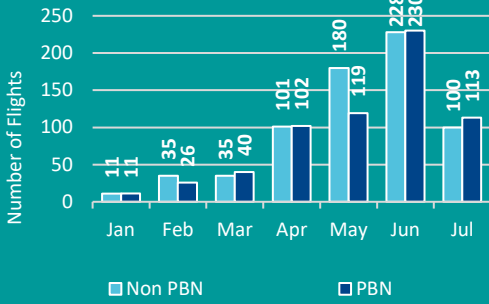
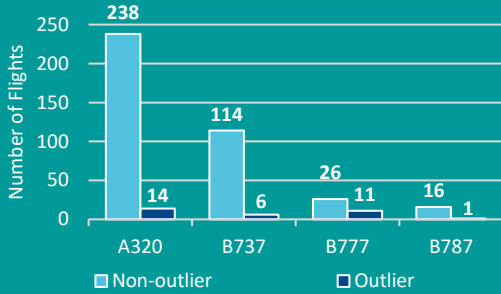


Trial Results

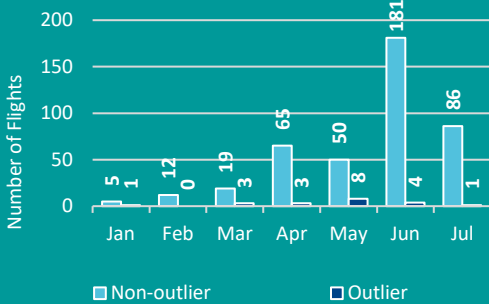
Trial Participation



Noise Outliers by Aircraft Type



Altitude Outliers by Month



Complaints

There were few noise complaints in the trial, with 11 of 641 flights having coincident complaints, none of which were outliers.

Next Steps

The CAA has granted funding to do more work in simulators to refine the procedures and develop guidance to feed into the FASI programme.

NMB FACTSHEET

Reduced Night Noise Trial

The Noise Management Board (NMB) has undertaken a UK-first trial to reduce the number of noisy ‘outliers’ (aircraft that are significantly lower or noisier) at night. The trial used Performance Based Navigation (PBN) to allow the arriving aircraft to manage its descent to maintain height and reduce noise.

Duration

6
months
Jan – July 2024

Trial Hours

01:30
- TO -
05:00

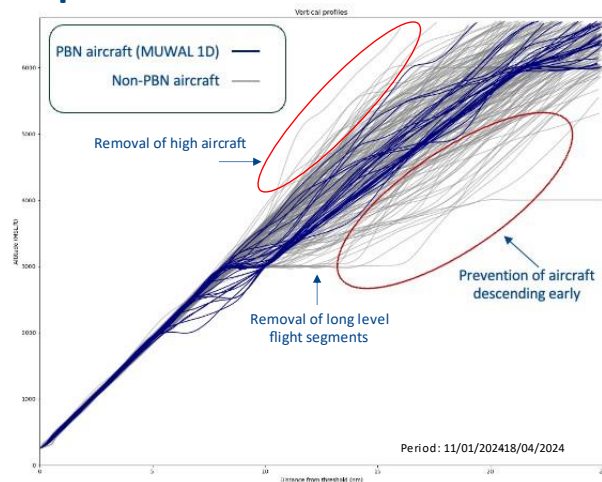
Participation

641
Flights, with no reported safety concerns

8 temporary PBN routes were created, ensuring they:

- Existed in the current arrivals swathe,
- Were distributed in the East and West,
- Were well separated,
- Avoided overflying new people.

Example Vertical Profiles of PBN Aircraft



Conclusions

1. PBN arrivals transitions have been successfully demonstrated with no reported safety concerns.
2. PBN technology offers advantages through highly precise lateral and vertical track keeping
3. No adverse impacts on the community were observed.
4. Several technical factors affected the flight profiles of arriving aircraft.
5. The trial reduced low altitude flights, removed excessive level segments and the steepest descents however it did not achieve its initial objective of reducing the number of outliers by 90%.