Introduction of revised Stansted VRPs

A revised set of VRPs that aid the transit of the CTR/CTA deconflicted from IFR traffic flows.

Prepared by: [redacted]

V 3.0

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1. Operational Requirement.

1.1. Initial Assessment.

For VFR traffic at Stansted the main axis of travel is along the M11 which puts the transit traffic in an awkward juxtaposition to the flow of inbound and outbound traffic on both RWYs and requires careful coordination across a number of areas of the radar pattern. Moreover the VRPs that are established do not particularly lend themselves to describing sensible transits across the Stansted zone. More VRP options are needed east and west of the airport. Also having some locations North and South of Stansted that could be used as VRPs to define good transit routes not above 1500ft QNH.

Also, during this assessment, it was decided to introduce a new VRP at the intersection of the A120 and B1256 at Little Canfield. This new VRP would replace the current VRP at Great Dunmow as the junction would be clear to see from the air and move the traffic away from the overhead at Great Dunmow.

1.2. Helimed and Police helicopter operations

These are the two main cat A & B helicopter operations based around the Stansted area that indiscriminately require transits through the Zone. There are mixed opinions on whether more formal procedures should or need to be devised to assist these transits, however some controllers will find them very useful during the busiest periods, especially if the pilots "ad-hoc" routing causes multiple inbounds to be broken off the approach.

Defined routing options would allow for the transit of helicopters without affecting the approach. Gatwick already uses this method to allow the zone crossing of their local Helimed/Police when routing southbound from Redhill aerodrome.

Due to the locations of the respective home bases of the Helimed/Police, several routings may be needed to be devised to allow maximum flexibility of their operations and to minimise delays to their destination.

One of the potentially most disruptive zone crossings is by the Helimed based at Cambridge – if it requires to route in a south/south easterly direction through the runway 22 final approach, this could cause a halt in arrivals while it is transiting. Routeings to avoid this scenario are:

Cambridge – Debden disused – Spriggs Solar Farm – Canfield A120/B1256 INT – Due South towards Berners Lake.

Cambridge – Audley End (enter) – overhead Stansted – Chipping Ongar (exit) or,

Cambridge – Audley End (enter) –West of Sawbridgeworth – Head due South (exit).

2. Operational Impacts

2.1. Impact on Airspace Users

Introducing new VRPs inside and around Stansted CTR will aid the flow of VFR traffic and could be utilised to deconflict VFR traffic inside the CTR against IFR traffic.

Having VRPs North and South of Stansted Airport will help East/West VFR transit traffic of the CTR and move this traffic away from the overhead at Stansted.

Similarly, the VRP at Little Canfield at the intersection of the A120/B1256 will assist traffic routing North/South through the CTR.

Possible VRP routings for North/South traffic would be:

- Audley End ->Spriggs Solar Farm->Canfield A120/B1256 INT->Berners Lake/Chipping Ongar to remain East of Stansted Airport;
- Audley End ->West and South of Sawbridgeworth->Chipping Ongar/Due South to remain West of the airport.

For East/West traffic:

- Canfield A120/B1256 INT-> Spriggs Solar Farm ->Audley End to remain North of the airport;
- Berners Lake->South of Sawbridgeworth->Puckeridge A10/A120 INT to remain South of the airport.

Having VRPs that avoid the overhead will, potentially, allow airspace users more opportunity to transit the CTR without extensive holding.

2.2. Impact on Stansted ATC

This will have a positive impact on Stansted ATC as it will assist in deconflicting VFR traffic from IFR traffic.

Additionally, the use of these new VRPs will reduce the likelihood of VFR aircraft transiting the ATZ, therefore potentially reducing the workload of the Stansted Tower Controller.

3. Environmental Impact

3.1. Current Traffic Transiting the Stansted CTR

Between 3rd April and 17th May 2018 there were 73 VFR transit requests of the Stansted CTR, of which only 5 were declined. All pre-notified requests using the new Class D Transit Portal were accepted.

3.2. Environmental Impact of new VRPs

Whilst it is anticipated that the introduction of new VRPs will not reduce the number of transit requests, it will reduce the complexity of traffic, help deconflict traffic and provide a more expeditious routing for aircraft, ensuring they remain within the CTR for as short a time as possible.

3.3. Location of VRPs

The proposed VRPs are placed in locations of less populated areas, i.e. fields or solar farms and they follow existing ground lines of roads etc.

4. ATSU and Airport Engagement

4.1. Airport Engagement.

NATS Swanwick operates the airspace around Stansted. There has been engagement with both NATS Stansted and Stansted Airport Ltd who support the proposal and have engaged local stakeholders.

4.2. Confirmation email from GM NATS Stansted

Thu 18/07/2019 16:04

[redacted]

RE: Policy for the Establishment of Visual Reference Points (VRPs)

To [redacted]

Cc [redacted]

All,

Thanks for being patient with us going back to the customer.

I can confirm that I raised the item for discussion at the noise and track working group this afternoon. Present were the DFT, a number of councillors and representatives of official bodies.

After describing the VRPs and our proposal there was an unopposed/positive view to allow the VRP item to progress. The only request is to feed back in about a year after implementation any perceived impact on the operation (I don't think that is too unreasonable).

Hopefully this meets expectation and I if can do more to support you please let me know.

Good luck with the submission,
Martin

NATS

[redacted]
GM ATS Stansted

[redacted]

Control Tower Building
Stansted Airport
CM24 1AH

5. Coordinates.

5.1. Coordinates of proposed VRPs. (WSG84)

Spriggs Solar Farm	515803N 0002208E
Chipping Ongar	514245N 0001442E
Berners Lake	514549N 0001811E
Canfield A120/B1256 INT	515214N 0001923E
Debden disused	515931N 0001629E

5.2. AIP Updates

The table in EGSS AD 2 section 2.22 5e has the current VRPs listed with Lat/longs and reference to BKY, BNN & LAM VORs. It is planned to amend this table to show the VRPs with the lat/longs only as shown below.

VRP	Co-ordinates
Audley End Railway Station	520015N 0001225E
Berners Lake	514549N 0001811E
Braintree	515242N 0003314E
Canfield A120/B1256 INT	515214N 0001923E
Chelmsford	514400N 0002824E
Chipping Ongar	514245N 0001442E
Debden disused	515931N 0001629E
Epping	514200N 0000640E
Haverhill	520457N 0002604E
Hazelend Wood	515339N 0001015E
Nuthampstead AD	515924N 0000343E
Puckeridge (A10/A120 Intersection)	515306N 0000016E
Spriggs Solar Farm	515803N 0002208E
Ware	514842N 0000136W

In addition to the above amendment, AD 2 section 2.22 4d ii. will require changing due to the removal of Great Dunmow VRP and being succeeded by Canfield A120/B1256 INT VRP.

The chart AD2.EGSS-4-1 to be updated accordingly.

6. VRPs Overview

6.1. Views of proposed VRPs

These images where collated from Google Earth Pro and are dated between 25/06/2018 and 26/06/2018.

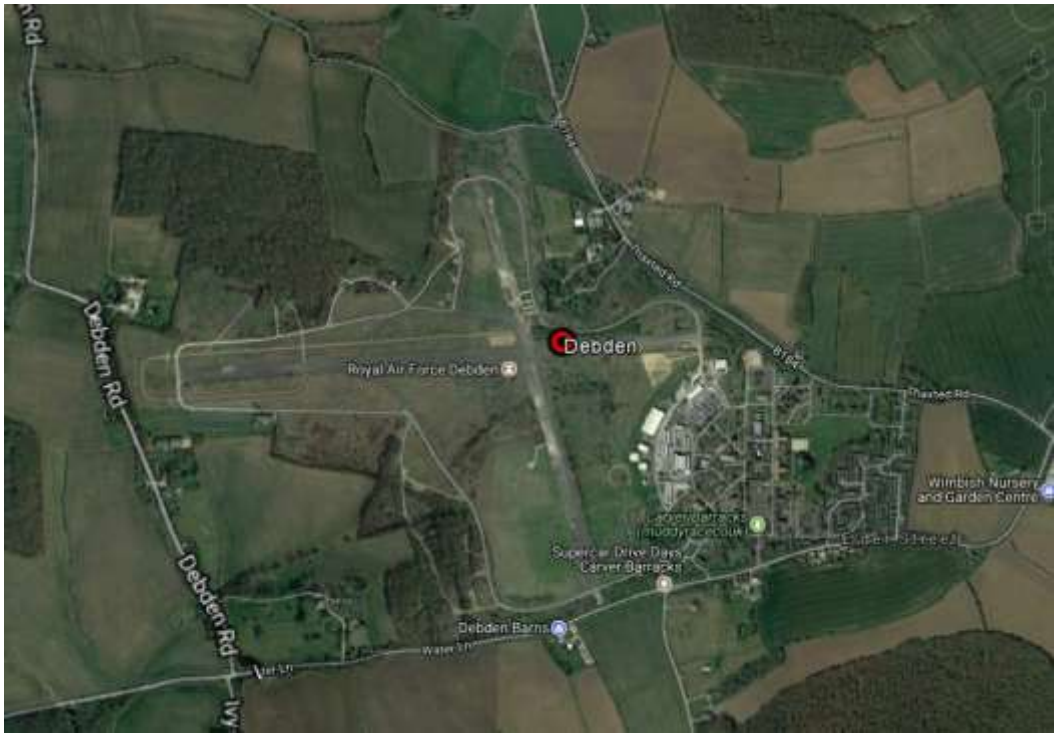
6.1.1. Spriggs Solar Farm

6.1.2. Chipping Ongar

6.1.3. Berners Lake

6.1.4. Canfield A120/B1256 INT

6.1.5. Debden disused



6.1.6. Overview of all current and proposed VRPs