Heathrow Experience – The Easy Way
Jock Lowe

'Jock' Lowe was familiar to many present, having been the BA Fleet Captain for Concorde until 2001, but it was his subsequent role in aviation consultancy that underpinned this presentation. The lecture concentrated on the Runway Innovations Ltd and Heathrow Hub Ltd submission to the on-going Davies Commission into UK airport development strategy, and attested to other schemes, but without recourse to any comparisons. This was a topical lecture which concentrated on showing that there was much merit for the future to one solution for a proposal to improve runway capacity, not just in the South-East of England, but to serve UK business interests overall.

He expressed a strong belief that Heathrow should remain the major UK airport, basing his preference on the failure of incentives in that past to boost usage of other airports: and citing Gatwick especially. His argument was that even when there was available capacity elsewhere, it was largely because of ground infrastructure limitations that they were able to capture only a small share of the most profitable airline operations.

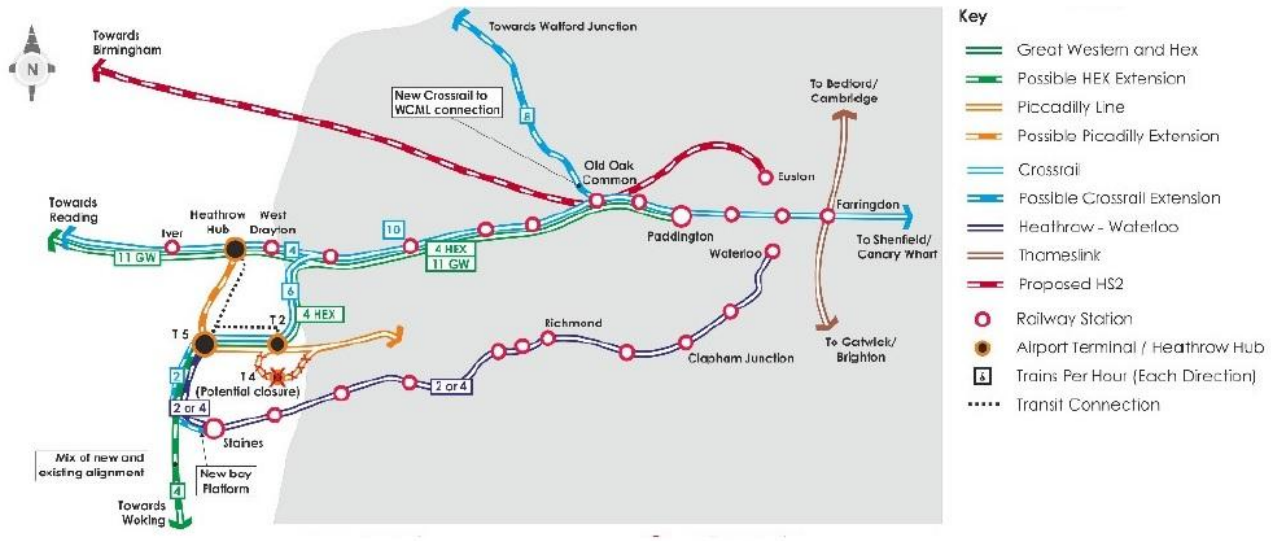
He cited numerous statistics that supported a case for an airport with the scope already demonstrated at Heathrow to use larger capacity aircraft, and with daily or better service frequency. This could offer the consumer the breadth of product options essential to attain good yield overall on international services. He stressed how other European hub airports with spare capacity – such as Amsterdam, Paris and Frankfurt - are potential magnets for the high-yield long-haul services, because they can accommodate large capacity aircraft and attain sustainable service frequencies.

This illustration from the project website shows the ultimate development potential of the three-runway proposal for Heathrow.

For more details refer to www.heathrowhub.com

His desire to consider a radical, but logical, runway development, based on having two runways directly in-line, with a modest amount of longitudinal separation, was drawn on a napkin over a conference table at Dubai in 1988, while discussing ATC capacity strategies. It has matured into a plan for a 6,800m strip based on extending Heathrow's north runway. With a 650m sterile section between the two portions it will operate as two independent runways. Each runway will be 3,100m long, and because the existing 3,658m existing south runway is retained this creates a three-runway airport offering a passenger handling capacity rising from the existing 80 million to 130 million per annum.

The potential to operate the runways within statutory safety requirements was outlined with illustrations of the three-dimensional approach and departure path options and exhibited minimal noise footprint variations. There were also alternative options for 'selective respite' in respect of noise distribution by using offset approaches and curved approaches. The involvement of communities, through direct discussion and via representatives was acknowledged to be a vital aspect of implementation for any of the proposals on the table.



Considerable stress was placed on the 'Heathrow Hub' aspect, whereby existing local surface access was to be integrated with an evolving multi-mode facility north of the airport, and directly linked into the passenger handling components of the new airport infrastructure. Nine existing and proposed surface transport options are presented in the associated diagram shown. The concept was one way of ensuring that any Heathrow benefits would be accessible into a wider community overall, and by serving a wider population than ever assuring airlines that the airport would remain a viable international aviation hub.

The cost of the project, including all associated surface access developments, was estimated as £14.58b. It was regarded as sufficiently cost-effective to be financed directly, and not to require undue amounts of Government financial support. The lecture concluded with a summary that stressed how quickly capacity could be boosted, and development staged. The additional cost of a 4-runway design was felt to be unjustifiable, as the expected 130 million passenger throughput was unlikely to need to be bettered, even after 2050.

This was a lecture that covered such a broad range of civil-aviation perspectives it was able to reach into the interests of all who attended, and generated a lot to discuss in questions and answers. It attracted a large cross-section of students (and was the first lecture where the Velocity student group on campus joined in an RAeS branch event). There were about 160 attendees and Vipran Kannan presented a vote of thanks which drew rousing support.

Lecture notes by Mike Hirst