Focus

KRA	Focus areas
AC	> Inadequate spatial awareness.
	> Limitations of VFR separation using 'see and avoid' principle.
	> Proliferation of UAS/drones in operating environment.
LOC	> Inappropriate flight control inputs in response to event of a powerplant System Component Failure — Non-Powerplant.
	> Inappropriate flight control inputs in response to adverse environmental conditions.
T&OC	> Inadequate mission planning.
	> Inadequate obstacle clearance when operating at low-level in vicinity of obstacles.
	> Inadequate spatial awareness.

6.8 Unmanned Aircraft Systems (UAS)

This section considers all UAS operations in the UK, whether engaged in:

> Low complexity, low risk, operations, i.e. the Open category.

or

> Higher complexity, higher risk, operations, i.e. the Specific category.

Additional areas of focus in the UAS domain include:

> Remote Pilot Competency, ensuring remote pilots have the appropriate level of competence for their operations, in particular with Beyond Visual Line of Sight (BVLOS) requirements.

> Flightworthiness of UAS platforms, assessing and validating the platforms design, build and testing of the UAS, helping to ensure that it is safe to fly in the proposed operation. Introducing the concept of 'SAIL Mark' certification which will involve the validation of Original Equipment Manufacturer (OEM) evidence such that a 'SAIL Mark' can be delivered against a particular make and model of UAS, aligned to the SAIL levels within Specific Operations Risk Assessment (SORA) in which it is safe to operate.

> Remote Identification, enabling an in-flight drone to provide identification and location information that can be received by other parties.

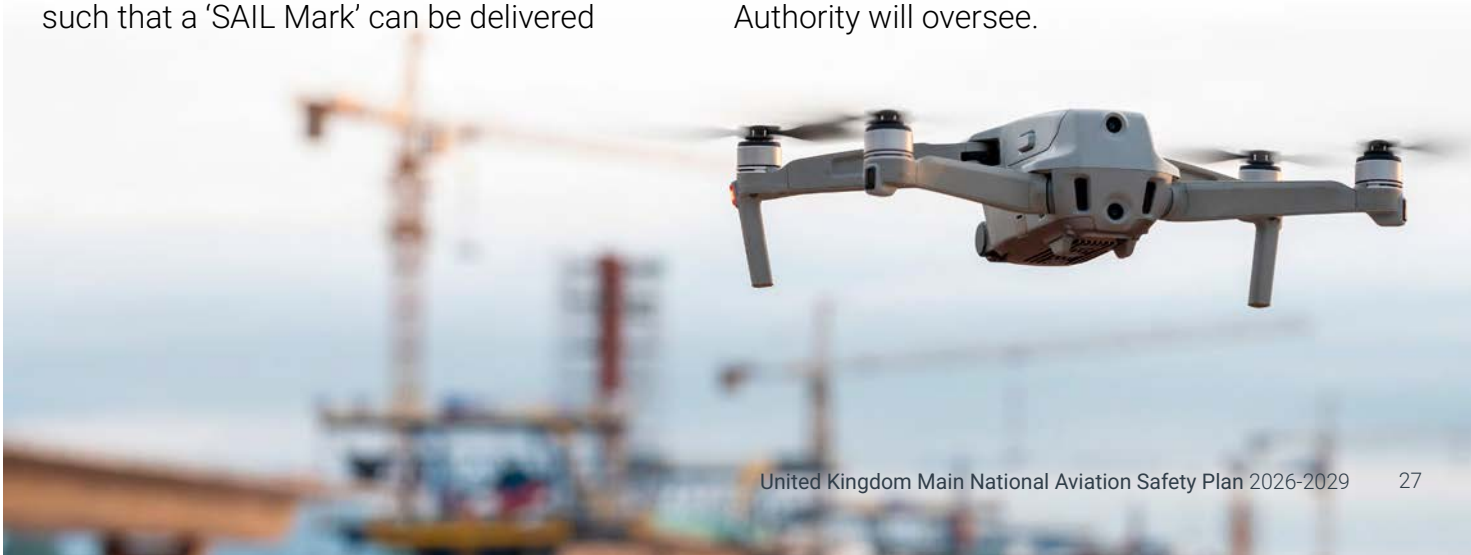
> Introduction of Class Markings and standards, for Open Category UAS, to provide basic technical assurance of these products.

> Drone Swarms (drone lightshow displays) ensuring these large scale drone performances are executed safely.

> The safe integration of UAS operations with other airspace users in all airspace, working across departments and categories to enable this safely and securely at scale.

> Development of standards for use with flightworthiness of platforms, for use in SAIL Marks and with UK Class Marking categories that the Market Surveillance Authority will oversee.

> remote Drone surveying construction site



6.8.1 UAS KRAs and Areas of Focus

KRA	Focus areas	
AC	Safe integration of UAS into airspace systems. Implement SORA: 1. UAS remote pilot/operator competency.	2. Flightworthiness standards.
LOC	- Pilot/operator competency. - Flightworthiness standards.	- Non-military state UAS activities. - Operations over public.
TOC	- Obstacle and terrain avoidance during BVLOS operations. - Flight worthiness standards.	- Pilot/operator competency.

6.8.2 Accidents and Serious Incidents

The number of registered drone users continues to grow. The drone and model aircraft code provides education and awareness for flying drones, model aeroplanes and other unmanned aircraft systems in the Open Category. This includes advice and guidance for hobbyists, commercial operators and Under 13's and their parents/guardians [9]. There are approximately 745,275 active registered drone flyers and operators (32.6% increase year on year) [10] which consists of:

> Approximately 470,321 active Flyer IDs

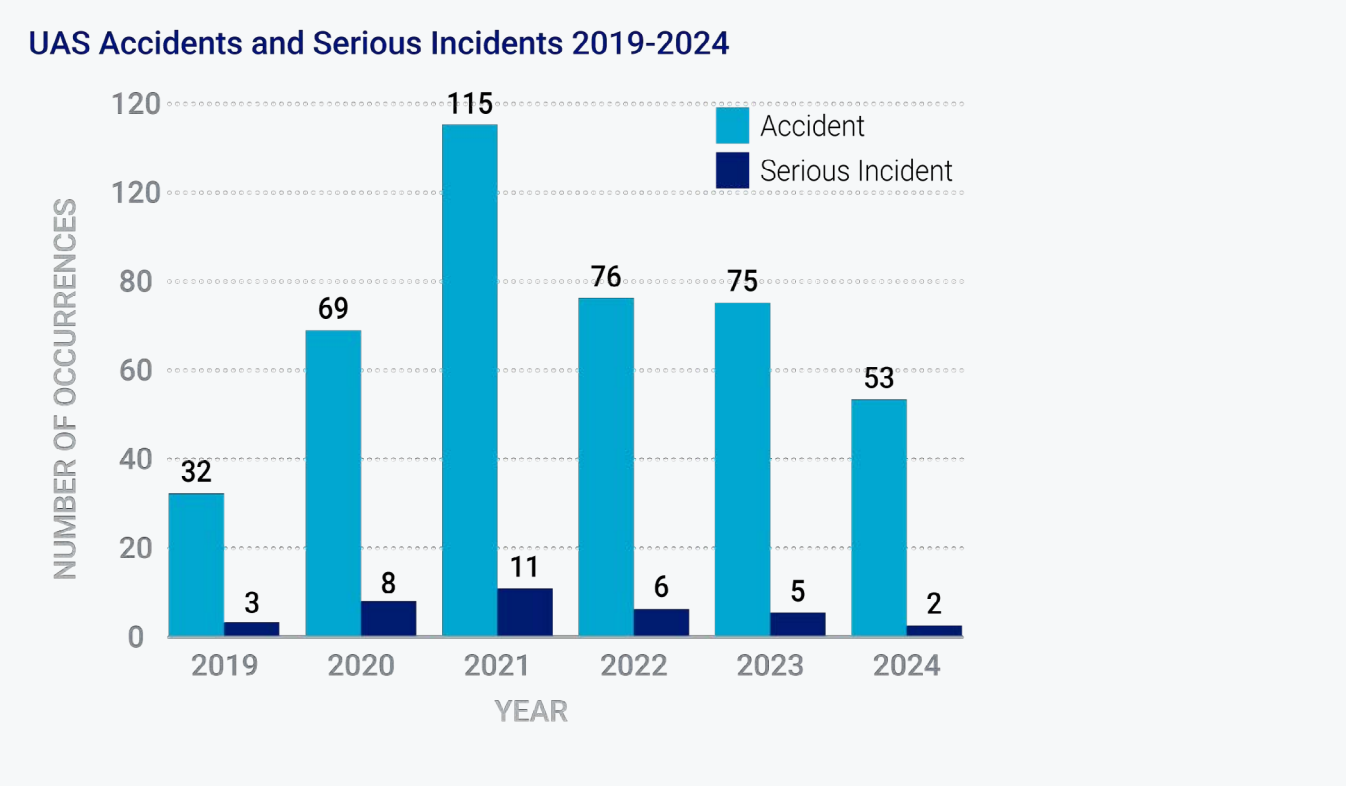
> Approximately 274,954 active Operator IDs

There are 34,973 remote pilots with more advanced Remote Pilot Competency Qualifications In the Specific Category, there are over 2,500 active Specific Category Operational Authorisations approved by the CAA.

There were 55 accidents and serious incidents involving UAS during 2024, which is a 31% decrease compared to 2023. In 2024, 56% (31) of accidents and serious incidents were contributed to by loss of control in flight, making it the most commonly reported event in connection to accidents. System or component failure was the second most frequently reported accident in 2024.

[9] Drone and Model Aircraft Code (UK CAA website: https://register-drones.caa.co.uk/drone-code)
[10] CAA Drone & Model Aircraft Registration and Education Scheme (DMARES) database as on 28th of February 2025.

The graph below provides a visual representation of accidents and serious incidents related to UAS in the UK in the years between 2019 and 2024.



6.9 Space

Space domain activities are not yet fully included within the KRA analysis programme, given the relative lack of operational launch activity to date and the very limited links or dependencies to aviation risks and KRAs. In addition, orbital risk only has a part-impact on aviation systems (re-entry to atmosphere). Much work is underway internationally on this element to align or integrate re-entry risks to aviation safety systems such as airspace management.

6.10 Safety Performance Indicators

A new suite of SPIs for each KRAs are being derived from the analysis of key initiating events and incidents, which will be used to inform state priorities for ongoing and future safety improvement and SEIs.

7. United Kingdom Main Organisational Challenges and Safety Enhancement Initiatives

Organisational Challenges and Activity

1	Airspace Modernisation	Timeline
1a	An industry and CAA focussed organisational challenge being addressed by SEIs including the airspace modernisation strategy and associated workstreams.	2026 to 2029
1b	Implementation of a revised approach to and associated policies and processes for airspace change; the objective being that we enable streamlining and simplification of the mechanism by which revised airspace can be implemented within the UK to enable the benefit of increased airspace capacity and efficiency in a safe and timely manner.	
1c	Enabling the utilisation of innovative technologies and procedures by airspace designers, service providers and users such that the UK airspace is both modernised and maintains inter-operability with the global airspace system.	
2	**Policy and Rulemaking**	**Timeline**
2a	Enhancements to the UK Main policy and rulemaking process whilst continuing to ensure consistent implementation of ICAO Standards & Recommended Practices at the national level.	2026 to 2027 Note, MSA and regulatory reform will be ongoing and enduring implementation work.
2b	Roll out of the ground handling regulatory framework - an industry and CAA focussed challenge being addressed by a CAA Ground Handling project control board, with associated stakeholder engagement activities already in train.	
2c	Implementing and embedding the internal governance framework and stakeholder engagement activities required to undertake a new regulatory remit as a Market Surveillance Authority (MSA); to enable the implementation of product standards for UAS that are intended to be used in the Open Category from 2026.	

Organisational Challenges and Activity		
2d	Development of, in collaboration with the DfT, a more agile legislative framework and continued improvement such that the regulatory framework can be evidenced to be goal and outcomes based, and in accordance with the UK Better Regulation Principles.	
3	**Training and Competency Management**	
3a	The establishment of a robust, centrally coordinated, approach to colleague training and competency, with associated governance mechanisms - a CAA specific Organisational Challenge.	**Timeline** 2026 to 2027
4	**Growth and Innovation**	
4a	Safely enabling growth and innovation whilst ensuring a flexible, transparent, proportionate, efficient and non-prescriptive approach in accordance with the UK Better Regulation Principles - an industry and CAA focussed organisational challenge being addressed by the Future of Flight Programme, Future Safety and Innovation strategy, technical strategy, Hydrogen challenge and Spaceflight Improvement programme.	**Timeline** Ongoing enduring work in accordance with UK Government priorities.
5	**Continued improvement of the safety risk management framework**	
5a	The revision of internal governance mechanisms to coordinate industry, national and international safety forum activities such that the UK Main CAA can demonstrate continuous improvement and evidence the safety benefit of outreach activities including safety promotion, research and publications.	**Timeline** 2026 to 2028.
5b	Improving our oversight model to ensure that it remains aligned with ICAO guidelines and promotes integrated risk management and coordinated surveillance, as described in CAP3184 (Scheme of Charges Consultation).	
6	**Key Risk Area Methodology**	
6a	Stakeholder engagement and promulgation of the KRA methodology such that industry Safety Performance Indicators can be collaboratively developed and emerging safety risks proactively identified. To include linkages, where appropriate, to the CAA's internal data strategy.	**Timeline** 2026 to 2028.

SEIs related to Operational KRAs listed in Section 6 (all domains) are captured as part of the above activities with the exception of Organisational Challenge 3 'Training and Competency Management'.

8. Additional UK Main Safety Activities / Statutory Obligation

8.1 Air Accidents Investigations Branch

To ensure compliance with ICAO Annex 13, Assimilated Regulation (EU) No 996/2010, and the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2018, the CAA works in close collaboration with the AAIB when aviation accidents or serious incidents occur.

The CAA supports AAIB investigations through structured and clearly defined principles, as outlined in an agreement on cooperation between the CAA and AAIB. This support includes providing safety data, regulatory clarification, and providing technical advisors. The AAIB will consult, as required by regulations, with the CAA on AAIB reports prior to publication. Once reports are published, the CAA takes action on any safety recommendations addressed to it. The AAIB monitor the responses to safety recommendations they have issued and those received by other States directed to UK entities.

For context, in 2024:

> 762 accident and serious incident notifications were made to the AAIB.

> 77 investigations were conducted (20 field investigations and 57 correspondence investigations).

> These investigations resulted in 20 safety recommendations, 11 of which were directed to the CAA.

The CAA is responsible for addressing these safety recommendations as part of our commitment to continuous improvement in aviation safety, protection for the public and supporting a safer aviation industry.

8.2 Public Sector Equality Duty

In line with the Public Sector Equality Duty (PSED), we are required to effect positive change in a wide range of areas. We work with airports on ranking accessibility for disabled passengers, we provide guidance for Hajj travellers about unlawful travel agents, and we are leading aviation regulatory changes to enable pilots with certain medical conditions to keep flying.

While undertaking our role as the civil aviation regulator for the UK, PSED requires the CAA to have due regard to:

> Eliminating unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act.

> Advance equality of opportunity between people who share a protected characteristic and those who do not.

> Foster good relations between people who share a protected characteristic and those who do not.

We expect organisations that we regulate to consider how they contribute to this and to be proactive in achieving these objectives.

Having due regard to the need to advance equality of opportunity involves considering the need to:

> Remove or minimise disadvantages suffered by people due to their protected characteristics.

> Meet the needs of people with protected characteristics; and

> Encourage people with protected characteristics to participate in public life or in other activities where their participation is low.

Fostering good relations involves tackling prejudice and promoting understanding between people who share a protected characteristic and others.

The PSED covers nine protected characteristics:

- Age,
- Disability,
- Gender reassignment,
- Marriage and civil partnership,
- Pregnancy and maternity,
- Race,
- Religion or belief,
- Sex,
- Sexual orientation.

Further information can be found via this link: https://www.equalityhumanrights.com/equality/equality-act-2010

8.3 Whistleblowing Considerations

The CAA is a "prescribed person" under the Public Interest Disclosure Act (Prescribed Persons Order 2014) for the purpose of receiving disclosures regarding compliance with the requirements of civil aviation legislation.
We are directly responsible for investigating any information of this nature that is received.

Whistleblowing reports can provide critical safety, security, and compliance insights that may not be identified through routine oversight. The reports help protect consumers and the public and help to support a safer aviation industry. All reports are triaged, and those with sufficient public interest and a relevance to safety or security are investigated under our statutory duties.

The below table includes the amount of whistleblowing reports received that were investigated and those that resulted in further action taken by the CAA.

	Apr 2023 – Mar 2024	Apr 2024 – Mar 2025	Apr 2025 – Feb 2026
Investigations coordinated following a whistleblowing report	252	275	224
Investigations which involved further action by the UK CAA	235	265	Investigations ongoing, numbers to be confirmed at the next update.

8.4 Human Factors Considerations

Human factors play a critical role in enhancing aviation safety and is a cornerstone of the UK NASP. Addressing performance shaping factors such as, but not limited to, fatigue, aviation mental health, wellbeing, and human factor competency is essential to support people in the aerospace system. Our plan prioritises human factors training (both internal and external) and competency programs; working with stakeholders to better understand how new technologies such as AI and increasing levels of automation impact human and system performance and to embed systems thinking into the work we do.

Additionally, the CAA human factors strategy is tailored to enable and support a just and safe culture that encourages open reporting of errors - without fear of punitive action - that will enhance safety data collection and proactive risk management and learning. Further, it focuses on integrating human factors principles into system design, operational procedures and maintenance protocols, as well as developing collaborative relationships with those organisations growing expertise in future systems – to optimise human performance with the increasing complexity of aviation technologies, supporting a safer and more efficient UK aviation sector.

The Human Factor Strategy promotes a just culture to encourage transparent error reporting, enabling proactive risk identification and mitigation. By integrating human factors principles into system design, operational procedures, and maintenance practices, the plan aims to align human capabilities with evolving aviation technologies, fostering a safer, more resilient UK aviation system.

Further information regarding the Human Factors Strategy and Action plan is available here: here: https://www.caa.co.uk/publication/download/19275

What's next?

The NASP will be promoted internally and externally via a communications campaign. Internal governance and reporting frameworks will assure delivery of the SEIs articulated within it, and updates will be given at the SSB. In addition, the UK CAA Annual Aviation Safety Review will contain regular updates and can be found here: https://www.caa.co.uk/safety-initiatives/aviation-safety-review/aviation-safety-review/

Contact

For any NASP related question, email: safety.strategy@caa.co.uk

9 Glossary

AAIB	Air Accidents Investigation Branch
AI	Artificial Intelligence
AOC	Air Operator Certificate
ATOL	Air Travel Organisers Licensing
BVLOS	Beyond Visual Line of Sight
CAT	Commercial Air Transport
CD	Crown Dependency
DfT	Department for Transport
EASA	European Aviation Safety Agency
EPAS	European Plan for Aviation Safety
GASP	Global Aviation Safety Plan
HEMS	Helicopter Emergency Medical Services
HRC	High Risk Category
ICAO	International Civil Aviation Organization
KRA	Key Risk Area
NASP	National Aviation Safety Plan
NCC	Non-commercial Complex Motor-Powered Aircraft
OT	Overseas Territory
PACT	Passenger Advice & Complaints Team
RASP	Regional Aviation Safety Plan
Safety Oversight	All forms of surveillance and monitoring activities
SEI	Safety Enhancement Initiatives
SORA	Specific Operations Risk Assessment
SSB	State Safety Board
SSP	State Safety Programme
UAS	Unmanned Aircraft Systems
VFR	Visual Flight Rules
VTOL	Vertical Take-Off and Landing

UK Civil Aviation Authority

Produced by the UK CAA in collaboration with:

AAIB Air Accidents Investigation Branch

AIR SAFETY SUPPORT INTERNATIONAL

Military Aviation Authority MAA

Maritime & Coastguard Agency

Department for Transport

CAP3237

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