

## Heathrow Community Noise Forum – 6 July 2016

### 1pm – 4pm Heathrow Academy – meeting notes

#### Attendees

<b>Name</b>	<b>Borough / Organisation</b>
John Coates	Richmond
Peter Willan	Richmond Heathrow Campaign
Stephen Clark	Teddington Action Group
Cllr Conrad Sturt	Surrey Heath
Kathleen Croft	Stanwell Moor RA
David Sleight	Wokingham
Paul Conway	Englefield Green
Chris Turrell	Bracknell Forest
Gerry Ceaser	LAANC
Hannah Cook	Spelthorne Borough Council
Cllr Tony Popham	Elmbridge Borough Council
Graham Young	Richings Park RA
Christine Taylor	Harmondsworth & Sipson RA
Margaret Majumdar	EANAG
Rob Buick	Englefield Green
Surinderpal Suri	Hounslow
Rosalie James	AN3V
John Stewart	HACAN
James Shapland	Met Office
Darren Rhodes	CAA
Isobel Pastor	DfT
Nicole Porter	Anderson Acoustics
Ian Jopson	NATS
Dean Plumb	BA
Matt Gorman	Heathrow
Cheryl Monk	Heathrow
Jane Dawes	Heathrow
Richard Norman	Heathrow
Laura Jones	Heathrow
Richard West	Heathrow
Zoltan Bazso	Heathrow
Sophie Collis	Heathrow
<b>Apologies</b>	
Stuart Lindsey	CAA
Dave Curtis	NATS
Cllr David Hilton	Windsor & Maidenhead
Cllr Wendy Matthews	South Bucks
Cllr Rebecca Jennings-Evans	Surrey Heath

## 1 Welcome and apologies for absence

- 1.1 Matt Gorman (MG) welcomed members and observers in the public gallery and noted apologies for absence (above).

## 2 Previous minutes and actions

- 2.1 **Responsibilities of organisations:** Darren Rhodes (DR) confirmed that a statement setting out the responsibilities of each organisation in relation to approving airspace procedures will be circulated this to the group. **ACTION DR**
- 2.2 **HNF meeting notes:** MG confirmed that meeting notes from the Heathrow Noise Forum (HNF) would be put on the noise website. **ACTION CM**
- 2.3 **Working group notes:** The Heathrow noise website now includes notes from the working groups and links to CAA, NATS, DfT and HACCC websites.
- 2.4 **Departure profile study:** An update will be provided during the meeting.

## 3 Action plan update

- 3.1 MG provided an update on the Forum's action plan which has been developed in response to key findings from flight analysis undertaken by PA Consulting.
- 3.2 He cited examples of actions taken by Heathrow to reduce the airport's noise footprint include incentivising airlines to use the quietest aircraft through landing charges; the Fly Quiet Programme; pioneering the use Continuous Descent Approaches; improving Track Keeping on departure routes; a voluntary ban on aircraft landing before 4.30am, and retrofitting A320s to reduce noise.
- 3.3 MG ran through a number of key deliverables and priorities planned for 2016. MG commented that the HCNF action plan should be viewed alongside actions Heathrow has taken over the last two decades through its noise strategies, Noise Action Plans and the Blueprint for Noise Reduction.
- 3.4 MG summarised the work of the Forum so far, observing that last year's work had involved verifying the accuracy of Webtrak and carrying out tailored analysis of flight patterns. This year the Forum has developed a number of actions and the long term goal is to bring all of these together. After the airspace trials in 2014 flight paths returned to the same broad structure as before apart from the procedural changes NATS made to the Compton route on easterly operations. This change resulted in a concentration of the swathe northwards which benefitted some areas but caused more over flight for others.
- 3.5 MG explained that the independent analysis of flight patterns highlighted some underlying changes such as some increases in traffic on some routes, for example more flights over Teddington serving Middle East and Asian markets. It has also shown increases in concentration within some departure routes resulting from improvements to navigational technology over time. The average height of the lowest aircraft on many routes has reduced and this is one of the issues currently under investigation.
- 3.6 Rosalie James (RJ) wanted to know when things would go back to pre-trial levels, observing that it sounded like Heathrow are saying that things have changed but would not be changed back. Tony Popham (TP) added that Molesey residents want to know what will be done.

- 3.7 MG responded that the increase in traffic was not something that could be reversed. With regard to concentration, this has been government policy for around 50 years. As on-board technology has improved, planes have become more capable of adhering to that policy, however with future airspace changes Heathrow is looking at the possibility of rotating routes. Isobel Pastor (IP) added that Government policy is to limit and reduce the number of people affected by noise. Concentration is a complex issue and DfT are investigating whether or not this was the right policy for Heathrow.
- 3.8 Stephen Clark (SC) stated that concentration blights areas and the policy needs to be reviewed. Dean Plumb (DP) explained that from a technical perspective concentration has become greater. Over the last 10 to 15 years there has been an increase in accuracy and pilots do not have the facility to be less accurate.
- 3.9 With regard to altitude, MG observed that aircraft are meeting government requirements but some planes are now lower, so Heathrow is looking to see where that could be improved. SC pointed out that Heathrow has some of the lowest minimum standards in the world for departures. DP pointed out that airlines do not deliberately hold aircraft lower. They have to balance a whole range of issues such as engine life, air quality and safety. Changes to procedures don't reduce noise overall, they just move it to somewhere else.
- 3.10 MG agreed with the points raised and observed that a few years ago Heathrow had submitted a joint consultation with HACAN about concentration.

## 4 Working group updates

- 4.1 Nicole Porter (NP) and Jane Dawes (JD) presented updates on the Forum's five working groups. (The presentations can be found [here](#).)
- 4.2 **Working Group 1 – Monitoring, Verification and Metrics.** The objective of the group is to oversee the data analysis of historic flight patterns and to agree the parameters of an extended noise monitoring programme. NP presented the work plan which includes more gate analysis, deployment of additional permanent and mobile noise monitors, a study of A320 retrofit noise benefits, delivery of the NLR verification report and analysis of standard reporting metrics.
- 4.3 Peter Willan (PW) requested that other working groups should have a chance to review the locations of noise monitors before they are deployed. **ACTION NP**
- 4.4 **Working Group 2 – Operational Procedures.** The purpose of this group is to explore changes to operating procedures and understand the trade-offs in order to identify those which have the most potential to improve the noise climate around the airport.
- 4.5 The scope covers steeper approaches, landing gear deployment, arrivals approach paths, a survey of standard operating procedures and studies of departure profiles, vectoring, load factors and published minimum climb gradients at other international airports.

- 4.6 SC pointed out that the climb gradient study only looked at minimum requirements. JD responded that a survey was underway to look at the standard operating procedures of airlines. These procedures tend to be based on altitude restrictions on charts rather than the published minimum requirements. Heathrow will be talking to more airports in Q3/Q4 to understand the actual climb gradients achieved. The departure profile study will look at the use of departure profiles NAPD1 and NAPD2 on the 09R DET route. Darren Rhodes (DR) noted that differences in height were linked to issues such as fuel loads and not the published minimum requirements. He also observed that increasing departure heights only moves noise from one place to another and that carbon and air quality also had to be taken into account. SC pointed out that noise should be the priority below 4,000ft, however DR responded that the requirement he was referring to related only to airspace change. MG confirmed that the Forum should gather the evidence to see what aircraft are actually doing.
- 4.7 PW asked about the different engine power requirements for 2 engine and 4 engine aircraft. DR explained that the minimum requirement was 75% regardless of the number of engines.
- 4.8 **Working Group 3 – Night Flights.** Heathrow's night flight structure has been the same since 1992/93 and over the years Heathrow has added additional voluntary steps to mitigate the noise impacts. The purpose of this group is to explore what other steps Heathrow could put in place, within its current restrictions, to reduce the impact of Heathrow's night operations, particularly late running departures. The scope of the work includes establishing an information pack on night flights and developing a voluntary Quiet Night Charter.
- 4.9 JD explained that the group was looking at a range of options for the Quiet Night Charter but that all solutions have a consequence. For example, turning off particular routes could result in more late runners. The group needs to decide on the priorities and will explore this further at the next working group meeting in September. MG noted that Heathrow currently has a strong focus on reducing the number of late running aircraft. JD added that progress had been good this year until June when there were more late runners because of bad weather and ATC strikes.
- 4.10 **Working Group 4 – Research, Policy and Communications.** The objective of this group is to build knowledge of existing aviation health-related research, noise metrics, modelling and relevant operational information. This will help to inform decisions and choices around airspace redesign and identify gaps in research. The work plan for the group includes a quarterly research briefing note to review recently published health knowledge, a series of evening lectures, designing an updated community noise report template, launching an enhanced noise and track keeping tool called xPlane and identifying gaps in current research.
- 4.11 NP mentioned that Heathrow recently hosted an evening lecture by Bernard Berry on noise and health impacts on 5<sup>th</sup> July. This had been well received and the next lecture would be held on 14<sup>th</sup> July on the subject of aircraft noise and the effects on children with Charlotte Clark.
- 4.12 PW observed that aircraft are becoming quieter and the benefit of this should be shared with the community.

- 4.13 **Working Group 5 – Compton Route Review.** JD discussed the background and current status of the Compton easterly departure route. She recounted that there have been problems with the easterly Compton departure route for many years because the route involves a 180 degree turn and the conflict with arrivals traffic. The aim is to design an operationally viable departure route that doesn't affect other routes and has a positive effect on track keeping. This will require an airspace change and consultation. The next step is to have a larger discussion with a broader set of stakeholders. A workshop is planned for 28<sup>th</sup> July with community representatives, airlines, AOC and NATS.
- 4.14 John Stewart (JSt) asked if he could put Heathrow in contact with HACAN members who've been affected by the Compton route over the years. JD suggested he spoke to Cheryl Monk (CM) about this.

## 5 Steeper approach trial report update

- 5.1 John Henderson (JH) from TRAX presented a summary of Heathrow's steeper approach trial that ran between Sept 2015 and March 2016. (The presentation can be found [here](#).)
- 5.2 The purpose of the trial was to better understand how slight steep approach (3.2 degrees, rather than 3 degrees) would impact Heathrow's operation. The trial involved around 2,500 flights. A number of objectives were assessed and broadly showed no detrimental impact to operations.
- 5.3 The steeper approach resulted in an average noise reduction of -0.5 dBA (SEL) ranging from +0.1dBA to -1.4 dBA. The noise reduction was slightly less than expected, most likely because the average glideslope during the trial was slightly lower than 3.2 degrees at 3.12 degrees. Heathrow will now report the findings to its airspace governance and community groups and engage with CAA to understand what can be implemented in the short, medium and long term. MG observed that this was one of a number of steps that will combine to help reduce noise.

## 6 Westerly preference

- 6.1 James Shapland (JSh) from the Met Office gave a presentation about wind conditions around Heathrow (the presentation can be found [here](#)). He explained that surface winds are different from winds aloft. Surface winds tend to be lighter and backed round anti-clockwise in direction due to land friction. He explained for example, when there is a NW surface wind there could be a NE wind at 3,000ft. This means that the airport may be on easterly operations even when the surface forecast suggests westerly operations. Similarly, when there is a SE wind on the ground there could be a SW wind at 3,000ft. Heavy showers can cause downdrafts which can temporarily change the wind direction and cause last minute runway changes. Forecasts are made four times a day. There is also a five day forecast which looks at significant weather that may affect Heathrow as well as 15-day planning tools. NATS observe wind conditions at Heathrow using anemometers. Area winds are also observed and an on-site wind profiler is currently being trialled. The aim is for Heathrow's operation to run as smoothly as possible.
- 6.2 SC asked to what extent ATC has discretion about when to change ends. JSh explained that the Met Office advises ATC so that they can make an informed decision. However they also have to take into account information received from pilots in the air. Ian Jopson (IJ) confirmed that feedback from pilots is important for safety. There are also specific criteria regarding tail winds and crosswinds.

- 6.3 Margaret Majumdar (MM) wanted to know how far from Heathrow a pilot might report unfavourable tail winds and how long an end change would take. DP advised that it takes around 30 minutes. An aircraft could be as close as 200ft when it encounters unfavourable wind conditions and this could result in what is known as a 'go-around'. MM questioned whether the wind would still be the same after the go-around. DP responded that ATC would assess whether it was just a temporary wind condition or whether an end change was required. Aircraft carry enough fuel to allow for holding stacks and go-arounds.
- 6.4 SC asked if the percentage of easterly and westerly winds has changed over the last twenty years. JSh advised that it has remained roughly the same 70/30 split. He said the long term future projection is for the jet stream to strengthen, resulting in more Atlantic storms and potentially more westerly winds.
- 6.5 PW observed that the westerly preference was set up many years ago and asked if it was still policy. Richard Norman (RN) responded that in 2009 the government had recommended maintaining the westerly preference however. He explained that in Heathrow's submission to the Airports Commission in May 2013 on making the best use of existing capacity in the short and medium terms, Heathrow proposed the ending of the westerly preference and the Airports Commission supported this in its [Interim Report](#) (December 2013) and said that the Government should review the need for a westerly preference with a view to introducing a 'no preference' policy. RN said this should not happen until runway alternation can be achieved on easterly operations, and this is currently not possible due to the Cranford Agreement.
- 6.6 On average there have been 72% westerly winds over the last 20 years and the data is published on the Heathrow noise website [www.heathrow.com/noise](http://www.heathrow.com/noise). It is estimated that there would be around 5% more easterly operations if the westerly preference was dropped.

## 7 AOB

- 7.1 PW felt that the CAA consultation on the airspace change process does not cover much that affects residents, and wanted to know what process will be used for LAMP. MG responded that the future timetable was uncertain and there was still some time to think about how to redesign airspace. IP added that the CAA consultation is about the very specific airspace change process.

### Date of next meeting

Wednesday 21 September 2016, 1pm-4pm, Heathrow Academy