



ICAO

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**The 8th Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG) Monitoring
Agency Working Group (MAWG/8)**

Video Teleconference, 1 – 4 February 2021

Agenda Item 4: EMA/RMA Safety Monitoring

ANALYSIS OF CATEGORY A AND B OCCURRENCES IN THE BRISBANE, HONIARA, MELBOURNE, NAURU, AND PORT MORESBY FLIGHT INFORMATION REGIONS 1 JANUARY 2020 TO 31 DECEMBER 2020

(Presented by AAMA)

SUMMARY

Since the 23rd Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/23), AAMA has been involved in analysis and reporting of Category A and B Large Height Deviations (LHDs) in the Brisbane, Honiara, Melbourne, Nauru, and Port Moresby Flight Information Regions (FIRs). In this report, a detailed analysis of Category A and B LHDs is presented for the period 1 January 2020 to 31 December 2020.

1. INTRODUCTION

1.1 During the 23rd Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/23), the International Federation of Air Line Pilot's Associations (IFALPA) requested further information about Category A (Flight crew failing to climb/descend the aircraft as cleared) and B (Flight crew climbing/descending without ATC clearance) Large Height Deviations (LHDs).

1.2 Since RASMAG/23, AAMA has been involved in analysis and reporting of Category A and B LHD occurrences in the Brisbane, Honiara, Melbourne, Nauru, and Port Moresby Flight Information Regions (FIRs). In this report, a detailed analysis of Category A and B LHDs is presented for the period 1 January 2020 to 31 December 2020.

2. SUMMARY OF CATEGORY A AND B LHDs

2.1 For the period 1 January 2020 to 31 December 2020, there were 14 LHDs that were assessed as non-zero-duration. Of these, eight (57.1%) were either Category A or B.

2.2 Of these, seven were Category B. This means, of all non-zero-duration LHDs, 50% were Category B.

2.3 A comparison of the counts and proportions of Category A and B LHDs for the calendar years 2018, 2019, and 2020 is shown in **Table 1**.

Table 1: Comparison of Category A and B LHDs between the calendar years 2018, 2019, and 2020.

Quantity	1 January 2018 to 31 December 2018 (MAWG/6)	1 January 2019 to 31 December 2019 (MAWG/7)	1 January 2020 to 31 December 2020 (MAWG/8)
Number of Category A LHDs	19	8	1
Number of Category B LHDs	12	14	7
Number of non-zero-duration LHDs	53	39	14
Percentage of non-zero-duration LHDs comprising Category A and B	58.5%	56.4%	57.1%

2.4 For the period 1 January 2020 to 31 December 2020, the number of non-zero-duration LHDs has decreased, likely as a result of changing traffic patterns due to the COVID-19 pandemic. However, the proportion of these LHDs that were Category A or B has remained relatively stable.

2.5 In addition, there were three reports of Category A LHDs that were assessed as zero-duration.

3. GEOLOCATION OF CATEGORY A AND B LHDs

3.1 A map identifying the geographic location of all Category A and B LHDs for Brisbane, Honiara, Melbourne, Nauru and Port Moresby FIRs for the period 1 January 2020 to 31 December 2020 is shown in **Figure 1**.

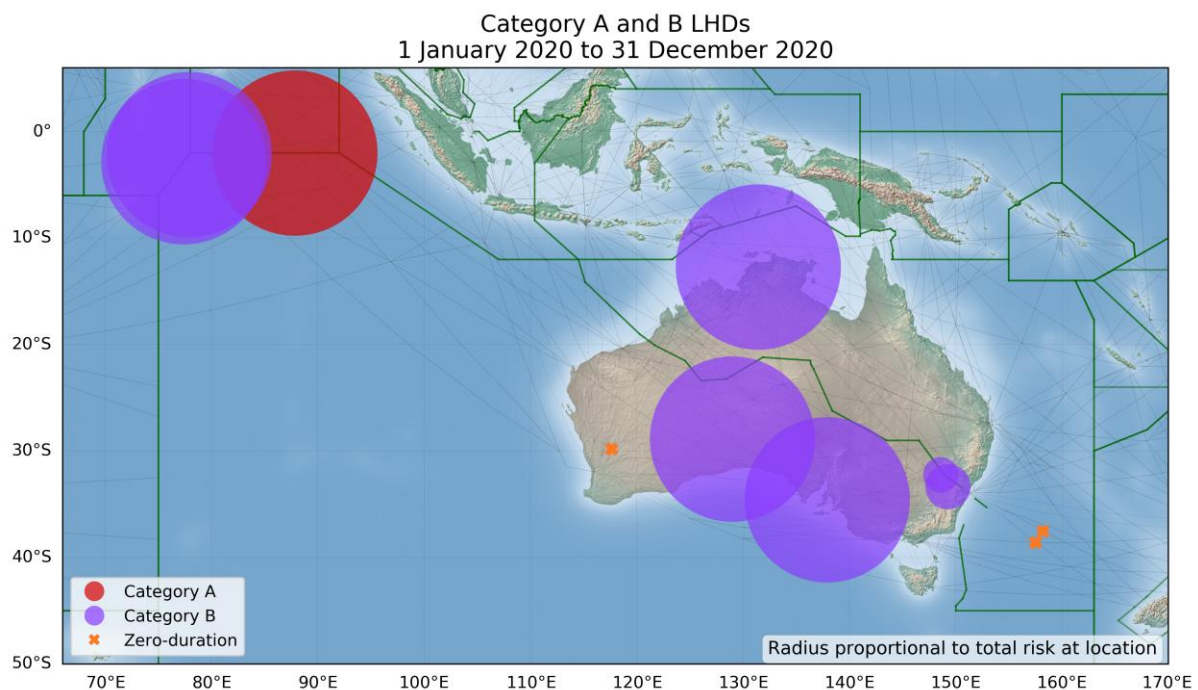


Figure 1: Geolocation of Category A and B LHDs for Brisbane, Honiara, Melbourne, Nauru and Port Moresby FIRs for the period 1 January 2020 to 31 December 2020.

3.2 The single non-zero-duration Category A LHD occurred at DOGAR on the Melbourne—Colombo FIR boundary.

3.3 Two of the non-zero-duration Category B LHDs involved aircraft entering Melbourne FIR from Male FIR. These were Pilot/Aircrew-attributed deviations occurring after the aircraft had crossed the FIR boundary, rather than coordination errors between ATC units.

3.4 The remainder (5) of the non-zero-duration Category B LHDs were in Australian Domestic airspace.

3.5 Two of the zero-duration LHDs were in Tasman airspace, and were both resolved prior to the aircraft leaving Brisbane FIR and entering Auckland Oceanic FIR.

4. DISCUSSION

4.1 The single Category A LHD that was assessed as non-zero-duration involved an aircraft failing to meet a height requirement at DOGAR on the Melbourne—Colombo FIR boundary. For the purposes of risk assessment in the Melbourne FIR, the AAMA assessed the occurrence as 1 level crossed, since the aircraft was not under ATC protection at that level within the Melbourne FIR. Since the aircraft crossed the FIR boundary into Colombo at the incorrect level, the occurrence may also contribute to the risk value in the Colombo FIR.

4.2 Of the seven Category B occurrences that were assessed as non-zero duration, three involved the incorrect aircraft changing levels without clearance as a result of call sign confusion. A potential mitigation for these types of occurrences could arise from the Asia Pacific Alpha Numeric Call-Sign (ANCS) project. RASMAG/25 urged States and ANSPs to support and assess the viability of this project.

4.3 Of the remaining Category B LHDs, two involved an aircraft commencing descent or ascent prior to clearance being given. One involved an aircraft descending without clearance due to turbulence, and one involved an aircraft climbing above the cleared block levels without a reason being given.

4.4 Of the three Category A occurrences that were assessed as zero-duration, all three involved an aircraft being slow to commence climb or descent. However, in all instances, ATC recognised that the aircraft would not meet a height requirement and provided an alternative separation standard. The aircraft were under ATC protection the entire time and as a result the occurrences were assessed as zero-duration.

5. ACTION BY THE MEETING

5.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) consider contributing to a regional analysis of Category A and B LHDs.

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