



**ROYAL
AERONAUTICAL
SOCIETY**
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**The Challenges of Operating and
Maintaining Highland and Island
Airports Limited (HIAL) Airports and
Services**

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– former Group Operations Manager

The speaker was Group Operations Manager for Highland and Islands Airports Ltd (HIAL) throughout 2003-2006, and was approached to give a retrospective view of the work involved in the day-to-day operations of what are very different airports to most others in Britain, largely because of their rural nature, and consequently small passenger demand, and yet the airports often have essential service status for many served communities.



The original 10 airports of the HIAL network. In recent time Dundee airport has been added to the airports managed by the organisation.

The HIAL organisation was created in 1986 as an initiative that, on the grounds of them providing exceptional services, would give the then 10 aerodromes (an 11th added subsequently) special status. In particular, the airports are more relevant to the well-being of people in the case of emergencies, and especially during periods when weather constrains other modes of transport, as well as providing swifter and more amenable access for visitors who contribute to local businesses.

HIAL has its headquarters at Inverness, which is mainland and relatively central relative to the other locations, and in terms of passenger figures it is the busiest location. The main bases for the Orkney and Shetland Islands are Kirkwall and Sumburgh respectively, and for the Hebrides it is Stornoway on Lewis. These airports are served directly from Inverness.

The operation of all aerodromes in the UK depends on them being appropriately licensed by the UK CAA, which sets essential requirements on facilities such as runways and services such as air traffic control (ATC) and rescue and fire-fighting (RFF). There are additionally, and equally essential, requirements set by the Dept of Transport (for security) and the UK Health & Safety Agency. Inspection of facilities is conducted regularly and is no less thorough at these small airports than it is elsewhere. Several duties in these components need specially-trained staff, who are expensive to recruit and train, and to ensure fullest possible availability of services rota-based staff are required. The way that an organisation chart could be reduced through job-sharing was illustrated, and some of the issues that arise on smaller airports were exemplified: such as at Tiree, where many staff are also crofters, and the airport is closed at 15:00hr daily so that they can attend to livestock. The airports at Barra (famously aircraft use the sand and apply a tide-related timetable), Tiree and Campbeltown are licensed under Public Service requirements and get additional UK Government support.

The busiest airports can justify investment in equipment such as navigation aids and surveillance equipment. All the airports need maintenance and periodic assessment of

runways, taxiways and apron surfaces, airfield lighting, plus rescue and fire-fighting equipment to maintain an acceptable level of compliance. These lead to regular re-investment programmes and can require additional, and sometimes costly, projects. The speaker illustrated the installation of improved radar surveillance at Inverness, the construction of runway-end extensions at Sumburgh, station-wide investment in fire-fighting training facilities and the introduction of maritime rescue resources. He



Inverness is the hub operation and offers low-cost access with direct flights to London (Luton). Services commenced with Boeing 737-700 are now operated using Airbus A320.

stressed too the need to keep abreast of planning applications for constructions that might impact the airport, and the question marks posed by wind-turbine installations was highlighted. Wind-turbines were also cited in the context of aerodrome physical safeguarding legislation, and the presentation included a brief overview of the way that acceptable obstacle height is set by invisible 'planes' through which an obstacle penetration is unacceptable, without a strong safety case. As one might expect, the further away an object is from the aerodrome and the approach paths, the less significant is a given-height obstacle. Maintaining up to date charts and handling the planning issues that could influence this aspect of operation is the responsibility of the core HIAL team in Inverness, and this involves the perusal of 100 or so planning applications per week.

Some incidents of note were described, many of a minor nature, in that people were not injured or lost – although aircraft were invariably seriously damaged. He commented too on the legacy of the off-shore oil operations in the North Sea, which have accounted for numerous incidents that led to loss of life and aircraft. These were largely attributable to system failures and fluctuating weather conditions, and reasonable safety has been maintained over several decades through thorough application of stringent safety legislation.

One incongruous example of aerodrome safety being put at risk was when farmers were encouraged through subsidies to accommodate migratory geese, and there was no apparent concern about applying this policy on land adjacent to aerodromes, where bird strikes are always a hazard, but geese are a particular problem as they are such large birds. HIAL staff however always adopted stringent bird monitoring and removal, in line with CAA practices. His comments included advocacy for a strong relationship between the operational staff at the airports and the aircraft operator/airline flight crews that used the airports to address issues as experienced or perceived. He saw these as crucial to the review of procedures, and that might lead to a revision of priorities or be relevant to establishing new concepts

requiring longer-term actions, and in some case these might include the appropriation of significant funding.

He commented on the pleasure of routines being relaxed with when there were one-off events, which were attributable often to the remoteness of HIAL's operations. He cited a privately-owned A320 which facing an expensive parking bill in SW England being flown to Campbeltown and whilst parked for several days its crew enjoyed the golf courses in the region, and claimed the overall cost was still much less than leaving the aircraft parked on an airport near London. Campbeltown was used also for trials of an autonomous aircraft while the speaker was in post, as the long runway and the ability to conduct flight trials over adjacent water offering a site which did not cause a threat to anyone on the ground, once the gap introduced in local golf club tee off times had been suitably recompensed. At many of the HIAL airports the local population would also join in when they conducted regular statutory emergency exercises by enthusiastically taking on the role of crash victims.



The large expanse of firm tidal sand on the small island of Barra supports a regular service to/from Glasgow.

The fact that safety is top of the operations agenda required careful application and he cited the case at Barra where winkle-pickers would routinely drive onto the beach. The airport team had to adopt and enforce special procedures to prevent vehicles and personnel believing they had full access to what was, at irregular times, an operational aerodrome. Visitors would also fly into airports in light aircraft that they knew were well away from crowded skies, and Barra, being the UK's only tidal runway regularly took

aircraft on prior permission only (PPO) arrangement. HIAL policy was to make sure that their first duty on arrival was signing an understanding that the owner was responsible for their aircraft if it was engulfed by an incoming tide. It appears that this policy ensured that people always remembered to move their aircraft appropriately.

Commenting that his experience was still relevant today, but was accumulated a decade or so ago, the speaker signed off with a review of some places where his subsequent career took him, and where his HIAL experience proved to be invaluable. This included remote airport studies and developments in Northern Iraq (Erbil in Kurdistan), Tripoli in Libya, Palmyra in Syria and Gan in the Maldives. His concluding example, with a video presentation, referred to the controversial new airport on St Helena. The film from a cabin window on his arrival revealed the precipitous terrain adjacent to both ends of the runway, plus the remarkable high rock terrain in the vicinity. He was unwilling to condemn the new runway on the South Atlantic island as roundly as it has been in the UK press, insisting that



Islay is one of the smaller airports but the investment needed to maintain adequate ATC and RFFS facilities, which also must be appropriately staffed, is amply illustrated in this photograph.

narrated with a passion for the topics introduced, and the places described. The topic was unique, and the insights into what is apparently a cottage-industry level service which has to conform to onerous regulation, and balancing the costs with needs, was presented in a broad context that was much appreciated by the 100 or so attendees present.

the airport has been certified for an initial 6 month period, as is normally the case, that operators have tested for more time than has been reported in the UK press, and that humanitarian flights have been conducted. However, the main potential user has been deterred because the aircraft type they use has limited payload capability only from the runway. A post-lecture check on the web has found these facts are more clearly reflected in non-UK sources.

It was an information-packed presentation, illustrated and

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