

# ICAO DOC 10104 Manual on Flight Recorder System Maintenance

Transport Safety Investigation Bureau  
Singapore

APAC-AIG/8

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Agenda 3: Update on ICAO AIG-Related Requirement and Activities

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# Introduction

- This paper highlights the publication of ICAO Doc 10104 Manual on Flight Recorder System Maintenance which was published recently

# Discussion

- AIAs had experienced challenges in obtaining useful information from flight recorders
- Examples of FDR issues:
  - System calibration not performed to required standard
  - Amplitude of parameter signal greater than recording capabilities
  - Unserviceable sensor providing invalid data to FDR
  - Annual serviceability check inadequate to determine validity of recorded data

# Discussion

- Examples of CVR issues:
  - Poor quality recording due to:
    - Incompatible microphone signals with CVR
    - Incorrect balance between radio and intercom inputs
  - Serviceability checks inadequate to detect poor quality recording issues
  - Bug in software converting raw CVR data to audio file
- In general, main issue is due to lack of proper maintenance of the flight recorders

# Discussion

- Flight Recorder Specific Working Group (FLIREC SWG) discussed developed Doc 10104
- Main intention:
  - Availability of a consistent international guidance material relating to the methods of maintenance to ensure the proper performance of the flight recorder system

# Action by the Meeting

The meeting is invited to:

- Encourage States/Administrations to review the contents of Doc 10104; and
- Share the information with their regulatory authorities, air operators and organisations performing flight recorder maintenance, as appropriate

Thank You