PLEASE DO NOT REMOVE June 2019

UKAB FINDINGS ON CONTRIBUTORY FACTORS AND RISK - GUIDELINES

1. The purpose of these simple UKAB guidelines is to promote consistency when arguments are being marshalled to determine 'contributory factors' and 'risk'.

2. The value of our process rests in the discussions we have during meetings, which provide a broad range of perspectives that almost always open up areas that we hadn't considered beforehand. During these discussions, the inspectors and I will track the debates we have and then, at the end, I will present to you our thoughts on the selection of contributory factors from a 'pick-sheet'[1] which you can then challenge, accept, or modify as appropriate. Other than for the see-and-avoid barrier,[2] it is only by exception that we include contributory factors for fully-effective barriers - if the barrier was fully effective then it played its part as well as can be expected and, unless there is a particularly pertinent influence, will not usually attract a qualifying 'contributory factor'.

3. Many circumstances can and do surround Airprox incidents, but it is in the context of see-and-avoid that most guidance is required regarding the choice of contributory factors. There are 3 broad scenarios that cover most ***see-and-avoid*** situations:

3.1. One or both of the pilots sees and avoids the other aircraft as early as prevailing circumstances permit.

Contributory Factor: A conflict in the FIR

3.2. One or both pilots do not see the other (when an earlier sighting could reasonably have been expected) until late, not at all, or too late to increase separation at CPA.

Contributory Factor: Late-sighting or non-sighting by one or both pilots

3.3. One pilot (A) sees the other aircraft and considers that safety was not compromised but the other pilot (B) thinks otherwise.

Contributory Factor: Sighting report (if we think that the situation was entirely benign).

or

Contributory Factor: Pilot (B) was concerned by the proximity of the other aircraft (A) (if we think that A was conducting himself with due care and regard but B's risk appetite caused him to be concerned)

or

Contributory Factor: Pilot (A) flew close enough to cause the other pilot (B) concern (if we think that A should have done more to avoid B)

or

Contributory Factor: Pilot (A) flew into conflict (if we think that A knowingly flew towards B)

---

[1] Laminated copies of the 'pick sheet' are available, and the list is also appended to the Agenda pack.
[2] The see-and-avoid barrier can be fully effective even if only one pilot sees the other aircraft and so, in order to improve the quality of analysis, we generally provide an indication of this barrier's contributory factors even when fully effective.

4. Although the nature of the assessment process requires you to bring to bear your own judgement, the determination of *contributory factors* must be as objective as possible. To this end, analysis must adhere to the facts of the case (i.e. what actually took place). Multiple *contributory factors* may of course be identified where appropriate but, in isolating the reasons for an Airprox, all *contributory factor* statements must have a direct link to the outcome.

5. Similar treatment should be applied to the determination of *risk.* When doing so, there is no room for speculation on what might have happened if such-and-such had also happened. Stick rigidly to what did happen and don't speculate on the potential for something worse or better to transpire from a situation - although you will often be encouraged to do so by those involved in an incident. The assessment is purely ***risk of collision***, not ***risk from collision*** (i.e. what the consequences might have been had the aircraft collided).

As a guide:

ICAO 4444 PANS-ATM AIRPROX risk classification	UKAB Collision Risk descriptor and guideline word picture
Category A **Risk of Collision**: aircraft proximity in which serious risk of collision has existed.	**Providence – serious risk of collision**. Situations where separation was reduced to the bare minimum and/or which only stopped short of an actual collision because providence played a major part in events. The pilots were either unaware of the other aircraft or did not/could not make any inputs in time to materially improve matters.
Category B **Safety not assured**: aircraft proximity in which the safety of the aircraft may have been compromised.	**Safety much reduced/safety not assured – risk of collision.** Situations where aircraft proximity resulted in safety margins being much reduced below the norm through either chance, misjudgement or inaction; or where emergency avoiding action that materially increased separation and averted a likely collision was only taken at the last minute.
Category C **No risk of collision**: aircraft proximity in which no risk of collision has existed or risk was averted.	**Safety degraded – no risk of collision**. Situations where safety was degraded but either fortuitous circumstances or early enough sighting, information or action allowed one or both of the pilots to either simply monitor the situation or take timely and effective avoiding action to prevent the aircraft from coming into close proximity.
Category D **Risk not determined**: aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.	**Non-assessable – insufficient, inconclusive or irresolvable information**. Situations where insufficient information was available to determine the risk involved, or inconclusive/conflicting evidence precluded such determination.
Category E[3] **Non-proximate**: a sighting report of another aircraft where there was no risk of collision and no degradation of safety.	**Normal safety standards and parameters – no risk of collision**. Situations that met the criteria for reporting but where, after analysis, the occurrence was assessed to be benign and where normal procedures, safety standards and parameters were considered to have pertained.

[3] Not an ICAO risk classification: introduced by UKAB in 2011 to differentiate events where there was no risk of collision and safety was not degraded from those where there was no risk of collision but safety was degraded (Category C).