

# Supplementary Airspace Consultation - CTA-13

## HAZID

May/June 2019 – Doncaster Sheffield Airport

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# Scope

- ▶ Introduction
- ▶ Purpose
- ▶ Assumptions
- ▶ ROGAG SIDs and Airspace Containment
- ▶ Airspace Classification Options
- ▶ Hazard Identification and Analysis
- ▶ Next Steps

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# Introduction

- ▶ DSA submitted a CAP725 ACP to the CAA in May 2018;
- ▶ It proposed the introduction of PBN SIDs, IAPs and an additional CTA (CTA-13);
- ▶ The CAA requires that DSA consult aviation stakeholders on the options for the airspace classification associated with the proposed CTA;
- ▶ The purpose of this HAZID is therefore to assess the risks associated with aircraft operations within CTA-13.

# Purpose

- ▶ Identify as many credible hazards as possible that could be presented by providing an ATS to IFR aircraft in CTA-13 (airspace classification tbd).

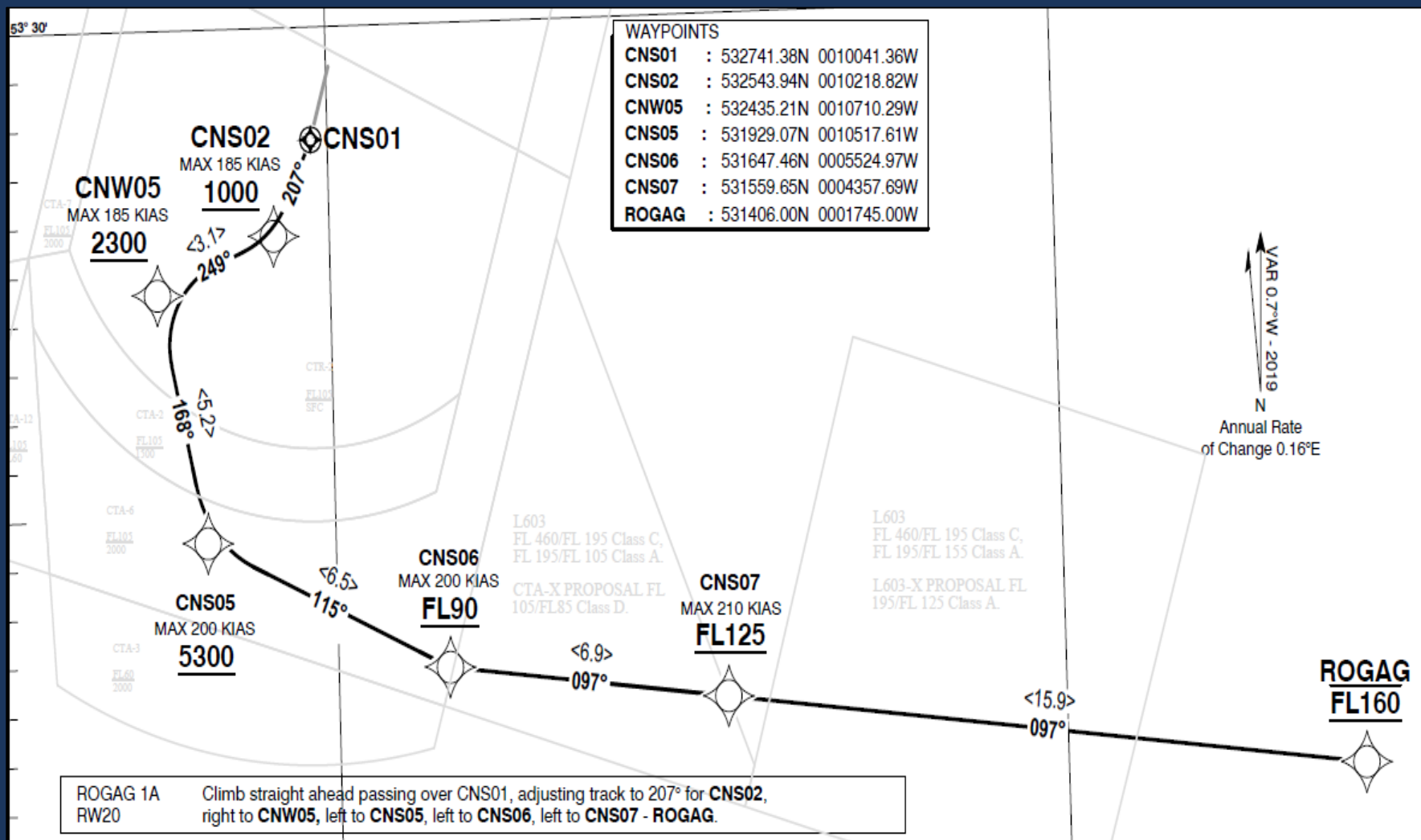


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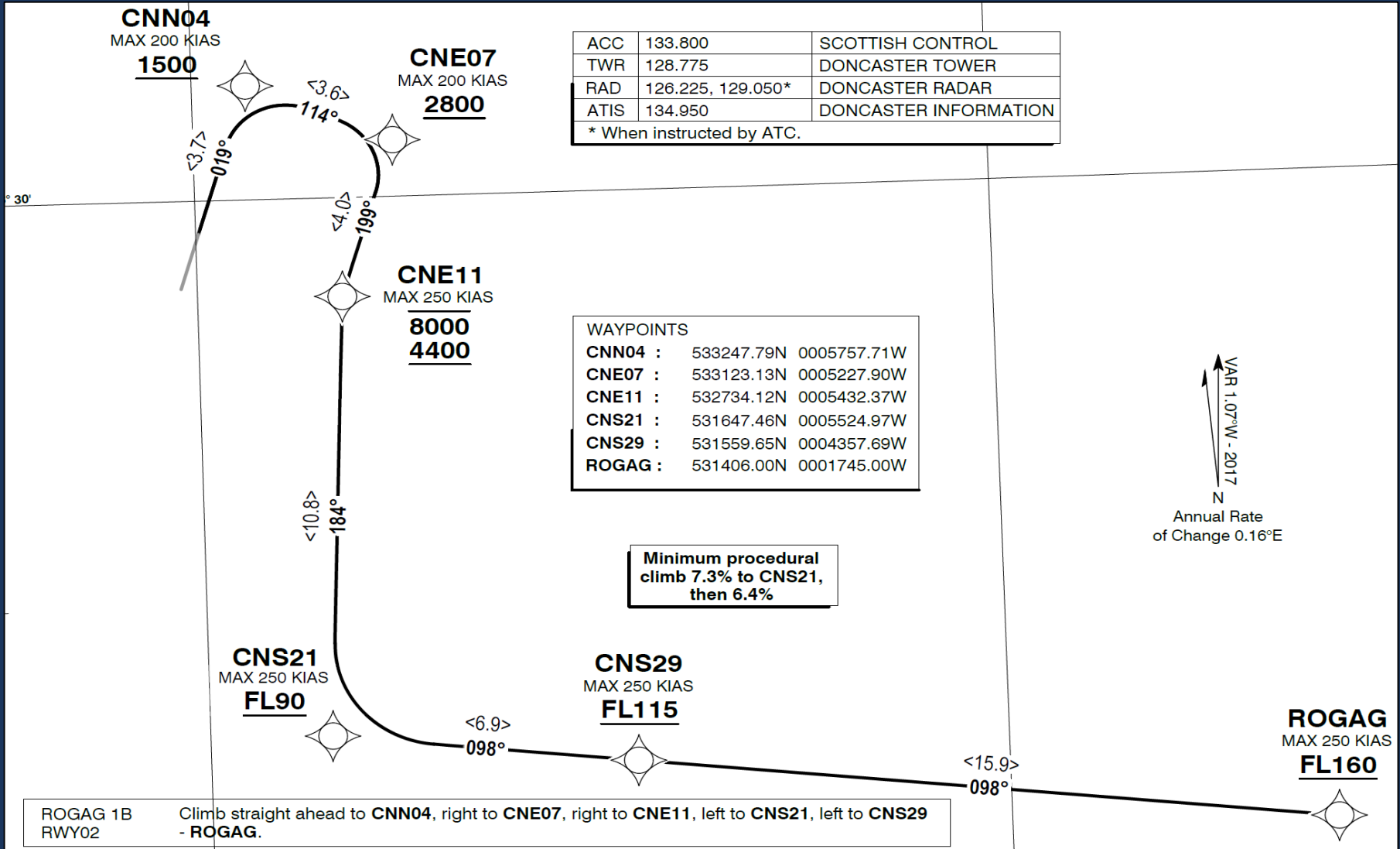
# Assumptions

- ▶ Current level of risk presented by operations in Class D and Class G airspace is tolerable (in accordance with the ANSP's SMS and statutory requirements).
- ▶ ROGAG SID procedures are designed in accordance with PANS-OPS regulations (obstacle and terrain clearance) and current controlled airspace containment policy.
- ▶ Operational Procedures will be defined for the implementation and through-life safety of the IFPs and the associated airspace.

# ROGAG 1A SID



# ROGAG 1C SID



# Existing Airspace

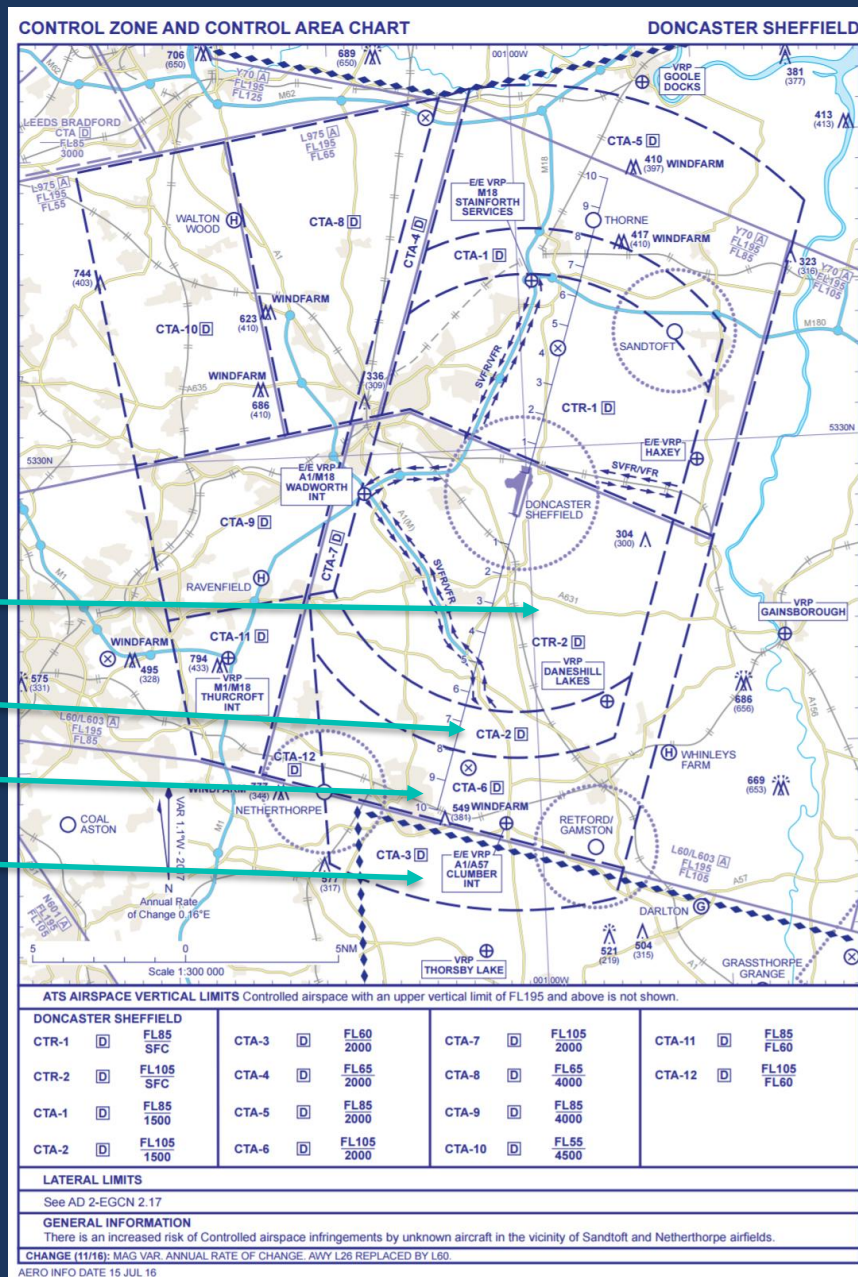
## ▶ Class D CTR and CTAs

CTR-2 SFC-FL105

CTA-2 1500-FL105

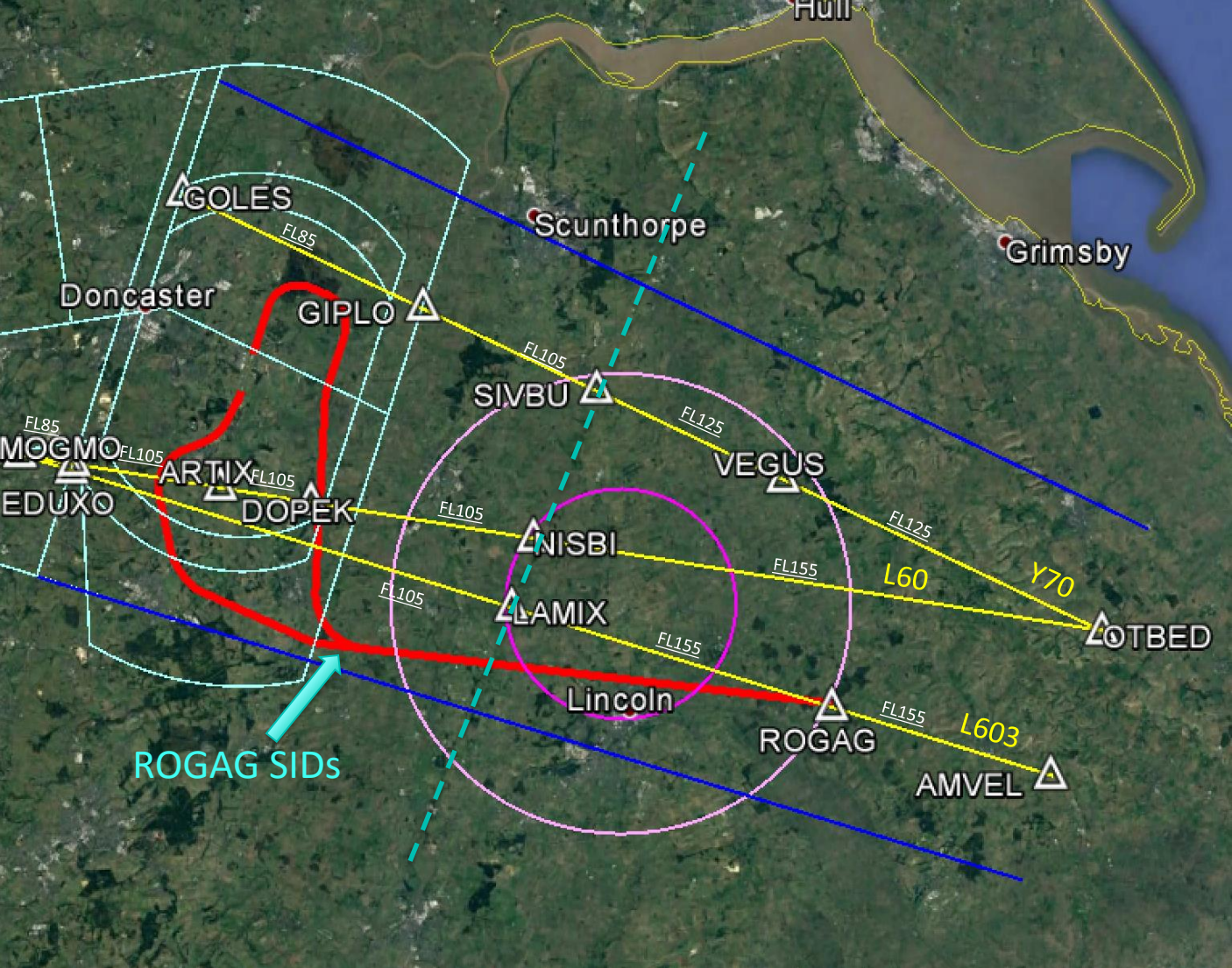
CTA-6 2000-FL105

CTA-3 2000-FL60





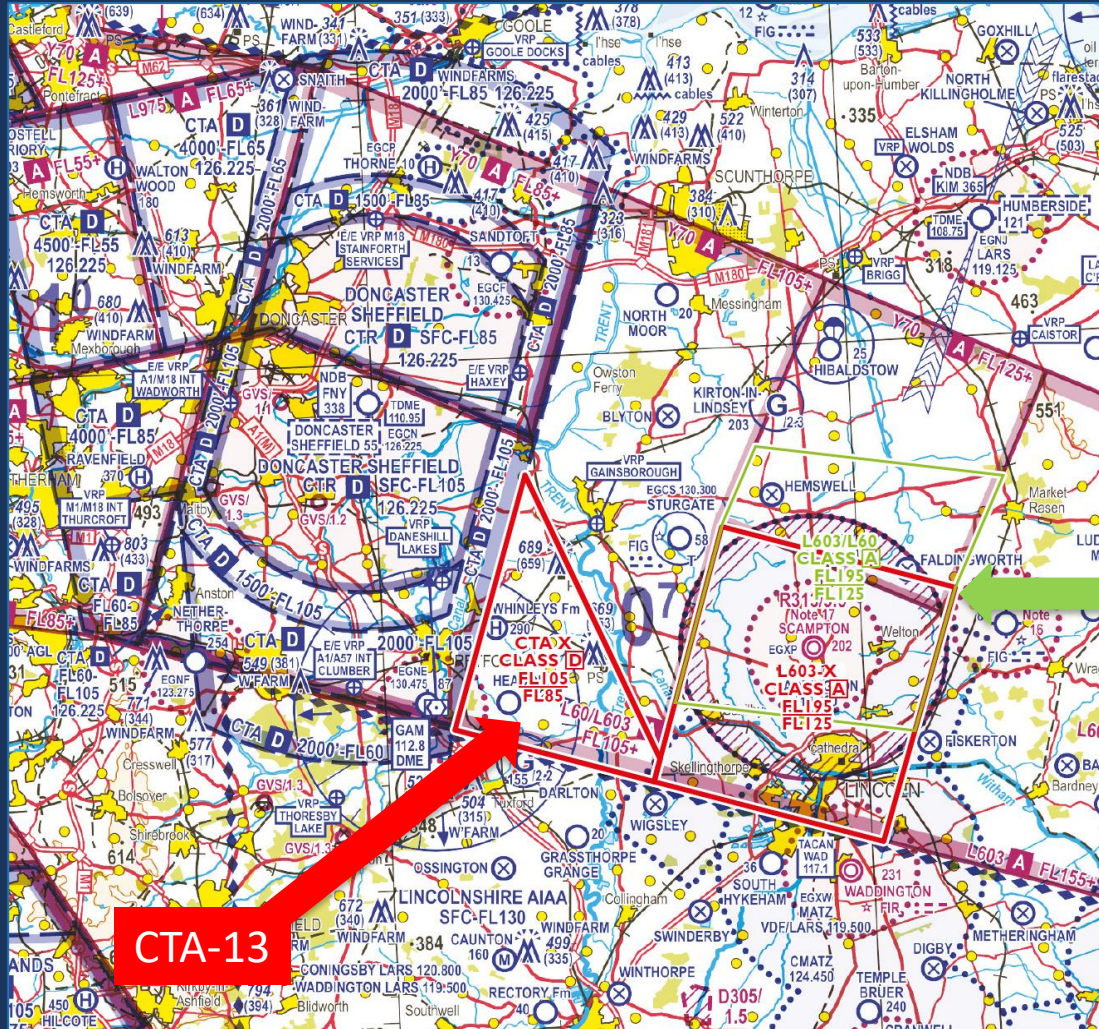
# PC Airspace



- KEY**
- ROGAG SIDs
  - ATS Routes
  - Existing DSA CTA/CTR
  - ATS Route level change
  - R313
  - R313 Buffer Zone



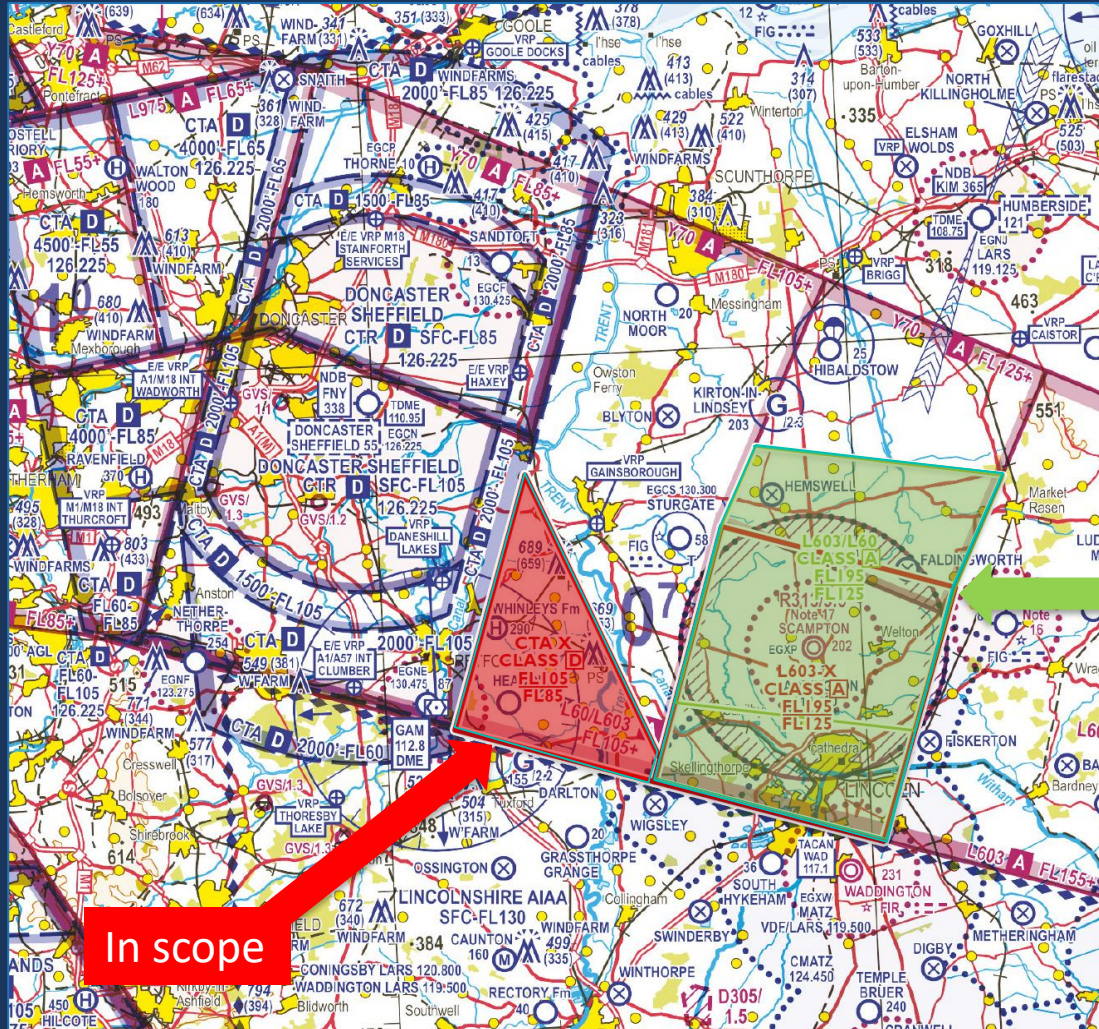
# The original Airspace Proposal



Portion of L603/L60 to be lowered



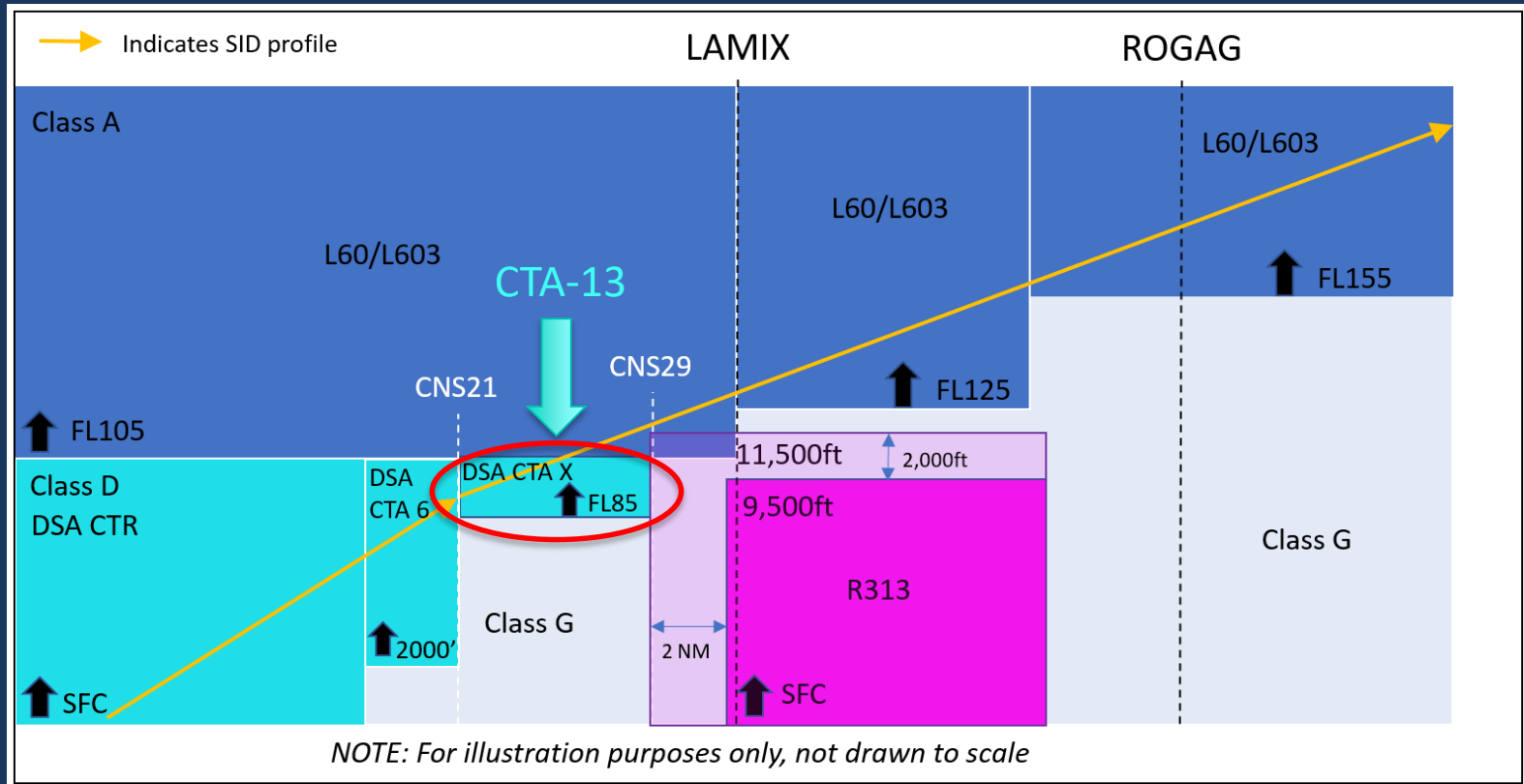
# The original Airspace Proposal



Outside scope

In scope

# The original Airspace Proposal – Cross Section



In scope

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# Options for CTA-13

- ▶ Option 1. Do Nothing, i.e. do not change the existing proposal of Class D airspace;
- ▶ Option 2. Change classification to Class E;
- ▶ Option 3. Change classification to Class E but add RMZ;
- ▶ Option 4. Change classification to Class E but add TMZ; (Preferred Option)
- ▶ Option 5. Change classification to Class E but add RMZ/TMZ;



# Hazards Identification - Example

	Hazard	Cause(s)	Consequence	Mitigations and Considerations
ATC Systems				
ATC Procedures				
GNSS SiS	Loss of GNSS Navigation Infrastructure (Signal in Space)	<ul style="list-style-type: none"> <li>• Unintentional RF interference.</li> <li>• RAIM Holes.</li> </ul>	<ul style="list-style-type: none"> <li>• Inability for one or more aircraft to perform horizontal position estimation resulting in failure to follow the SIDs.</li> <li>• ATC workload increase.</li> <li>• MAC (worst case scenario).</li> </ul>	<ul style="list-style-type: none"> <li>• Onboard receiver fitted with RAIM/FDE algorithms</li> <li>• SIDs designed according to PANS-OPS (safety protection areas).</li> <li>• Gross error checks and cross-reference navigation system for integrity and accuracy of lateral position database.</li> <li>• ATC services</li> <li>• Visual Flight Rules</li> </ul>
Airborne Systems				
Flight Crew				
Airspace and other Aircraft				

# Hazards Identification – Operations in CTA-13

	Hazard	Cause(s)	Consequence	Mitigations and Considerations
ATC Systems				
ATC Procedures				
GNSS SiS				
Airborne Systems				
Flight Crew				
Airspace and other Aircraft				



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# Next Steps

- ▶ Write-up and issue the HAZID Report;
- ▶ ATCSL to update Safety Assessment;
- ▶ NERL and ATCSL to develop/amend Operational Procedures and Letter of Agreement;
- ▶ Revision of the Airspace Change Proposal Submission;
- ▶ Earliest planned implementation via AIRAC 13/2019.

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Thank you