AIRWAYS

AAM elements for global interoperability

Justine Whitfield & Phil Rakena
Airways New Zealand

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Brave new world

Change is here

- Vehicles, equipage, performance, digital ecosystem, drones, detection, cloud, security, infrastructure
- AAM - passenger & cargo, crewed & autonomous
- Low level airspace and control zones

Why lean in

- Attractive airspace
- Share the air
- Achieve scale
- Safety - common operating picture
- Learn!
  - Interoperability
  - Future stages

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Image: Wisk Aero LLC

Enabling AAM – a New Zealand lens

- Participatory action research – live operations
- **World first IFR equivalency** – stepping-stone to flying taxis
- Emerging tech ops within existing rules
  - Current CARs – no separation standards for AAM
  - Current Airspace - class G and class C
  - Current ATS – separation, comms, Part 91
  - AIP, NOTAMs
- Stakeholders – AAM, ATS, CAA, crewed aircraft, airspace managers, AITP (govt)

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AAM BVLOS in non-segregated controlled airspace – Nov/Dec 2023

ATC interaction

- Voice comms ATC to ‘pilot’ on ground
- Existing surveillance infrastructure, ADSB
- Safety Case
- CAA matrix Part 91
- Operational MOU
- ATC training package
- Coordination with FAA Collision Risk Modelling

AirShare UTM

- Digital ecosystem - 3D flight plans, activations, authorisations, live positional data (GPS, barometric)
- Multi-users – Tāwhaki, AAM operator, ANSP
- Conformance
- Traffic information
- Common operating pic low level airspace

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AAM elements for interoperability

Global

- Performance standards e.g. modify PBN “uRNP 8m”
- Digital ecosystem standards (e.g., airspace info ED-269), adoption of APIs, ATSM
- Certifications – pilot, aircraft, UTM, infrastructure
- Electronic conspicuity
- Regulator alliances, specialist expertise

Local

- uRNP applied based on regional conditions e.g. traffic & population density, aerodrome proximity
- MOU – standardize op procedures & training
- Detection
- UTM/ ATM interaction

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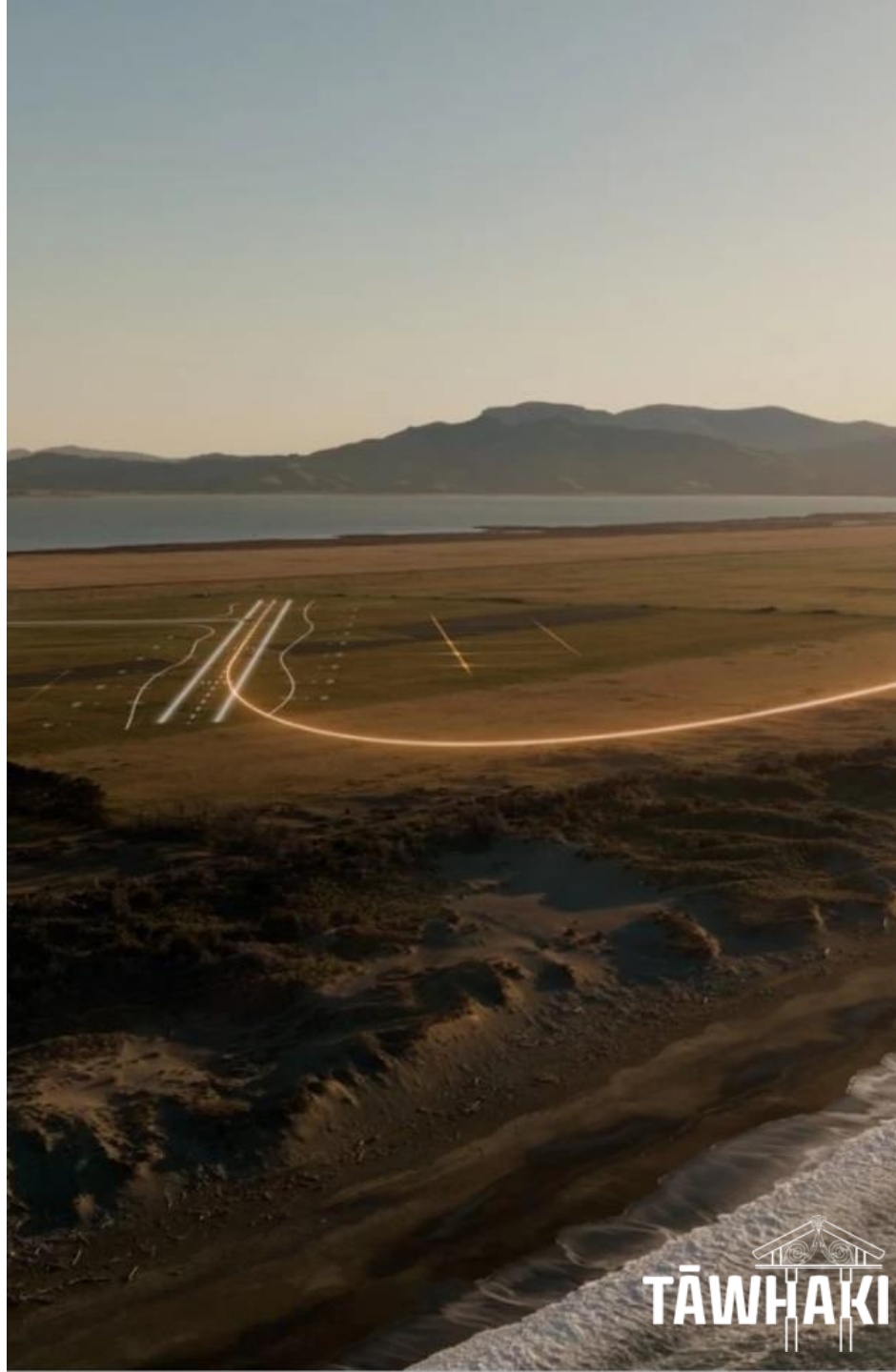

AAM ecosystem interoperability benefits

- Share the air – evolve airspace e.g. corridors, UTM
- Pursue performance based approach
- Support convergence
- Enable scale - global markets & cross-border
- Reduce uncertainty – aircraft fitouts, certs, rules
- Build social acceptance

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