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الهيئة العامة للطيران المدني
GENERAL CIVIL AVIATION AUTHORITY



ATM SG/11 & CNS SG/14

19-23 Oct. 2025 **MEETINGS** Abu Dhabi, UAE





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ATM SG/11 Meeting

Abu Dhabi, UAE (19 – 23 October 2025)



ATM SG/11 Meeting



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FUJAIRAH AIR NAVIGATION SERVICES

STREAMING OPERATIONS SEAMLESSLY



FUJAIRAH AIR NAVIGATION SERVICES
DEPARTMENT OF CIVIL AVIATION



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FUJAIRAH

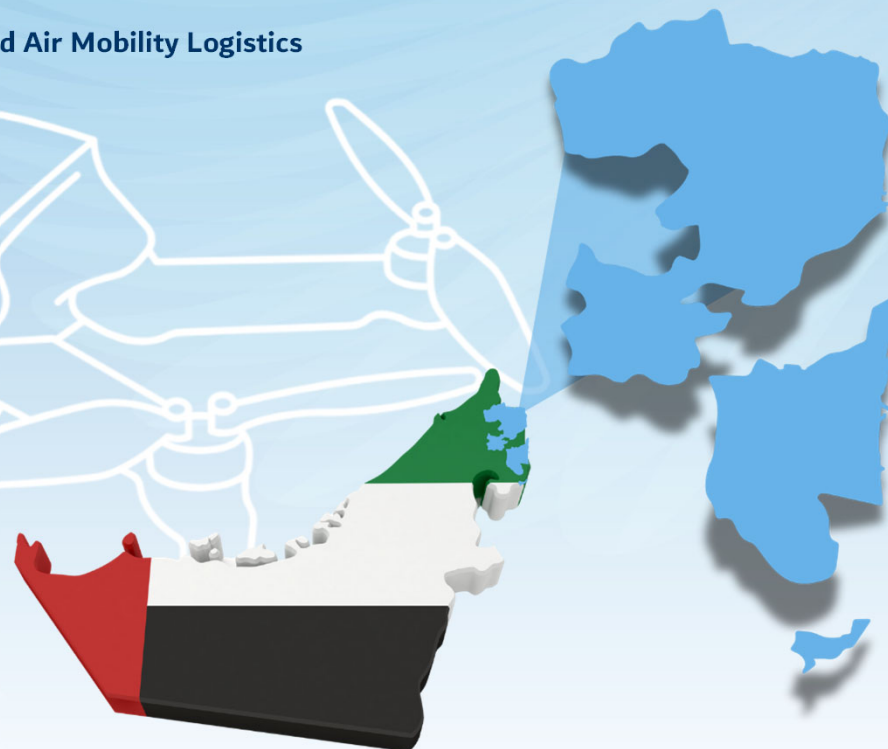
The Future Hub for Advanced Air Mobility Logistics

TRANSFORMING AIR LOGISTICS BEYOND BOUNDARIES

VISION & PURPOSE

Fujairah is positioning itself as the UAE's gateway to Advanced Air Mobility (AAM) logistics.

- ☐ Fujairah is positioning itself as the UAE's gateway to Advanced Air Mobility (AAM) logistics.
- ☐ Highlight alignment with UAE's Net Zero 2050.





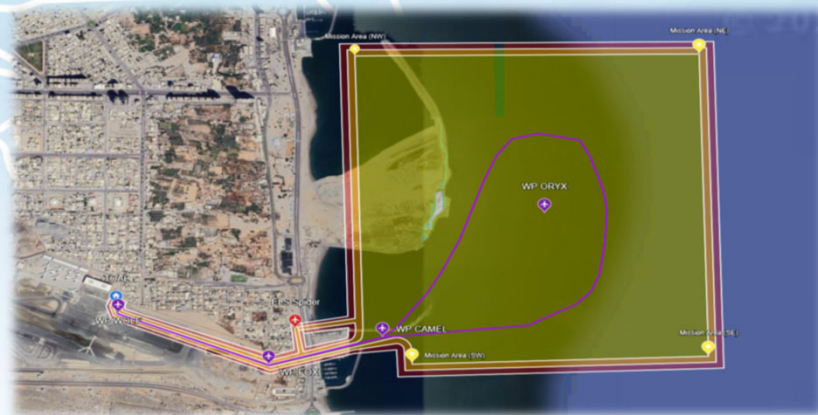
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PROJECT OVERVIEW

Name: Offshore Drone Cargo Operations – BVLOS Demonstration

Type: BVLOS/EVLOS logistics ops over water to ships

- ❑ Demonstrated **safe integration of unmanned aircraft into controlled, operating airport airspace (OMFJ)**
- ❑ **Mission Route & Performance Route Type:** Pre-programmed waypoint flight (autonomous)
- ❑ **Total Route Distance:** ~14 km (round trip: airport ↔ Hili maritime area)
- ❑ **Waypoints:** TOAL → WOLF → FOX → CAMEL → ORYX → HILI (NW/NE/SE/SW) → Return
- ❑ **Altitude Profile:** 30–120 m AGL
- ❑ **Cruise Speed:** 15–20 m/s (54–72 km/h)
- ❑ **Endurance:** Up to 25 minutes per sortie
- ❑ **Flight Time (Demo):** ~12 minutes
- ❑ **Emergency Landing Site (ELS):** “SPIDER” zone (pre-approved within 3 km)
- ❑ Highlight alignment with **UAE’s Net Zero 2050**.





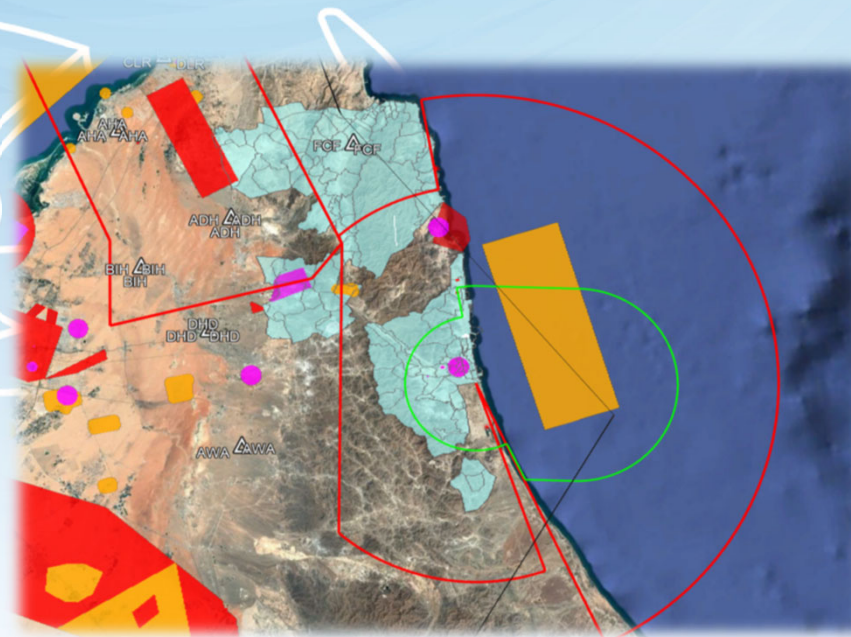
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WHY FUJAIRAH?

Is The Perfect Testbed For AAM Logistics

- ❑ Only East Coast international airport.
- ❑ Maritime anchorage within 5 km.
- ❑ Low-traffic, high-compliance airspace.
- ❑ ATC/UTM integration ready.





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ENVIRONMENTAL COMMITMENT

- ☐ Zero-emission logistics corridor.
- ☐ Marine traffic reduction through drone delivery.
- ☐ Time and cost cutting





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CAPACITY BUILDING

- ❑ Training local talent through simulation-based programs.
- ❑ Workshops with Fujairah Police & GCAA.
- ❑ Academic partnerships for UAV research.



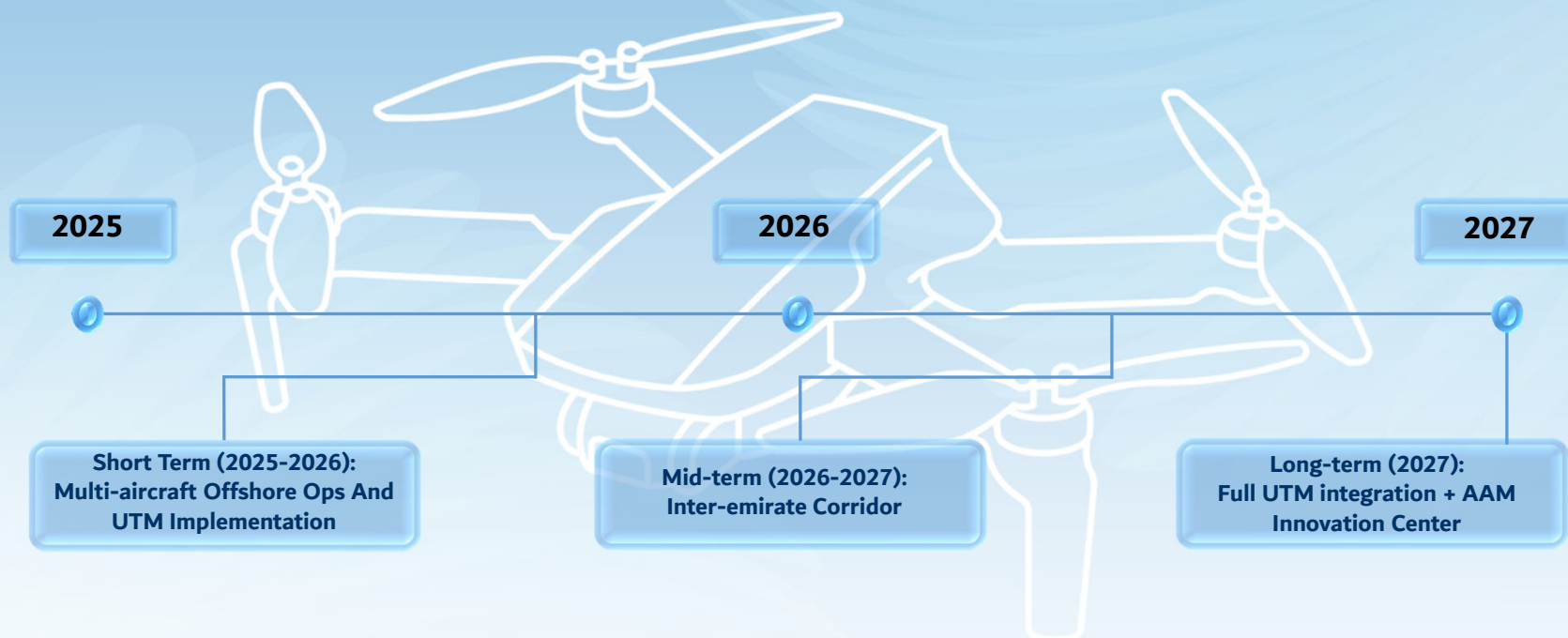
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What's Next?





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FUJAIRAH AIR NAVIGATION SERVICES
DEPARTMENT OF CIVIL AVIATION

**FUJAIRAH
IS READY.
THE FUTURE OF
LOGISTICS IS
AIRBORNE**



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FALCON EYE UAV

Enhancing Safety And Efficiency From The Sky

FUJAIRAH INTERNATIONAL AIRPORT: SECURITY PATROL OPTIONS

- ☐ Traditional patrols rely on vehicles and manpower, but are costly and limited in coverage.
- ☐ Drone & Smart Mobility solutions deliver 24/7 surveillance, smart analytics, and major cost savings.
- ☐ Aligns with GCAA/FANS oversight and supports Fujairah's Advanced Air Mobility vision.

PROJECT STATUS:

ONGOING

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PROJECT OVERVIEW



The “FALCON EYE UAV” project, launched by Fujairah International Airport, introduces a cutting-edge drone-based operational framework designed to enhance the safety, efficiency, and technological advancement of aerodrome operations. This initiative marks a transformative shift in how airport infrastructure is monitored and managed, positioning FIA at the forefront of smart airport innovation.





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INTRODUCING OUR DRONE FLEETS

Overview Of Our Cutting-edge UAVs Enhancing Aerodrome Operations And Safety

FALCON EYE 01

The DJI Mavic 4 Enterprise is designed for heavy-duty missions, providing superior versatility and performance in complex aerial operations at aerodromes.



FALCON EYE 02

The DJI Mavic Air 2 is compact yet powerful, perfect for capturing high-quality aerial photography and ensuring effective monitoring of aerodrome environments.



FALCON EYE 03

Our fleet comprises the latest UAVs, enabling efficient and effective operations for safety, surveillance, and overall operational excellence in aerodrome environments.





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ENHANCING PERIMETER SECURITY MEASURES

Advanced Surveillance Solutions For Aerodrome Safety

Our cutting-edge drone technology provides live monitoring of the aerodrome perimeter, ensuring quick detection of unauthorized entries or abnormalities. This enhances security with immediate response options and improved situational awareness.



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PRECISION IN SURVEYING AND MAPPING

Enhancing accuracy and efficiency in aerodrome assessments

Our UAVs provide high-resolution aerial data for precise surveying and mapping. This technology ensures accurate assessments of land, highlighting features and changes that are crucial for effective aerodrome management and planning.



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FUTURE DRONE OPERATIONS AT FIA

Enhancing Safety With Innovative Drone Inspections

Our commitment to advanced drone operations at FUJ ensures comprehensive inspections of the runway and maneuvering areas, improving safety and operational efficiency while effectively identifying potential hazards before they become critical issues.



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OPTIMIZING AIRSIDE LOGISTICS WITH DRONES

Revolutionizing Supply Chain Management at Aerodromes

Our advanced drone Falcon Eye 01 Oversees vehicle and cargo movement to ensure smooth ground operations and avoid traffic congestion, Track turnaround times and service vehicle coordination.



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COMPARISON

Traditional Patrol vs. Drone & Smart Mobility

Cost (5 YEARS)	Traditional patrol	AED 2.2M
	Drone & Smart Mobility	AED 562.8K
	Advantage	74% SAVINGS
Coverage & OPS	Traditional patrol	Limited, Manpower Heavy, Fatigue Issues
	Drone & Smart Mobility	24/7 Autonomous, Scalable, Rapid Detection
	Advantage	WIDER & SMARTER COVERAGE
Safety & Compliance	Traditional patrol	On-site Presence Only
	Drone & Smart Mobility	Requires NOC, ATC/UTM Integration
	Advantage	INTEGRATED INTO SAFETY MGMT.

Organisation	Traditional patrol	Drivers & Officers
	Drone & Smart Mobility	Operators, Analysts, Maintainers
	Advantage	DIGITAL SHIFT & FASTER RESPONSE
Added Value	Traditional patrol	Reactive Patrol
	Drone & Smart Mobility	Continuous Surveillance, Analytics, Evidence
	Advantage	SUPPORTS AAM VISION





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ACTION BY MEETING

- ☐ Take note of the content of this paper
- ☐ Inviting member states to share their best practices and share knowledge in UTM/UAV domain





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THANK YOU

