

Report of the Surveillance Panel Representative

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SUMMARY

Only one meeting was attended this year, the one of the AIRB group held in Montreal between the 12 and the 14 March. This report focuses on the discussions held during such meeting.

1. INTRODUCTION

- 1.1. Among the ICAO panels where IFATCA has a presence, there is a Surveillance Panel which deals with everything related to surveillance systems: radar, ADS-B, multilateration, etc.
- 1.2. The Surveillance Panel has several working groups with different levels of interest for IFATCA. The two main groups are the Aeronautical Surveillance Working Group (ASWG) and the Airborne Surveillance Working Group (AIRB WG). There are also some subgroups like the Technical Sub-Group (TSG) or the Performance-Based Surveillance Sub-Group (PBSSG).
- 1.3. Much of the scope of these groups is of a highly technical nature being the AIRB the group with an activity closest to the operations. Traditionally, IFATCA has kept an eye in both ASWG and AIRB.

2. DISCUSSION

- 2.1. The always increasing activity of IFATCA and the subsequent financial stress has led to the need of picking carefully the meetings to attend. The usual attendance to a 5 days ASWG meeting followed by a 3 days AIRB meeting was considered too expensive. Therefore, a priority criterion had to be applied in order to decide what meetings to attend.
- 2.2. Subjects in ASWG are of great interest for the industry and for sure they have an impact in the way our surveillance systems work but they are usually far away of operations and therefore the potential contribution of operational controllers is limited. In view of this, no meeting of this group was attended.

- 2.3. The documents discussed in the meetings are available, anyway so the most important issues for the panel can still be known. The issues of congestion in 1030 and 1090 MHz frequencies are as always present and now the ASWG is highly focused in the issue of compatibility with LDACS.
- 2.4. LDACS (L-band Digital Aeronautical Communication System) is being tested at present and could become operational in a relatively recent future, but L-band (1 to 2 GHz) is the one where SSR operates. A good deal of the ASWG papers deal with this subject.
- 2.5. Reduction of congestion in 1090 MHz is behind other concepts like hybrid surveillance which puts together radar and ADS-B. In view of the issues with ADS-B due to GNSS spoofing this concept could bring unexpected issues. Anyhow, as controllers, the peculiarities of the surveillance system are out of our scope being our interest to have a reliable system with no care for the way the reliability is achieved. The papers are nonetheless at our disposal.
- 2.6. AIRB deals with onboard applications of surveillance, with means ADS-B IN. Our interest in the concept of Interval Management (IM) led to my participation in the AIRB/19 meeting held in Montreal 12 to 14 March 2025.
- 2.7. IM intends to use ADS-B IN to achieve a defined separation between pairs of aircraft. If two aircraft are going to fly over a given waypoint (WP), the first one can be defined by the controller as the target aircraft and a clearance can be issued to the second aircraft to cross the WP at a given distance after the target. Other way to use it is with two aircraft flying the same route: the second aircraft can receive an instruction to maintain a given distance or time behind the first one. This second option is expected to reduce the controller's workload in the arrival segment of flight because the controller wouldn't need to issue frequent speed instructions that are, instead, provided by the system to the second aircraft of the pair.
- 2.8. Trials of this concept are being carried in the USA, so the AIRB meeting have always been the proper place to gather information about IM. So far, in my experience, the USA has been the most active member of the Panel with four, five or even more representatives present in every meeting but for the first time not a single representative of the FAA attended! It seems that the isolationist policy of the new American administration or the budget cuts of the same administration or most probably both are taking the USA out of ICAO activity. Two questions arise: will this policy be just temporary? And who will take the lead now?
- 2.9. There were nonetheless mentions to IM but no real new information except for the fact that apparently there is interest in the Netherlands about this concept and its possible implementation.
- 2.10. Something that can be also of interest from a controller's point of view is the information in one of the papers about the DAA (detect and avoid) experiments carried out in Japan. The idea behind them is to reduce the risk of collision

between drones and general aviation aircraft using a system based on primary radar.

- 2.11. Finally, a paper proposed a modification in doc 9994 to include SURF-A, a system developed to alert the pilot in case of a runway incursion.

3. CONCLUSION

- 3.1. IFATCA continues to be present in the SP with participation in the AIRB group.
- 3.2. Congestion in the radar frequencies is as usual an issue with technical proposals to mitigate it being discussed.
- 3.3. Interval Management could be applied out of the USA in The Netherlands. Not much information on this subject was gathered due to the absence on American representatives.
- 3.4. SURF-A, a safety net against runway incursions, could be included soon in ICAO documentation.
- 3.5. The absence of FAA representatives in the meeting raises questions about future leadership in this panel or even in ICAO.

4. RECOMMENDATIONS

- 4.1. This report is accepted as information material.

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