



ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

WORKING PAPER

E/CAR/CATG/8 — WP/07  
16/10/24

**Eighth Eastern Caribbean Civil Aviation Technical Group (E/CAR/CATG/8) Meeting**  
Miami, United States, 22 to 24 October 2024

**Agenda Item 4: Update of the E/CAR/CATG Work Programme and Activities**  
**4.1 Review and Identification of E/CAR/CATG main priorities and focus areas**

**COMPLIANCE WITH ICAO STANDARDS AND RECOMMENDED PRACTICES FOR AERONAUTICAL INFORMATION PRODUCTS - AERONAUTICAL INFORMATION PUBLICATION (AIP), AIP AMENDMENTS, AIP SUPPLEMENTS AND AERONAUTICAL INFORMATION CIRCULARS (AICS).**

(Presented by Trinidad and Tobago)

<b>EXECUTIVE SUMMARY</b>	
This working paper addresses the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) concerning Aeronautical Information Products. These products are essential for ensuring the safety, regularity, and efficiency of air navigation. It discusses the importance of adherence to ICAO SARPs, current challenges in implementation, and recommendations for improvements.	
<b>Action:</b>	Described in Section 3
<b>Strategic Objectives:</b>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<b>References:</b>	<ul style="list-style-type: none"><li>• Annex 15 - Aeronautical Information Services (AIS)</li><li>• Doc. 8126 - AIS Manual</li><li>• Doc. 10066 - PANS Aeronautical Information Management (AIM)</li></ul>

**1. Introduction**

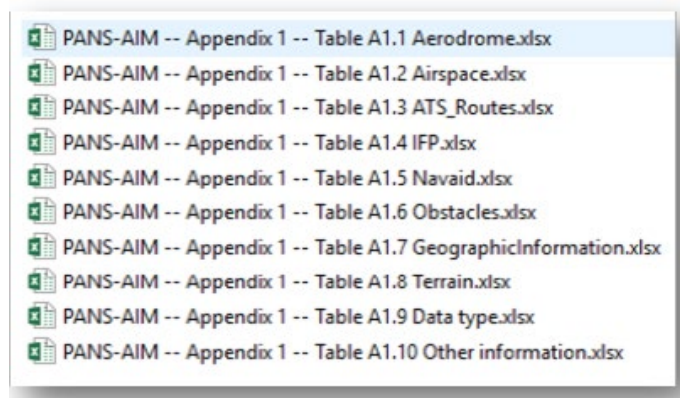
1.1 Aeronautical Information Products, including AIP, are critical to aircraft operators, airports operators, Air Navigation Service Providers (ANSPs), and civil aviation stakeholders. These products include both aeronautical charts and aeronautical information that are necessary for safe, effective and efficient aviation operations. ICAO has established SARPs in Annex 15 that guides the collection, processing, and dissemination of aeronautical information, ensuring data accuracy and timeliness.

1.2 The Trinidad and Tobago Civil Aviation Authority (TCAA) under the guidance of formal agreements with Eastern Caribbean States (ECAR), Anguilla, British Virgin Islands and data originators, have the responsibility for the publication of timely and complete aeronautical data and aeronautical information products; AIP, AIP Amendments, AIP Supplements and AICs.

1.3 Data Originators are responsible for providing aeronautical data that meets the data quality requirements of the PANS AIM Aeronautical Data Catalogue.

1.4 The Aeronautical Data Catalogue is a tool supporting the implementation of the datacentric environment. It provides the scope of the data and information that can be collected and maintained by an AIS, including the publications requirements for aeronautical data. It facilitates the identification of the organizations and authorities responsible for data origination.

The Aeronautical Data Catalogue contains the aeronautical data subjects, properties and sub-properties organized in the following tables:



Extract: Doc. 10066 *Appendix 1: Aeronautical Data Catalogue*

1.5 ICAO requires metadata submission throughout the aeronautical information data chain, from origination to distribution to the next intended user. Metadata submissions shall include the names of the organizations or entities performing any action of originating, transmitting or manipulating the data, the action performed, and the date and time the action was performed.

## 2. Discussion

### *Publication delays resulting from inaccurate data submission*

2.1 Submitted aeronautical data that does not meet the required quality, or missing metadata, results in multiple verification requests to data originators until the required standards have been met. This increases the resources needed to meet the required standard and can lead to delays in publication. Dealing with multiple requests creates a level of fatigue to the publications officer having now an increase in workload and an increase in the pace to complete the publication in order that publication deadlines and the AIM Publications Quality Objectives are met. This also increases the risk of human errors.

In addition to delays in the publication, the publication of inaccurate data can have a very dangerous impact on the aviation safety depending on the information published.

Data originators are to comprehend and be cognizant that quality data submissions are critical to safety, therefore verification and validation activities should be conducted to eliminate inaccurate data submissions.

Verification activities include:

- o comparison processes where data and information are compared with an independent source;
- o feedback processes where data and information are compared between their input and output state;
- o processing through multiple independent and different systems where each output is compared, this includes performing alternative calculations; and
- o processes where data and information are compared to the originator's request.

Validation activities include:

- o application processes where data and information are tested;
- o processes in which data and information are compared between two different outputs; and
- o processes in which data and information are compared to an expected range, value or other variant.

#### *Late/No Submission of Raw Data*

2.2 TTCAA AIM Publication Unit distributes annually via AIC, scheduled timelines for the submission of data for amendments to the ECAR AIP. This is followed up by emailed requests for raw data submissions to data originators, AIS/AIM Offices and Points of Contact.

Data originators are required to monitor their published data for continued compliance to requirements, for example, from updates to ICAO SARPs and shall take steps to submit updated data to the AIM Publication Unit within the stipulated timelines.

The experience is, data originators: do not comply with timelines or submit inaccurate data or no data at all.

When data is not received within timelines or when inaccurate data is submitted, it leads to the same outcome; the publication officer must repeat tasks from data reception to production. This increases both workload and the urgency to meet deadlines.

Additionally, if no data is provided for mandatory updates - such as those required for ICAO SARPs, the information published in the AIP is now considered non-compliant as it relates to the updated SARPs.

#### *Determination of data suitable for AIRAC Publications*

2.3 AIRAC, a system aimed at advanced notification based on common effective dates of circumstances that necessitate significant changes in operating practices.

Currently, data originators are assisted by the AIM Publication Unit in determining if data to be published qualifies for AIRAC publication, and the most suitable effective date that the data can be published.

The TTCAA AIM Publication Unit requires data submissions at least two (2) AIRAC cycles prior to the effective date, for a publication date of twenty-eight (28) days or fifty-six (56) days advance notice.

Taking into consideration the time requirement for data submission to the AIM Publications Unit and the timelines outlined within the AIRAC cycle and the desired effective date of the operational occurrence, data originators are required to determine the date most suitable for their publication.

### *Queries*

2.4 Queries regarding data published via AIP Amendment and AIP Supplements (AIRAC and Non AIRAC) are received at the TTCAA AIM Publications Unit when discrepancies are discovered with published products. Queries when received are forwarded to the data originator concerned, requesting that a response be submitted to the AIM Publications Unit. The resultant action includes performing corrective action, if required, and advising subscriber of action taken or providing the response from the data originator.

The time taken by data originators to respond to these queries extend for long periods which results in the user asking for frequent updates to their query.

When this happens, the AIM Publications Unit is put in an embarrassing situation having to respond to the requests for updates with no resolution from the data originator.

Data originators are required to submit data of the required quality which will eliminate queries from published data, and when required, provide responses to queries as soon as possible.

### *Updated Promulgation Advice Form*

2.5 The Promulgation Advice Form currently used to submit data for publication, has been updated to include a statement that indicates that the data submitted via this form meets the required data quality and that relevant verification and validation processes were conducted prior to submission. The new Promulgation Advice Form is available in Attachment A.

Promulgation Advice Forms submitted to the TTCAA AIM Publication Unit will be accepted, with the understanding that data submitted has undergone the required processes to ensure data quality.

## **3. Suggested Actions**

3.1 This meeting is invited to:

- a) Note the information provided in this Working Paper;
- b) implement required verification and validations activities
- c) any other action required.