**ARINC 424 NDB**

**Draft 1 of Supplement 23**

**Discussion/Proposal**

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EXTENSION OF PROCEDURE AND TRANSITION/AIRWAY IDENTIFIERS in XML

**V1.0**

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| **SUMMARY** |
| This paper aims at improving the proposition made during the January 2018 Phoenix meeting by Airbus (EXTENSION OF PROCEDURE IDENTIFIER TO 7 CHARACTERS) to allow extension of procedure identifiers to 8 characters for growing anticipation, as well as increasing the transition and airway route identifier from 5 to 6 characters. This paper also questions the need to add comments on the A424 PDF release document for clarification when only XML model version is planned to be modified following a new proposition. |

1. **INTRODUCTION/ BACK GROUND**

During Phoenix meeting in January 2018, Airbus proposed to extend the procedure identifier of the Airport SID/STAR/Approach Primary Records (see A424-22 §7.4 SID/STAR Procedure Identifiers, §4.1.9.1 Airport SID/STAR/Approach Primary Records & §5.9 SID/STAR Route Identifier (SID/STAR IDENT)) from 6 to 7 characters.

This has been deemed not possible in the ASCII version of A424 due to limited spare place but has been deemed feasible for the XML version for A424 supplemental 23. MITRE then confirmed during Gdansk meeting in October 2018 that the XML model (changes tracked by story ARINC-142 task in the XML follow-up tool) will contain two fields for SID/STAR IDENT, one with 6 characters to allow compatibility with today onboard systems, and one with 7 characters to allow compliance/consistency with ICAO Annex 11 Appendix 3 and future onboard systems evolutions.

1. **DISCUSSION and or ACTION**

This new paper proposes to extend this new 7 characters field to 8 characters in order to anticipate any growing need.

This paper also proposes to extend the TRANS IDENT (mainly SID/STAR Enroute Transition and Approach Transition) from currently 5 characters to 6 characters (see A424-22 §5.11 Transition Identifier (TRANS IDENT)) in the XML model for the same reasons, similar to what has been done for SID/STAR identifier.

The same modification (extension from 5 to 6 characters) should also be carried-out for the enroute airway record (see A424-22 §5.8 ROUTE IDENT) to be consistent with ICAO Annex 11 Appendix 1.

Indeed, it appears that some Approach transitions and Airways are now sometimes designated on 6 characters, with an additional letter indicating a variant of the procedure (e.g. TEPTI1 at LFTB or UM729A).

Note: after discussions with David Baker, these modifications are deemed minor to carry-out in the XML model.

This paper finally queries about how such XML-only modifications - which are not planned to be done in the ASCII version - will be reflected in the A424 PDF release document. It is indeed Airbus understanding that the A424 PDF release document should be the primary mean of reading the standard content. Therefore, in order to ensure clarity and avoid confusion of what is permitted or not by the A424 standard, every XML model-only modifications should be at least noted or commented in the PDF version in the appropriate impacted sections.

Though it appeared impossible to describe the full XML model content in the A424 PDF document (HTML browser would allow this), can we at least note some of the XML discrepancy in A424 PDF document chapter 4/5 at opportunity?

1. **Changes as depicted (Track Changes is Helpful)**

XML model only:

* Keep SID/STAR IDENT on 6 characters and TRANS/ROUTE IDENTs on 5 characters original fields.
* Extend the new SID/STAR IDENT field from 7 to 8 characters.
* Add a new TRANS IDENT field that can accept up to 6 characters.
* Add a new ROUTE IDENT field that can accept up to 6 characters for enroute airway.

A424 PDF release document:

* Add a note/comment in sections §7.4, §4.1.9.1, §5.8, §5.9 and §5.11 to clarify that A424 XML model can have more characters allowed (up to 8 for SID/STAR IDENT, 6 for TRANS/ROUTE IDENT).

For instance:

**5.9 SID/STAR Route Identifier (SID/STAR IDENT)**

Definition/Description: The SID/STAR Route Identifier field contains the name of the SID or STAR, using the basic indicator, validity indicator and route indicator abbreviated to six characters with the naming rules in Chapter 7 of this document.

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| Source/Content: SID/STAR route identifier codes should be derived from official government publications describing the terminal procedures structure. Used On:  | Airport SID/STAR, Heliport SID/STAR and Flight Planning Arrival/Departure Data Records  |
| Length:  | 6 characters max  |
| Character Type:  | Alpha/numeric  |
| Examples:  | DEPU2, SCK4, TRP7, 41M3, MONTH6  |

**Note: the XML model also contains an additional SID/STAR Route Identifier field that allows up to 8 characters max.**