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UK Civil Aviation Authority

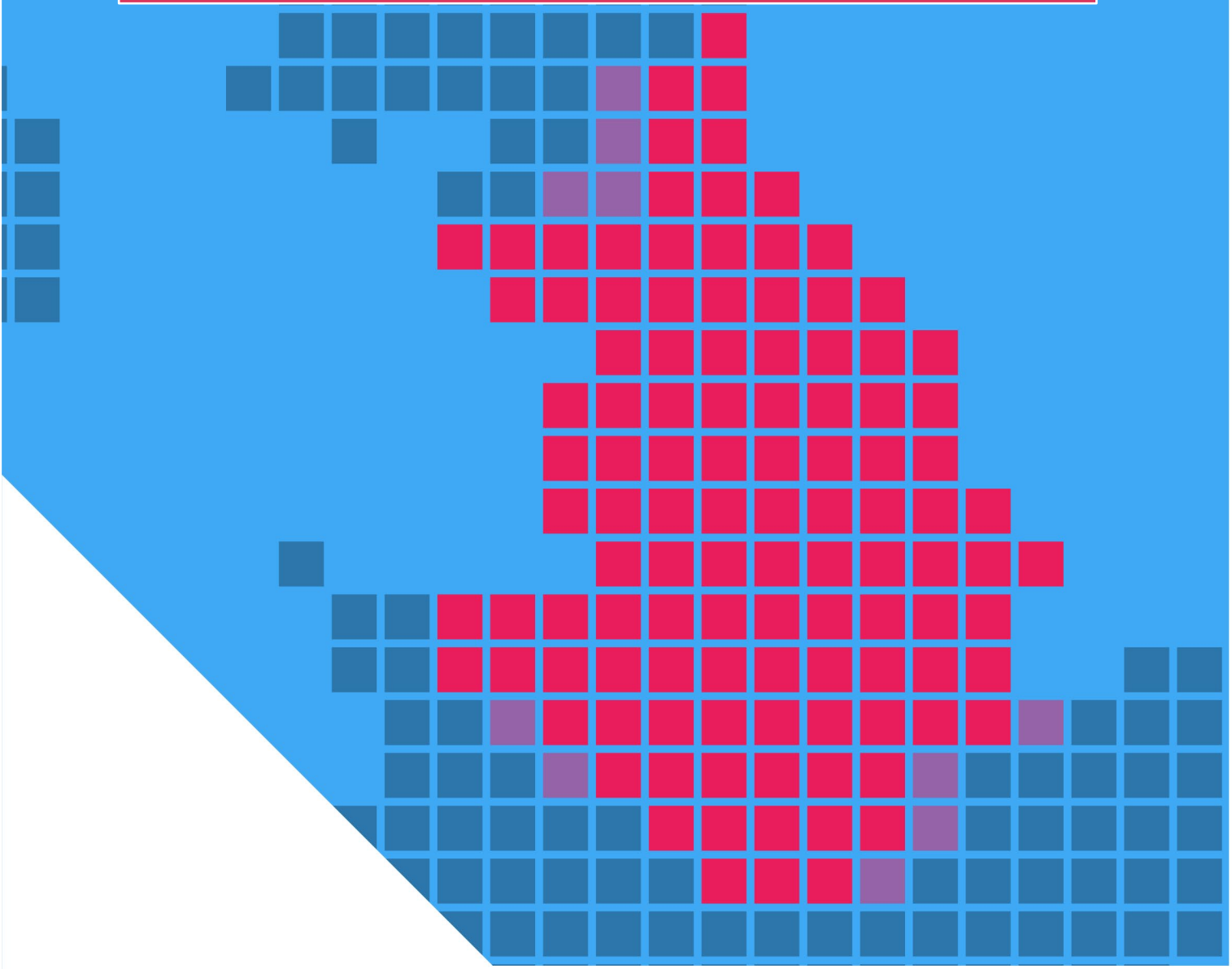
Airspace Classification Review

AMEND

MANCHESTER LOW LEVEL ROUTE

Amend Submission – CAP 3027

Amend ID: CRA-1991-2023-002



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Civil Aviation Authority
Aviation House
Beehive Ring Road
Crawley
West Sussex
RH6 0YR

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Enquiries regarding the content of this publication should be addressed to: airspace.classification@caa.co.uk

The latest version of this document is available in electronic format at: www.caa.co.uk/CAP3027

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Chapter 1

Introduction

1.1 This change proposal is sponsored by the UK Civil Aviation Authority (CAA) as part of the CAP1991 process for the CAA to review the classification of airspace. Despite the change sponsorship being that of the CAA, the safety risk owners in the Controlled Airspace (CAS) affected by this change are Manchester Airport and their Air Navigation Service Provider (ANSP) NATS, and Liverpool Airport and their ANSP Air Traffic Control Services Liverpool (ATCSL). Their safety assessments for their respective airspace volumes will be included with this submission.

1.2 This document details the amendment proposed for the airspace currently known as the Manchester Low Level Route (MLLR) which sits within the class D Control Zone (CTR) associated with Manchester Airport. The change is proposed by the Airspace Classification Team within the UK Civil Aviation Authority. It will detail the processes and timeline in the creation of this proposed amendment as well as the safety assessment and assurance work undertaken to support its introduction.

1.3 This CAP 1991 Amend proposal will remove all current MLLR procedures and the MLLR will cease to exist. Access to this airspace for GA traffic will be replace with the alternative arrangements detailed within this document.

Chapter 2

Current airspace description

2.1 The current airspace known as the Manchester Low Level Route (MLLR) is a 4nm wide (at its narrowest point) corridor aligned on a North to South axis between Manchester and Liverpool airports. The MLLR has a maximum altitude of 1300ft AMSL[1] and provides a route through the Manchester Class D CTR for aircraft wishing to transit the airspace in-between the aforementioned airports, without having to route around their adjacent CTRs, either to the east over high ground or to the west over water.

2.2 The current shape and location of the MLLR, highlighted in red, is displayed below in Figure 1.

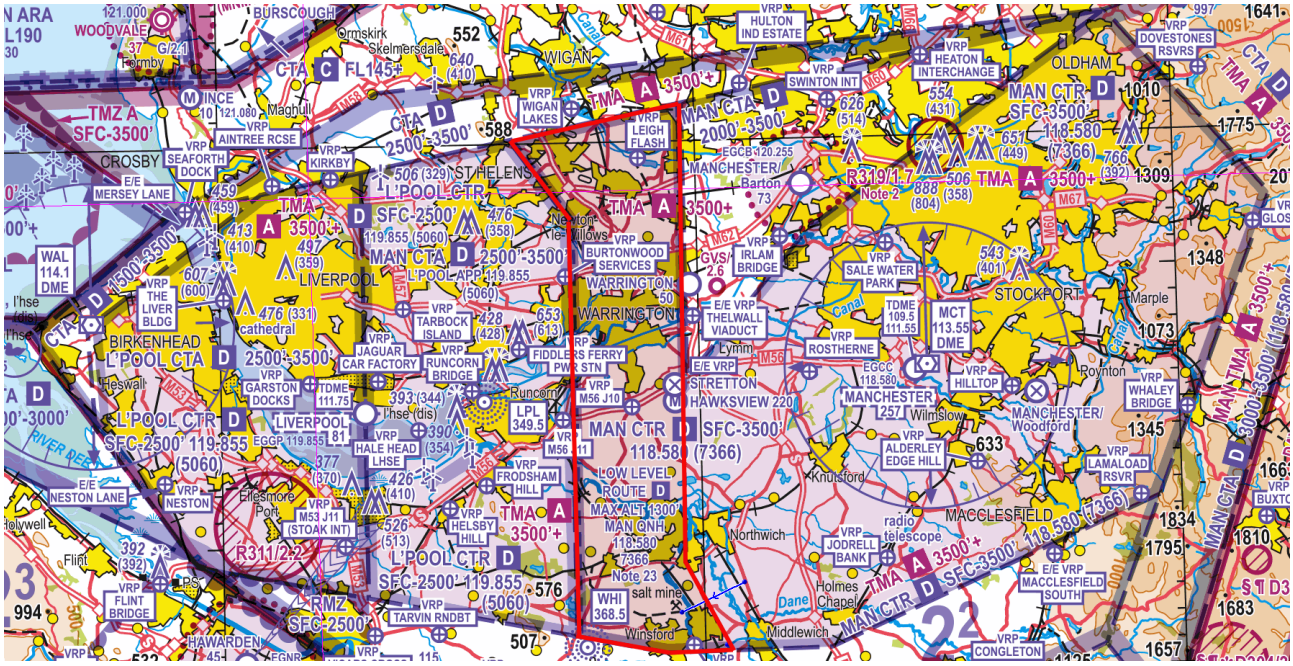

Figure 1 The MLLR as displayed on the 1:500k VFR chart (Edition 47(2024))

2.3 Analysis using the CAA Airspace Analyser Tool (AAT) shows annual usage averaging at just under 5,350 flights per year over the last 3 years, 2023 itself featuring 5635 flights.

2.4 The MLLR is that part of Manchester CTR bounded by the following coordinates: 533124N 0023102W - 531411N 0023105W - 531050N 0022814W - 531050N 0023224W - 531130N 0023744W - 532708N 0023744W - 533011N 0024123W - 533124N 0023102W.

[1] AMSL - Above Mean Sea Level

2.5 The airspace controlling authority (ACA) for the MLLR is Manchester Airport and their ANSP, NATS. ATCSL operate the airspace to the west of the MLLR and also, through the delegation of air traffic services (ATS), a significant portion (circa 75%) of the airspace which sits immediately above it.

2.6 The Low-Level Route sits within Class D airspace. However, unlike the rest of UK Class D, no verbal clearance is required to operate within it, providing, in accordance with ORS4 No.1596, that a set of conditions prescribed in the UK AIP, PT3 EGCC AD 2.22 section 7 are adhered to. These are replicated here:

a. Aircraft operating VFR in accordance with the procedures notified for the operation of the Manchester Low Level Route are exempt from the provisions of an air traffic control service (ORS4 No.1489). As such, within the Manchester Low Level Route, aircraft may be flown by day or night, without individual ATC clearance, subject to the aircraft being flown;

i. in accordance with SERA.5005 (VFR);
ii. at a speed which according to its airspeed indicator is 140 KT or less, to give adequate opportunity to observe other aircraft and any obstacles in time to avoid a collision;
iii. in a flight visibility of at least 5 KM;
iv. in accordance with the radiocommunications and secondary surveillance radar transponder operation procedures applicable to the Manchester Low Level Route.

b. Suitably equipped aircraft are to be flown in the Manchester Low Level Route with SSR code 7366 selected (unless displaying a special purpose code or code allocated/agreed by Manchester ATC) and listening out on Manchester Radar frequency 118.580 MHz, to enable the use of an alerting service if necessary, or to facilitate the early resolution of an airspace infringement.

c. Pilots of non-transponder equipped aircraft operating within the Manchester Low Level Route are to monitor Manchester Radar, frequency 118.580 MHz to enable the use of an alerting service if necessary, or to facilitate the early resolution of an airspace infringement.

2.7 The airspace of the MLLR is therefore currently an anomaly to all other class D airspace in the UK, whereby these conditions constitute a clearance, and permit entry in lieu of a verbal clearance.

Chapter 3

Reason for change

3.1 The UK CAA, through publication of ORS4 No.1545 (published 10th May 2022 and now superseded by ORS4 No.1596 providing an extended expiry date to facilitate this CAP1991 Amend work) made the following declaration requiring the airspace be reviewed and considered for an appropriate change of airspace classification:

"An exemption is not a permanent solution to enable the operation of this volume of airspace. As part of its work to review the classification of airspace, the CAA intends to consider whether reclassifying the volume of airspace containing the LLR as class G would be appropriate. Any such change will be subject to the CAA's procedure to review the classification of airspace as set out in CAP 1991, including a final regulatory decision on the proposal by the Airspace Regulation Team within the CAA. If that process does not result in the airspace being reclassified, another solution will be considered."

3.2 This led to a thorough and comprehensive review of the MLLR airspace taking place, the result of which was published by the CAA in July 2023 (CAP 2564). Within this review it was identified that whilst the airspace was in no way deemed unsafe, a number of risks were present and that improvements could potentially be made to lower risk in the area. These risks were namely Mid-Air Collision (MAC), the ability to land safely in an emergency and an increased risk to air traffic control operations due to Airspace Infringements (AI).

3.3 At the time of this review taking place, ORS4 No.1545 was in effect and permitted the operation of the MLLR by way of exemption (detailed in paragraph 2.6) which was due to expire on 31st May 2024. At this point the airspace would have reverted to standard Class D airspace operation, requiring pilots of all aircraft to obtain a verbal clearance from ATC prior to entering the airspace.

3.4 ORS4 No.1545 has now been superseded through the issuance of ORS4 No.1596, which extends the expiry date of current procedures until 31st May 2025. Subject to successful approval of this proposal, it is the intention of the CAA to withdraw this ORS4 in conjunction with its implementation.

3.5 The approaching expiry of the ORS4 exemptions means that this airspace cannot continue to operate as it does today and will ultimately undergo a change regardless of this proposal.

3.6 The workloads of ATC units adjacent to the existing MLLR are already at substantial levels and the expiry of the ORS4 could mean these units handling 5500 or more requests to cross Class D airspace (MLLR usage in 2023 was circa 5,600 flights). These unplanned flight requests would raise controller workload significantly which could potentially become unmanageable. This

increases the risk within the ATC operation to unacceptable levels. It is therefore highly likely that ATC units will have to refuse many, if not all, of these requests due to high controller workload.

3.7 Without the provision of ATC, transiting between, or through, Manchester and Liverpool airspace is impossible for GA aircraft. This then requires alternate routes to be taken around the Class D CTRs of Manchester and Liverpool Airports. These routes would overfly either high ground or open water, increasing risk to these aircraft as well as likely have an environmental impact on National Parks to the east or wetland nature reserves to the west.

3.8 It is the intention of this amend proposal to avoid the increased risk associated with routeing around the CTR volumes, lower the existing identified risks from paragraph 3.2 and simplify the airspace in the region, whilst maintaining current access levels for airspace users.

Chapter 4

Aims of the Proposal

4.1 To adequately address the issues and risks identified, we created our design using the following design objectives. These objectives serve as the foundation of our approach, helping to shape our proposed solutions for the MLLR. They ensure that our proposal not only addresses the identified intentions of paragraph 3.8, but also gets the most out of this opportunity for improvement.

Objective A – Maintain a high standard of safety

4.2 In the case of the MLLR we are looking to minimise MAC risk and increase the options for a pilot to land safely in an emergency, should they be required to do so, thus reducing the risk associated with an emergency landing.

4.3 In addition to this, we also want to facilitate a safe, simple crossing solution for pilots to operate between the CTR controlled airspace volumes of both Manchester and Liverpool airports. Without this solution it would be necessary for pilots to fly either over high ground of The Pennines to the east or over the Irish Sea to the west, both of which increase risk to GA traffic.

4.4 To maintain the safety of traffic operating within the surrounding CAS, all elements of our proposal have been discussed at length with, and achieved the support of, the ATC units at both Manchester and Liverpool Airports.

Objective B – Simplify airspace in the region

4.5 As stated above, the proposed solution aims to offer a safe and simple solution for aircraft wishing to transit the region without having to fly over high ground to the east or over water to the west. For over 50 years there has been a way to do this without speaking to ATC and we are aiming to maintain this simplicity for pilots, whilst adhering to standard UK regulations on the provision of ATS in differing classifications of airspace. This proposal will remove the requirement for an ORS4 exemption in order to operate the airspace.

Objective C – Reduce airspace infringements

4.6 Airspace Infringements are an enabler to a MAC and a key focus area of the CAA. Reducing infringements will lower risk within the ATC operation in the surrounding airspace.

4.7 As stated in the CAA's MLLR report published in July 2023, there has been an increase in the number of airspace infringements within the Manchester CTR since 2021. According to our data, non-adherence to the current ruleset has

been identified as a causal factor in over two thirds (31 from a total of 45) of Manchester CTR infringements during 2023.

4.8 The design solution will incorporate both internal and external experience and guidance to create a design which minimises the likelihood of an infringement occurring.

4.9 To achieve this objective we will also take into account guidance within the European Action Plan for Airspace Infringement Risk Reduction.

Objective D – Meet the objectives of the CAA's Airspace Modernisation Strategy (AMS)

4.10 The AMS is at the forefront of the CAA's vision for UK airspace between now and 2040. One of the core values within the strategy is that all UK airspace is a state asset and as such, access to it should be fair and reflect the needs of all airspace users on an equitable[2] basis.

4.11 Currently the airspace known as the MLLR is accessible to pilots through the application of an exemption to standard Class D airspace rules, which negates the requirement to obtain a verbal ATC clearance to enter controlled airspace prior to entering.

4.12 This exemption will expire, and it is not permissible or legally justified to extend the exemption ad infinitum.

4.13 This design objective will be achieved by proposing a solution which will maintain current levels of access to this airspace i.e. maintain access without the requirement to obtain a clearance from an ATC unit.

Objective E – Adhere to the Air Navigation Directions

4.14 Currently the MLLR sits within the Class D CTR of Manchester airport. CAA Policy for the Classification of UK Airspace section 5.1 (e)(iv) states, in relation to Class D airspace:

"Within the UK FIRs, CTRs and CTAs in the vicinity of those aerodromes where an ATC service is provided to aerodrome traffic are normally notified as Class D airspace, except where the design principles identified by the airspace change sponsor identify the need for a more restrictive classification".

4.15 Within the MLLR no service is provided to aerodrome (Manchester Airport for whom the CTR exists) traffic and therefore its designation as Class D airspace is not aligned with this policy. The CAA, under section 3 of the Air Navigation Directions 2023 (AND 2023), must ensure classification of airspace is in line with published policy and seek to ensure that the amount of controlled airspace is the

[2] *Please note, the CAA understands 'equitable' to mean that needs are fairly accounted for, not that each user has the same and equal amount of airspace and/or access*

minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users is reflected on an equitable basis.

4.16 Therefore, this proposal will adhere to both the AND 2023 and the CAA's Policy for the Classification of UK Airspace. This proposal will ensure that the airspace classification accurately reflects the types of aircraft and flights within it, promoting safety and efficiency.

Overarching Principles

4.17 This solution also aims to have a minimal effect on today's ATC operation in the area by allowing a continuation of current day arrival and departure procedures into and out of both Manchester and Liverpool Airports.

4.18 CAP1991 prevents this process from affecting ongoing ACP work and therefore this work will not influence the future ACP designs of the ongoing FASI-North work associated with the two aforementioned airports.

Chapter 5

Proposed airspace description

5.1 The airspace volume of today's MLLR is 4NM wide and extends from surface level to an upper limit of 1300ft AMSL. It is proposed that the upper limit will be raised by 200ft, to 1500ft AMSL and, in the area south of the M56 motorway, will be widened to the east by 0.65NM creating a total width of 4.65NM. The new airspace boundaries proposed are illustrated in red in Figure 2 below. The new points defining the adjusted, wider, eastern boundary are highlighted by green circles at the northern and southern extremities of the extension.

Figure 2 Proposed design of the lateral confines

5.2 This volume, highlighted in red and surface to 1500ft AMSL, will be re-classified as Class G airspace and a Restricted Area (RA) applied to the entire volume. The RA will align with standard UK policy and adopt the background classification of the airspace within which it is situated, so will remain Class G airspace.

5.3 Flight within the RA will be permitted by any aircraft operating in accordance with the following criteria:

- Maximum indicated airspeed (IAS) of 140kts
- Minimum in flight visibility of 5km or greater
- A Maximum Certified Take Off Mass (MCTOM) of 40,000kg (equivalent to “small” wake turbulence category)
- Operating upon either the Manchester or Liverpool QNH

5.4 Class G airspace does not have a controlling authority; however, Manchester Airport ATC will be designated within the AIP as the Special Use Airspace Authority (in line with UK Policy For The Establishment And Operation Of Special Use Airspace[3]) giving them the authority to issue exemptions to the restrictions should they be required.

5.5 This will be handled through applications to NATS’ Non-Standard Flight (NSF) application procedure which is available online.

[3] Policy for the Establishment and Operation of Special Use Airspace

Chapter 6

Analysis of options

6.1 Stakeholder involvement has been crucial to the development of a design that both achieves the objectives listed in Chapter 4 of this document as well as the safety requirements of adjacent ACA's. We have discussed numerous options for potential solution elements with multiple stakeholders and by doing so have been able to take into consideration both internal and external factors affecting their suitability.

6.2 Within this process several solution elements were considered and discounted following their evaluation. These options, as well as the reasons they were ultimately deemed unsuitable for inclusion, were:

Air-to-Air Frequency

6.3 As part of the CAP2564 report into the MLLR an air-to-air frequency was examined and ruled out as a tool to lower risk. As part of this proposal the idea was again investigated and the decision to not include it in a future proposal was confirmed for the following reasons:

- A discrete frequency for MLLR users would not fit the airspace simplification goals of the Airspace Modernisation Strategy (AMS). It may even complicate the situation by adding yet another frequency which airspace users may choose from use whilst operating within the future MLLR solution.
- Mandating its use would complicate the operation of the airspace with no way to confirm users were on frequency other than to require a listening out squawk be displayed on transponders. As per today's operation, this could result in multiple airspace infringements due to incorrect squawk selection. This would not adhere to our design objective of decreasing the risk of airspace infringements or simplifying access.
- Future solutions such as electronic conspicuity will provide a better long-term solution to providing airspace users with increased awareness of each other. We encourage ACAs to consider the benefits provided by future technological advancements and maturity when considering future ACP work in this area.
- Aircraft operating with only one radio would be unable to monitor local airfield frequencies to ensure correct atmospheric pressure setting (QNH) selection or improve situational awareness as they approach aerodromes.

- Were an airspace infringement to occur there would be no way for ATC to contact aircraft on a separate air-to-air frequency. The recommended use of Frequency Monitoring Codes (FMCs) gives ATC the ability to contact an infringing aircraft and issue control instructions to prevent further incursion and separate conflicting traffic.

Further widening of the airspace in the southeast corner

6.4 Extensive consideration was given to widening the MLLR in the southeast corner to align with the visual feature of a railway line running between Northwich and Middlewich. The purpose of which was to align the CAS boundary with a ground feature making it easy for pilots to remain west of this and therefore also remain outside CAS.

6.5 We engaged with an array of stakeholders regarding this proposal which extended the width of the southeastern corner by approximately 1.25NM.

6.6 ATC at Liverpool Airport and NATS, providers of ATC at Manchester Airport, evaluated the proposal through their individual risk assessment processes and supported the change as acceptably safe.

6.7 However, following engagement with Manchester Airport Group (MAG) it was identified that this extension could have an impact on its ongoing FASI ACP[4] and affect the decision-making process within that work. We are, therefore, not able to progress with this part of the widening as our CAP1991 process specifically prevents us from impacting or impeding any ongoing ACP work.

6.8 The FASI work being undertaken by MAG does already include the design principle to minimise the amount of CAS to ensure the needs of other airspace users are considered. We expect MAG to evaluate and minimise controlled airspace to support the designed routes as it completes its design – something MAG has already committed to within previously submitted and published documents included in their CAP1616 ACP work.

6.9 The work we completed in considering and receiving ACA support for this widening to the southeast will be submitted by the CAA in response to MAG's public consultation on its proposals.

6.10 Any ACP submitted to the CAA from any sponsor will be judged against the principle that the CAA has a duty to ensure that the amount of controlled airspace is the minimum required to maintain a high standard of air safety and, subject to overriding national security or defence requirements, that the needs of all airspace users are reflected on an equitable basis.

[4] This Future Airspace Strategy Implementation Airspace Change Proposal aims to modernise the airspace and ATC operation in the UK. FASI (north) is a collaboration between Manchester, Liverpool and Leeds Bradford Airports to deconflict routes into and out of the airfields.

Widening the airspace to the west and southwest

6.11 A widening of airspace to the west was considered as part of this proposal, but after careful evaluation this was deemed unsafe against the operation of Liverpool ATC. Due to the proximity of the runway at Liverpool, aircraft arriving for runway 27 (in use for around 65-70% of the year) overfly the existing MLLR at 2000ft. The proposed 1500ft base of controlled airspace in our design provides the minimum safe containment prescribed in the UK policy for the design of controlled airspace structures. Any further westbound extension would therefore remove the safe containment and prevent inbound aircraft from making a final descent to the runway at Liverpool. This containment principle also limits any vertical extension to a maximum of 1500ft AMSL.

6.12 Further extension was also sought in the southwestern corner of our proposed Class G area (the SE corner of the Liverpool CTR). However, due to existing ATC procedures between Liverpool and Hawarden airports containing a managed safety risk, the proposal of a further extension was deemed to increase this risk to an unacceptable level. Therefore, this extension was not included in our solution.

6.13 Following a suggestion received during our public engagement Liverpool were also approached regarding a potential widening of the airspace to the northwest (further north and away from the final approach path mentioned in paragraph 6.11). Unfortunately this was not possible due to the likelihood it would affect the decision making process in the FASI ACP work Liverpool Airport are undertaking.

6.14 We expect Liverpool Airport to evaluate and minimise controlled airspace to support the designed routes as it completes its FASI design.

Northerly and southerly traffic flow positioning

6.15 Due to the narrow constraints of the airspace this option was discounted for a number of reasons.

- It would not be possible to include safety buffers to opposite direction tracks, as well as the surrounding controlled airspace.
- The suggestion is not in line with the principal of Class G airspace and our objective to simplify airspace.
- It is not an effective mitigation against MAC risk considering traffic arriving and departing at Barton Aerodrome would cause many aircraft to “cross” a flow of traffic when entering or leaving this airspace.

A “split” airspace solution

6.16 We also considered a split future MLLR solution where a northern and southern half would have different access criteria. Standard Class G VFR minima would

have been required in the northern half - where the width available to GA aircraft was significantly greater, whilst an increased visibility minima, proposed later in this document as a restriction to enter a Restricted Area[5] (RA), would have been required in the southern half.

6.17 This proposal was rejected by stakeholders as it was deemed to increase risk, especially on the western boundary with Liverpool where arriving commercial traffic is closest to the MLLR.

6.18 Liverpool arrival traffic would have passed over the northern half of the solution where standard Class G (lower) visibility restrictions were in force and these restrictions were assessed by stakeholders to increase the risk of an airspace infringement due to the risk ground features could be harder to identify.

6.19 In addition to this, and also contained within our proposal as a key risk reducing element, is to raise the height of the future solution by 200ft. This would reduce the separation to 500ft between aircraft operating in the proposed future solution and those inside CAS arriving into Liverpool. Whilst in line with UK controlled airspace design policy, this was also considered in conjunction with the increased risk of an infringement with reduced visibility restrictions (paragraph 6.18). In addition to this, the arriving traffic also commences final descent after crossing this volume of airspace, further eroding separation. It was therefore agreed by stakeholders that an infringement occurring in this scenario could have a significant effect on ATC operations and reduce the time available to successfully resolve the conflict. This was deemed an unacceptable risk to air traffic.

6.20 It was therefore important that the design proposed must do its utmost to minimise airspace infringements. To achieve this objective, it was agreed that a visibility solution must be applied for the entirety of the airspace we intend to amend. This will maximise a pilot's ability to identify visual clues and references on the surface and allow them to navigate with increased accuracy and remain outside CAS.

Mandating a frequency (air to ground) or squawk for users

6.21 Once Class G airspace had been decided upon as the most appropriate classification of airspace, consideration was given to implementing a mandate within the airspace to monitor a specific radio frequency and/or display a particular squawk. This had some similar considerations to those of the air-to-air frequency already discussed and was ultimately discounted due to the following factors:

[5] restricted area refers to a segment of airspace designated by a governing aviation authority where flight operations are subject to restrictions

- Mandating a radio frequency would be difficult to monitor and enforce. Possible solutions could have been to:
    - Display a squawk that affirms a listening watch on frequency to observing ATC units. This would also require the agreement of an ATC unit to monitor uncontrolled airspace and increase already high existing workload. Failure to adhere to this process would constitute an illegal entry to a restricted area and could be a common occurrence due to pilot error / distraction / unfamiliarity with new rules. This would not adhere to our design objective of decreasing the risk of airspace infringements.
    - Aircraft would have to identify themselves to ATC through radio contact. Again, this would create an unacceptable increase to workload and radio transmissions for the nominated ATC unit.
- Mandating contact with a frequency is not aligned with the concept of uncontrolled airspace. Class G does not mandate this elsewhere in the UK.
- By mandating either, or both, of these conditions we would limit access to the airspace to only those aircraft suitably equipped. This would decrease accessibility from today's current solution, which does not adhere to our design objective requiring equitable access to be maintained or improved.

6.22 Following the engagement with stakeholders described in sections above, which led to the discounting of the above options, four options were agreed by all parties to be acceptable and achieve the design objectives of the proposal. These design elements are described in further detail and as to how they achieve the design objectives in the next section of this document.

Chapter 7

Airspace description requirements

7.1 Whilst traffic levels and patterns are unpredictable in Class G airspace, it is anticipated that this amendment will not change traffic demand for this airspace and the number of flights will remain similar to past and current usage. The current trend in GA hours flown per annum is a year-on-year decrease and this is expected to continue to decline. This may, over time, reduce the annual number of users. The amendment aims to recreate the access levels available to GA traffic in today's operation and therefore it is expected that today's traffic levels will remain.

7.2 After detailed analysis and collaboration with both Manchester and Liverpool Airports, we are proposing an amendment to the MLLR with four core elements. The proposed elements are:

- Convert that portion of the Manchester CTR known as the MLLR to class G airspace. This will also, by default, change that portion of the CTR sitting above the Class G volume from being defined as Class D CTR to now being defined as a Class D CTA (Manchester CTA 6).
- Make the maximum altitude available within the newly formed Class G airspace 1500ft AMSL.
- Widen the newly formed Class G airspace volume by 0.65NM in the area south of the M56 motorway. (Only necessary in this area as the lower limit of CAS to the east of the area north of the M56 already provides greater width)
- Implement a Restricted Area (RA) within the Class G airspace which permits access to any aircraft operating in accordance with all of the following criteria:
  - An in-flight visibility of 5km or greater
  - A maximum IAS of 140kts
  - A Maximum Certified Take Off Mass (MCTOM) of 40,000kg (equal to wake turbulence category Small) or less
  - Aircraft operating with reference to either the Manchester or Liverpool airport QNH

7.3 The defining co-ordinates of the proposed Class G airspace, and accompanying RA of the same dimensions, are:

533011N 0024123W –

533124N 0023102W –

532056N 0023103W –

532141N 0023000W –
531254N 0023000W –
531050N 0022814W –
531050N 0023224W –
531130N 0023744W –
532708N 0023744W –
533011N 0024123W

7.4 The formation of Manchester CTA 6 will also be defined by the same co-ordinates as above for its lateral boundaries, existing above the Class G RA with vertical limits extending from 1500ft AMSL to 3500ft AMSL. No further airspace changes will occur outside the boundary of the former CTR as the Class G RA, CTA 6 and the amended CTR boundary fully replicate the full former CTR boundary.

7.5 Each element of the proposed change is detailed further below, and for reference, the design objectives underpinning this proposal are repeated here:

- Objective A – Maintain a high standard of safety
- Objective B – Simplify airspace in the region
- Objective C – Reduce airspace infringements
- Objective D – Meet the objectives of the CAA's Airspace Modernisation Strategy (AMS)
- Objective E – Adhere to the Air Navigation Directions

Reclassification to Class G

7.6 We are proposing to change that portion of the Manchester CTR known as the MLLR to class G uncontrolled airspace. Consequently, pilots will maintain access to the airspace without requiring a verbal clearance from ATC.

7.7 As a standalone change however, this would remove some existing safety barriers, such as the current 140kts speed restriction, and therefore this is being proposed in conjunction with the implementation of a restricted area (detailed as the next design element in this document starting on paragraph 7.9).

7.8 By simplifying procedures and removing the need for alternatives to verbal clearances, we will make the airspace more accessible and straightforward for all users. Class G was decided upon as the most appropriate classification for this proposal due to it achieving the following design objectives (see paragraph 7.5):

- A – The Class G airspace proposed will permit flight between the Manchester and Liverpool CTRs and therefore give pilots a means to transit north/south without speaking to ATC or obtaining a clearance. It also provides a lower risk alternative to the increased risk of aircraft having to route over either the high ground of The Pennines to the east, or the Irish Sea to the west.
- B – Simplifies airspace through removing the need for adherence to a ruleset in lieu of a verbal clearance, removes the need for any clearance and, by utilising a standard 500ft-interval airspace vertical boundary of 1500ft. This boundary is also recommended as the minimum base of CAS within UK Policy for the Design of Controlled Airspace Structures Annex A, section A4.2 states:

  "The lower limit of a CTA shall not be less than 700 ft agl. However, wherever practicable and in order to permit VFR flights under the CTA to comply with SERA.5005(f), the lower limit of a CTA adjoining a CTR should be no lower than 1,500 ft AGL; the use of an expanded CTR to permit higher CTA base levels is preferable."
- C – It is not possible to infringe Class G airspace due to its uncontrolled nature. Currently over 50% of Manchester CTR infringements are from aircraft entering the MLLR without adherence to the conditions specified in UKAIP EGCC AD 2.22.7, in particular the requirement to squawk 7366. This will no longer be a requirement for entry and as such a decrease in the number of airspace infringements is expected as a result of this proposal. Frequency monitoring codes (FMC) will remain highly recommended when operating in the vicinity of an aerodrome which operates such a code. This message will be reinforced within the communication campaign promoting any airspace change as a result of this process.
- D – Meets AMS by providing equitable access to airspace between two major airfields' CTR Class D airspace volumes
- E – The reclassification of Class D airspace (which does not serve aerodrome traffic) to Class G is in line with the AND 2023 requirement for CAS to be kept to a minimum and also in accordance with Policy for the Classification of UK Airspace

Implementation of a Restricted Area

7.9 To maximise the safety of our amendments to the MLLR, we are proposing the introduction of a Restricted Area (RA). Within this RA, flight will be permitted to any aircraft meeting the published restrictions (speed, visibility, QNH and MCTOM). These restrictions are being implemented where we, in conjunction with stakeholder engagement, believe it is fully justified as necessary to maintain or lower risk. The restrictions proposed are:

- A maximum speed limit of 140kts IAS to be carried over from today's safety-increasing ruleset. This will provide pilots with increased time (over standard Class G speed restriction of 250kts) to employ see-and-avoid techniques consequently lowering MAC risk. This will also help pilots identify ground features in good time, increasing situational awareness and helping to avoid a CAS infringement.
- A minimum in-flight visibility of 5km is also to be carried over from today's ruleset. This is an increased requirement over that of standard Class G VFR minima, however, by keeping this restriction we can maintain the reduction to MAC risk it currently provides today. This is achieved by increasing (over standard Class G) the time available to pilots to visually identify, and avoid, other aircraft. Greater visibility minima also allow for more accurate visual navigation, reducing the chances of airspace infringements occurring in the neighbouring CAS of both Manchester and Liverpool Airports. Airspace infringements are a key area of concern for these stakeholders and as such this proposal aims to assist in reducing them as much as possible.
- A mandate to use either Liverpool or Manchester Airport's QNH for flights beneath the new Control Area 6 (CTA 6). This will ensure consistency of altitude readings to an acceptable (as assessed by Liverpool and Manchester) level, thus lowering the risk of aircraft reducing vertical separation against aircraft inside CAS. This could occur if significantly differing pressure settings are used.
- A restriction permitting only aircraft with a MCTOM of less than 40,000kg (equivalent to "Small" UK wake turbulence category). Currently there is no restriction on weight or wake category for aircraft to operate within the MLLR, however by applying this we can officially prevent larger aircraft, however unlikely, from operating in the airspace volumes proposed within this amendment. This reduces the risk of a wake turbulence encounter occurring where limited recovery is available due to low altitude. Pilots should be aware of wake turbulence at all times and as per all Class G airspace in the UK, pilots will remain responsible for their own risk.

7.10 ATC will monitor compliance with the restrictions and report any observed breaches. Breaches of the restrictions are expected to be dealt with in accordance with the SARG Enforcement Policy (CAP1074) which is founded on a Just Culture process where learning is the driving principle.

7.11 It is proposed, and approved, by both CAA and DfT Legal teams, that the RA would not have any specific airspace management procedures associated with it and remain exempt from the oversight activities detailed in CAP 740. This ensures it remains aligned with our design principal of simplification, and remains consistent with the method employed for the management of other speed and visibility restrictions and rules applied across the UK FIR, e.g. SERA.5001 140kts

speed restriction in Class G and SERA.6001 for the 250kts speed restriction below FL100.

7.12 Police, Air-Ambulance, Search and Rescue, and the King's Helicopter Flight will be exempt from visibility restrictions. Due to the nature of their task, it is essential that the crews of these aircraft have access to this airspace at all times, and therefore visibility requirements shall not be enforced should the aircraft require to operate outside of the criteria specified.

7.13 These measures are aimed at making the airspace safer and more predictable for all users and align with the following design objectives:

- A – All the proposed restrictions ensure that the risk to the safety of aircraft flying within the RA is minimised – increased time for see-and-avoid, appropriate QNH and minimising wake turbulence encounters from other RA users.
- B – Introduction of this RA keeps access simple; access is prevented to aircraft which stakeholder feedback suggested are too big or too fast for this area, and there remains no requirement to speak to ATC (although FMCs are available in this area, and their use is highly recommended). In addition, almost all flights (except any flights by aircraft over 40,000kg of which our research and evidence suggests there were zero in 2023) abiding by the ruleset for current MLLR access will, by default, meet the criteria of the restrictions applied to the new airspace design.
- C – The restrictions to be put in place will help reduce infringements of CAS. By providing increased visibility minima, the ability of pilots to navigate using visual reference points and maintain an accurate position to track through the airspace will be improved over standard Class G operations. In addition to this benefit, the biggest reduction in airspace infringements is expected to come from aircraft no longer infringing CAS by displaying an incorrect transponder code. Use of FMCs remains encouraged for the safety benefit of an ATC unit being able to establish prompt contact with pilots if required.

7.14 For the Restricted Area to be implemented as part of this amend, it must be underpinned by an associated statutory instrument (SI), giving legal status to the airspace. The power to approve RAs and restrict flying rests with the Secretary of State for Transport and we have engaged with the Department for Transport (DfT) throughout this process. A draft of the SI (included in Appendix K) which sets out the specific restrictions has been provisionally approved by DfT who are content that it is a feasible and legitimate option under Article 239(1) of the Air Navigation Order. Once a decision has been made by Airspace Regulation on whether to implement the changes set out in this submission, DfT are able to publish the SI in advance of it coming into force, with the implementation date of the SI aligned with AIRAC 01/25.

Raising the altitude available to 1500ft

7.15 It is proposed that the Class G airspace introduced will be from surface level to 1500ft AMSL, thereby raising the airspace available to transit the area by 200ft over today's operation. This will be achieved by reclassifying the portion of Class D CTR defined by the co-ordinates detailed earlier in this document into class G airspace. That portion of the CTR which remains above the class G will therefore remain Class D but become a CTA (Manchester CTA 6) with a lower limit of 1500ft. This change achieves the following design objectives:

- A – Risk is lowered by providing more airspace for GA, thereby reducing the risk of MAC. The added altitude also offers pilots a greater safety margin in emergencies, allowing more options for a safe landing.
- B – This change in altitude also aligns with UK airspace policies, particularly the policy for the design of CAS structures, ensuring a safe vertical separation between controlled and uncontrolled airspace. By setting the lower limit of controlled airspace at 1500 feet, it adheres to guidelines which support safer VFR flight below controlled zones, while maintaining the required 500-foot vertical clearance from any instrument flight procedures (IFP) within the controlled airspace above. This 500ft provision is standard throughout UK airspace and adhering to this simplifies airspace.
- C – Vertical infringements may be reduced by providing 200ft more vertical airspace in which aircraft can fly to keep a safe distance from both ground obstacles and controlled airspace boundaries
- D – The extra altitude provides extra airspace for GA aircraft to operate within. In doing so this considers, and provides, a means of equitable access to airspace in the region for all airspace users.
- E – This proposal, by reclassifying Class D airspace into Class G airspace, ensures CAS is kept to the minimum levels necessary for a safe provision of ATC.

Increasing the width of the airspace

7.16 We propose to widen the airspace available to transit between the CAS of this area to reduce MAC risk and improve options for emergency landings. This change will complement the raising of altitude available and provide more space in a busy and narrow volume of airspace. A wider route could also allow pilots to avoid overflying some populated areas, offering safer options for emergency landings in less urbanised areas.

7.17 Any modifications will carefully avoid interfering with existing flight paths, including the Instrument Landing System (ILS) approaches to runways at Liverpool Airport and Manchester Airport, and will maintain the necessary 500ft

or greater vertical separation from flightpaths of aircraft operating inside CAS, as per UK airspace design policy.

7.18 The new boundary being proposed has been chosen collaboratively by the CAA and key stakeholders, and in accordance with guidelines published in the European Action Plan for Airspace Infringement Risk Reduction. The action plan recommends the design of airspace boundaries follow land-based, easily identifiable reference points. The new Class G airspace boundary proposed is 0.65NM wider than the MLLR as shown in green in the images below.

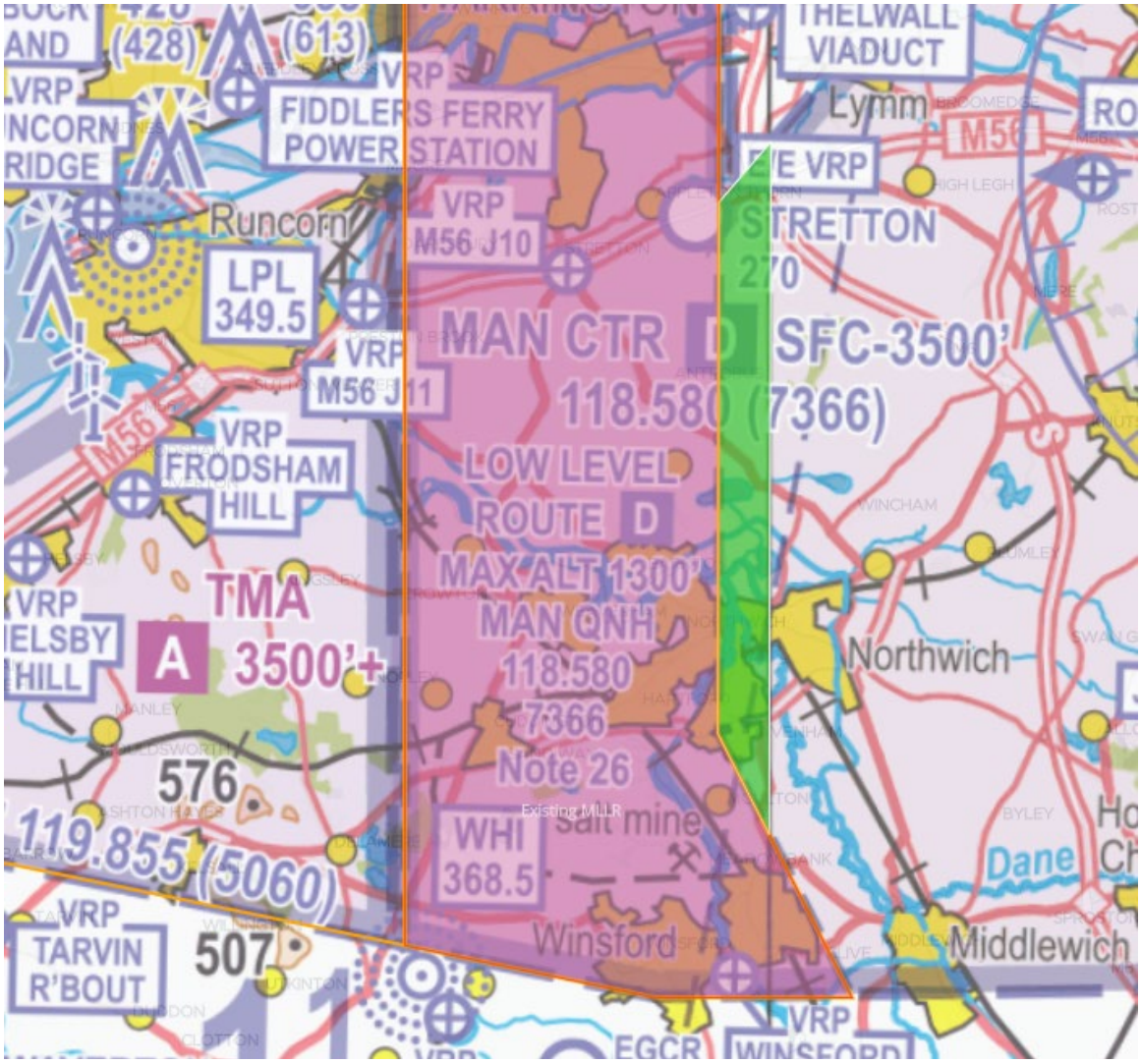

Figure 3 Visual depiction in green shading of extended areas of Class G airspace on VFR chart

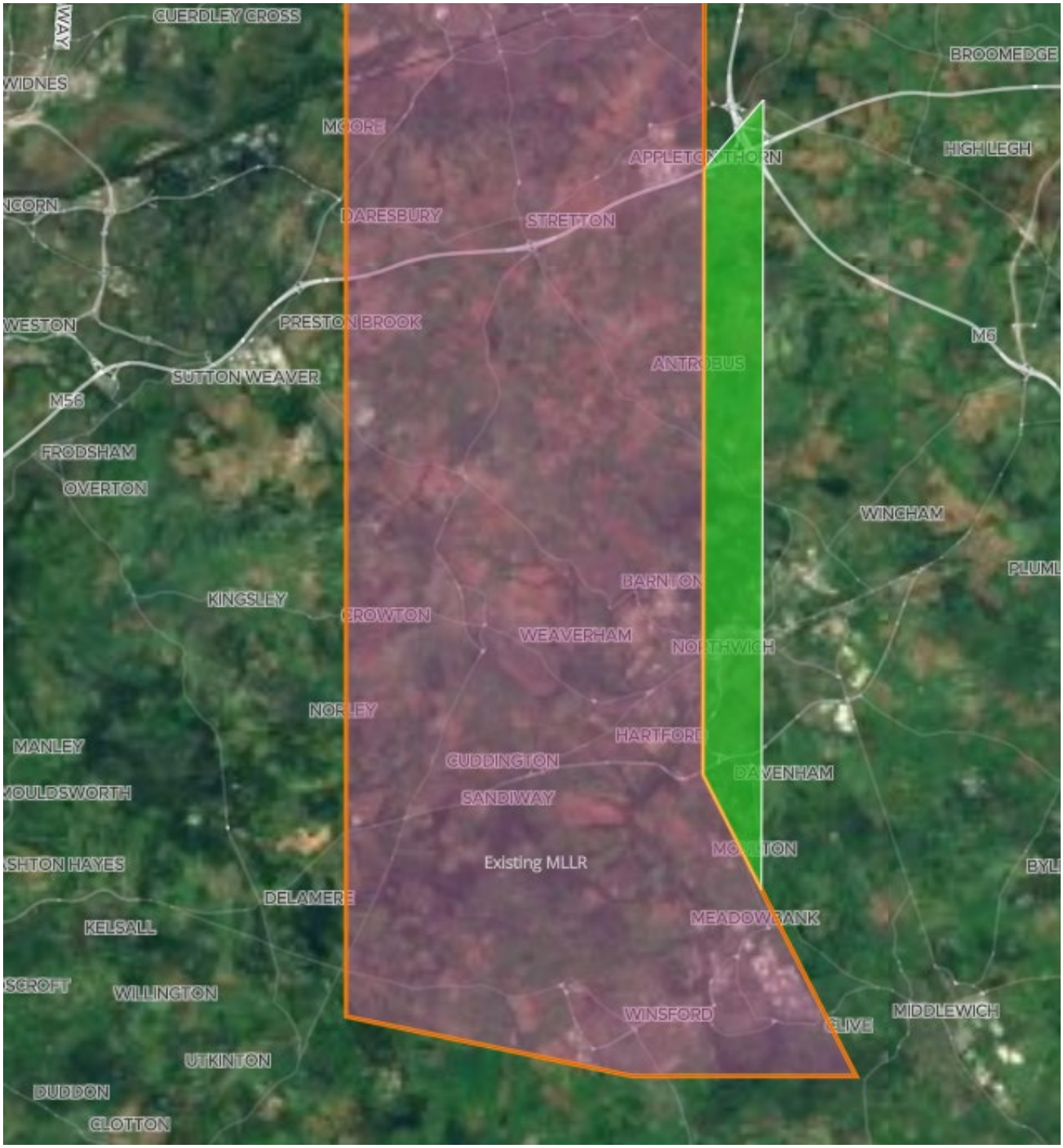

Figure 4 Additional Class G airspace shown in green overlaid on satellite image map

7.19 Our proposal aligns the new north-south boundary at the east of the airspace with multiple ground reference points, providing clear reference points to increase a pilot's situational awareness, as well as resilience against GPS jamming, spoofing or device failure. The features aligned with are all visible on VFR charts (displayed above in Figure 3) and are:

- Thelwall viaduct – The viaduct is beyond the actual boundary to the north but is in line with the proposed new eastern edge and easily visible to airborne pilots.
- A large motorway intersection of the M6 and M56 at the northern end of the boundary.
- Budworth Mere – this body of water is in the central area of the newly defined boundary.
- A railway T-junction in Northwich in the southern area of the boundary.

7.20 In addition to these ground reference points the new boundary is also in alignment with the line of longitude 02’30’’W. This makes it easy for pilots using a GPS device to remain outside CAS by remaining west of 02’30”W. Additionally, this line of latitude is itself clearly displayed on VFR charts.

7.21 The widening of the former MLLR achieves the following design objectives:

- A – Risk is lowered by providing more airspace for GA flights. This reduces congestion as well as providing a wider area for pilots to land safely in an emergency that was previously unreachable due to the lateral constraints of the MLLR.
- B – Simplifying airspace by aligning with easily recognisable ground features and a displayed line of longitude
- C – Alignment with ground features and a line of longitude is expected to reduce the chances of a lateral infringement by providing pilots with easy to spot visual clues to increase their situational awareness. This will make it easier for pilots to identify, and avoid, the CAS boundary.
- D – Increasing the width of this volume of airspace aligns with our objective of maintaining or improving GA access.
- E – By increasing the amount of Class G airspace available and reducing the amount of Class D airspace, CAS will be kept to a minimum.

Chapter 8

Engagement

8.1 A full report into the engagement strategy and activities of this proposal, including the responses to our public engagement work and our response in return is included in Appendix A.

8.2 From the inception of the design process for this amendment we have employed our engagement strategy (included as Appendix B) to ensure that stakeholder input was thoroughly considered and integrated into the final proposal. Our strategy employed a tiered approach, categorising stakeholders based on their likely level of impact and interest, and included a wide range of activities, from targeted meetings with key stakeholders to broader public engagement exercises.

8.3 This engagement strategy was designed to be proportional to the scale and impact of the proposed change, as required in CAP1991. However, we also chose to go above and beyond the standard requirements where we saw value in doing so, including the length and depth of our engagement, and arranging a public drop-in session. This approach not only adhered to the proportionality principle but also ensured that our engagement process was robust and comprehensive.

8.4 In line with the Gunning Principles, the engagement was conducted at a formative stage, provided stakeholders with sufficient information and time to respond, and ensured that all feedback was conscientiously considered in the final proposal. It is our view that this commitment to an inclusive and transparent process has resulted in a well-supported proposal that aligns with both regulatory requirements and stakeholder expectations.

Tier 1 Engagement

8.5 The initial and most critical engagement involved "Tier 1" stakeholders, which were defined as the airspace controlling authorities of the surrounding controlled airspace. The process began with a series of pre-meeting discussions to gather preliminary insights, followed by a project kick-off meeting in October 2023. During this meeting our “Requirements Statement” (which formally began this process – included as Appendix C) was submitted to the group, presenting the rationale behind the project. Stakeholders provided valuable feedback on the four potential solution elements under consideration which had been initially presented within CAP2564. Given the time frame between CAP2564 and this meeting, we invited alternative solutions to those already presented from these key stakeholders, but none were forthcoming.

8.6 A consensus was reached to advance all four options for further development and initial impact assessments were requested from Tier 1 stakeholders.

8.7 A Project Follow-Up meeting was held in November 2023 which focused on addressing any concerns raised by stakeholders in the initial impact assessments received from both Liverpool (Appendix D1) and Manchester (Appendix D2). Particular concern was discussed regarding the implications for ongoing Airspace Change Proposals (ACP) to which we committed to arranging a conversation between these Tier 1 stakeholders and a representative from AR which successfully allayed the concerns.

8.8 Following the discussions with stakeholders at this meeting an “Amend Statement” was produced. This statement addressed the questions raised in both conversations during the meeting as well as the initial impact assessments submitted. It also provided further detail on proposed elements of a solution that were to be taken forward to a formal hazard identification (HAZID) process to be conducted in January 2024. This Amend Statement is attached as Appendix E.

8.9 The feedback collected at each meeting played a vital role in shaping the proposals that were subjected to a HAZID session in January 2024. This session was instrumental in securing stakeholder endorsement for all proposed solutions, with detailed discussions on necessary restrictions and risk management measures.

8.10 Throughout the engagement, ongoing communication with Tier 1 stakeholders was maintained through emails, ad-hoc phone calls, and virtual meetings. This consistent dialogue ensured that concerns were promptly addressed and that the evolving proposals remained aligned with stakeholder expectations.

Tier 2 Engagement

8.11 The second tier of engagement targeted stakeholders who are regular users of the MLLR and surrounding airspace or are highly informed on its usage. This group included smaller local aerodromes, commercial operators and other relevant entities using the MLLR and airspace around Manchester and Liverpool, as well as emergency services like the National Police Air Service (NPAS) and Helimed. Early awareness communications were initiated in October 2023, followed by information sessions in February 2024 at the CAA’s Manchester office. These sessions provided detailed briefings on the proposed amendments, ensuring that all Tier 2 stakeholders were well-informed and had opportunities to provide feedback.

8.12 The feedback from these sessions was overwhelmingly supportive. Stakeholders particularly appreciated the proposals' potential to enhance safety without disrupting current operations. Specific requests, such as visibility exemptions for NPAS and Helimed were requested and incorporated into the proposal. A request for the proposed weight restriction to be amended from “Light” wake

turbulence to “Small” to permit the continued operation of Chinook aircraft, was also carefully considered and integrated into the final proposal.

Tier 3 Engagement: Public and Broader Stakeholder Input

8.13 The broadest engagement effort was directed towards Tier 3 stakeholders, which included individual members of the General Aviation (GA) community, local residents, and elected representatives.

8.14 Information was available throughout the process to those Tier 3 stakeholders who attended the NW Local Airspace Infringement Team meetings. These are meetings, open to members of the flying community, aimed at reducing the likelihood of airspace infringements. The attendees of these meetings had previously provided valuable insight into the formation of CAP2564’s conclusions and as such we kept the meeting up to date with progress as well as receiving feedback on this progress and suggested solutions in person whilst in attendance.

8.15 A public engagement exercise was conducted from May to August 2024, extended from its original timeline to maximise participation, and is fully detailed in Appendix A. This exercise included an online survey, supported by a detailed engagement document and a summary document to ensure stakeholders had all necessary information to make informed comments. We also extended the exercise following the calling of the UK General Election to help ensure we raised the awareness of our exercise as broadly as possible.

8.16 A public information drop-in session was also held in June 2024, allowing stakeholders to engage directly with the project team. The session was well-attended, and feedback was generally positive, with many attendees expressing support for the proposed safety-led amendments.

8.17 Our engagement strategy was a crucial component in the development of a well-rounded and supported proposal. The feedback gathered from stakeholders across all tiers informed significant aspects of the final design and pushed us to explore the maximum benefits available through this amendment ensuring that the proposed changes align with both safety objectives and stakeholder needs. We are confident that this proposal not only meets the regulatory and safety requirements but also reflects the valuable input received throughout this comprehensive engagement process.

Department for Transport

8.18 As this solution proposes the establishment of a restricted area it has been necessary to engage with DfT throughout this process. The RA proposed requires a Statutory Instrument to establish it, signed off by the Secretary of State for Transport prior to its implementation, to grant it legal status. Our communication with DfT established that the basis for establishing such an area was legal in accordance with Article 239 of the Air Navigation Order, and that the

restrictions proposed were justified in achieving the aims of the RA. The SI to support this amendment will be signed off upon successful approval of this proposal and will come into force in line with the implementation date of January 23rd 2025.

Chapter 9

Safety assessment

9.1 The Safety Case attached in Appendix F outlines the safety assurance analysis conducted by NATS Manchester and ATCSL Liverpool to assess the proposed changes to the MLLR. The overall safety argument is that the impact of the changes being made to the MLLR and surrounding airspace is acceptably safe.

9.2 The acceptable level of safety is defined by the safety criteria that are set by NATS Manchester and ATCSL Liverpool as the risk owners for this airspace change. These are that 'acceptably safe' is considered to mean that risks are acceptable, or tolerable (ATCSL have assessed the change as tolerably safe in line with their SMS), or mitigated to ALARP (as low as reasonably practicable) and that there is no unacceptable risk for either risk owner. However, the concept of 'acceptably safe' must be considered against the overriding objectives and requirements for this airspace change and the statutory safety objectives that govern the CAP 1991 process.

9.3 The primary objectives of these changes are to maintain high safety standards, minimise mid-air collision risk, reduce airspace infringements, and simplify the airspace structure. Additionally, the changes aim to align with the Airspace Modernisation Strategy and ensure equitable access for all airspace users.

9.4 The safety assurance work conducted by both NATS Manchester and ATCSL Liverpool demonstrates that the proposed changes are acceptably safe in accordance with the Safety Management System (SMS) in place at each airfield. Both units have thoroughly analysed hazards, assessed risks, and identified mitigations, ensuring compliance with their respective SMS and statutory safety requirements. A joint two-day hazard identification (HAZID) workshop was held by the CAA and attended by Manchester Airport Group, Manchester ATC and Liverpool ATC. The aim of this session was to identify how the implementation of the proposed solution may either create new or affect previously identified risks in the adjacent airspace of the ACAs. Both units also conducted subsequent HAZID activities for their own safety assessments to complement the work of these two days.

9.5 The primary concern raised during the HAZID sessions was ensuring the risk of airspace infringements (AI) and their effects was not increased over today's operation. The concern arising from the possibility that infringing aircraft could be higher (1500ft vs.1300ft) and, for Manchester only, in a position further east than in today's airspace design. Both of these elements could reduce reaction times for air traffic controllers to resolve potential conflicts with aircraft infringing CAS. Therefore, lowering the risk of an airspace infringement occurring was a key aim of the proposal and mitigations sought to achieve this.

9.6 These effects were assessed to be acceptable with appropriate mitigations. Some of these are already in place in today's MLLR operation and being replicated in the RA proposed. The mitigations proposed are:

- Having a higher than standard visibility restriction was deemed essential by Liverpool for reducing airspace infringements when aircraft could be at 1500ft altitude against traffic inbound to runway 27 on an ILS approach path.
- All units thought it practical and safety enhancing to reproduce the 140kts IAS restriction to aid pilots in employing see-and-avoid collision avoidance, to aid location and situational awareness, as well as to reduce the negative effects of an AI should it occur.
- Mandatory use of a QNH. Operating with either Liverpool or Manchester QNH will reduce the possibility of a pressure setting error leading to an infringement via level-bust.
- In addition to mitigations helping to prevent an AI in the first place, having competent and adequately trained controllers and infringement alerting systems – the latter is in place at Manchester ATC only at time of implementation (Liverpool intend to introduce this capability at a later date not in conjunction with this proposal) – further mitigates the likelihood of a negative outcome following an airspace infringement.

9.7 Further to existing mitigations, additional mitigation will be introduced within the change by simplifying access requirements and establishing an airspace boundary based on ground features, to increase situational awareness for pilots. The new eastern boundary location was also selected at the suggestion of Manchester ATC who promoted the advantages of following ground based navigational features as well as the line of longitude to aid airspace infringement reduction.

9.8 Considering the balance of safety risk versus benefit, it has been agreed by both risk owners that the benefits present a significant opportunity in both tackling the current safety concerns associated with the airspace and achieving a simplification of the airspace for airspace users. The safety risks that have been identified, with the changes proposed, are able to be managed to an acceptable level and still deliver improvements for airspace users and the ACAs currently responsible/affected by the airspace use and design as it exists today. Therefore, it is reasonable to argue that the amendments to the airspace would maintain high levels of safety in delivering those identified benefits.

9.9 The CAA plans a dedicated communications campaign to inform airspace users and stakeholders about the changes, ensuring a smooth transition. In addition to this, the proposed changes are "fail-safe", ensuring that a lack of awareness will not lead to an unintentional airspace infringement, as pilots following previous rules to enter the MLLR will by default follow the restrictions proposed to enter the RA.

9.10 As per all Class G airspace it remains the responsibility of the VFR pilot to avoid wake turbulence. However, included within the communications will be a reminder to pilots wishing to fly through the restricted area that wake turbulence remains a possibility within this airspace, both from commercial traffic transiting overhead whilst operating to/from Manchester and Liverpool Airports, as well as from other users within the airspace such as larger CH47 helicopters.

9.11 In conclusion, this Safety Case confirms that the proposed amendments to the MLLR maintain high levels of safety and deliver significant benefits, addressing the identified safety concerns and simplifying airspace access for users. The comprehensive safety assurance analysis meets all statutory objectives and requirements, demonstrating that the proposed changes are acceptably safe.

Chapter 10

Operational impact

10.1 The Operational Impact Assessment included in Appendix G provides a comprehensive evaluation of the proposed reclassification of the MLLR from Class D controlled airspace to Class G uncontrolled airspace. The assessment specifically examines the operational impacts of this change on key stakeholders, including NATS Manchester, ATCSL Liverpool, and general aviation (GA) users.

Key Impacts:

NATS Manchester:

10.2 NATS Manchester will no longer be responsible for monitoring that portion of the Manchester CTR known as the MLLR, leading to a reduction in ATC workload. This change simplifies the operational responsibilities for Manchester ATC and removes the need for certain clearances previously required for aircraft entering this airspace.

10.3 Internal adjustments, such as updates to the MATS Part 2 and radar maps, will be managed through existing processes in compliance with UK regulations.

ATCSL Liverpool:

10.4 The reclassification will affect Liverpool ATC's ability to descend traffic to 1800ft when overflying the area formerly known as the MLLR, with the new minimum altitude set at 2000ft. This change aligns with existing approach procedures and is expected to have minimal operational impact.

10.5 Emergency procedures, particularly those involving engine failures on departure, have been reviewed to ensure continued safety within the newly classified airspace.

Airspace Users:

10.6 The majority of MLLR users are recreational GA pilots. The reclassification to Class G airspace will maintain or improve their access to this airspace while reducing operational complexity.

10.7 The proposed changes are expected to have a positive economic impact on local GA airfields by preserving current access levels, thus supporting local aviation businesses.

10.8 The reclassification will also streamline operations at specific airfields, such as Hawksview and Barton, by removing the need for ATC clearances and simplifying communication procedures.

10.9 NPAS, Helimed, Search and Rescue, and the King's Helicopter Flight operators will be exempt from visibility restrictions thus permitting continued operations at all times.

Airspace Usage:

10.10 The assessment does not anticipate a significant increase in airspace usage due to this change, as it is designed to maintain existing access levels rather than encourage new users. However, it enhances safety for current users by providing clearer operational guidelines.

Implementation Plan:

10.11 The CAA will initiate a dedicated communication campaign to ensure all stakeholders are informed of the changes. This will include interaction with moving map software providers, press releases, social media updates, targeted emails, and face-to-face engagements to prepare for the reclassification scheduled for January 2025.

10.12 In conclusion, the assessment confirms that the proposed reclassification of the MLLR airspace will reduce ATC workload, simplify airspace access for users, and support the ongoing safety and efficiency of air operations in the region, with minimal disruption to existing procedures.

Chapter 11

Supporting infrastructure / resources

11.1 The changes outlined in this proposal do not require any changes in infrastructure. All communications, navigational and surveillance requirements currently in place today are satisfactory for the design changes suggested as there is no change to responsibilities or service provision. ATC resourcing requirements therefore remain static. No changes are required to ground infrastructure as ground infrastructure in use today for surveillance etc remains adequate for the proposed operation post implementation.

Chapter 12

Airspace and infrastructure

12.1 The introduction of the RA is in accordance with the criteria specified in Appendix E of the Policy For The Establishment And Operation Of Special Use Airspace, specifically Annex E[6]. The CAS structure to be created as Manchester CTA 6, as well as pre-existing surrounding CAS structures all adhere to SARG Policy 126: Policy for the Design of Controlled Airspace Structures[7].

12.2 Aeronautical data associated with this change for inclusion within sections ENR 2.1, ENR 5.1, and AD EGCC 2.17 is included as Appendix H. A thorough review of the AIP was also undertaken and a list of affected sections requiring update is included in Appendix I.

12.3 It has been decided by both ACAs that there will be no training requirement for ATCOs ahead of the implementation.

12.4 It is the intention to introduce this amendment, subject to approval, as part of AIRAC 01/2025 on Thursday 23rd January 2025. A Yellow Aeronautical Circular (AIC) will be published on 12th December 2024 to increase awareness of the upcoming change. This will explain thoroughly the introduction of the RA and its restrictions for entry and also include an excerpt of the VFR 1:500,000 chart giving airspace users an advance look at how the changes will be displayed. The statutory instrument that gives legal status to the RA and sets out the specific restrictions will be published in advance of it coming into force, further increasing awareness of the changes.

12.5 In addition to this a dedicated communications campaign using the CAA's full suite of channels will be initiated over a period of several months in the build up to that implementation date to engage with and inform as many airspace users and other affected stakeholders as possible. The channels we will look to use will include:

- Press releases targeted at relevant stakeholder groups
- Social media (both organic and paid for advertising)
- Skywise updates
- Targeted stakeholder emails
- Podcasts

[6] POLICY FOR THE ESTABLISHMENT AND OPERATION OF SPECIAL USE AIRSPACE

[7] SARG Policy 126: Policy for the Design of Controlled Airspace Structures

- Updates through the CAA's existing stakeholder communications e.g. monthly GAP email
- Face to face engagement at relevant LAITs and RAUWGs
- Working with stakeholders to raise awareness amongst their members and customers through their own channels

Chapter 13

Operational agreements

13.1 Manchester Airport currently has Letters of Agreement (LoA) with a number of smaller airfields located within the confines of the MLLR. As these airfields will no longer sit within CAS it is anticipated that the agreements will no longer be required and will be cancelled.

13.2 Inter-unit agreements between Manchester and Liverpool ATC reference the MLLR and in some cases also a level of “2000ft or below”. References to MLLR will be deleted and appropriately re-worded, and the altitude reference changed to “2000ft”. Also of particular importance is in regard to the delegation of ATS provision from Manchester to Liverpool shown in the image below. Areas labelled E and F currently have ATS provision delegated from 1300ft AMSL and this will require an amendment to the agreement to reflect the new lower limit of CAS in these areas of 1500ft AMSL.

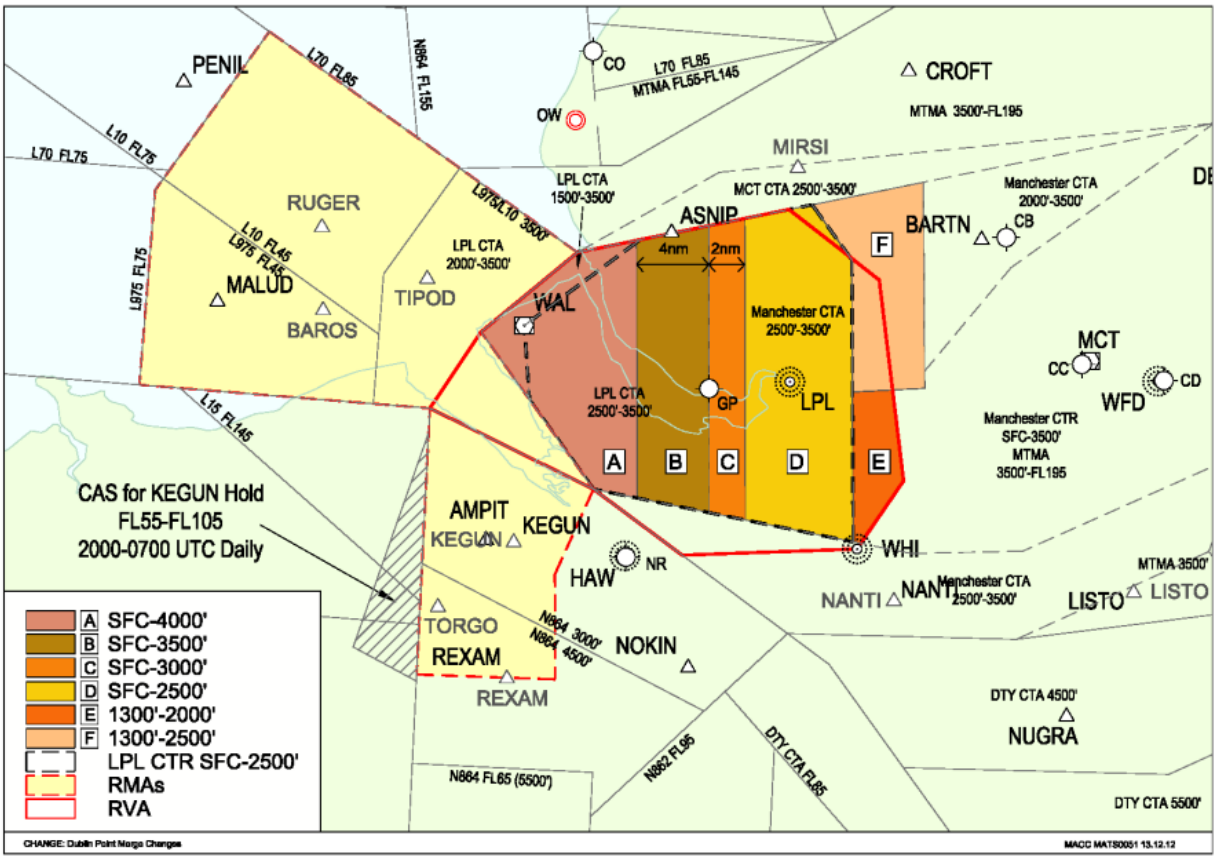

Figure 5 Illustration of Liverpool ATC areas of responsibility

13.3 Liverpool ATC have no agreements beyond those with Manchester ATC which will be subject to change.

Chapter 14

Environmental assessment

14.1 Although the CAP1991 process is subject to a letter from the Secretary of State for Transport specifically disapplying existing Air Navigation Guidance on environmental objectives, the CAA has developed guidance to ensure environmental concerns are considered within the CAP1991 process.

14.2 As per CAP1991, as far as we are able to, we will assess any potential environmental impacts and add this to the proposal. We do not envisage any significant environmental impacts from a classification change, such as might be caused by changes to departure and arrival routes at aerodromes, because these would have been filtered out at an earlier stage in the procedure. The environmental impacts of a classification amendment are uncertain because the airspace is not controlled and therefore, we cannot estimate the frequency of new flights or where and at what height they will overfly those on the ground. For these reasons, making any assessment of the environmental impacts for a change to a less restrictive classification is a qualitative not quantitative exercise.

14.3 The full environmental assessment completed is attached in Appendix J.

14.4 While it is difficult to predict the net effect of these changes with certainty due to the unpredictable nature of GA flying activity, it is expected that any potential negative impacts will be minimal. The proposed widening of the former MLLR airspace to the east will involve areas that were previously outside its boundaries. While this change would allow GA aircraft to now fly over these communities, it's important to remember that these communities can be, and already are, overflown by larger commercial air traffic. Given this context, the impact on local communities under the Class G RA is expected to be minimal. Commercial traffic and its routeings will not be changed by this proposal and the consideration of GA aircraft, which are generally smaller and less noisy, suggests no significant increase in overflight activity or noise levels for these areas. The widening is also expected to distribute the GA traffic more evenly across the new volume of airspace further mitigating any potential noise and visual disturbances through dispersal.

14.5 Currently, aircraft are permitted to fly within the MLLR up to 1300ft. The proposed change would allow aircraft to fly at a higher level up to 1500ft. While we do not expect this change to result in significant changes to traffic or noise levels, it is possible that the amendment may result in a negligible change in the number of aircraft operating in the area.

14.6 It is worth noting that it is difficult to predict whether there will be more GA traffic outside of controlled airspace, as these flights do not require flight plans and can be influenced by various factors such as weather, cost, and the preferences of

the pilot. After engaging with both internal and external stakeholders, we anticipate that the proposed changes will maintain approximately the current volume of aircraft operations in the area. However, these changes will enable aircraft to fly in a more dispersed pattern and at slightly higher altitudes

14.7 In conclusion, the proposed amendment is not anticipated to change flight paths or intensify aircraft movements and therefore the proposal is not expected to have an impact on noise and the environment.

Appendix

The following appendices are all present within the submission folder

- Appendix A – Engagement Document
- Appendix B – Engagement Strategy Document
- Appendix C – Requirements Statement
- Appendix D1 – Liverpool Initial Impact Assessment
- Appendix D2 – Manchester Initial Impact Assessment
- Appendix E – Amend Statement
- Appendix F – Safety Case
- Appendix G – Operational Impact Assessment
- Appendix H – Aeronautical Data Spreadsheet
- Appendix I – AIP updates required
- Appendix J – Environmental Assessment
- Appendix K – Draft Statutory Instrument (SI)
- Appendix L – Engagement Materials
- Appendix M - Engagement Exercise Responses