



International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 – 8 May 2025)

Agenda Item 4.2: Outcomes of the RASG-MID Groups (SEIG/6 Meeting)

FATIGUE IN AVIATION MAINTENANCE ENVIRONMENT

(Presented by United Arab Emirates))

SUMMARY
<p>This paper presents the</p> <p>A detailed analysis was conducted using data from the General Civil Aviation Authority (GCAA) databases, focusing on reported incidents, their root causes, and contributory factors. Among the findings, fatigue emerged as a critical contributing factor to many of the incidents.</p> <p>Action by the meeting is at paragraph 8</p>
REFERENCE
<p>- ICAO DOC 9966</p>

1. INTRODUCTION

1.1 The Fatigue is widely recognised as a significant hazard that predictably impairs human performance across various tasks and, if left unchecked, can lead to incidents or accidents.

1.2 In response to this, the GCAA has organised a dedicated workshops aimed at discussing fatigue issues encountered by the maintenance organisations.

1.3 A detailed analysis was conducted using data from databases, focusing on reported incidents, their root causes, and contributory factors. Among the findings, fatigue emerged as a critical contributing factor to many of the incidents.

2. DISCUSSION

2.1 Explore mitigation actions toward fatigue risk induced to maintenance personal.

2.2 Establish dedicated fatigue training as mandatory training for maintenance organizations.

2.3 Maintenance Organization shall take into consideration Special circumstances in maintenance activities.

2.4 UAE approach towards fatigue.

2.5 UAE Propose a survey by ICAO MID office to determine regional approach towards

fatigue.

3. MECHANISMS IN PLACE TO MITIGATE FATIGUE

- 3.1 GCAA analyzed the data collected from the GCAA reporting channels related to fatigue.
- 3.2 The GCAA facilitated specialized workshops addressing fatigue in maintenance environments.
- 3.3 The UAE GCAA Published Safety Decision to introduce the fatigue principles and requirements.

4. MANDATORY TRAINING FOR FATIGUE

- 4.1 GCAA suggest to implement a standardized training for fatigue dedicated to maintenance organizations.
- 4.2 UAE GCAA to encourage ICAO MID to conduct fatigue workshops in the region.

5. SPECIAL CIRCUMSTANCES

- 5.1 Organization shall consider special circumstances such as but not limited to Aircraft on Ground (AOG), away from base.
- 5.2 Sufficient rest periods before and after AOG cases shall be given to the maintenance personnel.
- 5.3 Flight hours shall be included as duty hours for on board engineers.

6. GCAA APPROACH

- 6.1 GCAA published a safety decision (SD) to eliminate the effect of fatigue in maintenance environment as an initial stage.
- 6.2 GCAA in the phase of publishing a standalone regulation aiming for controllable fatigue in maintenance environment.

7. FATIGUE SURVEY

- 7.1 UAE GCAA propose a survey for the region with the following questions:
- Is the state implemented any measures toward fatigue in maintenance environments?
 - What are the current mitigation actions taken by the state?
 - Are those mitigation action sufficient to eliminate the effect of fatigue?
 - Any future plan to enhance fatigue mitigation actions? And what are they?
 - What actions do you recommend from ICAO MID office towards managing fatigue

in maintenance environments?

7.1 Following the publication of the survey by ICAO MID office and the collection of outcomes the regional office is required to provide the necessary recommendations for the next steps.

8. ACTION BY THE MEETING

8.1 The meeting is invited to:

- a) Take note of the working paper content
- b) ICAO MID office to circulate a survey to the region to assess the measure taken to mitigate fatigue in maintenance environment.
- c) Following the publication of the survey and the collection of outcomes, the regional office is required to provide the necessary recommendations for the next steps.

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