

Noise and Airspace Community Forum (NACF)

Summary Minutes (24 July 2024, 13:00-16:00, London Heathrow Marriott)

These summary minutes are not intended to be a verbatim record of the meeting but a summary of the of the topics and views of Forum members and a note of any actions agreed. They should be read in conjunction with a copy of the presentations given at the meeting.

Confirmed attendees

Name	Borough / Organisation
Andreas Lambrianou	Chair
Robin Monaghan	Anderson Acoustics
Cllr Guy Gillbe *	Bracknell Forest Council
Spencer Norton	British Airways
Cllr Dr Wendy Matthews	Buckinghamshire Council
Ben Lippitt *	CAA
Darren Rhodes	CAA
Mark Izatt	CISHA
Laura Keith	CISHA
Ian Greene	DfT
Gary Marshall *	DfT
Margaret Majumdar	Ealing Aircraft Noise Action Group
Robert Buick	Englefield Green Action Group
Paul Conway	Englefield Green Action Group
Paul Beckford *	HACAN
Christine Taylor	Harmondsworth and Sipson Residents Association
Armelle Thomas	Harmondsworth and Sipson Residents Association
Lisa Forshew	Heathrow
Samantha Fountain *	Heathrow
Mike Glen *	Heathrow
Natalie Wallis	Heathrow
Rick Norman *	Heathrow
Jennifer Sykes	Heathrow
James Mackenzie *	Heathrow
Pierre Sohier	Heathrow
Richard West	Heathrow
Michael Thornton *	Heathrow Strategic Planning Group
Dr John Lees *	Iver Village Residents Association
Cllr John Martin	London Borough of Ealing
Surinderpal Suri *	London Borough of Ealing
Christian Hughes *	Longford Residents Association
Deborah Petty	Molesey Residents Association
Robin Clarke *	NATS
Bridget Bell	Plane Hell Action
Graham Young	Richings Park Residents Association
Peter Willan	Richmond Heathrow Campaign
Cllr Andrea Berardi	Runnymede Borough Council
Cllr Sean Beatty *	Spelthorne Borough Council
Dave Gilbert	Teddington Action Group
Stephen Clark	Teddington Action Group
John Henderson	Trax International

Apologies

David Hilton	Ascot Parish Council
Cllr Mark Howard	Windsor & Maidenhead
Cllr James McAsh	Southwark Council
John Burton	CAA
David Matthews	NATS
Ian Jopson	NATS

1 Welcome and Introduction

- 1.1 Andreas Lambrianou (AL) welcomed members to the forum and noted apologies for absence. He advised that the previous summary minutes had now been finalised.
- 1.2 AL provided updates on the actions from the previous meeting as detailed below.
- 1.3 **Provide data on flights in the shoulder period (2.2).** Mike Glen (MG) will cover this later in the meeting.
- 1.4 **Respond to xPlane analysis for Deborah Petty (DP) (2.3).** A response has been sent.
- 1.5 **Provide clarity on scheduled times and runway times (2.5).** MG will cover this later in the meeting.
- 1.6 **Circulate ANAS samples sizes (5.1).** These were provided by John Burton (JB) and circulated to members.
- 1.7 Armelle Thomas (AT) asked for details of the Easterly Alternation Consortium mentioned at the previous meeting. Mark Izatt (MI) explained that he chaired the consortium, and it was made up of Local Authorities that had an interest in the impact of the introduction of Easterly Alternation at Heathrow. He advised that the minutes would be published on the CISHA website. AT also asked if approval of Heathrow's Noise Action Plan had been delayed due to the general election. AL confirmed this was the case.

2 Data Dashboard

- 2.1 MG presented Heathrow's data dashboard for June 2024. The dashboard can be downloaded from the [Heathrow website](#).
- 2.2 MG explained that the Scheduled Time was the time an aircraft was due to leave or arrive at the stand and that airport punctuality at all airports around the world was based on this time. He added that Runway Time was the time an aircraft lifts off or touches down on the runway. The Night Quota Period (23:30-06:00) was based on Runway Time and all figures and statistics on the data dashboard were based on Runway Time.
- 2.3 MG discussed the number of flights in the shoulder period (23:00-23:30) in 2024 and previous years. He explained that aircraft were allowed to land or take off during this period, but Heathrow did not schedule aircraft in this period. He noted that the trends showed a spike in the summer months across all years due to delays associated with weather and air traffic control impacts across Europe, but some improvements were being seen.
- 2.4 Peter Willan (PW) noted that he had previously suggested moving flights out of the

shoulder period to earlier in the day. AL replied that the DfT had held a consultation on the night flight regime and trusted PW had submitted his comments.

- 2.5 Paul Beckford (PB) was concerned about claims from some community members of experiencing 20 hours of overflight with no respite. MG explained there had been some periods where alternation had not been possible during westerly operations and asked PB to provide specific examples. **ACTION PB**
- 2.6 AT wanted to see a reduction in flights in the shoulder period and asked for numbers to be included on the data dashboard. AL said it would be considered. **ACTION MG**
- 2.7 AT noted there had been more passengers in June than in May despite 2,000 fewer flights, so it was possible for airlines to increase the number of people on flights.
- 2.8 Margaret Majumdar (MM) asked for presentations to be circulated well in advance where possible to allow members time to prepare.

3 Deep Dive: Performance Based Navigation (PBN)

- 3.1 AL introduced the deep dive topic, noting there would be contributions from Heathrow, Teddington Action Group, Anderson Acoustics and Trax International. The presentations were circulated to members before the meeting.
- 3.2 Natalie Wallis (NW) explained that the objective of the session was to reach a common understanding of PBN, explore its benefits and why it is being introduced worldwide, discuss community concerns, share lessons learnt and explore ways to reduce concerns via stakeholder engagement, incorporating respite and relief into the airspace design, applying lessons learnt and best practice and carrying out further research.
- 3.3 John Henderson (JH) advised that PBN was an advanced, satellite-enabled form of air navigation and discussed why it was being introduced. Michael Thornton (MT) asked about contingency plans in the event of losing a satellite. JH advised that aircraft already used satellite based navigation and it had to be demonstrated that there was sufficient resilience in the system at all times. Cllr Andrea Berardi (AR) asked if the geomagnetic storm in May had any impact on the Global Navigation Satellite System (GNSS). Spencer Norton (SN) advised there had been no impact.
- 3.4 Surinderpal Suri (SS) asked what proportion of current aircraft were compliant with PBN requirements. JH advised that at Heathrow the figure was 100% for Area Navigation (RNAV) and high 90% for Required Navigation Performance (RNP) specifications.
- 3.5 DP asked about the backup strategy for RNP if ground based beacons were being decommissioned. JH explained that there would be RNAV as well with a minimum operational network of beacons retained for resilience.
- 3.6 Peter Willan (PW) stated that Heathrow was one of the most resilient airports in the world and questioned the need to improve resilience by increasing the accuracy of flight paths. Jennifer Sykes (JS) explained that it was not the PBN aspect that provided resilience, it was the capacity of the airspace around it and the way that airspace was designed. PW asked how concentration would affect a “do nothing” option for Airspace Modernisation. JH explained that Heathrow’s Stage 2 submission included an option for all flights on today’s routes up to 7,000ft which showed the effects of concentration in the data.
- 3.7 NW discussed considerations for introducing PBN as part of airspace modernisation at Heathrow. She noted community concerns about PBN and assured members that

Heathrow would explore options for mitigating and minimising any impacts of the airspace change.

- 3.8 Cllr Guy Gillbe (GG) asked if the new government was likely to continue with PBN. JH advised that it was a global navigation plan so a change in policy was not expected.
- 3.9 Stephen Clark (SC) discussed community concerns regarding PBN. His presentation addressed a range of matters including airspace governance, problems regarding the evidence base and methodologies on which Airspace Modernisation decisions are proposed to be taken under CAP1616, Heathrow's 2014 PBN trials, the roll out of NextGen/PBN in the US and elsewhere, and the potential health and social impacts of Airspace Modernisation in the UK. He proposed a number of potential solutions including 'Do Minimum' scenarios, fair and equitable distribution, avoidance of increased noise exposure or loss of respite, an independent study on PBN, a review of noise metrics, validation of noise modelling, exploring the potential to fly higher, establishing a noise engagement oversight board and undertaking a case study review of the Manchester decision to 'Do Minimum'.
- 3.10 PW asked if a less accurate type of PBN could be used to provide random distribution. JH explained that while RNAV 1 meant an accuracy of +/- 1 nautical mile (NM), that did not mean that aircraft would be spread over that range. The accuracy would be around 0.1 NM on a straight line and 0.3-0.4 NM on a turn. He added that the different specifications were to ensure aircraft were within a certain range, so for example more accuracy was required for aircraft on the final approach into the airport.
- 3.11 Paul Beckford (PB) asked if PBN was already in operation on any Heathrow routes. JH explained that none of today's departure routes were designed or published to a PBN standard, but aircraft generally flew them to a PBN standard using their own coding to replicate the centreline the best they could. He added that there were some PBN approach procedures with a slightly steeper angle of 3.2° but they were only flown by a small number of aircraft. Rick Norman (RN) added that the two concentrated green lines on Route 3 in SC's presentation were the result of two different coding houses and showed concentration that people have experienced for a long time. The combining of Routes 4 and 5 showed the accuracy of PBN.
- 3.12 MT highlighted that complaints would come from people who experience a change for the worse and asked how those who have a change for the better would be valued. He added that the introduction of Easterly Alternation would result in many people being newly overflown. JS advised that the proposals would involve full consultation with those affected.
- 3.13 RN discussed the lessons learned from the PBN trial carried out by Heathrow and NATS in 2014. He noted that the trial had been the result of engagement with HACAN and was intended to test whether predictable respite could be achieved with PBN. He explained there had been no reaction to the first trial, but the second trial had generated a lot of reaction which was possibly the result of a social media campaign. He added that no positive feedback had been received from communities overflown less than before. He noted that some communities had interpreted their experience of PBN during the trial period as indicative of how they might be affected by Airspace Modernisation, and Heathrow had committed to engage more prior to any future airspace changes.
- 3.14 Dave Gilbert (DG) asked how the change effect would be addressed. RN advised that a range of supplementary metrics would be used. DP stressed that the volume and frequency of flights down any one PBN route were critical.
- 3.15 PW asked if Heathrow would consider introducing a local noise objective. RN advised

that Heathrow had supported the idea of a SMART noise objective in its response to the government's consultation on night-time noise abatement objectives, had set one for Heathrow and was encouraging the government to consider what might be applicable.

- 3.16 Lisa Forshew (LF) and JH presented four operational concepts to provide dispersion within a PBN environment, respite via runway alternation, respite via route alternation and a reduction in the impact of night flights. JH noted that Heathrow would be exploring all four concepts in Stage 3 of the airspace change process for Airspace Modernisation.
- 3.17 PB asked if fleet change would be considered. JH confirmed that it would. PB was concerned that some aircraft would not have the capacity to store multiple routes in their Flight Management Systems (FMS). JH noted that the second operational concept included looking to address this issue but acknowledged that if every airport in the world issued different procedures it would cause a problem.
- 3.18 Robin Monaghan (RN) presented research conducted by Anderson Acoustics and Manchester Metropolitan University exploring the concept of Fair and Equitable Distribution (FED) to minimise social unacceptability of airspace design options. He noted that change in spatial distribution of aircraft noise lay at the heart of perceptions of fairness. The challenge for the researchers was therefore to devise a means by which the use of N65 and PEI data could complement the existing CAP1616 airspace change process. He advised that the final report would be published, and the approach would hopefully be tested across a number of airports in their Airspace Modernisation programmes.
- 3.19 BB asked if Heathrow's approach would be that the voice of residents should count rather than be only consultative. JS explained that a key part of any airspace change, including Airspace Modernisation and Easterly Alternation, is that meaningful public consultation must be undertaken.
- 3.20 AR asked if vulnerable and marginalised groups had been considered. RM confirmed this was included in the report.
- 3.21 Darren Rhodes (DR) added that the interim FED report for Gatwick had already been published as CAP2971. The report can be downloaded from the [CAA website](#).
- 3.22 AL thanked the presenters and noted the session had been a very good example of forum members working together to discuss a topic.

4 Community Slot

- 4.1 DG raised a number of issues following on from the previous deep dive on departure profiles in May 2024.
- 4.2 DG suggested there was a need for Noise Abatement Departure Procedure (NADP) 1 with the introduction of PBN and more concentrated routes over densely populated communities such as around Heathrow. AL asked if such a conclusion could be drawn before it was known how PBN would be deployed. DR responded that such a conclusion could not be drawn, and it just created a spurious link between PBN and NADP 1.
- 4.3 DG questioned previous comments by Spencer Norton (SN) that the latest engines were designed for NADP 2. SN clarified that new aircraft were designed for shallower gradients. DG quoted figures from To70 suggesting that using NADP 1 to 4,000ft would only result in a 0.34% difference in fuel usage which was the equivalent of 10p per passenger. SN responded that DG and To70 did not have information on BA's costs.

- 4.4 Robert Buick (RB) asked if ICAO was wrong to suggest that NADP 1 should be used in areas of high conurbation close to the runway. DR advised that he had been involved in that work and noted there had been some minority reports of adverse effects to the side of the flight path. He added that care was needed when looking at local situations rather than general comments from ICAO.
- 4.5 DG asked if Heathrow would consider NADPs as part of their airspace change proposal for airspace modernisation. LF confirmed that NADPs would be considered at Stage 3, as part of Heathrow's design principle to "use noise efficient operational practices to limit and, where possible, reduce adverse impacts from aircraft noise". PW proposed that increased climb gradients should also be considered at Stage 3 to reduce noise levels.
- 4.6 Pierre Sohier (PS) noted that the departure profile study commissioned by Heathrow and undertaken by the CAA's Environmental Research and Consultancy Department (ERCD) was now considered complete. He added that the next step would be to progress it through the Technical Engagement Forum (TEF) and it could also be considered as a topic of common interest for research as part of Heathrow's Noise Action Plan.

5 AOB

- 5.1 James Mackenzie (JM) informed members that Heathrow would be undertaking landing gear deployment surveys over the next few weeks to collect new data on where airlines were deploying landing gear on their approach to Heathrow. He added that the results of the survey would be shared with the forum.

Date of Next Meeting

Wed 25 September 2024 (13:00-16:00) – Radisson RED Hotel, West Drayton, UB7 0DU.