

Section 4

Extended Stakeholder Engagement

Extended Stakeholder Engagement Report & Updated Airspace Change Proposal.

ACP-2021-022

Prepared for the CAA

Ву

4.0 Extended Stakeholder Engagement

Following a call on the 12th November at 13:00 between Electric Aviation and the airspace team at the CAA, it was decided to engage in a second period of stakeholder engagement so as to update all stakeholders on the proposed final dimensions of the TDA structures and to provide a naming convention for individual airspace structures as well as providing the updated structures dimensions with associated heights in amsl as well as agl formats.

This further period of time would also allow for further engagement works between Electric Aviation, EDF Energy and the Office of the Nuclear Regulator with regards flights through Restricted Area R444.

4.1 Stakeholder selection

On the 17^{th} of January we contacted the NATMAC list once again as previously detailed in section 1.4.4

We also contacted the other previously identified stakeholders to update them on the proposal. These stakeholders included:

- BAE Systems Submarines
- BAE Warton
- EDF Energy
- Blackpool Airport
- Skydive Northwest
- National Police Air Service
- Babcock International (HEMS)
- Multiflight (HEMS)
- Network Rail
- National Grid
- Bay Search & Rescue
- North West Balloon & Airship Club
- Lancaster Model Aircraft Club
- Westair Flying School Blackpool
- ANT Flying School Blackpool
- High G aviation Blackpool
- Lakes Gliding Club
- Carlisle Flight Training
- Black Knights Parachute School
- North Kite Flying Club
- Duchy of Lancaster
- North West Microlight Aircraft Club
- BMAA direct
- Attitude Airsports
- Bickerstaffe Aviation
- Cumbria Microlight Training
- Lancs Aero Club

We also contacted all individuals who had made contact throughout the first stakeholder engagement period.

In correspondence with th	ne new Chief Executive of the BMAA,	we asked for
clarity as to who from th	he BMAA would be representing them during this	s stakeholder
engagement.	instructed Electric Aviation to liaise with himself	directly, then
contacted	instructing them to:	

"For this specific ACP, I am asking you to make no further contact with the sponsor on behalf of the BMAA. Any further contact you may make is as an individual and not representing the BMAA"

Thus we did not re-engage with who had been incredibly vocal in the first stakeholder engagement but failed to provide anything meaningful regarding airspace utilisation.

4.2 Notice to Stakeholders

On the 17^{th} of January, we issued the following email notice to the stakeholder list as detailed in 4.0 above

Dear Stakeholder

Following a meeting between the CAA Airspace team and Electric Aviation Limited, regarding ACP-2021-022 we present the following as an update with regards the progress of the proposal.

We have secured provisional access through Restricted Area R444, subject to the operator of this area being able to secure approvals from the Office of Nuclear Regulation (ONR) for a RPAS vehicle to operate remotely within this restricted airspace. We are currently working with the CAA, the airframe operator and the ONR to bring these matters to a conclusion.

We have also secured provisional support from BAe at Warton who have offered to provide a Danger Area Crossing Service (DACS) in support of our RPAS flights. This service will be available for all operators to seek a Crossing Service across the Temporary Danger Area established by ACP 2021-022. We are working with British Aerospace to confirm the Temporary Operating Instructions that will enable this service to be offered.

We have segregated the TDA into route sectors and provided both AMSL and AGL extents. We have named these sectors accordingly such that only the minimum airspace required during the flight campaign will be used. We have worked to provide a provisional flight campaign schedule and indicated which sectors will be active for which parts of the flight campaign.

The co-ordination of such activities is no simple task and as such we have extended our works period to encompass all the unique requirements of this Airspace Change Process. To that extent we have worked with the CAA to establish a revised timetable which has been published to the Airspace Change Portal.

As we require this extra time to align the regulatory processes and requirements, we have decided to run a second period of stakeholder engagement to seek further responses from the community. As such our second period of stakeholder engagement will run from the 17th of January, 2022, through to the 28th of February, 2022.

Once again, we have opted to use the www.morecambebaydrones.com website from which all information about our proposed activities can be found.

If you wish to provide any relevant feedback, please send it through the website portal.

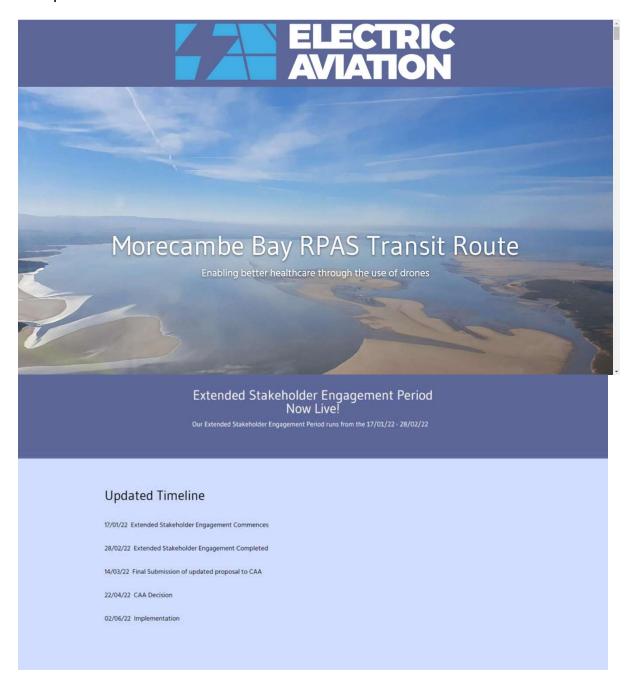
Many Thanks,

ELECTRIC AVIATION LTD.

4.2 Updated Stakeholder Website Portal

Prior to the initiation of the second stakeholder engagement phase, we updated the www.morecambebaydrones.com website. This was undertaken to address some of the issues with the presentation of the TDA data that we submitted previously in Section 3 and to reflect other minor changes to the planned operations within said TDA.

The updated website was laid out as follows:



The Problem

The geography of Morecambe Bay causes excess journey times between the three hospitals that serve the Bay Community. The A590 is infamous, for it's hold ups, causing considerable excess time to be taken when moving samples from one hospital to the next.

The Solution

We aim to speed up the transport of pathology samples and items between the hospitals by using Remote Piloted Aircraft Systems (drones) to

Faster processing of medical samples and data between hospitals will lead to improved healthcare for the Bay community. Our flight campaign will prove the business model of drone freight systems whilst adding proven metrics in the flight to reduce carbon emissions across the Bay.

"The NHS Long Term Plan is bringing new technologies into the NHS to improve patient care and save lives.".

Professor Tony Young. NHS National Clinical Lead for Innovation

https://heiwisantre.instature.co.uk/rews/drones.to-deliver.coxid-19-medical-supplies in scotland-using 4s.

This site is designed to provide accompanying information for Electric Aviation's Airspace Change Proposal (ACP-2021-22) for the duration of the Stakeholder Engagement Phase.

Please use this link for the proposal on the CAA's Airspace Change Portal.

https://airspacechange.caa.co.uk/PublicProposalArea?pID=371

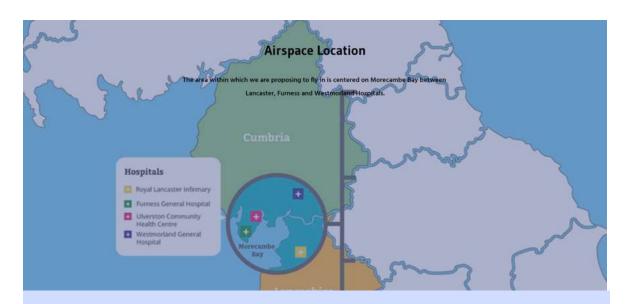
Morecambe Bay RPAS Transit Route is designed to support:



About Morecambe Bay RPAS Transit Route

Morecambe Bay RPAS Transit Route is designed to evaluate the potential performance gains for University Hospitals Morecambe Bay NHS Trust, by flying Remotely Piloted Aircraft Systems between the Lancaster Royal Infirmary, Furness General Hospital (Barrow) and Westmoreland General Hospital in Kendal.

The aim of these flights is to transfer pathology samples and medications between the hospitals in a more efficient manner, providing optimised healthcare to the Morecambe Bay population. With the relevant approvals in place, we plan to conduct Beyond Visual Line of Sight operations between the above-mentioned sites.



Indicative Flight Campaign

Weeks 1 & 2 Test Zone T active for flight and communication tests

Week 3 Zones T.B.A active for Furness General Test

Week 4 Zones T,C,D active for Westmorland General Test

Week 5 Zones A,B,C,D active for Furness to Westmorland Test

Week 6 Zones T,E,F,A active for R444 Test

Week 7 Zone G active for Lancaster Royal Infirmary to R444 Test

Week 8 Zones G,F,A active for Lancaster Royal Infirmary to Furness General Tests

Weeks 9-12 Zones A,B,C,D,E,F,G active for month long full flight campaign

We aim for the TDA to be active for 2 hours per day between 9am to 5pm, Monday to Friday only.

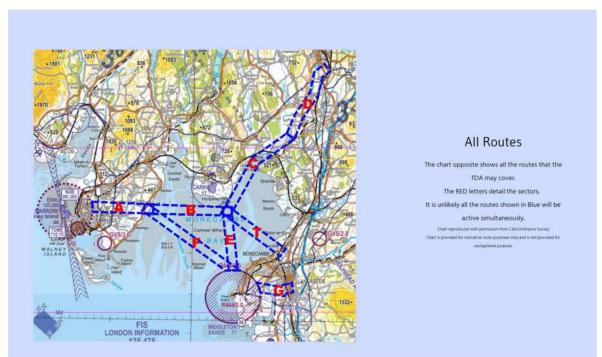
Routes

Following on from our initial stakeholder engagement we received a lot of valuable feedback.

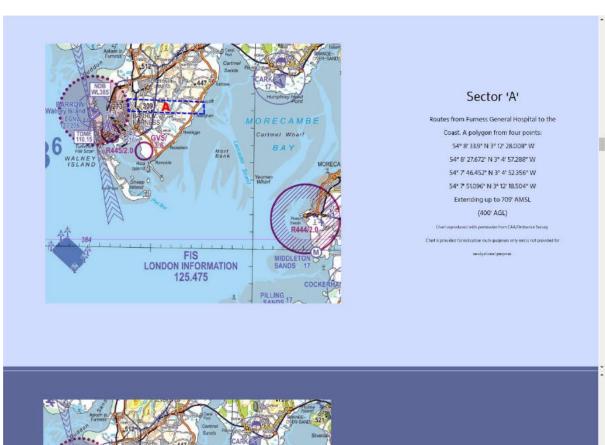
We have carefully designed the following routes to allow us to operate between the three hospitals with minimal disruption to other airspace users.

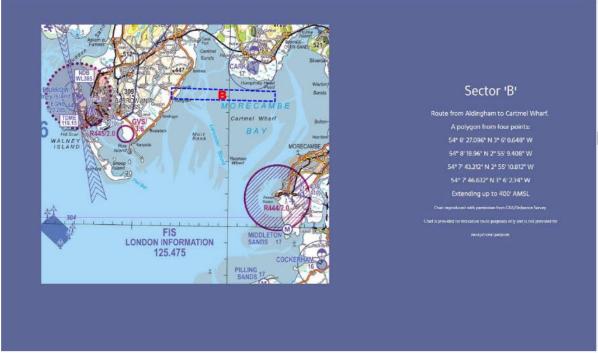
We are grateful for the input from BAe Warton, BAe Systems Submarines, EDF Energy, ATC Walney Island, Blackpool Airport, Skydive
NorthWest/Cark Airfield, Black Knights Parachuting/Cockerham Airfield, HEMS (North West/Great North Air Ambulances), National Police Air
Service, British Nuclear Constabulary, Bay Search & Rescue, MOD, Duchy of Lancaster, Network Rail, National Grid, Westair, ANT, Lakes Gliding
Club, Cumbria Soaring Club, North West Kite Club, Lancaster and Morecambe Model Aircraft Club, North West Balloon and Airship Club, Multiple
GA Billots, Multiple Commercial Pilots (rotary and fixed wing) support.

We are grateful for the support from Lancaster City Council, Lancashire County Council, Lancashire Local Enterprise Partnership, Lancaster











Sector 'C'

Route from Cartmel Wharf to Storth.

A polygon from six points: 54° 7' 51.744" N 2" 56' 27.6" W 54° 11' 56.256" N 2" 52' 45.516" W

54° 13' 43.5" N 2° 48' 28.836" W

54° 13' 18.12" N 2° 47' 33.792" W

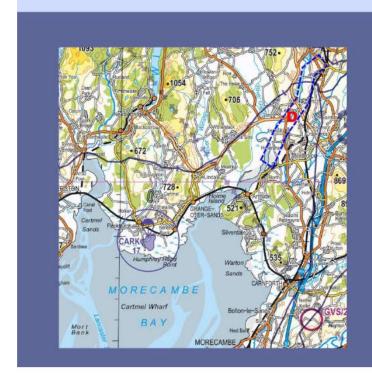
54° 11' 29.904" N 2° 51' 54.432" W 54° 7' 33.492" N 2° 55' 29.316" W

Extending up to 422' AMSL (400' AGL)

Chart reproduced with permission from CAA/Ordnance Survey

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minigational purpose



Sector 'D'

Route from Storth to Westmorlan

General Hospital

A polygon from ten points:
54° 13' 44.292' N 2" 48' 30.204" W
54° 15' 9252" N 2" 47' 29.616' W
54° 16' 44.22' N 2" 45' 38.16' W
54° 18' 12.204" N 2" 45' 11.196" W
54° 18' 17.88" N 2" 43' 12.36' W
54° 18' 17.28' N 2" 44' 10.356' W
54° 16' 30.036' N 2' 44' 38.436' W
54° 16' 30.24' N 2" 46' 30.324' W
54° 13' 21.252' N 2" 47' 31.776' W
Extending up to 680' AMSL

Chart reproduced with pennission from CAA/Ordnonce Survey

navigational purpose



Sector 'E'

Route from Cartmel Wharf to R444.
A polygon from four points:
54° 8' 18.024" N 2° 56' 20.4" W
54° 8' 21.192" N 2° 55' 13.656" W
54° 3' 45.756" N 2° 54' 22.824" W
54° 3' 44.928" N 2° 55' 29.064" W
Extending up to 400' AMSL
(400' AGL)

Chart is provided for indicative mute purposes only and is not provided for



Sector 'F

Route from Aldingham to R444, A polygon from four points: 54° 3' 44.926° N 2° 54' 3.816° W 54° 3' 42.048° N 2° 55' 49.872° W 54° 7' 59.124° N 3° 6' 14.472° W 54° 8' 30.948° N 3° 5' 36.636° W Extending up to 400' AMSL (400' AGL)

Chart reproduced with permission from CAAA/Ordnance Survey. Chart is provide



Sector 'G'

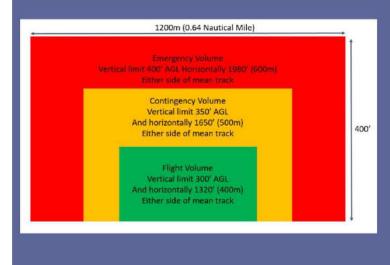
Route from

Lancaster Royal Infirmary to R444.

A polygon from eight points:
54° 2' 54.348" N 2° 47' 37.68" W
54° 2' 12.012" N 2° 47' 27.456" W
54° 2' 12.012" N 2° 48' 10.584" W
54° 1' 52.464" N 2° 48' 10.584" W
54° 1' 52.464" N 2° 48' 31.752" W
54° 2' 10.176" N 2° 51' 31.644" W
54° 2' 50.1" N 2° 51' 56.752" W
54° 2' 34.512" N 2° 48' 58.932" W
54° 2' 43.908" N 2° 48' 48' 46.044" W

Extending up to 615' AMSL (400' AGL)

Oracl reproduced with permission from CAA/Ordnance Survey. Chart is provided for indicative route purposes only and is not provided for newselpment purpose.



TDA Volume & Operating Height

Level and will operate at 250 Above Ground
Level and will operate in a flight volume of
300' high and 400m either side of track.
This Flight Volume will be surrounded by
Contingency and Emergency Volumes
creating a total volume of 400' high and
1200m wide.
Please note we have increased the width of

the operating volumes to make chart annotation simpler.



About the Aircraft

For the Morecambe Bay RPAS Transit Routes we will be using our SLT (Separate Lift and Thrust) Remote Operated Aircraft. This is a 5m wingspan VTOL aircraft capable of carrying a useful payload

We communicate with the the aircraft using 4/5G plus dedicated 5GHz as well as Satcom.

The aircraft operates around 40 knots IAS.

Communicating with other Airspace users

We will be offering a Danger Area Crossing Service to support operations within the TDA

We will utilise the NOTAM system to inform other airspace users as to our operations and will provide this 24 hours before activation. We will split the TDA into route sections and we will only activate the minimum routes required. We will issue a single NOTAM that details all of the operations.

We have a comprehensive communication system in place, which can automatically text, for example, ATDs and ETAs to anyone that requires

that information, and we can also provide Pre-Flight Information for the TDA via the dedicated telephone number.

In the event of the emergency services requiring access to the airspace within a TDA, they will be given priority over RPAS traffic and we can

collapse the TDA very quickly if necessary.

Our RPAS is equipped with ADS-B and a Mode S Transponder for electronic conspicuity.

The schedule

We are working through the Airspace Change Process in accordance with CAP1616.

Our aim is to operate a daily service, serving all three hospitals in the Bay area.

Our intended hours of operation will be established through stakeholder consultation with other airspace users and facilities within the Morecambe Bay Area.



"As the largest employer in Britain, responsible for around 4% of the nation's carbon emissions, if this country is to succeed in its overarching climate goals, the NHS has to be a major part of the solution. It is for this reason that we are committing to tackle climate change by reducing our emissions to 'Net-Zero'."

Sir Simon Stevens, Chief Executive, NHS England - P3. Delivering a 'Net-Zero' National Health Service. Oct 2020



Working with HEMS & the GA community

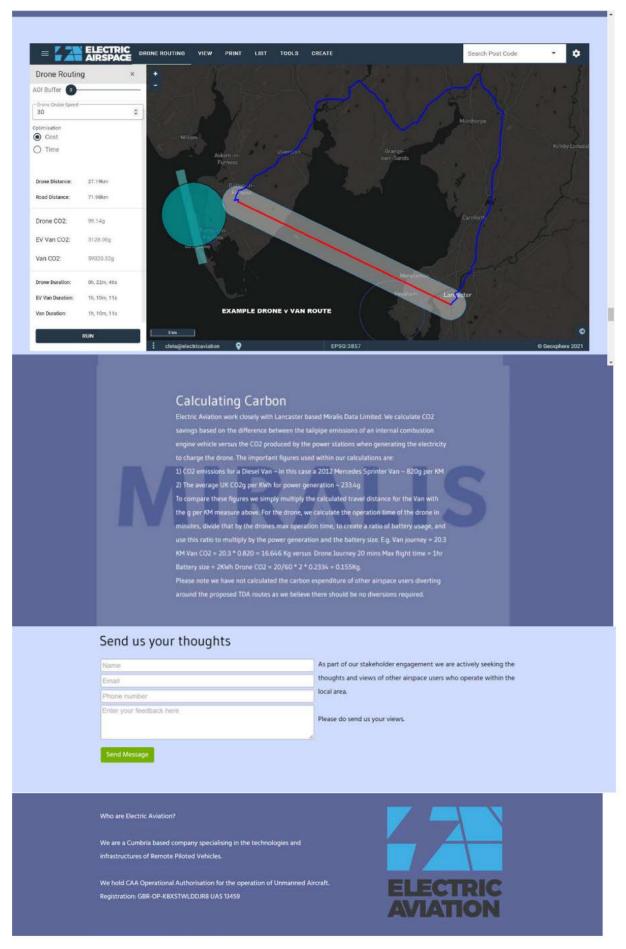
Electric Aviation have already operated Remotely Piloted Aircraft Systems within Restricted Airspace and have successfully co-ordinated flights with live operational GA and HEMS traffic to date.

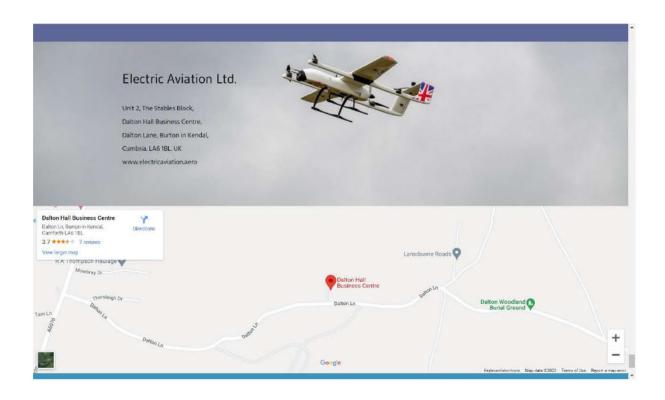
Flights have been conducted both BVLOS and VLOS at multiple UK sites. Key to these flights has been our engagement works with the GA, commercial and military communities, allowing us to operate in complex environments and to establish operating procedures based on successful stakeholder risk assessments.

Why not send a van?

As with most technological changes, the key enabler is an effective business model. Unlike other RPAS activities, we are not grabbing headlines. Working with the Hospital Trust we are focused on evaluating the effects of RPAS operations across the Bay to enable greater service efficiencies within the NHS.

Providing a faster transfer service allows the three hospitals to operate more efficiently, in a cheaper manner and, most importantly moving forward, reduce the Trust's carbon footprint. Our initial calculations show that replacing one of the daily round-robin vans that move samples, records and medications between hospitals could save over 15 tonnes of Carbon annually. But Carbon savings are only one area we aim to improve. Optimising the pathology service will lead to immediate healthcare gains across the Bay community.





4.3 Responses to the Second Stakeholder Engagement

Initially we received little response to the stakeholder engagement, however several parties did write to express their confirmation of the receipt of the updated information.

The full NATMAC list, plus other local entities that were contacted at the same time, plus response indication can be found below.

NATMAC	First	Response	Positive?	Second	Response	Positive?
Organisations Contacted	Contact	,		Contact	, , , , , , , , , , , , , , , , , , ,	
Airlines UK	27/06/21	X	Assumed Impartial	17/01/22	X	Assumed Impartial
Airspace4All	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
Airport Operators Association (AOA)	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
Airfield Operators Group (AOG)	27/06/21	Х	Assumed Impartial	17/01/22	X	Assumed Impartial
Aircraft Owners and Pilots Association (AOPA)	27/06/21	X	Assumed Impartial	17/01/22	X	Assumed Impartial
Airspace Change Organising Group (ACOG)	27/06/21	30/07/21	Positive	17/01/22	Х	Continued Positive
Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK)	27/06/21	01/08/21	Positive	17/01/22	21/2/22	Continued Positive
Aviation Environment Federation (AEF)	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
British Airways (BA)	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
BAe Systems	27/06/21	Prior	Positive	17/01/22	10/03/22	Positive
British Airline Pilots Association (BALPA)	27/06/21	06/08/21	Positive	17/01/22	X	Continued Positive
British Balloon and Airship Club	27/06/21	Х	Positive	17/01/22	Х	Continued Positive
British Business and General Aviation	27/06/21	30/7/21	Positive	17/01/22	Х	Continued Positive

Association	18	0	16			
(BBGA)		SEANS OF THE SEASON				
British Gliding	27/06/21	06/07/21	Positive	17/01/22	X	Continued
Association						Positive
(BGA)	07/0//01	00/05/01	D	17 /01 /00	V	0 1
British	27/06/21	29/07/21	Positive	17/01/22	Х	Continued
Helicopter Association						Positive
(BHA)						
British Hang	27/06/21	03/08/21	Positive	17/01/22	Х	Continued
Gliding and	27/00/21	03/00/21	rositive	17/01/22	^	Positive
Paragliding						1 USITIVE
17/01/22Associat						
ion (BHPA						
British	27/06/21	15/07/21		17/01/22	Formal	Now
Microlight		•	Negative		Response	Assumed
Aircraft			-		Received	Impartial
Association					Two	As no
(BMAA) /					weeks	definitive
General					post	objection
Aviation Safety					second	recieved
Council (GASCo)					period	
					close	V-04-20000000000000000000000000000000000
British Model	27/06/21	X	Positive	17/01/22	X	Continued
Flying						Positive
Association						
(BMFA) British	27/06/21	X	Positive	17/01/22	Х	Continued
Skydiving	27/00/21	^	Pusitive	17/01/22	^:	Positive
Drone Major	27/06/21	X	Assumed	17/01/22	Х	Assumed
Di one major	21/00/21	^	Impartial	17701722	Α	Impartial
General	27/06/21	Х	Assumed	17/01/22	Х	Assumed
Aviation	model model mu	1703	Impartial		70%	Impartial
Alliance (GAA)						
Guild of Air	27/06/21	X	Assumed	17/01/22	X	Assumed
Traffic Control			Impartial			Impartial
Officers			8			8
(GATCO)	(y					S2 23
Honourable	27/06/21	X	Assumed	17/01/22	X	Assumed
Company of Air			Impartial			Impartial
Pilots (HCAP)	00 10 1 101			am los los		
Helicopter Club	27/06/21	X	Assumed	17/01/22	Х	Assumed
of Great Britain			Impartial			Impartial
(HCGB)	27 /0 / /21	10 /00 /01	Desitive	17 /01 /22	V	Continued
Heavy Airlines	27/06/21	19/08/21	Positive	17/01/22	X	Continued Positive
Iprosurv	27/06/21	X	Assumed	17/01/22	X	Assumed
ipi usui v	21/00/21	^	Impartial	17/01/22	^	Impartial
Isle of Man CAA	27/06/21	30/7/21	Positive	17/01/22	Х	Continued
.s.c c. man or or	2.,00,21	00,7,2		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Positive
5	8		17			

Light Aircraft Association	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
(LAA) Low Fare Airlines	27/06/21	Х	Assumed Impartial	17/01/22	X	Assumed Impartial
Military Aviation Authority (MAA)	27/06/21	X	Assumed Impartial	17/01/22	X	Assumed Impartial
MoD DAATM)	27/06/21	06/08/21	Positive	17/01/22	Υ	21/02/22
NATS	27/06/21	28/06/21	Positive	17/01/22	Y	11/02/22
Navy Command HQ	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
PPL/IR (Europe)	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
UK Airprox Board (UKAB)	27/06/21	Х	Assumed Impartial	17/01/22	Х	Assumed Impartial
UK Flight Safety Committee (UKFSC)	27/06/21	Х	Assumed Impartial	17/01/22	X	Assumed Impartial
United States Air Force Europe (3rd Air Force- Directorate of Flying (USAFE (3rd AF-DOF))	27/06/21	X	Assumed Impartial	17/01/22	Х	Assumed Impartial

Whilst the response to this second stakeholder engagement was low, this was perhaps unsurprising as the changes to the dimensions and locations of the TDA structures established was only minor.

We evidence the above engagement through the following sections:

4.3.1 ARPAS

Correspondence was received from ARPAS through the portal as shown below:

New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



message

ARPAS UK, the UK's trade association for the remotely piloted aircraft sector, fully supports this BVLOS trial.

Submitted 09:34 AM - 21 February 2022

Mark as spam



You are receiving this because you confirmed this email address on Formspree.

Don't want these emails anymore? No problem!

Simply remove the form on formspree.io or unsubscribe from this form's notifications.

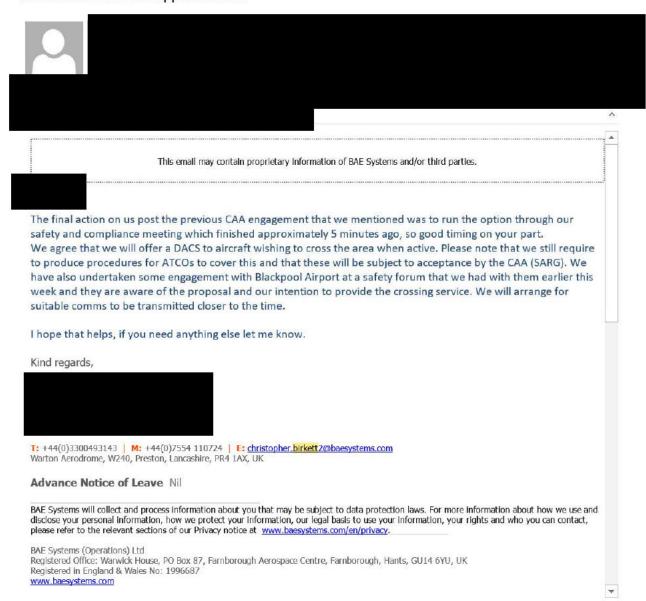
4.3.2 BAE Systems

Several calls have been undertaken with BAE Systems at Warton Aerodrome regarding the provision of the DACS service in support for the Morecambe Bay TDA associated with ACP-2021-022.

During these calls it was explained that Mr had been calling the Air Traffic Control operators and discussing the TDA and the ACP's progress with them. BAE confirmed that these calls were unappreciated and a distraction for operations staff.

BAE provide support for the TDA and have offered to provide a DACS service for the TDA. This is provisional on the Temporary Operating Instructions for the operation of the DACS being approved by the ATC inspector on behalf of the CAA. We have liaised with the appropriate ATC inspector and advised him of the more cambebay drones.com website.

We evidence BAE's support below.



4.3.3 BMAA

We entered into direct engagement with the new Chief Executive of the BMAA, Rob Hughes, post the first stakeholder engagement on the 10th of December 2021. We received the following response regarding persons claiming to represent the BMAA and defamatory comments.



Thank you for your email and my apologies for the delay in replying.

This is, naturally, of concern to me. Can you please give me further details regarding who it was from our team that contacted you and ideally copies of the texts you found objectionable? I will then ensure that they are aware of the nature of your email to me and that the behaviour is not repeated.

Please use me as the single point of contact and I will then liaise with my team if needed before responding to you.

In the meantime, be assured that we strive to interact positively with ACP engagements, including when we disagree with the proposals!

With best regards,



following instructions.



I have been contacted by Dr. Crockford (Morecambe Bay, ACP-2021-022). He tells me that he instructed ais solicitor to contact a member of the airspace team regarding comments that he considered defamatory.

For this specific ACP, I am asking you to make no further contact with the sponsor on behalf of the BMAA. Any further contact you may make is as an individual and not representing the BMAA. If you do have anything further to contribute to ACP-2021-022, please send it to me directly.

Many thanks,



We had expected to thus have direct engagement from the BMAA, Chief Executive's office. Sadly on the 10th of February we received the following email from The public statement he refers to was the usage of the word "luddite" in the previous stakeholder engagement documentation.



I take from this that you are not withdrawing your comment, despite indicating that you base this on the actions of one individual.

I am currently researching 21 ACPs and act through the change process system. If I have specific questions, i contact the ACP sponsor.

Given your public statements about my organisation, I shall refrain from engaging directly with you further.



When compiling this report on the day of publications, we emailed Executive and asked:



Our report to the CAA for ACP-2021-022 goes into today.

We have not received anything from BMAA regarding this ACP.

Can I just confirm that BMAA will not be responding?

Many Thanks,

At 15:09 on the 14th of March we received the following response:

for the email. We would raise these issues:

Morecambe Bay is an area of high microlight activity levels, including flying at low (sub-500ft) level and landing on beaches when conditions permit. This is all legal activity.

- Route C passes over landing sites used by microlights.
- The eastern corner of the Kent Estuary mouth by New Barns Caravan Site has long been used as a landing site as the tidal patterns have left that section of sand unchanged for at least 15 years.
- White Creek near to Far Arnside and north side of the viaduct near Sandside also have established landing sites.
- The route could be moved east to follow the A590 leaving the shore line undisturbed and the landing sites unaffected. It would be better to route the aircraft away from conflict than try to manage one created by the proposed activities.

Microlights are not required to carry radios and the imposition of a radio-mandatory zone would severely restrict the movements of non-radio aircraft.

The TDA is very complex and it is not clear how it will demonstrate if the use of UAVs is the correct, viable, efficient and economic vehicle for the NHS.

The proposed route through R444 to Lancaster Royal Infirmary seems unnecessary. In the original material the purple route option was preferred because it did not route into R444, as the blue route does. The purple route is more in line with test route named HBTA, thus requiring fewer TDA routes. This would involve coasting in somewhere near Morecambe Golf Club, flying over less urban area, then routing to the north of Lancaster, parallel with and just west of the M6, approaching the hospital from the east. It might add seconds to the UAV journey time but would also avoid the suggested 1250ft climb and descent profile through R444, saving energy. It would remove the complicated need to obtain approval to route through R444 and that hardly saves any significant amount of segregated airspace.

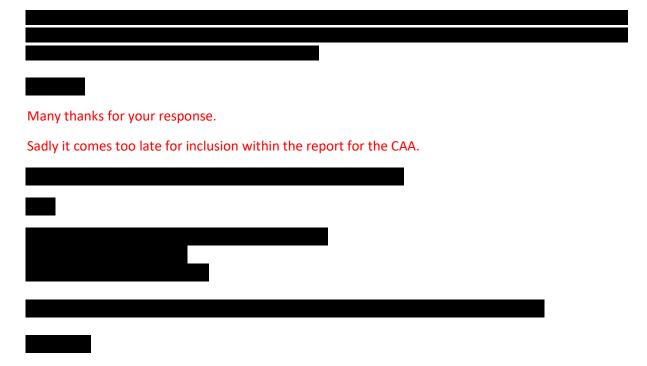
Does a DACS have written confirmation by a qualified service provider? A DACS is a vital requirement, if only because of the military lower-level route requirements.

What is unique about this trial for the NHS compared with other duplicated trials that have either already been completed or approved elsewhere in the country?

What technology will this trial demonstrate that will enable the NHS to utilise UAV services for more than 90 days within a TDA, given that the CAA have stated TDAs are not a long-term solution?

Many thanks,





Thank you for the email. We would raise these issues:

Morecambe Bay is an area of high microlight activity levels, including flying at low (sub-500ft) level and landing on beaches when conditions permit. This is all legal activity.

We have had good feedback from many local microlight pilots and none of the flying instructors locally raised any concerns regarding beach landings. Some local pilots did mention landing at Bardsea beach and Red Bank Beach was also mentioned. Both of which should be unaffected by our plans.

One local microlight pilot provided evidence to us of Natural England writing to him claiming he did not have consent under section 28E of the Wildlife and Countryside act to access the beach that he landed upon.

We have written confirmation that the Duchy of Lancaster have never granted access to Microlight pilots to land on the sands of Morecambe Bay. The Duchy being the majority landowner in partnership with Crown Foreshore. Both entities being Sovereign. Thus any pilot landing on the sands, we believe, would be committing common trespass.

The majority of the sands are also within Sites of Scientific Special Interest, or Special Protection Areas, thus vehicular access, with regards the impact on flora and fauna is required from Natural England prior to landing.

It is not our place to judge the professionalism of your members, nor the legal standing regarding landing on the beaches within Morecambe Bay. We do, however believe that our hours of operations will not affect your pilots ability, to land on the beaches and river banks should they choose.

It is worth pointing out that all of the areas mentioned are tidal and significant quicksand exists. Bay Rescue report multiple historic cases of being called out to Microlights landing on the sands.

- Route C passes over landing sites used by microlights.

- The eastern corner of the Kent Estuary mouth by New Barns Caravan Site has long been used as a landing site as the tidal patterns have left that section of sand unchanged for at least 15 years.
- White Creek near to Far Arnside and north side of the viaduct near Sandside also have established landing sites.

Please see previous comments.

- The route could be moved east to follow the A590 leaving the shore line undisturbed and the landing sites unaffected. It would be better to route the aircraft away from conflict than try to manage one created by the proposed activities.

We believe that our operating hours will cause minimal impact to any beach landing activities. We believe you mean moving the route West not East along to follow the A590. Routing along the A590 will impact other airspace users and significant local environmental issues.

Microlights are not required to carry radios and the imposition of a radio-mandatory zone would severely restrict the movements of non-radio aircraft.

We have no intention of imposing a Radio mandatory zone. Should a non-radio equipped aircraft be flying we ask them to keep above 400' and not to enter the TDA. Radio equipped aircraft may seek a Danger Area Crossing Service from BAE Warton.

The TDA is very complex and it is not clear how it will demonstrate if the use of UAVs is the correct, viable, efficient and economic vehicle for the NHS.

The economics of drone operations are not relevant to the Airspace Change Process.

The proposed route through R444 to Lancaster Royal Infirmary seems unnecessary. In the original material the purple route option was preferred because it did not route into R444, as the blue route does. The purple route is more in line with test route named HBTA, thus requiring fewer TDA routes. This would involve coasting in somewhere near Morecambe Golf Club, flying over less urban area, then routing to the north of Lancaster, parallel with and just west of the M6, approaching the hospital from the east.

One of the reasons for the route through R444 is to overfly as few residential properties as possible.

Routing in as described above has significant effect on the commercial helicopter operations within the local area, including rotary access to Halton Training Camp.

We received specific feedback from one microlight instructor who specifically asked that we keep our routings away from the M6.

It might add seconds to the UAV journey time but would also avoid the suggested 1250ft climb and descent profile through R444, saving energy. It would remove the complicated need to obtain approval to route through R444 and that hardly saves any significant amount of segregated airspace.

Using R444, as existing restricted airspace is one way of minimising the amount of low level airspace required to be segregated, albeit on a temporary basis.

Does a DACS have written confirmation by a qualified service provider? A DACS is a vital requirement, if only because of the military lower-level route requirements.

Yes we have written confirmation from BAE Warton, no thanks to there.

The RAF through the MOD have responded favourably to the TDA application. Your statement regarding the DACS and military requirements is incorrect.

What is unique about this trial for the NHS compared with other duplicated trials that have either already been completed or approved elsewhere in the country?

Firstly this is not a duplicated trial. Secondly this is the first trial that load balances the three most common pathology lab set-ups and is perhaps the only trial that aligns with NHS England and Improvement plans to move to Pathology Networks from April this year.

What technology will this trial demonstrate that will enable the NHS to utilise UAV services for more than 90 days within a TDA, given that the CAA have stated TDAs are not a long-term solution?

We operate an optical Detect And Avoid Algorithm on-board the aircraft as well as a unique air-ground radio solution. Both these technological developments move RPAS forward towards eventual operations within unsegregated airspace.



4.3.4 MOD

We received confirmation that the MOD had no objections to the TDA on the 21st of February, 2022. We evidence this below.

RE: Morecambe Bay TDA - Update and Extended Stakeholder Engagement Z



From Wayman, Dave Sqn Ldr (DAATM-AirspacePlansSO2) on 2022-02-2117:34

Details

Good afternoon,

I am writing to you to provide the consolidated MOD response to the revised proposal for ACP-2021-22. The MOD has no grounds to object to the TDA proposal, a summary of responses is detailed in the following paragraphs:

It has been identified that, when active, the TDA will block off an area that is routinely used to enter the UK Low Flying System, in particular for Hawk and Texan aircraft based at RAF Valley, which would have a minor impact to training and currency sorties. As a result, aircraft would have to transit at 1000ft until clear of the TDA before descending to low-level. The area is also routinely used for transits and refuelling at Barrow-in-Furness by transiting rotary wing aircraft, activation of the TDA will limit available routes through the area during poor (winter) weather, as rotary wing aircraft will not be able to fly low-level without conflicting with the TDA. However, it is noted that the revised dimensions use the minimum amount of airspace necessary and promulgating a schedule will aid military flight planning. The added provision of a DACS by BAE Warton will also help reduce the impact and may be particularly of use to rotary wing National standby assets, who may need access to Furness General Hospital, Royal Lancaster Hospital and Halton Training Camp (Lancaster).

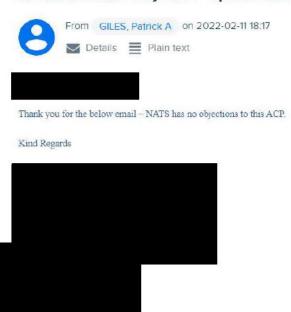
Thank you for your engagement on the revised proposal and the opportunity to respond to it. This was also submitted via the portal on the website.

Best regards,

4.3.5 NATS

We received a response from NATS that they had no objections to the TDA on the 11th of February, 2022. We evidence this below.

RE: Morecambe Bay TDA - Update and Extended Stakeholder Engagement 🗾



4.4 Local stakeholders contacted

From the results of the first stakeholder engagement, we believed that we had a positive response from all sectors of the aviation community, with the exception of the local and national microlight fraternity.

This we believed was down to an and colleagues and their negative outreach to the local and national Microlight communities.

We emailed directly to Cumbria Aviation Limited and received a generally positive email back including for the first time some genuinely helpful advice regarding local area traffic utilisation.



Thanks for your email.

With various hats on I work closely with both BMAA and the LAA, so I've forwarded your email to them for their view.

On a personal basis, having reviewed your website, I can see it's clearly a great plan, plus my wife is a project manager for NHS so I'm sure she'll agree. Your fixed wing drone hybrid looks fantastic, I hope the 40kts cruise limitations can cope with the Bay weather!

Looking at the plan, I'd say section C and D the route to Kendal could need some clarification. It crosses a highly favoured route north and south for many of our fellow Light Sport Aviation pilots and indeed that of some of our customers heading north for services we offer..

I assume that looking at the hours of operation and the TDA dimensions and particularly your reference to the 400'agl ceiling, your view would be its unlikely to be an issue?

I'm sure you'll be aware that there is a large group of North Lancs based BMAA member microlight flyers and indeed several schools that operate just south of you and many often fly north into the Lakes and indeed around the area of the proposed TDA so I guess you may have more engagement activity with them. Many of these pilots do use radio, but many particularly those who fly SSDR don't and avoid flying near controlled airspace and may object strongly to having to call a crossing service to head north into the Lakes.

Good luck and kindest regards



SALES - SERVICES - MEDIA
Cumbria Aviation Ltd - Hangar 165 - Northside GA Centre
Carlisle Lake District Airport - Cumbria - CA6 4NW
T: 01228 562261 M: 077250 46836

Email: flying@cumbria-aviation.co.uk Email: media@cumbria-aviation.co.uk

We decided that direct engagement was required and through a Facebook post asked for help from the microlight community. Whilst we received considerable gripe about RPAS operations, we did receive communication from a local pilot who knew the Morecambe Bay area well and who lived within the Restricted R444 zone at Heysham.

In communication with	microlight pilot, we were able	to establish that there
was little to affect microlight pilot	s in the area as the TDA extents	are below 400'. Andrew
introduced us to CI	hairman of Bay Flying Club,	, CFI, Attitude

Airsports Limited who operate out of Rossall Field and CFI who operates out of Moss Edge Flying Field.

We arranged to go and see _____, CFI at Rossall Field on the 22nd of February at 14:30 hours. The meeting was positive and _____ could see no aspect of the ACP proposal that would affect his operation. We also discussed how we might be able to deploy some technology at Rossall Field that would enable us to inform Rossall Field of when the RPAS may be active.

Speaking with _____, Chairman of the Bay Flying Club, we arranged an evening meeting for members of the Bay Flying Club and this was hosted at the Lancaster House Hotel by Electric Aviation on the 23rd of February at 19:30. The evening was well attended as it was the first face to face meeting of the Bay Flying Club since the pandemic. Approximately 22 people attended and Electric Aviation gave a presentation on the proposed TDA to the attendees.

A constructive question and answer session was held afterwards and no objections to the proposed ACP were raised by the Bay Flying club members.



Electric Aviation presenting to Bay Flying Club.

A flyer was produced for the event detailing the ACP and was designed to be a one pager that members of the Bay Flying Club could take away with them. This flyer is presented overleaf. Overall the evening was a success as it allowed Electric Aviation to understand the concerns of the microlight pilots around the local area. Through communications with chairman of the Bay Flying Club, we were also able to reach out to the Paramotor flyers in the local area and agreed with them to engage further so as not to affect their operations.

We have also followed up with with regards the implications of the TDA and the ACP process. In total there are three air strips in the vicinity of Rossall Field. We have now reached out and communicated out intentions to the owners, operators and instructors at all three fields successfully and have received no objections based on airspace utilisation.



The flyer generated for Bay Flying Club

All TDA activation will be notified by NOTAM prior to activation. We are negotiating a DACS service at the moment

We will maintain a listening watch on various AG frequencies and will provide a dedicated telephone service.

and are working with Heysham and the Office of Nuclear Regulation to access to R444.

It is not our intention to restrict anyone access to any airspace throughout this project!

During our conversations with the local Microlight Pilots from Rossall Field, we asked about (see section 1.34.11 Microlight "D"). It was suggested that was not a microlight CFI in the local area at all and was in fact from Swansea. We contacted and asked if he was from Swansea or had ever flown or landed on Morecambe Bay. He responded.



Go away. I thought I made that perfectly clear in our last exchange.

Alistair Dixon 07711 111382

From: chris@Chriscrockford.com <chris@Chriscrockford.com>

Subject: Deach Landings

Please confirm if you are Swansea based and also if you have ever landed at Morecambe Bay other than Pilling Sands or Middleton Sands.

Many Thanks,



Checking local microlight schools in Swansea confirms Mr Dixon to be located there.

We also reached out again to North West Microlight Aircraft Club, located at St Michael's, who we previously offered to go and present to, but we received no response.

4.5 Other feedback

Post our facebook post for help regarding microlight flying at Morecambe Bay, we received a number of responses via the website portal. These are now presented. Whilst some are negative, predominantly through gripe, some are positive and none contain issues regarding airspace utilisation, with the exception of the mention of the kite flyers at Newbiggin with whom we are in communication with already.

New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



message

Sounds like a good idea, if it saves life, I support it. Amendments can always be made in the future.

Submitted 06:42 PM - 08 February 2022

Mark as spam



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New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



phone

message

I am very opposed to this initiative for two reasons. 1. There are better, cheaper alternatives 2. It is part of an ongoing airspace grab

Submitted 05:44 PM - 08 February 2022

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New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



message

Please explain how you intend to operate a 54.4m wingspan RPV through Restricted Area R444/2.0 or what exception you have received to do this.

Submitted 10:40 AM - 18 January 2022

Mark as spam



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New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



message

As an ex pro drone operator I am extremely concerned for the safety of your aircraft over the coast line near Newbiggin. Every weekend dozens of Kite fliers descend on the area and the height they were flying looked well over 400 ft. A potential deathtrap for drones.

Submitted 09:52 AM - 18 January 2022

Mark as spam



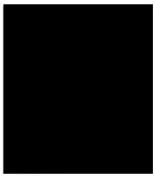
You are receiving this because you confirmed this email address on Formspree.

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New form submission on A New Form

Someone just submitted a form on www.morecambebaydrones.com/. Here's what they had to say:



message

Whilst I respect the professional quality of your application - something seeming to be missing from the vast majority of such applications - this is yet another outrageous airspace grab by a company looking for a problem for its solution. Using the NHS as a worthy justification.

The only positive suggestion I can add is that lots of microlight and light aircraft pilots use Pilot Aware conspicuity devices (and no other). So that facility must be included.

If you quote this submission, I insist it be used in its entirety. It in no way supports your application.

Submitted 02:00 PM - 10 February 2022

Mark as spam



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Don't want these emails anymore? No problem!

Simply remove the form on formspree.io or unsubscribe from this form's notifications.

4.6 Mr W.

Before the second stakeholder engagement opened we were contacted by provided a spirited engagement, although we believe his arguments should be directed to the CAA rather than to ourselves as Airspace Change Sponsors. The communications can be found below presented latest to earliest communication.

Re: OBJECTION: Morecambe Bay RPAS Transit Route Airspace change ID: ACP-2021-022

From rob on 2022-02-22 21:07

Thank you Chris. I look forward to welcoming your organisation into class G airspace.

Best regards



Subject: Re: OBJECTION : Morecambe Bay RPAS Transit Route Airspace change ID: ACP-2021-022

We will enclose your views in our stakeholder engagement report to the CAA. ELECTRIC AVIATION

On 2022-02-22 09:28, rob wrote:



Thank you for you response. My only disagreement is that RPAS must be integrated into class G airspace, not segregated from other airspace users.

It is clear from the Secretary of State for Transport that RPAS integration is the direction that is expected. You say that the CAA has advised you; who has and where is the evidence,; email or letter? Spoken word is, these days, unreliable.

From what you say the airspace change commitee would

- 1. Have to be prepared to be responsible and accountable for the carriage of your hazardous goods, as no scrutiny has been permitted by stakeholders.
- 2. Have to be prepared to be responsible and accountable for your organisations objectives, as no scrutiny has been permitted by stakeholders

- 3. Have to be prepared to be responsible and accountable for denying other users access to this airspace on the basis of the evidence you have provided.
- 4. Have to be prepared to be responsible and accountable for assignment of segregated airspace when an alternative is available and has not been considered.

I trust that the committee members will be clearly identified so that we can understand their rationale at a later date.

This application must be refused because:-

- 1. The evidence on which the request for airspace is made is flawed.
- 2. The path you have embarked on will lead to an application for permenant segregated airspace.
- 3. You have presented no evidence with your application to demonstrate that BVLOS operations must be in segregated Airspace when clearly a route is laid out in CAP1861, supported by a letter from Sir Stephen Hillier.
- 4. You have provided no argument that supports the use of segregated airspace when I have offered an alternative solution.

As a consequence, this application has failed to address stakeholders concerns at the consultation stage and it must be refused as unsound.

Best regards

On 20 Feb 2022 at 19:19,

> wrote:

Our thanks for taking the time to respond to our response.

We provide the following responses to your comments.

- 1 We cannot comment on other ACP applications.
- 2 We cannot comment on the operation of the CAA Sandbox.

We will close by commenting that the majority of your argument is focussed on CAA policy with regards Temporary Danger Areas and their usage. This is a matter that you should direct at the CAA and not ourselves. We have been advised by the CAA airspace team that the TDA is the correct vehicle for our operations.

We thank you for taking the time to contact us.

ELECTRIC AVIATION

On 2022-02-15 17:19, rob wrote:



Thank you for your patience whilst I considered your response.

Appendix A sets out the case for RPAS integration, and you'll notice that at the highest level in The Country the call is for RPAS integration not segregation. If the application shows no pathway towards RPAS integration then it must fail.

The challenge as I see it is that RPAS applicants have, for whatever reason, followed one of two paths.

1. Segregation through Danger Areas.

Quite a number of applicants have initiated the TDA process. However, what has become apparent from those at the end of this process is that the applicant is granted one 90 day TDA, and at the end of that tenure they are told they cannot have another TDA and must apply for a permanent Danger Area thus robbing all class G users of that airspace. Danger Areas are extraordinarily difficult to remove. I've been unable to unearth such an event in the last ten years. As a result, the applicant solely had 90 days to demonstrate their vehicles capability. This route invariably leads to a permanent Danger Area and segregation. On that basis, applicants must be dissuaded from taking this path as integration will never happen.

2. Segregation by sandbox

An alternative route is for the applicant to bury themselves in the CAA sandbox, where they can demonstrate their capabilities, and presumably come out the far end 'integrated'. However, some of these sandbox candidates have emerged from the far end, and I'm surprised to find that they too are applying for TDAs. It seems that the sandbox has done nothing more than delay the inevitable 'segregation' outcome.

Sir Stephen Hillier is copied into my email, as there is a disconnect between the initiating directive and its implementation.

In am working with another applicant, who is farther along the above process and who has recognised its flaw. We are developing a trials strategy, together, held in Class G airspace that demonstrates progression towards RPAS integration whilst meeting some of the organisation's objectives. Because the programme starts in Class G airspace it will remain in Class G airspace without the need for segregation. That's integration!

As in most other aspects of aviation, in this strategy the CAA provides oversight, while the applicant is examined. Pilot Licencing and aircraft maintenance are examples of the CAA providing oversight while an Examiner conducts an inspection.

I would recommend a similar approach as it benefits both the applicant and airspace users. Let me know if you'd be interested in opening a dialogue.

This application is not appropriate or necessary as it leads to RPAS segregation. There is no path to RPAS integration and the application doesn't align with the Secretary of State's strategy. As a consequence, it must be refused.



Points 1-3 accepted.

Point 4. See above.

Point 5. It is difficult to see why the programme objectives should be classified as Company Confidential. A clear objective must be "RPAS integration". If the company does not openly embrace that objective through this application then it sails in the face of the Secretary of State for Transport's stated ambition (1) and on that basis alone the application must fail. Points 6-8. If the General Public are to be kept it dark regarding to the conduct of your operation, then you deny us a proper consultation. A wider debate brings incisive assurance.

The application must fail on this point alone.

Appendix A the case for integration

"More airfields, less controlled airspace"

"best place in the world for General aviation"

"Clearly we need to integrate the drones"

Grant Shapps Secretary of State for Transport (1)

Case 1

Segregated airspace is no panacea for safety (2). There are no barriers to entry or exit and airspace creates a false sense of security.

Case 2

Real world example. Light aircraft flight Perranporth to Biggin Hill in IMC. Bournemouth hands over to Southampton for a RADAR control service (RCS). 7 miles to run, tracking VOR SAM and an incoming Commercial flight transmits its initial call. The service to the light aircraft is terminated and the pilot (me) is instructed to turn onto a northerly heading and leave controlled airspace 'own navigation'. Ignoring any other aspect, the light aircraft pilot is in the same situation as an RPAS with a command link failure.

However, the light aircraft pilot has no control over the situation, and is in a worse situation than a RPAS in class G airspace. The light aircraft was being controlled remotely, the remote pilot (ATC) unexpectedly cut the control link and the on-board pilot is left with few navigation options. (Not a great number of beacons to the North of Southampton).

Flight by a competent RPAS pilot in VMC outside of controlled airspace is in a better proposition than a RCS given to a light aircraft by a commercial operator.

Case 3

"The CAA has a policy of keeping the volume of controlled airspace to the minimum necessary to meet the needs of UK airspace users and to comply with its international

obligations.'(3). No airspace user *needs* another danger area, TMZ, RMZ or any other zone for RPAS to operate safely, when there is an alternative solution available.

Case 4

Once established, segregated airspace is almost impossible to remove. In recent memory Southend had no airspace at all. It acquired a few fights from Easyjet and a huge chunk of class G airspace in the SouthEast disappeared. The Airport has never been really busy and Commercial flights stopped in August 2020 (4). Even if Southend introduces new commercial flights is airspace isn't justifie. In comparison Exeter Airport manages on similar volumes without any controlled airspace at all, and still services commercial flights. In contrast Southend burns up airspace that could be available to all!

Case 5

CAP722 reminds us "It is important to emphasise that segregation effectively denies airspace to otherwise legitimate users" (5). TDAs,DAs, TMZ,RMZ are all tools of segregation. Unless there is an imperative, we should all seek a long term non segregated solution. I see no imperative in this application.

Case 6

Integrated BVLOS is a fact in US, Canada, India, South Africa (6), Rwanda Feb 2020(7), Singapore Apr 2020 (8), Switzerland Feb 2017 (9), Ukraine (200 targets) Jan 2022(10)

Case 7

UK Armed forces RPAS operating in the US will not have the experience of operating in integrated airspace. Whilst this might be mitigated by pre- training overseas, it is cost effective and safer to train in the UK in class G airspace. The tax payer's money can be spent more efficiently.

Case 8

How will we treat our allies when they visit the UK on joint exercises? The US Armed forces will think we're bonkers when we tell them RPAS are operating in 'integrated' airspace only to reveal that any RPAS BVLOS needs a danger area or TMZ etc.

Case 9

CAP1861 provides 3 strategies for achieving RPAS integration.

A letter from Sir Stephen Hillier (11)

"TDAs are neither mandatory, nor the first option, to operate BVLOS"

supports my view and draws my attention to this CAP. This application makes no assessment of CAP1861 strategies or alternative segregated structures and provides no conclusive reasoned argument for establishing a DA.

Case 10

As long ago as 5th August 2019 the first FAA-approved 'Beyond-Visual-Line-of-Sight' drone flight was completed (12). The UK is in the dark ages and so will lose the RPAS race, if it

hasn't already done so. Bold, enabling action is needed to embrace and facilitate true BVLOS in non segregated airspace.

Case 11

- 1. Observation, not segregation, is used today to evaluate pilots and their machines abilities by the CAA.
- 2. Observation is used today, both in the air and on the ground, to evaluate a flying system's fitness to fly by the LAA and microlight association.
- 3. In 75 years the LAA has never required a TDA, or any segregated airspace to evaluate a new type of aircraft. Its always been assessment by observation In n class G airspace. I can find no significant incidents.
- 4. The CAA doesn't require the establishment of segregated airspace (- nor should it be required to do so) for practicing aerobatics and aerobatics teams.

Case 12

Cooperation, collaboration, integration

The FAA has shown a 'can do' attitude to integrating drone operation in all airspace (13),(14),(15), (16),(17). Commercial Drones may operate freely and safely in Class G airspace without being segregated but the operator takes responsibility for avoiding all threats. The same Drone can operate safely in controlled airspace with the agreement of its ATC.

This initiative has seen the FAA

- 1. Facilitate debate.
- 2. Form the legislation
- 3. Allow the people it serves to shape the future

Why can't that happen in the UK?

Case 13

Flying that starts segregated ends up segregated

Case14

Segregation=MOR=Pilot punishment (18)

- I. https://www.flyer.co.uk/transport-secretary-grants-shapps-talks-to-flyer/
- 2. https://www.flyer.co.uk/aaib-report-slams-caa-and-airspeeder-after-demo-drone-crash/
- 3. https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Airspace-Change/
- 4. https://www.independent.co.uk/travel/news-and-advice/southend-airport-easyjet-ryanair-flights-b1900190.html
- 5. https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=415
- https://www.irisonboard.com/how-to-get-a-bvlos-waiver/
- 7. https://auterion.com/enabling-bvlos-missions-for-the-african-drone-forum/

- 8. https://www.epshipping.com.sg/first-commercial-beyond-visual-line-of-sight-drone-delivery-bylos-in-singapore/
- 9. https://www.commercialuavnews.com/energy/first-bvlos-license-switzerland
- 10. https://www.uasvision.com/2022/01/06/ukraine-flight-tests-drone-based-awacs
- 11. Letter from Sir Stephen Hillier 1 March 2021
- 12. https://dronedj.com/2019/08/05/faa-approved-beyond-visual-line-of-sight-drone-flight/
- 13. https://www.aviationtoday.com/2021/01/22/faa-approves-bvlos-drone-operations-without-visual-observers
- 14. https://www.geekwire.com/2020/faa-issues-safety-rules-smooth-way-amazon-drone-deliveries
- 15. https://www.commercialuavnews.com/infrastructure/beyond-visual-line-sight-operations-next-target-faa-regulation
- 16. https://skyward.io/part-107-basics-commercial-drone-regulations-in-the-u-s/
- 17. https://www.faa.gov/uas/commercial_operators/
- 18. https://airspacesafety.com/statistics/
- 19. https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=9294

Abbreviations

UAV Unmanned aerial vehicle **UAS Unmanned aircraft System** RPAS Remotely Piloted Aircraft System RPAV Remotely Piloted Air Vehicle BVLOS Beyond Visual Line of Sight VFR Visual Flight Rules IFR Instrument Flight Rules VLOS Visual Line of Sight EC Electronic Conspicuity **BAU Business as usual** TMZ Transponder Madatory Zone RMZ Radio Mandatory Zone RCS RADAR control services **GA General Aviation** SPTA Salisbury Plain Training Area AIAA Area of Intense Aerial Activity N.b. the terms Drone, UAS, UAV, RPAS, RPAV are often interchanged

On 11 Feb 2022 at 16:12, rob < wrote	0n	11 Feb	2022	at 16:12,	rob	<		wrote:
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Thank you for your response which I will consider over the next few days and revert to you

----- Original message ------From: chris@electric-airspace.com Date: 11/02/2022 15:10 (GMT+00:00)

Subject: Re: OBJECTION: Morecambe Bay RPAS Transit Route Airspace change ID: ACP-

2021-022

Our thanks for taking the time to submit your objection to our Airspace Change application through our online portal.

We respond to the points made in your PDF document as follows:

- 1. Flawed Airspace Analysis We acknowledge your opinion. In our Airspace Analysis, we used the available data from FlightRadar24. In the document we acknowledge that this data will not be representative of aircraft not fitted with ADS-B or transponders and also acknowledge that the data was for a period date range which included reduced flights owing to the pandemic.
- 2. Undetectable aircraft We refer you to our answer to your Question 1.
- 3. Class G airspace We have not assumed that transponders are omnipresent.
- 4. CAP 1861 the following is stated in CAP 1861: "Operating an unmanned aircraft Beyond Visual Line of Sight (BVLOS) is not explicitly prohibited or restricted by regulation, in the UK, however it does require the permission of the CAA to do so. Page 3 of this guide describes how the maturity of technological and operational mitigations is not yet sufficient to authorise BVLOS operations in non-segregated airspace." CAP 722 states that unmanned aircraft intended for BVLOS operations will require either an accepted Detect and Avoid capability, segregated airspace, or clear evidence that the intended operation will pose 'no aviation threat'. We have determined, in conjunction with the CAA, that segregated airspace is required. This ACP has been raised in accordance with CAP 1915 as required by the CAA at the time, and CAP 1915 states that the primary method for achieving segregated airspace is by application for a TDA.
- 5. Programme Objectives Our programme objectives are commercial in confidence.
- 6. Carriage of hazardous goods Transport of any dangerous goods is subject to CAA regulation and approval, as per manned aircraft.
- 7. Safety The operator is required to submit an operating safety case (OSC) to the CAA, fully documenting all the hazards and risks identified for the BVLOS operation. If the CAA is satisfied that the OSC is sufficiently robust to mitigate the risks, then an operational authorisation (OA) is issued to the operator for the documented BVLOS operation. The OA goes hand-in-hand with an approved ACP, i.e. both are required to commence flying operations.
- 8. Flight rules The operator is required to state in the OSC how flights will be conducted. Please see our response to point 7 above.

We thank you for taking the time to contact us regarding this Airspace Change application. ELECTRIC AVIATION LTD.



Abingdon cottage Station road Dormansland Surrey RH76NL

We have previous exchanged emails on 5th December 2020 and you agreed to include me in this consultation.

Summary

Class G airspace is a finite resource which is made available to all airspace users. I welcome all new users who wish integrate into class G, and indeed other airspace. CAP 1915 (8) has been exploited in previous RPAS applications and we are now seeing applications for permanent segregated areas in their stead. As the Covid-19 emergency recedes, so there is no need to circumvent the provisions of CAP 1861 (7).

The establishment of TDAs brings with it the risk that RPASs never seek to achieve integration into existing airspace, leading to a spreading mosaic of segregated airspace which denies access to General Aviation.

I object to the establishment of Temporary Danger Area in Morecombe Bay, reference ACP-2021-022 on the following grounds.

1. Flawed airspace analysis

In your proposal your arguments rely heavily on data from Flight Radar.

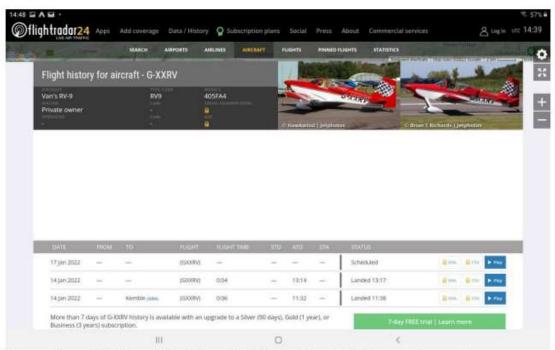
To test this, I used FlightRadar24 to show my most recent flights in my aircraft G-XXRV on 14th and 17th January 2022.

Flight details.

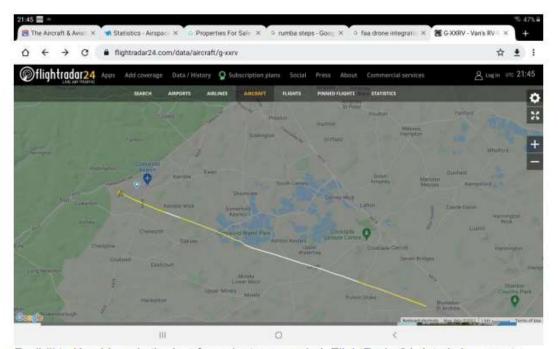
14th outbound Redhill Kemble chox 1052 t/o 1059 land 1141 chox 1144 g/s 135kt alt 2400ft 14th inbound Kemble Redhill chox 1303 t/o 1305 land 1344 chox 1349 g/s 132kt alt 2500ft 17th outbound Redhill Thruxton chox 1040 t/o 1048 land 1117 chox 1119 g/s 128 kt alt 2300ft

17th inbound Thruxton Redhill chox 1312 t/o 1316 land 1349 chox 1353 g/s 125kt alt 1500ft Times as recorded in my aircraft flight log.

My model S Transponder was active and tracked by Farnborough and Boscombe. Winds were light both days.



Note: outbound flight on 17th missing. FightRadar24 has failed to record any data. For flights on 14th only 6 and 4 minutes were recorded



Redhill to Kemble only the last few minutes recorded. FlightRadar24 data is inaccurate Aircraft flight log

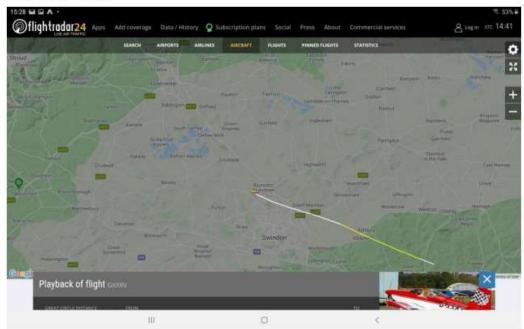
14th outbound Redhill Kemble chox 1052 t/o 1059 land 1141 chox 1144 g/s 135kt alt 2400ft Flighradar24

1132 725ft 0kt

1133 275ft 119kt

1134 275ft 119kt

1135 550ft 119kt 1136 1100ft 134kt



Kemble to Redhill only a small section about 10 minutes into the flight. FlightRadar24 data is inaccurate

Aircraft flight log

14th inbound Kemble Redhill chox 1303 t/o 1305 land 1344 chox 1349 g/s 132kt alt 2500ft

Flighradar24

1311 Oft 00kt

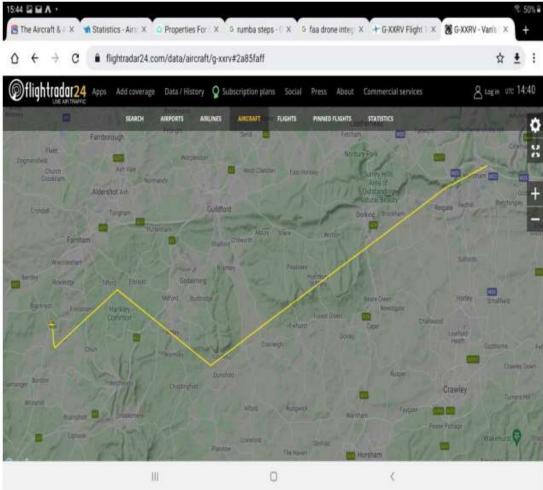
1312 Oft Okt

1313 250ft 0kt

1314 1175ft 74kt

1315 1300ft 124kt

1316 1175ft 154kt



Thruxton to Redhill 1st third of flight missing. Track plot dubious. I accurately tracked a line between Alton, south of Guildford, Dorking. FlightRadar24 data is inaccurate.

Aircraft flight log

17th inbound Thru ton Redhill chox 1312 t/o 1316 land 1349 chox 1353 g/s 125kt alt 1500ft Flighradar24

1332 1000ft 281kt

1332 1000ft 304kt

1334 900ft 304kt

1343 700ft 346kt

1345 700ft 211kt

1346 500ft 167kt

Conclusion

The test Aircraft is constructed of aluminium, which provides the best RADAR signature (1). It was lit up electronically by a transponder.

Light Aircraft cruise at a constant velocity with a small variations due to wind. Winds were light on both days.

Online tracking services are unreliable and miss individual entries and entire flights,

2. Undetectable Aircraft

Wood and fabric Aircraft offer the worst Radar cross sectional area (1). Historic and vintage Aircraft are made from wood and fabric and often have no electrical systems to support avionics. (2)(3)

Of the 21,000 civil aircraft registered in the UK,[1] 96 per cent are engaged in GA operations, and annually the GA fleet accounts for between 1.25 and 1.35 million hours flown.(4). The Light Aircraft Association (LAA) (5) administers about 12% Of GA aircraft and a significant number of these are built of materials that have a poor Radar cross sectional area, have no electrical systems, and as a consequence have no transponder or illuminating device. Balloons and gliders do not have electrical systems and are unlikely to carry transponders.

There being no restrictions on GA activities, movement volumes are back to pre pandemic levels.

3. Class G Airspace

There is no obligation to carry a transponder or radio in class G airspace (6). The assumption, by this application, that transponders are omnipresent distorts the perceived risk.

4. CAP 1861

This proposal takes advantage of the provisions of CAP 1915(8), however CAP 1915

- 1) "doesn't replace the current Civil regulations". CAP 1861(7) still applies.
- 2) "or by using an existing suitable airspace structure"

CAP1861 provides 3 strategies for achieving RPAS integration. A letter from Sir Stephen Hillier (9) ("TDAs are neither mandatory, nor the first option, to operate BVLOS") supports my view and draws my attention to these strategies. This application makes no assessment of CAP1861 strategies or alternative segregated structures and provides no reasoned argument for establishing a TDA.

5. Programme Objectives

By establishing a TDA without identifying how its use contributes to the BVLOS development pathway(8) we are left to guess what will happen at the end of 90 days. Will a further TDA extension or permanent segregation be sought?

The proposal makes no reference to the extent to which the programme will converge on the BVLOS development pathway (8). Without a positive move towards integration we are left to guess what this programme will achieve. It may provide a service, but what will we learn from its operation? On challenging organisations who have benefited from a TDA for RPAS use, all have claimed success but none have been able to quantify or qualify what they have achieved.

We have seen the corollary to these activities for the establishment of a permanent exclusion area. Much better to start on the integration path from the beginning,

6. Carriage of hazardous goods

The application fails to identify how biomedical goods can be carried safely and how it is protected in the event of systems failure. The same goods transported by lorry or ship will already have handling procedures in transit and in case of emergency(10). Goods in transit safety is inadequately dealt with in this application.

7. Safety

The application shows no consideration of the danger of complacency in establishing segregated airspace. Airspace provides no physical safety barriers, merely virtual safety as was discovered in an earlier runaway drone incident at Goodwood (11). What will prevent a runaway drone from causing mayhem.

8. Flight rules

I see no derogation of the Rules of the Air. What flight rules would this venture operate under and how would the operation maintain its compliance.

1) https://en.m.wikipedia.org/wiki/Radar_cross-section

- https://www.aopa.org/news-and-media/all-news/2017/january/19/ads-brequirement-clarified-for-nonelectrical-aircraft
- 3) http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~">http://www.lightaircraftassociation.co.uk/Beginners%20Guide/per_air.html#:~
- 4) https://en.m.wikipedia.org/wiki/General aviation in the United Kingdo m
- 5) http://www.lightaircraftassociation.co.uk/Who%20we%20are/about%20us.html
- https://www.aurora.nats.co.uk/htmlAIP/Publications/2021-12-30-AIRAC/html/index-en-GB.html 5.3.1.3
- 7) https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=9294 CAP1861: Beyond Visual Line of Sight in Non-Segregated Airspace
- 8) https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=d
 etail&id=9593 CAP1915: Unmanned Aircraft Systems; BVLOS Operations in Support of the COVID-19 Response
- "TDAs are neither mandatory, nor the first option, to operate BVLOS".
 Letter from Sir Stephen Hillier 1 March 2021
- 10) https://personal.help.royalmail.com/app/answers/detail/a id/96/~/prohibitedand-restricted-items---advice-for-personal-customers
- 11) https://forums.flyer.co.uk/viewtopic.php?f=1&t=117912 Rogue Drone AAIB report



Electric Aviation once again, albeit in an individual capacity and not representing the BMAA. Confusingly does appear in the March edition of the BMAA magazine as being part of the BMAA airspace team.

New form submission on A New Form

Someone just submitted a form on morecambebaydrones.com/. Here's what they had to say: name



Morecambe Bay Revised Proposal - 2nd Questions

PLEASE ACKNOWLEDGE RECEIPT

03 Feb 22

Please take this as the 2nd part of my Feedback; I will respond more fully in due course.

On 20 Jan 22 I responded through your website with 3 questions but as yet I have had no answer. For ease of your answering they are repeated immediately below.

- 1. Despite providing requested Feedback for the initial proposal I was not sent the e-mail requesting further feedback, was that an oversight?
- 2. Have you missed sending the update e-mail to other Stakeholders who provided feedback last time?
- 3. When will the Minutes of your latest meeting with the CAA which resulted in the revision and request for further feedback be uploaded to the ACP portal?

In addition, having made an initial study of the new documents I have some further questions.

- 4. Your original Statement of Need (SoN dated 9 Mar 21) was published on the CAA ACP Portal 23 Apr 21 together with a revised version yet neither is now available on the Portal. Can you explain why they have been removed and arrange for them to be reinstated?
- 5. I notice that the information provided on your website is now quite different to that in the original version. Having all the information on the CAA Portal provides an audit trail which is fully open to all Stakeholders, and is a key feature of the Portal. Can you please explain why you are not publishing information on the Portal (if necessary in addition to the website) and can you please publish the original website information to maintain that audit trail? After all, CAP1616 does state "Documents will be published on the airspace change online Portal"
- 6. You state in your website that you have already operated RPAS in Restricted Airspace, can you please provide details? I have searched the CAA ACP Portal and can find no reference to Electric Aviation involvement in any other ACP for such a purpose.

- 7. Your website says "We will be offering a Danger Area Crossing Service through BAe (sic) at Warton" while the Stakeholder letter says that BAE Systems support for the DACS is 'provisional'. Which is correct?
- 8. The 'Indicative Flight Campaign' schedule states that week 6 will see routes T, E, F & A will be used for R444 test. What have routes T & A to do with R444?

Submitted 10:30 AM - 03 February 2022

Mark as spam



You are receiving this because you confirmed this email address on Formspree. **Don't want these emails anymore? No problem!**Simply remove the form on formspree.io or **unsubscribe from this form's notifications**.

Electric aviation responded:

Re: New submission from A New Form To on 2022-02-11 00:53

Please accept our apologies for the delay in responding to you. As you submitted an incorrect telephone number your message was placed into spam. Please find our responses to your questions.

1. Despite providing requested Feedback for the initial proposal I was not sent the e-mail requesting further feedback, was that an oversight?

No. We were waiting for clarification from the BMAA as to whether you were representing them, which they have confirmed you are not.

2. Have you missed sending the update e-mail to other Stakeholders who provided feedback last time?

No. As the Airspace Change Sponsor, it is at our discretion as to whom we liaise with continuously through this process.

3. When will the Minutes of your latest meeting with the CAA which resulted in the revision and request for further feedback be uploaded to the ACP portal?

We are under no obligation to provide such minutes. This was confirmed to us today by the CAA Airspace team.

In addition, having made an initial study of the new documents I have some further questions.

4. Your original Statement of Need (SoN dated 9 Mar 21) was published on the CAA ACP Portal

23 Apr 21 together with a revised version yet neither is now available on the Portal. Can you explain why they have been removed and arrange for them to be reinstated?

Both versions are still on the portal and have never been removed.

5. I notice that the information provided on your website is now quite different to that in the original version. Having all the information on the CAA Portal provides an audit trail which is fully open to all Stakeholders, and is a key feature of the Portal. Can you please explain why you are not publishing information on the Portal (if necessary in addition to the website) and can you please publish the original website information to maintain that audit trail?

All information, including snapshots of the website and the information contained within, are presented in the documents on the portal.

After all, CAP1616 does state "Documents will be published on the airspace change online Portal"

6. You state in your website that you have already operated RPAS in Restricted Airspace, can you please provide details? I have searched the CAA ACP Portal and can find no reference to Electric Aviation involvement in any other ACP for such a purpose.

Perhaps you need to familiarise yourself with the definition of Restricted Airspace. Established Restricted Airspace needs no ACP for a drone to operate within with the permission of the Restricted Airspace operator.

7. Your website says "We will be offering a Danger Area Crossing Service through BAe (sic) at Warton" while the Stakeholder letter says that BAE Systems support for the DACS is 'provisional'. Which is correct?

Both statements are correct. We will be offering the service through Warton, but Warton must finalise the procedures and ensure the CAA are happy before the service can be commenced.

8. The 'Indicative Flight Campaign' schedule states that week 6 will see routes T, E, F & A will be used for R444 test. What have routes T & A to do with R444?

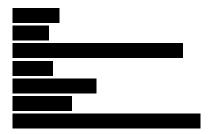
Routes T,E,F,A join to form a route from Hest Bank to Lancaster Royal Infirmary. As we are flying through R444 with the permission of the operator of R444 we need to test that we can successfully liaise with both ATC services and the Restricted Area Operator accordingly. We need to ensure that we can do this for both outbound and incoming traffic from Lancaster Royal Infirmary.

ELECTRIC AVIATION LTD.

We then received yet another response from

submission on A New Form

Someone just submitted a form on morecambebaydrones.com/. Here's what they had to say: name



ACP-2021-022 Morecambe Bay

Introduction

Despite comments to the contrary I am not at all opposed to RPAS or trials for their development and use. I am, however, opposed to the plethora of NHS logistics:RPAS trials that are currently underway or planned. They are in my view an entirely inefficient use of scare resources – public money, Class G airspace, CAA resources and Stakeholder resources.

Surely the emphasis right now should be on 2 things:

A single, coordinated and comprehensive NHS trial, and

The development of an acceptable Detect And Avoid system for RPAS.

It is also extremely difficult for me to understand how the engagement for this ACP has met the spirit and letter of the CAP. Even had it done so I have serious concerns about the operational aspects including routing through R444. As the Goodwood and Network Rail accidents have shown, RPAS that are "not designed, built or tested to any recognisable engineering or airworthiness standards" (UK AAIB) pose a serious hazard.

I am, therefore, entirely opposed to this Proposal

ACP Process

This ACP causes me more concern than any other I have viewed, assessed and responded to, and largely because of the engagement. The following 4 points illustrate my concerns.

Unanswered Questions. Despite raising valid questions the sponsor has refused to provide answers and information just as he did the first time, then claiming 'not relevant to airspace'. I have read and re-read the CAP and can find nothing that limits stakeholders from responding on all matters relevant to the Proposal. If the sponsor is claiming that ONLY matters relevant to airspace may be subject of comment then please could they reference that part of CAP1616.

Furthermore, if only airspace matters are subject to comment then why have Lancaster City Council, the Queen's Guide to the Sands and Lancashire County Councils been consulted? Surely, they are neither users nor regulators of the airspace.

Relevant Information Not On ACP Portal. Details of the original proposal were contained on the Sponsor's website. This has now been updated but the original website details are no longer available for comparison. When asked about this the sponsor replied "All information, including snapshots of the website and the information contained within, are presented in the documents on the portal".

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documents but Stakeholders should not have to search through multiple documents to find information that was formerly published separately. That surely does not meet the requirements of the CAP:

Page 24 para 73: ""For the purpose of transparency, the CAA runs an online portal. The portal holds all relevant information on airspace change proposals...",

Page 47 para 156: "all consultation material is published on the online portal", and

Page 178 para C16: "Documents will be published on the airspace change online portal".

Limited Engagement. In the absence of Meeting Minutes, which the sponsor has refused to publish - "We are under no obligation to provide such minutes. This was confirmed to us today by the CAA Airspace team" - I can only assume the reason for this 2nd period of engagement, and it has failed in what I assume is that aim.

As an active stakeholder for the 1st engagement I was not individually invited to comment the 2nd time and I'm aware I am not the only pilot to have been 'ignored'.

Late Publication of Documents on Portal. More importantly, to publish a series of documents on the Portal on 10 & 11 Feb, not much more than 2 weeks before the end of the engagement period, is unacceptable. These newly-published documents consist of a total of c300 pages and while they might well contain information that has already been re-published, Stakeholders cannot assume that is the case if they are to make informed comment.

Previously the CAA has stated that they will remind sponsors that uploading of all material is a demonstration of their commitment to the open process.

To me this demonstrates that the engagement for this ACP lacks the openness and transparency that is integral to the CAP process.

Operational Aspects

Whatever the slight changes to the operational aspects of this Proposal that are associated with this 2nd engagement the substance of my concerns about this Proposal remain largely unchanged.

I have not read any justification for routing through R444 rather than just going around it, and I can find no information to convince me that the RPAS to be used will meet the same regulatory and safety regime as manned aircraft.

Summary

None of my concerns about this ACP have been allayed and I believe the proposal will offer no material benefit to the problem of NHS logistics.

Because of the way the engagement has been conducted and because of my concerns about the operational aspects I object strongly to this ACP.

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Because of the way the engagement has been conducted and because of my concerns about the operational aspects I object strongly to this ACP.

Submitted 05:30 PM - 27 February 2022

Mark as spam



Electric Aviation then responded:

Re: New submission from A New Form



We acknowledge receipt of your submission 27/02/22:17:30.

We note you still wish to use a fictitious contact telephone number.

We provide our response below.

ELECTRIC AVIATION.

Introduction

Despite comments to the contrary I am not at all opposed to RPAS or trials for their development and use. I am, however, opposed to the plethora of NHS logistics:RPAS trials that are currently underway or planned. They are in my view an entirely inefficient use of scare resources – public money, Class G airspace, CAA resources and Stakeholder resources.

The author is entitled to his opinion

Surely the emphasis right now should be on 2 things:

A single, coordinated and comprehensive NHS trial, and

The development of an acceptable Detect And Avoid system for RPAS.

The NHS is not a single entity and with over 300 Trusts and Clinical Commissioning Groups as well as 28 dedicated Pathology Networks. What will work for one trust/CCG/network will not work for another, hence the requirement for multiple trials.

We are in agreement regarding the development of DAA technologies.

It is also extremely difficult for me to understand how the engagement for this ACP has met the spirit and letter of the CAP. Even had it done so I have serious concerns about the operational aspects including routing through R444.

The routing through R444 will be achieved in accordance with operational authorisation from the CAA, The operator of R444 and the Office of Nuclear Regulation.

As the Goodwood and Network Rail accidents have shown, RPAS that are "not designed, built or tested to any recognisable engineering or airworthiness standards" (UK AAIB) pose a serious hazard.

The author has no knowledge of the RPAS to be used, its testing and performance characteristics and is attempting to smear the operational reputation of the RPAS operator.

I am, therefore, entirely opposed to this Proposal

ACP Process

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Unanswered Questions. Despite raising valid questions the sponsor has refused to provide answers and information just as he did the first time, then claiming 'not relevant to airspace'.

The author submitted over 9000 words of comment during the initial stakeholder engagement and every point was answered appropriately. At no time did the author provide any feedback about the impact of the operations on other airspace users.

I have read and re-read the CAP and can find nothing that limits stakeholders from responding on all matters relevant to the Proposal. If the sponsor is claiming that ONLY matters relevant to airspace may be subject of comment then please could they reference that part of CAP1616.

The sponsor is happy that they have conducted the CAP1616 process accordingly and suggests that the author refers his concerns to the CAA Airspace team directly.

Furthermore, if only airspace matters are subject to comment then why have Lancaster City Council, the Queen's Guide to the Sands and Lancashire County Councils been consulted? Surely, they are neither users nor regulators of the airspace.

Communications with the Queen's guide to the sands established the likelihood of members of the public being on the sands at Morecambe Bay during operational hours of the airspace change above the bay. Lancashire County Council have been contacted as they manage the planning process for the land surrounding Morecambe Bay and thus are aware of any developments that might see increased footfall of the public under the airspace change planned.

Relevant Information Not On ACP Portal. Details of the original proposal were contained on the Sponsor's website. This has now been updated but the original website details are no longer available for comparison. When asked about this the sponsor replied "All information, including snapshots of the website and the information contained within, are presented in the documents on the portal".

The website portal was snapshotted and placed in the Stakeholder Engagement file, which is available on the Airspace Change Portal.

In seeking to compare this proposal with the original information may be available in other documentACP-2021-022 Morecambe Bay

The Sponsor cannot understand this sentence.

The highlighted text below in Green seems to be a repeated submission, perhaps caused through a cut and paste error on the part of the author.

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ACP-2021-022

ACP Process

This ACP causes me more concern than any other I have viewed, assessed and responded to, and largely because of the engagement. The following 4 points illustrate my concerns.

Unanswered Questions. Despite raising valid questions the sponsor has refused to provide answers and information just as he did the first time, then claiming 'not relevant to airspace'. I have read and re-read the CAP and can find nothing that limits stakeholders from responding on all matters relevant to the Proposal. If the sponsor is claiming that ONLY matters relevant to airspace may be subject of comment then please could they reference that part of CAP1616.

Furthermore, if only airspace matters are subject to comment then why have Lancaster City Council, the Queen's Guide to the Sands and Lancashire County Councils been consulted? Surely, they are neither users nor regulators of the airspace.

Relevant Information Not On ACP Portal. Details of the original proposal were contained on the Sponsor's website. This has now been updated but the original website details are no longer available for comparison. When asked about this the sponsor replied "All information, including snapshots of the website and the information contained within, are presented in the documents on the portal".

In seeking to compare this proposal with the original information may be available in other documents but Stakeholders should not have to search through multiple documents to find information that was formerly published separately. That surely does not meet the requirements of the CAP:

This sentence now makes sense.

All documentation is placed on the Airspace Change Portal for public viewing.

Page 24 para 73: ""For the purpose of transparency, the CAA runs an online portal. The portal holds all relevant information on airspace change proposals..",

All documentation is placed on the Airspace Change Portal for public viewing.

Page 47 para 156: "all consultation material is published on the online portal", and

Page 178 para C16: "Documents will be published on the airspace change online portal".

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Limited Engagement. In the absence of Meeting Minutes, which the sponsor has refused to publish – "We are under no obligation to provide such minutes. This was confirmed to us today by the CAA Airspace team" – I can only assume the reason for this 2nd period of engagement, and it has failed in what I assume is that aim.

The second period of stakeholder engagement was facilitated to enable the sponsor more time to align the regulatory authorities regarding the operation of the RPAS through R444 and to further consult with the local aviation community regarding the usage of a specific sector of the planned airspace change that had not previously been discussed.

As an active stakeholder for the 1st engagement I was not individually invited to comment the 2nd time and I'm aware I am not the only pilot to have been 'ignored'.

The author submitted over 9000 words of comment, but yet did not provide any meaningful engagement. No mention of where he flies from, or where he flies to, at what height etc. was supplied. Merely gripe and conjecture. It was confirmed to us by the BMAA that the author does not represent the BMAA as he previously claimed and as such was left off the stakeholders list for the second engagement period.

As the Airspace Change Sponsor, the control of who we send the stakeholder engagement letter out to, is at our discretion. We reached out and successfully engaged with multiple microlight pilots and schools operating out of the three strips at Rossall Field receiving encouraging feedback and helpful routing advice. We notice the author did not attend the presentation evening with Bay Flying Club on Wednesday the 23rd of February.

Late Publication of Documents on Portal. More importantly, to publish a series of documents on the Portal on 10 & 11 Feb, not much more than 2 weeks before the end of the engagement period, is unacceptable. These newly-published documents consist of a total of c300 pages and while they might well contain information that has already been re-published, Stakeholders cannot assume that is the case if they are to make informed comment.

The re-publication of the documents on the Airspace Change Portal was caused by a microlight pilot from Scotland, Norman Sutherland, managing to reverse engineer and un-redact the documents on the Airspace Change Portal and then publish these onto social media. We subsequently engineered an image processing redaction and uploaded these to the portal as requested by the CAA Airspace team.

Previously the CAA has stated that they will remind sponsors that uploading of all material is a demonstration of their commitment to the open process.

We have worked with the CAA Airspace team throughout this Airspace Change Process.

To me this demonstrates that the engagement for this ACP lacks the openness and transparency that is integral to the CAP process.

The author is entitled to his opinion.

Operational Aspects

Whatever the slight changes to the operational aspects of this Proposal that are associated with this 2nd engagement the substance of my concerns about this Proposal remain largely unchanged.

I have not read any justification for routing through R444 rather than just going around it, and I can find no information to convince me that the RPAS to be used will meet the same regulatory and safety regime as manned aircraft.

Had the author attended the Bay Flying Club evening on the 23rd of February he would have had a full briefing regarding the utilisation of the restricted airspace of R444. The rationale for utilisation is to allow the RPAS the ability to climb to 1500' and overfly residential properties at an appropriate height to reduce noise and environmental issues.

Summary

None of my concerns about this ACP have been allayed and I believe the proposal will offer no material benefit to the problem of NHS logistics.

The author is entitled to his opinion.

Because of the way the engagement has been conducted and because of my concerns about the operational aspects I object strongly to this ACP.

The authors concerns will be passed on to the CAA.

The following text we can only assume is disjointed from the previously identified and assumed cut and paste error. It is repetitive and as such will not be answered.

s but Stakeholders should not have to search through multiple documents to find information that was formerly published separately. That surely does not meet the requirements of the CAP:

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4.7.1 Summary with regards H Cook - stakeholder engagement.

once again has provided no active input into the stakeholder engagement process. He has provided no evidence of flight operations within the planned area, nor presented any evidence with regards how the implementation of the ACP might affect flight operations within the local area. He has yet again provided significant gripe regarding the ACP process to which we are obliged to respond.

We have tried to answer his every comment in as polite manner as possible, but it has been at significant operational cost to Electric Aviation and his involvement has bought zero value to the stakeholder engagement. His public comments have led others in the microlight community, such as from Swansea, to respond to this ACP vociferously with no useful or productive comment, just mere gripe.

Engaging with the microlight pilots who fly out of the strips where is active, yields a frank discussion with no airspace issues, highlighting that it is discussed dislike for change that drives his conjecture and rambling diatribes. That the BMAA gives the opportunity, in the BMAA magazine, to pen such lines as:

"We are concerned, though, at the duplication and inefficiency that is inevitably caused by the multiple NHS logistics trials taking place and being planned. The effect on the BMAA, its members, other stakeholders and the CAA is that every proposal for segregated airspace takes time and effort for us to respond, and every trial takes more of our valuable Class G airspace"

and:

"With the failures of the CAA system, the BMAA airspace team continues to try and monitor the ACP portal to spot either new or updated applications."

Shows a significant lack of respect for the CAA, the ACP process by the BMAA and Mr Cook – who seems to this month be back on the BMAA airspace team!

Such literature only goes to fire up the naysayers and those that fear technological change within the microlight fraternity as has been seen in this ACP.

It is a shame that not attend the Bay Flying Club evening at Lancaster House Hotel as he would have found that his fellow microlight pilots could find no issues with this ACP.

4.8 Natural England

Between stakeholder engagement phases we heard from Natural England via Freedom of Information Request (EIR2021/00037) which informed us that:

1. What height above mean sea level does a Site of Scientific Special Interest extend to?

Natural England's powers and duties in relation to the notification of SSSI extend only to the notification of land, including land covered by water. While it may be the case that owners of land may have certain rights in the airspace above that land, Natural England does not consider the area of land that it notifies as SSSI to include the airspace above it.

2. What height above mean sea level does a Special Protection Area extend to?

Similarly with Special Protection Areas, while the provisions relating to classification are not quite so specifically confined to land it is Natural England's practice when recommending sites to the Secretary of State for classification, to identify them by reference to an area of land or water rather than the airspace above them.

As no airspace is relevant to Natural England and as only the flora and forna of the landing site is controlled under Natural England's powers, we have concluded that no formal consultation is required with Natural England as two of the three hospital landing sites are established Helipads cast from inert material and the third is a repurposed tarmacked car park.

We filed a complaint with Natural England that their staff had over stretched their powers in writing to ourselves, the CAA and the NHS with regards this ACP. Natural England did not up hold the complaint and as such it has been passed to the Local Government and Social Care Ombudsman.

That Natural England advised via FOI that SSSI/SPA etc have no airspace attachment, one wonders how Natural England's staff can pen such lines as:

"Can I draw your attention please to the statutory requirements to seek advice from Natural England for activities that may impact on features (such as migratory birds) of those protected sites."

We have written to Natural England to inform them that our take-off and landing sites are all inert material based, existing Helipads or car parks.

4.9 EDF Energy

We have been working since the first stakeholder engagement process with EDF with regards temporary access for the RPAS to fly within R444. We have had discussions regarding how to seek permissions from the Office of Nuclear Regulation and have now identified a route forward.

We continue to work with EDF and the ONR to enable access for the RPAS operations through R444. We evidence this below. We are confident that we will have the relevant permissions in place to enable flight through R444.



[Classification: NOT PROTECTIVELY MARKED]

As Site Head of Security for Heysham Power Stations, the operators of Restricted Zone R444, I write to inform you that we are actively working through the procedures necessary to facilitate the operation of your drone through the restricted area in co-ordination with ourselves and to the satisfaction of the Office of Nuclear Regulation.

Andrew Pyle the Technical and Safety Manager is aware of the request. As you would expect we must follow all Nuclear Safety and Nuclear Security processes to get the formal approval. For the trial I expect that to be a temporary security plan to alter the claims made on the Nuclear Site Security Plan.

We will keep you informed regarding the progress of your request. Regards



Heysham 2 Power Station, Heysham, Lancashire, LA3 2XH



5.0 Summary of second period of stakeholder engagement

We have now concluded a second period of stakeholder engagement. This extra time has been spent locating the microlight pilots, local to the area and through direct engagement we have had positive interaction. We have received good support from them and through their local contacts have been able to speak with other airspace users such as the Paramotor pilots with whom previous attempts at contact had failed.

We have also moved forward the provision of the DACS service with BAE at Warton as well as the permissions for accessing R444 through EDF Energy at Heysham.

We believe that the TDA dimensions that we have proposed represent a good balance with regards restricted airspace for the RPAS to operate within, with access available for any aircraft wishing to transit through the TDA through the DACS service to be provided by BAE at Warton.

In summary form we are effectively asking pilots who are radio equipped that in the unlikely event that they are flying below 400' across Morecambe Bay or the surrounding areas, that they climb above 400'. Those that are radio equipped we ask that they seek a crossing clearance from BAE Warton.

In reality, and from the second stakeholder engagement consultation with the local microlight pilot fraternity at Rossall Field, we believe that the DACS service will be used infrequently and that in reality the usage of the DACS service will be instigated by the RAF, who through the MOD's response are happy for the TDA to exist with the associated DACS.

Ignoring the rantings the BMAA have, at literally the eleventh hour, given us feedback to this ACP. Whilst we are aware that beach landings do take place, we know from the landowner that permissions have not been given. It is not our place to judge the legality of such beach landings. We have received a suggestion that a route be moved by the BMAA, but this suggestion would compromise the paragliding fraternity who utilise Whitbarrow scar. It has also been suggested that the route to Lancaster Royal Infirmary be re-routed to approach from the east, but this contradicts the advice from local microlight instructor. It would also clash with military rotary operations into Halton barracks.

We have established support for the TDA from the local HEMS services as well as NPAS, all local airfields and operators who are keen to lend their support to NHS RPAS operations within the Morecambe Bay NHS Foundation Trust footprint.

We have provided detailed correspondence throughout both the stakeholder engagement periods. We have now, we believe, established the requisite level of communications and support from the majority of airspace users local and those that utilise the airspace around the proposed TDA geography.

ELECTRIC AVIATION

14/03/22