



ICAO

**Seventh Meeting of the Africa-Indian Ocean Regional Aviation Safety Group
(RASG-AFI/7)
(Virtual – 5 November 2021)**

**INITIATIVES ON THE ESTABLISHMENT AND OPERATIONALIZATION OF
CENTRE FOR AVIATION MEDICINE IN THE AFI REGION**

**Agenda Item 4: Update on the safety initiatives by States, Regional Organizations,
Industry and Partners, especially under the context of COVID-19**

(Presented by the EAC CASSOA)

SUMMARY

This paper presents the Regional initiative regarding the establishment and operationalization of the Centre for Aviation Medicine (CAM) in support of the provision of the civil aviation medicine services and related initiatives on capacity and capabilities building in the AFI Region. Among the most observable findings during the Universal Safety Oversight Audit Programme (USOAP) of the International Civil Aviation Organization (ICAO) in 2011 were shortcomings in the implementation of ICAO Aviation Medicine related Standards and Recommended Practices in relation to lack of Designated Medical Examiners and use of Medical Assessors in the Region hence the existential inability of the AFI States to provide requisite services in support of flight crew competencies and related training, medical referral and deferral services and the CAPSCA Project. Capacity building in the areas of Aviation Medical Assessors and Designated Medical Examiners (DME's) has now considerably improved following the establishment of the CAM in 2014 in Entebbe. The requirements for ensuring medical fitness among flight crew and air traffic controllers are now in line with the provisions contained in the ICAO Annex 1, 2, 6 and 11 SARPs.

Based on this existential scenario, the Republic of Kenya through cooperation and collaboration with the ICAO ESAF, EAC CASSOA and civil aviation authorities have completed construction of the CAM facility in the Republic of Kenya in June 2021. In this regard, operationalization of the CAM facility will assist AFI States and global flying community to comply with the ICAO SARPs related aeromedical standards thus achieving established fitness to fly criteria, among other allied services related to managing flight safety and health standards.

Action by the Meeting: The meeting is invited to consider recommendation 3.1/x — on “Update on the safety initiatives by States, Regional Organizations, Industry and Partners, especially under the context of COVID-19”

Strategic Objective	A, D, E
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1. INTRODUCTION

1.1 It is common knowledge that civil aviation industry in the AFI region needs the support and services of the civil aviation medicine in ensuring compliance with the regulations related to personnel licence and offering adequate management health of cockpit crew and air traffic controllers. The current statistics indicates that the number of skilled Aviation Medicine Assessors (AVMED Assessors) and Designated Medical Examiners (DMEs) including provision of civil aviation medicine needs continuous improvement. This calls for dedicated capacity and capability building initiatives.

1.2 For purpose of maintaining medical related requirements, the, ICAO ESAF region through cooperation and collaboration with the EAC CASSOA and civil aviation authorities in the Eastern African sub region completed the construction of CAM facility in the Republic of Kenya in June 2021 under the financing of Government of Kenya. The current efforts are directed towards operationalization of the facility for purposes of assisting AFI States and global flying community to implement and maintain compliance with the aeromedical requirements and other best industry medical related practices.

2. DISCUSSION

2.1 ICAO introduced medical requirements for pilots related to aeromedical examination contained in ICAO Annex 1, 2, 6 and 11 and related guidance material contained in ICAO Doc 8984. However, minimal efforts have been directed towards monitoring and quantifying safety benefits of the requisite aeromedical standards in the AFI region. It is important to note that the established medical standards and recommended practices set by ICAO have been agreed upon globally. Despite this global agreement on a suitable international system, regulatory authorities interpret the medical standards and recommended practices in variable ways. In practice, this leads to varying criteria on fitness levels being required of license holders in States. Therefore, through establishing and operationalization of the CAM Centre in the EAC, the following intrinsic benefits will be realized:

- a) Contribution towards ensuring implementation of Safety management system (SMS) through medical related provisions of ICAO SARPs;
- b) Provision of technical support in the implementation and guidance on aeromedical standards and practices;
- c) Contribution towards overall reduction of events related aeromedical unfitness among flight crew, ATMOs and other related personnel;
- d) Enhancement of training, organizational capabilities for assessment and validation of medical fitness and;
- e) Act as key stakeholder in the development of aviation medicine practices and examination techniques.
- f) Contribution towards the implementation of the CAPSCA Project in the Region.

2.2 The proposed partnership between the CAM, ICAO and potential funding Agencies is intended to strengthen competencies among the medical examiners and medical assessors in the AFI Region which in turn will culminate into the satisfactory

implementation of medical-related ICAO SARPs with the leading accountability of the CAA's.

2.3 Besides, the operationalization of the CAM is intended to assist in maintaining medical fitness among the various licensed pilot categories to conduct commercial civil aviation operations in a safe manner. In essence, the pilots need structured, competent and readily available medical evaluation and support in order to reduce the risk of in-flight incapacitation and their general wellbeing.

2.4 In addition, once fully operational, the CAM Centre will evolve into an indispensable stakeholder in the implementation of measures under the ICAO Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) framework. Since CAPSCA is a cross-sectoral, collaborative programme involving various organization, the CAM will contribute towards management of the programme within the region with the leadership and support of ICAO and other organizations including World Health Organization (WHO) and Africa – CDC and RSOOs in the Continent. The plan is geared towards making the CAM to discharge contributory role in improving emergency preparedness plans and response to public health emergencies of pandemic magnitudes such as COVID-19.

2.5 In the medium term, the CAM is visioning towards extension of its role in facilitating standardized 'Upset Prevention and Recovery Training' (UPRT) through providing a combination of theoretical knowledge and practical piloting training with the objective of equipping flight crew with the required competencies for both prevention and recovery from situations in which an aeroplane inadvertently exceeds the parameters for line operation or training (aeroplane upsets).

2.6 With the objective to introduce different 'levels' of UPRT at various stages of a professional pilot's career, the CAM intends to provide the training (theoretical and practical instructions) based on the following modules;

- a) **Basic UPRT Training** - integrated in all Commercial Pilot Licence (CPL) and Airline Transport Pilot Licence (ATPL) training courses as well as the Multi-pilot Licence (MPL) training course;
- b) **Advanced UPRT Training** which will include at least 5 hours of theoretical instructions and at least 3 hours of dual flight instruction in an aeroplane, with the aim to enhance the student's resilience to the psychological and physiological aspects associated with upset scenarios.
- c) **Class- or type-related UPRT Training** which is intended to address the specificities of the relevant class or type of aeroplane when pilot encounters upset situations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) take note on the establishment phase of the CAM facility upon completion of

construction of the facility;

- b) encourage AFI States and RSOOs to collaborate in ensuring implementation and compliance with the aeromedical standards and related guidance material and;
- c) urge AFI States and RSOOs in Africa to strategize and develop programmes aimed at capacity and capability building in the field of aviation medicine, among others, aviation medical assessors and designated medical examiners to meet growing demand on fitness to fly and air traffic management operations;