

JOINT STATEMENT FROM THE CIVIL AVIATION AUTHORITY AND THE MINISTRY OF DEFENCE ON OUTCOME OF THE REVIEW OF THE RISK OF COLLISIONS BETWEEN COMMERCIAL AIR TRANSPORT AIRCRAFT AND MILITARY FAST JETS FLYING IN UNREGULATED AIRSPACE IN THE NORTH EAST OF THE UK

Reference:

A. 8AP/51/05/02 - Review of the risk of Collisions between Commercial Air Transport Aircraft and Military Fast Jets Flying in Unregulated Airspace in the North East of the UK dated 26 January 2005.

BACKGROUND

1. The North East Airspace Team (NEAT) was jointly sponsored by the CAA and the MOD to review the risk of collision in Class F & G airspace, i.e. outside Controlled Airspace (CAS), between military fast jets (FJ) and Commercial Air Transport (CAT) aircraft, in the North East of the UK. The Review was specifically triggered by a recommendation made by the UK Air Accidents Investigation Branch (AAIB) following an AIRPROX involving a Bombardier Dash 8 and two Royal Navy Sea Harriers, on 22 April 2002, that called for a high level review by the CAA and MOD into the concurrent use of unregulated airspace in the North East of the UK, with the aim of eliminating AIRPROX and potential collisions between CAT and military aircraft. The Team considered a wide range of issues including: policy considerations; Airline operating procedures; the provision of Air Traffic Services (ATS); incident statistics; consideration of the previous measures put in place to mitigate that risk; predicted future activity trends; and the wider assessment of risks outside CAS, remembering that there has been no CAT collision outside CAS since 1949.

NEAT FINDINGS AND ENDORSEMENT

2. The Team reached unanimously six principal recommendations, which have been endorsed by the CAA and the MOD, and these are set out below together with the agreed Action Plan. Specifically, in addressing the AAIB's

recommendation, the Review concluded that it was not possible to eliminate AIRPROX between CAT and military aircraft, or any other class of aircraft, whilst they were permitted to share the same airspace at the same time. While, within the NEAT findings, there was nothing to suggest that risk levels for CAT operations in Class G airspace were increasing, the team concluded that risk should continue to be mitigated to the greatest extent possible. Although much has already been done to reduce risk, the planned Review follow-up Action Plan is structured to produce further significant incremental safety benefits.

3. In Spring 2000, the CAA and the MOD initiated a number of localised complementary activities to reduce the risk of collisions in the Newcastle area. Initiatives included increased liaison between users and ANSPs, mandating of SSR operation for military aircraft, redesign/reclassification of airspace, mandatory radio calls and the implementation of buffer policies. These initiatives have contributed significantly towards local awareness and we have received positive feedback from the Newcastle ATS Manager that these initiatives have increased flight safety in the area.

NEAT RECOMMENDATIONS

4. **Recommendation 1.** The first recommendation from the NEAT Review called for a joint CAA/MOD study to be undertaken to identify Advisory Routes (ADRs) and Helicopter Main Routes (HMRs) that warrant being upgraded in terms of airspace classification. A preliminary review of ADRs was completed in June 2004 and this work will now be completed under the sponsorship of the CAA Outside Controlled Airspace Steering Group (COCASG), ensuring appropriate consultation with all relevant stakeholders is conducted. A full review of HMRs will also be carried out by the CAA, under the guidance of the COCASG, with full stakeholder consultation.

5. **Recommendation 2.** Secondly, the NEAT Review recommended that all FJ military aircraft, and any CAT not covered by the Airborne Collision Avoidance System (ACAS) II mandate, should be fitted with a Collision Warning System (CWS) capability wherever technically possible. Currently, the majority of CAT operators, which fly outside CAS, have ACASII and the MOD has secured funding for the fitment of CWS to some of its FJ fleets and is continuing to seek viable technical solutions for the integration of such equipment into the complex avionics suites of current and future military aircraft. The CAA intends to mandate the carriage of Mode S transponders by all aircraft in 2008 although some non-Mode S equipped flying activity will continue beyond this date with, for example, the MOD operating a dispensation until 31 March 2009. Clearly, the mandated carriage of Mode S combined with CWS/ACAS will have considerable safety benefit and further reduce the potential risks of collisions. The COCASG will monitor CWS developments and associated procedures.

6. **Recommendation 3.** The Review also recommended that Joint Air Navigation Services Council (JANSC) should discuss the provision of Air Traffic Services Outside Controlled Airspace (ATSOCAS) with the aim of ensuring that Radar Advisory Service (RAS) is available on an agreed basis from MOD and NATS Air Traffic Service Units (ATSUs), subject to normal constraints (as listed in the Manual of Air Traffic Services Part 1 and the Joint Services Publication 552), throughout radar cover in accordance with the CAA Policy Statement – Flights Outside Controlled Airspace. The CAA has already initiated a review of ATSOCAS to re-define customer requirements and to ensure that service delivery reflects the demand. Additionally there are a number of key issues regarding the provision of RAS that will need to be addressed by the service providers and regulators. The NATS Licence Management Coordination Committee (NLMCC) will be tasked with considering an appropriate amendment to the NATS En Route Limited (NERL) Licence to place an obligation on the Licensee to meet the customer demand for RAS. The JANSC will then consider how best to implement the obligations contained in any such amendment to the NERL License. Concurrent work will be carried out by COCASG in order to address service delivery with all

providers of ATSOCAS through the ongoing ATSOCAS Review. SRG and the CAA Legal Division will examine the legal issues pertaining to “Duty of Care” associated with the provision of ATSOCAS, particularly with regard to RAS. Additionally, COCASG will develop a PR policy to address controller fears/perceptions about ATSOCAS.

7. **Recommendation 4.** The fourth recommendation made by the NEAT Review was for a programme of education and training for pilots flying in Class G to be undertaken. It recommended that the Safety Regulation Group (SRG) (through liaison with the Defence Aviation Safety Centre and the UK Flight Safety Committee) should develop a reliable mechanism to bring these lessons to the attention of all pilots. To the same end, the Operating Standards Division (OSD) of SRG should chair a joint civil/military group to determine “best practice” for pilots operating in Class F and G airspace. This recommendation was fully supported; additionally, COCASG will coordinate the development of more formal links between Air Navigation Service Providers (ANSPs) and aircraft operators.

8. **Recommendation 5.** NEAT recommendation number five was for enhanced civil/military liaison procedures to be introduced at civilian airports when anticipated traffic loadings from military exercises indicate this to be warranted. Activity regarding this recommendation will be coordinated by COCASG with MOD cooperation.

9. **Recommendation 6.** The NEAT Review final recommendation was for the creation of a standing CAA/MOD/General Aviation (GA) Steering Group to monitor the implementation of the NEAT recommendations and to monitor future trends/events. It has been agreed that the COCASG is the most appropriate body to take this work forward and the MOD seconded personnel within the Directorate of Airspace Policy (DAP) will be in a position to provide the requisite military input.

CONCLUSION

10. The NEAT found no evidence to suggest that CAT operations outside CAS were not tolerably safe but concluded that risk should continue to be mitigated to the greatest extent possible. The Review produced a number of recommendations that will be implemented through a joint Action Plan that is being afforded high priority and is directed at producing proportionate, incremental safety improvements.

ACTION PLAN

11. The following joint Action Plan, which addresses all of the recommendations made by the NEAT Review, also includes work that has been set in train by the Group Director Safety Regulation (GDSR) to review the data relating to safety risk and to assess safety risk associated with CAT operations outside of CAS. The lead on all actions will be undertaken by the CAA with appropriate MOD involvement being agreed on a case-by-case basis.

ACTION PLAN TO MITIGATE RISK TO CAT OUTSIDE OF CAS

Ser No	Action	Target Date
1	Review and, where possible, assess available data relating to the safety risk associated with Commercial Air Transport Operations Outside of CAS <ul style="list-style-type: none"> • Produce Interim Report • Produce Final Report 	31 July 05 31 Oct 05
2	Review and, where possible, assess the safety risk associated with Commercial Air Transport Operations Outside of CAS <ul style="list-style-type: none"> • Produce Interim Report • Produce Final Report 	31 Aug 05 30 Nov 05
3	Review ADRs and commence process for removal/re-categorisation <ul style="list-style-type: none"> • Produce Report • Implement changes following airspace change process 	31 Oct 05 30 Apr 06
4	Review HMRs and North Sea helicopter activity <ul style="list-style-type: none"> • Produce Report • Implement changes following airspace change process 	31 Oct 05 30 Apr 06
5	Monitor development of CWS. Consider mandate for CAT which falls outside of ACASII criteria	Ongoing
6	Consider NERL Licence amendment to 'mandate' provision RAS if requested by pilot	31 Jul 05
7	Consider implementation of an amended NERL Licence including discussions with NATS	31 Oct 05
8	Address service delivery with all providers of ATSOCAS through the on-going ATSOCAS Review	31 Dec 05
9	Examine legal issues pertaining to "Duty of Care"	30 Sep 05
10	Develop, and propose to the Board, a process to address controller fears/perceptions about ATSOCAS	31 Dec 05
11	Consider process to better educate civilian pilots about flight outside of CAS	31 Dec 05
12	Consider enhancements to civil/military liaison outside of CAS	31 Dec 05
13	Report to CAA Board on progress at 6-monthly intervals	6-monthly from Oct 05

