



Farnborough Airport

Airspace Consultation Feedback Report **Part B: Executive Summary**



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Executive Summary

Feedback Report Part B is about the proposed airspace and flight-path changes in the vicinity of TAG Farnborough Airport. It discusses the consultation held in 2014, the actions we took following that consultation, and what will happen next.

The objective of this proposed change is to create a new operating environment with elements of 'controlled' airspace, which would offer all airspace users predictability and consistency of operation.

TAG Farnborough Airport wishes to thank all individuals and organisations who responded to the consultation on airspace changes. The preceding document, Feedback Report Part A, detailed the feedback acquired during the consultation and analysed the themes and issues raised. The consultation process relied on the acquisition of views, suggestions and comments about the potential impact of proposed changes. We were encouraged by the quantity, quality and breadth of responses to the consultation.

The full version of this document, Feedback Report Part B, takes these themes and issues and explains how we have considered them. In many cases, we have taken action such as redesigning part of a flight route or airspace volume.

A balanced approach has been taken in order to address conflicting issues. Compromises have been made, resulting in a proposal that strives to meet the needs of as many stakeholders as possible.

The consultation was conducted under the CAA's CAP725 Guidance on the Application of the Airspace Change Process. It presented a number of proposed changes to airspace and aircraft routings in relation to TAG Farnborough Airport. The proposed changes were developed to:

1. Improve the overall efficiency of the airspace
2. Increase safety
3. Reduce environmental impact

The consultation generated over **13,000** comments from more than **2,500** stakeholders. In addition, more than **700** documents were submitted in support of responses.

What has been happening since Feedback Report Part A was published?

An essential part of the Airspace Change Process is to study the areas of concern raised in consultation and to act on them where possible.

We have been:

- a. Studying the consultation responses in depth to understand concerns and design ideas;
- b. Exploring potential mitigations and considering how they may be progressed;
- c. Re-engaging with some stakeholders to better understand specific elements of their response;
- d. Creating a significant redesign based on all this information;
- e. Simulating the redesign using Farnborough, NATS and RAF air traffic personnel, and analysing the results;
- f. Adjusting some details of the design based on the simulation results;
- g. Finalising the overall design;
- h. Documenting all the above.

The task of analysing and acting on the considerable volume of responses, ideas and design suggestions was extensive, reflected by the length of time taken.

Stakeholder groups' areas of concern

There were two core groups of stakeholders, each raising three broad areas of concern.

Aviation stakeholders raised concerns regarding access to the proposed airspace, justification for the proposed changes, and safety issues caused by funnelling or compression of non-Farnborough aircraft around or beneath the proposed airspace.

Other stakeholders raised concerns regarding environmental impact (primarily noise), justification for the proposed changes, and safety.

Safety and Justification were common themes between these two core groups.

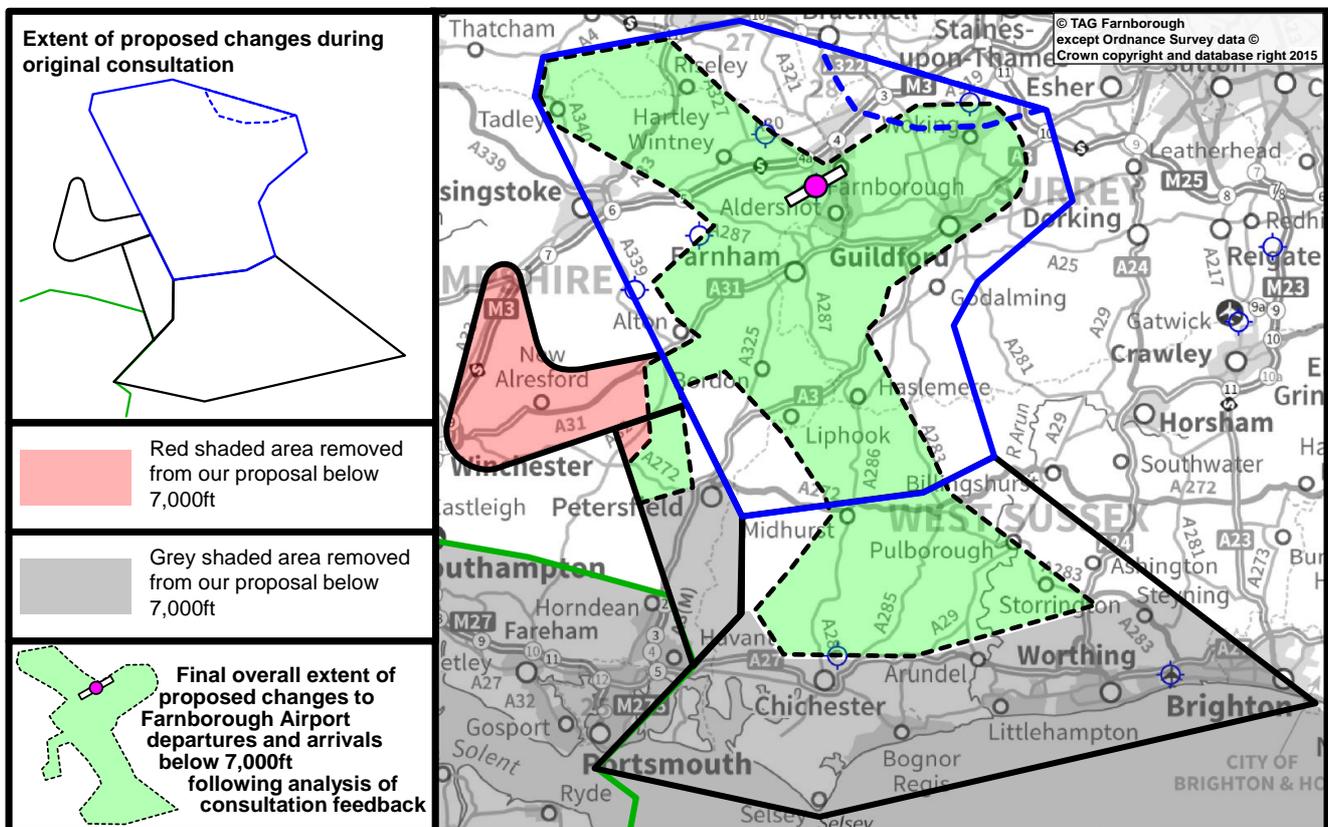
Therefore the four broad areas of concern are:

1. Environmental impact (primarily noise)
2. Access to the proposed airspace
3. Safety
4. Justification for the proposed changes

What changes to the proposal have been made as a result of consultation feedback?

Of the four broad areas of concern, the first three have been mitigated by redesigning the routes and associated airspace.

1. Departure routes (Standard Instrument Departures, 'SIDs') have been redesigned;
2. Proposed airspace extent and base levels have been redesigned;
3. One of the arrival routes (Standard Terminal Arrival Routes, STARs) has also been redesigned



The proposed areas of over-flight below 7,000ft, shown in green in the adjacent map, have been significantly reduced.

The justification for this proposal remains the same, but the extent of the controlled airspace required to support that justification has been cut down.

The lateral extent (area, square km) of the proposed airspace was reduced by 20%.
The overall volume (cubic km) of the proposed airspace was reduced by 32%.

The airspace design developed as a result of the feedback from consultation represents a fair and balanced proposal which has understood, examined and taken into account the views of all stakeholders.

This final proposed design will be submitted to the CAA for their independent scrutiny. They will determine whether we have succeeded in balancing the needs of all stakeholders.

Benefits Summary

Environment – People over-flown:

Due to the accurate track-keeping potential of aircraft following these new, modernised routes, it has been possible to design flight-paths that reduce the over-flight of populated areas.

In particular, we made significant changes to departures to minimise the population over-flown at low altitude, based on the feedback we received.

Under this proposal 35% (199,000) fewer people than today would be over-flown below an altitude of 4,000ft, with 11% (56,000) fewer people over-flown from 4,000ft-7,000ft.

Overall, 24% (255,000) fewer people would be affected by Farnborough aircraft.

A smaller number of people would be likely to get over-flown more often, because the flight-paths would be more concentrated. For details see Section 6 of the full report.

Access to airspace:

The proposed concept of operations (airspace, routes and procedures) relies upon Farnborough controllers providing pilots with regular, timely and consistent access to the airspace upon request.

TAG Farnborough is committed to ensuring that the fundamental requirements of introducing controlled airspace (known as 'Class D' airspace) are met or exceeded. This means that fair and equitable access will be provided to the maximum extent possible.

Safety:

The airspace surrounding Farnborough is managed safely, but flight-paths are not very efficient or predictable and are often extremely complex.

The more consistent and predictable the routes, the more efficient they can be.

Reducing the complexity of air traffic management would reduce the workload for pilots and controllers, enhancing overall safety even further.

Summary of routes and associated environmental benefits

Route	Benefit
Runway 06 departures below 5,000ft	Designed to avoid direct over-flight of Guildford, Aldershot and Farnham . Precise track-keeping will ensure that flights are consistently routed over sparsely populated areas as much as possible and at higher altitudes than currently achieved. (See page B16 of the full report).
Runway 24 departures below 5,000ft	Designed to avoid direct over-flight of Church Crookham, Fleet, Ewshot, Crondall, Farnham, and Alton . Precise track-keeping will ensure that flights are consistently routed over sparsely populated areas as much as possible, and at higher altitudes than currently achieved. (See page B18 of the full report).
Departures from both runways 5,000ft-7,000ft.	Designed to avoid major centres of population Alton, Bordon, Liphook, Four Marks, Ropley and New Alresford below 7,000ft. Precise track-keeping will ensure that flights are consistently routed over sparsely populated areas as much as possible, and at higher altitudes than currently achieved. (See page B20 of the full report).
Arrivals to both runways from south between 7,000ft-4,000ft	Arrivals would typically be between 600ft and 1,000ft higher than the current equivalent arrival, during the descent to 4,000ft. (See page B24 of the full report).
Runway 06 arrivals from north and south below 4,000ft	Arrivals would typically be between 600ft and 1,000ft higher than the current equivalent arrival until nearing final approach where standard approach altitudes would be flown. (See page B26 of the full report).
Runway 24 arrivals from north and south below 4,000ft	Arrivals would typically be between 600ft and 1,000ft higher than the current equivalent arrival until nearing final approach where standard approach altitudes would be flown. (See page B28 of the full report).

What happens now?

We submit our formal Airspace Change Proposal (ACP) to the CAA.

The CAA will study our proposal and check we have considered the requirements laid out in CAP725 and the Government's environmental guidance to the CAA.

The CAA evaluation is expected to take until late 2015 to complete.

The CAA will then make their decision and announce it on their website. We will also announce it on ours - www.consultation.tagfarnborough.com

If CAA approval is granted, we plan to implement the change in late 2016.

Comments regarding the proposal should now be directed to the CAA.

End of Executive Summary.

For more details see the full Feedback Report Part B which can be found at www.consultation.tagfarnborough.com