

# Compton Easterly PBN Departures ACP

## (Airspace Change Proposal)

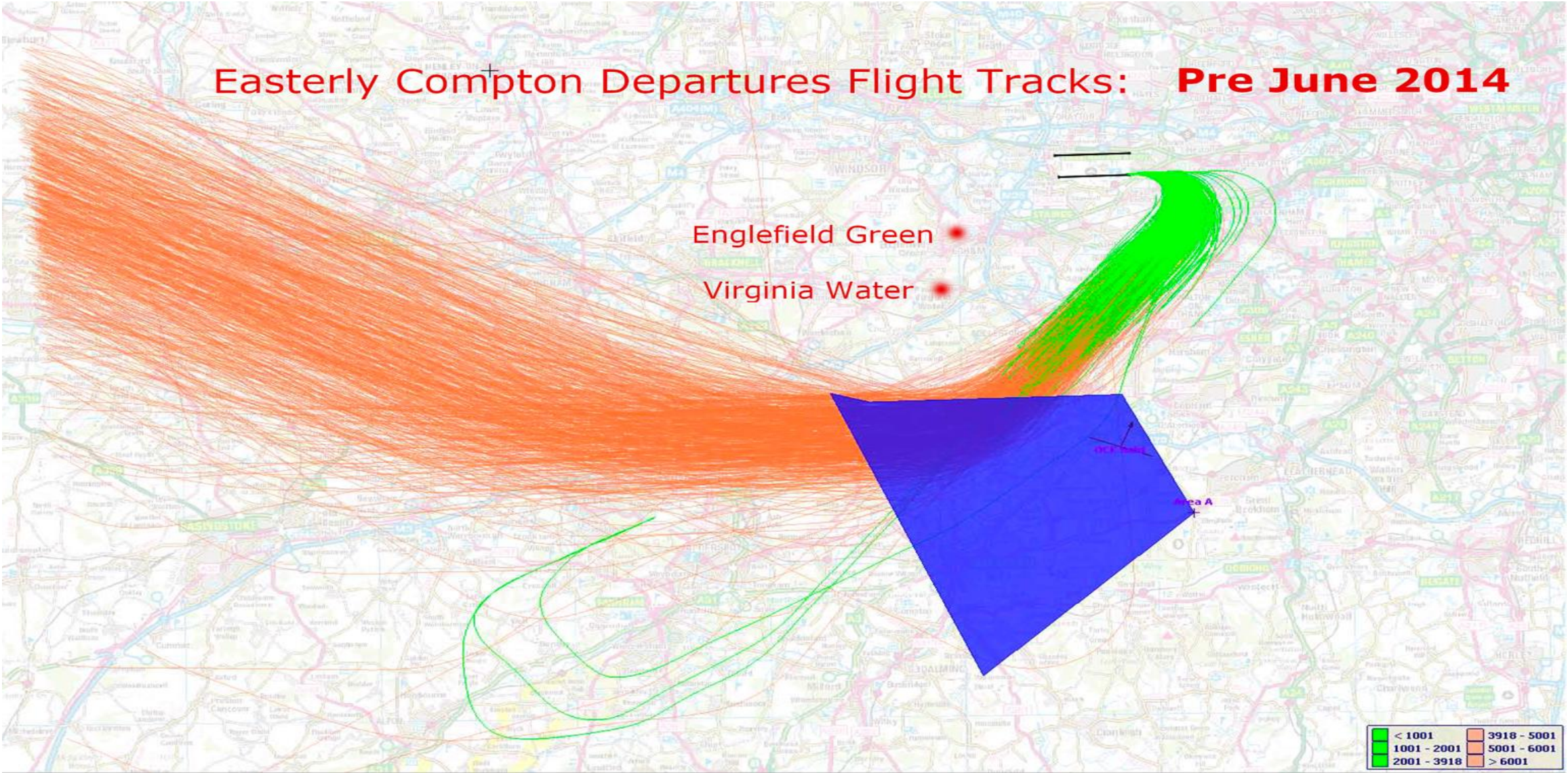
Rob Buick - HCNF Community Noise Group  
20th November 2019 - HCNF

# Compton timeline

1. Prior to June 2014
2. Post June 2014
3. The future - in place ~ 2022 - PBN ACP proposal
  1. I.e. same time as 25,000 additional PBN IPA flights

# Compton prior to June 2014

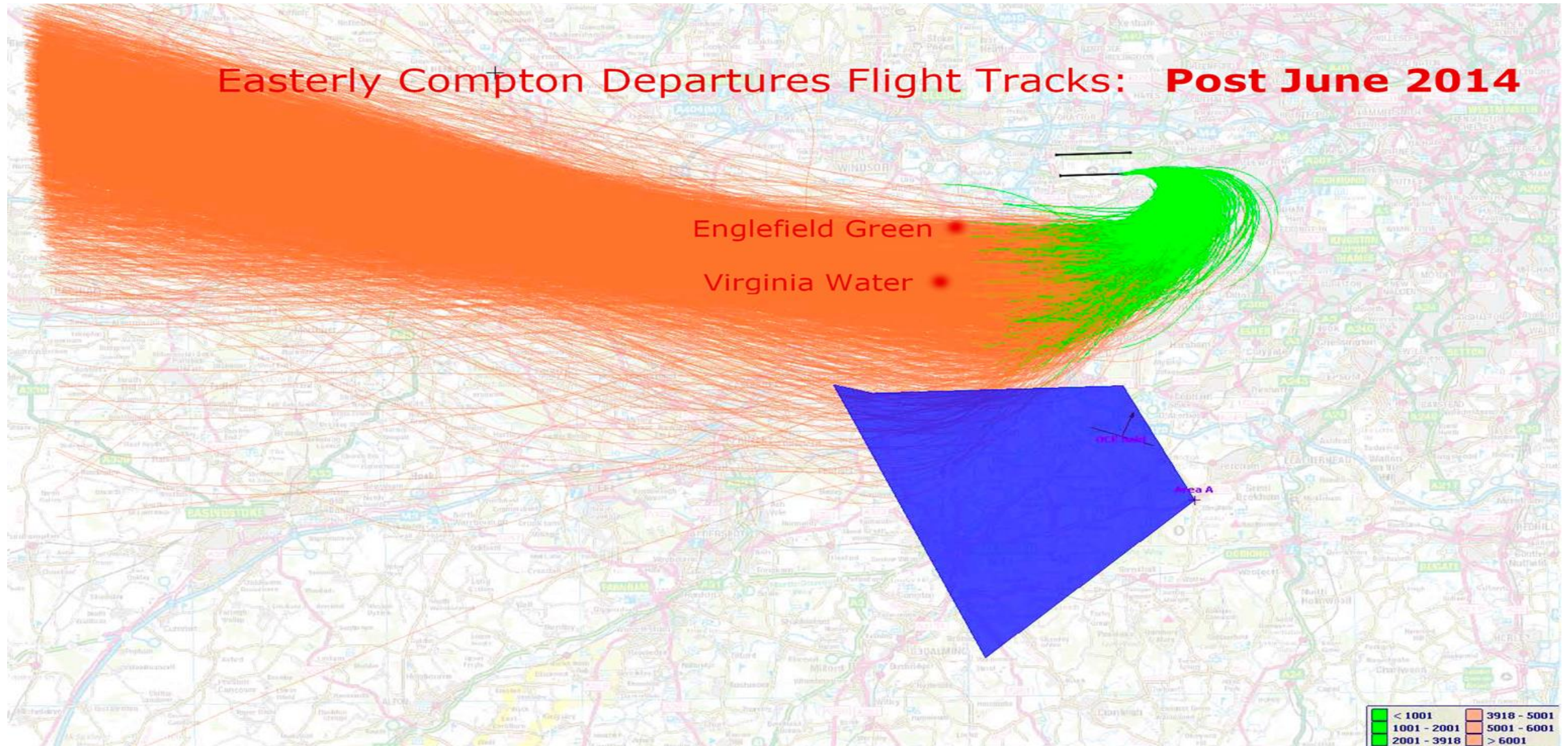
# Prior to June 2014



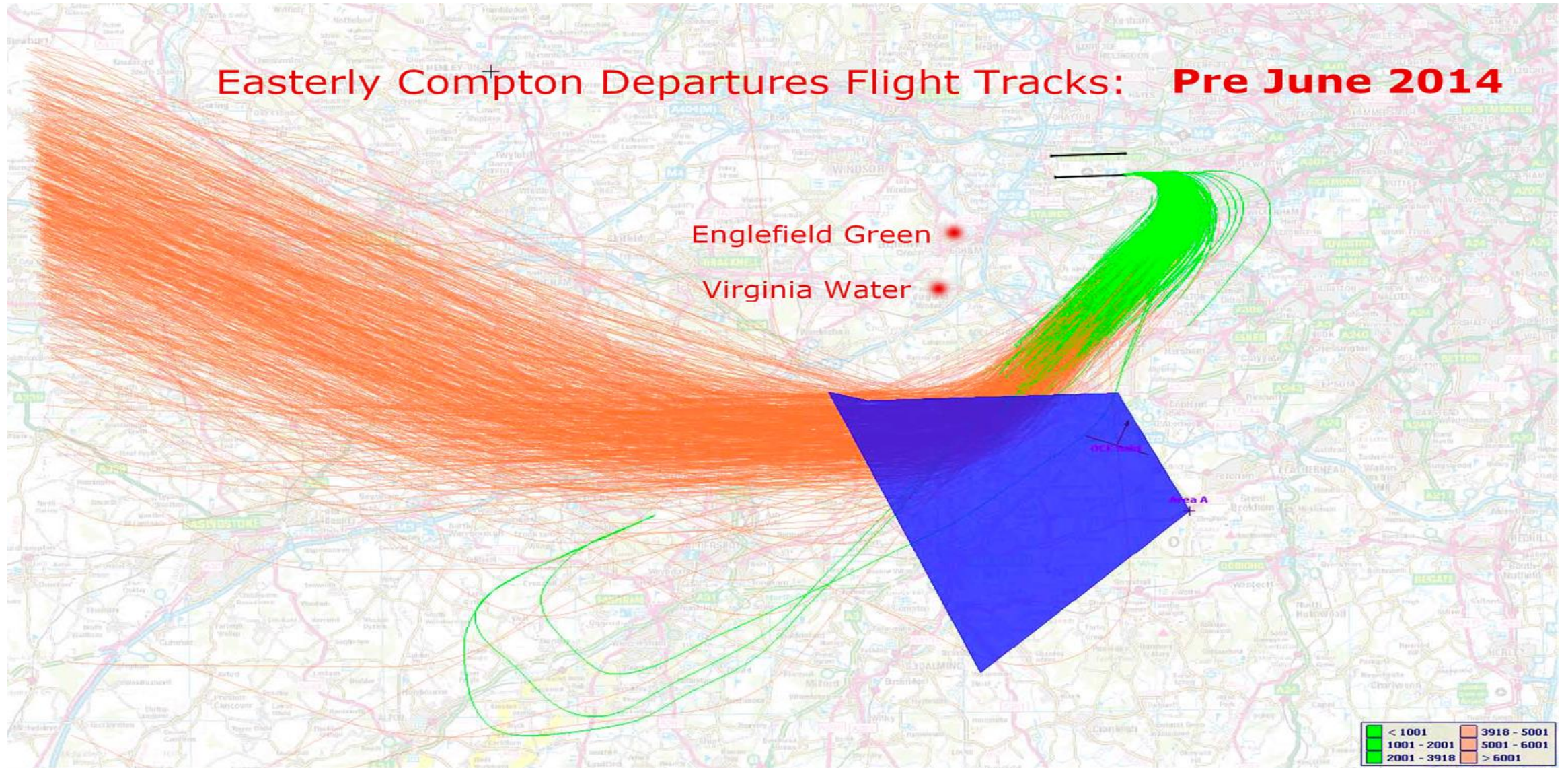
# June 2014 - without Public Consultation Compton route moved

In June 2014, NATS without public consultation moved the Compton route, reducing the swathe from 13 to 7 miles, pushing flights over Englefield Green and Virginia Water.

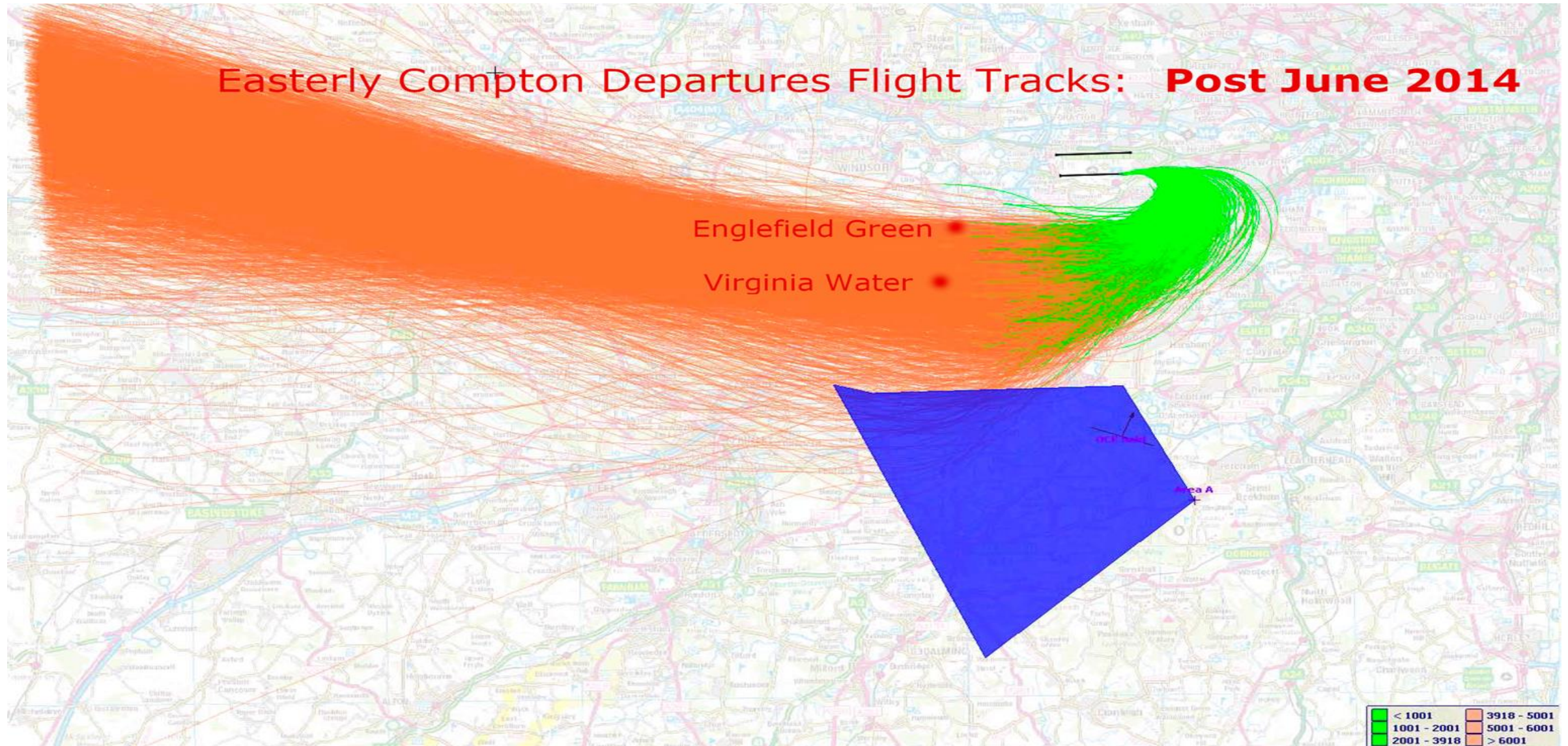
# After June 2014 - unilaterally moved by NATS



# Prior to June 2014



# After June 2014 - unilaterally moved by NATS





# Compton today - post June 2014

## Easterly Compton Departures

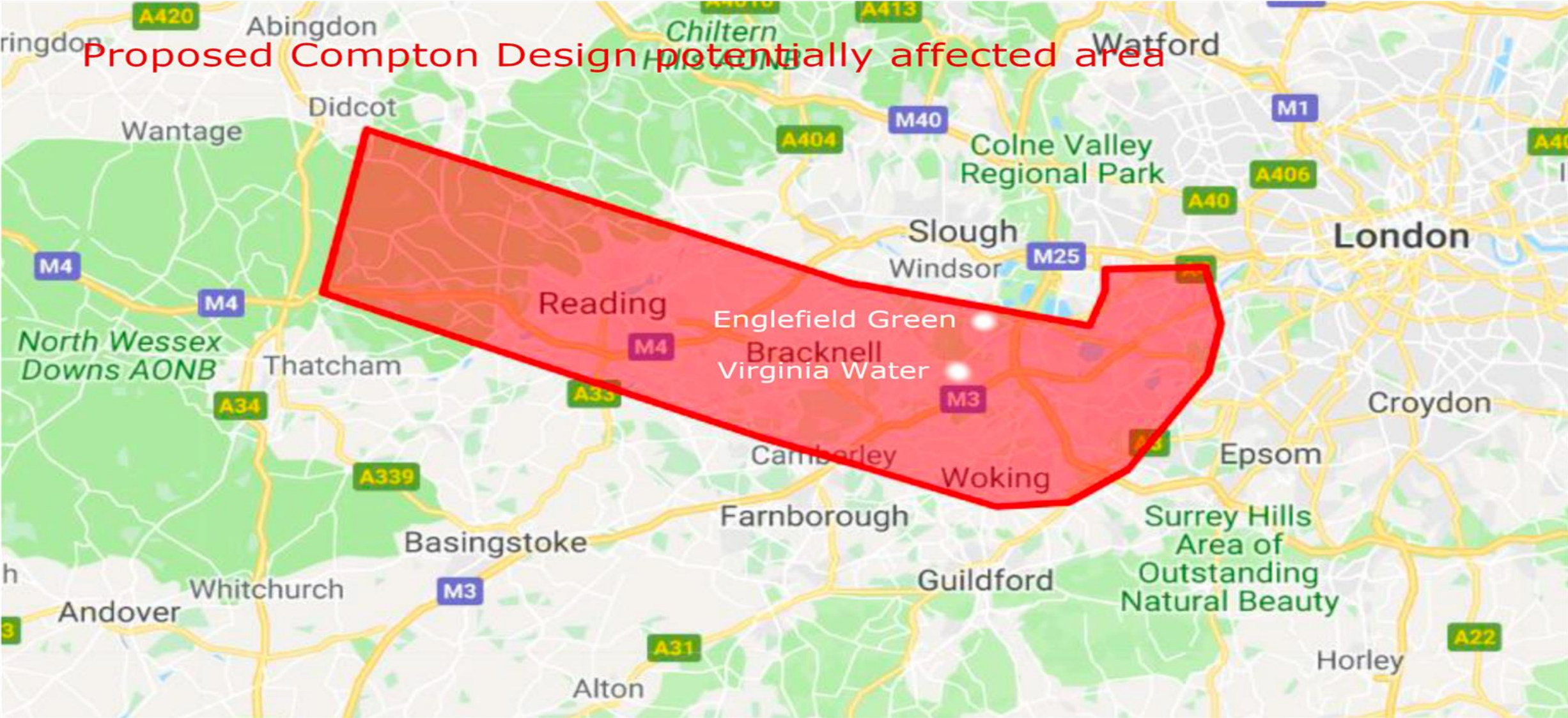
We are told ~ 90 per day on easterly operations, mainly to USA and Ireland

~ 10km or more swathe, extending from the middle of Englefield Green, through Virginia Water, past Addlestone and extending to Woking.

# Compton PBN ACP

- The first ever non-trial PBN (Precision Based Navigation) route out of Heathrow
  - The 2014 PBN trial flights created public uproar wherever they were experienced and due to the enormous political fallout, cancelled.
- Analysis shows that it is of great benefit to the aviation industry
- Given that PBN routes can operate to an exact flight path just 10's of meters wide, this would mean a 1000:1 concentration of aircraft, for a single PBN route, over today's ~10km swathe.

# Compton ACP Proposal - potentially affected area



# *ISSUES, OPPORTUNITIES AND CONSIDERATIONS ARISING FROM PROPOSED CHANGE<sup>1,2</sup>*

## **References**

- 1 Heathrow ACP submission power point <https://airspacechange.caa.co.uk/umbraco/Surface/PublicSurface/DownloadDocument/575>
- 2 CAA Compton SID ACP Website <https://airspacechange.caa.co.uk/PublicProposalArea?pID=110>

# Issues

- *Will mean changes to aircraft noise for some communities*
- *Possible consultation fatigue and confusion: similar communities for CPT, Expansion and IPA*

# Opportunities

- *Will significantly reduce the need for controllers to manually direct aircraft*
- *Will ensure aircraft fly this route in a more consistent, predictable way*
- *Will allow aircraft to stay within the NPR*
- *Potential opportunity to explore PBN respite options for SIDs (depending on design principles and technical possibilities)*

# Considerations

- *Will likely require a new NPR*
- *Limited life-span ~ 4 years. Expansion airspace design will replace this CPT SID in 2026*

# Serious PBN problems in the USA

Key issue for community - concentration of noise impacts increasing annoyance.

An August 2019 report<sup>3</sup> in the USA has shown the benefits to airspace users from PBN have fallen well short of the minimum expected by 50%

Since 2014, further delays have occurred as FAA has implemented new PBN procedures at more sites, largely due to increased community concerns about aircraft noise.

For example in 2018 the FAA cancelled the Phoenix PBN project due to litigation related to a previous PBN project.



# Heathrow's comment on PBN in response to EU

comment

103

comment by: *Heathrow Airport Limited*

Whilst Heathrow Airport Limited fully supports airspace modernisation, this document does not support current UK CAA guidance and is not in line with current UK airspace projects such as LAMP. The time scale suggested here is unrealistic and could jeopardise these projects. In addition, as subsequent comments highlight, we have the following concerns:

- The Social Impact of PBN trials in the UK has been enormous, therefore this should be considered and not dismissed in one sentence.
- There does not appear to be an environmental assessment of this proposed change in terms of noise.
- The Benefit section takes no account of the cost of airspace consultation which results in an incomplete assessment.
- Mixed conventional and PBN operations are not supported by the UK CAA.

Consequently, this NPA is not supported by Heathrow Airport Limited.

response

*Noted.*

# Community Perspective

In the Compton ACP *'Opportunities' section*, there are considerable benefits for the industry, but the *'Issues' section*, *'Will mean changes to aircraft noise for some communities'*, characteristically underplays the price communities will pay of being under, potentially, a single PBN concentrated flight path, with all aircraft travelling along the exact same flight path just 10's of meters wide, creating a 'Noise Sewer' for people blighted under this proposal.

With a single PBN flight path, this will be infinitely worse than existing distributed flight tracks, which in this case currently span some 10km or more in width, i.e. the aircraft will be 1000 times more concentrated than they currently are!!

The communities expressed the preference to keep the existing distributed flight paths, rather than be exposed to a debacle similar to the 2014 trial flights. It has been suggested that a trial be conducted to determine community acceptance.

Note: The Opportunities section says 'Will' for all industry benefits, but only 'Potential' when referring to communities, with many caveats as to its feasibility.

We would like to see in the Opportunities section - To avoid communities suffering multiple route impacts (i.e. departures in both wind directions), reduce the impact of multiple route impacts by having planes flying quieter, provide systematic respite and in all cases fly planes quieter using modern plane technology and SID instructions.

If noise cannot be reduced and air quality cannot meet legal limits, then the ACP must be refused by the CAA.

# Compton ACP Engagement - Design Priorities

The majority of community attendees requested that design principle 7 (in relation to noise) be moved higher up the list and sit above design principle 4 “Must meet local air quality requirements”. Most attendees felt that air quality did need to be in the list, however lower down.

This is all the more relevant as Heathrow state that air quality issues are caused by road traffic, not aviation and this ACP does not impact the numbers of aircraft flying - so does this principle need to be on the design principles priorities list at all?

## Community Prioritised Design Principles for CPT 09L and 09R SIDs

1	Must be safe
2	Must not change the rest of the existing airspace network
3	Must meet the three aims of the Noise Policy Statement for England <sup>6*</sup> (NPSE <sup>7</sup> ); <ol style="list-style-type: none"><li>Avoid significant adverse impacts on health and quality of life</li><li>Mitigate and minimise adverse impacts on health and quality of life</li><li>Where possible, contribute to the improvements of health and quality of life</li></ol>
	<p>*It is implicit that any airspace change proposal must meet the requirements of Air Navigation Guidance 2017<sup>8</sup> and the CAA's Airspace Modernisation Strategy<sup>9</sup></p>
<del>7</del> 4	Mitigate the effects of aircraft noise, enabled through; <ol style="list-style-type: none"><li>Continuous climb for aircraft to be as high as possible, as soon as possible, balancing any benefits between community and the airline industry, subject to compliance with Design Principle 4</li><li>Use of multiple routes, which diverge as soon as possible and converge as late as possible, to provide respite from aircraft noise, whilst sharing flights equitably and predictably across those routes</li><li>Minimising tactical intervention by ATC below 7000ft<sup>10</sup></li><li>Avoiding overflight of communities not currently overflowed by easterly CPT departures</li><li>Positioning flights over non-residential areas, whilst avoiding AONBs and National Parks, where practicable</li><li>Minimising the impact on communities overflowed by other routes to/from Heathrow</li></ol>
<del>4</del> 5	Must meet local air quality requirements
<del>5</del> 6	Must not degrade Heathrow's runway throughput performance
<del>6</del> 7	Must enable the departures to stay within a Noise Preferential Route or Routes
8	Should not require any new Controlled Airspace (CAS)
9	Should not affect the ability for arrivals to Runways 09L and 09R to perform a Continuous Descent Approach

# Final Design Priorities CAA submission - a minority report

Compton community engagement concluded as per the previous slide. To community's dismay the total thrust of the Final Design Principles were unilaterally changed from the consensus reached.

Communities have written back to Heathrow and regard this, as another example of how trust in HAL is not as strong as it should be and believe it does not aid constructive engagement. We had our say and intelligent debate but because Heathrow doesn't like it, it has been changed to fit its view.

On behalf of - Heathrow Association for the Control of Aircraft Noise. (HACAN)

Englefield Green Action Group. (EGAG)

Teddington Action Group. (TAG)

Windlesham Society.

Elmbridge Residents.

## Final Prioritised Design Principles for CPT 09L and 09R SIDs

1	Must be safe
2	Must not change the rest of the existing airspace network
3	Must meet the three aims of the Noise Policy Statement for England <sup>6*</sup> (NPSE <sup>7</sup> ); <ol style="list-style-type: none"><li>Avoid significant adverse impacts on health and quality of life</li><li>Mitigate and minimise adverse impacts on health and quality of life</li><li>Where possible, contribute to the improvements of health and quality of life</li></ol> <p><small>*It is implicit that any airspace change proposal must meet the requirements of Air Navigation Guidance 2017<sup>8</sup> and the CAA's Airspace Modernisation Strategy<sup>9</sup></small></p>
4	Must meet local air quality requirements
5	Must not degrade Heathrow's runway throughput performance
6	Must enable the departures to stay within a Noise Preferential Route or Routes
7	Mitigate the effects of aircraft noise, enabled through; <ol style="list-style-type: none"><li>Continuous climb for aircraft to be as high as possible, as soon as possible, balancing any benefits between community and the airline industry, subject to compliance with Design Principle 4</li><li>Use of multiple routes, which diverge as soon as possible and converge as late as possible, to provide respite from aircraft noise, whilst sharing flights equitably and predictably across those routes</li><li>Minimising tactical intervention by ATC below 7000ft<sup>10</sup></li><li>Avoiding overflight of communities not currently overflowed by easterly CPT departures</li><li>Positioning flights over non-residential areas, whilst avoiding AONBs and National Parks, where practicable</li><li>Minimising the impact on communities overflowed by other routes to/from Heathrow</li></ol>
8	Should not require any new Controlled Airspace (CAS)
9	Should not affect the ability for arrivals to Runways 09L and 09R to perform a Continuous Descent Approach

# References

1. Heathrow ACP submission power point  
<https://airspacechange.caa.co.uk/umbraco/Surface/PublicSurface/DownloadDocument/575>
2. CAA Compton SID ACP Website <https://airspacechange.caa.co.uk/PublicProposalArea?pID=110>
3. <https://storage.googleapis.com/proudcity/scscroundtable/uploads/2019/09/FAA-Metroplex-Program-Final-Report%5E08-27-19.pdf>