Safety and Airspace Regulation Group

NATIONAL AIR TRAFFIC MANAGEMENT ADVISORY
COMMITTEE

MINUTES OF THE 94th PLENARY MEETING
HELD AT AVIATION HOUSE ON 12TH OCTOBER 2023

National Air Traffic Management Advisory Committee 94 – Minutes

Present:

CHAIR

Jon Round   Head, Airspace, ATM & Aerodromes

REPRESENTATIVES OF MEMBER ORGANISATIONS

Mark Swan	ACOG
Tim Thomas	AEF
Rob Griggs	Airlines UK
Matt Wilshaw-Rhead	AOA
Mark Gibb	AOG
Martin Robinson	AOPA
Rupert Dent	ARPAS-UK
Tanja Deakin	BALPA
Mike Gunston	BBAC
Pete Stratten	BGA
Ollie Dismore	BHA
Rob Hughes	BMAA
Jeff Montgomery	British Skydiving
William Arinze	Drone Major
Roger Hopkinson	GAA
Luis Barbero	GATCO
Nick Goodwyn	HCAP
Jeremy James	HCGB
Ian Roy	Heavy Airlines
Colin Gill	Isle of Man CAA
Francis Richards	Low Fare Airlines
Cdr Crompton	MAA
Cdr Gladwin	MoD DAATM
Michael Cockcroft	NATS
Lt Cdr Chatfield	Navy Command HQ
Timothy Nathan	PPL/IR Europe
Simon Oldfield	UKAB
Dai Whittingham	UKFSC
ATC Officer Fuller	US Visiting Forces UK Rep

CAA STAFF

Alex Coleman	NATMAC Secretary
Mark Simmons	Principal Airspace Regulator
Stuart Lindsey	Head of Airspace Modernisation
Lucy Page	Principal, AMS Oversight
Colin Chesterton	Manager, Airspace Modernisation Delivery
Kevin Woolsey	Co-Acting Head GA & RPAS
Nikki Deeley	Principal, Airspace Classification
Ben Lippitt	Manager, Airspace Regulation
Kate Bromley-Fox	Manager, AAA Policy

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| Rob Lewis | Manager, Aerodromes & ATM |
| Rachel Sowerby | Manager, AMS Development |

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INDEX TO NATMAC 94 MINUTES

ANNEXES:

NATMAC 94 MINUTES

1.   ITEM 1 – INTRODUCTION

1.1   The **Chair** welcomed representatives to the meeting.

1.2   The **Chair** reminded the committee that NATMAC is a formal consultative group (not a decision-making body) and welcomes all input and thoughts from the broad spectrum of aviation specialists that the committee is formed of.

2.   ITEM 2 – NATMAC 93 MINUTES

2.1   The **Chair** confirmed there were no comments made on the minutes from NATMAC 93, and so invited the committee for any last minute comments. Nothing was raised so the minutes were accepted as a true record of NATMAC 93.

2.2   The **Chair** reminded the committee that the minutes for NATMAC will be published on the relevant CAA webpage.

3.   ITEM 3 – ACTION LIST FROM NATMAC 93 AND MATTERS ARISING FROM PROGRESS REPORT

3.1   The **Secretary** confirmed that four actions were raised at NATMAC 93, and that three have been closed off, and one will be addressed in the AMS Annual Progress Report later in the meeting (Item 10). The **Secretary** explained that all related information was available in the Progress Report that was sent out prior to the meeting and invited associated feedback/comment. No comments or feedback was raised.

4.   ITEM 4 – CHAIR'S REPORT

4.1   The **Chair** provided a summary of the report.

4.2   The **Chair** invited comments.

4.3   **Pete Stratten** (BGA), asked if ANSPs such as NATS were only training controllers for their own commercial operation, or if they offered training for controllers in general. The **Chair** said NATS are not even training enough for their own needs currently. **Rob Lewis** said that NATS only train for NATS operational requirements.

4.4   **Dai Whittingham** (UKFSC) questioned whether there was something wrong with the validation process for Gatwick air traffic controllers, as the pass rate is around the 50-60% mark. The **Chair** said that the ground movement control position at Gatwick was perhaps the most demanding of air traffic roles within the UK and has historically been the main issue for Gatwick. However, there is a plan in place to prepare for next summer aimed to help alleviate the demand on the ground movement control, and in the longer term to split GMC into two to reduce reliance on the one position.

4.5   **Matt Wilshaw-Rhead** (AOA), asked whether splitting the Air and GMC seat configurations option could be made available to other airports other than Gatwick through licensing. The **Chair** advised that this has not even been approved for Gatwick yet but will come back and advise in due course.

Action: Secretary

5.   ITEM 5 – AIRSPACE MODERNISATION DELIVERY TEAM UPDATE

5.1   **Colin Chesterton** introduced himself and first presented an update on the Airspace Classification Team activities.

5.2   **Matt Wilshaw-Rhead** (AOA), mentioned the Barnsley Review has attracted a lot of challenging comments around the airspace design and said there was no opportunity to provide positive comments on the airspace, and asked whether this has been addressed through the CAP 1991 review. **Nikki Deeley** responded to say that through broader engagement with all airspace stakeholders we were looking to collect both positive and negative feedback on the airspace. The **Secretary** advised that the Call for evidence and other engagement activities have not been designed to elicit negative comments about airspace, but took the feedback onboard for future engagement activities.

5.3   **Pete Stratten** (BGA) was concerned about the pace of the reviews, and asked whether there were any timescales for the airspace classification reviews. **Nikki Deeley** advised the Manchester Low Level Route work was ongoing with hazard identification sessions booked for January with a look to submit to Airspace Regulation by early Summer May/June 2024. **Nikki Deeley** also advised that there are no timescales for the Barnsley review currently, due to the size and complexity of the region. However, the team is conducting subregional reviews with focus currently on the Birmingham and East Midlands airspace areas. **Pete Stratten** (BGA) asked if the airspace classification work is funded by the Department for Transport. **Colin Chesterton** answered that this work is part of the normal process.

5.4   **Luis Barbero** (GATCO) asked if part of the Airspace Classification Review that Class E airspace was being looked at, as from an air traffic controller perspective, Class E airspace is an unknown environment. **Colin Chesterton** and the **Chair** welcomed the comment and asked for Luis to email what he was saying in more detail for us to respond to.

Action: Secretary

5.5   **Colin Chesterton** presented an update on Electronic Conspicuity.

5.6   **Martin Robinson** (AOPA), asked how much convergence the UK will have with the rest of Europe on EC. **Colin Chesterton** said that the EGIS report points to the UK looking to global ICAO standards for EC.

5.7   **Matt Wilshaw-Rhead** (AOA), asked what work is being done on the interoperability and integration of ground-based systems with EC. **Colin Chesterton** said this was something they are aware of, and that the first piece of work towards this was the introduction of flight information displays that takes in several forms of EC. More work is planned but has not been started yet.

5.8   **Jeremy James** (HCGB), said that aircraft owners needed direction on what EC equipment they would need to buy, or whether the equipment they have is future proof. **Colin Chesterton** stated that the DfT funding scheme for EC was used to help shoulder the burden for the costs of buying the equipment. **Colin Chesterton** also said the EGIS report points in the direction of the two frequencies for EC devices (1090MHz and 978MHz) but accepted the point that clearer communications need to be made around this in future.

5.9 **Rupert Dent** (ARPAS-UK) asked for an update on timing of conclusions around this work. **Colin Chesterton** said that the work the EC team have tendered for is due to be delivered April / May 2024, and once this work has been delivered and we are happy with the direction of travel, we will be able to develop a roll out plan.

5.10 **Mark Swan** (ACOG) asked if the EGIS Report was publicly available as he wanted to see it. **Colin Chesterton** advised that the report was published on the CAA website.

Action: Secretary

5.11 **Martin Robinson** (AOPA) asked whether the CAA was aware of the work being conducted in Europe on iConspicuity and the use of mobile phone technology, and that several mobile telecommunications companies are getting involved with this work, with EASA also developing a position on it as well. **Colin Chesterton** said he was aware of this work, and that the CAA were about to produce a report via UKRI on the integrity and resilience of mobile networks in aviation and how they can play a part not just in electronic conspicuity but in future aviation activities as well.

5.12 **Colin Chesterton** presented an update on Airspace Infringements.

5.13 **Dai Whittingham** (UKFSC) mentioned that he brought up the ownership of risk infringement a long time ago, and how it was decided that this risk was for those who manage the airspace. **Dai Whittingham** said that he did not believe it was right that an airport owns the risk of infringement when this is something they have no control over, and believe the CAA is the only entity who can own this risk. **Colin Chesterton** advised he would come back to Dai on this one, as there was no one in the room at the time who could provide an answer for this.

Action: Secretary

5.14 **Luis Barbero** (GATCO), said that NATS have hours of radar replays demonstrating the impact of infringements on commercial traffic, and that these can be presented as effective educational tools to infringing pilots. **Colin Chesterton** said he would pass this onto the Airspace Infringement Team, as a lot of their work focusses on education, and that radar replays could also feature in this area. The **Chair** said that NATS willingness to offer radar replays is not universally shared amongst the other 60 ANSPs, and that because of this it would make it difficult to make this a standard offering unless all ANSPs were onboard with it.

Action: Secretary

5.15 **Martin Robinson** (AOPA), said he attended a meeting in Luxembourg recently, with Eurocontrol presenting on infringements, and mentioned that all the data used from the UK CAA which shows that as a state the UK CAA is leading the pack on the infringements issue. The **Chair** acknowledged that Eurocontrol use the UK CAA's material, and many other states are years behind us in the infringement area but added that many other European countries don't have such complex airspace as the UK does. The **Chair** also added that while we are making good progress on infringements, we won't be declaring victory on it yet.

5.16 **Pete Stratten** (BGA) mentioned that military infringements are increasing, and that there is no oversight from the CAA in this area and added that the licenses of private and commercial pilots are at risk, the same is not true for military pilots, many of whom don't have licenses. **Pete Stratten** asked what the CAA is doing in this area to get the military infringements down. **ATC Officer Fuller** (US Visiting Forces UK Rep)

advised that US Air Force pilots do have commercial FAA licenses, and if there is a breach in the regulation, then the pilots are investigated, and appropriate sanctions are dispensed which includes the removal of their license. The **Chair** acknowledged the point was well made on foreign military pilots operating in the UK, and added that the Infringement team, which is made up of four individuals now, are keen to be part of the education to help in this area. **Pete Stratten** sympathises with foreign military pilots as UK airspace is incredibly complex to operate in. **Cdr Crompton** (MAA) advised that from the UK military side, her team at the MAA conduct weekly infringement coordination meetings with the Airspace Infringement team.

6.   ITEM 6 – CAP1616 REVIEW

6.1   **Mark Simmons**, Principal Airspace Regulator introduced himself and presented an update on the CAP1616 Review.

6.2   **Mark Swan** (ACOG), welcomed the review and all the work that has gone into it, however, remains concerned over the treatment of multiple co-dependent ACPs particularly in the London TMA FASI programme that ACOG is running, has not been addressed in the review. **Ben Lippitt** (Manager of Airspace Regulation) answered that this piece of work has been an evolution rather than a revolution and has been focusing on the base generic process. The **Chair** recognised the point that was being made, and reiterated the review was focused on everyday numbers of ACPs coming through the door rather than the one-off independent ACP clusters in the FASI programme that will not be a regular way of conducting ACPs in the future. **Ben Lippitt** also stated that the review was careful not to impact on current ACPs going through the process that could need further re-work to keep compliant with the revised 1616 process. **Mark Swan** understands the reasoning to keep the review on the baseline process and offered ACOG's assistance on shaping and guiding further thinking on the multiple co-dependent ACP scenarios.

6.3   **Roger Hopkinson** (GAA) asked what is happening around the ACPs that are still following the CAP 725 process which have different requirements to the current and revised 1616 process, particularly around the secondary effects on class G airspace. **Ben Lippitt** said that all ACPs following the CAP 725 process will continue to follow this, although most of them are in the latter stages now, but Airspace Regulation are looking closely at where some of the CAP 725 ACPs could be closed off, where perhaps the expected time for completion has lapsed. **Ben Lippitt** also said the PIR process in CAP 725 and the Airspace Classification review does pick up and look at these secondary issues as well.

6.4   **Martin Robinson** (AOPA), said that the whole airspace change process is disproportionate for the needs of general aviation, and that the process is also too complex and costly to encourage GA aerodromes to bring in GNSS approaches. **Ben Lippitt** agreed that the process needs to support the needs of general aviation, and the answer to more proportionate airspace changes lie within the new Level 3 ACP, which has a simplified process without any gateways, and relevant guidance for the sponsor. The new document has also been reduced by around a third.

6.5 **Timothy Nathan** (PPL/IR Europe) stated that aircraft do not collide into each other outside controlled airspace in IMC conditions, but the application to get GNSS approaches focuses on the mid-air collision element. Where-as aircraft do hit the ground on a more regular basis, and emphasised the CAA focus is on MAC, when it should be more on controlled flight into terrain. **Timothy Nathan** also mentioned that putting in an RNP approach into an aerodrome ends up restricting the use of that aerodrome in IMC/IFR and does not recommend aerodromes to apply for the process because the benefits are small. **Timothy Nathan** also advises pilots to use GNSS systems independently from regulation. The **Chair** said that pilots practice when it is not IMC conditions as well, so there is more to consider than just IMC/IFR.

6.6 **Matt Wilshaw-Rhead** (AOA), welcomed the CAP 1616 Review, however expressed concern around the PPR process and how it is currently a barrier for tactical use of airspace, and asked the timescale of a PPR review, and offered his support in this area. **Ben Lippitt** said that the team's capacity has been focused on getting the CAP 1616 review done. However, the plan is to start work on a PPR review once the CAP 1616 process has been embedded in.

7. ITEM 7 – AIRSPACE CHANGE PROPOSAL UPDATE

7.1 **Ben Lippitt**, Manager Airspace Regulation, provided an overall update on ACPs.

7.2 **Rob Hughes** (BMAA) highlighted the airspace change portal is inaccurate and queried how CAP725 numbers had gone up on the chart. **Ben Lippitt** confirmed the number of CAP 725 ACPs has not gone up, it is going down and that this is an inaccuracy on the chart. **Ben Lippitt** also advised that the airspace change portal is handed over to change sponsors to manage and use as part of their engagement process, however acknowledged there are inaccuracies and are working on ways to improve this, including having brought in a person to look at the portal. **Rob Hughes** asked if he could send his findings over to the person looking at the portal. **Mark Simmons** confirmed the best email to use is airspace.portal@caa.co.uk. **Pete Stratten** mentioned that this was one of the questions he had raised in the AOB which is now answered.

7.3 **Pete Stratten** (BGA), said that some months ago, not all Red Arrows training could happen at Waddington, and airspace over Syerston was used instead, and asked what the planned future was of this. **Ben Lippitt** advised the conditions of approval for the Waddington ACP are outlined in the decision document on the portal. **Cdr Gladwin** (MoD DAATM) added that several temporary restricted areas that mirror the planned/approved permanent change have been tested over the past few months, and that airspace over Syerston will not be required in the future as the area being established over Waddington should meet the needs of the Red Arrows training.

7.4 **Rupert Dent** (ARPAS-UK) asked on the TDAs, how the CAA will deal with the overflight of uninvolved people, particularly with the Apian London Healthcare Bridge trial which is over Central London. **Ben Lippitt** responded to say that the ACP process would look at impacts on people on the ground from a safety perspective and the environmental aspect of noise. **Kevin Woolsey** (Co-Acting Head GA & RPAS) added that the CAA would look at this ACP like all other ACPs, through the acquisition of appropriate evidence, and companies have a lot of flight worthiness

evidence that they can provide to the CAA, which will be assessed to see if it is compliant with process and safe enough to authorise. Ultimately it will all be data driven. The other part of the safety aspect is the size and weight of the aircraft, which is quite small.

7.5   **Jeremy James** (HCGB) said that helicopters fly along the river near where the TDA will be and is concerned of a possible conflict between a helicopter and drone on the western edge of the zone which borders right on the river. **Kevin Woolsey** mentioned that the proposed zone is not over the river. **Ben Lippitt** said this issue will form part of the CAA's considerations, and this is why it forms part of the CAA's sandbox. The area may well be smaller than the one shown in the slide, but it could be the same size, either way drones will be contained within the area. The **Chair** acknowledged the complexity of the issue and how busy this piece of airspace is, and while we have not received the application yet, we expect the answers to the issues raised to be addressed in the application along with the required mitigations.

7.6   **Dai Whittingham** (UKFSC) added for background information, a project in Zambia used drones for dropping drugs and equipment in the right places at the right time and managed to reduce deaths in child births by 90%. **Dai Whittingham** also highlighted that there is a noise benefit of using drones in that it might save using an ambulance with its sirens on being a lot more intrusive.

7.8   **Martin Robinson** (AOPA) asked if geofencing technology has been considered to keep the drones within the zone. **Kevin Woolsey** agreed that this is the type of technology that is expected to be used.

7.9   **Pete Stratten** (BGA), mentioned the people in charge of the consultations of the Apian Northumbria NHS trial amongst others, don't understand the stakeholders or the environment they are dealing with. **Ben Lippitt** said that is the reason why a course is being developed on this subject, while also working closely with CAA International who have close links with these entities can assist in this area. **Jeremy James** (HCGB) added that there would need to be a danger area crossing service as the area would not be used the whole time it is established. **Ben Lippitt** said that all these points are balanced when they come through, depending on the day and time of operation.

7.10   **Roger Hopkinson** (GAA) asked if the CAA proposed to charge for the training courses for CAP 1616. **Ben Lippitt** responded to say that we would not like to charge for this if we can. **Roger Hopkinson** emphasised that the GA community is not a wealthy one and places a burden on resources.

7.11   **Jeremy James** (HCGB) asked what was happening with the Farnborough PIR. **Ben Lippitt** advised we were expecting an update in the next month, and that all comments have been received and carefully considered.

BREAK FOR LUNCH

8. ITEM 8 – AIRSPACE CHANGE ORGANISING GROUP (ACOG) BRIEFING

8.1 **Mark Swan**, Head of ACOG, provided a briefing on ACOG activities.

8.2 **Dai Whittingham** (UKFSC), asked if the visualisation tool that ACOG have procured, can be made more widely available to help people understand ACPs better. **Mark Swan** said his ambition would be for airports to buy licenses for the tool and use it for their ACPs, however this is unlikely to happen. However, from an ACOG perspective as the big picture is shaped and presented, people and organisations can then interact with the visuals showing the tracks etc. **Mark Swan** added that he intends to exploit the tool for all its worth.

8.3 **Rupert Dent** (ARPAS-UK) understands ACOG have been talking with the government and shadow ministers, and asked whether there is a perception that there is any change in emphasis if there was a change in government. **Mark Swan** said there was none so far and emphasised that there is a lot of support from a political level in the non-current government to get on with the work.

8.4 **Martin Robinson** (AOPA) asked how much of the work ACOG is doing is around carbon reduction, and it is a KPI for this work. **Mark Swan** answered that it was at the front and centre of ACOG's benefit management strategy for what good looks like. **Mark Swan** added that noise has precedence up to 4000ft and between 4000ft-7000ft it is the environment.

9. ITEM 9 – JOINT CAA/DFT SINGLE DESIGN ENTITY & AMS PART 3 PLAN OVERVIEW

9.1 **Stuart Lindsey**, Head of Airspace Modernisation, presented a briefing on the Single Design Entity and an update on the AMS Part 3 plan overview.

9.2 **Dai Whittingham** (UKFSC) asked if there will be direction to move away from 'the user pays' model and stated that some form of legislation would be needed to set up a single design entity. **Stuart Lindsey** answered that there are different models on the table to be discussed, some would need legislation and others would not, it entirely depends on the route that is chosen.

9.3 **Martin Robinson** (AOPA) assumed that the single design entity would be open to any organisation, and asked what the rules would be about participating in the application process for the single design entity. **Stuart Lindsey** stated that it has not been decided on the chosen model, whether an established entity is given this function, or a completely new entity is set up to take on the function. Once the agreed model has been chosen, is when we can start to answer this question. **Martin Robinson** asked if the single design entity goes ahead, what would the role for ACOG be. **Stuart Lindsey** said that further iterations of the masterplan and coordination between the FASI airspace change sponsors is something that still needs to be done.

10. ITEM 10 – AMS ANNUAL PROGRESS REPORT – ACTION FROM NATMAC 93

10.1 **Lucy Page**, Principal Airspace Modernisation Oversight, gave an overview of how NATMAC members could provide feedback on the delivery of airspace modernisation.

10.2 The **Chair**, asked if there were any questions. No questions were raised.

11.   ITEM 11 – AOB

11.1   The **Chair** asked if there were any AOB items. **Pete Stratten** (BGA) had raised four items, and **Rob Hughes** (BMAA) had raised one, all listed below.

11.2   **Pete Stratten** (BGA): The GAA has completed a trawl through all the active ACPs in the CAP1616 web portal. The number of errors and omissions indicate a data quality issue. As we are almost always directed at the portal to obtain information regarding ACPs, many of which have quite short response timescales, accurate and timely maintenance of the portal is very important. How and when does the CAA intend to improve the situation? The **Chair** and **Pete Stratten** agreed this has been addressed earlier in item 7.2.

11.3   **Pete Stratten** (BGA): The airspace classification review was prompted by a previous SoS and Aviation Minister as part of wider efforts to modernise UK airspace and picked up with enthusiasm by the CAA. We note that the airspace classification review has been watered down, with the most recent regional review limited to the specifics of VFR LL routes across Manchester. As the problem of excessive and underused controlled airspace is as real an issue now as when CAA recognised the need to address the problem, it would be helpful to understand how the CAA is planning to complete its UK wide airspace classification review. As airspace design policy and AMS is resulting in more rather than less CAS, it's important that the CAA moves faster to remove unnecessary controlled airspace. The **Chair** and **Pete Stratten** agreed this has been addressed earlier in item 5.3.

11.4   **Pete Stratten** (BGA): The military retains a MATZ around Topcliffe. Topcliffe is used by the Air Cadets for winch launched gliding which operated an A/G radio. Aircraft that choose to recognise the MATZ, including flight training operators, seek but cannot receive any airspace access service from Topcliffe and so fly around the MATZ. The resulting airprox's at the Yorkshire Gliding Club site at Sutton Bank (including by mil aircraft) are becoming a routine event. When BGA previously raised this as an issue, the CAA response replayed the MoD response that the military are unable to remove the MATZ as MAC remains their greatest risk, etc, etc. We remain concerned that this topic isn't being taken seriously enough by either MoD or the CAA. A simple solution would be for the MATZ to be activated by NOTAM if the RAF ever need to use Topcliffe for fast traffic that needs a MATZ. **Ben Lippitt** spoke on behalf of the Airspace Classification team, and understood that Topcliffe falls within the Barnsley review, and that this issue would be raised at the Leeming Regional Airspace User Working Group around the concerns on accurate notification and service provision. The **Chair** took an action to provide feedback on Topcliffe at the next NATMAC meeting if not before.

Action: Secretary

11.5   **Pete Stratten** (BGA): In April 23, it was suggested in correspondence that CAA 'capture what GA perceive as the advantages/disadvantages of the PBN strategic approach (once there is one); and that we get some of that content/requests into this year's Airspace Change Masterplan as part of the GA impact statement.' Has that engagement taken place? With the decision made, i.e., 'In keeping with the AMS objectives, the scope of the UK PBN IR will be expanded to include all instrument runway ends', presumably there an intent to accommodate GA concerns and needs going forward with this topic. We're not clear on the topic and would welcome more detail than read in the NATMAC chair's statement, please. **Pete Stratten** acknowledged this AOB was more around the BGA's understanding of the PBN item in the Chair's Report. The **Chair** asked for Pete Stratten to send over a more detailed question to him and **Jean Francois** (Principal Airspace Regulator).

Action: Secretary

11.6 **Rob Hughes** (BMAA): UK airspace is now effectively closed to sub-ICAO licence holders. Will the CAA give greater priority to enabling foreign sub-ICAO pilots to visit the UK and access UK airspace? The **Chair** offered to give a couple of names of the individuals that would have the expertise to answer this question, given the expertise in the room was airspace focused rather than license focused.

Action: Secretary

11.7 **Dai Whittingham** (UKFSC), said the airspace change CAP documents are not linked, and asked if we could brigade the CAPs into a more organised structure, so that those looking for information can navigate through the various CAP documents. The **Chair** acknowledged the point raised.

Action: Secretary

11.8 **Matt Wilshaw-Rhead** (AOA), said that RP3 finishes towards the end of next year and asked if we plan to align with RP4. The **Chair** answered that NR23 will take the place of RP3, and this will probably be public knowledge by the time of the next NATMAC meeting. **Matt Wilshaw-Rhead** said that this only covers the financial element and asked about the safety and environmental element moving away from RP3 to RP4. The **Chair** didn't have the available information and advised we would take this away for a response.

Action: Secretary

12. ITEM 12 – DATES OF FUTURE MEETINGS

The **Chair** confirmed that the next NATMAC will be held virtually on Microsoft Teams.

- NATMAC 95 – 11th April 2024
- NATMAC 96 – 10th October 2024
- NATMAC 97 – 10th April 2025
- NATMAC 98 – 9th October 2025

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Annex B: National Air Traffic Management Advisory Committee 94 - Minutes

NATMAC 94 – ACTION LIST

Actions arising from NATMAC 94

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Annex B: National Air Traffic Management Advisory Committee 94 - Minutes

11.6   **Rob Hughes** (BMAA): UK airspace is now effectively closed to sub-ICAO licence holders. Will the CAA give greater priority to enabling foreign sub-ICAO pilots to visit the UK and access UK airspace? The **Chair** offered to give names of the individuals that would have the expertise to answer this question given the expertise in the room was airspace focused rather than license focused.

Secretary

11.7   **Dai Whittingham** (UKFSC), said the airspace change CAP documents are not linked, and asked if we could brigade the CAPs into a more organised structure. The **Chair** acknowledged the point raised.

Secretary

11.8   **Matt Wilshaw-Rhead** (AOA), said that RP3 finishes towards the end of next year and asked if we plan to align with RP4. The **Chair** answered that NR23 will take the place of RP3, and this will probably be public knowledge by the time of the next NATMAC meeting. **Matt Wilshaw-Rhead** said that this only covers the financial element and asked about the safety and environmental element moving away from RP3 to RP4. The **Chair** didn't have the available information and advised we would take this away for a response.

Secretary

NATMAC 94 – GLOSSARY

(This Glossary is not necessarily limited to acronyms used in these Minutes, but is intended to assist members with the variety of NATMAC correspondence promulgated)

AAA	Airspace, ATM & Aerodromes
ACOG	Airspace Change Organising Group
ACP	Airspace Change Process
ADS-B	Automatic Dependent Surveillance - Broadcast
AIP	Aeronautical Information Publication
	Administrative Incentive Pricing (spectrum)
AIMWG	Aeronautical Information Management Working Group
ANSP	Air Navigation Service Provider
AIWG	Airspace Infringement Working Group
AMS	Airspace Modernisation Strategy
ATSOCAS	Air Traffic Services Outside Controlled airspace
ATM	Air Traffic Management/Movement
ATWP	Air Transport White Paper
ATZ	Aerodrome Traffic Zone
AWG	Airlines Working Group
BVLOS	Beyond Visual Line of Sight
CMIC	Civil/Military Interface Committee
DMO	Delivery Monitoring and Oversight
DfT	Department for Transport
DGCA	Director General of Civil Aviation
EASA	European Aviation Safety Agency
EHS	Enhanced Mode S
ELS	Elementary Mode S
ECAST	(EASA) European Commercial Aviation Safety Team
EGAST	(EASA) European General Aviation Safety Team
FAA	Federal Aviation Authority
FAB	Functional Airspace Block
FAB EC	Functional Airspace Block Europe Central
FASI	Future Airspace Strategy Implementation
FFC	Future Flight Challenge
FIS	Flight Information Service
FUA	Flexible Use of Airspace
GAWG	General Aviation Working Group
HMT	Her Majesty's Treasury
ICAO	International Civil Aviation Organisation
IFP	Instrument Flight Procedures
NATS	National Air Traffic Services
NPA	Notice of Proposed Amendment (EASA)

NSA   National Supervisory Authority

PinS   Point in Space
PPR   Planned and Permanent Redistribution of air traffic
PRC   EUROCONTROL Performance Review Commission
PRNAV   Precision Area Navigation
PSSTG   Public Sector Spectrum Test Group

RPAS   Remotely Piloted Aircraft System
RMZ   Radio Mandatory Zone
RICBAN   Regulatory Information and Co-ordination Board Area North-West

SARG   Safety & Airspace Regulation Group (CAA)
SASWG   Spectrum & Surveillance Working Group
SBAS   Satellite-Based Augmentation System
SES   Single European Sky
SES IR   SES Implementing Regulation
SESAR   Single European Sky ATM Research Project
SESAR JU   SESAR Joint Undertaking
SSC   Single Sky Committee

TDA   Temporary Danger Area
TMZ   Transponder Mandatory Zone

UAM   Urban Air Mobility
UAS   Unmanned Aircraft Systems
UAV   Unmanned Aerial Vehicle
UTM   UAS Traffic Management

WRC   World Radio Conference

**National Air Traffic Management
Advisory Committee (NATMAC) Meeting
NATMAC 94**
Thursday 12th October 2023

Aviation House – Fire & Security

SECURITY

- Visitors passes to be worn and visible at all times.
- Visitors to always stay within the advised conference designated areas, which will include access to toilets and the restaurant (if applicable). Visitors should not enter offices or the rest of the building unless authorised and escorted by CAA staff.
- Keep personal possessions with you. An unattended bag or case is not only vulnerable to theft but may also be the cause of a security alert.

FIRE

- No alarm tests are expected. If you discover a fire shout "**FIRE"** and sound the alarm.
- If the Fire Alarm sounds (two tone claxon) the building will be evacuated via the nearest fire exit and CAA staff will accompany visitors to safely exit the building and proceed to the furthest point of the visitors' car park at the front of Aviation House, to await further instructions from the fire marshal.
- Fire exits (stairwells) are located in the four corners of the building. Lifts cannot be used, nor the balconies crossed to exit. Do not stop to collect personal belongings and do not re-enter the building until told to do so.
- If you require medical assistance at any time please speak to CAA staff or call Security 03301 383326. Or in an emergency, call 999.

NATMAC 94 Agenda

- 09:30 – Teas and Coffees available
- 10:00 - Introduction
- 10:05 – Minutes of NATMAC 93
- 10:10 – Actions List / Progress Report
- 10:15 – Chair's Report
- 10:30 – Airspace Modernisation Delivery Team Update
- 11:00 – CAP1616 Review
- 11:30 - Airspace Change Proposal Update
- 12:00 to 12:45 – Lunch (Served in Jupiter Meeting Room nearest the lifts)
- 12:45 – Airspace Change Organising Group Briefing
- 13:05 – Joint CAA/DfT Single Design Entity & AMS Part 3 Plan Overview
- 13:35 – AMS Annual Progress Report – Action from NATMAC 93
- 13:40 – Any Other Business
- 13:45 – Wrap Up

Progress Report – Actions

Actions arising from NATMAC 93

4.5 The **Secretary** pointed to a question in the chat from **Roger Hopkinson** (GAA) who asked if there was any benefit for stakeholders to pre -review the annual AMS progress reports to the Secretary of State for Transport. **John Dow** offered to take this away to speak with the AMS team on how they would do this, with the possibility of exposing the document to NATMAC before it reaches the Secretary of State. The **Chair** said we would take this away to see if the barebones of the report could be available at the Autumn NATMAC.

NATMAC 94 Update: An opportunity for the committee to provide feedback on the AMS delivery is an agenda item for NATMAC 94.

CLOSED

11.3 **Rob Daniel** to send a report to NATMAC of a review on how the UK compares to many other states in the world with regards to the criteria used in the design of controlled airspace, specifically its lateral dimensions.

NATMAC 94 Update: The Review Report has been sent out to the committee prior to NATMAC 94, and a short paragraph is included in the Chair's Report.

CLOSED

Progress Report – Actions

5.9 **Timothy Nathan** (PPL/IR Europe) commented that Manchester Airport do not provide crossing clearances over its Class D airspace and wanted to know how this could be changed. The **Secretary** answered that the team is looking at the Manchester Low level Route to see if access can be improved and highlighted the use of the 1522 Refusal of Access Forms if denied a crossing clearance. **Timothy Nathan** (PPL/IR Europe) responded to say that these forms are not filled in because pilots don't bother to ask for crossing clearances from Manchester anymore. The **Secretary** acknowledged the point but said that pilots should still request for a crossing clearance if that is part of their planned route but have another route in mind if their crossing clearance was not given. The **Secretary** also pointed out that the team was looking at whether access could be improved by amending the Manchester Low level Route (returning some airspace to class G for example). **Timothy Nathan** (PPL/IR Europe) asked for a follow -on conversation to go through his reasoning and concerns. The **Secretary** and **Nikki Deeley** agreed to arrange a chat and bring in colleagues who are working on the Manchester Low level Route.

NATMAC 92 Update: The Airspace Classification team arranged a discussion with **Timothy Nathan** *to provide a synopsis of the FCS 1522 process. The call also brought in members of the team who have been driving the review work on the Manchester Low level Route. Since this discussion the team have published a report on the Manchester Low Level Route and what we plan to do going into the Amend stage of the process.* CAP 2564: Airspace Classification Review: Manchester Low -Level Route 2023 (caa.co.uk)

CLOSED

Progress Report – Actions

9.5 **Roger Hopkinson** (GAA) asked how the CAA measures efficient use of airspace and what formula is used. **Ben Lippitt** said there is an official definition around 'efficient use of airspace' which is to do with a given number of aircraft through a volume of airspace and is mainly commercial based, and that is a reason why it cannot be used on its own, as it does not take into account new entrants to UK airspace, and Section 70 of the transport act requires the CAA to take into account other users requirements as well. **Ben Lippitt** offered to find out more and give a better response to the question.

NATMAC 94 Update: The CAA uses the following overall definition of "the most efficient use of airspace" – The most aircraft movements through a given volume of airspace over a period of time in order to make the best use of the limited resource of UK airspace from a whole system perspective. However, it is worth pointing out that the old CAP 725 process did not consider effects on surrounding class G airspace as much, but the CAP 1616 process does (and revised 1616 even more so). Much of the existing airspace structure in the UK has seen or undergone a CAP 725 ACP in the past, and so there inevitably will be pockets of class G airspace that have been impacted. This is exactly the sort of work the Airspace Classification team are keen to identify and tackle either via the CAP 1991 process, or by other available means. The Airspace Classification team will also feed any intelligence gathered into ACP consultations particularly with the FASI programme of ACPs, so airspace change sponsors will be cognisant of the current issues and concerns beyond their airspace boundaries. Furthermore, an ACP's post implementation review will consider and check the effects of the change beyond the controlled airspace boundaries.

CLOSED

Chair's Report

7

Airspace Modernisation Delivery Team Update
Colin Chesterton

Airspace Classification Review

UPDATE

NATMAC 94

Manchester Low Level Route

We produced a detailed report into the MLLR in July

4 options have been identified to potentially improve operations in the MLLR: raising the ceiling, convert to class G, introducing a speed advisory area, and changing the lateral boundaries

We are now working closely with airports and relevant ANSPs to undertake HAZID activity on the options and identify the best route forward

Key to our analysis is localised insight from all relevant stakeholders especially localised insight from airspace users
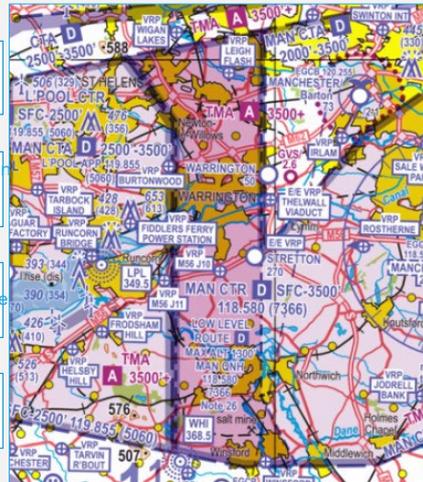
Additional activity undertaken by the team…

- We are undertaking a broad review of the Barnsley ASR
- We conducted a Call for Evidence and are scrutinising those responses
- We will undertake sub regional reviews e.g. Birmingham, East Midlands as well as considering common themes such as Danger Areas

Reviewing the Barnsley region

- Proposed amendment to Daventry CTA6 stopped due to knock on safety impacts identified by NERL during the HAZID process.
- Removal of Restricted Airspace being progressed by ONR, inc. a broader review of restricted airspace
- Progress against actions will be captured in a follow up report on our website

Our Cot... Report ...

- Required to review the effectiveness of our procedure after three years
- Currently redrafting the CAP to reflect our experiences to date
- ALL airspace to be reviewed, but "feasibility criteria" determines the suitability for amendment
- Aiming to complete work in October
- We will send final draft to NATMAC for comment

CAP1991 Review

Under Review

Stakeholder engagement lies at the heart of all our activities

Official – Named Parties Only. This information is intended for [insert entities, departments, teams, roles, individuals] only.

Electronic Conspicuity

NATMAC 94

12

EC project update

- Egis report laid the foundations for progress
- Aims to improve interoperability and:
- Provide a standard to integrate airspace with BVLOS etc
- Work to bring in specialist supplier to deliver key workstreams is ongoing
- Looks at risk, standards, probability of detection and human factors among other subjects
- EC Tech. Coop. Grp. is in the loop

13

EC – Next steps

- Continue to work with CAA colleagues to specify enablers to an EC standard that will address the aims of the AMS:
- Especially airspace integration and Detect & Avoid
- Support and guide the supplier once appointed – aim to produce a Concept of Operations that will inform the standard
- Number of trials feeding data both ways

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Airspace Infringement Update

Reported Airspace Infringements 2023

Year	Number
2018	1348
2019	1272
2020	748
2021	1064
2022	1384

	2019	2020	2021	2022	2023
January	63	45	18	75	70
February	77	31	19	58	69
March	83	63	39	105	74
April	119	9	101	114	126
May	159	51	109	174	144
June	146	57	146	167	191
July	177	134	137	182	118
August	179	82	136	168	124
September	104	117	106	117	
October	82	81	106	103	
November	37	44	103	76	
December	46	34	44	45	

12% reduction vs 2022

Areas of Significant Focus

- Stansted CTA-2 and TMZ -2;
- Solent CTA-2 and Southampton CTR;
- East Midlands CTA-2;
- Farnborough CTA-1 (south of Fairoaks);
- Southend; and
- London CTR (vicinity White Waltham).

Strategy Update

- Continue education and information
  - Southampton/Solent area
  - Stansted area
  - Restricted Areas (Temporary)
  - Hotspot narratives for aerodromes/strips proximate to CAS
  - Private Landing Sites within CAS

- Podcasts
  - RT and communications
  - LAIT functions
- Safety Sense Leaflet on Distraction/interruption issued
- Education/guidance on Frequency Monitoring Codes

- Close ties with GASCo relating to monthly AI Prevention webinars.

- Engagement with military regarding infringements involving military aircraft.

Strategy Update

- Focus on/Support to Local Airspace Infringement Teams
  - Currently 13:
    - 2023 additions Scottish and Southend
    - Bristol (Under formation)

- AI briefings
  - Face-to-face or via Teams available as required:
    - 8 delivered to date
    - 6 planned for Oct-Dec
  - Autumn focus on Midlands region

- Attendance at trade shows/GA events
  - MCASD, RAF Benson
  - 5 GA events in England & Scotland

CAA Post-infringement Action
All AI Reviewed
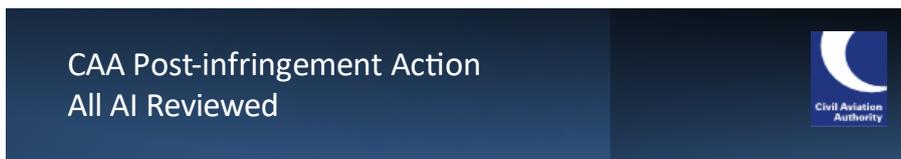
2023 to 30 September

	Total	%
No AI	92	9.9
Unknown	29	3.1
AI but NFA	32	3.4
Military	59	6.3
Student	25	2.7
Education Letter	454	48.7
Online Tutorial & Test	44	4.7
Practical Training	36	3.9
AIAC	143	15.3
Provisional Suspension	18	1.9
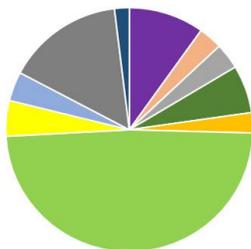
When Pilot Action/Inaction identified as Root Cause

	TOTAL	%
Education Letter	479	66.5
Online Tutorial & Test	44	6.1
Practical Training	36	5.0
AIAC	143	19.9
Provisional Suspension	18	2.5
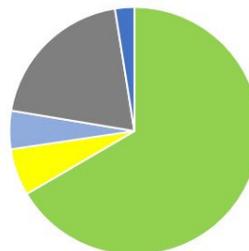
Military Infringements
By State/UK Air Arm
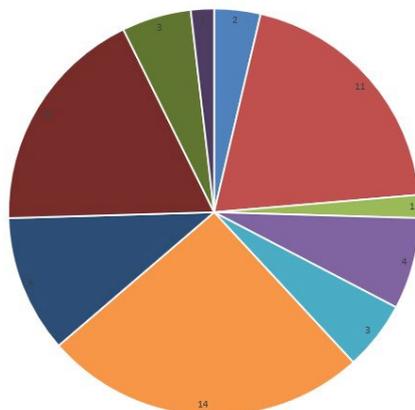
	%
Belgium	3.64
France	20.00
Germany	1.82
UK - AAC	7.27
UK - DHFS	5.45
UK- RAF	25.45
UK- RN	10.91
USA	18.18
Other	5.45
N/K	1.82

QUESTIONS

CAP 1616 Review

NATMAC – Thursday 12th October 2023

CAP 1616 Review

What will be covered?

- CAP 1616 document set
- Key principles of the airspace change process
- Summary of the airspace change process and modifications made
- Separate but related work strands
- Next Steps
- Questions

CAP 1616 Review

CAP 1616 Document Set

- The current version is being split into separate publications

- CAP 1616 will be a shorter publication, focussed on the requirements of the permanent airspace change process

- Guidance on the permanent airspace change process will be kept separate and published in CAP 1616f

- Guidance related to the temporary airspace change process (Part 1a) and airspace trials (Part 1b) will be published in CAP 1616g

- CAP 1616h will provide guidance on low impact airspace change proposals where a pre -scaled airspace change process exists (Airspace Policy Statements)

- Environmental guidance will be published in CAP 1616i – this will replace CAP 1616a, which will be withdrawn

- CAP 1617 (a withdrawn publication) will be re -purposed to cover Planned and Permanent Redistribution of Air Traffic (Part 2), noting that this regulatory process is due to be reviewed

- CAP 1618 (Airspace Design: Unusual Aerial Activities) will be re -purposed to cover Airspace Information (Part 3) – the pre-existing content will be covered elsewhere

CAP1616 Review

Key principles of the airspace change process

- **Safety:**
  - all airspace change proposals must consider safety and demonstrate the impact they will have on safety
  - safety has the highest priority in the airspace change process

- **Transparency:**
  - the airspace change process needs to be as transparent as possible
  - those potentially affected by an airspace change proposal should feel confident that their views have a formal place in the process
  - openness allows a change sponsor to see more clearly what's expected of them

- **Proportionality:**
  - we have a duty to develop a proportionate airspace change process to ensure the expeditious assessment of airspace change proposals

- **Accountability and Consistency:**
  - aligned with transparency, it's important that we publish Gateway Outcomes (Stages 1 to 3) and assessment/decision documents (Stage 5) so that everyone can see the rationale behind our decisions

CAP1616 Review

Summary of the airspace change process and modifications made

Stage 1: level definitions modified, more emphasis on establishing and validating the current day scenario, use of mandatory, discretionary, bespoke design principles

Stage 2: more emphasis on developing realistic and viable design options, clarification on requirements related to the development of baseline scenarios and engagement

Stage 3: making an allowance for engagement as opposed to consultation, responsibly of moderating and publishing consultation responses transferred to change sponsor, bringing forward the requirement to publish a consultation response document

Stage 4: requirement to publish consultation response document moved to Stage 3

Stage 5: removal of the reference to the 'Decide Gateway'

Stage 6: enhanced guidance on the requirements

Stage 7: development and use of data request forms

CAP1616 Review

Separate but related work strands

- **CAA Website:** we will work with relevant colleagues to create a more holistic and coherent view of airspace, with clear links to relevant legislation and policy. This project will also explore the possibility of developing educational videos related to the airspace change process, as well as other key airspace related topics.

- **Airspace Change Portal:** we are working with relevant colleagues to ensure that the Airspace Change Portal reflects the modifications made to the airspace change process, while also considering opportunities to enhance its functionality

- **Training course:** we have started developing a two -day course on the airspace change process to help stakeholders gain a deeper understanding of the airspace change process, why it exists and what is required from it

- **CAA resource:** we are increasing our resources and will be looking at the structure of the Airspace Regulation team

- **CAA Point of Contact:** we are currently reviewing the way in which we manage enquiries concerning the use of UK airspace and the airspace change process

- **Annual 'show and tell' events:** we will explore the possibility of facilitating annual 'show and tell' events to share updates and information related to the airspace change process with relevant stakeholders

CAP1616 Review

Next Steps

- Mapping of in -progress airspace change proposals to new level definitions and liaison with change sponsors
- Approval and publication of the CAP 1616 document set
- Distribution of related communications
- Updates to the CAA website
- Updates to the Airspace Change Portal
- Internal and external training

Questions

NATMAC 94 – Thursday 12ᵗʰ October 2023

Airspace Change Proposal Update
Manager Airspace Regulation – Ben Lippitt

Dataset: 02 October 2023

ACP Types 3-monthly comparison

ACPs received by year
2023 YTD − 72
2022 − 106
2021 − 94

Chart: ACP Types 3-monthly comparison (Mar-23, Jun-23, Sep-23)

Type	Mar-23	Jun-23	Sep-23
Level 1	55	62	62
Level 0	31	32	37
Level 2c	35	35	36
TBC	30	36	31
CAP 725	26	31	31
Temporary	31	17	17
Trial	13	15	14
Level 2b	11	11	11
Level 2a	7	7	6
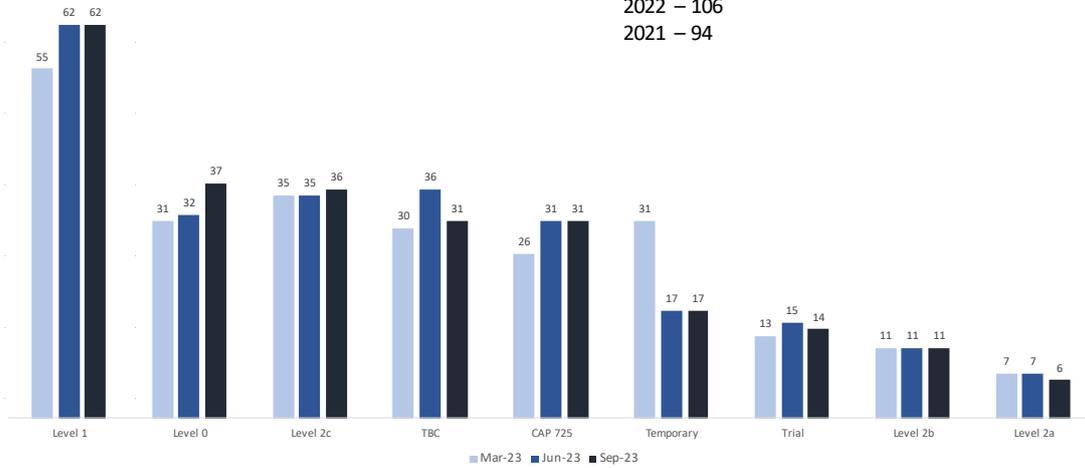
Trend Analysis (2 Years) – Live Airspace Change Proposals

4% decrease in the last 12 months
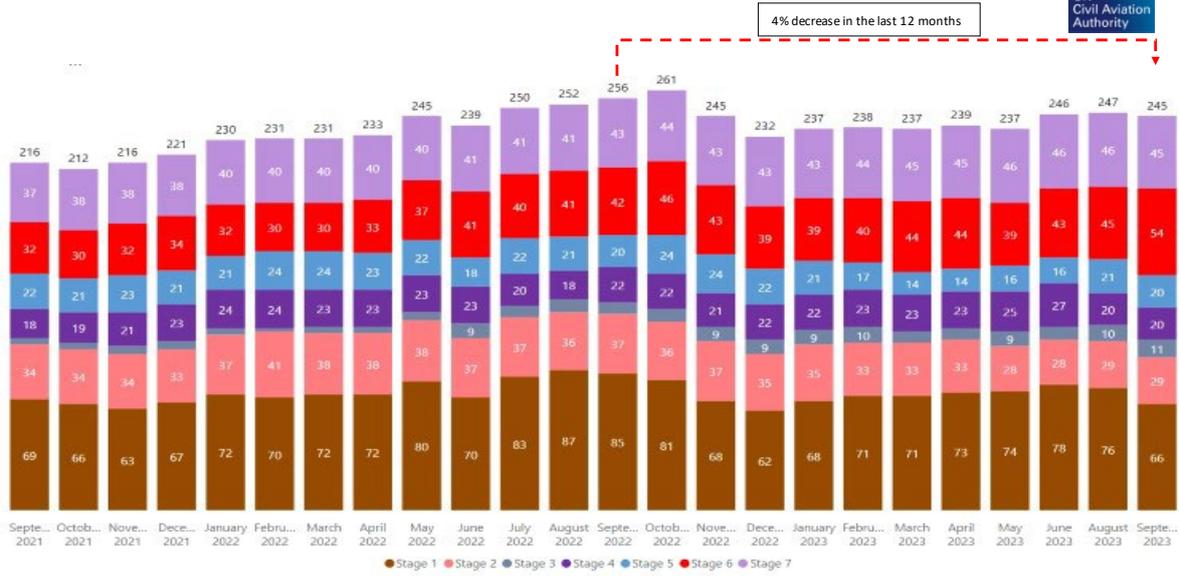
ACP Forecast

Depicts the monthly ACP schedule for Define (brown), Develop & Assess (pink) and Consult (purple) with simultaneous Stage 5 assessments overlayed (blue)

Airspace Change Programmes
Future Airspace Strategy Implementation (FASI)

- **'ScTMA' Cluster**
  - **4** ACPs currently within this Cluster
    - **4** '**In Progress**', **0** '**Paused**'
    - **4** in **Consult (Stage 3).**

  - Aberdeen
  - Edinburgh
  - Glasgow
  - NERL ScTMA

ScTMA Cluster
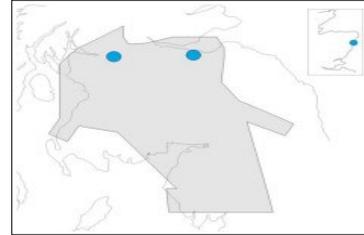
- **'MTMA' Cluster**
  - **5** ACPs currently within this Cluster
    - **5** '**In Progress**', **0** '**Paused**'
    - **3** in **Develop & Assess (Stage 2)**
    - **2** in **Consult (Stage 3).**

  - Liverpool*
  - East Midlands
  - Leeds Bradford
  - NERL MTMA
  - Manchester

MTMA Cluster
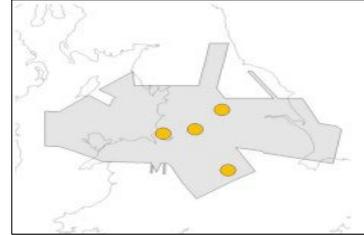
Liverpool- Reintegrated into Masterplan in February 2023 (was previously at Step 4a)

Airspace Change Programmes
Future Airspace Strategy Implementation (FASI)

LTMA Cluster

- **'LTMA' Cluster**
  - **15** ACPs currently within this Cluster
    - **15** '**In Progress**'
    - **5** in **Develop & Assess (Stage 2)**
    - **10** in **Consult (Stage 3).**

  - Heathrow R2
  - Gatwick
  - Bournemouth
  - Farnborough
  - Southend

  - Southampton
  - LAMP2 D2
  - LAMP2 D3
  - LAMP2 D4
  - Manston
  - Northolt
  - Biggin Hill
  - Stansted
  - Luton
  - London City
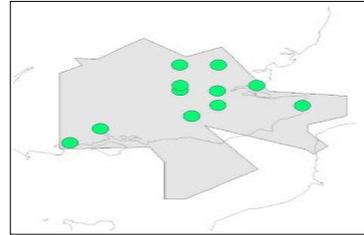
- **'WTA' Cluster**
  - **5** ACPs currently within this Cluster
    - **5** '**In Progress**', **0** '**Paused**'
    - **1** in **Develop & Assess (Stage 2)**
    - **3** in **Consult (Stage 3)**
    - **1** in **Stage 6 (Implement).**

  - Exeter
  - Bristol
  - Cardiff
  - LAMP2 D1.2
  - LAMP2 D1.1

WTA Cluster
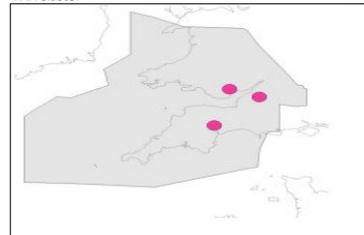
Airspace Change Proposals
Military

Enabling RPAS & RAFAT Operations Out of RAF Waddington

- Permanent (ACP-2019-18)
  - CAA Decision made in August 2023 (Approved)
  - Target AIRAC 12/2023 (effective 30th November 2023)

- Temporary (ACP-2023-003)
  - CAA Decision made in September 2023 (Approved)
  - Target AIC Publication 19 October 2023
  - Available for activation 9th – 29th November 2023

Airspace Change Proposals
RPAS FFC

Apian London Healthcare Bridge

- Temporary, Trial (ACP-2023-061)
  - RPAS Operator - Wing (multi-rotor, short range, no landing winch-lowering delivery)
  - Stakeholder engagement not yet started
  - Small TRA within London CTA Class D airspace (~2km). Dimensions not yet agreed or approved, straight line between Guy's & St Thomas' hospitals in central London. (London Eye – Shard) 410ft ALT ceiling.
  - Target for ACP submission to CAA 24/11/2023
  - Target trial dates 12/Feb/2024– 9/Aug/2024

Airspace Change Proposals
RPAS Non FFC

Apian Northumbria NHS Air Grid

- Temporary, Trial (ACP-2023-015)
  - RPAS Operator - Zipline (fixed wing, long range, no landing paradrop delivery)
  - Stakeholder engagement ongoing
  - Designs not finalised TDA dimensions not yet agreed or approved (expected to be revised following engagement)
  - Target for ACP submission to CAA 16/02/2024
  - Target trial dates 02/May/2024– 31/Oct/2024

CAA Policy for the Establishment and Operation of Special Use Airspace

- Scope – Prohibited Areas, Restricted Areas, Danger Areas, Temporary Segregated Areas, Temporary Reserved Areas and Cross Border Areas.
- Aims to harmonise with ICAO and ERNIP documentation, recognising the UK's position and the strategic objectives of the AMS.
- Significant developments:
  - Improved clarity on how each structure should be utilised.
  - Broadens the application of Airspace Management processes.
  - Increased accountability for 'owners' of Special Use Airspace.
  - Improved clarity on the provision of SUA Crossing and Information Service (current DACS and DAAIS).
- Draft policy scheduled for engagement w/c 23 Oct on CAA Citizen Space.
- Intention to publish the finalised policy document in Dec 23 or Jan 24.
- Review of related documents inc. sections of the AIP, CAP 740 (UK ASM Policy) and other CAA Policy Statements.
- Gradual implementation of updated policy and review of existing airspace structures.

Airspace Change Proposals
MoJ & HMPPS Restricted Areas (Permanent)

Implementation of RPAS Restricted Areas over HM Prisons/YOI in England and Wales

- Request made by Ministry of Justice (MoJ) & HM Prisons and Probation Service (HMPPS) for RPAS Restricted Areas (RA) around CAT A to C prisons within England and Wales.

- 98 Prisons/YOI have been given bespoke RAs based on their   different shapes and sizes.
  - Dimensions based on 400 meters from the HMP boundary fence and up to 400ft AGL.
  - Some HMPs lie within FRZs and a Restricted Area. RPAS operators would require their permissions to operate before any HMPPS decision is made. (Rochester, London City, London City Heliport, London Heathrow, Norwich, Ternhill and Manchester and EGR 313 Scampton)

- Statutory Instrument (SI) has been drafted and ready for   sign off by the MoJ - Lord Chancellor and Secretary of State for Justice, in the upcoming month, pending CAA recommendations.

- Applications to operate in the HMP RAs made via the CAA   ACOMS portal for <u>data checking only</u> by the ORA regulator before final decision made by HMPPS.
  - Some of the data being checked will be RPAS pilot details (via DMARES) and the location of operation (inside/outside the HMP RA). This is similar to data checked for current Nuclear Exemption requests.

- Promulgation via SI, AIP Entry, Perm NOTAM, Skywise and collaboration   of the CAA, MoJ and HMPPS Comms teams for press releases and website updates. (pending CAA recommendations.)

Any Questions?

42
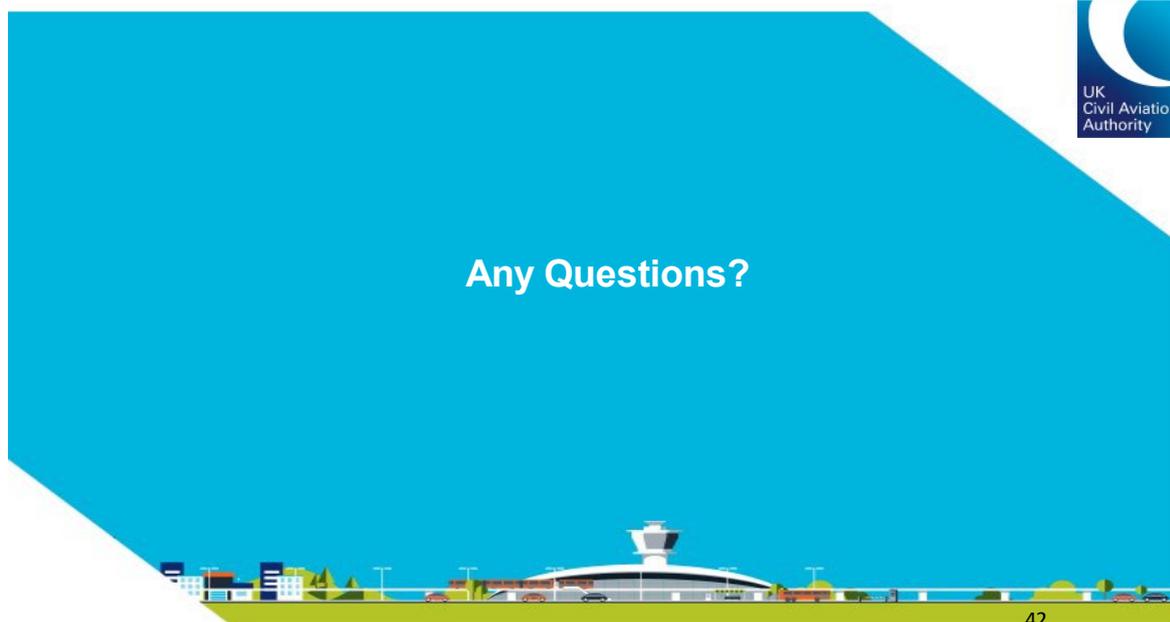
Break for lunch

ACOG Update

Mark Swan – Head of ACOG

NATMAC Meeting 94

October 2023

ACOG
Airspace Change
Organising Group

ACOG

AGENDA

- Masterplan Iteration 3 Development
- UK Airspace Change Programme Coordination
- Benefits Management
- Communications and Engagement

Masterplan Iteration 3 Development

ACOG Airspace Change Organising Group

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Masterplan Iteration 3 Development Update – Q4-2023

Q4-23 UPDATE

- Integration issues with the **Scottish TMA ACPs** prompted significant revisions to the system-wide design, delaying Public Engagement & the MP It.3.

- ACOG-led **ScTMA Lessons Learned Review** underway to inform the approach in other clusters.

- The **revised ScTMA Programme**, agreed with ACP Sponsors, re-scheduled the Public Engagement Exercise and submission of the MP It.3 to Q1-24.

- ACOG worked with the **LTMA ACP Sponsors** in Q3-23 to define and agree a full end-to-end process for ACP development & deployment.

LOOK AHEAD

- Preparation for **Manchester TMA system-wide design** ATC simulations in summer 2024, enabling Public Engagement and MP It.3 development

- NERL is on track to complete the proposed **network design for the LTMA** in April 2024.

- The **LTMA Airport ACP Sponsors** are further refining their low-altitude airspace design options in preparation for the integration phase.

- ACOG to revise the plan for the **West cluster** based on Cardiff Airport's decision re Stage 3.

UK Airspace Change Programme Coordination

ACOG Airspace Change Organising Group

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Airspace Change Programme Coordination Update– Q4-2023

Q4-23 UPDATE

- ACOG has completed the **recruitment of a senior Head of Programmes** to oversee and align Masterplan development & deployment timelines.

- The first practical application of the ACOG **Cumulative Analysis Framework (CAF)** was delivered with ScTMA ACP Sponsors in Q2-23.

- ACOG has secured an **airspace design and visualisation software tool** (Volans) to collate ACP design options, better manage interdependencies and improve stakeholder/public engagement.

LOOK AHEAD

- ACOG to complete recruitment of **additional Programme Account Managers** dedicated to each Masterplan regional cluster in Q4-23.

- **ACOG to coordinate further CAF reviews** and analysis in support of the ScTMA and MTMA system-wide proposals during Q4-23 and Q1 -24.

- An initial CAF review of **LTMA interdependencies** at lower altitudes will be supported by the collation of Airport ACP options data in the ACOG version of the Volans tool during Q4-23 and Q1 -24.

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Benefits Management

ACOG Airspace Change Organising Group

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ACOG Benefits Management Update – Q4-2023

Q4-23 UPDATE

- ACOG Masterplan **Benefits Management Strategy** and accompanying model established in Q3-23 and shared with ACP Sponsors for peer review.

- ACOG published the findings of **phase one of the Manchester Airport IMPACT trial** in Q2-23, modelling potential environmental improvements.

- ACOG updated the **Masterplan General Aviation (GA) Impact Assessment** in Q2-23 to incorporate more specific information about the potential impacts of the Scottish cluster ACPs.

LOOK AHEAD

- ACOG to implement and maintain a **quarterly cycle of Masterplan benefits review,** management and reporting from Q4-23 onwards.

- ACPG to complete **phase two of the IMPACT trial**, working with EasyJet and EUROCONTROL to validate the modeling in flight simulations.

- ACOG to complete **further engagement in Q1-24 with airspace users from the GA, Military, Drone, Advanced Air Mobility and commercial space launch** sectors to gather feedback about the potential impacts of the Masterplan ACPs.

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Communications & Engagement

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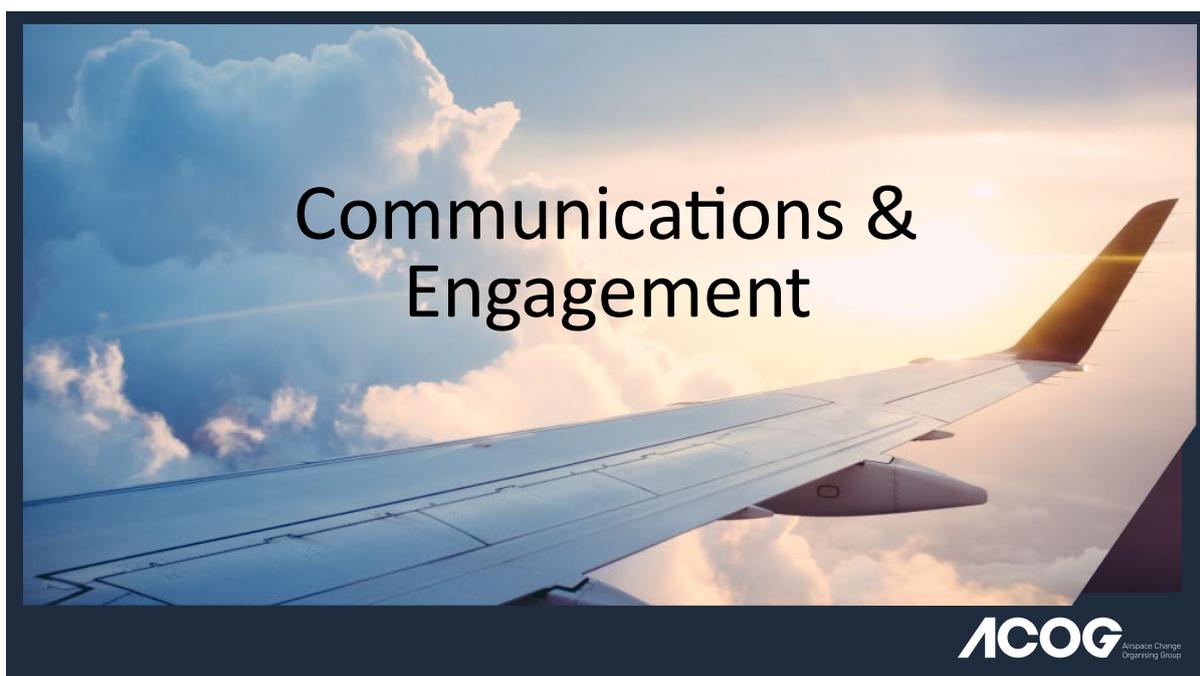
ACOG

ACOG Communications and Engagement Update– Q4-2023

Q4-23 UPDATE

- ACOG completed a 12-month programme of **Government engagement** in Q3-23, including Parliamentary Receptions with MPs and dedicated Ministerial briefings.

- ACOG is conducting quarterly meetings of the **Community Advisory Panel** to help shape the approach to engagement with local stakeholders.

- ACOG is partnering with the British Chamber of Commerce to host events that highlight the expected economic benefits of modernisation to companies that rely on aviation to do business.

LOOK AHEAD

- **Additional parliamentary receptions and drop -in sessions** will be scheduled over the next 12 months, aligned to the preparation for Masterplan Public Engagement Exercises.

- ACOG plan to conduct **Community Focus Groups** in Q1-24 to assess current attitudes and perceptions towards airspace modernisation from people affected by aircraft noise.

- ACOG will complete a**Public Engagement Exercise (PEX)** on the draft content of the Masterplan Iteration 3 (Scotland) in Q1-24.

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Airspace Modernisation Single Design Entity

NATMAC 12 October 2023

Stuart Lindsey, Head of Airspace Modernisation, UK Civil Aviation Authority

Overview

- Story so far
- Key policy considerations
- Engagement strategy
- Questions we have been asking stakeholders
- Next steps

Department for Transport

Single Design Entity

The Single Design Entity (SDE)
The story so far

Department for Transport

The current delivery model for airspace change is based on numerous 'sponsors' of individual airspace change proposals, normally airports and air traffic service providers, being responsible for taking forward and funding changes in airspace design.

A theme emerging from the CAA's Airspace Modernisation Strategy refresh, published in January 2023, was that the complexity of this 'multi -sponsor' approach creates significant risks to the delivery of airspace modernisation, including the airspace change masterplan, because of the large number of airspace interdependencies.

It has been suggested that airspace design might be more successfully delivered through a **Single Design Entity (SDE)**. This would be in line with the model operated in many other countries.

The Single Design Entity (SDE)
The story so far

In Spring 2023, the CAA Chair wrote to the Minister for Aviation suggesting that a joint DfT and CAA project team be formed to work through the options for implementing an SDE model. The letter noted the particular issue of the London Terminal Manoeuvring Area (LTMA). Despite best efforts, progress with modernisation is hampered by different parties designing routes for 'their' volume of airspace without necessarily thinking how the design works most effectively and efficiently as a holistic UK airspace system.

The concept was agreed, and the project team began work after the July Aviation Council.

The project team will develop an SDE proposal to deliver airspace modernisation, initially for the LTMA, in order to improve delivery confidence of airspace modernisation and maintain current timelines.

Key policy considerations

- This project is about **airspace design** . We are not planning to fundamentally change who manages the airspace or sponsors airspace changes – that will for the most part remain with airports and air traffic service providers, who know their local stakeholders' interests best. The CAA's CAP 1616 airspace change process, which is in the process of being reviewed separately, is unaffected.

- We recognise that there is already considerable modernisation work underway as part of the airspace change masterplan. **It is crucial that sponsors continue to progress these airspace change proposals to already established timelines, as this will be critical to implementation.** Any changes resulting from this DfT/CAA project should not require work that has already been undertaken on airspace change proposals to be redone. This will be factored into planning assumptions.

- Stakeholder input is key. We cannot understand the problem fully without open dialogue with industry experts.

Engagement in support of developing a proposal for an SDE

Informal engagement

- **Engagement Phase A – Listening (September 2023)**
Understanding the problem from different stakeholder perspectives, including other states, other industry sectors

- **Engagement Phase B – Testing (timing tba)**
Shaping the options for an SDE (scope, organisation, transition, implementable plan etc)

- Feedback received in other meetings and supplemented, if necessary, by email.

Formal consultation on any SDE proposal would, subject to Ministerial and CAA approval, likely occur in 2024, once options have been developed and evaluated.

> *Throughout, our aim is to be open and transparent and, through our engagement with stakeholders, to hear and understand all views. This will allow stakeholders to help shape the proposal as it matures and achieve the best outcome.*

Questions we asked stakeholders in 'listening' sessions

UK airspace needs to be modernised. The London TMA is a priority. What challenges arise from the current model of multiple airspace change sponsors?

What differences in challenges are there by geographical area, types of airspace or stakeholder?

What is working with the current model? What might we lose if we move to an SDE? What impacts might there be – on airspace modernisation or certain stakeholders?

What new problems might we see in future if nothing changes? Is do-nothing an option?

If we introduced an SDE, what would 'good' look like? What could be in scope? Who might take on the role of SDE (including a new entity)?

How could the SDE be funded?

Next steps

- DfT/CAA analysis of engagement Phase A – Listening workshops.

- DfT/CAA will produce anonymised notes of each workshop for all invitees.

- We have said to stakeholders that additional feedback **to amplify or clarify points** can be provided by email to airspace.modernisation@caa.co.uk

- Engagement Phase B – Testing. We will send out invitations once we have developed preliminary SDE options that we can test effectively through stakeholder engagement.

- Continued development of SDE options (scope, organisation, transition, implementable plan).

- Potential formal consultation in 2024, subject to Ministerial and CAA Board approval. Target date for a decision (once consultation responses have been analysed and taken into account), has yet to be agreed.

Airspace Modernisation
Part 3 Plan Overview

October 2023

Airspace Modernisation Origins

- ICAO Global Air Navigation Plan – Signatories are obligated to implement standards and recommended practices – they become State level obligations.

- EASA implementation of the ICAO GANP is managed through the SES programme

- Post-EU exit, the UK is required to implement its own solution, which would have occurred through EASA, but is now managed through the Airspace Modernisation Strategy (AMS)

Airspace Modernisation Strategy Part 1, 2 & 3

Part 1 2018 & 2023
Strategic objectives & enablers

- Sets out the revised overall strategy and explains the longer-term vision from 2024-40
- Pulls together the ICAO GANP, the 2018 AMS initiatives and new requirements that the CAA has identified through extensive stakeholder engagement in 2021–2022
- It's the **Strategic Objectives and enablers.**

Part 2 2023
Delivery elements, ways & means

- Sets out the **ends,** the policy objectives for achieving the shared vision for airspace modernisation
- Describes the **ways** of achieving the ends, such as new airspace design, new operational concepts and implementable new technologies
- Establish the **means** of delivering modernised airspace, such as resources, organisation needed, project teams, and supporting industry/entities
- Draw up delivery plans that are then overseen by the CAA.

Part 3 2023
The Delivery Plan

- The technical deployment plans outlining programmes of work with supporting projects
- Supporting governance including links to other programmes of work such as the Future Flight Challenge.

Mapping Projects, Outcomes & Tools

How is the Gov, CAA and wider Aviation Sector going to deliver modernisation?

The **9** Delivery Elements set out in the AMS Part 2 strategy, address the high level requirements set out in in ICAO's Global Air Navigation Plan (GANP)

For Part 3, this broadly encompasses 7 High level Themes, linked to 32 Outcomes and 124 projects or varying size.

ICAO GANP Threads and Elements

Information				Operational																Technology			UK Focus		
AMET	DAIM	FICE	SWIM	ACAS	ACDM	APTA	CSEP	DATS	FRTO	GADS	NOPS	OPFL	RATS	RSEQ	SNET	SURF	TBO	WAKE	ASUR	COMI	COMS	NAVS	Env	Align	Flex
								✓		✓															
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UK x9 AMS Elements

1. *Trajectory operations*
2. *Terminal airspace redesign*
3. *Network operations*
4. *Integration*
5. *Airspace management*
6. *Data services*
7. *Future surveillance*
8. *Integrated CNS systems*
9. *Aircraft capabilities*

CAA x7 AMS Part 3 Deployment Plan Elements incl Outcomes, Objectives & Tasks .

- Simplification of the established route structure
- Widespread use of flexible access airspace concepts
- Flight-centric aircraft trajectory information
- Electronic position, flight and airspace availability information
- Air traffic management systems and tools
- Communications, navigation & surveillance infrastructure
- Aircraft capabilities

1 Delivery Projects
2 Delivery Projects
3 Delivery Projects
4 Delivery Projects
5 Delivery Projects
6 Delivery Projects
7 Delivery Projects

Governance to deliver the AMS

To enable the AMS delivery, internal CAA Steering Groups with technical experts were formed. Each Steering Group establishes Delivery Groups supported by Working Groups which tackle workstreams at a more granular and technical project level

Airspace Modernisation Programme Board (AMPB)

CAA Airspace Modernisation Steering Groups

- **Aircraft Capability**
  - HAPS (Higher Airspace Altitude Stations) Delivery Group
  - RPAS C2 (Command and Control) Delivery Group
  - ACAS Delivery Group
  - ATS Communications Delivery Group
  - Wake Turbulence Delivery Group
- **Digital Data Transformation**
  - SWIM Delivery Group
- **Spectrum, Comms, Navigation, Surveillance**
  - Infrastructure Delivery Group
  - Virtual Datalink Delivery Group
- **Airspace Integration**
  - ATM / UTM Delivery Group
  - DAA (Detect and Avoid) Delivery Group
  - Electronic Conspicuity
  - FIS (Flight Information Service)
  - Airspace Structures Delivery Group

Active
Not started / inactive

Recent Highlights

- SERA (Standardised European Rules of the Air) Action Group set up to support UTM DG

- Air Risk Working Group (ARWG) set up to support Detect and Avoid Delivery Group

- SCNS SG monitoring developments with regards to UK -SBAS (Satellite -Based Augmentation System)

- CAA work commenced to define the UK SWIM approach

Airspace Modernisation Strategy Annual Progress Report

NATMAC 94 - 12th October 2023

Lucy Page
Principal– Airspace Modernisation Oversight

Opportunity for NATMAC Members to Provide Feedback on Delivery of Airspace Modernisation

In 2017, the Government updated CAA's strategic role for airspace modernisation by issuing new Air Navigation Directions. Consistent with our role as specialist aviation regulator and our statutory responsibilities, we are required to prepare and maintain a coordinated strategy and plan for the use of UK airspace for air navigation, including for the modernisation of the use of such airspace.

Our Airspace Modernisation Strategy CAP1711: Airspace Modernisation Strategy 2023–2040 Part 1: Strategic objectives and enablers (caa.co.uk) responds to that requirement, setting out the detailed elements that the industry must deliver, to achieve the objectives envisaged in the current Government policy.

- CAP1711
- UK Airspace Modernisation Strategy (AMS) Up To 2040
- Integration Of New Operational Concepts, Technologies and Airspace Re-design

Industry-led Delivery Plans
✓ Scope & Benefits
✓ Schedule Feasibility & Dependencies
✓ Delivery Blockers & Trade-Offs
✓ Opportunities, Risks & Mitigation

Annual Report to the Secretary of State

To establish the means of delivering modernised airspace, such as the resources needed, the strategy requires the entities responsible for delivering the elements to draw up delivery plans, with progress overseen by the CAA.

The CAA must report to the Secretary of State annually on the delivery of the strategy and the Airspace Modernisation Annual Progress Report fulfils that requirement.

The report is produced by the Airspace Modernisation Oversight team. The team is sat within the CAA's Communications, Strategy and Policy Department and is independent from the CAA delivery teams.

The latest version of the report is available here CAP2494: Airspace Modernisation – 2022 Progress Report (caa.co.uk)

'Roger Hopkinson (GAA) asked if there was any benefit for stakeholders to pre-review the annual AMS progress reports to the Secretary of State for Transport.'
Minuted at NATMAC 93

Due to the report's independent nature, we will not be sharing it with third parties before publication. However, in response to this request, we are offering members of NATMAC an opportunity to provide feedback on delivery of airspace modernisation. Opinions received will be summarised in a new, dedicated chapter of the report. The final draft of the chapter will be shared with the original authors for pre-review in early Q1 2024.

Opportunity for NATMAC Members to Provide Feedback on Delivery of Airspace Modernisation cont.

Feedback on airspace modernisation progress made between January and October 2023 can be submitted by Friday 1 December 2023 to airspace.modernisation@caa.co.uk using below format:

Category	AMS delivery elements	2018 AMS initiatives further developed through these elements		Delivery Lead (organisations involved in delivery)	NATMAC Member Feedback (Progress, Impact, Engagement, Risks, Benefits, Issues)
Aircraft-Based Navigation	UK-ABN/1. Trajectory-based operations	2, 7, 8, 11, 14	Overarching principle: implementing government policy on minimising the environmental impacts of aviation within the context of supporting a strong and sustainable aviation sector	NERL / CAA / ACOG	
	UK-ABN/2. Terminal airspace redesign	4, 5, 14		CAA / ACOG / NERL	
	UK-ABN/3. Network management	3, 6		CAA / NERL	
	UK-ABN/4. Integration	3, 9, 10, 11		CAA / NERL / MoD	
Airspace Management	UK-AM/5. Airspace management				
	UK-AM/6. Data services	13, 15		CAA / NERL	
	UK-AM/7. Future surveillance and spectrum	11, 12		CAA	
	UK-AM/8. Integration of communications, navigation, surveillance & spectrum	12, 13, 14, 15		CAA / NERL	
	UK-AM/9. Aircraft capabilities	New		To be confirmed	N/A

Any Other Business?

Dates of future NATMAC meetings

- NATMAC 95 – 11th April 2024
- NATMAC 96 – 10th October 2024
- NATMAC 97 – 10th April 2025
- NATMAC 98 – 9th October 2025

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