



International Civil Aviation Organization

Runway and Ground Safety Working Group

Fourth Meeting (RGS WG/4)
(Cairo, Egypt, 05-07 November 2017)

Agenda Item 3: Implementation of Aerodrome Safety Priorities and Objectives in the MID Region

MAINTAINING OPERATIONAL SAFETY LEVEL ON AERODROMES DURING CONSTRUCTION

(Presented by Egypt)

SUMMARY

The aim of this paper is to introduce best practice methodology for mitigating and controlling the risks emitted from construction at airfield during aircraft operation.

Action by the meeting is at paragraph 2.

REFERENCE

- Construction Safety Policy Guidelines, Revision 2, 2009
- ECAR 139.335 (i)
- EAC 139.33
- EAC 139.25 chapter (8)

1. INTRODUCTION

1.1 Airports are complex environments, and procedures and conditions associated with construction activities often affect aircraft operations and can endanger operational safety. Safety considerations are essential and may make operational impacts unavoidable. However, careful planning, scheduling, and coordination of construction activities can minimize disruption of normal aircraft operations and avoid situations that compromise the airport's operational safety. The airport operator must understand how construction activities and aircraft operations affect one another to be able to develop an effective plan to complete the project and to enhance the day-to-day airport maintenance operations.

1.2 Safety must be an integral part of each activity. Full participation, cooperation, and support are necessary and required to ensure the safety at airfield.

1.3 In accordance to ECAR (Egyptian Civil Aviation Regulation) part 139.335 (i), EAC (Egyptian Advisory Circular) No. 139.25 chapter (8), a Work Safety Plan should be prepared by the Aerodrome Operator prior to commencement of any aerodrome construction/development project, so as to ensure that necessary precautions shall be undertaken with the aim to accomplish highest safety levels during construction/ development works.

1.4 As we know, airport operator is responsible for maintaining operational safety during construction by putting all construction activities under control and providing sufficient warning for pilots, So, Egyptian Airports Company is prepared methodology of Construction Safety at airports in order to help the airport operator and contractor in the preparation of Safety Construction documents, in case of performing of any projects within Movement area at airports with taking into account the obligation to implement regulation of Egyptian Civil Aviation Authority.

1.5 Construction safety methodology provides a good framework for good practice for mitigating and controlling the risks emitted from construction at airfield during aircraft operation.

1.6 Consequently, good practice methodology is particularly needed in order to collect relevant and accurate data on Construction project and its location at airfield to identify all components of hazard as an initial step to put suitable safety measures to ensure safety during Construction activities.

1.7 Contractors are charged with the responsibility for conducting their operations in a manner that will provide safe working conditions for all employees and the protection of the aircrafts is exposed to the project.

Construction Safety Methodology Consisted of Four Sections as following:

1.8 Procedures to establish Construction safety plan by committee comprising representatives from the Airport management, Air Traffic Control, Airport Maintenance Department, and contractors' agent.

1.9 General precautions should be obligated by contractors before and during construction activities at airfield.

1.10 Explanation of work in progress checklist reference to ECAR 139 and EACs 139.

1.11 Procedures to implement displaced threshold before the commencement of any work on the RWY.

Basic Safety Precautions should be Taken into Account by Contractor to Prevent Bad Effect on Aircraft Operation during Work Activities:

1.12 Prevent employees, subcontractors, suppliers, and vendors or equipment from intruding upon the movement area, without the knowledge and concurrence of the Airport Operations Supervisor.

1.13 Prevent trash, water, dirt, dust, debris, or other transient materials with Foreign Object Damage (FOD) potential from entering into or remaining in construction and/or maintenance areas, whether on runways, taxiways, aprons, or in related safety areas. Further, the Contractor shall not allow any material or equipment to obscure pavement markings, pavement edges, or detract from the visibility of runway/taxiway markings or lighting.

1.14 Not use any vehicles, equipment, excavations, stockpiles, or other materials which could degrade or otherwise interfere with the electronic signals from radios or electronic navigational aids.

1.15 Smoking by personnel is prohibited on the movement area.

1.16 Ensure proper radio communication coordination between the construction and air traffic control tower as required in the movement area.

1.17 Remove all bird attractions, such as edibles (food scraps, etc) or other miscellaneous garbage, trash, or pooled water while on or near the airports.

1.18 Secure all material and equipment, such as lightweight construction materials, to prevent displacement from wind or jet blast.

1.19 Provide and monitor adequate and proper fencing, barricading, marking, and lighting of construction, maintenance or other sections that are temporarily closed to normal airport use.

1.20 Ensure that no hot work welding or cutting operations which may provide an open flame or hot surface are performed until a permit obtained to conduct such operations.

Egyptian's Commitments to Aviation Safety

1.21 Egyptian has shown its commitment to safety and security by undergoing all relevant ICAO and ECAA.

1.22 In order to ensure safety, EAC 139-33 (Operational safety on airports during construction) is prepared by ECAA.

1.23 Egyptian Civil Aviation Authority is preparing guidance material of construction safety as national guideline coordination with Egyptian Airports Company aims to achieve high safety performance during Construction activities.

2. ACTION BY THE MEETING

2.1 The meeting is invited to:

- a) note the information in this Paper and provide comments;
- b) review the best practice methodology in para 2 and recommend measures to meet the agreed safety performance during construction; and
- c) identify the difficulties faced in the implementation of safety measures during construction.