

ACP-2023-015 Apian Northumbria NHS Air Grid

# Agenda

- 1. Introduction
- 2. Statement of Need (discussion & review)
- 3. Issues or opportunities arising from proposed change
- 4. Options to exploit/address opportunities & issues identified
- 5. Process requirements
  - i. TDA Policy Statement
  - ii. Stakeholder Engagement
  - iii. Safety Assessment
- 6. Provisional Timescales
- 7. Next Steps and AOB

### 1. Introduction

#### Who are we?

- Apian is a healthcare logistics startup whose mission is to deliver faster, smarter and greener healthcare.
- Working in partnership with Northumbria Healthcare NHS Trust Foundation.

### What are we wanting to do?

Bring a reliable, on-demand service at scale to the NHS. Products delivered include medical implants, medical electronics, consumables and other high value medical items to demonstrate the environmental, economic and health impact using a hub and spoke distribution network.

#### What have we done so far?

- Developed use case with Northumbria NHS
- Demonstrated use case in Northumbria Stage 1 (ACP-2022-031)
- Engaged with aviation stakeholders
  - CAA Innovation team
  - DAATM
  - Emergency Services
  - Newcastle International Airport
  - Regional Airspace Users Working group
  - And more....



# 2. Statement of Need (discussion & review)

The change sponsor, Apian, in conjunction with the Northumbria Healthcare NHS Foundation Trust is looking to conduct the second stage of feasibility trials using Unmanned Aircraft Systems (UAS), for the distribution of medical payloads including but not limited to chemotherapy drugs, patient samples, blood packs and other urgent medical supplies. The flights will look to operate a hub and spoke distribution network to a number of hospitals in Northumbria. This project is building upon the learnings and outputs from the Northumbria Aerial Delivery Network that Apian has previously conducted (ACP 2022–031)

The change sponsor is proposing that the transport of these time sensitive small and medium-weight healthcare items are conducted by UAS flying Beyond Visual Line of Sight (BVLOS) operations. In order to do this in the area selected for this activity, current regulation requires the activity to be contained within segregated airspace.

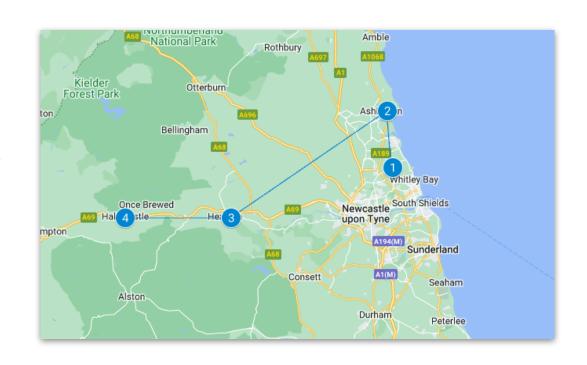
### 2. Statement of Need (discussion & review)

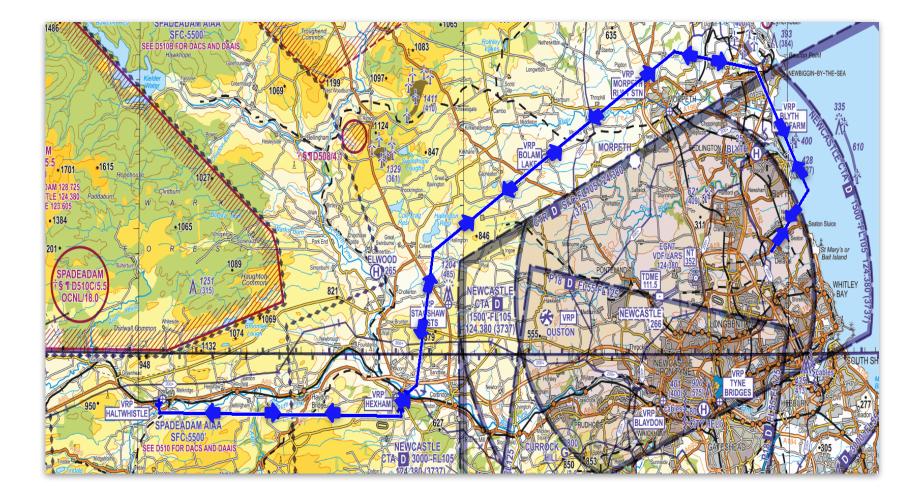
#### **Locations**

- Seaton Delaval
- 2. Wansbeck
- 3. Hexham
- 4. Haltwhistle
- 5. GPs, care homes, pharmacies, patient's homes (tbc)

#### Outcomes to be measured

- More reliable and predictable deliveries
- Greener deliveries
- Improving access to healthcare
- Reduce wastage
- Reduce staff workload





## 3. Issues or opportunities arising from proposed change

### Opportunities

- Northumbria geographically vast needs UA to deliver faster, smarter, greener healthcare to patients and clinicians (important for NHS England)
- Continue development from current trial (validations, integration with healthcare)
- Trial will see active delivery of use case not just a demonstration
- Collaboration with local airspace users to identify requirements for permanent BVLOS operations in Class D and G airspace
- Helping the NHS transition towards a net zero future

3. Issues or opportunities arising from proposed change

#### Issues:

- Electric Conspicuity Use of SSR and ADS-B being considered (SSR for Newcastle Airport) EC CAP 1391.
- CAA Safety Buffer Policy We wish to have a dispensation to operate in close proximity of Newcastle Airport.
  Discussions with Newcastle ATC.
- OA and ACP alignment Need to ensure alignment of OA request, ensuring it can be issued alongside the TDA process.

4. Options to exploit/address issues & opportunities identified

Open discussion

## 5. Process requirements

1. TDA Policy Statement

CAA identification of CAP 1616 requirements and stages required.

1. Stakeholder Engagement

Stakeholder engagement plan to be shared with CAA for feedback.

Apian conduct stakeholder engagement.

1. Safety Assessment

UA Operator will make an application for an OA in the Specific Category.

### 6. Provisional Timescales

- Stakeholder engagement: 2nd June (8 weeks)
- Submission: 4th August 2023
- Decision: 1st September 2023
- Submission of AIC: 8th September 2023
- AIC publication date: 19th October 2023
- Implementation/Start ops date: 20th October 2023



# 7. Next steps and AoB

- CAA to confirm date when draft copy of the minutes is required.
- CAA requested to review Stakeholder engagement plan.
- Apian to commence Stakeholder engagement.

