



**MINUTES OF ACP-2022-029 ASSESSMENT MEETING
HELD AT CAA AVIATION HOUSE/MS TEAMS ON 01/08/2022**

01/08/2022

Present

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Appointment

Technical Regulator
Technical Regulator
Engagement and Consultation Regulator
Environmental Regulator
RPAS Technical Inspector
RPAS Technical Inspector
Windracers Co-Founder and CEO
Unmanned System Activities Lead
Head of Regulations and Flight Integration
Project Manager
Innovation Project Manager
Strategic Insight and Innovation Manager

Representing

Civil Aviation Authority
Civil Aviation Authority
Civil Aviation Authority
Civil Aviation Authority
Civil Aviation Authority
Civil Aviation Authority
Windracers Ltd.
University of Southampton
Windracers Ltd.
Windracers Ltd.
Royal Mail Group
Royal Mail Group

Temporary Airspace Change Assessment Meeting Opening Statement

CAA noted that the statement of need, were received in advance of the Assessment Meeting and confirmed that the documents must be published by the Change Sponsor, together with the minutes of the meeting, on the airspace change portal.

CAA explained that the purpose of the Assessment Meeting, as set out in CAP 1616, was for the Change Sponsor to present and discuss their Statement of Need, provide information on how it intended to fulfil the requirements of the airspace change process and present its provisional timescales. Lastly, the Change Sponsor was required to provide information on how it intended to meet the engagement requirements of the process.

	ACTION
Item 1 – Introduction All attendees were introduced. [REDACTED] read the CAA opening statement (as above) [REDACTED] invited Windracers to start their presentation	
Item 2 – Statement of Need (discussion and review) [REDACTED] Introduced Windracers and the ULTRA UAS platform: Windracers is a privately funded, Southampton-based, technology company trying to improve logistics and human aid operation with the use of UAVs specifically designed for this purpose. The company was started in 2017 when the founders approached the University of Southampton with the idea to improve humanitarian aid in African countries such as South Sudan. Quickly the first ULTRA UAS platform was built and completed it's first flight in 2019. The ULTRA UAS is a twin-engine aircraft designed for robustness with broad wind and weather limits. It has hundreds of operating hours and operates with a highly reliable autopilot and avionics system produced by Distributed Avionics. Its maximum take-off weight is 450kg with a range of up to 550 nautical miles and a cruise speed of 75 knots. ULTRA also has Mode-S Transponders and ADSB in and out.	

<p>Windracers has a very good track record for BVLOS operations and has completed routes up to 120 nautical miles, covering various locations in the UK. These have included crossing the Solent delivering PPE to the Isle of Wight, delivering PPE to the Isles of Scilly from Lands End, delivering mail for Royal Mail from Perranporth to the Isles of Scilly, completing various point to point operations delivering mail in the Orkney and Shetland Islands and also completing flights for the Royal Navy at Predannack.</p> <p>■ Introduced the Royal Mail Group's vision for drone trials in the future: Having completed trials in the Isle of Mull with Skyports and then trials with Windracers in Scilly Isles, Orkney and Shetland Islands; Royal Mail's goal is to work with Windracers to serve communities across the UK entirely by UAV. This would include operations in Cornwall, the Inner Hebrides, the Shetland and Orkney Islands and many more.</p> <p>■ expanded on ■ comments by explaining the roadmap further.</p> <p>■ discussed the CAAs BVLOS Development Pathway from CAP1861: Windracers would like to move into operating in non-segregated airspace but needs to prove the technology in segregated airspace first. Windracers would like to apply for a trial TMZ in the future and will use this ACP as a platform to engage with stakeholders about the trial TMZ and gather the required data for the trial TMZ.</p> <p>■ discussed the Detect and Avoid (DAA) solution that Windracers has been developing and trialling.</p>	
<p>Item 3 – Issues or opportunities arising from proposed change</p> <p>■ mentioned the fact that this is a very similar TDA to a previously submitted TDA however Windracers has amended their ConOps for this submission. This has been done by having a different start location (Newquay airport), reduced crew, higher flight frequencies and less ANSP participation.</p> <p>■ discussed the opportunities and issues from this ACP.</p> <ul style="list-style-type: none"> • Successful IoS Airbridge trial (ACP-2020-090 in Spring 2021) • ACP-2022-021: Trial ADS-B TMZ for the existing Land's End RMZ <ul style="list-style-type: none"> ○ Evidence of existing interest on integrating UAS between mainland and Isles of Scilly ○ Known commercial interest over access to airspace • Stakeholders with strong views regarding UAS (GAA case) • "Unknown" aerial activity (mainly GA) • Lack of data on use of airspace. <p>■ asked whether Windracers are going to replicate or base this submission design around their last TDA in this area?</p> <p>■ responded no but will be similar as that design reduces the impact on other aviation stakeholders.</p> <p>■ asked what the length of TDA implementation, will it be more or less than 90 days? And are Windracers going to look to extend the TDA if the Trial TMZ application is slower than planned?</p> <p>■ responded that at the moment there seems to be a good enough argument to extend the TDA</p> <p>■ explained that to his knowledge only 1 ACP has been extended over the 90 days due to not conducting enough flying to complete the activity. It is not the norm to extend these TDA applications without a strong case to do so. (Followed up with Windracers on 8/8/2022 - If after the airspace is approved, you wish to extend a temporary airspace arrangement, then justification must be provided to demonstrate extraordinary circumstances. Para 306 CAP 1616.)</p> <p>■ added that the seasonal argument comes into this to gather more information for the TMZ application. We are also going to be conducting our operations in times and areas where there isn't much other traffic who would be against our TDA.</p> <p>■ added that TDA extension is covered in CAP1616 para 306 and is reserved for extraordinary circumstances. As such, there have been very few TDA extensions granted to date, therefore extension shouldn't be relied upon as a long term strategy.</p>	

Item 4 – Process requirements

- i. TDA Policy Statement (if applicable)**
- ii. Stakeholder engagement**

█ explained Windracers stakeholder engagement strategy for this ACP: Based on Windracers' previous stakeholder engagement experience, Windracers believes that there are key stakeholders which are more likely to influence the geometry and management of the TDA. Once this first phase of engagement has been completed, then a wider group of stakeholders will be engaged as they are more likely to require details of the geometry and management arrangement of the TDA which needs to be decided with the key stakeholders. The plan for this engagement is as follows:

- 4 weeks of engagement with only key stakeholders to define the TDA
- 6 weeks to do the initial campaign
- 6 weeks to do the detailed campaign and to get letters of agreement
- We will be conducting surveys to all the GA airfields in the area
- Make sure to capture this and all feedback from this
- Engage with all stakeholders of NATMAC list
- Produce report at the end of the engagement period.

█ suggested that Windracers may wish to capture their engagement approach in a strategy and have the option to provide it to the CAA for comments. Given this is a temporary airspace change, the stakeholder engagement strategy doesn't need previous approval from CAA. All stakeholders in NATMAC list must be included. If the proposal is likely to affect traffic operating below 7000ft over an inhabited area, the sponsor must provide a related brief impact analysis and explain how they will inform relevant community stakeholders if the proposal is approved. (CAP1616 para 302). As there have been similar proposals in this area it will be helpful for stakeholders to understand what is different from previous TDAs. For challenging stakeholders, try to encourage stakeholders to provide valuable feedback. Key point is to demonstrate that you have listened to stakeholders and answered any queries. If you are carrying out pre-engagement with key stakeholders before engaging more widely, the engagement material should explain this and how that has influenced the proposal so far.

iii. Noise Assessment

█ mentioned that a noise impact assessment is required for temporary airspace changes as per CAP1616 Appendix B paras B81-B85, and there is no requirement to assess other environmental metrics. Noise below 7,000 ft. needs to be assessed at key locations. Operational diagrams can be used to illustrate this. Noise impacts from our operations as well as consequential noise impacts from aircraft rerouting need to be considered. Can Windracers provide traffic data (frequency of flights/typical altitudes)?

█ explained that Windracers have never had to do this before, because of the nature of the aircraft being very similar to crewed aircraft. Windracers in the past have discussed with the councils about our operations.

█ added that noise levels over land should be considered in relation to the nature and density of population, location of take-off and landing. Details of the noise assessment can be defined later in agreement with the CAA. If quantitative noise assessment is believed to be disproportionate and the assessment is to be scaled down, the sponsor should present to the CAA the rationale behind the scaling of the assessment and supporting evidence as per CAP1616 Appendix B para B26. Communities affected must be informed of the change.

iv. Safety Assessment

█ said that the safety case should provide evidence that air risks and ground risks are adequately mitigated. Some examples of the type of evidence that are required were discussed including whether barometric or GNSS altitude are used, if its barometric, is QNH adjustable to regional setting. He also asked about the use of AIS to monitor maritime traffic in ditch scenarios.

█ said that the assessment to the OSC application is a subjective process that depends on the inspector's experience and areas of expertise.

Item 5 – Provisional timescales

█ presented Windracers proposed ACP timescale:

12 th May	Statement of Need submitted
1 st August	Initial Assessment meeting
8 th August	Key Stakeholder Engagement starts
5 th September	Targeted Engagement with all stakeholders
16 th September	OA Application
25 th November	Finish Stakeholder Engagement
2 nd December	Submission of ACP Proposal
23 rd December	Decide gateway
9 th February	NATS AIC Publication
13 th February-14 th May	ACP Implementation

█ explained that the CAA need to look at the timescale proposed, it's still only provisional at this stage.

█ stressed that RMG would like to know the timescales as soon as possible.

█ accepted the commercial aspect of the timeline, and agreed to get an agreement in place quickly

Item 6 – Next steps

█ Explained the actions required from the assessment meeting:

- Meeting minutes and presentation to be uploaded by 15th August after being agreed by CAA, if we can receive them by Friday 5th August please
- Agree on a UAS Operation Safety Case Application timeline

█ Stated the next steps for the ACP sponsor:

- Generate key stakeholder engagement material and commence engagement
- Upload documents from the assessment meeting to the portal

Item 7 – Any Other Business

ACTIONS ARISING FROM ACP-2022-029 ASSESSMENT MEETING

Subject	Name	Action	Deadline
Meeting Minutes	Windracers	Complete meeting minutes and submit	10/08/2022
Meeting Minutes	Windracers	Upload meeting minutes and presentation	15/08/2022

Windracers Ltd.
ACP Sponsor