

International Civil Aviation Organization Asia and Pacific Office

# Thirteenth Meeting of the Asia Pacific Accident Investigation Group (APAC-AIG/13)

(New Delhi, India, 30-31 October 2025)

Agenda Item 4: Enhancing accident investigation capabilities

#### RESEARCH INTO THE NUMBER OF FINAL REPORTS PUBLICLY AVAILABLE

(Presented by France in collaboration with the AIG Panel)

#### **SUMMARY**

This working paper provides an update on the research, undertaken by Working Group 20 (WG-20) of the ICAO Accident Investigation Panel (AIGP), on the number of Final Reports publicly available for fatal accidents involving civil-operated aircraft with MCTOM (Maximum Certificated Take-Off Mass) over 5,700 kg and their availability for the ICAO e-Library.

In 2017, while researching the average duration of accident/incident investigations, the AIG panel found that only 41% (471 accidents) of worldwide fatal accidents involving civil-operated aircraft with MCTOM over 5,700 kg between 1990 and 2016 had resulted in a Final Report publicly available.

Subsequently, the AIG panel was tasked by the ANC to focus its research on the reasons why final reports were not publicly available. Member States were asked to expedite the release of Final Reports. At the same time, the AIG Panel managed to unearth more reports, including those from the APAC region. The updated ratio is now at 72 % of the Final Reports that were publicly available in the APAC region.

It is also crucial to update the public e-library of Final Reports managed by ICAO.

Action by the APAC-AIG is in paragraph 3.

### 1. INTRODUCTION

- 1.1 The timeliness of publication of Final Reports ensures the effective dissemination of safety information and lessons learned arising from accident or incident investigations. The preferred way to make safety lessons publicly available should remain the publication of a Final Report (i.e., making an electronic copy of the Final report on a website) by the State conducting the investigation.
- 1.2 In the consideration to improve the timeliness of accident and incident investigations and the release rate of Final Reports, the AIG Panel had two working groups (WG-6) and then Working Group 20 (WG-20) to perform a review of 1,157 fatal accidents worldwide between 1990 and 2016 of civil-operated aircraft with MCTOM (Maximum Certificated Take-Off Mass) over 5,700 kg.

- 1.3 In 2017, WG-6 found that only 41% (471 accidents) of fatal accidents involving civil-operated aircraft with MCTOM over 5,700 kg between 1990 and 2016 had Final Reports publicly available. This low number came out in the context of a research on the average duration of an accident/incident investigation.
- 1.4 WG-20 was then assigned the task of conducting research into the reasons why a large number of Final Reports were not publicly available and, if necessary, proposing amendments to AIG documents and/or USOAP CMA AIG Protocol Questions.
- 1.5 WG-20 used the same database of 1,157 fatal accidents as established by WG-6 to ensure consistency and expanded the list to include 58 fatal accidents that occurred between 2017 and 2022. The total of fatal accidents in the list between 1990 and 2022 is now 1,215 which involved 137 ICAO Member States. The States, having at least one accident in the database with no Final Report publicly available as found by WG-6, were consulted by WG-20 members. WG-20 members comprise representatives from all ICAO regions <sup>1</sup>.

#### 2. DISCUSSION AND RESULTS

## 2.1 <u>Feedback from the States consulted in the APAC region</u>

- 2.1.1 The objective of WG-20 was to contact the 30 States in the APAC region having at least one accident in the database with no Final Report publicly available. At the time of writing this working paper, 28 States had replied to the survey and provided information if the report were published or not. This accounted for about 93% of the States consulted. The Excel file in Appendix A contains 208 accidents in the APAC region with either the dates of the Final Reports or the reasons why the Final Reports were not publicly available, as provided by the States.
- 2.1.2 WG-20 look forward to receiving information from Afghanistan and Vietnam on the survey.

## 2.2 Analysis of the accidents in the database from WG-20 research

- 2.2.1 In the period 1990-2022, as mentioned in 2.1.1, WG-20 was able to solicit responses from 28 over 30 States in the APAC region. The results of WG-20 research indicated that 138 Final Reports are publicly available. WG-20 had confirmation that States decided not to conduct Annex 13 investigation on accidents considered to be outside the scope of Annex 13 (e.g., State flight) for 10 accidents. Removing these accidents for which no Annex 13 investigation was conducted, 70% of the Final Reports were publicly available for the remaining accidents in the APAC region. The result of 72% of fatal accidents for which a Final Report is publicly available is better than the result of 41% found by WG-6, given that there are still two States yet to respond to the survey. The worldwide average is 76% with Final Reports publicly available.
- 2.2.2 For the period 2017-2022, the ratio of Final Reports publicly available in the APAC region is **80%**. This is an encouraging improvement which indicates that more APAC States are following the requirements in Annex 13.

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# 2.3 <u>ICAO e-Library of Final Reports</u>

2.3.1 The ICAO Secretariat manages an electronic library of Final Reports (the e-Library) that was discussed during AIGP/6 in WP/6, entitled "Dissemination of Final Reports". The AIGP proposed to amend Annex 13 to ensure that Final Reports could be accessed globally in the interest of accident prevention. This e-library is emphasized by State Letter AN 6/1.2-22/85 of 14 October 2022 that contains text on the international dissemination of Final Reports. This ICAO web platform is available on:

## https://www.icao.int/safety/airnavigation/AIG/Pages/E-library-of-Final-Reports.aspx

- 2.3.2 In 2021, it was estimated that the ICAO e-Library contained 789 Preliminary and Final Reports issued after investigations on incidents, serious incidents and fatal accidents. Among these reports, 215 of them are Final Reports of fatal accidents included in WG-20 database for the period of 1990-2022.
- 2.3.3 In addition to the Final Reports provided by States to WG-20, the BEA retrieved 53 additional final reports that were available on Internet. Among these reports, 39 were already on the ICAO e-Library. In the upcoming months, the BEA has planned to work with ICAO to add the Final Reports to the e-Library not already available. Additional work should be performed to upload all the Final Reports identified as Publicly available by WG-20.

## 3. ACTION BY THE AIGP

- 3.1 The APAC-AIG is invited to note the update on the research on the number of Final Reports made publicly available in the APAC region;
- 3.2 States are encouraged to release the remaining Final Reports following fatal accidents in the period 1990-2022; as well as all the Final Reports of accidents involving civil-operated aircraft with a MCTOM (Maximum Certificated Take-Off Mass) of over 5,700 kg after 2022; and
- 3.3 ICAO is invited to make them available on the ICAO e-Library.

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| Local date of the accident | Manufacturer/model               | Registratio<br>n | Location of occurrence | ICAO Region | Fatalities | Airline  | Report found<br>publicly<br>available by<br>AIGP WG-6<br>and WG-20 (1<br>= 1) | Duration of<br>the<br>investigation<br>or date of the<br>report | Uploaded on the<br>BEA server (YES<br>= 1; NO = 0) | Uploaded on the ICAO server (YES = Number ; NO = 0) |
|----------------------------|----------------------------------|------------------|------------------------|-------------|------------|--|---|---|--|---|
| 11/09/1995                 | Antonov 26B                      | YA-BAO           | Afghanistan            | APAC        | 3          | Ariana Afghan Airlines                                       | 0   |   | 0  |   |
| 29/10/1997                 | Yakovlev 40                      | YA-KAE           | Afghanistan            | APAC        | 1          | Ariana Afghan Airlines                                       | 0   |   | 0  |   |
| 19/03/1998                 | Boeing 727-228                   | YA-FAZ           | Afghanistan            | APAC        | 45         | Ariana Afghan Airlines                                       | 0   |   | 0  |   |
| 24/12/1999                 | Airbus A300B2-101                | VT-EDW           | Afghanistan            | APAC        | 1          | Indian Airlines  | 0   |   | 0  |   |
| 03/02/2005                 | Boeing 737-242 Adv.              | EX-037           | Afghanistan            | APAC        | 105        | Phoenix Aviation, op.for<br>Kam Air                          | 1   | 01/02/2006  | 0  | 1   |
| 11/11/2005                 | Ilyushin 76TD                    | 4L-ZIL           | Afghanistan            | APAC        | 8          | Global Georgian Airways,<br>op.for Royal Airlines<br>Cargo   | 1   |   | 0  | 1   |
| 24/04/2006                 | Antonov 32B                      | ZS-PDV           | Afghanistan            | APAC        | 5          | US Department of State,<br>opb Air Million Cargo             | 0   |   | 0  |   |
| 17/05/2010                 | Antonov 24B                      | YA-PIS           | Afghanistan            | APAC        | 44         | Pamir Airways  | 0   |   | 0  |   |
| 12/10/2010                 | Lockheed L-100-20<br>Hercules    | 5X-TUC           | Afghanistan            | APAC        | 8          | National Airlines<br>(National Air Cargo), opb<br>Transafrik | 0   |   | 0  |   |
| 06/07/2011                 | Ilyushin 76TD                    | 4K-AZ55          | Afghanistan            | APAC        | 9          | Silk Way   | 0   |   | 0  |   |
| 29/04/2013                 | Boeing 747-428BCF                | N949CA           | Afghanistan            | APAC        | 7          | National Airlines<br>(National Air Cargo)                    | 1   |   | 0  | 1   |
| 18/05/2016                 | Antonov 12B                      | 4K-AZ25          | Afghanistan            | APAC        | 7          | Silk Way   | 1   |   | 0  | 1   |
| 09/03/1994                 | Swearingen SA226-AT<br>Merlin IV | VH-SWP           | Australia              | APAC        | 1          | Jetcraft   | 1   | 12/10/1995  | 0  |   |
| 27/04/1995                 | IAI 1124 Westwind                | VH-AJS           | Australia              | APAC        | 3          | Pel-Air  | 1   | 30/08/1996  | 0  |   |
| 16/09/1995                 | Swearingen SA227-AC<br>Metro III | VH-NEJ           | Australia              | APAC        | 2          | Tamair   | 1   | 26/06/1997  | 1  |   |
| 04/09/2000                 | Beech 200 Super King Air         | VH-SKC           | Australia              | APAC        | 8          | Central Air  | 1   | 07/03/2002  | 0  |   |
| 10/12/2001                 | Beech B200C Super King<br>Air    | VH-FMN           | Australia              | APAC        | 1          | Royal Flying Doctor<br>Service                               | 1   | 17/06/2003  | 0  |   |

| 07/05/2005 | Swearingen SA227-DC<br>Metro 23  | VH-TFU | Australia  | APAC | 15 | Transair Australia, op.for<br>Aero-Tropics | 1 | 04/04/2007  | 0 |   |
|------------|----------------------------------|--------|------------|------|----|--|---|---|---|---|
| 09/04/2008 | Swearingen SA227-AC<br>Metro III | VH-OZA | Australia  | APAC | 1  | Airtex Aviation                            | 1 | 16/05/2011  | 1 |   |
| 22/03/2010 | EMB-120ER                        | VH-ANB | Australia  | APAC | 2  | Airmorth                                   | 1 | 23/02/2012  | 0 |   |
| 09/03/2016 | Antonov 26B                      | S2-AGZ | Bangladesh | APAC | 3  | True Aviation                              | 1 | 13/12/2019  | 0 |   |
| 24/02/2019 | Boeing 737-8E9                   | S2-AHV | Bangladesh | APAC | 1  | Biman Bangladesh                           | 0 | Hijack No<br>Annex 13<br>investigation<br>initiated | 0 |   |
| 25/06/2007 | Antonov 24B                      | XU-U4A | Cambodia   | APAC | 22 | PMT Air                                    | 1 | 15/03/2008  | 0 | 1 |
| 02/10/1990 | Boeing 737-247                   | B-2510 | China      | APAC | 82 | Xiamen Airlines                            | 0 |   | 0 |   |
| 02/10/1990 | Boeing 757-21B                   | B-2812 | China      | APAC | 46 | China Southern                             | 0 |   | 0 |   |

|            |                        |        |       |      | 1   |                       |   | 1          |   | 1 |
|------------|------------------------|--------|-------|------|-----|-----------------------|---|------------|---|---|
| 31/07/1992 | Yak-42                 | B-2755 | China | APAC | 107 | China General Avn     | 1 | 24/09/1992 | 1 |   |
| 08/10/1992 | llyushin-14            | B-4211 | China | APAC | 14  | Wuhan Airlines        | 1 | 13/04/1993 | 0 |   |
| 24/11/1992 | B737-300               | B-2523 | China | APAC | 141 | China Southern        | 1 | 03/12/1993 | 1 |   |
| 23/07/1993 | BAe146-300             | B-2716 | China | APAC | 56  | China Northwest       | 1 | 25/05/1994 | 0 |   |
| 26/10/1993 | MD-82                  | B-2103 | China | APAC | 2   | China Eastern         | 1 | 08/01/1994 | 0 |   |
| 13/11/1993 | MD-82                  | B-2141 | China | APAC | 12  | China Northern        | 1 | 31/05/1994 | 0 |   |
| 06/06/1994 | TU-154M                | B-2610 | China | APAC | 160 | China Northwest       | 1 | 29/01/1995 | 1 |   |
| 08/05/1997 | B737-300               | B-2925 | China | APAC | 35  | China Southern        | 1 | 03/07/1997 | 0 |   |
| 22/12/1997 | Airbus A300            |        | China | APAC | 1   | China Eastern         | 0 |            | 0 |   |
| 24/02/1999 | TU-154M                | B-2622 | China | APAC | 61  | China Southwest       | 1 | 09/03/2000 | 0 |   |
| 15/04/1999 | MD-11F                 | HL7373 | China | APAC | 8   | Korean Air            | 1 | 06/11/2000 | 1 | 1 |
| 22/06/2000 | YUN-7                  | B-3479 | China | APAC | 49  | Wuhan Airlines        | 1 | 14/03/2001 | 0 |   |
| 27/09/2000 | Boeing 737             |        | China | APAC | 1   | China Xinhua Airlines | 0 |            | 0 |   |
| 02/09/2002 | Cessna 650 Citation VI | B-7023 | China | APAC | 3   | CAAC                  | 1 | 08/11/2002 | 0 |   |

| 18/05/2004 | Ilyushin-76TD                     | 4K-AZ27 | China                | APAC | 7   | Silk Way, op. for Azal<br>Cargo   | 1 | 15/04/2008 | 0 | 1 |
|------------|-----------------------------------|---------|----------------------|------|-----|-----------------------------------|---|------------|---|---|
| 21/11/2004 | CRJ200                            | B-3072  | China                | APAC | 55  | China Yunnan                      | 1 | 06/03/2007 | 0 | 1 |
| 28/11/2009 | MD-11F                            | Z-BAV   | China                | APAC | 3   | Avient Aviation                   | 1 | 10/03/2012 | 0 |   |
| 24/08/2010 | Embraer ERJ 190                   | B-3130  | China                | APAC | 44  | Henan Airline                     | 1 | 11/06/2012 | 1 |   |
| 28/03/2011 | Cessna 550 Citation II            | B-7026  | China                | APAC | 3   | Zhong Fei General<br>Aviation Co. | 0 |            | 0 |   |
| 29/06/2012 | Embraer ERJ-190                   | B-3171  | China                | APAC | 2   | Tianjin Airlines                  | 0 |            | 0 |   |
| 21/03/2022 | Boeing 737-89P (WL)               | B-1791  | China                | APAC | 132 | China Eastern Airlines            | 0 |            | 0 |   |
| 21/07/1994 | Lockheed Herculas L100-30<br>382G | PK-PLV  | China - Hong<br>Kong | APAC | 6   | Heavylift Cargo Airlines          | 1 | 01/10/1996 | 1 |   |
| 22/08/1999 | MD11                              | B-150   | China - Hong<br>Kong | APAC | 3   | China Airlines                    | 1 | 01/12/2004 | 1 |   |
| 29/12/1991 | Boeing 747-2R7F                   | B-198   | China -<br>Taiwan    | APAC | 5   | China Airlines                    | 0 | 01/04/1996 | 0 |   |
| 28/02/1993 | Dornier 228-201                   | B-12238 | China -<br>Taiwan    | APAC | 6   | Formosa Airlines                  | 0 |            | 0 |   |

| 17/09/1994 | Learjet 35A     | B-98181 | China -<br>Taiwan | APAC | 4  | Golden Eagle Aviation | 0 |            | 0 |  |
|------------|-----------------|---------|-------------------|------|----|-----------------------|---|------------|---|--|
| 30/01/1995 | ATR72-202       | B-22717 | China -<br>Taiwan | APAC | 4  | TransAsia Airways     | 1 | 26/06/2017 | 1 |  |
| 05/04/1996 | Dornier 228-212 | B-12257 | China -<br>Taiwan | APAC | 6  | Formosa Airlines      | 0 |            | 0 |  |
| 10/08/1997 | Dornier 228-212 | B-12256 | China -<br>Taiwan | APAC | 16 | Formosa Airlines      | 0 |            | 0 |  |

| 16/02/1998 | Airbus A300B4                    | B-1814         | China -<br>Taiwan                       | APAC | 202 | China Airlines       | 1 | 18/05/2000 | 0 | 1 |
|------------|----------------------------------|----------------|---|------|-----|----------------------|---|------------|---|---|
| 18/03/1998 | Saab 340B                        | B-12255        | China -<br>Taiwan                       | APAC | 13  | Formosa Airlines     | 1 | 17/02/2000 | 1 |   |
| 22/03/1998 | A320                             | RP-C3222       | China -<br>Taiwan                       | APAC | 3   | Philippine Air Lines | 1 | 23/08/2000 | 1 |   |
| 24/08/1999 | MD-90                            | B-17912        | China -<br>Taiwan                       | APAC | 1   | Uni Air              | 1 | 24/08/2000 | 1 |   |
| 31/10/2000 | Boeing 747-412                   | 9V-SPK         | China -<br>Taiwan                       | APAC | 83  | Singapore Airlines   | 1 | 30/04/2002 | 0 | 1 |
| 21/12/2002 | ATR 72-202                       | B-22708        | China -<br>Taiwan                       | APAC | 2   | TransAsia Airways    | 1 | 21/04/2005 | 1 |   |
| 23/07/2014 | ATR72-500                        | B-22810        | China -<br>Taiwan                       | APAC | 48  | TransAsia Airways    | 1 | 29/01/2016 | 0 |   |
| 04/02/2015 | ATR72-212A                       | B-22816        | China -<br>Taiwan                       | APAC | 43  | TransAsia Airways    | 1 | 30/06/2016 | 0 | 1 |
| 25/05/2002 | Boeing 747-209B                  | B-18255        | China -<br>Taiwan<br>(Pacific<br>Ocean) | APAC | 225 | China Airlines       | 1 | 25/02/2005 | 0 |   |
| 31/01/2003 | Ilyushin 76TD                    | RDPL-<br>34141 | East Timor                              | APAC | 6   | Euro Asia Aviation   | 1 | 24/06/2004 | 1 | 1 |
| 24/07/1999 | Embraer EMB-110P1<br>Bandeirante | DQ-AFN         | Fidji                                   | APAC | 17  | Air Fiji             | 1 | 15/11/2000 | 0 |   |
| 18/04/1991 | Dornier 228-212                  | F-OHAB         | French<br>Polynesia                     | APAC | 10  | Air Tahiti           | 1 | 25/05/1992 | 1 |   |
| 14/02/1990 | Airbus A320-231                  | VT-EPN         | India                                   | APAC | 92  | Indian Airlines      | 1 | 30/11/1990 | 0 | 1 |
| 16/08/1991 | Boeing 737-2A8 Advanced          | VT-EFL         | India                                   | APAC | 69  | Indian Airlines      | 1 | 30/04/1992 | 1 |   |

| 27/08/1992 | Beech B200C Super King<br>Air | VT-EOA   | India | APAC | 1  | Border Security Force             | 1 | 28/02/1993 | 1 |  |
|------------|-------------------------------|----------|-------|------|----|-----------------------------------|---|------------|---|--|
| 02/01/1993 | Dornier 228-101               | CG-757   | India | APAC | 4  | Indian Coast Guard                | 0 |            | 0 |  |
| 24/04/1993 | Boeing 737-2A8                |          | India | APAC | 1  | Indian Airlines                   | 0 |            | 0 |  |
| 26/04/1993 | Boeing 737-2A8                | VT-ECQ   | India | APAC | 55 | Indian Airlines                   | 1 | 25/12/1993 | 1 |  |
| 15/07/1993 | Beech 300 Super King Air      | VT-EQM   | India | APAC | 4  | National Remote<br>Sensing Agency | 1 | 30/06/1994 | 1 |  |
| 08/03/1994 | llyushin 86                   | RA-86119 | India | APAC | 9  | Aeroflot                          | 1 | 22/03/1995 | 0 |  |
| 08/03/1994 | Boeing 737-2R4C               | VT-SIA   | India | APAC | 9  | Sahara Airlines                   | 1 | 22/03/1995 | 1 |  |
| 09/07/1994 | Beech 200 Super King Air      | VT-EUJ   | India | APAC | 11 | Punjab Government<br>(India)      | 1 | 31/07/1995 | 1 |  |
| 11/07/1996 | Let L-410UVP-E9D              | VT-ETC   | India | APAC | 9  | Archana Airways                   | 1 | 31/10/1996 | 1 |  |

| 12/11/1996 | Boeing 747-168B                 | HZ-AIH   | India     | APAC | 312 | Saudi Arabian            | 1 | 15/07/1997  | 0 |   |
|------------|---------------------------------|----------|-----------|------|-----|--------------------------|---|-------------|---|---|
| 12/11/1996 | Ilyushin 76TD                   | UN-76435 | India     | APAC | 37  | Kazakhstan Airlines      | 1 | 15/07/1997  | 0 |   |
| 03/07/1997 | Fokker F-27 Friendship 200      | VT-SSA   | India     | APAC | 2   | Elbee Airlines           | 1 | 25/06/1998  | 1 |   |
| 30/07/1998 | HAL/Dornier 228                 | VT-EJW   | India     | APAC | 3   | Alliance Air             | 1 | 15/06/1999  | 0 |   |
| 11/01/1999 | HAL-748                         | H-2175   | India     | APAC | 8   | Defence Research         | 0 |             | 0 |   |
| 17/07/2000 | Boeing 737-2A8 Advanced         | VT-EGD   | India     | APAC | 60  | Alliance Air             | 1 | 31/03/2001  | 0 | 1 |
| 29/07/2000 | Beech B200C Super King<br>Air   | VT-EIE   | India     | APAC | 5   | Aerial Services Pvt. Ltd | 1 | 08/01/2001  | 1 |   |
| 06/03/2009 | NAL Saras                       | VT-XRM   | India     | APAC | 3   | I charatarias            | 1 | 06/12/2009  | 0 |   |
| 22/05/2010 | Boeing 737                      | VT-AXV   | India     | APAC | 158 | Air India Express        | 1 | 31/10/2010  | 0 |   |
| 22/12/2015 | Beech B200 Super King Air       | VT-BSA   | India     | APAC | 10  | Border Security Force    | 1 | 15/08/2017  | 0 |   |
| 07/08/2020 | Boeing 737-8HG (WL)             | VT-AXH   | India     | APAC | 21  | Air India Express        | 1 | 1 y and 3 m | 1 | 1 |
| 02/01/1990 | CASA/Nurtanio NC-212<br>Aviocar | PK-PCM   | Indonesia | APAC | 9   | Pelita Air Service       | 0 |             | 0 |   |
| 25/01/1990 | Hawker Siddeley HS-748          | PK-OBW   | Indonesia | APAC | 19  | Airfast Indonesia        | 1 |             | 1 |   |

| 30/01/1991 | CASA/IPTN NC-212<br>Aviocar 200 | PK-NCY | Indonesia | APAC | 1  | Merpati Nusantara              | 0 | 0 |  |
|------------|---------------------------------|--------|-----------|------|----|--------------------------------|---|---|--|
| 09/05/1991 | Fokker F-27 Friendship 600      | PK-MFD | Indonesia | APAC | 13 | Merpati Nusantara              | 0 | 0 |  |
| 25/06/1992 | CASA/Nurtanio NC-212<br>Aviocar | PK-VSM | Indonesia | APAC | 3  | Dirgantara Air Services        | 0 | 0 |  |
| 24/07/1992 | Vickers 816 Viscount            | PK-RVU | Indonesia | APAC | 70 | Mandala Airlines               | 0 | 0 |  |
| 18/10/1992 | IPTN/CASA CN-235-10             | PK-MNN | Indonesia | APAC | 31 | Merpati Nusantara              | 0 | 0 |  |
| 09/01/1993 | Hawker Siddeley HS-748          | PK-IHE | Indonesia | APAC | 15 | Bouraq Indonesia               | 0 | 0 |  |
| 31/01/1993 | Shorts SC.7 Skyvan 3-100        | 9M-PID | Indonesia | APAC | 14 | Pan Malaysian Air<br>Transport | 0 | 0 |  |
| 01/07/1993 | Fokker F-28 Fellowship<br>3000  | PK-GFU | Indonesia | APAC | 41 | Merpati Nusantara              | 0 | 0 |  |

| 18/06/1994 | Fokker F-27 Friendship<br>500F  | PK-MFI | Indonesia | APAC | 12  | Merpati Nusantara                          | 0 |            | 0 |   |
|------------|---------------------------------|--------|-----------|------|-----|--|---|------------|---|---|
| 09/08/1995 | Hawker Siddeley HS-748          | PK-KHL | Indonesia | APAC | 10  | Bouraq Indonesia                           | 0 |            | 0 |   |
| 03/10/1995 | CASA/Nurtanio NC-212<br>Aviocar | PK-ZAG | Indonesia | APAC | 1   | Sabang Merauke Raya<br>Air Charter         | 0 |            | 0 |   |
| 07/12/1996 | CASA/Nurtanio NC-212<br>Aviocar | PK-VSO | Indonesia | APAC | 18  | Dirgantara Air Services                    | 0 |            | 0 |   |
| 19/04/1997 | British Aerospace ATP           | PK-MTX | Indonesia | APAC | 15  | Merpati Nusantara                          | 0 |            | 0 |   |
| 22/05/1997 | IPTN/CASA CN-235-10             | PK-XNT | Indonesia | APAC | 6   | IPTN                                       | 0 |            | 0 |   |
| 09/07/1997 | CASA/Nurtanio NC-212<br>Aviocar | PK-NCS | Indonesia | APAC | 3   | Merpati Nusantara                          | 0 |            | 0 |   |
| 17/07/1997 | Fokker F-27 Friendship 600      | PK-YPM | Indonesia | APAC | 28  | Trigana Air Service,<br>op.for Sempati Air | 0 |            | 0 |   |
| 26/09/1997 | Airbus A300B4                   | PK-GAI | Indonesia | APAC | 234 | Garuda                                     | 1 | 01/01/2002 | 0 |   |
| 19/12/1997 | B737                            | 9V-TRF | Indonesia | APAC | 104 | Silkair                                    | 1 | 14/12/2000 | 0 | 1 |
| 26/03/2001 | Fokker F-27 Friendship<br>500F  | PK-MFL | Indonesia | APAC | 3   | Merpati Nusantara                          | 0 |            | 0 |   |
| 15/06/2001 | Transall C-160NG                | PK-VTP | Indonesia | APAC | 1   | Manunggal Air                              | 0 |            | 0 |   |

| 19/12/2001 | CASA/Nurtanio NC-212<br>Aviocar | PK-VSB | Indonesia | APAC | 1   | Dirgantara Air Services            | 0 |            | 0 |   |
|------------|---------------------------------|--------|-----------|------|-----|------------------------------------|---|------------|---|---|
| 16/01/2002 | Boeing 737-3Q8                  | PK-GWA | Indonesia | APAC | 1   | Garuda                             | 1 | 01/01/2006 | 1 | 1 |
| 30/11/2004 | DC-9-82 (MD-82)                 | PK-LMN | Indonesia | APAC | 25  | Lion Air                           | 1 |            | 1 |   |
| 05/09/2005 | Boeing 737-230                  | PK-RIM | Indonesia | APAC | 149 | Mandala Airlines                   | 1 | 24/05/2009 | 0 | 1 |
| 01/01/2007 | Boeing 737                      | PK-KKW | Indonesia | APAC | 102 | AdamAir                            | 1 | 17/03/2008 | 0 | 1 |
| 07/03/2007 | Boeing 737                      | PK-GZC | Indonesia | APAC | 21  | Garuda                             | 1 | 22/10/2007 | 0 | 1 |
| 26/01/2008 | CASA NC-212 Aviocar 200         | PK-VSE | Indonesia | APAC | 3   | Dirgantara Air Services            | 1 | 27/05/2010 | 0 |   |
| 27/08/2008 | Boeing 737                      | PK-CJG | Indonesia | APAC | 1   | Sriwijaya Air                      | 1 | 09/09/2015 | 0 |   |
| 09/04/2009 | Bae-146-300                     | PK-BRD | Indonesia | APAC | 6   | Aviastar Mandiri                   | 1 | 14/12/2009 | 0 |   |
| 12/02/2011 | CASA 212-100                    | PK-ZAI | Indonesia | APAC | 5   | Sabang Merauke Raya<br>Air Charter | 1 | 21/11/2012 | 1 |   |
| 07/05/2011 | Xian MA60                       | PK-MZK | Indonesia | APAC | 25  | Merpati Nusantara                  | 1 | 12/07/2012 | 0 | 1 |
| 29/09/2011 | CASA 212-200                    | PK-TLF | Indonesia | APAC | 18  | Nusantara Buana Air                | 1 | 20/07/2013 | 0 |   |
| 09/05/2012 | Sukhoi Superjet 100             | 97004  | Indonesia | APAC | 45  | Sukhoi Civil Aircraft              | 1 | 18/12/2012 | 1 | 1 |

| 28/12/2014 | A320                | PK-AXC | Indonesia | APAC | 162 | Indonesia AirAsia                          | 1 | 17/12/2015   | 0 |   |
|------------|---------------------|--------|-----------|------|-----|--|---|--------------|---|---|
| 16/08/2015 | ATR 42-300          | PK-YRN | Indonesia | APAC | 54  | Trigana Air Service                        | 1 | 17/04/2017   | 0 |   |
| 31/10/2016 | DHC-4T Caribou      | PK-SWW | Indonesia | APAC | 4   | Puncak Regency Adm.,<br>opb Alfa Indonesia | 1 |              | 1 |   |
| 29/10/2018 | Boeing 737 MAX 8    | PK-LQP | Indonesia | APAC | 189 | Lion Air                                   | 1 | 1 y          | 1 | 1 |
| 09/01/2021 | Boeing 737-524 (WL) |        | Indonesia | APAC | 62  | Sriwijaya Air                              | 1 | 1 yr 10 mths | 1 | 1 |
| 26/04/1994 | Airbus A300B4-622R  | B-1816 | Japan     | APAC | 264 | China Airlines                             | 1 | 19/07/1996   | 0 |   |
| 11/12/1994 | Boeing 747-283B     | EI-BWF | Japan     | APAC | 1   | Philippine Air Lines                       | 0 |              | 0 |   |
| 13/06/1996 | DC-10-30            | PK-GIE | Japan     | APAC | 3   | Garuda                                     | 1 | 20/11/1997   | 0 | 1 |
| 23/07/1999 | Boeing 747-481D     | JA8966 | Japan     | APAC | 1   | All Nippon                                 | 0 |              | 0 |   |
| 23/03/2009 | MD-11F              | N526FE | Japan     | APAC | 2   | FedEx                                      | 1 | 26/04/2013   | 1 | 1 |

| 06/04/2016 | Raytheon U-125 (Hawker 800)            | 49-3043        | Japan      | APAC | 6   | JASDF  | 0 |            | 0 |  |
|------------|--|----------------|------------|------|-----|--|---|------------|---|--|
| 22/04/1990 | Antonov 24RV                           | RDPL-<br>34008 | Laos       | APAC | 1   | Lao Aviation                                 | 0 |            | 0 |  |
| 25/05/1998 | Yakovlev 40                            | RDPL-<br>34001 | Laos       | APAC | 26  | Lao Aviation                                 | 0 |            | 0 |  |
| 16/10/2013 | ATR72-212A                             | RDPL-<br>34233 | Laos       | APAC | 49  | Lao Airlines                                 | 0 |            | 0 |  |
| 17/05/2014 | Antonov 74TK-300                       | RDPL-<br>34020 | Laos       | APAC | 16  | Laos Government                              | 0 |            | 0 |  |
| 04/09/1991 | Grumman American G-<br>1159 Gulfstream | N204C          | Malaysia   | APAC | 12  | Du Pont de Numours and<br>Co., op.for Conoco | 1 |            | 1 |  |
| 04/09/1991 | Shorts SC.7 Skyvan 3-100               | 9M-AZB         | Malaysia   | APAC | 14  | Airtech Rajawaldi Udara                      | 1 |            | 1 |  |
| 30/07/1993 | Shorts SC.7 Skyvan 3-100               | 9M-AXM         | Malaysia   | APAC | 1   | Hornbill Skyways                             | 0 |            | 0 |  |
| 15/09/1995 | Fokker 50                              | 9M-MGH         | Malaysia   | APAC | 34  | Malaysia Airlines                            | 1 |            | 1 |  |
| 06/09/1997 | Dornier 228-212                        | 9M-MIA         | Malaysia   | APAC | 10  | Merpati Intan, op.for<br>Royal Brunei        | 1 |            | 1 |  |
| 08/03/2014 | Boeing 777-2H6ER                       | 9M-MRO         | (Indian    | APAC | 239 | Malaysia Airlines                            | 1 | 02/07/2018 | 1 |  |
| 28/09/2018 | Boeing 737-8BK (WL)                    | P2-PXE         | Micronesia | APAC | 1   | Air Niugini                                  | 1 | 290 d      | 1 |  |

| 26/04/4000 | Antonov 24DV               | BNMAU-          | Monaclia | ۸۵۸۵ | 20 | MIAT           |   |            | _ |  |
|------------|----------------------------|-----------------|----------|------|----|----------------|---|------------|---|--|
| 26/01/1990 | Antonov 24RV               | 10208           | Mongolia | APAC | 30 | MIAT           | 0 |            | 0 |  |
| 23/04/1993 | Antonov 26                 | BNMAU-<br>14102 | Mongolia | APAC | 32 | MIAT           | 0 |            | 0 |  |
| 21/09/1995 | Antonov 24RV               | BNMAU-<br>10103 | Mongolia | APAC | 42 | MIAT           | 1 | 03/10/1996 | 0 |  |
| 24/07/1996 | Fokker F-27 Friendship 600 |                 | Myanmar  | APAC | 8  | Myanma Airways | 0 |            | 0 |  |
| 27/01/1998 | Fokker F-27 Friendship 600 | XY-AES          | Myanmar  | APAC | 16 | Myanma Airways | 0 |            | 0 |  |
| 24/08/1998 | Fokker F-27 Friendship 600 | XY-AEN          | Myanmar  | APAC | 36 | Myanma Airways | 1 |            | 0 |  |

| 02/07/1999 | Fokker F-27 Friendship 600 | XY-AEO | Myanmar | APAC | 8   | Myanma Airways                | 0 |            | 0 |   |
|------------|----------------------------|--------|---------|------|-----|-------------------------------|---|------------|---|---|
| 25/12/2012 | Fokker 100                 | XY-AGC | Myanmar | APAC | 2   | Air Bagan                     | 1 | 11/02/2014 | 0 | 1 |
| 31/07/1992 | Airbus A310-304            | HS-TID | Nepal   | APAC | 113 | Thai Airways<br>International | 1 |            | 1 |   |

| 28/09/1992 Airbus A300B4-203 AP-BCP Nepal APAC 167 PIA 1 | 28/09/1992 | Airbus A300B4-203 | AP-BCP | Nepal | APAC | 167 | PIA | 1 |  | 1 |  |
|--|------------|-------------------|--------|-------|------|-----|-----|---|--|---|--|
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| 31/07/1993 | Dornier 228-101 | 9N-ACL | Nepal | APAC | 19 | Everest Air | 0 | 0 |   |
|------------|-----------------|--------|-------|------|----|-------------|---|---|---|
| 07/07/1999 | Boeing 727-243F | VT-LCI | Nepal | APAC | 5  | Hinduja     | 1 | 0 | 1 |

|  | 05/09/1999 | BAe-748 | 9N-AEG | Nepal | APAC | 15 | Necon Air | 0 |  | 0 |  |
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| 24/08/2010 | Dornier 228-101                   | 9N-AHE | Nepal       | APAC | 14 | Agni Air           | 0 |            | 0 |   |
|------------|-----------------------------------|--------|-------------|------|----|--------------------|---|------------|---|---|
| 25/09/2011 | Beech 1900D                       | 9N-AEK | Nepal       | APAC | 19 | Buddha Air         | 0 |            | 0 |   |
| 14/05/2012 | Dornier 228-212                   | 9N-AIG | Nepal       | APAC | 15 | Agni Air           | 1 |            | 0 | 1 |
| 28/09/2012 | Dornier 228                       | 9N-AHA | Nepal       | APAC | 19 | Sita Air           | 1 | 15/08/2013 | 0 | 1 |
| 27/05/2017 | Let L-410UVP-E20                  | 9N-AKY | Nepal       | APAC | 2  | Summit Air         | 1 | 11 m       | 1 | 1 |
| 12/03/2018 | DHC-8-402Q Dash 8                 | S2-AGU | Nepal       | APAC | 51 | US-Bangla Airlines | 1 | 11 m       | 0 |   |
| 09/06/1995 | de Havilland Canada DHC-<br>8-102 |        | New Zealand |      | 4  | Ansett New Zeland  | 1 | 17/03/1997 | 0 |   |

| 03/10/2003 | Convair CV-580F                  | ZK-KFU | New Zealand         | APAC | 2   | Air Freight NZ | 1 | 19/08/2004        | 1 |   |
|------------|----------------------------------|--------|---------------------|------|-----|----------------|---|-------------------|---|---|
| 02/05/2005 | Swearingen SA227-AC<br>Metro III | ZK-POA | New Zealand         | APAC | 2   | Airwork NZ     | 1 | 20/07/2006        | 0 |   |
| 10/07/2006 | Fokker F-27 Friendship 200       | AP-BAL | Pakistan            | APAC | 45  | PIA            | 1 | 11/05/2012        | 1 |   |
| 28/07/2010 | A321                             | AP-BJB | Pakistan            | APAC | 152 | Airblue        | 1 | 28/12/2011        | 0 |   |
| 05/11/2010 | Beechcraft 1900C-1               | AP-BJD | Pakistan            | APAC | 21  | JS Air         | 1 | 01/12/2015        | 1 |   |
| 28/11/2010 | llyushin 76TD                    | 4L-GNI | Pakistan            | APAC | 11  | Sun Way        | 1 | 03/03/2017        | 0 |   |
| 20/04/2012 | Boeing 737-236A                  | AP-BKC | Pakistan            | APAC | 127 | Bhoja Airlines | 1 | 21/01/2015        | 0 | 1 |
| 24/06/2014 | Airbus A310-324ET                | AP-BGN | Pakistan            | APAC | 1   | PIA            | 0 |                   | 0 |   |
| 07/12/2016 | ATR 42-500                       | AP-BHO | Pakistan            | APAC | 47  | PIA            | 1 |                   | 1 |   |
| 22/05/2020 | Airbus A320-214                  | AP-BLD | Pakistan            | APAC | 98  | PIA            | 1 | Not published yet | 1 |   |
| 13/10/2011 | DHC-8-102                        | P2-MCJ | Papua New<br>guinea | APAC | 28  | Airlines PNG   | 1 | 15/06/2014        | 0 |   |

| 14/04/1992 | Embraer EMB-110P1<br>Bandeirante | P2-RDS   | Papua New<br>Guinea | APAC | 11  | Talair  | 1 | 03/03/1993 | 0 |  |
|------------|----------------------------------|----------|---------------------|------|-----|---|---|------------|---|--|
| 01/07/1995 | C-7A Caribou                     | P2-VTC   | Papua New<br>Guinea | APAC | 2   | Vanimo Trading                                  | 0 | 30/12/1996 | 0 |  |
| 17/06/1999 | Embraer EMB-110P2<br>Bandeirante | P2-ALX   | Papua New<br>Guinea | APAC | 17  | Airlink   | 1 | 15/06/2017 | 0 |  |
| 30/03/2007 | Embraer EMB-110P1<br>Bandeirante | P2-ALU   | Papua New<br>Guinea | APAC | 2   | Airlink   | 1 | 10/11/2014 | 0 |  |
| 31/08/2010 | Cessna 550 Citation II           | P2-TAA   | Papua New<br>Guinea | APAC | 4   | Trans Air                                       | 1 | 22/11/2012 | 0 |  |
| 26/04/1990 | Douglas C-47A (DC-3)             | RP-C81   | Philippines         | APAC | 7   | MATS  | 1 | 31/05/1990 | 0 |  |
| 11/05/1990 | Boeing 737-3Y0                   | EI-BZG   | Philippines         | APAC | 8   | Philippine Air Lines                            | 1 | 14/11/1990 | 0 |  |
| 18/05/1990 | Beech 1900C-1                    | RP-C314  | Philippines         | APAC | 25  | Aerolift Philippines                            | 1 | 10/09/1990 | 0 |  |
| 02/02/1998 | DC-9-32                          | RP-C1507 | Philippines         | APAC | 104 | Cebu Pacific Air                                | 1 | 12/01/1999 | 0 |  |
| 07/12/1999 | Let L-410UVP-E                   | RP-C3883 | Philippines         | APAC | 17  | Asian Spirit                                    | 1 | 15/05/2000 | 0 |  |
| 19/04/2000 | Boeing 737-2H4                   | RP-C3010 | Philippines         | APAC | 131 | Air Philippines                                 | 1 | 16/10/2000 | 0 |  |
| 11/11/2002 | Fokker F-27 Friendship 600       | RP-C6888 | Philippines         | APAC | 19  | Laoag   | 1 | 05/05/2017 | 0 |  |
| 17/10/2009 | DC-3C                            | RP-C550  | Philippines         | APAC | 4   | Victoria Air                                    | 1 | 15/02/2011 | 1 |  |
| 21/04/2010 | Antonov 12BP                     | UP-AN216 | Philippines         | APAC | 3   | Almaty Aviation, op.for<br>Interisland Airlines | 0 |            | 0 |  |
| 25/03/1991 | Airbus A310                      | 9V-STP   | Singapore           | APAC | 4   | Singapore Airlines                              | 0 |            | 0 |  |

| 26/07/1993 | Boeing 737-5L9   | HL7229   | South Korea | APAC | 68  | Asiana Airlines           | 1 |            | 0 | 1 |
|------------|------------------|----------|-------------|------|-----|---------------------------|---|------------|---|---|
| 15/04/2002 | Boeing 767-2J6ER | B-2552   | South Korea | APAC | 129 | Air China                 | 1 | 04/03/2005 | 0 | 1 |
| 15/04/2002 | B767-200         | B-2552   | South Korea | APAC | 129 | Air China                 | 1 | 04/03/2005 | 0 |   |
| 28/07/2011 | Boeing 747       | HL7604   | South Korea | APAC | 2   | Asiana Airlines           | 1 | 24/07/2015 | 0 |   |
| 29/09/1998 | Antonov 24RV     | EW-46465 | Sri Lanka   | APAC | 55  | Gomelavia, op.for LionAir | 1 | 30/12/2013 | 0 |   |
| 24/03/2000 | Antonov 12BK     | RA-11302 | Sri Lanka   | APAC | 9   | Antey, op.for Sky Cabs    | 1 | 25/01/2002 | 0 | 1 |

| 21/11/1990 | DHC-8-103        | HS-SKI | Thailand | APAC | 38  | Bangkok Airways | 0 | 0 |   |
|------------|------------------|--------|----------|------|-----|-----------------|---|---|---|
| 26/05/1991 | Boeing 767-3Z9ER | OE-LAV | Thailand | APAC | 223 | Lauda Air       | 1 | 0 | 1 |

| 21/07/1997 | Learjet 31                   | 9V-ATD  | Thailand | APAC | 2   | Singapore Airlines                                     | 1 |            | 0 | 1 |
|------------|------------------------------|---------|----------|------|-----|--|---|------------|---|---|
| 11/12/1998 | Airbus A310                  | HS-TIA  | Thailand | APAC | 101 | Thai Airways<br>International                          | 1 | 15/06/2002 | 0 | 1 |
| 03/03/2001 | Boeing 737-4D7               | HS-TDC  | Thailand | APAC | 1   | Thai Airways<br>International                          | 1 | 15/04/2005 | 1 |   |
| 16/09/2007 | MD-82                        | HS-OMG  | Thailand | APAC | 90  | Orient Thai Airlines,<br>op.for One-Two-Go<br>Airlines | 1 | 30/06/2010 | 1 | 1 |
| 04/08/2009 | ATR-72-500                   | HS-PGL  | Thailand | APAC | 1   | Bangkok Airways  | 0 |            | 0 |   |
| 14/11/1992 | Yakovlev 40                  | VN-A449 | Vietnam  | APAC | 30  | Vietnam Airlines                                       | 0 |            | 0 |   |
| 03/09/1997 | Tupolev 134B-3               | VN-A120 | Vietnam  | APAC | 65  | Vietnam Airlines                                       | 1 | 01/06/1998 | 1 |   |
| 16/06/2016 | CASA C-212 Aviocar<br>400MPA | 8983    | Vietnam  | APAC | 9   | Vietnam Coast Guard                                    | 0 | 01/00/1000 | 0 |   |
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| Q1 For investigation s that were not started, please indicate why: | Q2 For investigations that were started but not completed, please indicate why and the | Q3 If the investigation was completed but the Final Report has not been made publicly available, please indicate | Q4 For accidents in which Annex 13 was not applicable, please indicate why: | It wasn't possible<br>to define if an<br>investigation was<br>performed or the<br>reasons why the<br>report was not<br>publicly available |  |
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|      | caused by unlawful interference, by hijacking. The CAAC did not conduct an Annex13 investigation but a criminal investigation by police. |      |
|      | caused by unlawful interference, by hijacking. The CAAC did not conduct an Annex13 investigation but a criminal investigation by police. |      |

|  | caused by unlawful interference, by hijacking. The CAAC did not conduct an Annex13 investigation but a criminal investigation by police. |  |
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|          |   |  |  |
|          | Investigation<br>completed, aircraft<br>still not found,<br>without an Annex<br>13 final report |  |  |
|          |   | caused by unlawful interference, by hijacking. The CAAC did not conduct an Annex13 investigation but a criminal investigation by police. |  |
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|          | Domestic law or<br>regulation not<br>require for making<br>final report publicly<br>available   |  |  |
|          | Domestic law or<br>regulation not<br>require for making<br>final report publicly<br>available   |  |  |

|  |   | The flight task was delegated to the Military so the investigation was not conducted by the CAA. |  |
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|  | Domestic law or<br>regulation not<br>require for making<br>final report publicly<br>available |  |  |
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| pertain to civil aircraft |   |  |                               |   |
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|                    | (Philippines)           |  |
|                    | found that              |  |
|                    | the accident            |  |
|                    | was sourred             |  |
|                    |                         |  |
|                    |                         |  |
|                    |                         |  |
|                    | The captain             |  |
|                    | was stabbed             |  |
|                    | by the                  |  |
|                    | hijacker and            |  |
|                    | sustained a             |  |
|                    | fatal injury in         |  |
|                    | the cockpit             |  |
|                    | during the              |  |
|                    | flight, and the         |  |
|                    | aircraft did            |  |
|                    | not sustain             |  |
|                    | any damage.             |  |
|                    | No Annex 13             |  |
|                    | investigation.          |  |
|                    | iiivootigation.         |  |
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|                          |     | Regulatory investigation instituted. Report in Myanmese and not made publicly available. The Aircraft Accident Investigation Bureau was only established in 2020. Prior to this, all the investigations were conducted by the regulator and not carried out as per Annex 13. |  |  |
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|                          |     | Regulatory investigation instituted. Report in Myanmese and not made publicly available. The Aircraft Accident Investigation Bureau was only established in 2020. Prior to this, all the investigations were conducted by the regulator and not carried out as per Annex 13. |  |  |
| investigation. Not Annex | N/A | investigation instituted. Report   |  |  |

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| As far we                                   |  |
| Understand in All                           |  |
| the accidents                               |  |
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| was followed.                               |  |
| Because at that                             |  |
| time there was no                           |  |
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| as well as                                  |  |
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|   | Security | <u> </u>   |
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| doing                                   |          |  |
| guilly,                                 |          |  |
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| complex nature                          |          |  |
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|            | į                                     | The investigation was closed and the final report ssued at the time.  Nevertheless, ICAO was not found as a recipient of the |                        |  |
|------------|---------------------------------------|--|------------------------|--|
|            | á                                     | report. Final report<br>and ECCAIRS file<br>were sent to ICAO<br>on 29.12.2019   |                        |  |
| pro<br>con | rne /estigation ocess was ocluded and |  |                        |  |
|            |                                       |  |                        |  |
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| resig      | The IIC gned, report yet to be        |  |                        |  |
| CC         | ompleted.                             |  | n was a<br>hijack case |  |

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|   | The old version of the Final Reports contain names of pilots and attach with CVR transcript. Considerations are being made to remove them before making them publicly available However; some report may needs to contain parts or summary of the transcript as necessary. Hence, it may take a period of time to remove these contents out of the report. |  |  |
|   | The old version of the Final Reports contain names of pilots and attach with CVR transcript. Considerations are being made to remove them before making them publicly available However; some report may needs to contain parts or summary of the transcript as necessary. Hence, it may take a period of time to remove these contents out of the report. |  |  |

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