UKAB STRATEGY 2023-2027

The United Kingdom Airprox Board (UKAB) has existed for many years and in its current form since 1998. It is an organisation charged with the analysis of incidents in UK airspace where it has been reported that the distance between 2 aircraft, as well as their relative positions and speed, have been such that the safety of the aircraft involved may have been compromised. As a signatory to the 1944 Chicago Convention (the formulation of the International Civil Aviation Organisation), and specifically Annex 13 of the Convention, the United Kingdom is required to establish a system for the reporting and investigation of Airprox – the UKAB satisfies this requirement.

Airprox are reported to the UKAB via the CAA's Mandatory Occurrence Report (MOR) scheme, Defence Air Safety Occurrence Reports (DASOR) or directly via UKAB-specific reporting forms on the UKAB website and App. Since 2017, the UKAB has seen a steady increase in the number of reports submitted, to the extent that the ability of the UK Airprox Board to process, assess and evaluate these reports is close to capacity. This strategy will outline measures intended to arrest this increase in reporting and, by extension, increase aviation safety because fewer Airprox events will be occurring.

The UKAB's Vision is:

UK skies are free of the risk of mid-air collision.

The Mission of the UKAB is:

To continuously reduce the risk of mid-air collision in the UK through sharing the analysis of airborne near-miss events and the identification and promotion of safety improvements with stakeholders, such that risk-reduction measures can be implemented by those stakeholders.

The purpose of the UKAB is:

To enhance Air Safety by increasing awareness of factors contributing to Airprox, with the objective of contributing to a reduction in the number of airborne conflict and mid-air collision events in UK airspace.

The aims of the UKAB are:

1. To analyse, assess and report the circumstances, contributory factors and risk of collision for all reported Airprox occurrences in UK's airspace, maintaining a consistent and transparent approach at all times.

2. Produce evidence-based, high-quality reports from the best information available to the UKAB at the time of publication.

3. Identify pertinent lessons from individual Airprox events and, where necessary, make Safety Recommendations – tracking their progress to a satisfactory conclusion – to minimise the likelihood of recurrence.

4. Identify common characteristics across Airprox events, including evidence of best practice, and communicate these findings to relevant stakeholders across the aviation community.

5. Maintain and build upon the professional reputation of the UKAB and champion an understanding of factors that contribute to Airprox, airborne conflict and mid-air collision risks.

Overview

1. Historically, the UKAB has processed circa 200 aircraft-to-aircraft reports each year since 2018 (accounting for the effect of the COVID restrictions in place in 2020). This figure is above the Secretariat's normal capacity to prepare reports for assessment by the Board, and close to the Board's capacity to fully evaluate each case. Therefore, action is required to increase the Secretariat's capacity to prepare reports, increase the Board's capacity to evaluate reports and to contribute to a decline of the growth in Airprox reports.

2. Because the aim of this strategy is to contribute to a reduction in the number of Airprox incidents in UK Airspace – measured through a reduction in the number of Airprox reports received – and consequently enhance Air Safety, it will take at least 2-3 years to see the benefits of increased stakeholder engagement and education. The timeline of this strategy is at Figure 1 below:

							<u>UK</u>	AB TAS	K/RES	OURCE	TIME	LINE							
	FY 202	23-2024			FY 202	4-2025			FY 202	5-2026		Ĭ	FY 202	6-2027		Ì	FY 202	7-2028	
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Add Inspe	xtor	Add Admi																	N
E2 SME	Tra	ansition to B	CCAIRS 2	5		Big Data	project pr	ovides ana	lysis capabi	ility		1							
Data rec		l analysis th	4	ting MS Of	fice tools		\sim												
Director	engageme	ent through	forums an	l d normal r	neeting rhy	/thm, incre	asing as ca	II pacity peri	mits			1							
		Insp	pector enga	gement w	ith Genera	l Aviation s	ector, thro	ugh visits	to flying clu	bs etc									
	Expand information available on website and App to assist in self-education of aviation sectors																		
							Review	impact of i	ncreased e	ducation ar	nd adjust if	necessary							

Figure 1 – Strategy timeline.

3. Year 1 (FY 23/24):

a. Funding has been secured for an additional Inspector to increase the Secretariat's capacity to prepare reports for the Board to evaluate. Furthermore, additional administrative resource has also been agreed conditional on a continued increase in reporting.

b. Board capacity will be increased through Secretariat evaluation of all Airprox cases assessed (by the Secretariat) to be a Risk Category of D (insufficient information) or E (normal safety parameters pertained). Full reports will be generated for <u>approval</u> by the Board at the monthly Board meeting, but these will not be discussed unless any Board member challenges with the Secretariat's evaluation.

c. The Secretariat will 'surge' its preparation of reports to ensure that a minimum of 18 reports are presented to the Board each month for evaluation. Any reports that are assessed by the Secretariat as Risk Category D or E at pre-Boarding will be included in the agenda but are not for discussion and will be, where possible, in addition to the 18 reports presented for evaluation by the Board.

d. Data repository will transfer to ECCAIRS 2. Dedicated resource is required to manage the migration of existing records into the new database and to ensure that ECCAIRS 2 UKAB 'Instance' is fit-for-purpose. At inception, ECCAIRS 2 will not satisfy the requirement to conduct analysis on the data held; this is intended to be addressed through the Big Data project. Pending delivery of a means for data analysis, Director UKAB will continue to manage existing Microsoft spreadsheets and analysis tools.

e. Director UKAB will continue to engage with stakeholders through appropriate forums and, where capacity exists, through one-off briefings to those sectors that request it or where Director UKAB identifies a specific need.

f. Once report processing delays fall back within KPIs, the number of reports prepared each month for evaluation will be reduced ('surge' will cease), thus generating capacity within the Inspector cadre for activity other than report preparation.

g. Dependant on report workload, Inspectors will conduct face-to-face briefings to stakeholders, thus increasing the outreach capacity of the UKAB Secretariat. These briefings will highlight the analysis conducted by the UKAB into weaknesses in the barriers to mid-air collision.

h. The CAA is developing a Customer Experience and Modernisation (CX&M) project. Director UKAB will engage with the CX&M project team to identify areas where there may be mutual benefit, noting that UKAB requirements are initially likely to be of lower priority to the project.

4. Year 2 (FY 24/25):

i. Expansion of information available on the UKAB website and App to facilitate the self-education of stakeholders.

j. Introduction of analysis tools from the Big Data project. After a period of parallel data management, using the existing Microsoft spreadsheets and analysis tools, transition to alternative analysis tools will take place. This is scheduled to occur after the UKAB 2023 Annual Report has been produced.

k. Continued engagement with stakeholders aimed at education, leading to an increased understanding of factors contributing to Airprox such that stakeholders can take informed decisions on how they manage their own mid-air collision risk. This should lead to a reduction in the number of Airprox reports submitted to the UKAB, though there are many factors that influence safety reporting and so a reduction in numbers cannot be guaranteed.

I. A review of the effectiveness of this strategy will be continuously conducted to ensure that desired effects are being achieved.

5. This strategy of Airprox reduction through education will continue into subsequent years as a continual process aimed at keeping the number of reported Airprox to as few as possible.

KPIs and Measures

Current agreed KPIs and measures are as follows:

		Key Performance Indicators	Measures
1.	Airprox Evaluation and Reporting	50% of All Airprox notifications are processed and evaluated within 4.5 months of the original notification	Conduct monthly Airprox Board meetings (apart from August when no meeting is scheduled)
		Make safety recommendations where appropriate and track their	Maintain input to the ECCAIRS/ECCAIRS2 database and 'in house' tools which

		outcomes on a 12-month rolling basis	facilitate the analysis of Airprox data
2.	Promote and Enhance Air Safety	Prepare and publish formal dis-identified findings and reports for each Airprox.	Yearly report prepared on Airprox trends and themes within 4 months of the last incident of that year being published
			Monthly report to key CAA Directors and senior leaders, DMAA and UKAB Stakeholders prepared summarising board output and presenting initial analysis on building and emerging trends
			Monitor feedback and tailor output if within resource to do so

3. Stakeholder Engagement	Conduct quality control including updates	Presenting to business-critical forums, including: CHIRP/UKFSC/MACCG/MACSG/ MOC/GASCo/LBWG/NATMAC/ RAUWG
	Airprox data set (catalogue) to be uploaded and checked by last day of relevant month	Airprox website and App updated with current data and current publications (including the annual report) and statistics
	Issue monthly INSIGHTS (2- page article) to highlight one Airprox from previous month's Board meeting	
	Issue annual Minimag – contains 5-10 preceding INSIGHTS plus a themed article – digestible annual report for the community	

4. Governance and Funding	UKAB expenditure tracked monthly and maintained within year-end forecast parameters	Governance meetings are held twice per year (Q4 and Q2) between the Director MAA, COO CAA and the Director UKAB. The MOU is reviewed in Q4 every two years (Q4:2020/21;22/23;24/25 etc)			
		UKAB Operating procedures are reviewed and updated to ensure alignment with MOU. (Q1:2021/22;23/24 etc)			
		Annual Budget reviewed and agreed annually in the Q4 governance meeting			

Risks

1. Reporting levels remain at, or increase beyond, those seen in CY 2022, leading to Inspector resource having to be allocated to report preparation rather than delivering education aimed at increased stakeholder awareness of factors contributing to Airprox. Resourcing levels match demand in FY 2023/2024 but may be reduced in subsequent years or prove inadequate should reporting levels increase.

2. The CAA and/or MAA withdraw funding for UKAB, leading to an inability to assess Airprox events and analyse the Board output.

3. Requests for resource to execute the education element of the strategy (as assessed on a year-by-year basis) are not supported by the CAA and/or MAA, i.e. resourcing levels no longer match demand.

4. Education does not lead to a reduced number of reported Airprox, and numbers remain at 2022 levels or continue to rise in line with historic norms (~10%/year).

5. Increased awareness of the Airprox process may lead to increased reporting from sectors that historically submit few Airprox reports.

Delivery Model

1. The CAA and MAA have agreed the resourcing arrangements to meet this strategy – an organisational chart is at Annex A.

Annex A to UKAB Strategy 2023-2027 UKAB Organisational Chart

