

ADVISORY CIRCULAR

SUBJECT:	DATE:	AC NUMBER:	VERSION:
AIRPORT EMERGENCY PLAN (AEP)	2022-08-11	139-04	1.0

NOTE: THIS ADVISORY CIRCULAR IS PUBLISHED TO PROVIDE REGULATORY INFORMATION AND DESCRIBE ACCEPTABLE MEANS OF COMPLIANCE WITH THE GENERAL AUTHORITY OF CIVIL AVIATION REGULATIONS (GACAR).

CHAPTER 1 – INTRODUCTION

1.1 Purpose.

This advisory circular (AC) provides information to certificated aerodrome operators on the requirements to be met for the airport emergency plan (AEP) and acceptable means of compliance with the regulatory requirements related to airport emergency plan (AEP). The information embodied in this AC is additional and supplementary to the requirements of GACAR Part- 139.

1.2 Applicability.

This advisory circular is applicable to all certificated aerodromes in the Kingdom of Saudi Arabia under GACAR Part-139.

1.3 Cancellation.

This is the first official version of this advisory circular, and it cancels no other advisory circulars.

1.4 Related Regulatory Provisions.

- (a) GACAR PART 5 – Safety Management Systems;
- (b) GACAR Part 139- Certification, Authorization and Operation of Aerodromes;
- (c) GACA eBook Volume-2; Safety Management Systems;
- (d) GACA eBook Volume-7; Aerodromes, Heliports and Water aerodromes administration.

1.5 Related Reading Material.

The following documents, inter alia, are relevant to the aerodrome requirements necessary to support the certification of aerodrome:

- (a) Introducing the Criteria for Reviewing Emergency Plans issued by National Risk Council, Kingdom of Saudi Arabia;

(b) ICAO Annex 14 – Aerodromes, Ninth Edition, July 2022;

(c) ICAO Doc 9137 – Aerodrome Services Manual Part-1- Rescue and Firefighting services, Fourth Edition, 2015s;

(d) ICAO Doc 9137 – Aerodrome Services Manual Part- 7- Airport Emergency Plan, Second Edition, 1991;

(e) National Fire Protection Association Codes.

1.6 Approval.

This advisory circular has been approved for publication by the Executive Vice President, for Safety and Aviation Standards Sector of the General Authority of Civil Aviation.

CHAPTER 2 – AIRPORT EMERGENCY PLAN

2.1 Introduction.

An airport emergency is any occasion or instance, natural or man-made that warrants action to save lives and protects property and public health. The airport emergency plan should address those emergencies that occur on or directly impact, an airport or adjacent property that:

- a) is within the authority and responsibility of the airport to respond; or
- b) may present a threat to the airport because of the proximity of the emergency to the airport; or
- c) where the airport has responsibilities under local/regional emergency plans and by mutual aid agreements.

Section 9.1 of Annex 14; Vol-I; to the Chicago Convention (Aerodromes), states:

"Aerodrome emergency planning is the process of preparing an aerodrome to cope with an emergency occurring at the aerodrome or in its vicinity. The objective of aerodrome emergency planning is to minimize the effects of an emergency, particularly in respect of saving lives and maintaining aircraft operations."

As per the provisions contained in § 139.901 Sub Part-L of GACAR Part-139 on Certification, Authorization and Operation of Aerodromes, it is stated:

“An aerodrome emergency plan should be established at an aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome. “

According to GACAR 139 (139.105) aerodromes are classified as follows:

- (1) Civil/Public Aerodrome
- (2) General Aviation Aerodrome
- (3) Private aerodromes
- (4) Flight training aerodromes
- (5) General purpose aerodrome

2.2 What is an Airport Emergency Plan.

An airport emergency plan is a document that:

- a) Assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in responding to an emergency.
- b) Sets forth lines of authority and organizational relationships, and shows how all actions should be coordinated.
- c) Describes how people and property will be protected in emergencies and disasters.
- d) Identifies personnel, equipment, facilities, supplies, and other resources available – within the airport or by agreement with external agencies /communities – for use during response and recovery operations.
- e) Facilitates response and short-term recovery to set the stage for successful long-term recovery.
- f) Should provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its vicinity.

2.3 Location and impact of emergencies.

An airport incident can occur anywhere, at any time – day or night, under any weather condition, and in varying degrees of magnitude It can occur instantaneously or develop slowly; it can last only a few minutes

or go on for days. It can be natural, such as a sand storm or earthquake, or it can be “man-made”, such as a hazardous materials spill, civil unrest, terrorism, major fire, or power outage. Moreover, emergencies of the same type can differ widely in severity, depending on factors such as degree of warning, duration, and scope of impact. The important thing to remember is that, while emergencies can seldom be exactly predicted, they can be anticipated and prepared for.

The potential for disaster exists everywhere, and the cost in suffering, life, and property can be devastatingly high. Since emergencies are perceived as low probability events and because preparedness requires cost in time and finances, the importance of such planning can often be overlooked. However, airports and communities that experience such disasters can pay a high price if they are not prepared. In addition to health and safety problems, social disruption, lawsuits, negative publicity, and psychological after-effects may result. While every contingency cannot be anticipated and prepared for, a strong emergency preparedness program can assist in limiting the negative impact of these events, including liability and other post-emergency issues.

2.4 Consideration for preparing an emergency plan.

When preparing for an emergency response, consideration should always be given to the:

- a) complexity of the aerodrome operating environment
- b) geographical location of the aerodrome
- c) type of aircraft that operate at, or are likely to operate at the aerodrome
- d) types of emergencies that could occur
- e) identification of hazards which could reasonably be expected to initiate or contribute to an emergency
- f) equipment, resources and training that may be required.
- g) readily availability of and coordination with appropriate specialist rescue services to be able to respond to emergencies where an aerodrome is located close to water and/or swampy areas and where a significant portion of approach or departure operations takes place over these areas.
- h) Establishment, testing and assessment at regular intervals of a pre-determined response for the specialized rescue services.
- i) An assessment of the approach and departure areas within 1,000 m of the runway threshold should be carried out to determine the options available for intervention.

2.5 Concepts and Principles of Emergency Planning.

2.5.1 Planning Guidance and Standards

The airport operator has the primary responsibility for airport emergency response. However, it is a fact no airport has all the sufficient resources to respond to every emergency situation independently. It is therefore each airport should depend to some degree on the resources from its governmental agencies and surrounding communities. For this reason, each airport operator is encouraged to involve local communities in the development of the airport emergency plan and use the collective expertise and resources for the mutual benefit of all parties. It is therefore, the relationships between on-airport emergency services and other mutual aid entities should be defined in Memorandums of Understanding (MOUs) and Memorandums of Agreement (MOAs).

Airport access should be in accordance with applicable MOUs and MOAs. Requirements of GACAR &

Security directives should not be compromised by allowing unlimited (or in some cases even limited) airport assets to be used in the local system on and off airport response. Airports may “incorporate by reference” mutual aid agreements and applicable local, regional, plans and to expand on them in the airport emergency plan only when necessary for compliance.

2.5.2 National Response Framework

The introducing the Criteria for Reviewing Emergency Plans issued by National Risk Council, presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies. It establishes a comprehensive, national, all-hazards approach to domestic incident response; The Criteria for Reviewing Emergency Plans defines the principles, roles, and structures that organize how we respond to emergencies.

While most airport incidents are generally handled routinely by the airport operator, there are important instances in which successful domestic incident management operations depend on the involvement of multiple agency's emergency responder disciplines. These instances require effective and efficient coordination across this activity. The command systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. This framework forms the basis for interoperability and compatibility that will, in turn, enable a diverse set of public and private organizations to conduct well-integrated and effective incident management operations.

The Emergency operations center and command post is a designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. A basic premise of incident command systems is that it is widely applicable and is used to organize both near-term and long-term field-level operations for a broad spectrum of emergencies, from small to complex incidents, both natural and manmade. Emergency operations center and command post facilitate activities in five major functional areas: command, operations, planning, logistics, and governmental officials.

The emergency operations center should be a part of the aerodrome facilities and should be responsible for the overall coordination and general direction of the response to an emergency. The command post should be a facility capable of being moved rapidly to the site of an emergency, when required, and should undertake the local coordination of those agencies responding to the emergency.

2.5.3 Coordination of Airport Emergency Plans with other organizations Emergency plans

As appropriate, consideration should be given to mutual assistance and coordination between local resources with airport resources. In addition to security and firefighting /emergency services, contingencies such as, mass evacuation with the airport being the staging and exit point or staging areas assembly areas, crowd control, shelter, sanitation, feeding, etc.

The safe and orderly movement of vehicles and pedestrians on an airport is essential in airport emergency planning. Lack of sufficient training for personnel and vehicles on airports has the potential to lead to life threatening consequences and costly property damage. Airports should work closely with mutual aid responders to ensure all requirements for each airport to include, but not limited to compliance with all

GACA regulations applicable to Security enforcement procedures.

2.5.4 Identification of Hazards and Risk assessment

The main purpose for Identification of hazards and risk assessment is to help airport emergency planning committee to determine what hazards exist, what actions should be planned, and what resources are recommended.

It is important to include as many people/organizations as possible from both the airport and surrounding community agencies (Civil Defense, Medical, and Security- Others) when doing the analysis. This provides information across a broad spectrum and avoids limiting the outcome to only one or two areas of expertise.

Once the hazards have been identified and prioritized, the airport emergency planning committee should create scenarios and brainstorm needed hazard-specific planning provisions and hazard-specific resource requirements. Starting with a given intensity of a hazard, the team can imagine the hazard's development from initial warning to its impact on a specific part of the airport and its generation of specific consequences (e.g., loss of critical services and infrastructure; death, injury). This information can then be further refined through drills and tabletop exercises.

2.5.5 Comprehensive Emergency Management

There are no typical emergencies and there are no typical or standard preparedness plans that are ideal for all airports. However, some common phases to preparedness for disasters can provide systematic approach for planning purposes.

- a) Mitigation- Actions that can prevent, alleviate, or diminish the potential effects of a disaster situation.
- b) Preparedness- Actions that enhance emergency response capabilities.
- c) Response- Time-sensitive actions to save lives and property, reduce the possibility of secondary damage, and speed recovery operations.
- d) Recovery-Actions that restore the airport to pre-emergency conditions.

2.5.6 Human Factors principles

The plan should observe Human Factors principles to ensure optimum response by all existing agencies participating in emergency operations.

CHAPTER 3 – AIRPORT EMERGENCY PLAN COMMITTEE

3.1 General.

- a) The aerodrome certificate holder should establish an airport emergency planning committee (AEPC). All assigned members from both internal and external (off airport) agencies will be participants in the development, review and exercising of the airport emergency plan.
- b) The Head of the Aerodrome, or other appropriate Chief Executive(s) should be a part of the team. Preparation for a disaster requires team leaders to understand their respective roles during emergencies, Team leaders should also review information describing past disasters which occurred or similar to those which could occur on the airport, as well as readiness assessments and exercise critiques, and potential liability issues.
- c) Airport emergency planning committee meetings should be convened at least once a year to ensure that the annual review of the airport emergency plan is completed. The committee should also consider additional meetings following:
1. An activation of the airport emergency plan.
 2. An airport emergency plan exercise; and
 3. Any other circumstances where the currency and procedural validity of the airport emergency plan needs to be addressed.
- d) Airport emergency planning committee should conduct regular meetings. The agenda(s) of the meetings and minutes thereof should be recorded as evidence of compliance. These records should be maintained for a period of at least three years.

3.2 Airport emergency plan committee (AEPC) objectives.

- a) The airport emergency planning committee is responsible for preparing and maintaining the airport emergency plan and formulating the relevant procedures that are applicable to its operations and any arrangements that exist with the emergency services.
- b) To ensure that the airport emergency plan complies with all relevant regulations, standards and legislation.
- c) To conduct regular exercises to test the efficacy of the procedures as outlined in the airport emergency plan.

3.3 Airport emergency plan committee Team.

The airport emergency plan comprises representatives of all agencies involved in the response to and recovery from an emergency on the vicinity of aerodrome and includes:

AIRPORT EMERGENCY PLAN COMMITTEE TEAM MEMBERS	
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1.Airport Authorities	2.Airport Operations
3.Air Traffic Control	4.Airport Safety
5.Rescue Firefighting	6.Airport Security
7.Aircraft operators	8.Government authorities
9.Airport Maintenance	10.Police
11.Civil defense	12.Coast Guard
13.Customs	14.Medical Agencies
15.Immigration	16.Metrology
17.Public Information/Media	18.Mutual Aid Agencies
19.Airlines	20.Ground services providers
21.OTHER	

CHAPTER 4 – STANDARD PLAN CONTENTS FORMAT

4.1 General.

The Basic Plan provides an overview of the airport's approach to emergency operations. It generally defines related policies, describes the response organization, and assigns tasks; the certificate holder should submit the airport emergency plan to GACA.

4.2 Components of the airport emergency plan.

4.2.1 Plan Management:

a) Plan Information (date of Plan preparation, number of current version, plan approval): General information about the plan including, for example, department, person in charge of plan preparation, plan revision, plan approval, dates of preparation, revision and approval, and number of current updated version.

b) Date of next plan revision and persons assigned to the revision: Date of latest revision of the plan, timeline for plan revision or next revision date of the plan; department information and person in charge of revision.

c) Record of Changes: A record of changes can be a chart containing a number assigned to any change, a description of the change, the date of the change, the date of actual entry into the AIRPORT EMERGENCY PLAN, and the signature or initials of the person(s) responsible for the change.

d) Plan distribution list: Employee information/departments/ agencies that have copies of the plan and have roles and responsibilities in it, locations of plan copies either electronic or paperback in order to ensure control of plan circulations, management; and insure validity and symmetry with latest revisions.

4.2.2. Plan Introduction:

a) Promulgation Document: This is letter or form signed by the aerodrome operator authority. It gives the AIRPORT EMERGENCY PLAN official status and provides both authority and responsibility for organizations to perform assigned tasks. The promulgation document can also discuss the tasked organizations' responsibility to prepare and maintain SOPs and commit them to the training, exercises, and plan maintenance efforts needed to support the AIRPORT EMERGENCY PLAN.

b) Signature Page: A signature page of airport emergency planning committee to show that all response organizations tasked in the airport emergency plan have coordinated in the plan's development and are committed to its effective implementation.

c) Determination of plan objective: The strategic purpose of responding to emergency situations and recovery after emergency response, the plan is aiming to achieve.

d) Determination of plan framework: This part of the plan specifies potential risks that might result in emergency situation that demands plan activation.

e) Determination of plan goals: The group of goals that the plan is aiming to achieve the main purpose through.

4.2.3 Events and Scenarios in the Plan Framework. Determination of events and scenarios undertaken in the plan: A list of planning presumptions based on risk analysis including emergency situations demanding plan activation, its causes, consequences, impact on society, health, environment, security, country's reputation, economic development, or the continuity of basic services or vital businesses.

4.2.4 Roles and Responsibilities:

a) Appointment of members of emergency situation response team: In this section, members of the main team responsible for performing the tasks and responsibilities mentioned in the plan are appointed; data of the team is attached with supporting documents in the appendixes.

b) Assignment of roles and responsibilities for the emergency situation response team: In this section, roles and responsibilities for the emergency situation response team are assigned:

- 1- Appointing the main committees for the event leadership, location of meeting, and the alternative location.
- 2- The assignment of roles and responsibilities for teams and committees.
- 3- Determining the mechanism of obtaining logistic support to ease the response teams and committees' work.
- 4- Instructions that are associated with filling related forms, reports preparation, meetings records and symbols and abbreviations used in them.
- 5- Connection between teams or committees with emergency operations centers.

c) Structuring of emergency situation management team and its correlation with other teams and departments: This section explains:

1. The administrative structure of response to emergency situations and its extent of correlation with other administrative structures inside the organization
2. It also provides an explanation the way in which roles are distributed inside and outside of the agencies associated with response.
3. It is also essential to support this section of the plan by attaching the details of roles and responsibilities of each department by placing the supporting documents in the appendixes.
4. Identification of Key responders in the Incident Command System should be readily identifiable through an identification system such as reflective vests, functional badges, safety hard hats, or other distinguishing markings that clearly indicate their respective function.

5. This section explains command personnel Identification system in the Incident, which be readily identifiable through an identification system such as reflective vests, functional badges, safety hard hats, or other distinguishing markings that clearly indicate their respective function. Identify Emergency Operations Center to response and deal with disasters, emergency situations, and temporary closure of the airport or runway and is subject to the supervision and management of the Airports Authority, identify attendees of this center from the departments operating at the airport, when the airport authority considers that their presence is necessary.

4.2.4.1 Roles and responsibilities of related parties (inside and outside the organization) and personnel in charge:

Roles and responsibilities are explained to departments and agencies related with plan implementation according to pre-planned presumptions, including roles and responsibilities which are divided as follows:

- 1- Inside the organization: such as emergency watch centers or report receiving call centers, other operations centers within the organization, mutual support services.
- 2- Outside the organization: all parties participating or supporting in the plan implementation.
- 3- Aerodrome operator should include a copy of the signed Mutual aid agreements between the Aerodrome operator and the organizations that provide emergency response services to the airport in the emergency plan and reviewed annually.
- 4- The plan should include the availability of and coordination with appropriate specialist rescue services to be able to respond to emergencies in difficult environments where an aerodrome is located close to water and/or swampy areas and where a significant portion of approach or departure operations takes place over these areas.

4.2.5 Main Requirements for Response and Recovery Operations. Required logistics and necessary abilities to enable the response and recovery team to perform its tasks: This section of the plan includes requirements and enablers necessary to provide logistic support for response and recovery operations within the plan framework, including but not limited to: providing primary operations rooms and centers for management of emergency situation and alternative locations for them, providing support for teams and committees reporting, transportation and continuity of work 24 hours if needed, in addition to providing technologies, communication means and procedures that ease coordination of teams and committees work, and providing support and services for report preparation and meetings records and its distribution, approval and sharing.

4.2.6 Detailed Plans (Procedures) for Each Phase of the Response and Recovery Operation:

4.2.6.1 The detailed plan of the alerting and notification phase: This section of the plan includes information of:

- a) The mechanism of monitoring, prediction, and early alert.
- b) Alert of upgrade and downgrade of level of situation, and the source of alert.
- c) Agencies in charge of alerting the audience.
- d) The mechanism of reporting sharing inside the organization and outside.

4.2.6.2 The detailed plan of information and reports collection, evaluation and analysis: In this section, the following details are clarified:

- a) The mechanism of collection of the information related to the emergency situation description and its level.
- b) The mechanism of decision making of response to emergency situation and plan activation.
- c) The mechanism of increasing the public awareness of the procedures that should be taken by each person in the society, and the determination of authorized persons.

4.2.6.3 The detailed plan for the response and containment: This section of the plan includes the

mechanism of execution and implementation of tasks and procedures, and providing support to the people effected as a result of the emergency situation in accordance with the pre-planned presumptions determined prior.

4.2.6.4 The detailed plan for recovery phase-returning back to norm: The inclusion of standards and procedures for evaluation of the termination of the response situation and the transition to recovery phase and the return back to norm and determining the mechanism of reporting to agencies inside and outside of the organization about the transition to the recovery phase, including the estimation of costs accompanying with the recovery phase and providing technical and financial consultations about it, along with the clarification of the roles of participating committees and agencies in this phase.

4.2.7 Reference Documents.

a) List of internal and external communication information: The list includes a statement showing the persons in charge of management of the plan elements or cooperation and support from inside or outside the agency according to the plan's framework which includes for instance:

- 1- Name of the main member and the substitute.
- 2- Name of the agency/department/center.
- 3- Primary or alternative communication means.

b) Maps of alternative locations:

Presenting detailed description of the alternative locations for the main emergency management center in order to ensure readiness for emergency situation management and communication with sectors related to the agency and the other agencies associated.

c) Data list of critical infrastructure exposed to effects of events and scenarios included in the plan:

d) The list contains a statement of all information necessary about the infrastructure expected to be affected according to the scenarios determined prior.

e) Relation with emergency plans and related documents: Providing description of the plan correlation with other emergency plan and documents.

f) Media and information management plan: Presenting detailed description about Media and Information Management Plan, includes public information officer should be designated, and specific place for Media Centre, for release of accident information, escorting the news media to the accident/incident location.

g) Family assistance plan: Aerodrome policy and procedures for providing support facilities and resources to the "Air Carriers Family Assistant Program, includes air Carriers Responsibilities, Aerodrome Supporting Responsibilities & Requirements (facilities & communications, resources, staffing).

h) Emergency Medical management Plan: Aerodrome policy and procedures for providing emergency medical care in time of emergency, to include specifics on triage areas, permanent care facilities, (holding

areas), and activation / request of assistance and medical transport requirements.

4.2.8 Evaluation of response and recovery procedures, and determining the lessons learned and chances for improvement:

In this section, it is mandatory to explain:

- a) The mechanism of documentation of response and recovery procedures implemented.
- b) Forms related to the documentation of response and recovery procedures.
- c) The mechanism of collecting, archiving and sharing of information and documents with stakeholders.
- d) The mechanism of studying the results of response and recovery evaluation and taking advantage out of them in improving response and recovery operations during the plan revision process.

4.2.9 Training and Exercises:

a) Training mechanism for agencies on plan tasks:

This section includes clarification of training mechanism on tasks assigned to participating agencies outside of the organization, including training of agencies' envoys and correlation elements on mutual tasks and the method of reports preparation, providing information, statistics, passing of reporting, and more.

b) Mechanism of exercise implementation, convening periods and training types:

Mechanism of exercise implementation aims to examine efficiency of emergency planning with all agencies assigned with tasks and responsibilities in the plan, including:

1. Examining the extent of comprehension and the availability of capabilities among all agencies for the implementation of tasks and responsibilities assigned to them efficiently.
2. Scheduling and periods of training convening, and its type (e.g.: tabletop, hypothetical, practical... etc.).

c) Evaluation mechanism for exercises and examinations, and determination of lessons learnt, documentation, and improvement of plans: This section includes the mechanism of exercises and presumptions evaluation, evaluation committees, and forms related to determination of strengths and weaknesses and chances of improvement and lessons learnt from exercises, with determining the mechanism of investment from those lessons in improvement of emergency plans and the efficiency of response and recovery procedures.

4.2.10 Escalation:

a) Upgrade of emergency situation standards and procedures:

This section includes presentation of detailed description on:

1. Standards of upgrade of emergency situation.
2. Sequence of on-site leadership.
3. Mechanism of upgrade to a higher level, if necessary (or when the situation exceeds capabilities and authority for each level), for example:
 - Number of casualties.
 - Number of harmed persons.
 - Amount of expected financial losses.
 - The effect of the situation over more than one sector.
 - Geographic space effected.

- The effect of the situation on political and diplomatic relations.
- Expected time period of the breakdown of services.
- The effect of the situation on general opinion.
- The effect of the situation on the country's reputation.

b) Downgrade of emergency situation standards and procedures:

This section includes presentation of detailed description on:

1. Standards of downgrade of the emergency situation.
2. Return of leadership to local levels after control of the situation or after receiving support or required authority.

4.2.11 Forms:

a) Reports passing forms, exchange of data and reports, upgrade and downgrade of emergency situation:

The plan should include unified forms for reports passing, data and reports exchange, upgrade or downgrade of emergency situation, and request of assistance and support.

b) Events record form used by the agency to document activities and works accomplished during the response and recovery phases: The plan should include unified forms for events record that the agency uses to document the activities and works accomplished during the response and recovery phases.

c) Damage evaluation form: Attaching a form for the purpose of evaluation and conceiving of damage resulted from the emergency situation.

CHAPTER 5 – AIRPORT EMERGENCY PLAN EXERCISE

5.1 General.

5.1.1 The plan should contain procedures for periodic testing of the adequacy of the plan and for reviewing the results in order to improve its effectiveness, training, drills, and exercises.

5.1.2 The on and off-airport emergency first responders who respond to emergencies are the most vital elements of an airport’s emergency response capability. Their training is essential for responding effectively to emergencies by making optimum use of facilities, equipment, and vehicles. The emergency procedure guidelines address the following issues:

- a) Airport personnel’s knowledge of the airport emergency plan its facilities, equipment and vehicles.
- b) Emergency response organizations’ (e.g., fire, medical, and security officials) knowledge of their responsibilities relative to the airport emergency plan its facilities, equipment, and vehicles.

5.1.3 Familiarization. There is a need for on- and off-airport emergency first responders to be familiar with each other’s equipment and facilities. It is especially important that off-airport personnel become familiar with the unique operating environment of an airport (e.g., security requirements, the hazards of moving aircraft, communications, etc.). This familiarization becomes critical during nighttime operations and other periods of low visibility.

5.1.4 Initial training of airport personnel should be primarily devoted to Standard Operating Procedures (SOPs).

This general training should be provided to all airport employees. Certain airport, as well as other emergency response personnel, should receive specialized training based on their individual job responsibilities. many times, and often due to lack of manpower resources, individuals may be assigned a job for which they are not emotionally prepared or capable (e.g., maintenance personnel assigned to carry stretchers or otherwise help at an accident site may end up being “victims” due to the emotional trauma experienced by proximity to severely injured people). Further, periodic training should be scheduled in order to prevent loss of knowledge and skills over time.

5.1.5 Initial training. A goal of initial training should be to ensure all airport employees are familiar with the following:

- a) Standard Operating Procedures (SOPs). Airport operators should establish guidelines for handling all normal, abnormal, and emergency operations.
- b) Layout of Facilities. Familiarization with the airport’s facilities is critical. Walking and bus tours should emphasize the location of normal and emergency exit controls (Assembly points), to include security procedures, communications equipment, and other safety features of the facilities.

5.1.6 Specialized Emergency Training.

Airport operators should conduct a cycle of specialized training courses, followed by periodic refresher training for those personnel/support staff, task to be assigned additional duties in time of emergency incident/crises. Simulation drills should be used to provide training, as well as to determine additional training needs.

5.1.7 Emergency Response Organization Personnel Training.

To ensure a coordinated response, the airport operator should offer training in airport emergency procedures to local security, rescue & firefighting services, ambulance personnel, paramedics, emergency management agencies, the media and other off-airport emergency response organizations /external governmental agencies, civil defense, MOH. The training should include the following:

- a) Orientation Seminar. This seminar involves bringing together those with a role or interest in the airport emergency plan (e.g. airport, ARFF, security officials, EMS, air carriers, media, airport tenants, etc.) to discuss the AIRPORT EMERGENCY PLAN and initial plans for upcoming drills and exercises, as well as to become familiar with the roles, procedures, responsibilities, and personalities of all those involved.
- b) Drill. A drill is the lowest level exercise and tests, develops, or maintains skills in a single emergency response procedure. A drill may focus, for example, on the emergency notification process to determine the effectiveness and timeliness of notifying participating personnel/organizations. A drill is considered a necessary part of ongoing training.
- c) Emergency response personnel should be train and become familiar with each aircraft normally using the airport including cargo /transit /military if applicable aircraft. This training will include access, flight crew/passenger locations, hazard locations, and emergency shut down procedures. To include and not limited to, ARFF tactics, strategies, and fire extinguishment application.

5.1.8 Procedure: Important that the plan contain procedures requiring that the airport emergency plan be tested. This test should correct as many deficiencies as possible and familiarize all personnel and agencies concerned with the airport environment, the other agencies and their role in the emergency plan, The plan should be tested by conducting:

- a) Full-scale exercise, conducted at least every two years;
- b) Partial exercise, conducted once each year that the full-scale exercise is not held;
- c) Tabletop exercise, conducted once each six months, except during the six-month period when the full-scale exercise is held.

5.2 Full-scale exercise: Full-scale aerodrome emergency exercise at intervals not exceeding two years and partial emergency exercises in the intervening year to ensure that any deficiencies found during the full-scale aerodrome emergency exercise have been corrected.

5.3 Partial exercise: Partial emergency exercises may be required for some of the participating units in order to train new personnel, evaluate new equipment or techniques, or to comply with mandatory recurrent training requirements. These drills are economical because of their limited scope and can be repeated as often as required in order to maintain a high standard of proficiency. They may involve only one unit, such as rescue and firefighting services or medical, or a combination of several units, as desired. These exercises

should be held at least once each year that a full-scale exercise is not held to ensure that any deficiencies found during the full-scale airport emergency exercise have been corrected.

5.4 Tabletop exercise:

- a) The tabletop exercise is a test of the integration and capability of emergency response resources without the expense and disruption of services incurred by a full-scale exercise. The exercise may be held as a co-ordination exercise prior to the full-scale exercise, or it may be held at intervening times in order to reconfirm procedures, policy, telephone numbers, radio frequencies, and changes in key personnel.
- b) The tabletop exercise is the simplest type of drill to stage, requiring only a meeting room, a large-scale map of the airport, and a senior representative of each participating unit in attendance. A probable accident location is selected on the map and each participant describes what actions their unit would take to respond. This exercise will quickly reveal operational problems, such as conflicting communications frequencies, lack of equipment, confusing terminology and areas of jurisdiction. These exercises should be held semiannually, but not coincidental with other exercises.

5.5 Preparing for an emergency exercise:

- a) Needs Assessment: The first step in the process is to identify difficult areas of the emergency preparedness program. Hazards Analysis can determine these needs. The drill/exercise priorities may be better placed on those hazards, which present the highest vulnerability factor. However, for the purpose of GACAR Part 139 the exercise should be an aircraft accident indicative of the airport's categorization.
- b) Statement of Purpose: It is recommended that a statement of purpose be developed which clearly and concisely explains why the drill/exercise is being conducted. At this point the drill or exercise can be announced, the necessary coordination accomplished, and the date and location established. This step may be modified, as needed, i.e. it may be an unannounced drill/exercise; therefore, the information released, if any, would be limited.
- c) Goals/Objectives. One of the most important steps in the drill/exercise program is deciding exactly what should be accomplished by efforts of airport and community emergency planners and responders. The needs assessment, scope, and Statement of Purpose should be examined very closely during this process. Caution should be exercised in determining the number of goals/objectives for any given exercise; to avoid confusion and frustration they should be limited and focused. Further, any goals/objectives established should be specific, credible, and realistic, yet challenging, results-oriented, and measurable.
- d) Public Awareness/Notification. Airport emergencies, whether real or simulated, are highly visible events that of great interest to the public, airport operators should notify the community in advance that a drill would be in progress, make periodic announcements during the exercise, including in the terminal; a NOTAM should be issued concerning the full-scale exercise. At least 120 days prior to the scheduled full-scale emergency exercise, the Aerodrome operator should hold a meeting of all key supervisory personnel of principal participating agencies. At this time, the aims of the exercise should be outlined, a scenario formulated, work tasks assigned, and duties of all agencies and personnel defined. In addition, exercise time schedule submits to GACA Safety & Aviation Standards Sector.

D - 120 days		Supervisory personnel of participating agencies hold organization meetings to outline aims, formulate the scenario, assign work tasks, and select emergency plan coordinators; <i>-- GACA Safety & Aviation Standards Sector should be notified officially of proposed timelines.</i>
D - 90 days		First progress report on arrangements;
D - 70 days		First meeting of all participating agencies (individual committee representatives);
D - 60 days		Complete arrangements for full-scale emergency exercises site or staging area. Written scenario completed; <i>-- GACA is officially provided the scenario and exercise target date.</i>
D - 50 days		Training for moulage team begins. Second meeting of individual committee representatives. A moulage chairman can be selected from hospitals, rescue and firefighting personnel, civil defense, military personnel, etc.’
D - 40 days		Arrangements for transportation, feeding, stretcher bearers and volunteer workers completed;
D - 30 days		Third meeting of individual committee representative. A preliminary “warm-up” communication exercise is held;
D - 21 days		Fourth meeting of individual committee representatives. Make-up for members who missed previous team training and arrangements for volunteer casualties completed;
D - 14 days		Final meeting and briefing for all participants, including critique team; <i>-- GACA deserves the right to provide oversight in briefs.</i>
D - 7 days		Final meeting of supervisory personnel to review assignments.
D - 0 days		The exercise. <i>-- GACA deserves the right to provide oversight during the exercise.</i>
D - 1 to 7 days		A critique following the exercise so that all participants may hear the observers’ reports; and
D + 30 days		Supervisory personnel meet to review written critiques submitted by observers and participants; revise procedures to correct mistakes and shortcomings indicated in the exercise and should submit report and corrective action plans relating to an exercise to the Aerodrome Standards Department of the GACA Safety & Aviation Standards Sector.

e) After each exercise, the Aerodrome operator should conduct a debriefing with all the organizations identified in the plan and a representative of the airport personnel who participated to evaluate the

effectiveness of the emergency plan and identify deficiencies.

f) The Aerodrome operator should implement an corrective action plan to correct any deficiencies in the emergency plan that were identified during a debriefing session.

g) The Aerodrome operator should submit report and corrective action plans relating to an exercise to the Aerodrome Standards Department of the GACA safety and Aviation Standards Sector.

h) In preparing the scenario, the use of real names of aircraft operators should be avoided. This will prevent any possible embarrassment to civil aviation companies or agencies.

i) Recognized quality assurance procedures should be established to identify, collect, index, store, update and maintain exercise records necessary for the safe provision of service. The procedures should ensure that legible and permanent exercise records and a traceable history are kept. Exercise records should be maintained and available for called upon by GACA and any other agency.

j) In planning for a full-scale exercise, the minimum number of “casualties” to be used should be based on the following:

<i>Aerodrome category</i>	<i>Minimum Casualties</i>	
2	10	- 15
3	10	- 15
4	20	- 30
5	40	- 60
6	50	- 60
7	50	- 60
8	70	- 90
9	100 or more	
10	100 or more	

CHAPTER 6 – FOR FURTHER INFORMATION

6.1 Contact Details.

The Aerodrome Standards Department can be contacted at the following coordinates:

In person:

General Authority of Civil Aviation
Safety & Aviation Standards Sector
Aerodrome Standards Department
Riyadh, KSA

By mail:

General Authority of Civil Aviation
Safety & Aviation Standards Sector
Aerodrome Standards Department
P.O. Box 47360 Riyadh, 11552

Email:

FRD@gaca.gov.sa

APPENDIX 1 – AERODROME RESPONSIBILITY

The _____ acknowledges that the Emergency Plan has been reviewed, updated and tested in accordance with the instruction of the Airport Emergency Plan Committee, as well as the approval to comply with the requirements stipulated in the ((GACAR PART 139 - CERTIFICATION, AUTHORIZATION AND OPERATION OF AERODROMES)) and emergency procedures followed and applied by all the inside agencies and all the supporting outside agencies.

The Airport Emergency Plan Committee is committed to develop and maintain the Emergency Plan under the terms of reference granted to it, in order to ensure that it keeps abreast of development in updating and testing the emergency plan at the airport.

Head of the Aerodrome In charge

Name:

Signature:

Date:

APPENDIX 2 - MUTUAL AID EMERGENCY SUPPORT AGREEMENT

1.PURPOSE.

2.SCOPE.

3.RESPONSIBILITIES.

- Endorses the _____ Airport Emergency Plan, associated document (currently plan xx dated yy), and attached procedures, and agrees to comply with all the procedures and instructions, and fulfill all applicable responsibilities contained therein.
- The _____(Agency)_____ endorses the attached procedures and agrees to comply with all procedures and instructions herein and fulfill all applicable responsibilities, insofar as it is capable so to do.

Name	Airport Manager
(Agency name)	(Identifying name)
	Airport Authority

Note: The tasks and responsibilities of the agency providing support and the tasks and responsibilities required from the airport operator should be attached.

