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Considerations for Aeronautical Data Alteration

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FOREWORD

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- developing consensus on the application of pertinent technology to fulfill user and provider requirements, including development of minimum operational performance standards for electronic systems and equipment that support aviation; and

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EXECUTIVE SUMMARY

This is a guidance document that clarifies and expounds on the criteria and processes associated with the alteration of aeronautical data in support of the requirements defined in RTCA DO-200B/EUROCAE ED-76A. It does not define any requirements, rather it provides considerations, examples, and guidelines for the disposition and processing of altered aeronautical data.

The document is organized as follows:

Section 1 - An introductory section which provides:

- Background information as well as the purpose and scope of the document
- A discussion of key terminology used in the document
- A listing of stakeholders and their intended use of the document
- A list of reference documents

Section 2 - A discussion of general considerations when altering aeronautical data. This section includes:

- An explanation of this document's relationship to DO-200B/ED-76A
- A discussion of why a data supplier may seek to change Source data
- The impacts of altering data

Section 3 - Scenarios based on Source responses to error reports, and examples for how to handle situations when the response is unclear or non-existent. This section includes both errors of omission and commission.

Section 4 - Recommended guidelines for alteration of aeronautical data in support of DO-200B/ED-76A requirements.

Section 5 - Lists the membership of RTCA SC-217/EUROCAE WG-44 that contributed to this document.

Appendix A - Glossary of relevant terms

Appendix B - Abbreviations and acronyms

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1 INTRODUCTION AND SCOPE

1.1 Introduction

This document provides clarifying information regarding data alteration for aeronautical data chain participants. The document provides background, key terminology, general considerations for data alteration, examples of data error scenarios, and ends with guidelines for data alteration.

1.2 Scope

This document addresses the alteration of data and guides entities in the processing, disposition, and/or use of altered aeronautical data. These entities may be any of the stakeholders involved in the aeronautical data chain and listed in Table 1.1. This document does not establish requirements above what is required in RTCA DO-200B/EUROCAE ED-76A, nor is it prescriptive in how existing aeronautical data chains process data. Alteration is separate from assembling, translating, selecting, or formatting of data. Withholding data found to be in error is not considered alteration. Consequently, this document does not apply to data changes which preserve the meaning of the data.

While this document refers to origination in order to differentiate it from alteration, it does not provide any additional guidance for origination, given that it is deemed sufficiently covered by DO-200B/ED-76A.

1.3 Background

Data suppliers have the ability to originate data or make alterations of the data they receive per approved processes. Before this document, industry guidance was not available for data suppliers to use in determining when alteration changes are appropriate. As data supplier processes became more complex, a need for clarity around data alteration was identified.

There are several contributing factors as to why data suppliers may consider altering the data received from Source, such as:

1. Incorrect, inconsistent, or incomplete data.
2. Other sources of information that are more recent and/or more accurate.
3. Information from multiple sources that disagree.

DO-200B/ED-76A, section 2.4.2, states that data may be altered if permission from the Source is granted. However, it does not explicitly address what to do if the Source fails to respond to the report of the perceived error. This document addresses the issues, concerns, and potential confusion among aeronautical data chain participants when considering data alteration. It further clarifies existing requirements, expectations, and processes related to data alteration.

1.4 Key Terminology

The definitions of terms used in this document are provided to clarify or add to those found in the glossary in DO-200B/ED-76A and ICAO Annex 15. They are not intended to amend current requirements or definitions, but to provide further context.

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