PROPOSAL TO AMEND ICAO FLIGHT DATA ANALYSIS PROGRAMME (FDAP) RECOMMENDATION AND STANDARD TO EXPAND AEROPLANES´ WEIGHT THRESHOLD

Working Paper

Regional Aviation Safety Group – Pan America

Executive Safety Committee

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INTRODUCTION

Flight Recorders as an investigation tool

▸ Data Stream as a Flight Data Analysis and Monitoring Tool

ACCIDENT REDUCTION VIA FDMP/FDAP

Accidents rates have continued to improve since 2001 when the ICAO standard has been written.

➢ Aircraft equipment has improved,

➢ Automation has improved

➢ Aviation infrastructure (airports, air navigation) has improved

➢ Safety oversight and surveillance has improved and

➢ Safety Management Systems have been introduced.

No definitive study has shown direct accident reductions from pre/post flight data monitoring/analysis implementation. FDMP/FDAP programs are also being continually improved and becoming more mature.

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COST OF FDAP/FDMP IMPLEMENTATION

Categories of Cost

➢ Aircraft Equipment

➢ Data Storage

➢ Staff to conduct analysis

➢ Staff and management of collecting flight data from the aircraft

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THE NEED FOR A BUSINESS CASE

Safety Risk Management is driven by data at nearly all levels

Safety Reporting is one method of data collection

Flight Data parameters recorded from the actual aircraft sensors is much less biased and factual

▸ The reasons for implementing FDMP/FDAP must be compelling when examining costs and benefits

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THE PROPOSAL

*3.3.1 **Recommendation.-** All aeroplanes of a maximum certificated take-off mass over 5 700 kg should be equipped with a Quick Access Recorder (QAR). This QAR should record at a minimum the parameters recorded by the Flight Data Recorder and the operator should establish and maintain a flight data analysis programme as part of its safety management system.*

3.3.2 All aeroplanes of a maximum certificated take-off mass over 5 700kg for which the individual certificate of airworthiness has been first issued on or after 1 January 2005 shall be equipped with a Quick Access Recorder (QAR). This QAR shall record at a minimum the parameters recorded by the Flight Data Recorder and the operator shall establish and maintain a flight data analysis programme as part of its safety management system.

ACCIDENTS – NACC/SAM REGIONS – 5.7 TO 27 TONS

List of 20 accidents in Annex 1 for 2016.

IMPACT FOR AIRCRAFT/OPERATORS

Aircraft

  137 Total Aircraft Models

  28 Aircraft types represent about 80% of the Total

Operators

▸ 676 Aircraft Operators

▸ Operators with 5 aircraft or more represent about 76% of total. (196 Operators)

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