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RAF Northolt Stakeholders

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**RAF NORTHOLT DRAFT DESIGN PRINCIPLES – RESPONSE TO STAKEHOLDER FEEDBACK**

1. Between March and May 2019, we conducted engagement with those people and organisations that could be affected by an Airspace Change Proposal (ACP) being drawn up by RAF Northolt. This ACP is required by the Department for Transport<sup>1</sup> and the Civil Aviation Authority<sup>2</sup> (CAA) as part of the modernisation of airspace across the country. Similar ACPs are being conducted by other airports and airfields across the south east of the UK.
2. You or your organisation responded to our engagement. We have now reviewed the feedback from all respondents and would like to provide you with an update to the design principles that we will submit to the CAA by 1 July 2019. We have provided a list of the finalised design principles as an Annex, along with an explanation for the changes that have been made or why suggestions have not been taken forward.
3. Respondents raised concerns that airspace that was not required by RAF Northolt could be handed over to other airports, potentially increasing flight paths over their communities. The rationale for that design principle has now been amended to make clear the aim is to minimise the volume of controlled airspace required by RAF Northolt, where possible. We have also amended the wording of the design principle about operational efficiencies and we have amended the rationale behind the design principle to minimise fuel and greenhouse gases. We have not included a design principle that was proposed by one stakeholder concerning the transition altitude and interactions with other airfields.
4. With regard to noise, feedback was inconclusive as to whether we should 'consider fewer people affected, but more noise' or 'more people affected, but less noise'. We have therefore removed these 2 design principles. Feedback was also inconclusive as to whether we should prioritise flights over rural areas rather than urban areas and we have removed that design principle. Our approach to noise is still covered by two other design principles which received strong endorsement from stakeholders. We have added a noise design principle concerning the overflight of communities with multiple routes.

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<sup>1</sup> Green Paper published in December 2018.

<sup>2</sup> CAP1711 – Airspace Modernisation Strategy dated December 2018.

5. Several respondents felt the CAP 1616 process was not conducive to making informed decisions that affect so many local airports and they undertook to take the issue up with the Department for Transport and the CAA directly. Others requested detail on proposed flight paths and stated that they could not comment on which design principles they agreed with, without first understanding the impact on the communities that would be affected. We must stress that at this point in the CAP 1616 process (stage 1), we are not considering possible flightpaths. Our work is limited to drawing up generic design principles which will guide all future work. A full consultation will take place as directed by CAP 1616<sup>3</sup>, once potential flight paths have been identified.

6. We are very grateful for the responses that we have had to our ACP engagement so far. You can find more information about airspace modernisation at <https://www.ourfutureskies.uk/> and updates to our ACP at <https://airspacechange.caa.co.uk/PublicProposalArea?pid=50>. As we progress through the CAP 1616 airspace change process, please rest assured that we will continue to engage with our stakeholders.

Annex:

A. Royal Air Force Northolt Design Principles.

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<sup>3</sup> <https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=8127>

## Royal Air Force Northolt Design Principles

1. This table lists the design principles RAF Northolt will submit to the CAA. Design Principles 1 and 2 are prioritised above all others. There is no priority accorded to the remaining design principles.

	Design Principle	Rationale
1.	Must be safe	Provide a safely designed airspace structure and routes, to ensure the safe operation of aircraft. A priority requirement <sup>4</sup>
2.	Must ensure continuation of military and governmental operational activity	RAF Northolt must be able to operate to its current commitments and future Defence requirements. A priority requirement <sup>5</sup>
3.	Should minimise impact on other airspace users	Minimise dependencies on other airspace users, including neighbouring airports, and consider opportunities to reduce controlled airspace
4.	Should facilitate design using modern navigational technology	Airspace and routes designed favouring the latest navigational technology
5.	Should facilitate operational efficiencies to maximise benefits to as many stakeholders as possible	Flight paths that minimise the workload of pilots and air traffic control, as well as design more efficient routes
6.	Should minimise fuel and greenhouse gases	Seek to minimise the amount of fuel and CO2 emissions produced
7.	Should minimise the impact of aircraft noise by:	Comply with government regulation and policy on noise impact. Aim to reduce effects on health and quality of life by considering local circumstances
	a. Minimising the number of people newly overflown	Limit designing new routes over those people who are not currently overflown by keeping routes as close to today's flight paths as possible
	b. Minimising the total number of people affected by noise	Reduce the number of people overflown by aircraft. This would lead to aircraft concentrated over a smaller number of routes
	c. Where possible minimise overflight of communities with multiple routes	Some communities could be affected by flight paths from different airports

<sup>4</sup> In accordance with the Transport Act of 2000, Section 70, where the CAA 'secures the most efficient use of airspace consistent with the safe operation of aircraft'.

<sup>5</sup> In accordance with the Transport Act of 2000, Section 70, where the CAA 'takes account of the interests of national security'.

2. This table outlines what changes have been made to the design principles and explains the reasoning behind the changes.

	Proposed Design Principle	Rationale	Stakeholder Feedback	RAF Northolt Comment
1	Must be safe	Provide a safely designed airspace structure and routes, to ensure the safe operation of aircraft	Expected safety should be a priority	Covered by this design principle
2	Must ensure continuation of military and governmental operational activity	RAF Northolt must be able to operate to its current commitments and future Defence requirements	Operational output is the priority	Covered by this design principle
3	Should minimise impact on other airspace users	Minimise dependencies on other airspace users, including neighbouring airports, and consider opportunities to reduce controlled airspace <del>give away airspace that is not required for future operations</del>	Concern there would be an increase in commercial traffic at RAF Northolt  Prefer to see a reduction in controlled airspace  Concern this would involve airspace being handed over to other airports, increasing noise and flight paths over communities	RAF Northolt commercial flights are capped at 12000 movements a year  CAP 1711 aims to achieve the most efficient use of airspace (Chapter 1 para 11). The wording of the rationale has been changed to reflect what RAF Northolt aims to achieve with this ACP in line with CAP 1711 – Airspace Modernisation Strategy  We cannot be responsible for the use of airspace beyond what RAF Northolt requires. Any change to airspace usage is through the approval of the CAA under the CAP 1616 process
4	Should facilitate design using modern navigational technology	Airspace and routes designed favouring the latest navigational technology	Articulate a minimum navigational standard, eg RNAV1  Concern for legacy systems not equipped with Performance-Based Navigation <sup>6</sup>  Provide respite	RAF Northolt cannot commit to a minimum navigational standard due to military aircraft requirements  Noted  There is a defined flying window for commercial air movements <sup>7</sup> . As flights are unscheduled, this makes planning for respite difficult to achieve, beyond

<sup>6</sup> For an explanation of Performance-Based Navigation see <https://www.caa.co.uk/Performance-based-navigation/>

<sup>7</sup> Mon-Fri 0800-2000. Sat 0800-1500. Sun and bank holidays 1200-1900. Military aircraft attempt to adhere to these timings but may fly as required to meet operational requirements.

	Proposed Design Principle	Rationale	Stakeholder Feedback	RAF Northolt Comment
				defined flying windows. Notwithstanding this, due to the number of commercial moves involved, periods of respite naturally occur during the flying window <sup>8</sup> . Respite has therefore not been taken forward as a design principle for this ACP
5	Should facilitate operational efficiencies to maximise benefits to <del>all stakeholders</del> as many stakeholders as possible	Flight paths that minimise the workload of pilots and air traffic control, as well as design more efficient routes	Question raised as to whether all stakeholders could benefit at the same time from operational efficiencies	Wording amended
6	Should minimise fuel and greenhouse gases <del>(for civil operations)</del>	Seek to minimise the amount of fuel and CO2 emissions produced. <del>Consideration of short, direct flight paths</del>	Concern raised that short, direct flight paths might not be environmentally efficient	Relevant section has been removed  No need to highlight civil operations
7	Should minimise the impact of aircraft noise by:	Comply with government regulation and policy on noise impact. Aim to reduce effects on health and quality of life by considering local circumstances	Provide respite/consider more routes to vary impact of those frequently overflown	There is a defined flying window for commercial air movements <sup>9</sup> . As flights are unscheduled, this makes planning for respite difficult to achieve, beyond defined flying windows. Notwithstanding this, due to the number of commercial moves involved, periods of respite naturally occur during the flying window <sup>10</sup> . Respite has therefore not been taken forward as a design principle for this ACP
	a. Minimising the number of people newly overflown	Limit designing new routes over those people who are not currently overflown by keeping routes as close to today's flight paths as possible	Supported by stakeholders	No change to design principle
	b. Minimising the total number of people affected by noise	Reduce the number of people overflown by aircraft. This would lead to aircraft concentrated over a smaller number of routes	Supported by stakeholders	No change to design principle

<sup>8</sup> Commercial aircraft moves are capped at 12000 per annum.

<sup>9</sup> Mon-Fri 0800-2000. Sat 0800-1500. Sun and bank holidays 1200-1900. Military aircraft attempt to adhere to these timings but may fly as required to meet operational requirements.

<sup>10</sup> Commercial aircraft moves are capped at 12000 per annum.

	<b>Proposed Design Principle</b>	<b>Rationale</b>	<b>Stakeholder Feedback</b>	<b>RAF Northolt Comment</b>
	<del>c. Considering fewer people affected, but more noise</del>	<del>A steeper climb gradient would result in a potential increase in noise, but over a smaller area</del>	<p>Feedback inconclusive. People stated that without details about planned flightpaths, they were unable to comment about where noise impact should lie</p> <p>Concern raised that work being undertaken by other airports needed to be considered, which was an issue that stakeholders would take up with the Department for Transport and CAA</p>	Design principle removed as no way forward could be identified from the stakeholder feedback. The remaining noise design principles still provide sufficient assessment of the impact of noise
	<del>d. Considering more people affected, but less noise</del>	<del>A shallower climb gradient would result in potential reduction in noise, but over a larger area</del>	<p>Feedback inconclusive. People stated that without details about planned flightpaths, they were unable to comment about where noise impact should lie</p> <p>Concern raised that work being undertaken by other airports needed to be considered. Stakeholders would take up with the Department for Transport and CAA</p>	Design principle removed as no way forward could be identified from the stakeholder feedback. The remaining noise design principles still provide sufficient assessment of the impact of noise
	<del>e. Prioritising flight paths over rural areas rather than urban areas</del>	<del>Favour routes over rural areas, rather than residential areas in towns and cities</del>	<p>Areas of Outstanding Natural Beauty should not be overflown</p> <p>Residential areas should not be overflown</p>	Design principle removed as no way forward could be identified from the stakeholder feedback. The remaining noise design principles still provide sufficient assessment of the impact of noise

3. This table lists design principles suggested by our stakeholders and explains RAF Northolt's response.

	<b>Proposed Design Principle</b>	<b>Rationale</b>	<b>RAF Northolt Comment</b>
8	Avoid overflight of communities with multiple routes from different airports	Some communities could be affected by the flight paths from different airports	Suggestion accepted with some changes to the wording, added as noise design principle
9	Any design work undertaken will ultimately take into account the change in vertical reference caused by the transition altitude, particularly with interactions with other airports	A design principle is required that takes into account the Transition Altitude and the interaction with other airport routes	This suggestion is too technical to be included as a design principle. It affects all airports involved in the redesign of UK airspace and not just RAF Northolt. The issue should be addressed jointly by the London Airspace Management Project, as the organisation responsible for implementing airspace changes across the UK above 7000 feet and the Future Airspace Strategy Implementation (South) Working Group