

UK AIRPROX BOARD : TERMS OF REFERENCE

and

GUIDANCE FOR MEMBERS, ADVISORS and OBSERVERS

General

1. The stated purpose of the UK Airprox Board (UKAB) is: “To investigate, assess and report the circumstances, causes and risk of collision for all Airprox occurrences in UK’s airspace; communicate its findings, lessons identified and associated recommendations to relevant sections of the UK aviation regulatory and operating organisations and the broader aviation communities; and champion an understanding of Airprox causes, airborne conflict and mid-air collision risks by tracking and following-up Airprox recommendations and associated issues”.¹
2. Airprox occurrences are near accidents. ICAO Doc 4444: PANS-ATM provides the definition of an Airprox as: “A situation in which, in the opinion of a pilot or a controller, the distance between aircraft, as well as their relative positions and speed, was such that the safety of the aircraft involved was, or may have been, compromised.
3. The sole objective of the UK Airprox Board (UKAB) is to enhance air safety in the UK through the avoidance of airborne conflict and mid-air collisions by providing a mechanism for the feedback and follow-up of Airprox-related insights and recommendations regarding the efficacy of airspace regulation and the factors that have influenced the performance of pilots and controllers within UK airspace.
4. It is a fundamental tenet of the UKAB that the Board never apports blame or liability. In order to encourage an open and honest reporting environment, all reports are disidentified, and the names of companies or individuals are neither released nor published, not even to the Board members.
5. UKAB has no statutory powers: its authority depends upon the professional respect in which it is held. Thoroughness, technical accuracy, timeliness and impartiality are critical success factors in the overall Airprox assessment process. Also of critical importance is communication of investigation outcomes with all parties involved in an Airprox event and, in disidentified form, with the wider aviation community.
6. To emphasise both the scope of its work and its independence, UKAB is sponsored jointly and funded equally by the Civil Aviation Authority (CAA) and the Military Aviation Authority (MAA). Notwithstanding this joint stakeholder arrangement, and although Director UKAB reports Airprox outcomes and issues directly to Chief Executive Officer CAA and Director General MAA, the UKAB conducts Airprox investigations and reporting as a quasi-independent endeavour beyond their day-to-day oversight.

¹ As stated in the UK Airprox Board Business Plan and Concept of Operations which can be found at: <http://www.airproxboard.org.uk/default.aspx?catid=423&pagetype=90&pageid=1558>

Constitution

7. The UKAB comprises three elements: fourteen highly experienced civilian and military aviator and controller voting members of the Airprox assessment Panel, 'The Board' (Chaired by Director UKAB); a collective of airspace and flight operations subject-matter expert (SME) advisors; and the Secretariat (currently comprising three Airprox Inspectors and three Administrative Staff). In investigating the circumstances of Airprox, the UKAB draws on the resources of the CAA Safety and Airspace Regulation Group (SARG) – principally their Flight Operations staff and the Air Traffic Standards Inspectorate; the military Radar Analysis Cell (RAC) at NATS Swanwick; and relevant Military HQs and their associated Air Safety organisations.
8. Board members are drawn from a mixed complement of 14 civil and military disciplines (see Appendix A). Members are invited to join the Board by Director UKAB. There is no formal period of appointment but civilian members are expected to serve ideally for at least three years to ensure continuity. It is accepted that military Members may not be able to achieve this objective.
9. Board members are selected for acknowledged expertise in their particular field of aviation experience. Members are, in general, nominated by civil/military organisations but sit as experts in their own right as opposed to representing any group or organisation.
10. SME advisors are called on by the Chairman to provide expert advice on their particular specialisation. Advisors from areas such as CAA Air Traffic Services Investigations; Military ATC Operations and the MAA attend the Board routinely whilst others (eg from HQ USAFE-UK) will come as and when their specialist knowledge is required.
11. Advisors are encouraged to contribute to the discussion of an incident and to correct matters of fact. However, SME advisors do not vote on the Cause or Risk assessments.
12. Up to 4 observers may attend Board meetings, subject to the prior agreement of the Chairman.
13. New members, advisors and observers will be personally briefed by the Chairman prior to their first attendance at the Board.

The Airprox Board : Process and Preparations

14. The *modus operandi* of the UKAB is to convene an assessment panel on a monthly basis to examine the circumstances surrounding each reported Airprox; review and assess what took place, and then ensure that lessons are identified and disseminated to facilitate improvements in air safety.
15. The process begins when an Airprox report is raised by either a pilot or a controller, civil or military, within UK airspace. Airprox are normally notified to the Secretariat by one of three methods: civil/commercial notifications are submitted through the CAA Mandatory Occurrence Reporting (MOR) scheme; military notifications are submitted through the MOD's mandatory Defence Aviation Safety Occurrence Reporting (DASOR) system; and GA notifications

are submitted voluntarily using CAA Airprox form CA1094. A formal investigation is then undertaken. When complete, the Secretariat prepares casework on each Airprox for presentation to the Panel on a monthly basis; this is termed the 'Part A', which comprises a factual consolidation of: a summary of the participants' submissions; a précis of the key elements of any external investigation reports; and any comments, if appropriate, from the associated aircraft operating authorities or associations.

16. At least one week prior to a Board meeting, members and advisors are sent an agenda by e-mail which comprises the Part A case-summaries for those Airprox to be assessed. This package is intended for self-briefing. The Panel then meets to assess the Part A to determine two things: a) what factor(s) caused the Airprox; and b) the risk of collision.
17. With the Panel having agreed a cause and risk during the Board meeting, the Secretariat then prepares a written record of relevant points from the Panel's deliberations (the 'Part B'), and a formal declaration of the cause and risk (the 'Part C').
18. In parallel, any recommendations that may have been made by the Board are compiled into targeted letters that are sent to relevant agencies or individuals inviting them to acknowledge and address the Board's recommendations: associated responses are tracked by the UKAB Secretariat to ensure that recommendations are either accepted and resolved or, if declined, the reason for rejection is noted for future reference.
19. Experience has shown that in some cases the facts established during the investigation phase are straightforward, clear-cut and undisputed. In such cases, the Secretariat will propose to the Board that the report be 'Fast Tracked'. The Secretariat will add to the investigation report such key points as it is felt that members will wish to see made in the final report. In addition, the Secretariat will draft a 'cause' and propose a 'risk rating'. If the Board agrees with the proposal to 'Fast Track' the subject Airprox, the Chairman will ensure that the report is handled properly and in a timely way. 'Fast Tracking' an Airprox is intended to minimise the discussion at the Board meeting, thereby leaving more time for the more complex occurrences.
20. However, the majority of Airprox occurrences require discussion by the Board to explore all of the circumstances and factors. Indeed, it is the discussion phase between so many experts that ensures that all aspects are properly considered and their importance weighted appropriately. Arguably, this is one of the greatest strengths of the Airprox Board. The reports are individually discussed after a brief introduction by the relevant inspector to refresh members and advisors on the circumstances. These brief introductions cannot cover the detail of the casework and it is essential that members and advisors familiarise themselves with the reports prior to the meeting.
21. Members are expected to:
 - a. Regularly attend Board meetings at the Force Development Centre, RAF Northolt, HA4 6NG. Depending on complexity, 20-25 Airprox are assessed during each session and, in order to ensure proper

consideration of all incidents, members are expected to attend the full meeting, nominally from 0900hrs to 1700hrs.

- b. Bring to bear experience and knowledge as dictated by each incident to stimulate constructive debate on what happened and why events took the particular sequence that led to the Airprox.
- c. Participate in making findings on the primary cause of each incident together with any contributory factor(s).
- d. Participate in determining the degree of risk involved under one of five ICAO classifications:

A. Risk of collision	An actual risk of collision existed.
B. Safety not assured	The safety of the aircraft was compromised.
C. No risk of collision	No risk of collision existed.
D. Risk not determined	Insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.
E. Non-event	Met the criteria for reporting but, by analysis, it was determined that normal procedures, safety standards and parameters pertained.

Further practical guidance on deciding cause and risk is published within 'UKAB Guidelines on Cause and Risk'.

- e. Assist in identifying lessons that need to be highlighted for further dissemination.
 - f. Propose Safety Recommendations where the Board considers that changes in procedures, techniques or equipment would bring improvements in air safety.
22. Should opinion be divided on cause or risk classification, opposing views, together with supporting arguments, will be recorded in the text of the final report.
23. From time to time, the Board may be split on its assessment of cause and risk and the Chairman may decide to resolve an issue by taking a vote of those present at the Board. Notwithstanding that any given discipline represented may have more than one member, each of the 14 disciplines has only one vote. The Chairman has a casting vote in the event of a tied decision.

Confidentiality

24. Board meetings are, in general, held under 'Chatham House' rules whereby discussions and opinions may not be repeated or attributed outside the Board other than in general terms. Furthermore, members may on occasion be presented with additional information, given in confidence, regarding an

incident: such information is to be treated with strictest confidentiality, under no circumstance being used by members outside the confines of the meeting. Finally, in accepting nomination to the Board, individuals undertake to treat the contents of the agenda and associated report material or other products as sensitive and privileged pre-publication information that is for their eyes only and not to be passed on to other individuals or agencies.

Post Meeting Procedures

25. Following each meeting, the Secretariat sends the Board members a summary sheet of the meeting's outcomes and then prepares the finalised Parts A, B and C for each Airprox. These draft reports are then sent to Board members for review for any errors or misrepresentations. In parallel, a copy of each draft report is also sent to the individuals concerned, and to any of the relevant participating agencies, so that they can see at first hand the outcome of their encounter and respond regarding any factual errors or misunderstandings. The Secretariat will willingly correct any such factual errors, but will not enter into negotiation on causes and risk simply because they may be unpalatable to those involved (save for when a cause or risk assessment has been based on factually incorrect information, when relevant Board members will be contacted to confirm any changes). If warranted by exceptional new information, the case may be drawn again to the Board's attention for review. The Chairman will decide the appropriate course of action in consultation with the relevant UKAB Inspector.
26. Board members and those involved in the Airprox have ten working days to submit any requests for changes to the draft report. The Chairman will then seek any final comments at the subsequent Board meeting after which, normally the Friday following, the reports will be finalised, placed on the UKAB website(at www.airproxboard.org.uk), and the CAA Communications team will highlight their presence to interested media agencies.

Publications

27. Within 10 days of the Board meeting, the Director compiles a report for CEO CAA and Dir MAA (with information copies to relevant stakeholders) that provides a précis of each Airprox assessed, offers comments, and reviews the progress of Airprox investigations and recommendation tracking. These reports are also sent to Board members for their information.
28. In addition, the Director also prepares an annual statistical trend analysis of Airprox that occurred in the preceding year. Referred to as the 'Blue Book' for historical reasons when the analysis was distributed in hard copy, this annual report is now placed on the UKAB website for general access. Supplemental to this, an annual 'Airprox Magazine' is also compiled in August for distribution to flying clubs and ATC organisations, which contains articles of interest based on the previous year's reports and themes.

Appendix A

The Disciplines from which UKAB Members are drawn

			Discipline:	Nominated by:
1	Civil	ATCO:	Airfield	AOA; GATCO; NATS - as appropriate
2		ATCO:	Area	
3		ATCO:	Terminal	
4		Pilot	CAT – Fixed Wing	BALPA; BATA; BBGA; BHAB; HCAP - as appropriate
5		Pilot	CAT – Fixed Wing	
6		Pilot	CAT – Rotary Wing	
7		Pilot	Gliding	BGA
8		Pilot	General Aviation	AOPA; GASCo - as appropriate
9	Military	ATCO:	RAF Area	HQ AIR
10		ATCO:	RAF Airfield	HQ AIR
11		ATCO:	RN Operations	NAVY HQ
12		Pilot	RAF Operations	HQ AIR
13		Pilot	RAF Training	HQ AIR
14		Pilot	Rotary Wing	HQ JHC