



UK Flight Safety Committee

# UKFSC News #28

10 June 2025

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### SKYBRARY

## Ground Damage

Most ground occurrences happen when the aircraft is parked, e.g. during maintenance, loading and unloading. Relatively high number of events involve air-bridges. The parts that usually sustain damage in such cases are the fuselage (especially the doors) and the engines.



The next most risky phase is Aircraft Towing. Incidents during this phase often result in damage to the landing gear, wings or empennage.

Taxiing aircraft participate in ground events y less often. A frequent outcome of such incidents is wingtip damage.

### Learn More



## New articles

[Abbreviated Precision Approach Path Indicator \(APAPI\)](#)

[Notification to Captain \(NOTOC\)](#)

[Runway Overrun on Landing](#)



Photo <https://safetyfirst.airbus.com/lets-use-xls/>

### AIRBUS

## Let's Use xLS

### xLS CONCEPT

Every day, around the world, many final approaches flown by commercial jet aircraft are Instrument Landing System (ILS) approaches. Flight crews are therefore very familiar with flying ILS approaches. In comparison, Non-Precision Approaches (NPA) represent a smaller proportion of the approaches performed daily. However, 50 % of recorded Controlled Flight Into Terrain (CFIT) during approach and Runway Undershoot accidents occurred while flying an NPA.

To address these factors, Airbus developed the xLS concept for A320 family, A330, A350, and A380 aircraft to ease the flight crew's task of flying all straight approaches.

This is why xLS provides a common and consistent Human-Machine Interface (HMI) and 3D guidance based on the well-known ILS function for all straight approaches. Aircraft handling with the various xLS functions is identical, allowing operational procedures to be almost identical for all straight approaches.

The xLS concept applies to both 2D and 3D approaches. xLS gathers 4 functions to fly all straight approaches:

Instrument Landing System (ILS) for ILS approaches,

GBAS Landing System (GLS) for GLS approaches ,

SBAS Landing System (SLS) for RNP approaches with LPV minima, and

FMS Landing System (FLS) for 2D (VOR, NDB, LOC, LOC B/C, RNP with LNAV minima) and 3D (RNP with LNAV/VNAV minima) approaches.

[Safety First Article](#)

### ROYAL AERONAUTICAL SOCIETY

## Navigating Artificial Intelligence in Aviation – Regulatory, Liability and Insurance Considerations

The RAeS Air Law Specialist Group Seminar, Tuesday 1 July 2025, 13:45 - 17:30 at the Offices of DAC Beachcroft 25 Walbrook, London EC4N 8AF, UK.

[Register](#)

### SAFETY CRITICAL SYSTEMS CLUB

## Seminar: How Safety Culture has to Change With AI

How an organisation's safety culture has to change when systems including AI are introduced.

Hilton, London Euston. Thursday 19th June 2025.

[Information & Registration](#)

### ROYAL AERONAUTICAL SOCIETY

## A Beginner's Guide to Sustainable Aviation Fuel (SAF)

If you've been pondering these and other SAF questions and would like to find out more, join this free webinar online on Thursday 26 June from 12.00 – 12.45 BST.

[Register](#)



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Image By Leo Stock.adobe.com



PILOTS WHO ASK WHY

The Hidden Impact of Pilot Mental Health on Flight Safety

Aviation as a profession demands a lot from all of us. Being a pilot often means crazy financial pressures to get qualified, long hours, working outside your normal circadian rhythm and being separated from loved ones. All while being one lingering health problem away from losing your entire career.

Doesn't sound like a recipe for great pilot mental health, does it?

In addition to this, mental health amongst pilots is still overlooked way too much, way too often, and has been consistently downplayed by both pilots themselves and employers.

[Read More](#)

SWISS TRANSPORTATION SAFETY INVESTIGATION BOARD (STSB)

A330 Fume Event

stawka - stock.adobe.com



In the serious incident, an unusual smell developed in the aircraft cabin of an Airbus A330-343 during the cruise flight, the cause of which could not be determined. This prompted the cockpit crew to put on their oxygen masks and several cabin crew members to use Protective Breathing Equipment (PBE). Several cabin crew members reported considerable difficulties in using the PBE, both in unpacking, unfolding, putting on and activating the devices and in their subsequent use. In addition, several PBE units exhibited technical defects and were therefore not or only partially functional. This represents a significant safety risk.

The following factors contributed to the serious incident:

The recurring maintenance measures were inadequate, which is why the existing defects in the PBE remained undetected.

The crew members were trained exclusively with dummy PBE provided for training purposes, which differs considerably from the real PBE used in an emergency. As a result, the crew members were unaware of various difficulties when using the PBE.

The technical design of the PBE was such that trained cabin crew members were unable to activate the PBE within a reasonable amount of time. The time required was several times longer than that specified in the certification criteria. In addition, communication was severely impaired when the PBE was in use.

Safety recommendations and safety advice

This final report provides three safety recommendations and two points of safety advice related to the PBE design, maintenance, training and time limit of the PBE.

The report references a Swiss A220 fume event with the same PBE that resulted in a cabin crew fatality.

[STSB Report](#)



Photo By rjankovsky stock.adobe.com

CAA SAFETY NOTICE 2025/008

Procedures for Addressing Odour Events

Following industry engagement, the purpose of this Safety Notice is to encourage Operators to have suitable procedures in place to manage smell/ odour events that are not smoke/ fumes events. The procedures should ensure that measures remain in place to manage smoke/fumes events and require targeted and timely action to protect aircraft occupants.

Using their Safety Management System, Operators should establish procedures to ensure they adequately address benign odour events in the cabin and/or flight deck. Training and guidance material should include recognition, differentiation and appropriate actions/check-lists.

[CAA Safety Notice 2025/008](#)



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Image from the official report

ACCIDENT INVESTIGATION COMMISSION OF PAPUA NEW GUINEA

DHC-6-300 Twin Otter Runway Excursion During Take-off Kairik Airport, Enga

The aircraft taxied to the RWY 05 threshold and made a tight left turn to align with the centreline. The crew stated that following completion of the required checks, they commenced the take-off roll. During the initial take-off roll, the aircraft began veering right from the centreline, prompting the crew to apply corrective inputs, but the correction was excessive, causing the aircraft to cross the centreline and veer left. Despite the application of asymmetric power and rudder inputs in an attempt to regain directional control, the aircraft continued its leftward drift onto the wet grass area adjacent to the runway surface. The crew then applied full reverse and brakes, but the aircraft continued to swerve off the runway and entered a drainage ditch. The aircraft’s left wing struck the edge of the drainage ditch, causing the aircraft to make a sharp left turn, after which the nose impacted the embankment.

The investigation determined that the accident resulted from a combination of operational, human, and environmental factors. During a tight left turn onto RWY 05, excessive tiller inputs led to sequential over-corrections, misaligning the nose-wheel to the right of the centreline. The crew omitted the manufacturer-required 3 metre forward roll check to verify nose-wheel alignment with the centreline, an item not included in the operator’s SOPs, preventing detection of this misalignment. When the take-off roll began, the aircraft veered right. In response, the crew applied left rudder and

asymmetric power; however, the inputs were excessive, causing a sharp left veer across the centreline, resulting in a loss of directional control. Despite attempts to regain control, the aircraft continued onto the grass and impacted the embankment. The wet and slippery grass surface adjacent to the runway significantly reduced tyre traction and rendered recovery efforts ineffective.

The investigation also identified other safety deficiencies or concerns that should be addressed to prevent future occurrences. These included discrepancies between operator and manufacturer procedures, incomplete checklist execution, a lack of clearly defined CRM guidelines in the company manuals, and inadequate CRM training. Additional findings included missing operational feasibility assessments for Kairik operations.

The investigation issued five safety recommendations to Kobio Aviation Limited to address identified safety deficiencies. These include updating the operator’s SOP to align with manufacturer-prescribed take-off procedures, improving flight crew training and CRM currency, implementing a phased training approach for command endorsements, and conducting documented operational feasibility assessments for approved new operations.

AIC Final Report

CAA SKYWISE

Reminder: Survey For Manufacturers And Suppliers Of Aeronautical Ground Infrastructure Applications

The UK CAA is seeking industry input to help shape the future of ground-based airspace surveillance and communication infrastructure to support beyond visual line of sight (BVLOS) operations under the Future of Flight action plan and in accord with the CAA’s Airspace Modernisation Strategy.

They have published a survey that will help them formulate future policy and regulation in this area.

SW2025/I26



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CONSULTATION

Darlington/Teesside Temporary Reserved Area for Amazon Prime Air BVLOS Drone Deliveries

Following acceptance into the Civil Aviation Authority’s (CAA) Beyond Visual Line of Sight Sandbox (BVLOS) initiative, Amazon Prime Air have initiated an Airspace Change Proposal (ACP) that will implement a Temporary Reserved Area (TRA) under ACP-2024-056, ahead of our planned launch in Darlington and surrounding areas later this year.

They are running stakeholder engagement for 6 weeks between 3rd June 2025 and 14th July 2025

There are two main ways of providing feedback on the TRA and its implementation:

- Online Feedback Form by completing the SmartSheets feedback form accessed by [this link](#), or,
- Email respond directly to the email address at [primeair-acp-uk@amazon.co.uk](mailto:primeair-acp-uk@amazon.co.uk)



Consultation Pack

UK AIRPROX BOARD

Circuit patterns – One Of The Most Likely Places To Have An Airprox...



“This might — or might not — surprise you, but every month Airprox Board members always discuss at least one Airprox in the visual circuit and April was no different. Which is why I’ve chosen Airprox 2024275 between a Cessna 152 and a Robin DR400 at Stapleford to, hopefully, illustrate a few points that we can all think about (nearly all of us fly, or will have flown, in the visual circuit, after all...). “

Read more: [April Edition of AirProx Insight](#)



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Photo: Copyright North Bend Fire Department

OPS GROUP

Summer Tips for Flight Planning in Europe

Summer in Europe often means one thing: traffic – and lots of it. Eurocontrol keeps the system moving, but it can feel complex, especially when delays mount and regulations interfere with your plans. The good news? A few smart moves can make a big difference. This guide breaks down what matters most: the tools, timing, and habits that help your flight operate on time.

[Read More](#)



IRISH AVIATION AUTHORITY

Not On My Flight Campaign

With support from Ryanair - Europe's Favourite Airline, Aer Lingus, daa An Garda Síochána, Fórsa trade union IALPA (Irish Airline Pilots' Association), and many other signatories to the declaration, this united front is tackling the rise in disruptive passenger behaviour through training, enforcement, and public awareness. [Joint Declaration on Unruly Passenger Behaviour in Airports and on Aircraft](#)

CAA SKYWISE

REMINDER: Carbon Monoxide Safety in General Aviation

From 1 January 2025, operators of specified piston engine aircraft are required to have a functioning active carbon monoxide detector on board when operating with passengers who do not hold a recognised pilot qualification – see SD-2024/001 for further details.

[CAA Carbon Monoxide Detector Leaflet SW2025/I27](#)

CAA SKYWISE

Go-ahead for the UK Airspace Design Service

The Department for Transport (DfT) and the UK Civil Aviation Authority (CAA) have announced the [outcome of their consultation on a new UK Airspace Design Service](#).

UKADS will be a single guiding mind to deliver the holistic, modernised design for UK airspace envisaged by the [Airspace Modernisation Strategy](#). The Chancellor [announced](#) go-ahead for the UKADS and a new Support Fund on 17 March 2025.

NATS (En Route) plc (NERL) will be tasked with the UKADS, initially focusing on the complex airspace around London.

We are setting up a UK Airspace Design Support Fund to help cover relevant costs of airspace modernisation outside London.

Read the consultation response document, [CAP 3106](#).

[SW2025/I22](#)

CAA SKYWISE

FAA Concern With Bell 206 In-Flight Abnormal Vertical Vibration

The US Federal Aviation Administration (FAA) is investigating reports of severe vertical vibrations on Bell 206L helicopters. These events are inconsistent in their repeatability. In addition, post-flight inspections have not identified any failure that caused the vibration event. The FAA is interested in receiving any information on such occurrences.

[FAA Airworthiness Concern Sheet SW2025/I34](#)



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Photo By donyanedomam stock.adobe.com

NATIONAL TRANSPORTATION SAFETY BOARD

B737-800 Engine Fire & Evacuation

On March 13, 2025, American Airlines Flight 1006, a Boeing 737-823, carrying 172 passengers and 6 crew members, encountered engine vibrations and an over-temperature warning in the No. 2 (right) engine during takeoff. The flight crew continued the takeoff and diverted to Denver.

Takeoff and Initial Anomaly: Just before reaching VI speed, the flight crew observed an exhaust gas temperature (EGT) over-limit on the No. 2 engine. After retracting the gear and flaps, they reduced power slightly, which brought the EGT back within limits.

In-Flight Vibration and Diversion Decision: During climbout, the captain noticed high vibration levels in the right engine. The crew initiated the High Engine Vibration checklist and contacted dispatch. They agreed to divert to DEN, climbing to a maximum altitude of 16,000 feet.

The captain informed the passengers and the flight attendants that the flight was diverting to DEN. Approach and landing were normal, and it took about five minutes to taxi to the gate.

Soon after arriving at the gate, flight attendants heard passengers yelling “fire” and “smoke” and saw smoke start to fill the cabin. One of the flight attendants tried calling the flight crew but did not get an answer. Another flight attendant knocked on the cockpit door to alert the flight crew of the fire outside the airplane and smoke in the cabin. In the meantime, passengers got up and were coming to the flight attendants wanting to get off the airplane.

The flight attendants conducted their assessments and initiated an evacuation. Passengers used the L1 door, both left overwing window exits, and the R2 door for egress. The passengers who used the L1 door deplaned using the jetway

bridge. After the evacuation, the L2 door was observed cracked open, with maintenance subsequently discovering the escape slide jammed in the door, preventing its operation. The R2 evacuation slide deployed automatically when the R2 door was opened.

The passengers who used the left overwing window exits were evacuated off the wing by a combination of ground vehicles, ladders that were available in the gate area, and a belt loader.

Post event examination found the flaps had remained at zero.

Twelve passengers sustained minor injuries. The fire was extinguished within a minute by ramp personnel.

Post-incident inspection revealed significant heat and fire damage to the right engine nacelle, right wing, fuselage, and right main landing gear area.

Mechanical Faults: The right engine, a CFM56-7B turbofan, showed several mechanical issues:

- One fan blade platform was fractured.
- A fuel fitting on the variable stator vane (VSV) was improperly secured, with loose lockwire and incorrect installation direction.
- The VSV actuator rod end was incorrectly fastened, allowing fuel leakage.
- The VSV rod end muscle line had a fractured weld.
- The 6 o'clock seal drain line in the thrust reverser was blocked with sealant.

NTSB Preliminary Report



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Recent Accidents & Incidents from the Air Safety Network Wikibase

| Date                      | Type       | Event                                                                                                                                                                                      | Location        |
|---------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <a href="#">07-Jun-25</a> | AW119      | Attempting to take-off, a hard forced landing causing the tail boom to break upon hitting a car.                                                                                           | Guptkashi,      |
| <a href="#">09-Jun-25</a> | A319       | An emergency landing in Graz Airport, Austria, citing smoke in the cabin.                                                                                                                  | Graz            |
| <a href="#">08-Jun-25</a> | A319       | Severe turbulence injuring a Flight Attendant.                                                                                                                                             | Tupelo, MS      |
| <a href="#">08-Jun-25</a> | A320       | RTO, due to the failure of the left hand engine.                                                                                                                                           | Kolkata-Subhas  |
| <a href="#">02-Jun-25</a> | A320       | Struck a vulture between 3000 and 4000 feet as the aircraft was about 10 to 12 nm from destination.                                                                                        | Near Ranchi     |
| <a href="#">08-Jun-25</a> | ATR 72-600 | ATB, lost a panel mid-flight over the Irish Sea.                                                                                                                                           | Irish Sea       |
| <a href="#">07-Jun-25</a> | ATR 72-600 | ATB, suffered a no.2 engine fire indication after take-off                                                                                                                                 | Naxos Island    |
| <a href="#">05-Jun-25</a> | ATR 72-600 | ATB, when the pilots reportedly experienced smoke in the cockpit.                                                                                                                          | Leeds/Bradford  |
| <a href="#">02-Jun-25</a> | Bell 412   | Experienced a technical malfunction and made a forced landing                                                                                                                              | Near Hawadley   |
| <a href="#">04-Jun-25</a> | B737-500   | ATB, front landing gear was not retracted                                                                                                                                                  | Surgut,         |
| <a href="#">04-Jun-25</a> | B737-700   | Struck a bird damaging the leading-edge slat of the outboard right engine.                                                                                                                 | San Antonio     |
| <a href="#">09-Jun-25</a> | B737-800   | The aircraft lost pressurization. The aircraft descended to FL100 but still continued to Frankfurt.                                                                                        | Munich          |
| <a href="#">04-Jun-25</a> | B737-800   | En route from Berlin to Milan at FL360 when it encountered severe turbulence from a thunderstorm. Eight passengers and one crew member were injured, and the flight was diverted           | Germany         |
| <a href="#">08-Jun-25</a> | B747-400   | ATB, at the flight level FL260, the crew reported a bang and temperature increase in the cabin.                                                                                            | NW of Yaroslavl |
| <a href="#">06-Jun-25</a> | B777-200   | The aircraft encountered severe turbulence injuring two flight attendants.                                                                                                                 | Birmingham, AL  |
| <a href="#">03-Jun-25</a> | CRJ200     | Lost pressurization and had to descend to FL100. The crew declared an emergency and landed safely at the destination.                                                                      | Lawton, OK      |
| <a href="#">03-Jun-25</a> | C550       | Reported missing after take-off from Caracas, Last radar contact was over a mountainous area                                                                                               | E of Caracas    |
| <a href="#">08-Jun-25</a> | C525       | RWEXC, skidded into the grass after a main landing gear puncture during landing                                                                                                            | Zagreb          |
| <a href="#">08-Jun-25</a> | DHC6       | A skydiving plane with 20 passengers and crew on board crashed                                                                                                                             | Tullahoma       |
| <a href="#">03-Jun-25</a> | ERJ145     | ATB, due to suspected hydraulic issue.                                                                                                                                                     | Whiteville, NC  |
| <a href="#">02-Jun-25</a> | AW119      | Training Squadron, impacted the ground at NOLF Santa Rosa                                                                                                                                  | Santa Rosa, FL  |
| <a href="#">03-Jun-25</a> | PC12       | On the landing the aircraft ballooned due to over-control of the elevator resulting in a secondary balloon with the nose gear and prop striking the runway and then the main landing gear. | Goose Bay       |
| <a href="#">04-Jun-25</a> | R66        | A Robinson R66 Turbine crashed on the North Slope, conducting a wildlife survey.                                                                                                           | North Slope     |



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Safety Conference Calendar

| Year | Month   | Day(s)                              | Org          | Event                                                                | Location              | Notes   |
|------|---------|-------------------------------------|--------------|----------------------------------------------------------------------|-----------------------|---------|
| 2025 | Jun     | 5 <sup>th</sup> – 6 <sup>th</sup>   | FSF          | Safety Forum 2025 - People at the Centre                             | Eurocontrol, BRU      |         |
| 2025 | Jun     | 10th - 12th                         | EASA         | EASA-FAA International Aviation Safety Conference                    | Cologne               | On site |
| 2025 | Jun     | 17th                                | EASA         | Ground Handling Implementation Webinar                               | Online                |         |
| 2025 | Jun     | 24th                                | EURO-CONTROL | Understanding culture and conversation                               | Webinar 1430-1630 CET |         |
| 2025 | Jun     | 25th - 26th                         | EASA         | Part-IS Implementation Workshop                                      | Cologne               | Hybrid  |
| 2025 | Jun     | 24 <sup>th</sup>                    | UKFSC        | 471 <sup>st</sup> SIE                                                | Dublin                |         |
| 2025 | Jul     | 7th - 9th                           | UKFSC        | FSO Course                                                           | Gatwick               |         |
| 2025 | Aug     | 27 <sup>th</sup> – 28 <sup>th</sup> | EASA         | Artificial Intelligence in Aviation                                  | Cologne               | Hybrid  |
| 2025 | Sep     | 10 <sup>th</sup>                    | UKFSC        | 472 <sup>nd</sup> SIE                                                | TBC                   |         |
| 2025 | Sep     | 10th - 11th                         | AAPA         | Asia Pacific Aviation Safety Seminar 2025                            | Manila                |         |
| 2025 | Sep     | 15 <sup>th</sup> – 17 <sup>th</sup> | UKFSC        | FSO Course                                                           | Gatwick               |         |
| 2025 | Sep     | 17th - 18th                         | Acron        | Acron Aviation Customer Safety Seminar                               | MBW, Weybridge        |         |
| 2025 | Sep     | 23rd                                | EASA         | Ground Handling Implementation Webinar                               | Online                |         |
| 2025 | Sep/Oct | 29 <sup>th</sup> – 4th              | ISASI        | ISASI 2025 - Soaring to New Heights: A World of Innovation           | Denver, Colorado      |         |
| 2025 | Sep/Oct | 30th - 1st                          | EASA         | SAFE 360° Safety in Aviation Forum Europe                            | Cologne               |         |
| 2025 | Oct     | 6 <sup>th</sup> – 7 <sup>th</sup>   | SAE          | Defence Aviation Safety Conference                                   | London                |         |
| 2025 | Oct     | 14th                                | EURO-CONTROL | Advancing Safety Management through pro-active weak signal detection | Webinar 1400-1530 CET |         |
| 2025 | Oct     | 14 <sup>th</sup> -16 <sup>th</sup>  | IATA         | World Safety and Operations Conference                               | Xiamen, China         |         |
| 2025 | Nov     | 4 <sup>th</sup> – 6 <sup>th</sup>   | FSF          | 78th International Aviation Safety Summit                            | Lisbon, Portugal      |         |
| 2025 | Nov     | 10 <sup>th</sup> – 12 <sup>th</sup> | UKFSC        | FSO Course                                                           | Gatwick               |         |
| 2025 | Nov     | 11 <sup>th</sup> – 13 <sup>th</sup> | Bombardier   | 29 <sup>th</sup> Bombardier Safety Standdown                         | Wichita, Kansas       |         |
| 2025 | Nov     | 19th                                | RIN          | 4th Annual UK PNT Leadership Seminar                                 | London                |         |
| 2025 | Dec     | 2 <sup>nd</sup>                     | UKFSC        | 473 <sup>rd</sup> SIE                                                | TBC                   |         |
| 2025 | Dec     | 2nd                                 | EASA         | Ground Handling Implementation Webinar                               | Online                |         |

3<sup>rd</sup> June 2025

# Amazon Prime Air

## Darlington and Surrounding Areas

### TRA for BVLOS Drone Delivery Services

ACP-2024-056 Briefing Pack





## Reserving Space for Your Feedback

**We are excited to be bringing our drone delivery service to the UK**

Following our acceptance into the Civil Aviation Authority’s (CAA) Beyond Visual Line of Sight Sandbox (BVLOS) initiative, we have initiated an Airspace Change Proposal (ACP) that will implement a Temporary Reserved Area (TRA) under **ACP-2024-056**, ahead of our planned launch in Darlington and surrounding areas later this year.

During our preparatory work with the CAA and Teesside International Airport (TIA), **we identified you as a potentially impacted stakeholder** for this airspace proposal.

This slide pack will provide a detailed overview of the proposed airspace change and how it supports our initial operations.

We’ll explain how the TRA will work and how you can provide feedback on its design directly to us and any suggestions you may have that will help us mitigate or minimise any potential impact the proposed TRA may have.



# Reserving Space for Your Feedback

We are running stakeholder engagement for 6 weeks between **3<sup>rd</sup> June 2025 and 14<sup>th</sup> July 2025**

There are two main ways of providing feedback on the TRA and its implementation:

- **Online Feedback Form**  
by completing the SmartSheets feedback form accessed by [this link](#), or,
- **Email**  
respond directly to the email address at [primeair-acp-uk@amazon.co.uk](mailto:primeair-acp-uk@amazon.co.uk)

All feedback shared on the TRA design, and any potential impact is gratefully received and we will carefully consider all inputs in the final TRA design.



3

## What we'll cover

1. Who we are – An introduction to **Prime Air**
2. UK Regulatory **Sandbox** – Integrating Drones
3. The **Temporary Reserved Area**
4. MK30 Drone **Overview**
5. **Darlington Operations**
6. FAQs
7. Feedback
8. Additional Prime Air **background information**



## Who we are – Introduction to Prime Air

**Prime Air is the designer, builder and operator of Amazon's next generation delivery capability.**

Established in 2013 and headquartered in Seattle, USA, we have developed a new way for Amazon customers to receive packages in under 2 hours, **using drones**.

For Prime Air, safety is non-negotiable – we have embedded foundational aerospace safety principles into the the very fabric of our teams, tools, and technology.

We hold approvals from the Federal Aviation Administration (FAA) to run live commercial and test & development operations across several US states, and we are **expanding our operations internationally**.



5

## UK Regulatory Sandbox – Integrating Drones

To gain the same approvals here in the UK, we need to demonstrate both the safety of our operation and BVLOS capability to the Civil Aviation Authority (CAA).

To do this, we are taking part in the CAA's latest regulatory [Sandbox](#) (described in [CAP 2616](#)). This initiative provides two key benefits:

- *Allows organisations like ours to safely demonstrate our unique operation and key technology*
- *Creates a controlled environment in which the CAA can observe, assess, and gather real-world data that will help inform future drone regulatory policies*

One of those key policies is the 'BVLOS Airspace Policy Concept' described in [CAP 2533](#).

This places particular emphasis on the demonstration of [Detect-and-Avoid \(DAA\)](#) capabilities and other airspace structures (such as Temporary Reserved Areas), allowing the CAA to evaluate regulatory readiness ahead of formal adoption.



6

# The Temporary Reserved Area

### Key Details:

TRA Max height: 700ft above mean sea level (AMSL)

Hours of Operation: Monday – Friday, 09:00 – 17:00 Local (daytime only)

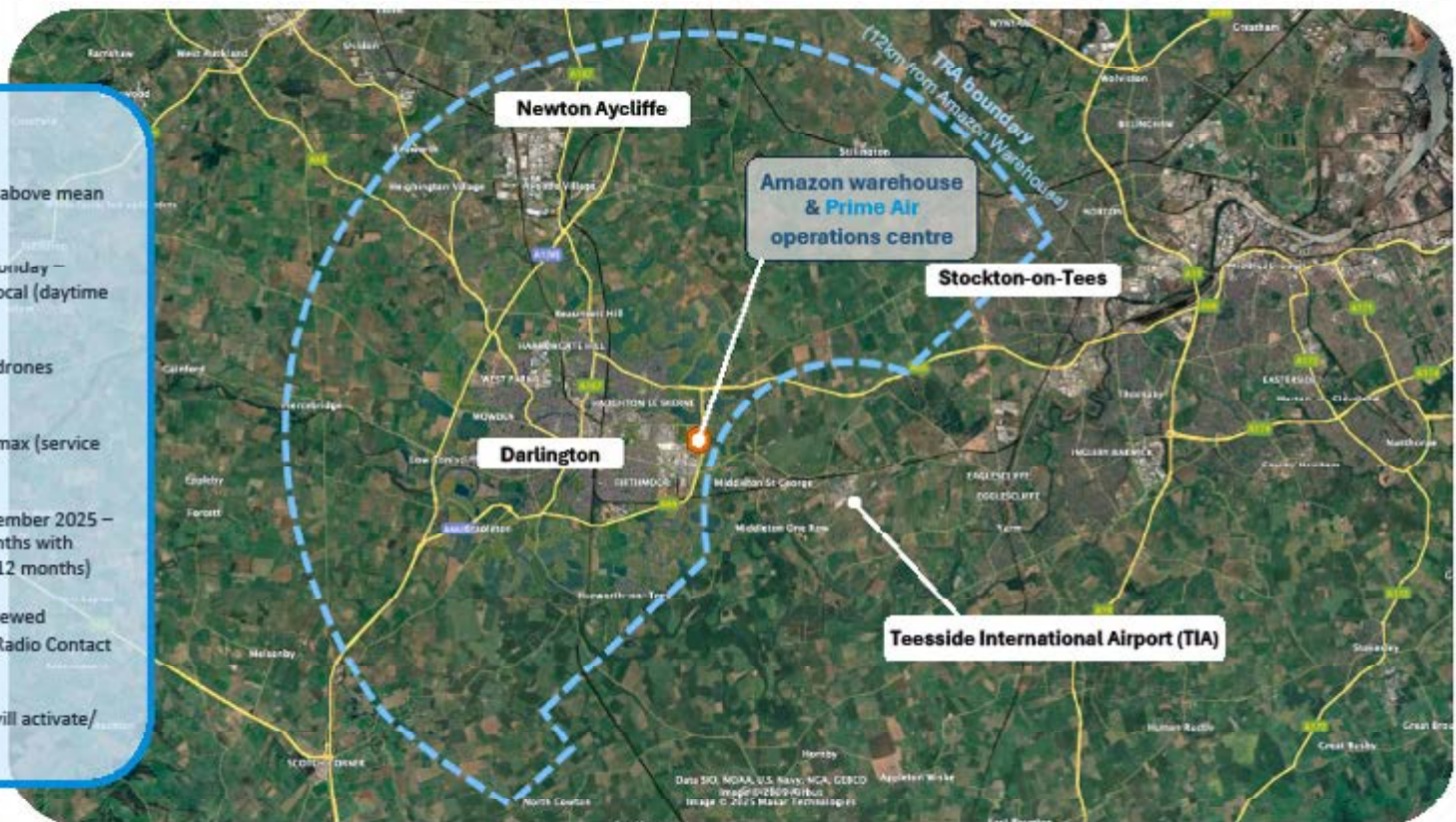
No. of drones: up to 4 drones operating in the area

Cadence: 21 flights/hr max (service demand dependent)

Activation Period: December 2025 – June 2026 (Initial 6 months with scope for extension to 12 months)

Entry Requirement: (crewed aircraft) ADS-B OUT & Radio Contact with TIA

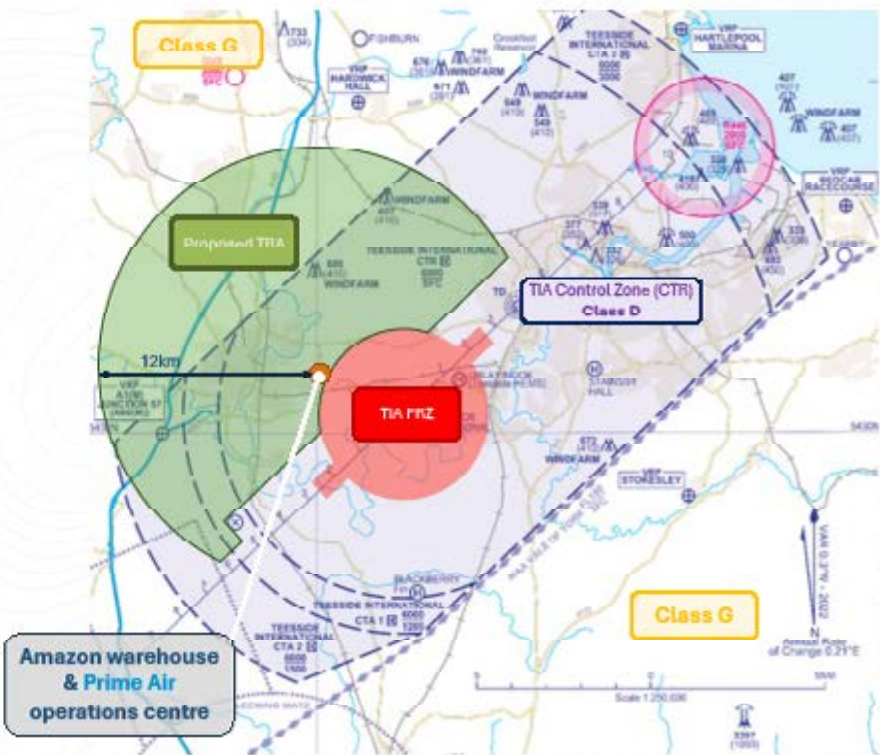
Notification: NOTAM will activate/de-activate TRA



7

# The Temporary Reserved Area

- The maximum range of the TRA (12km) is based on the operating radius of the Prime Air drone from the Amazon warehouse.
- No Prime Air flights will take place within the TIA Flight Restriction Zone (FRZ).
- The TRA spans both Class-D (TIA Control Zone) and surrounding Class-G airspace.
- Access to the TRA will be managed by TIA Air Traffic Control (ATC).
- Entry into the Class-G portion of the TRA must be coordinated with Prime Air (via NOTAM contact details) and TIA.
- Entry into the Teesside Class D portion of the TRA are subject to an Air Traffic Control (ATC) clearance from TIA AIC.



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# MK30 Drone Overview

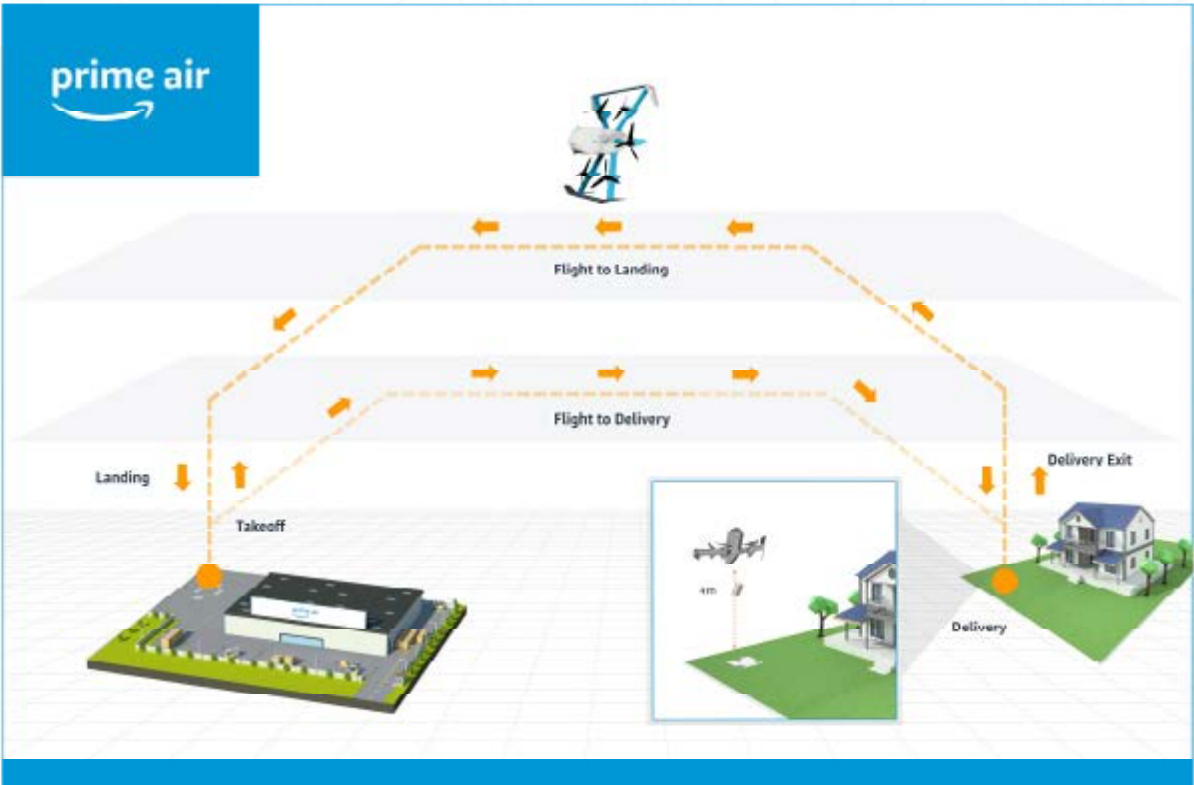
- All-electric aircraft system capable of vertical take-off and landing (VTOL) in the 'reclined' attitude.
- Transitions to 'fixed-wing' forward flight attitude for cruise phases.
- Delivers a single package of up to 2.3kg (in VTOL mode), using a marker-less (optical) delivery system.
- All flight paths remain below 122m (400ft) AGL.
- BVLOS capable using a suite of operational and technical solution including the on-board optical-based 'Detect-and-Avoid' (DAA) system.
- Will avoid ground-based and airborne obstacles.
- Includes high-intensity navigation/strobe lighting to aid visual conspicuity.
- ADS-B OUT equipped.



Upper wingspan: 1.5m  
Lower wingspan: 1.3m  
Height: 1.7m (fwd flight attitude)  
Fuselage Length: 1.22m  
Max T/O mass: 37kg  
Operational Range: 12km  
Cruise speed: ~30m/s (58kts)  
Max payload: 2.3kg

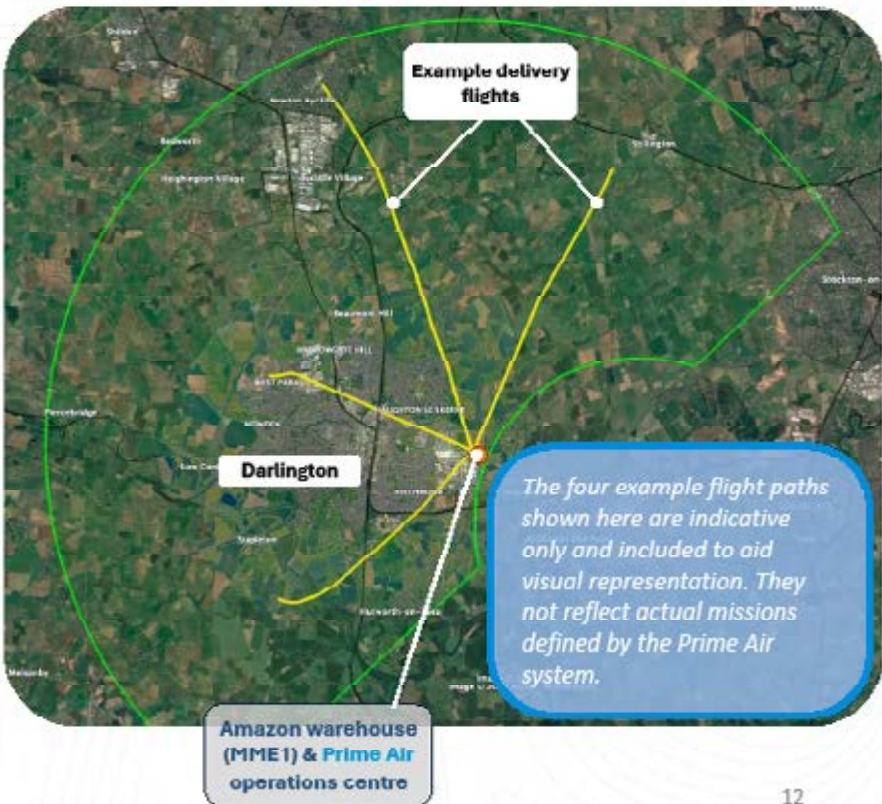
## MK30 Drone Overview – Basic Mission Profile

- Less than 50% of each complete delivery mission will reach the maximum height (return cruise phase only)
- Multiple layers of automation and health monitoring
- The Prime Air 'Flight Monitor' (drone pilot) may intervene at any phase of flight if required



# Darlington Operations Overview

- Package loading, launch and recovery, and all supporting ground operations will take place from the Amazon warehouse 'MME1'.
- Delivery missions radiate out from MME1 and can be to any qualifying Amazon customer within the TRA.
- The drones remain below 400ft above ground level (AGL) at all times.
- Mission profiles aim to take the most expedient path while avoiding Prime Air identified 'No-Fly Zones' and areas of high population concentrations (outdoor assemblies of people).
- There will likely be a concentration of delivery flights in and around the Darlington with lower frequency flights to the surrounding villages.
- **Prime Air operations will cease for all 'blue light' / emergency service operations that require access to the TRA (e.g. HEMS / Police Helicopter)**



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## FAQs

### What are the procedures for accessing the TRA?

If you intend to access the Class-G portion of the TRA and remain outside the TIA CTR, ADS-B equipped aircraft may continue to access the area as you do today. We request that you contact Prime Air operations via a dedicated telephone number (details will be included as part of the NOTAM) to inform Prime Air of your intentions. The Prime Air operations team will make sure that our drones remain well clear.

Non-ADS-B equipped aircraft will be required to contact Prime Air operations at least 12hrs before the planned flight. While we aim to make sure that your flight can go ahead as planned, we may need to decline access in some situations.

Access to the Class-D portion of the TRA are subject to an ATC clearance and must be coordinated with TIA in the same way as it is today. TIA will confirm whether the TRA is active/inactive.

*It should be noted that TIA Air Traffic Control cannot provide a UKFIS Traffic or Deconfliction service against the Prime Air drones*

### Will I be able to see the Prime Air drones from my aircraft?

Our drone dimensions are 1.7m x 1.5m and can be visually acquired in some scenarios. Our drones also carry high-intensity navigation lights with a strobe function which can help with visual conspicuity particularly in reduced lighting conditions.

Additionally, our drones will be Electronically Conspicuous (EC) via on-board ADS-B OUT and will be detectable on typical EC applications.

### Will I need to install an ADS-B transmitter on my personal/recreational drone?

No. Under UK Regulation (EU) 2019/947 in AMC1 Article 7(2), SERA.6005(b) and subject to compliance with CAA requirements for UAS operation in the intended category of operation, RPAS/UAS operators planning to conduct VLOS operations within the proposed TRA may continue to do so without complying with the transponder requirements of the TMZ.

We do request that you make contact with Prime Air via the published contact details, in advance of planned VLOS flight to ensure that relevant operational details can be shared, if required.

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# FAQs

**Will I be able to contact Prime Air operations via radio?**

While Prime Air will monitor the TIA tower and radar frequencies for situational awareness, at this stage we are not anticipating adopting 2-way radio communications as part of our procedures (other than potential emergency situations).

**What other approvals will Prime Air require before operations can start?**

Successful approval of the proposed airspace change by the CAA does not constitute an approval to operate. We are also seeking an Operational Authorisation (OA) in the Specific Category following the CAA’s recently adopted SORA methodology.

**Will I be able to provide feedback during the trial?**

Yes. We intend to continuously monitor the effectiveness of our operating procedures and we welcome any feedback received during the operations. This feedback will always be considered against our current approved operating ruleset and will review with the CAA and TIA Air Traffic Control at our regular review meetings

# Ready to Provide Feedback?

We greatly appreciate your time in considering this proposal and look forward to receiving any feedback you have.

If you decide this proposal does not impact your operation, we would still very much welcome confirmation of this, and if you simply do not have any comments to make, please also get in touch with a simple ‘no comment’.

Our targeted stakeholder engagement period will run until **14<sup>th</sup> July 2025** (6 weeks). We may not be able to address any feedback received after this date but will endeavor to do so where the ACP process allows.

We may also contact you to arrange additional **follow-up meetings** if we require more information from you, based on your feedback, or we believe specific operating procedures are required.

We will review all feedback received throughout this consultation and will consider any required changes for the final airspace design prior to submission to the CAA.

Records of your feedback (if any) will be shared with the UK CAA and published via the ACP Portal in a **redacted form**.

As a reminder you can provide your comments and feedback using either of the two methods below

- **Email**
  - respond directly to the email address at [primeair-acp-uk@amazon.co.uk](mailto:primeair-acp-uk@amazon.co.uk) or,
- **Online Feedback Form**
  - by completing the SmartSheets feedback form accessed by [this link](#)

# Additional Prime Air Background Information

| No. | Article                              | Link                                                                                                                                                                                                              |
|-----|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | How Prime Air proved the Mk30 Safety | <a href="https://www.aboutamazon.com/news/transportation/amazon-delivery-drones-safety-testing">https://www.aboutamazon.com/news/transportation/amazon-delivery-drones-safety-testing</a>                         |
| 2   | Prime Air customer Experience        | <a href="https://www.aboutamazon.com/news/transportation/amazon-drone-deliver-package">https://www.aboutamazon.com/news/transportation/amazon-drone-deliver-package</a>                                           |
| 3   | Arizona Launch                       | <a href="https://www.aboutamazon.com/news/transportation/amazon-drone-delivery-arizona">https://www.aboutamazon.com/news/transportation/amazon-drone-delivery-arizona</a>                                         |
| 4   | UK Location announcement             | <a href="https://www.aboutamazon.com/news/transportation/amazon-first-drone-delivery-uk-prime-air-location">https://www.aboutamazon.com/news/transportation/amazon-first-drone-delivery-uk-prime-air-location</a> |

