Manston Airport Airspace Transition
Design Principles Focus Group

5th November 2019

Issue 1

Background

- RiverOak Strategic Partners planning on reopening Manston Airport
- Development Consent Order (DCO) application
- Decision Expected January 2020
- Airspace Change required in parallel
- Introduce Procedures for Aircraft Operating from Manston Airport
- Application to the CAA under CAP 1616

  https://publicapps.caa.co.uk/docs/33/CAP1616E2interactive.pdf

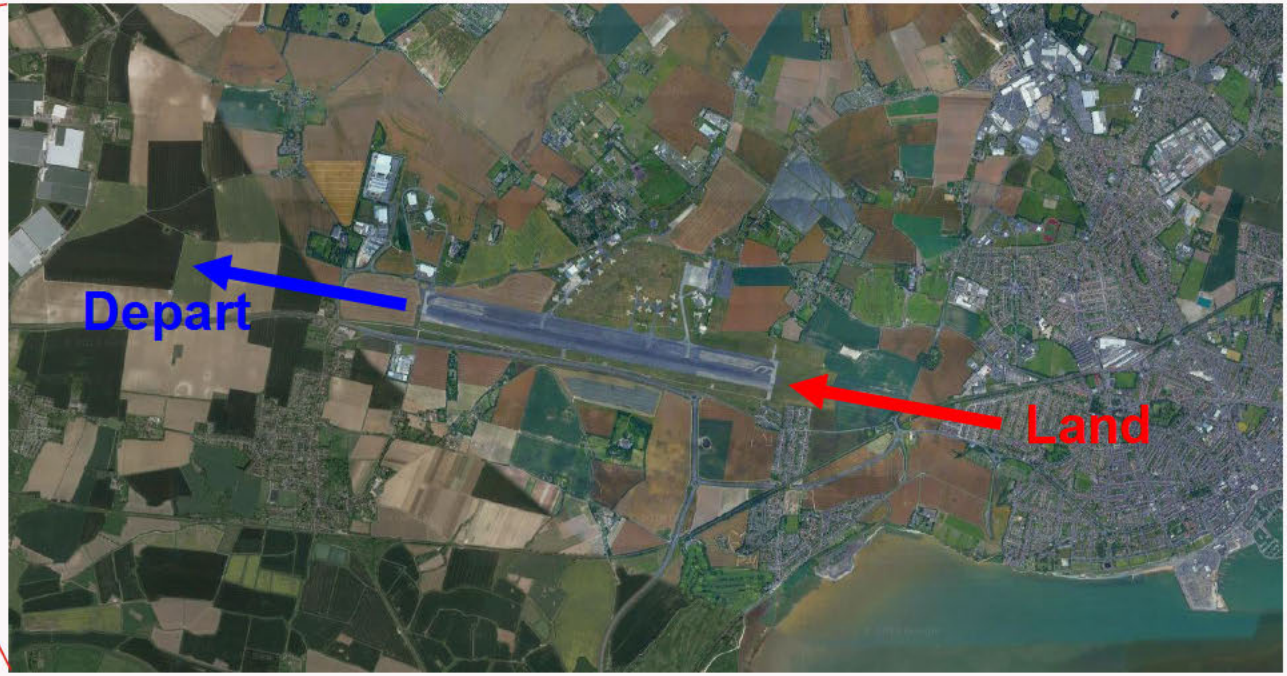
- Step 1b – Stakeholder engagement on Design Principles

Operations

Manston Airport Operations

- Air Freight Hub
  - Passenger travel
  - Executive travel
  - Aircraft engineering services
- Operating 06:00 – 23:00 daily
- Introduce Procedures for Aircraft Operating from Manston Airport
- Directives - Introduction of PBN by 2024
  - International Civil Aviation Organisation (ICAO) Directive 3/23
  - CAA Airspace Modernisation Strategy
  - Procedures must be designed and flown with reference to GNSS
- Aerodrome Traffic Zone (ATZ)

Flight Paths – Westerly Wind

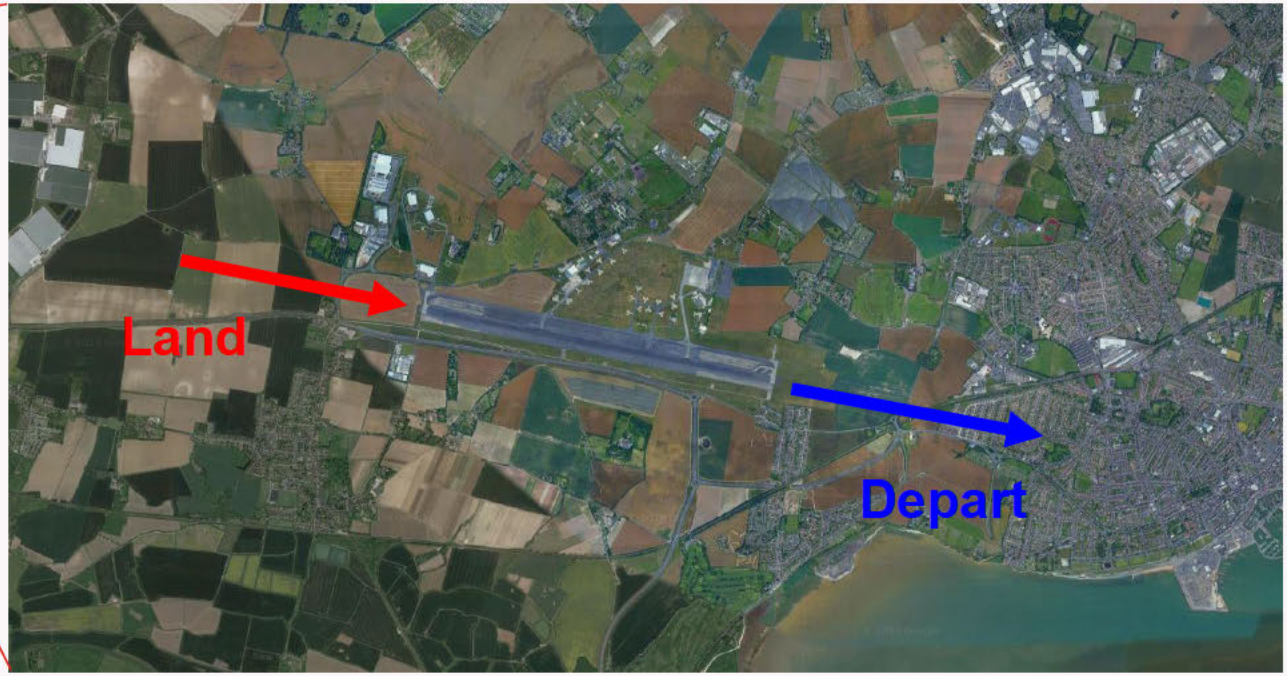


When wind is from West:

Aircraft land and depart into wind on Rwy 28

When the wind speed is less than approximately 10kts from the west, aircraft may land on Rwy 10

Flight Paths – Easterly Wind



When wind is from East:

Aircraft land and depart into wind on Rwy 10

When the wind speed is less than approximately 10kts from the east, aircraft may depart on Rwy 28

Design Principle

- SAFETY
  - Procedures must be designed to meet acceptable levels of flight safety

- HARMONISATION
  - Design options must accord with the CAA's published Airspace Modernisation Strategy (CAP 1711) and any current or future plans associated with it
    - FASI (S)

Current Local Airspace Chart

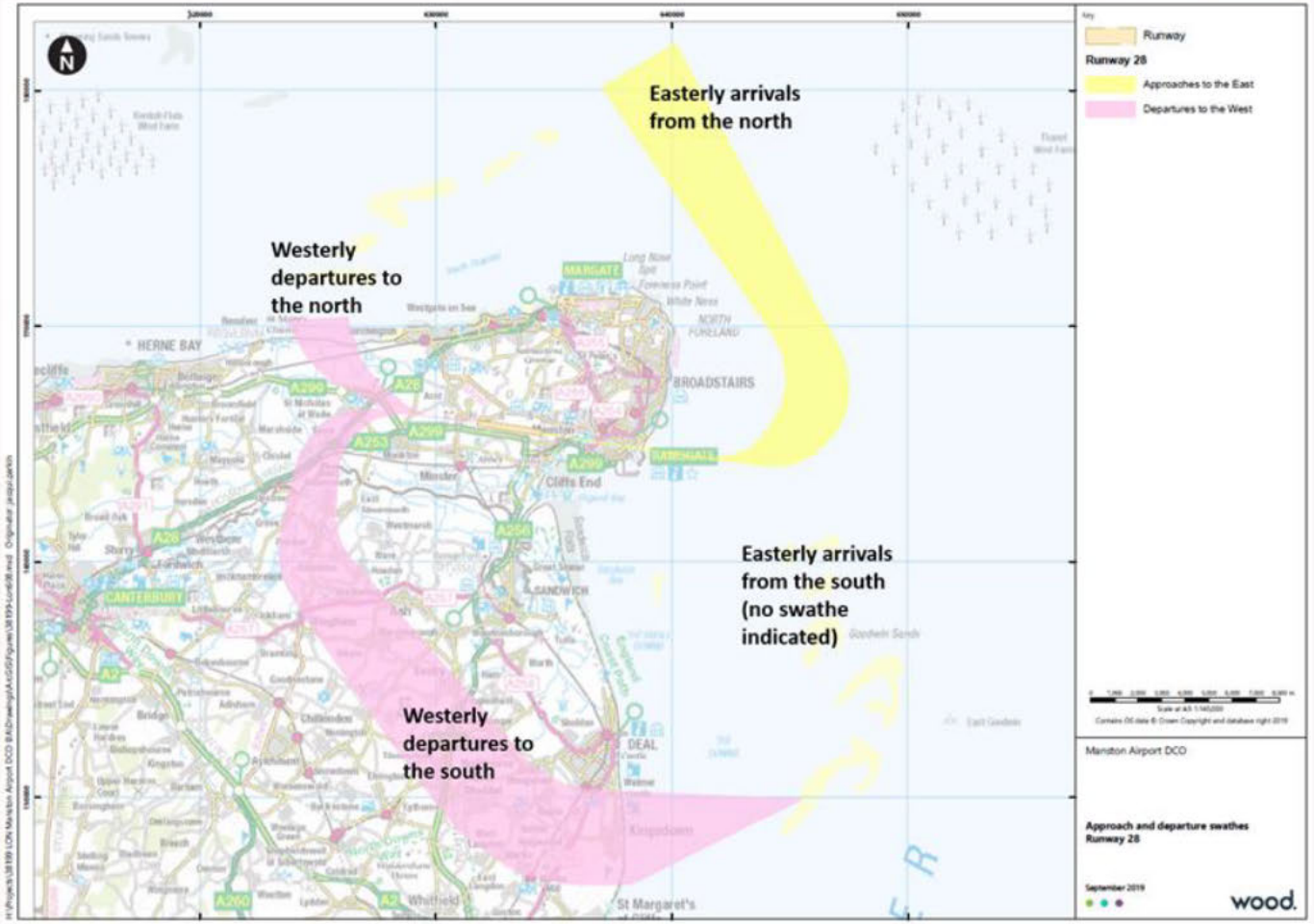
RSP Manston Airport

Local Area

Local Area

RSP Manston Airport

Route Swathes



Route Swathes

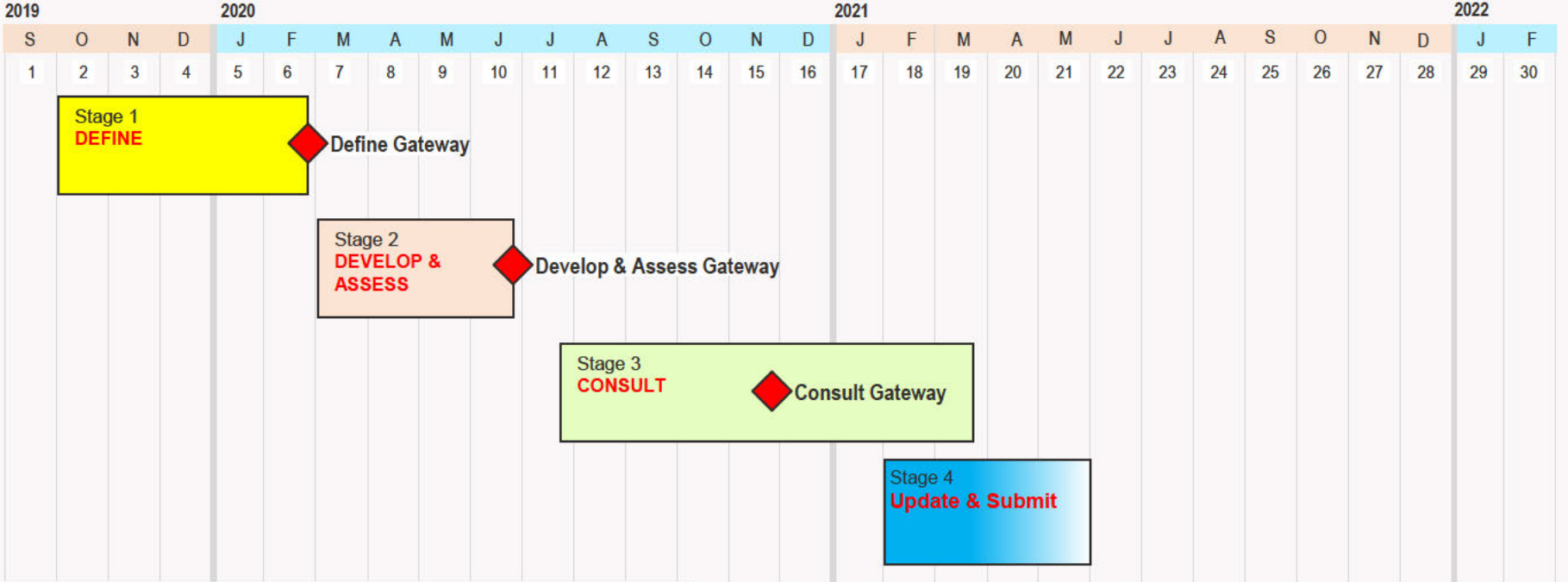
CAP 1616 Process

CAP 1616 – Airspace Design

- New process introduced in Jan 2018
  - Developed by CAA and independent third party
  - Endorsed by DfT:
    - Secretary of State
- Replaced CAP 725
- Stated Aim of CAP 1616:
  - More transparency
  - Greater engagement with stakeholders
- Available on CAA Website

https://publicapps.caa.co.uk/docs/33/CAP1616E2interactive.pdf

CAP 1616 – Seven Stage Process



- 6 Stages (plus Post Implementation Review
- Design Principles Step 1B
- Design Options Step 2A
- Gateways
- Formal Consultation

CAP 1616 – Change Level

- Assessment Meeting 9th May 2019 marked the end of Step 1A
- Minutes available on CAA website
- CAA anticipated this was a **Level 1** change
- Level 1 is not however confirmed until end of Step 2B at the **"Develop and Assess Gateway"**
- **Any specific comment on Level and scaling…?**

Level 1: High impact* changes to notified airspace design **A change that does have the potential to alter traffic patterns below 7,000 feet over an inhabited area§**	**Level 2: Medium to low impact* changes to notified airspace design** **A change that does not have the potential to alter traffic patterns below 7,000 feet over an inhabited area§**
The Government's Air Navigation Guidance states that below 7,000 feet is the maximum height at which noise is a priority for consideration	
Level 1: Typically a large-scale change which alters lateral aircraft tracks or dispersion, or changes aircraft height, below 7,000 feet (above mean sea level) over an inhabited area§, such as: • changes to departure and arrival routes at airports • changes which have a significant impact on other aviation stakeholders	**Level 2A:** Typically a change which alters aircraft tracks, or changes aircraft height, below 20,000 feet (above mean sea level) but at or above 7,000 feet (above mean sea level), such as: • changes to Air Traffic Service (ATS) routes • establishment of new controlled airspace below 20,000 feet (above mean sea level). **Level 2B:** Typically a change: • to controlled airspace that occurs over the sea or at 20,000 feet (above mean sea level) and above, or • outside controlled airspace at or above 7,000 feet (above mean sea level) **Level 2C:** Typically a change which reflects: • the current use of the airspace concerned, such as a DCT*** to ATS Route, or • the removal of established airspace structure (such as Standard Instrument Departure truncation) and which does not alter traffic patterns below 7,000 feet (above mean sea level)

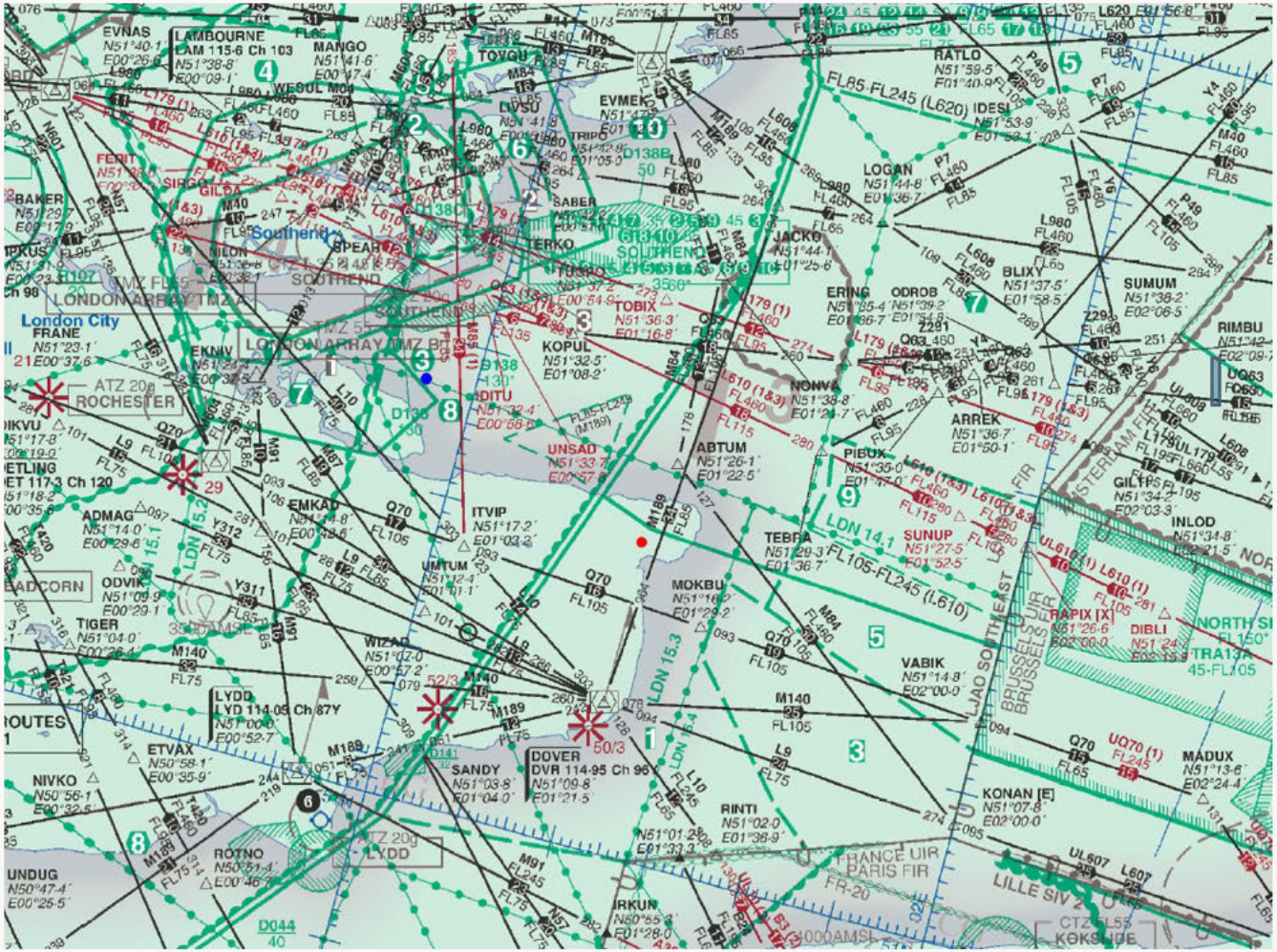
Design Principles Development Process

- RSP are keen to ensure Design Principles and Options are developed through a two-way engagement with local communities
- Questionnaires sent to the following:
  - Community Representatives
  - Local Authorities & Parishes
  - Environmental Protection Organisations
  - Airlines
  - General Aviation Community
  - Airport Operators
  - Air Navigation Service Providers (ANSPs)
- Focus Groups
- Engagement with National Air Traffic Management Advisory Committee (NATMAC)

Constraints

- Safety
- Integration with FASI(S):
  - NATS
  - Airports
- Integration with other local airspace users:
  - GA Community
- Airway entry and exit points
- PANS OPS 8168 - design constraints

Current Local Airspace Chart



Current Local Airspace Chart

Focus Group - Please Tell us Your Views

- Scope for SIDS (departures) & STARS (arrivals) and Approaches
- Urban Areas/ Open areas
- Rural Areas
- Technology & Innovation
- Noise Exposure vs Emissions (CO_2)
- Timing of over flights (Diurnal or Day to Day)
- Flight Path Principle:
  - Minimise the total number of people overflown
  - Share the routes over a wider area

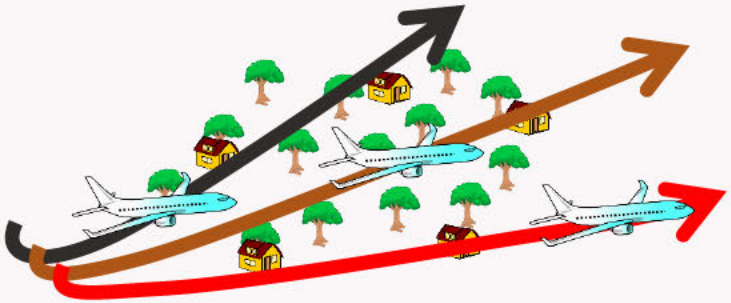
1 Potential Route Preference

PBN routes = Accuracy = Concentration

A

Aircraft follow the same route minimising the number of people overflown

B



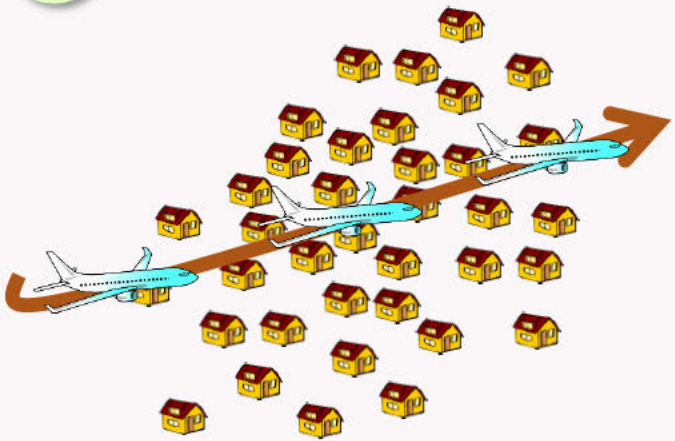
Aircraft follow slightly different routes (dispersion) sharing the noise exposure over more people, but less frequently in each location

This would result in larger numbers of people being overflown

2 Flight Path Preference
Densely Populated vs Sparsely Populated Setting

PBN routes = Accuracy = Concentration

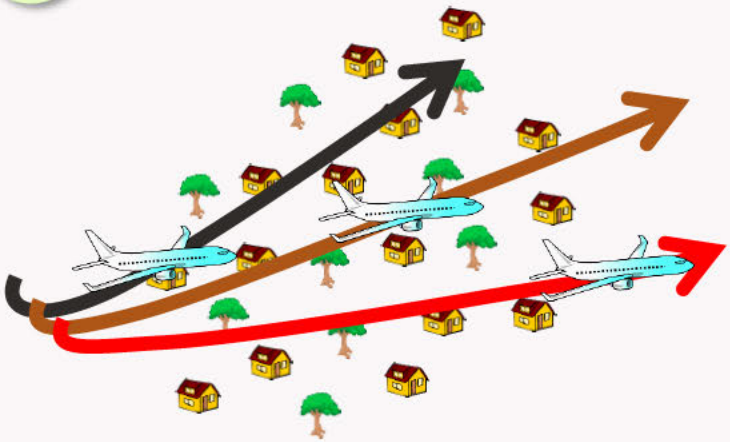
A



Urban Setting

More people overflown, but potential higher levels of general background noise

B



Rural Setting

Less people overflown, but potentially lower levels of general background noise

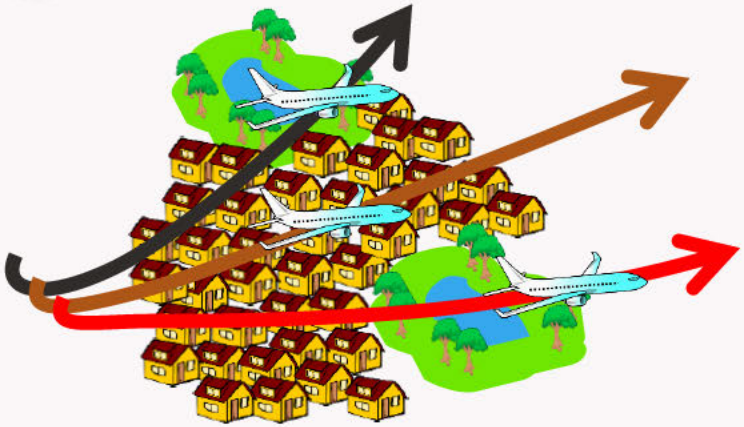
3 Flight Path Preference - Within Urban Areas

Not all urban areas area equally populated. Should the route seek to overly commercial/ residential areas and protect green space in urban areas?

A

Design routes over residential / commercial areas avoiding parks and public open spaces

B



Design routes over parks and open spaces rather than residential / commercial areas

4 Flight Path Preference – Noise vs Emissions

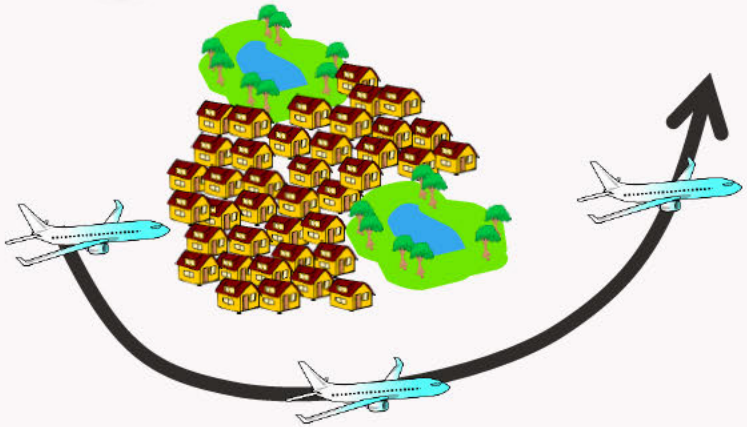
RSP Manston Airport

A

Design the most direct routes over areas exposing people to noise

This could **decrease** the track miles flown, fuel burnt and emissions

B



Design longer routes to avoid exposing people to noise

This will **increase** the track miles flown, the fuel burnt and emissions

Flight Paths – Considerations Summary

Setting Type	Preference A	Preference B
Route Preference	Expose fewer people to noise more often	Expose more people to noise less frequently
Densely vs Sparsely Populated Areas	Urban – More people overflown in areas with high background noise	Rural – Less people overflown in areas with low background noise
Urban Areas	Routes over residential / commercial areas avoiding parks & open spaces	Design routes over parks & open spaces avoiding residential / commercial
Noise vs Emissions	Design direct routes exposing people to noise, but minimising other emissions	Design routes to avoid exposing people to noise, but increasing other emissions

Focus Group Management

- Your help is required to identify your key areas of concern
- We recognise you may have strong opinions on certain topics
- Please allow all members time to voice their opinions
- We need to hear all your concerns and record them
- You will have diverse or conflicting opinions and contrary principles may develop
- We will look for and record any common areas of agreement or common priorities

Next Steps

Design Principles (Step 1B) - Next Steps

- Complete Focus Groups
- Collate all questionnaire responses
- Analyse all Focus Group comments and questionnaire responses
- Identify long list of Design Principles
- Develop short list of Design Principles
- Submit to CAA for publication on CAA Portal
- CAA will then conduct Define Gateway Assessment
- Proceed to Stage 2, Step 2A Options Development

Further Questions

Contact us:

manstonairspace@communityrelations.co.uk

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