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First NACC Virtual Meeting on Accident and Incident Investigation (NACC/AIG/1)

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March 2021

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OBJECTIVE

The purpose of this Meeting is to review the assistance provided in 2020, and discuss the main difficulties and challenges for the implementation of the investigation requirements.



Provisional Agenda

- ✈ Item 1: Adoption of the Provisional Agenda
- ✈ Item 2: Review of assistance activities provided in 2020
- ✈ Item 3: Strategy to address AIG problems in the NAM/CAR Regions
- ✈ Item 4: Accident and incident notifications (see requirements in Annex 13) – ECCAIRS taxonomy
- ✈ Item 5: AIG database as a part of the State's Safety data collection and processing systems (SDCPS)
- ✈ Item 6: Other Business



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Adoption of the Provisional Agenda

✈ Does anyone want to propose changes in the Provisional Agenda?

Provisional Agenda

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- ✈ Item 4: Accident and incident notifications (see requirements in Annex 13 – Aircraft Accident and Incident Investigation) – ECCAIRS taxonomy
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Adoption of the Provisional Agenda

✈ Other Business:

- ✈ Standardize air accident investigation procedures for the entire region (Honduras)
- ✈ The possibility of having alternate ways to obtain support from other States in an expeditious manner, through the mechanisms that are fast and with the guidance and supervision of ICAO, for acceptable products (Costa Rica)
- ✈ The reasons for the independence of the AIG and how to establish it (El Salvador)



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Review of assistance activities provided

✈️ AIG Survey (JAN 2020):

- ✈️ Less than half of the States answered the survey



Review of assistance activities provided

✈️ AIG Webinar Series:

1. Procedures – General and Procedure for forwarding ADREP Data Reports (PQ 6.435)
2. Procedure for the Provision of Information to Victims and Families (PQ 6.381)
3. Process for investigating the various types of accidents (PQ 6.343)



Review of assistance activities provided

✈️ AIG Webinar Series:

4. Procedure for forwarding Preliminary ADREP Reports (PQ 6.431)
5. Procedure for the completion of the final report and publication of interim statements (PQ 6.405)
6. Process for the identification and notification of differences in AIG (PQ 6.017)



Review of assistance activities provided

✈️ AIG Webinar Series:

7. Questions and Answers (Q & A)
8. Procedure for the recovery and read-out of the flight recorders (PQ 6.361)

All presentations, documents and videos of the webinars are available in the NACC webpage



Review of assistance activities provided

| STATES | Survey | Webinar 1st round | Accident Serious Incident data 21/5/2021 | Webinar 2nd round 23 & 25/6/2020 | Webinar 3rd round 18 & 20/8/2020 | Webinar 4th round 22 & 24/9/2020 | Webinar 5th round 13 & 15/10/2020 | Webinar 6th round 17 & 19/11/2020 | Webinar 7th round 16 & 17/12/2020 | Webinar 8th round 2 & 4/2/2021 |
|--------|--------|-------------------|------------------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| | N | N | N | N | N | N | N | N | N | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | N | Y |
| | N | N | N | N | N | N | N | N | N | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | N |
| | N | Y | Y | N | N | N | N | N | N | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| | N | Y | N | N | N | N | Y | N | N | N |
| | N | Y | Y | Y | N | Y | Y | Y | N | Y |
| | Y | Y | Y | Y | Y | Y | Y | Y | N | Y |
| | N | Y | N | N | N | N | N | N | Y | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| | N | N | N | N | N | N | N | N | N | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| | N | N | N | N | N | N | N | N | N | N |
| | N | N | N | N | N | N | N | N | Y | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | N | Y |
| | Y | Y | Y | Y | Y | N | Y | Y | Y | N |
| | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| | N | N | N | N | N | Y | N | N | N | N |
| | N | N | N | Y | Y | N | N | N | Y | N |
| | N | N | N | N | N | N | N | N | Y | N |
| | N | Y | N | Y | Y | Y | Y | Y | N | Y |
| | Y | Y | Y | Y | Y | N | Y | Y | Y | N |



Review of assistance activities provided

✈ Customized assistance (*per request*):

- Revision of AIG Procedures – Mexico (partial)
- Revision of the AIG Training Manual - Cuba
- Revision of the AIG Procedures Manual – Bahamas (ongoing)



Review of assistance activities provided

✈ Recollection of data (accidents and serious incidents):

- Excel spreadsheet for data collection (improved for 2021)
- Data being validated by the OVSG
- After validation, data is used globally as safety data



Review of assistance activities provided

✈ Obstacles to the assistance:

- Lack of feedback
- Lack of support for AIG within the States
- Virtual environment



Review of assistance activities provided

✈ Obstacles to the assistance

- Lack of resources

**More workload
with less results**

- Inadequate regulatory environment in the States



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Strategy to address AIG problems in NAM/CAR

✈ Three main streams:

- Build national capacity
- Build regional cooperation
- Establish a RAIO



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Strategy to address AIG problems in NAM/CAR

✈ Three main streams:

- Build national capacity

Consists of the provision of tailored assistance to individual States in order to improve and maintain a minimum level of efficiency in the activities related to accident and incident investigation



Strategy to address AIG problems in NAM/CAR

✈ Build national capacity:

- Identify gaps in the primary legislation
- Seek the establishment of an independent investigation authority
- Improve operational capacity/capability



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Strategy to address AIG problems in NAM/CAR

✈ Three main streams:

- Build national capacity
- Build regional cooperation

The strategy will assist States in the establishment of mechanisms of cooperation in the AIG domain



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Strategy to address AIG problems in NAM/CAR

✈ Build regional cooperation:

- Seek for synergy
- Mutual support on the development of regulation, procedures and guidance
- Develop training opportunities
- Establish regional database



Strategy to address AIG problems in NAM/CAR

✈ Three main streams:

- Build national capacity
- Build regional cooperation
- Establish a RAIO

In the long term, after all the previous conditions are implemented, this initiative will assist in the evolution of the MoC to a RAIO



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Strategy to address AIG problems in NAM/CAR

✈ Establish a RAIO:

- Legal framework of RAIO member States:
 - Allows the delegation of investigations
 - Accept/empowers foreign RAIO investigators acting in any of the States/Territories
- States are ready to build the RAIO:
 - Initial allocation of financial resources, facilities, equipment
 - Assignment of investigators
 - Permanent funding mechanism
 - Regional regulations and procedures



Strategy to address AIG problems in NAM/CAR

✈ The option to adhere to a RAIO model:

- RAIO is the best approach for the States in CAR Region
- It must be seen as an operational entity
- States still need to have an independent authority
 - Size and complexity of the authority may be significantly smaller



Strategy to address AIG problems in NAM/CAR

✈ Pre requisites for the implementation of the strategy:

- Commitment from the part of the State
- Designated AIG focal point (preferably a qualified investigator)
- Permanent full time staff (may be the focal point)



Strategy to address AIG problems in NAM/CAR

✈️ Priorities for receiving this assistance:

- States with an assigned full time AIG focal point (preferably a permanent qualified investigator)
- States with lowest EI in AIG
- States that volunteer
- States logistic support to the mission, with access to documents and facilities



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Accident and incident notifications

✈ States obligations:

4.1 The State of Occurrence shall forward a notification of an accident or serious incident, with a minimum of delay and by the most suitable and quickest means available, to:

...



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Accident and incident notifications

✈ States obligations:

However, when the State of Occurrence is not aware of a serious incident, the State of Registry or the State of the Operator, as appropriate, shall forward a notification of such an incident to the State of Design, the State of Manufacture and the State of Occurrence.



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Accident and incident notifications

✈ States obligations:

Note 1.— Telephone, facsimile, e-mail or the Aeronautical Fixed Telecommunication Network (AFTN) will in most cases constitute “the most suitable and quickest means available”. More than one means of communication may be appropriate.



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Accident and incident notifications



✈ States obligations:

4.8 When the State of Registry institutes the investigation of an accident or serious incident, that State shall forward a notification, in accordance with 4.2 and 4.3 above, with a minimum of delay and by the most suitable and quickest means available, to:...



Accident and incident notifications

1. NOTIFICATION — ACCIDENTS AND SERIOUS INCIDENTS

| <i>From</i> | <i>For</i> | <i>Send to</i> | <i>Annex 13 reference</i> |
|---------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| State of Occurrence | International occurrences: All aircraft | State of Registry State of the Operator State of Design State of Manufacture ICAO (when aircraft over 2 250 kg or is a turbojet-powered aeroplane) | 4.1 |
| State of Registry | Domestic and other occurrences: All aircraft | State of the Operator State of Design State of Manufacture ICAO (when aircraft over 2 250 kg or is a turbojet-powered aeroplane) | 4.8 |



Accident and incident notifications



✈ Related obligations (among others):

- *acknowledge receipt of the notification (4.9)*
- upon request, provide the State of Registry with any relevant information available to them regarding the flight crew and the aircraft involved (4.10)
- provide the State of Registry with details of dangerous goods on board the aircraft (4.11)



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Accident and incident notifications



✈ Consequences:

- 1. Every State has to have a system to ensure that notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours*



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Accident and incident notifications

In other words, States are expected to have the appropriate means to receive and process notifications on a 24-hour basis



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Accident and incident notifications

✈ Consequences:

- 2. The contact details for the notification shall be made public within the State and internationally*



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Accident and incident notifications

Phone numbers, e-mails, etc.
made public in the State's
authority website and informed
to ICAO



ECCAIRS Taxonomy

- ✈ Common taxonomies and definitions establish a standard industry language, thereby improving the quality of information and communication.
- ✈ With this common language the aviation community's capacity to focus on safety issues is greatly enhanced.



ECCAIRS Taxonomy

- ✈ The ICAO Accident/Incident Data Reporting (ADREP) system is based on the [ADREP taxonomy](#).
- ✈ The ADREP taxonomy is a set of definitions and descriptions used during the gathering and reporting of accident/incident data to ICAO. This taxonomy is maintained by the AIG Section.



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ECCAIRS Taxonomy

✈ It is extremely important to observe the applicable ADREP/ECCAIRS taxonomy since the notification phase.

<https://www.icao.int/safety/airnavigation/AIG/Pages/ADREP-Taxonomies.aspx>



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AIG database

8.1 A State shall establish and maintain an accident and incident database to facilitate the effective analysis of information on actual or potential safety deficiencies and to determine any preventive actions required.



AIG database

8.2 Recommendation.— *State authorities responsible for the implementation of the SSP should have access to the accident and incident database referenced in 8.1 to support their safety responsibilities.*



AIG database

Note.— An accident and incident database may be included in a safety database, which may refer to a single or multiple database(s)



AIG database

✈ Consequences:

- ✈ Since the notification, till the publication of a report, accident and incident data is necessary for safety
- ✈ The needs for data go beyond the accident investigation authority



AIG database

✈ Consequences:

- ✈ Accident and incident database is part of the SSP
- ✈ Here we may have a bridge between the CAA's responsibilities and the support to the AIG unit (for dependent AIG)



AIG database

✈ Consequences:

- ✈ ECCAIRS is usually the best option to be used as the accident and incident database
- ✈ This database shall include air traffic incidents



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Any Other Business...



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North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU