

TAG Farnborough Airspace Baseline Study

Executive Summary

TAG Farnborough is the leading airport in the UK business jet aviation market. Its position close to the economic heart of the UK, and with the exceptional transport links routing out of London, make it the preferred airport of choice for many corporate organisations and wealthy individuals. Ensuring a high standard of service is a key focus of TAG Farnborough's business plan. Whilst there are several facets that serve to provide an efficient operation, one key area is the provision of the ATC services. The ATC operation works to ensure that aircraft operating into, and out of, Farnborough are controlled safely and effectively, whilst also considering the needs of TAG's customers, and the surrounding neighbours. The airport is very noise conscious and has a stated intent to ensure its operations are as quiet as possible and respect the needs of the surrounding communities.

The airspace immediately surrounding Farnborough is uncontrolled, i.e. it is freely available to any type of aircraft, and no permission or contact with any agency is required to fly in the airspace. In particular, most are not required to communicate with the Farnborough ATC operation, thereby introducing inherent risks for business jet aircraft flying low and fast. Additionally, TAG Farnborough is surrounded by a number of other airfields with aerial activity ranging from intense military helicopter operations through to the country's busiest glider site. There is much competition for the airspace surrounding the airport and for this reason a more comprehensive airspace plan is required to ensure the safety of all users.

TAG Farnborough has established a strong relationship with NATS mainly through the provision of core services at the airport, but also through the advice NATS has provided to support the airport's long-term growth aspirations. The core service contract aims to deliver as many improvements as possible within the resources available. The links that the Farnborough ATC team have to many other NATS departments ensure that the operations are using modern practices and procedures wherever possible. Scope for future enhancements and more significant improvements are limited without making more substantial changes to the airspace structure and ATC procedures.

As a direct consequence of the co-operation between the two organisations, NATS was invited to perform a review of the airspace and procedures, and assess how current arrangements could benefit from change. A team from NATS visited TAG Farnborough in February 2010, and conducted a series of meetings, interviews and observations. The results have been compiled into this baseline study report.

This comprehensive assessment has identified how improvements in many areas of operational procedures, and airspace structure, could be put in place over time. These areas include:

• a detailed study into the modification of terminal control routes and procedures

- changes to the operation of danger areas immediately surrounding Farnborough
- introduction of standard departure clearances, provided when aircraft start-up
- review of the departure routes from Heathrow, Gatwick and Southampton to achieve a higher altitude for Farnborough traffic
- the early engagement of several stakeholders, particularly from the surrounding airports; essential for major airspace changes
- the possible introduction of steeper approach angles
- the introduction of P-RNAV (more accurate) arrival and departure routes
- higher performing vertical profiles for departures to reduce the noise footprint
- the establishment of additional controlled airspace or reclassification of airspace to protect the aircraft operating from Farnborough
- the possible co-location of Farnborough and Odiham radar control positions

All of the recommendations are expressed in terms of activity, duration and resources. This will provide the information necessary to design the next steps and identify the team best able to implement the changes. Following a review of this report, an agreed list of activity will be scoped in more detail, and costs provided for either budget planning purposes or as a detailed quotation.

24 March 2010