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Airspace Change Proposal Presentation to RAUWG

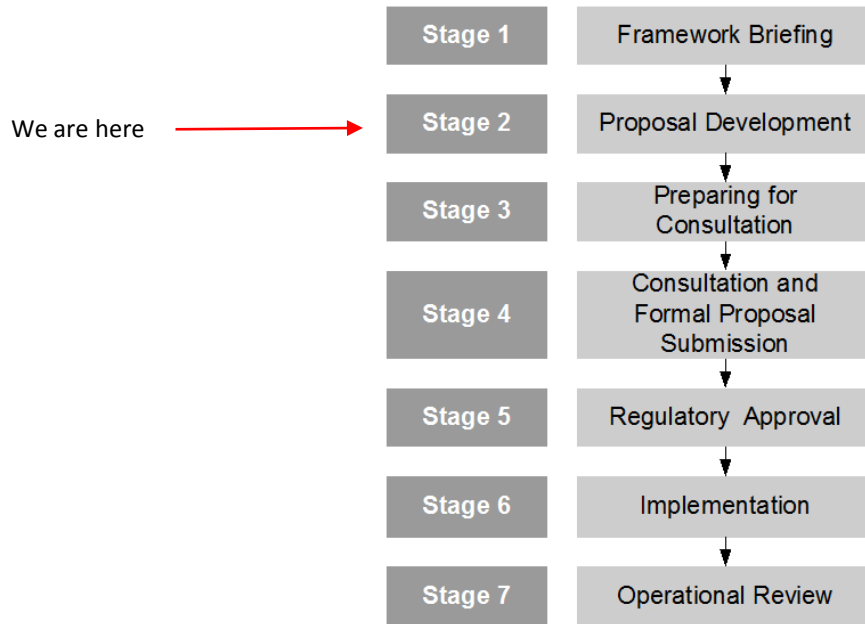
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Airspace Change Process



Where are we up to in the process?

Stage 2

- > Initial designs very ambitious, utilising many aspects of technological and procedural advancements;
- > Inconsistency in policy guidance from the CAA led to multiple changes (withdrawal of AIC Y 023/2012 *Application of Performance-based Navigation in UK Airspace*) (justification for a trial of some procedures approved, then denied 6 weeks later);
- > Achieving buy-in from NATS Prestwick Centre has been a challenge as the Northern Terminal Control Area (NTCA) Project has taken their priority.

Why change?

- > Integration of aircraft movements with adjacent airports result in delays or the presentation of aircraft in a poor lateral and/or vertical position, leading to:
 - Extensive delaying action to reduce height;
 - Potential safety issues mitigated only by an effective ATS, which is at capacity in the busiest periods;
- > Current Noise Preferential Routes (NPR) cannot be adhered to and this causes significant concerns to the local population;
- > Current airspace does not fully contain approach procedures (as detailed in the IAIP), leading to aircraft transiting outside CAS, with potential for conflict with GA;
- > Inefficiency by taking all aircraft west initially regardless of destination.

Options considered

- > Option 0 - do nothing;
- > Option 1 - do minimal:
 - Different procedures, same airspace;
 - Same procedures, different airspace;
- > Option 2 - other airspace constructs:
 - RMZ/TMZ;
 - Class E(+);
- > Option 3 - new procedures and new airspace to provide containment.

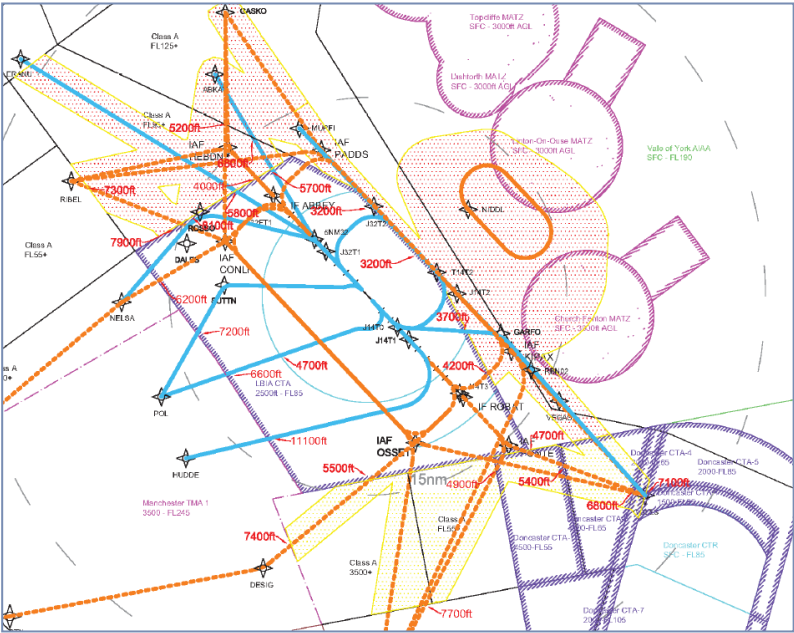
> Initial procedure designs:

- SIDs to every compass cardinal from each runway;
- Separate SIDs for jets and turbo-props to reduce departure separations;
- STARs from every compass cardinal;
- Multiple transitions from each STAR;
- Hold moved to the east of the Airport.

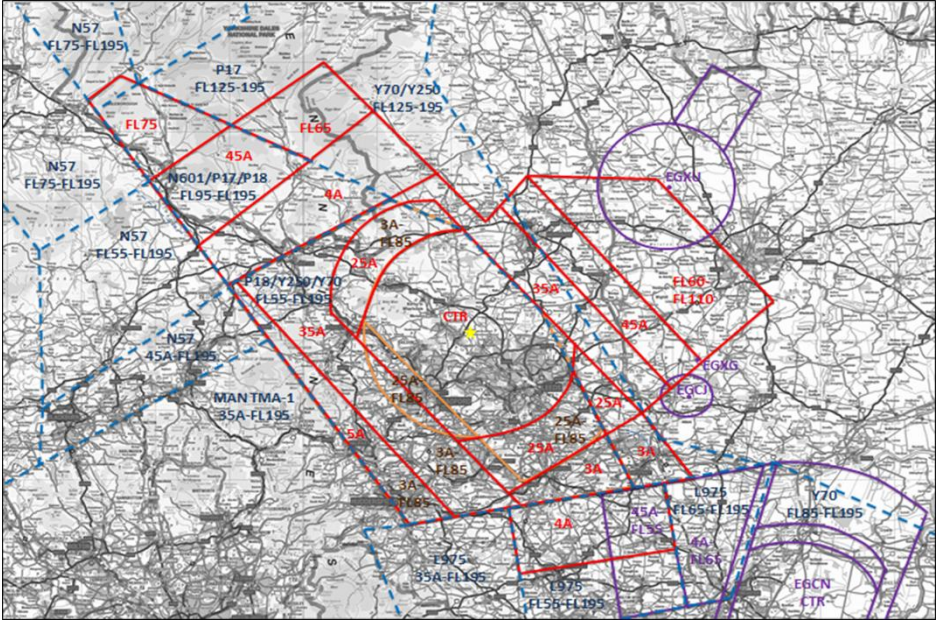
> Airspace:

- Large containment area.

Initial procedures



Initial airspace design



Issues identified with initial designs

- > **Connectivity and integration with the en-route structure the primary concern;**
- > **Number of procedures too great; could all routes be justified in terms of usage?**
- > **Airspace requirements too great:**
 - **Potential adverse impact on a disproportionate number of aviation stakeholders;**
 - **Significant increase in the volume of local inhabitants overflown;**
- > **Complexity too great from both ATC and cockpit perspectives - potential issues in Flight Management System configuration and flight planning.**

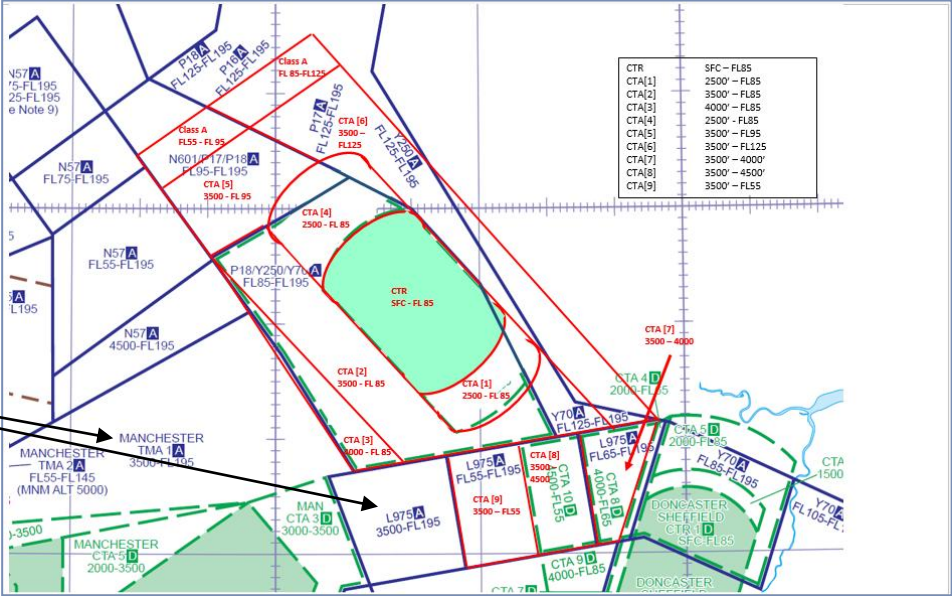
Changes introduced

- > Revised version of procedures sought to solve these issues by:
 - Amalgamating jet and turbo-prop SIDs;
 - Reducing the number of SIDs to reflect the current and known-future usage of the routes;
 - Simplifying and reducing the number of STARs;
 - Moving the hold to the overhead.

- > Changes devised in close consultation with NATS PC; few other options now available due to the constraints of the en-route structure and other airports' traffic (primarily Manchester, LJLA, RHADS).

- > Mainly concentrated on engagement with NATS PC - without integration into the en-route structure the project cannot progress;
- > MoD - Military Users Airspace Consultation Team (MUACT) requested to provide early comments on the proposal due to the close proximity of RAF Linton-on-Ouse and the Area of Intense Aerial Activity (AIAA);
- > Manchester Airport - part of the proposal is to raise the base of part of the Manchester TMA to facilitate IFR transits beneath, under discussion with the Airport;
- > RHADS - To discuss on use of parts of the current RHADS CTAs within the lateral confines of L975 required for southerly departures and arrivals from LBIA.

Proposed airspace design



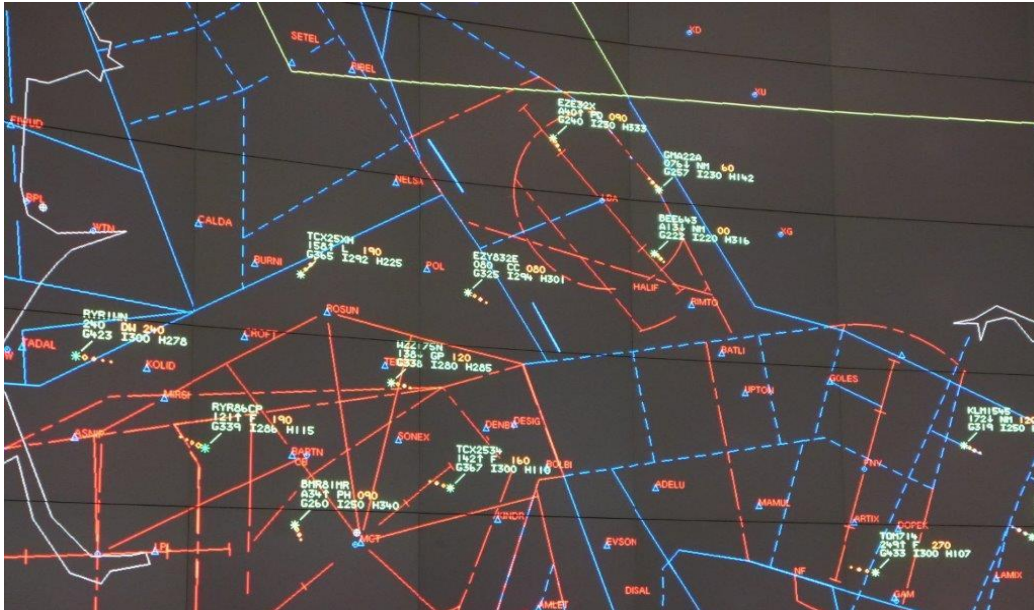
Base to 4000'?



- > **Aware that there will be impacts;**
- > **Hope that engagement at this stage will shape the airspace to meet other aviators' needs too;**
- > **Intention to develop:**
 - **LOAs with adjacent units to facilitate access to the airspace where practicable;**
 - **New VRPs (TBD);**
 - **Suggested crossing routes and altitudes that are likely to de-conflict with arrivals and departures; guide to GA on obtaining a service from LBIA within Class D to be published.**

- > Designs are currently just lines on maps; qualified procedure designers will be plotting into PANS-OPS compliant designs to ensure the tracks work;
- > Procedures have already been simulated at PC as part of the NTCA programme, but further simulation to be conducted to ensure smooth integration with other airports' operations;
- > Containment areas to be drawn up to further inform the airspace design;
- > Engagement with affected aviation stakeholders (hoping to identify suitable POCs today) to incorporate measures to ameliorate any impact and design solutions into subsequent airspace design;
- > Aim to resolve all potential aviation issues prior to formal consultation (Q2/Q3 2015).

- > **Reduced track mileage;**
- > **CO₂ emissions reductions;**
- > **New NPR to minimise impact on those overflown;**
- > **Facilitation of radar services west of LBIA (subject to Manchester agreement);**
- > **Simplification of CAS base altitudes.**



The big picture

THANK YOU

Questions?

Comments?

Rotten tomatoes?!