

NATMAC Representatives

DAP/CLYDETTMZACP

25 February 2011

NATMAC DECISION LETTER

Dear Astley,

ESTABLISHMENT OF THE CLYDE TEMPORARY TRANSPONDER MANDATORY ZONE (TTMZ)

INTRODUCTION

On 7 January 2011 NATS forwarded an Airspace Change Proposal (ACP) to DAP seeking the establishment of a TTMZ in the vicinity of the Clyde wind farm development. Upon receipt of the ACP, DAP staff, along with colleagues from SRG's Air Traffic Standards Department, undertook a detailed analysis of the proposal. The purpose of this letter is to provide you with an overview of the ACP and my subsequent decision on it.

PROPOSAL OVERVIEW

The Clyde wind farm is situated between Abington and Moffat in southern Scotland. Once operational it will create a large area of interference on NATS' Lowther Hill Primary Surveillance Radar (PSR) and subsequently on the radar displays at NATS' air traffic control centre at Prestwick (PC). To counter this, NATS intend to blank the Lowther Hill PSR around the wind farm, which in essence will create a radar void in that specific area of coverage.

The base of controlled airspace (CAS) above the wind farm is 5500ft amsl; however, NATS require radar coverage from 2000ft below the base of CAS in this area. The Lowther Hill PSR coverage currently provides that requirement. Once the Lowther Hill radar is blanked, PSR returns below 4500ft should not be visible on the PC controller radar displays in the affected area. However, above 4500ft, PSR returns although maybe occasionally intermittent, should be detectable on the alternative Glasgow PSR and subsequently will be visible to controllers at PC. The wind farm operators, Scottish & Southern Energy Renewables (SSER), have agreed to provide a new 'infill' PSR to restore the 2000ft vertical requirement that would be blanked out, but this facility will not be online for another 18 months. SSER wish to commence operations at Clyde as soon as possible and in order to accommodate this requirement and to mitigate the lack of 2000ft PSR coverage below the base of CAS, NATS have proposed the establishment of TTMZ as an interim measure. The stated objective of the ACP is to maintain current safety levels by ensuring that changes necessary to accommodate the Clyde wind farm installation do not increase the risk of infringements of CAS.

Civil Aviation Authority

STATUTORY DUTIES

In assessing the Clyde ACP I considered my statutory duties, in particular my responsibilities to secure the most efficient use of airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic¹ and to satisfy the requirements of operators and owners of all classes of aircraft². I have concluded that given the balance of risk posed to aircraft outside CAS against that to aircraft in CAS, I do not consider the case has been made to fully justify the establishment of a TTMZ outside existing CAS.

REGULATORY DECISIONS

It is acknowledged that the Clyde wind farm development will impact on NATS (PC) operations, but the proposal submitted by NATS did not justify the need for the TTMZ in several key areas. Despite the statement that the PC TALLA Sector is the most infringed sector within Scottish airspace, evidence shows that there appears to have been a relatively low figure of 18 infringements of this airspace since 1 January 2006 and no evidence of recent losses of separation or AIRPROX³ events in CAS adjacent to the proposed airspace. When this is considered against the paucity of traffic at the lower levels of CAS above the proposed TTMZ, it appears that any risk to flights in CAS is manageable through alternative mitigations.

In addition, a wide range of access arrangements for non-transponding aircraft have been described in the proposal which, while undoubtedly intended to be helpful to other airspace users, call into question the rationale for the TTMZ as there would potentially be long periods when non-transpondable contacts would be in the area.

I must consider what risk is posed to flights operating outside CAS as a consequence of the establishment of the TTMZ. It is recognised that there are pilots that will not be able to fly in the proposed TTMZ or if flying beneath it, will be forced to operate in a 500ft layer beneath the TTMZ in order to comply with Rule 5 of the Rules of the Air, in an area of high ground. Moreover this area is over the route of the A74(M)/M74 motorway, a clearly observable line feature and a useful navigational aid to VFR flights. This may result in these aircraft having to navigate around significantly higher terrain and closer to the base of CAS. There is also the potential for a higher level of risk in maintaining VFR⁴ or recovery from an emergency situation when flying underneath or around the proposed TTMZ.

As the installation of a permanent primary radar will in due course resolve the issue, NATS may, as a short-term measure, wish to consider other mitigations or introduce procedural changes to operations inside CAS. However, as any such modifications may incur a workload penalty on the affected PC sectors, NATS have been asked to ensure that any new arrangements are kept under close scrutiny and should be in place for the absolute minimum period necessary.

It is also important to emphasise that this decision does not set a precedent for any similar proposals in the future, which will be considered by the Directorate strictly on a case-by-case basis.

¹ Transport Act 2000, Section 70 (2)(a).

² Transport Act 2000, Section 70(2)(b).

³ An AIRPROX is a situation in which, in the opinion of a pilot or air traffic services personnel, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved may have been compromised.

⁴ Visual flight rules (VFR) are a set of regulations which allow a pilot to operate an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going.

Having regard for the importance of this issue, and in order to be certain that the traffic situation remains as currently described in the proposal and that the safety risk continues to be manageable, my staff will review the situation together with NATS at 3, 6 and 12 months after implementation of any interim solution. If as a consequence of significantly changed circumstances, further action is necessary to address an urgent safety concern, we will consider the implementation of some form of emergency construct.

Yours sincerely,

Mark Swan

M SWAN
Director of Airspace Policy