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Minutes of an engagement meeting between the Fairford RPAS ACP team and NATS, 24 May 2022, held at NATS Swanwick and via Teams

Present

NATS	[REDACTED]	Airspace and Future Operations (Military Interface Lead)
	[REDACTED]	Mgr ATC Procedures (Swanwick)
	[REDACTED]	ATC Requirements and Acceptance Mgr)
	[REDACTED]	Operations Policy Team
	[REDACTED]	Airspace and Future Operations (Airspace Evolution Mgr)
	[REDACTED]	Airspace and Future Operations (Airspace Development Consultant)
	[REDACTED]	Western Airspace Deployment Lead
	[REDACTED]	Manager UTM Strategy & Service Integration
Fairford RPAS ACP team	[REDACTED]	Mgr ATC Procedures (Prestwick)
	[REDACTED]	ACP sponsor
[REDACTED]	[REDACTED]	USAFE

Minutes	Action
<p>Item 1 - Introduction</p> <p>All attendees gave introductions and the Fairford ACP team thanked NATS personnel for hosting.</p> <p>A PowerPoint presentation was shared, with agenda as follows:</p> <ul style="list-style-type: none">• Views on integration in CAS for certified RPA without ACAS• Views on proposed MALE transit routes• Views on climb/descent options• Preferred option for TDA – timelines for engagement and submission• Airspace management and FUA• Reduced safety buffers• Provision of quantitative data for impact on network traffic• Requirements for systems mapping updates and testing <p>The remainder of the PowerPoint depicted the initial options taken from the Stage 2A engagement letter.</p>	

<p>Item 2 – Integration Discussion</p> <p>█ showed an excerpt from CAP 722 detailing the requirements for unmanned aircraft conduction BVLOS operations and advised that said policy, though civil, was being applied for this ACP. █ suggested a review of the Visiting Forces Act to understand applicability of MAA regulation.</p> <p>CAP 722 states a requirement for Detect and Avoid (DAA) capability, segregated airspace or clear evidence of ‘no aviation threat’. As the intended RPAS will be certified aircraft but not equipped with DAA capability (no Airborne Collision Avoidance System (ACAS)), the Sponsor asked how it might be possible to approach an argument for integration. It was advised that integration rather than segregation is the preference for NATS and that a demonstration of equivalence to a certified, manned aircraft with a safety argument to mitigate any deltas could be developed in parallel to the ACP. It was acknowledged that the decision on safe ability to integrate lies with the CAA.</p> <p>The ACP team was asked to provide the equipment information that would be entered onto a flight plan (see CAP 694) in order for NATS to give a view on equivalence.</p> <p>There was discussion of integration requirements in other European countries, where double standard separation is applied. █ asked whether the doubling is to provide a specific mitigation or just for caution, and suggested that a safety argument for integration in UK airspace should be based on only the actual required separation.</p> <p>█ stated that, due to licensing limitations, NATS controllers will not be allowed to control RPAS, therefore they will be required to operate as OAT with 78 Sqn or another suitable agency. That intent was confirmed by the ACP team.</p>	<p>█ consult Visiting Forces Act to understand applicability of MAA regulatory articles</p> <p>█ to review CAP 694 and provide equipment capability information</p>
<p>Item 3 – RPAS Operations and Procedures</p> <p>NATS team members asked questions about various RPAS operating procedures and performance characteristics, including lost-link, wake turbulence, anti-icing capability and potential communications lag with remote pilots. The ACP team responded where able and agreed to consult RPAS operators to get accurate responses where required.</p> <p>NATS requested input into developing lost-link and other procedures for operating within the UK. The ACP team agreed and advised that 78 Sqn (Swanwick Mil) had already been in discussions to provide ATS to the RPAS operating as OAT, but that a formal request for support was still being staffed between USAFE and the MOD due to potential impact on work force requirements.</p>	<p>█ to consult RPAS operators for answers to questions on performance characteristics</p>
<p>Item 4 – Feedback on Initial Options</p> <p>█ provided initial feedback that for MALE options, segment A, TC1 and 2 would be unlikely to have detrimental impact on Western</p>	

<p>Airspace but for TC3 and 4 it would reduce impact if a single level was selected and maintained rather than a large block. The latter point was iterated by other members of the NATS team, who advised that initial climb to a transit level would be preferred over climb in transit, which would block out multiple levels.</p> <p>There was general feedback that activating D201 would be more detrimental than only an overlaying corridor. For MALE options it was also recommended that the TC options align with extant Radar Corridors (RC) where possible, as these have already been established to minimise impact on network traffic, though there would still be potential to cause flight planning issues at key transition areas. The sponsor advised that transit level may not always align with the allocated RC levels but the lateral positions could certainly be reviewed, and the Westcott and Swindon RCs may be suitable in their current guise if they can be utilised. NATS iterated that any feedback on TCs does not imply support of them as a concept and that other methods of accommodating RPAS e.g. CFP, NDS are far more preferable than segregated corridors.</p> <p>NATS asked that the ACP team consider cumulative impacts of segregated airspace activations, as ACPs tend to only consider their sole impacts. It was also suggested that, as the RPAS will operate OAT under control of 78 Sqn, their personnel may be able to provide suggestions on how best to manage the flights, routings, etc.</p>	
<p>Item 5 – Airspace Management and FUA</p> <p>There were concerns expressed about the dimensions of TCs as their activation will mean that network traffic cannot flight plan to route through, even if there are tactical airspace hand backs or agreements in place to cross. The measures suggested to provide flexibility and increase access can be effective at lower altitudes but are not effective where the system is designed to manage planned flow.</p>	
<p>Item 6 – Buffer Policy</p> <p>The policy statement for SUA buffers states that a DA for BVLOS activity requires 10NM distance from an ATS route and 5NM from the edge of CAS. The ACP team asked for clarification of whether it might be acceptable to NATS to reduce those buffers. ■ stated that, due to the predictable, reliable nature of large, certified RPAS flight profiles, it should be possible for the operators to write a safety argument to reduce that buffer, and that other ACP projects have completed similar work in conjunction with other airspace users and stakeholders which, if approved by the CAA, could form the basis of the sponsors or operators argument. Deviation from policy would still need to be approved by the CAA.</p>	
<p>Item 7 – Provision of quantitative data</p>	

<p>Due to time limitations, this topic was only briefly touched on and will be followed up separately through the JFADT.</p>	
<p>Item 8 – System mapping update requirements</p> <p>█ and █ confirmed that any TDA or DA of the size proposed in this ACP would definitely need to be incorporated into the ATM system for network planning, which can only be done at major AIRACs. There is still some uncertainty about major AIRAC dates for 2023 due to the FRA and WAD ACP implementations in spring 2023, but it will be important for the Fairford ACP team to understand the potential timeline constraints and plan for a substantial amount of time for implementation. There was an indication from NATS that the current proposed timeline would not be achievable from a systems perspective, regardless of ACP outcome.</p>	
<p>Item 9 – AOB</p> <p>There was no AOB. The ACP team thanked NATS for hosting the engagement session and agreed to continue to work closely to ensure that all relevant factors are considered during both the ACP and in the broader RPAS operating agreements that will be required.</p>	

█
ACP Sponsor