



**AIRSPACE CHANGE PROPOSAL
MANCHESTER CONTROL ZONE

CONSULTATION REPORT**

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1 Executive Summary

- 1.1.1 During 2008, work commenced on an Airspace Change Proposal to reclassify several portions of Class D airspace within the Manchester CTR to Class G. The stakeholder consultation commenced in October 2008 for 13 weeks, during which 117 representative groups were consulted, eliciting a total of 56 responses.
- 1.1.2 During the early part of 2009, the Manchester CTR Airspace Change Proposal was put on hold due to the resource and attention required in moving the Manchester Area Control Centre to Prestwick. In late 2011, the Airspace Change Proposal was reinvigorated with an update letter and Consultation Feedback document sent to all previously consulted stakeholders, and anyone else who had previously responded to the initial consultation. A further 11 responses were received.
- 1.1.3 54 of the responses from the original consultation and all 11 responses from the consultation update were in favour of the Change Proposal. Two main issues though were raised, reclassifying more of the Manchester CTR to Class G airspace and raising the maximum altitude of the Low Level Route.
- 1.1.4 Careful consideration has been given to the suggestions of reclassifying more of the Manchester CTR to Class G, however the rationale as documented in this report for not accepting the suggestions is considered to be sound.
- 1.1.5 Regarding raising the maximum altitude of the Low Level Route and reclassifying the airspace to Class G, given the nature of the comments received, the matter warrants further consideration. Therefore, apart from raising the upper limit in accordance with CAA DAP requirements to 1300 feet amsl, it has been decided that the LLR element will be removed from the Change Process.
- 1.1.6 The Manchester CTR is proposed to change because its present form was designed for procedures that are no longer appropriate. Fillets of airspace proposed to be reclassified to Class G would remove some complexity by harmonising base altitudes, facilitating easier navigation in the area (thus reducing CAS infringements) and will provide access to more airspace by general aviation.

2 Overview of Responses

2.1 Introduction

- 2.1.1 The Manchester Control Zone (CTR) stakeholder consultation ran for 13 weeks, commencing on 31st October 2008 and closed on 30th January 2009. This provided an extra week in view of the Christmas & New Year Public Holidays.
- 2.1.2 Based on the requirements set out in CAP725 (CAA Guidance on the Application of the Airspace Change Process), a total of 117 representative groups were identified as stakeholders (including aviation users in the local and surrounding Manchester CTR airspace area, the National Air Traffic Management Advisory Committee, Local Authorities and County Councils). Each of these representative groups were formally notified of the start of the consultation by either e-mail or letter. An ACP briefing presented by NATS ATCOs was held at Manchester City Airport Barton on 16th December 2008, detailing the proposed airspace changes and inviting feedback from general aviation (GA) representatives.
- 2.1.3 34 responses to the consultation were received from stakeholders. Two responses were received late on 1st & 11th February 2009 but these have been included in this report and in the Consultation Record Sheet. 22 additional responses were received, either from other persons within the same stakeholder group, persons notified by the stakeholder or from persons attending the ACP briefing at Barton. These have also been included in the Consultation Record Sheet and this report.

2.2 Response statistics for aviation stakeholders

	Count	Approx %
Total notifications sent	104	
Responses with objections:	1	1%
Responses in favour with comments:	20	19%
Responses in favour with no comment:	12	12%
Neutral	0	0%
Delivery but no response:	71	68%

Table 1: Summary of numbers of responses from aviation stakeholders.

- 2.2.1 It can be seen from Table 1 that 32% of stakeholders representing aviation users responded. Liverpool Airport had objections to the proposal. These focused on the raising of the maximum altitude of the Low Level Route (LLR) above 1250 feet amsl. They requested that their concerns are recorded in this Change Proposal for future reference (see paras 2.7.2 & 2.7.3).

Woodford objected to part of the proposal but overall they were in favour, therefore their response has been included in the 'Response in favour with comments'. Operations at Woodford have ceased for the time being, however a business aviation operator has shown interest in reactivating the airfield.

2.3 Response statistics for non-aviation stakeholders.

- 2.3.1 Notification of the start of the consultation was sent to 13 stakeholders with an environmental remit, including County Councils and environmental interest groups.

	Count	Approx %
Total notifications sent	13	
Responses with objections:	0	0%
Responses in favour with comments:	0	0%
Responses in favour with no comment:	0	0%
Neutral	1	8%
Delivery but no response:	12	92%

Table 2: Summary of numbers of responses from non-aviation stakeholders.

- 2.3.2 There was only one response from a non-aviation stakeholder. Their response was considered to be 'Neutral' since they had no objections, but did not wish to comment further because the Change Proposal did not materially or significantly affect their interests.

2.4 Response statistics for additional responses.

	Count	Approx %
Additional Responses	22	
Responses with objections:	0	0%
Responses in favour with comments:	14	64%
Responses in favour with no comment:	8	36%
Neutral	0	0%

Table 3: Summary of responses from additional responses.

- 2.4.1 The additional responses were more or less equally shared between responses from other persons within a stakeholder group, persons notified by the stakeholder, or from persons attending the ACP briefing at Barton on 16th December 2008. All responses were in favour of the Change Proposal, with the majority of additional comments requesting that more Class D airspace should be reclassified as Class G. Additional comments from the same stakeholder group generally reflected the comments made by the stakeholder's primary responder. Some responses stated that they thought that the changes would reduce the number of CAS infringements.
- 2.4.2 Most of the comments from the Barton ACP briefing were not recorded on an ACP response form, but have still been included in the Consultation Record and statistics.

2.5 Consultation Update

- 2.5.1 During the early part of 2009, the Manchester CTR Airspace Change Proposal was put on hold due to the resource and attention required in moving the Manchester Area Control Centre to Prestwick. In late 2010/early 2011, the Airspace Change Proposal was reinvigorated. On 15th June 2011, an update letter was sent to all previously consulted stakeholders and anyone else who had previously responded to the initial consultation. The update letter included a Consultation Feedback document, with an invitation to make any additional comments to those already provided by 31st July 2011.
- 2.5.2 11 responses were received in relation to the update letter and Consultation Feedback document, though one person was responding on behalf of two stakeholders. 10 responses were 'Response in favour with comments', one of which was from a non-aviation stakeholder who had not previously commented. Comments either consisted of a 'no objections' theme or had comments similar to those raised during the initial consultation. A 'Neutral' response was made by the same non-aviation stakeholder as the initial consultation.
- 2.5.3 Whilst not part of the update response period, Liverpool Airport reported to the ACP team on 2nd February 2011 that they no longer had objections to the Change Proposal and in particular, the raising of the LLR maximum altitude to 1300 feet amsl.

2.6 Key Issues raised by consultation.

- 2.6.1 There were two key issues raised by the consultation, which included detailed responses from two aviation association representative groups. These two groups were supportive of the proposal on operational grounds, since they stated that the safety of VFR aircraft would be improved, whilst the risk of airspace incursions would reduce. There was also support for the proposal on environmental grounds, since they felt that the proposed changes would allow the density of VFR traffic to be reduced. However, they requested that one or two points be considered and addressed during the formal submission of the proposal. These issues centred on reclassifying more of the Manchester CTR to Class G airspace and raising the maximum altitude of the Low Level Route.

2.7 Comments on Key Issues.

- 2.7.1 **Low Level Route – Upper Limit.** The ACP proposed to change the LLR airspace to Class G which would necessitate the introduction of a new CTA above the LLR. During discussions with the CAA, it was made clear that having CTA stubs beginning at 50 feet intervals was not permitted and that any new CTA must be based on a round one hundred feet figure. Consideration was therefore given to raising the maximum altitude of the LLR to 1300 feet or higher.
- 2.7.2 Serious consideration was given to raising the upper limit of the LLR to an altitude of 1500 feet. During the Proposal Development stage, discussions were held with Liverpool ATC who were strongly against raising the upper limit of the LLR above 1250 feet amsl.

- 2.7.3 The LLR lies within an extremely complex and congested section of airspace and there are many specific ATC operating procedures that have to be followed to ensure that the interaction between Manchester and Liverpool traffic is minimised. To this end, Liverpool have over the years developed radar vectoring techniques that (amongst other things) allow them to facilitate visual approaches from the downwind right position for runway 27. This allows them to have a significantly greater throughput of traffic than would be possible were all approaches flown as per the published procedure. The flexibility to descend inbounds to 1800 feet is an essential part of this technique and allows more than one aircraft to be positioned for the approach at any one time. To remove this flexibility risks reducing the number of aircraft being sequenced and consequently increases the possibility of more airborne holding, with negative impacts both in terms of service delivery and environmental considerations. The notion of raising the LLR to 1500 feet amsl has thus been rejected.
- 2.7.4 To raise the upper limit of the LLR, north of M6 J21/M62, to 2000ft would radically affect current Liverpool vectoring procedures, creating safety concerns of having IFR inbounds descending over a busy VFR/SVFR route with non SSR squawking contacts – with further safety concerns regarding the vectoring of Liverpool traffic closer to Manchester SIDs and producing further track mileage for Liverpool IFR inbounds. With the upper limit of the LLR at 2000 feet, the interactions between Liverpool and Manchester procedures (not least, Manchester departures and Liverpool arrivals) needs to be considered in greater detail.
- 2.7.5 Raising the upper level of the LLR, south of the A556, to 2000 feet would seriously affect IFR inbounds being vectored to the 05R/L ILS at Manchester, causing a late descent to establish on the glidepath, leading to potentially rushed approaches for the crews.
- 2.7.6 Stepped upper limits to the LLR have also been considered, but that would not only unduly complicate the proposed changes and delay its introduction, but would also create safety concerns that traffic using the LLR would fail to descend in the vicinity of Stretton to the lower limit of the LLR.
- 2.7.7 The final option considered with regard to the LLR was to raise the upper limit to 1300 feet amsl. This satisfies the CAA DAP requirement for any new CTA bases to begin at a 'round one hundred feet' interval and provides the required 500 feet or more procedural containment obligation for aircraft operating into/out of Liverpool.
- 2.7.8 **Low Level Route – Lateral Limit.** Extending the lateral limits of the LLR was another of the main issues raised during the Consultation. This issue has been given much consideration, but the only change proposed will be to return a portion of airspace to the east of the LLR (north east of Stretton VRP) to Class G airspace. This increase in Class G airspace has been well received, particularly amongst pilots using Manchester Barton. One response questioned the reason behind the 'kink' in the revised boundary between Stretton VRP and Oldham. This is due to the protection required for the POL & DESIG outbound SID climb profiles, which are based on multi-engine aircraft's engine out performance.
- 2.7.9 Manchester ATC has experienced a number of CTR infringements, particularly to the east of the LLR. New VRPs were introduced which appear to have reduced the number, however motorways (particularly the

M6) in the Manchester area have often been followed during the summer months by non-locally based pilots, bringing 'infringers' into close proximity to Manchester's IFR traffic. This is at a time when Manchester ATC are at their busiest. Naturally, these infringements can create a high increase of workload for the Manchester Final Approach Director when on Easterlies, with aircraft being broken off the approach, resulting in substantial delays to traffic. When on westerly operations, 'infringers' can cause delays to departures. This situation requires a high level of ATC coordination between Manchester Approach & Tower controllers, and possibly also with Prestwick Centre and Liverpool ATC. For these reasons, any further extension of the eastern lateral limit of the LLR has not been included in the proposal.

2.7.10 One detailed response could see no reason why the LLR should not be expanded to the south-west and why it should be reserved as part of the Liverpool CTR. This portion of airspace, inside the Liverpool CTR to the south west of the LLR is outside the remit of this airspace change proposal and therefore will not be considered at this time.

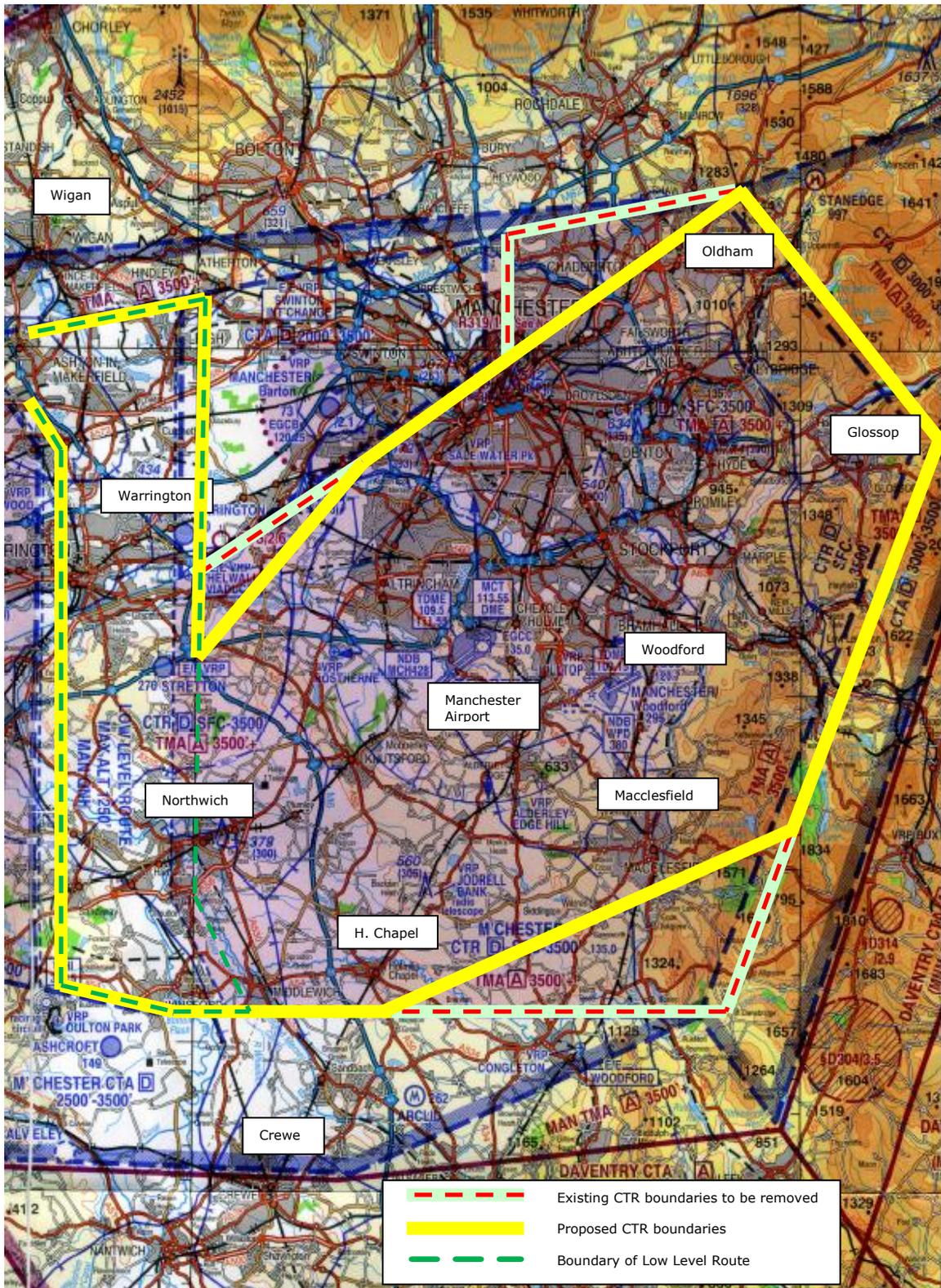
2.7.11 **CTR – Lateral Limit.** Responses welcomed the additional fillet to the north-east of the CTR, which they view as a lateral improvement. Further suggestions though requested that the south east CTR boundary could be taken back on a line towards Glossop. This could bring unknown north east bound traffic (following the edge of higher terrain to the east of the Manchester basin) on a converging track with the 23R final approach. The presence of low cloud (which often occurs around the high ground to the east) could result in traffic taking a more westerly track, flying even closer to the final approach at Manchester. Northbound traffic remaining clear of cloud, tracking to the west of this high ground could encounter further low cloud over the high ground in their twelve o'clock, north of Glossop. This could lead to a scenario where the traffic alters course onto a southerly track, again close to the extended final approach track.

3.0 Modifications to the Proposal

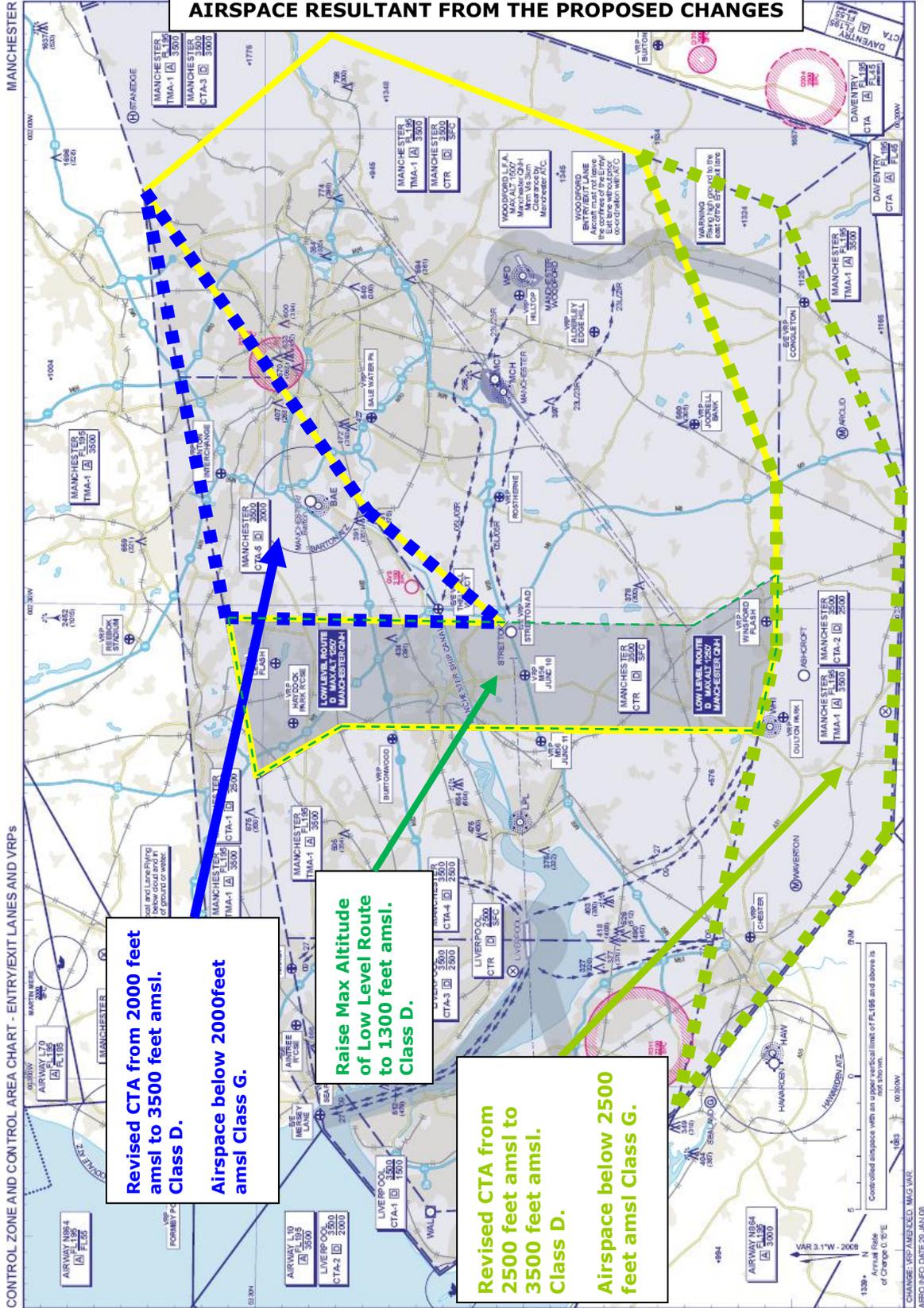
3.1.1 Careful consideration has been given to the suggestions of reclassifying more of the Manchester CTR to Class G, however the rationale (as documented in paragraph 2.7 of this report) for not accepting the suggestions is considered to be sound. There are therefore no modifications to the original Proposal in relation to reclassifying more of the Manchester CTR to Class G.

3.1.2 Regarding raising the maximum altitude of the Low Level Route and reclassifying the airspace to Class G, given the nature of the comments received, the matter warrants further consideration. Therefore, apart from raising the upper limit in accordance with CAA DAP requirements to 1300 feet amsl, it has been decided that the LLR element will be removed from the Change Process. This serves two purposes; firstly, it will ensure that all options regarding this piece of airspace can be fully explored, and secondly it will mean that any additional delay to the other changes can be avoided whilst the issue is being considered further.

**MAP ONE
CTR BOUNDARIES BEFORE AND AFTER PROPOSED CHANGE**



**MAP TWO
AIRSPACE RESULTANT FROM THE PROPOSED CHANGES**



Revised CTA from 2000 feet amsl to 3500 feet amsl. Class D.

Airspace below 2000 feet amsl Class G.

Raise Max Altitude of Low Level Route to 1300 feet amsl. Class D.

Revised CTA from 2500 feet amsl to 3500 feet amsl. Class D.

Airspace below 2500 feet amsl Class G.