

Emergency Preparedness and Contingency Planning

HANDBOOK

First Edition 2014





AIRPORTS COUNCIL INTERNATIONAL

EMERGENCY PREPAREDNESS AND CONTINGENCY PLANNING HANDBOOK

First Edition 2014

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FOREWORD



The idea of an ACI guidance handbook on emergency planning emerged in discussions in the Safety and Technical Standing Committee. Members of the committee developed a table of contents and wrote and sourced material, including best practices from both inside and outside of the aviation industry: we especially acknowledge the ICAO materials that are referenced. We also thank IATA for permission to reproduce its best practice document on communicating with news media, which is included as an Annex.

The handbook now before you has been thoroughly reviewed and we believe it is a useful summary of the action that aerodrome operators should take to develop an Emergency Plan. This can never be an “off-the-shelf” exercise, but must be fully tailored to the circumstances of the individual aerodrome.

We sincerely hope that this handbook will help our members to produce better and more appropriate emergency plans that take account of a wide range of possible events, and enable the aerodrome operator to cope with a crisis and return to normal operations as soon as possible, making full use of business continuity planning.

As a complement to this handbook, ACI Global Training offers Emergency Planning and Crisis Management training along with a range of courses relevant to safety, both online and by classroom delivery.

I commend the handbook to you, and thank its authors for their time and effort.

A handwritten signature in black ink, appearing to read 'Angela Gittens', written in a cursive style.

Angela Gittens
Director General
ACI World

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DEFINITIONS

Airside – The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled. (AVSEC terminology)

Landside – That area of an airport and buildings to which both traveling passengers and the non-traveling public have unrestricted access. (AVSEC terminology)

Manoeuvring area – The part of an aerodrome to be used for take-off, landing and taxiing of aircraft, excluding aprons.

Movement area – That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

NOTAM (Notice to Airmen) – A notice distributed by means of telecommunication containing information concerning the establishment of, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Risk – A risk is often specified in terms of an event or circumstance and the consequences that may flow from it. Risk is measured in terms of a combination of the consequences of an event and their likelihood. (AS/NZS 4360: 2004)

LEGAL ROLES AND REQUIREMENTS

ICAO Annex 14 – Aerodromes, Section 9.1 Aerodrome Emergency Planning, states that “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.”

This handbook has been produced to provide the management and staff of aerodrome operators with a set of guidelines to emergency preparedness and contingency planning for aerodromes. The document has been prepared so that it reflects guidance on current best practices. It does not provide exhaustive detail on every topic, but contains references to relevant ICAO Standards and Recommended Practices (SARPs) and guidance material. The document can be used when a framework for an Aerodrome Emergency Plan (AEP) is established.

1.1 ICAO

The Convention on International Civil Aviation (also known as the Chicago Convention) was first signed on 7 December 1944. Subsequently, a specialized agency of the United Nations, the International Civil Aviation Organization (ICAO) was established as provided in the Convention. ICAO develops SARPs for the safety, efficiency and regularity of international civil aviation which are published in Annexes to the Convention. ICAO is headquartered in Montreal, Canada and also operates seven regional offices. Further information on ICAO can be found at www.icao.int.

1.2 STATE

The ICAO Annexes are directed to the Member States of ICAO and not to individual operators or service providers. The Member States have an obligation under the Convention to implement, through their legislation, standards published in the Annexes to the Convention, and to endeavour to implement recommended practices. If Member States are unable to implement a standard, they are obliged to provide notification of a “difference” under Article 38 of the Convention.

Typically the Member State establishes an aviation act and a legal body within the State to:

- a. Establish national regulations;
- b. License or certify objects, organizations or individuals operating in civil aviation; and
- c. Monitor licensed or certified subjects for continued compliance with requirements.

1.3 OPERATORS

Licensed or certified organizations or individuals are obliged to operate in conformance with requirements manifested in the applicable regulations. Two primary ways are used to ensure regulatory compliance: first, the operator's internal management program; and second, an authority's oversight program.

In addition, most operators endeavour to operate according to industry best practices and guidance materials, even though following such materials is mainly a voluntary activity.

1.4 ACI HANDBOOKS

ACI Handbooks are guidance materials which reflect industry best practice and are developed by ACI with the assistance and input of individuals from ACI member organizations. Those experts bring to the Handbooks knowledge, expertise and experience from the industry. The Handbooks take account of the relevant ICAO standards and recommended practices.

2

INTRODUCTION AND BUSINESS CONTINUITY

According to ICAO Annex 14, paragraph 9.1.1, “An AEP shall be established at an aerodrome.”

Aerodromes differ in complexity and each has unique features. Some are small, uncomplicated facilities, while others are large communities with industrial and commercial facilities, serving major metropolitan areas. Aerodromes may be operated by a State; by a local government such as a city or county; or by a private operator. However, all aerodromes have in common that they are subject to emergencies, accidents and incidents.

A major aerodrome emergency can occur anywhere and at any time, under any weather conditions and with varying degrees of magnitude. It can occur instantaneously or develop gradually. It can last only a few minutes or continue for days and weeks. It can be natural, such as a hurricane or earthquake; or it can be “man-made” either accidentally or intentionally, such as an aircraft accident, a hazardous materials spill, terrorism, major fire or power outage.

Moreover, emergencies of the same type can differ depending on various factors such as degree of warning, duration, and scope of impact. The important thing to remember is that while emergencies can seldom be predicted exactly, they can be anticipated and prepared for.

An AEP is a document that establishes the guidelines for the management of major emergencies, and defines the roles and responsibilities of the principal responding agencies. Basically, an AEP aims at providing a timely and coordinated response to and recovery from an emergency at an aerodrome.

Many organizations have roles to play at an aerodrome. Some will contribute on a daily basis. Others might have a direct role only under special circumstances such as a major crisis. Aerodromes do not generally have sufficient resources to respond to every emergency situation, so external organizations usually play important roles during a major event at an aerodrome. Conversely, local and regional emergency plans may incorporate an aerodrome’s emergency resources into their planning.

Relationships between emergency services located on an aerodrome and external organizations must be well defined, coordinated and accepted to plan for any anticipated event. Memoranda of Understanding (MOUs) or Memoranda of Agreement (MOAs) can be used to formalize these relationships. At a minimum, the AEP should be used as the formal document confirming who will do what, and when they will do it, during specific situations.

In order to achieve this, each aerodrome operator must involve local, regional and national organizations in the development of the AEP and use their collective expertise and resources for the mutual benefit of all parties. The aerodrome operator will normally have the primary responsibility for aerodrome emergency response.

The following graphic illustrates the need to have an AEP incorporated into other plans.



Graphic from FAA AC 150/5200 – 31C (Figure 2 – 1)

Management of an accident does not start when the accident occurs. The planning and coordination for response to any type of accident must be performed well in advance of an actual event. Nor does the management of the accident end when the “fire is extinguished.” The full cycle of emergency management can be described in four phases: Mitigation and Prevention, Preparedness, Response and Recovery.

An AEP will mostly focus on Response and initial Recovery issues. In general terms, an AEP is a document that describes how people and property will be protected in emergencies taking place on or in the area immediately surrounding an aerodrome.

The AEP is a document that should:

- a. Define lines of authority and organizational relationships and describe how activities will be coordinated;
- b. State its objectives, cite its legal basis, and describe and acknowledge assumptions;
- c. Assign responsibilities to organizations and people for performing specific tasks at projected times and places;
- d. Identify all available/needed resources (personnel, facilities, supplies, etc.) for use during an event; and
- e. Drive the response and facilitate short-term recovery in order to resume normal operations as soon as possible without compromising safety.

The broad objectives/priorities of an AEP should be (in order):

- a. To save (protect) life;

- b. To reduce damage and loss;
- c. To assist/support the investigation; and
- d. To resume normal operations.

2.1 BUSINESS CONTINUITY: RESUMPTION AND RESILIENCE

ACI Policies and Recommended Practices Handbook 7.16 states: “Airports should implement a business continuity management approach that comprises preventive measures, contingency measures and business recovery measures. Any incident, whether security-related or not, has the potential to cause major disruption to normal airport operations. Airports need to plan to mitigate and manage such disruption.”

Within the whole scope of comprehensive emergency management, a need exists for a plan specifically to handle business continuity and initial recovery from incidents and accidents that occur on or around an aerodrome.

This implies that specific planning is required to handle any mitigation, administrative and long-term recovery issues associated with an emergency.

The initial goal is to facilitate business continuity, a short-term recovery to set the stage for successful long-term recovery. An aerodrome operator should be responsible for overseeing the business continuity planning (BCP) process, which includes:

- a. Establishing policy by determining how the aerodrome operator will manage and control identified risks to its business continuity;
- b. Allocating knowledgeable personnel and sufficient financial resources to implement the BCP;
- c. Ensuring that the BCP is independently reviewed and approved periodically;
- d. Ensuring employees are trained and aware of their roles in the implementation of the BCP; and
- e. Ensuring that the BCP is regularly tested in relation to emergency exercises.

2.1.1 Business Continuity Planning

An aerodrome’s BCP process should reflect the following objectives:

- a. It should include the recovery, resumption and maintenance of all aspects of the business;
- b. The BCP involves the prioritization of business objectives and critical operations that are essential for recovery of aerodrome activity; and
- c. The BCP should include a business impact analysis or vulnerability plan (VP).

More complete information is available in the ACI publication “Business Continuity Management Framework and Case Studies for Health – related disruptions at airports”.

2.1.2 Vulnerability Plan

A VP is the first step in the BCP process and should include:

- a. Assessment and prioritization of all business functions and processes, including their interdependencies, as part of a work flow analysis;
- b. Identification of the potential impact of business disruptions resulting from uncontrolled, non-specific events on the aerodrome's operations;
- c. Identification of the legal and regulatory requirements for the aerodrome's business functions and processes;
- d. Estimation of Recovery Time Objectives (RTOs), Recovery Point Objectives (RPOs) and recovery of the critical path; and
- e. Evaluation of resource requirements. Realistic recovery efforts require a thorough evaluation of the resources required to resume aerodrome operations.

2.1.3 Performing a Vulnerability Assessment

A vulnerability assessment (VA) is similar to a risk assessment. However, it focuses solely on providing information that will be used in the BCP process. The goal of the VA is to determine the potential impact of disruptive events on the aerodrome's business processes. As part of the VA, a loss impact analysis should be conducted that defines loss criteria as either quantitative (financial) or qualitative (operational).

The steps needed to perform a VA include the following:

- a. List applicable threats that may occur internally and externally;
- b. Estimate the likelihood that each threat might occur;
- c. Assess the potential impact of the threat on business operations; and
- d. Assess the internal and external resources available to deal with the identified threats.

Once the VA is complete, a report should be presented identifying critical departments and processes, significant interdependencies, a summary of the vulnerability assessment and recommended recovery priorities generated from the analysis.

In addition, the aerodrome should prepare contingency plans to cope immediately with the loss of all or part of a facility. Such facilities include but are not limited to runways, taxiways, aprons, passenger terminals, freight facilities, fuel facilities, road access, administration buildings and computer facilities.

The management staff of the aerodrome should evaluate the emergency to determine the impact on business processes and level of operability of the aerodrome. After an emergency, management should assume responsibility for overall recovery operations once life, property and other safety matters have been mitigated. In the response phase, as appropriate to the situation, management should evaluate if it is necessary to suspend or curtail normal business activities.

Command and Control is the management function responsible for determining timing for action, alerting the public and nearby businesses and interrupting operations. After performing that function, management should provide for continuity of operations.

2.1.4 Returning the Operation to Normal

The last phase in emergency planning is the Recovery Phase. Returning the aerodrome to a normal operational condition as soon as possible is extremely important. Emergency Response Planning (ERP) should consider a separate set of plans, standard operating procedures (SOPs) and checklists to cover this activity. Recovery activities can begin during the Response Phase and continue through the Investigatory Phase, depending upon the situation.

It is essential that the need for recovery operations is assessed and planned during the early stages of an emergency response operation.

2.1.4.1 Return to Operational Status

The following tasks may be required prior to return of the aerodrome to full operation:

- a. Inspect manoeuvring area, aprons, aircraft navigation facilities, aerodrome lighting, buildings and other facilities affected to determine the damage, if any, resulting from the emergency;
- b. Evaluate the impact on aerodrome operations;
- c. Design the critical path to return to operations in two phases, if this is necessary:
 - i. Return to restricted aircraft operations means the re-commencement of some aircraft operations using those parts of the manoeuvring area that are not affected by the emergency or rescue operations. This activity is undertaken with extreme care so as not to endanger any emergency personnel or hinder the emergency rescue and initial recovery operation;
 - ii. Return to unrestricted aircraft operations means the re-commencement of normal aircraft operations;
- d. Determine the necessary resources and schedule. If it is necessary, this can be divided into short- and long-term considerations;
- e. Elevate the report to the senior management of the aerodrome for approval and commencement of activities;
- f. Perform activities; and
- g. Inspect after recovery activities have been performed to determine the aerodrome's level of operability.

When these needs have largely been met, the crisis subsides and the aerodrome can again begin to function as normal. The resource management function will have to address four post-emergency activity (recovery) areas:

- a. Disposal of excess stocks: Loaned equipment will have to be returned to its owners. Surplus property can be dealt with through normal procedures, except perhaps where hazardous materials are involved.
- b. Stand down (return to normal duties): Facilities and staff should be deactivated as soon as is feasible, with all necessary reports and documentation completed and filed;
- c. Financial settlement: The aerodrome may need to reimburse or compensate the owners of private property. It may also have to submit required reports that address requests for any available financial assistance; and
- d. Acknowledgement of support: Suppliers and donors should receive acknowledgment for their support. This should be coordinated with the Aerodrome Manager/Chief Executive. New suppliers and organizations might be approached regarding their interest in developing an agreement in time for the next emergency.

3

EMERGENCY PLANNING PHASE

3.1 RESOURCES

Resources are essential components of an AEP and people are the most important and critical resource. However, financial and material resources and data are also essential to a sound AEP. Some resources will come from within the organization and others will be made available by external providers. Agreements with external providers must be made in advance. Contingency plans should also be considered, since the aerodrome might be in competition with other entities if the crisis is of a regional or national nature.

Issues include initial sustainability, such as being able to operate with the equipment and supplies on hand for the first 24 hours of a crisis. Self-sustainability will be more critical if the aerodrome is isolated. Furthermore, during events such as storms and earthquakes, it may be difficult to bring external resources to the aerodrome.

Analysis of potential hazards and risk could be used to identify the type and quantity of resources needed to achieve specific AEP goals.

The following are some – but are not a comprehensive list – of the items related to “resources” which should be considered in an AEP:

- a. Potential critical resource shortages (such as power, potable water, firefighting agents, etc.);
- b. Possible effects on the transportation infrastructure, such as bridge collapses;
- c. Listings/checklists/databases of:
 - i. equipment;
 - ii. resources; and
 - iii. skills of personnel;
- d. Communication equipment;
- e. Vehicles to transport survivors (injured or not);
- f. Heavy equipment (such as cranes, loaders, road graders, etc.);
- g. Airfield equipment (such as conveyor belts, air stairs, tractors, fuel trucks, etc.);
- h. Portable power generators, pumps and hoses;
- i. Fuel, oil, propane, etc.;
- j. Sand, sandbags, plastic sheeting, plywood, lumber, shovels, picks, chainsaws, etc.; and
- k. Mass care supplies such as first aid kits, blankets, sanitation services, lighting, etc.

3.2 HUMAN FACTOR PRINCIPLES

An AEP is made up of operational processes containing many individual procedures which personnel should follow when an emergency arises. The circumstances of an emergency situation can be stressful and therefore it is necessary to put in place standard operational procedures which assist the personnel to react in a predetermined manner. Training and exercises are of the highest importance to ensure as far as possible that the reaction and performance will be in accordance with the intended response in the AEP. It is important that when the AEP is designed and the procedures written that appropriate care is taken of human factor principles. Guidance on human factors training can be found in ICAO Doc. 9683, Human Factors Training Manual.

It should be ensured and demonstrated during training and exercises that the AEP is not only a technical document but a document containing functional processes that take consideration of human performance and the special circumstances under which such a plan is activated. All surprise factors should be considered and eliminated as far as possible.

The AEP must be communicated to all responders, and emergency personnel must be trained accordingly. Emergency procedures must be available, should be as simple as possible and should be as similar as possible to normal procedures and command structures.

3.3 ROLES AND RESPONSIBILITIES

Assigning roles and responsibilities during an occurrence instead of doing so in the planning phase might lead to unwanted, if not catastrophic, results. In order to perform, people and organizations will need to understand prior to the crisis just what is expected from them. Communication and training are necessary to achieve a proper level of preparedness. Laws and regulations will often dictate who will be in charge of what, and when.

However, this does not guarantee that the mission at hand will be successful. There may be “grey areas” or overlapping responsibilities. Furthermore, responsibilities might change over time or according to geographical boundaries. The AEP should be coordinated with a view to addressing these issues.

A well-defined and well-understood command structure will assist in managing these “grey areas.” An Emergency Response Organization Responsibility Matrix, such as that reproduced below, could be used.

Agency / Functions	Airport Manager Chief Executive	Fire Department	Police Department	Health and Medical Coordinator	Emergency Response Manager	Communications Coordinator	Public Information Officer	Airport Operations and Maintenance	Warning Coordinator	Resource Manager	Volunteer Organizations	Other Agencies
Direction and Control	P	P/S	P/S	P/S	S	S	S	S	S	S	S	S
Communications	S	S	S	S	S	P	S	S	S	S	S	S
Alert and Warning	S	S	S	S	S	S	S	S	P	S	S	S
Emergency Public Information	S	S	S	S	S	S	P	S	S	S	S	S
Protective Actions	P	P/S	P/S	P/S	S	S	S	S	S	S	S	S
Fire Rescue	S	P	S	S	S	S	S	S	S	S	S	S

* Table continued on p.10.

Agency / Functions	Airport Manager Chief Executive	Fire Department	Police Department	Health and Medical Coordinator	Emergency Response Manager	Communications Coordinator	Public Information Officer	Airport Operations and Maintenance	Warning Coordinator	Resource Manager	Volunteer Organizations	Other Agencies
Law Enforcement	S	S	P	S	S	S	S	S	S	S	S	S
Health and Medical	S	S	S	P	S	S	S	S	S	S	S	S
Operations and Maintenance	S	S	S	S	S	S	S	P	S	S	S	S
Resource Management	S	S	S	S	S	S	S	S	S	P	S	S

LEGEND P: Primary Responsibility S: Support Responsibility P/S: One of these may be in charge depending on the nature and scope of emergency

Graphic from FAA AC 150/5200 – 31C (Table 5-1)

3.4 EMERGENCY PREPAREDNESS COMMITTEE

An Emergency Preparedness Committee should be established at an aerodrome. This committee should be present at the genesis of the ERP process. It should be opened to all stakeholders and connected to other relevant committees, such as the Airline Operators Committee.

This forum should allow every organization to better understand the roles and responsibilities of others and to communicate its needs.

Besides entities on the aerodrome itself, such as the aerodrome operator, the terminal operator and the Air Navigation Service Provider (ANSP), the Emergency Preparedness Committee should generally include agencies from outside the aerodrome. These should include, but should not be limited to:

- a. Police;
- b. Local authorities and community establishment representatives, such as personnel able to secure needed accommodation;
- c. Customs and Immigration;
- d. Aircraft operators;
- e. Ground Handling Service Providers;
- f. Local fire services;
- g. Paramedic/ambulance services;
- h. Coroner;
- i. Civil Aviation Authority (CAA) safety team;
- j. Local hospitals;
- k. NGOs such as the Red Cross; and
- l. Voluntary rescue teams.

Technical subcommittees could also be created from the main committee (for example, an Infectious Diseases Subcommittee involving mainly medical organizations).

Typically an Emergency Preparedness Committee would meet two to four times a year; and more often if required.

3.5 ASSESSMENT OF RISK

Risk assessment is a component of the safety risk management process. The [Australian/New Zealand standard on Risk Management \(AS/NZS 4360:2004\)](#) states:

“Risk management involves establishing an appropriate infrastructure and culture and applying a logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organizations to minimize losses and maximize gains.”

A safety risk management process is described in the [Safety Management System \(SMS\) framework in ICAO Annex 19](#) and in the [ICAO Safety Management Manual Doc. 9859](#). A corresponding safety assessment process with a flow chart is described in the [PANS Aerodromes, Doc. 9981](#) to be published.

Using the “risk management” approach should assist an aerodrome’s management in producing a more efficient ERP process. Normally, it would involve the following steps:

- a. To communicate and consult with the stakeholders;
- b. To establish the context in which the analysis will take place;
- c. To identify the associated hazards;
- d. To analyze and evaluate them;
- e. To assess the risks;
- f. To mitigate the risks; and
- g. To monitor and review in order to continuously improve the plan.

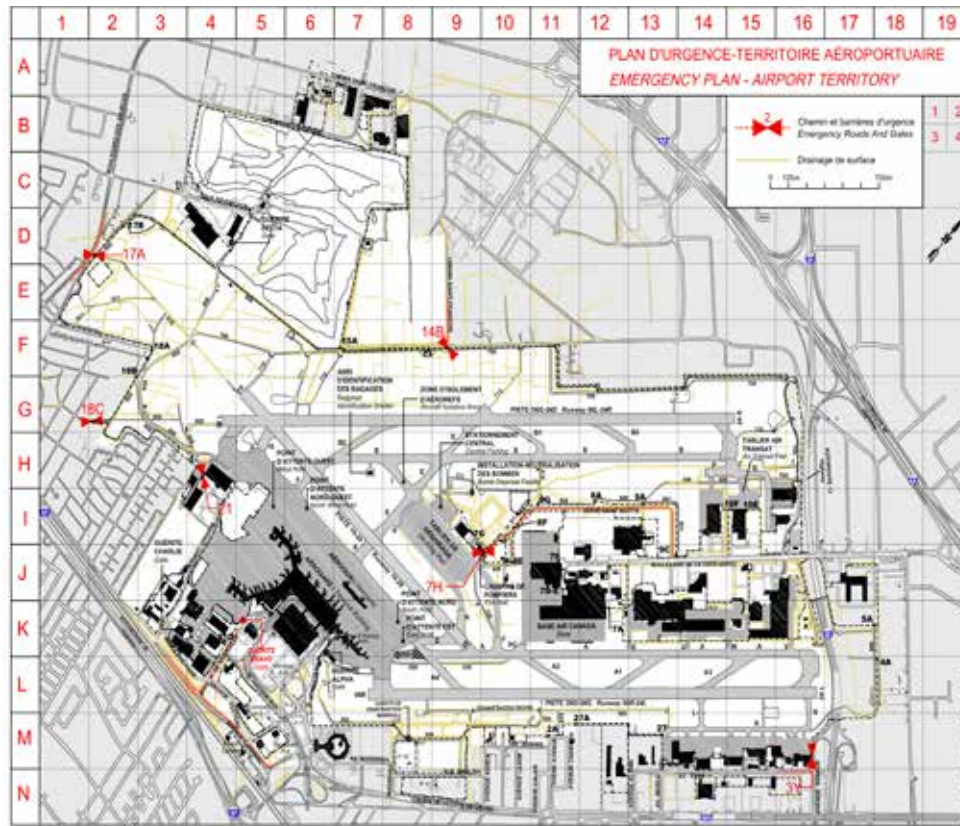
This process should enable a focus on events specific to real situations at a given aerodrome. Furthermore, it should be a guide to a decision-making process and assist the planning on where to allocate efforts and resources ahead of time.

3.6 EMERGENCY GRID MAPS

ACI recommends that an aerodrome grid map is included in the development of the AEP. The grid gives a view of the aerodrome territory with a system of squares (numbered and lettered) superimposed over a map of the aerodrome. This system provides a fixed reference to any point, helping to define the response area and assist with search and rescue efforts. The drawing should include all aerodrome access roads and gates and the meeting point for emergency responders.

Copies of aerodrome grid maps, such as that shown below, should be included in the AEP and distributed to all organizations identified in the plan. Copies of the grid should also be made available in all vehicles that are responding to an emergency situation. The use of emergency grid maps then becomes a common reference for all organizations involved in the response to an emergency situation.

However, allowing any use of non-standard grids may cause problems and may impact emergency operations negatively.



Grid from Montréal Pierre Elliott Trudeau International Airport's ERP

3.7 EMERGENCY SUPPLIES

It may be beneficial to develop emergency packages to expedite emergency responses. The AEP may identify the contents and locations of these packages for responders and survivors of the occurrence. Examples of items to incorporate into these packages are:

- a. For responders
 1. Additional portable radios, flashlights, call back lists for aerodrome staff, medical supplies, high visibility vests, gloves, tools, fuel, portable power generators, stretchers, firefighting agents, etc.
- b. For survivors
 1. Water, food, shelter, sanitation, sleeping bags, beds, blankets, clothes, footwear, first aid supplies, telephone cards, etc.

Each aerodrome is unique and may have specialized operational needs to consider when preparing emergency packages. Planning should also consider seasonal weather and climatic variations and conditions prevailing in each country. In fact, the contents of emergency packages should be largely conditioned by environmental factors.

3.8 RESPONDING AND PARTICIPATING AGENCIES

Aerodromes are a critical asset during a regional disaster or major occurrence. They can provide vital resources and functions to assist during and after the emergency. However, in some circumstances aerodromes may require assistance to maintain and restore operations. Moreover, aerodromes may have unique challenges in either providing or receiving assistance during a disaster.

As previously mentioned, establishing an Emergency Preparedness Committee is a good way to improve the coordination and planning of operations of all partners for crisis situations. This type of committee provides a forum which allows the exchange of information specific to emergency management and ensures that the AEP adequately reflects everyone's roles and capabilities.

ICAO Doc. 9137, *Airport Services Manual, Part 7, Chapter 3* recommends that the following agencies be considered in the AEP:

- a. Civil aviation regulatory and government agencies;
- b. Air traffic services;
- c. Rescue and Fire Fighting services (RFF);
- d. Police and/or security services;
- e. Aerodrome authority/(aerodrome operators);
- f. Medical services (physical and mental health agencies);
- g. Hospitals;
- h. Aircraft operators;
- i. Government authorities;
- j. Communication services;
- k. Aerodrome tenants;
- l. Transportation authorities;
- m. Rescue coordination center;
- n. Civil defense;
- o. Mutual aid agencies;
- p. Military;
- q. Harbour patrol or coast guard;
- r. Clergy;
- s. Public communications;
- t. Customs and immigration;
- u. Public utilities;
- v. Postal authorities
- w. Veterinary services;
- x. Coroner;
- y. Volunteer organizations; and
- z. International relief agencies (Red Cross/Crescent, etc.).

ACI in principle supports this list, although the different agencies, authorities and organizations may be listed in a different order and may be organized differently and have other titles and roles. In addition, Ground Handling Service Providers should be included. Paragraphs 3.8.1 – 3.8.11 list some of those entities and typical roles and duties.

3.8.1 Aerodrome

The aerodrome operator is responsible for establishing, promulgating and implementing the AEP and ensuring efficient coordination among all applicable service providers at the aerodrome, as well as agencies associated with response to an emergency.

The primary focus for the aerodrome operator is to ensure the provision of sufficient resources (personnel and equipment) and timely response for dealing with an aircraft accident at or in the immediate vicinity of an aerodrome. The most important factors are:

- a. Coordination of ERPs;
- b. Training;
- c. Effectiveness of equipment; and
- d. Response time of personnel and equipment to the scene.

An aerodrome operator should be able to alert and activate appropriate emergency response agencies and ensure the first response to any emergency occurring at the aerodrome or in its vicinity, as appropriate.

Further information can be found in [ICAO Doc. 9137 Airport Services Manual Part 7, Section 3.5](#). Here, the document outlines that the AEP may require the aerodrome operator to ensure that important information – such as the names and telephone numbers of offices or people involved in an aerodrome emergency – is kept up to date and distributed to all concerned.

According to [ICAO Annex 19, Appendix 2, paragraph 1.4](#), the aerodrome operator must ensure through its SMS that its ERP is properly coordinated with the ERPs of those organizations with which it must interface during the provision of its products and services.

The aerodrome operator should delegate a person to manage an Emergency Operations Centre (EOC), which is responsible for coordinating the activities of all agencies and services responding to an emergency. The aerodrome operator/EOC also arranges necessary meetings of the aerodrome emergency plan coordinating committee – which is composed of key personnel from participating agencies – to critique the plan after it has been tested or implemented.

The aerodrome operator should be prepared for dangerous goods on board aircraft in an emergency and include in the AEP measures for handling dangerous goods during an emergency. Those processes should correspond to processes which ensure cargo safety at the aerodrome. Items on board aircraft in emergency may include lithium batteries and other explosive or flammable goods.

The aerodrome operator should also be responsible for closing the aerodrome, or part of it, if relevant circumstances arise. Aircraft operations should be resumed only when circumstances permit aircraft to operate safely without interfering with rescue activities and when the aerodrome movement area has been made safe.

ACI Recommendation

Because an aerodrome's location and national policies can affect the contents of the emergency plan, the aerodrome operator should be responsible for ensuring that all of the relevant aspects are included in the plan and are within the national requirements.

3.8.1.1 Fire Fighting

ICAO Annex 14, 9.2 – Introductory Note states that “The principle objective of a Rescue and Fire Fighting service (RFF) is to save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity of, an aerodrome. The rescue and firefighting service is provided to create and maintain survivable conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid. The rescue may require the use of equipment and personnel other than those assessed primarily for rescue and fire fighting purposes.”

ICAO Annex 14 does not contain provisions for fire fighting for buildings and fuel farms, even though such emergencies are foreseen in Note 1 to paragraph 9.1.2 of the Annex. If an aerodrome elects to use the RFF at the aerodrome for this function, then it should ensure that this does not impact on the RFF’s and aerodrome’s ability to respond to an aircraft incident/accident.

If a vehicle is responding to a fire outside the aerodrome, it may not be able to maintain the minimum response time for an aircraft incident/accident. Under these circumstances, it is important that the aerodrome operator ensures that the RFF service required for aircraft operation at the aerodrome is maintained.

If it is not possible to maintain these required services to the published RFF category, it is a requirement in Annex 14 paragraph 2.11.3 that the RFF category must be formally downgraded by notifying the appropriate Air Traffic Service (ATS) units and Aeronautical Information Service (AIS) units. If additional RFF vehicles or personnel beyond those needed to meet required RFF-category standards are not available for non-aeronautical responses, then the aerodrome should coordinate a mutual aid agreement with a local community-based fire service.

National law may stipulate that aerodrome RFF can be utilized during situations described above, regardless of aerodrome policies or requirements, or in other cases the aerodrome may be served by a city or municipal fire service (having the requisite aviation capability). In these cases the operation at the aerodrome may be restricted or even shut down by requirements outside of the aerodrome. Close coordination with the community-based fire service is essential for mitigation of these situations.

All mutual aid agreements should be reviewed annually and revised if necessary. Personnel contacts, telephones and E-mail addresses should be reviewed monthly and updated.

The standard 9.2.3 in ICAO Annex 14 requires that the level of protection provided at an aerodrome for RFF must be appropriate to the aerodrome category. This is determined from the overall length and fuselage width of the longest aeroplanes normally using the aerodrome. There is one exception: where the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 in the aerodrome’s busiest consecutive three months of operation, the level of protection provided must be not less than one category below the determined category.

ICAO recommends in Annex 14, paragraph 9.2.4 that the level of protection provided at an aerodrome for RRF should be equal to the category determined from the overall length and fuselage width of the longest aeroplanes normally using the aerodrome (i.e. without exception).

In addition to accident/incident responding, the RFF services at an aerodrome should be used in the planning, testing and training of the AEP. A representative from the RFF services should be elected to address any concerns related to RFF and to provide active input and feedback to the plan’s development.

Further guidance material is available in ICAO Doc. 9137, [Airport Services Manual Part 1 – Rescue and Fire Fighting](#).

3.8.1.2 Emergency Operations Centre

An Emergency Operations Centre (EOC) should be established at an aerodrome to deal with various emergencies that occur at an aerodrome.

The main objectives of the EOC are to provide support to the on-scene commander and as appropriate to provide guidance and leadership in the management of an emergency response and to maintain aerodrome operations as far as possible.

The EOC should be located in a predefined facility and should be functional on a 24-hours-a-day basis. It should be located so that it offers a clear view of the affected aircraft and the aerodrome movement area, wherever possible. It functions as the command, control and coordination centre during an emergency at the aerodrome. It might also be activated during major operations or when incidents occurring outside the aerodrome could have impacts at the aerodrome.

The EOC should be fully equipped with facilities such as internet, telephone and fax, radiotelephony, computers, TV and replay systems. These devices should be checked regularly for their serviceability. All relevant aerodrome charts, maps, manuals and log books should be available in the EOC.

The EOC should maintain coordination with the mobile command post and serve as an assembly room for senior management of all agencies to take decisions collectively while handling a crisis.

3.8.1.3 Mobile Command Post

The primary objective of the mobile command post is to carry out search and rescue operations to save lives, and to secure the accident site.

A mobile command post is used during an emergency where representatives from various agencies need to assemble on-site to receive, record and communicate important information involving the emergency or accident and take certain decisions involving the rescue operations. It becomes the on-site coordination centre.

The mobile command post may be used during various types of occurrences, such as unlawful interference against civil aviation, recovery of disabled aircraft, or during rescue operations.

The mobile command post is required to reach the site quickly – soon after the RFF vehicles do – and should be positioned a safe distance away from the accident site, and against the direction of the wind in the case of an aircraft accident.





Courtesy of Doha International Airport



Courtesy of Doha International Airport

3.8.1.4 Facilities Available within the Mobile Command Post

The mobile command post should be equipped with up-to-date facilities. These should include, but should not be limited to:

- a. Internet, radiotelephony, mobile telephones, siren, TV and replay facilities;
- b. The grid map of the aerodrome, along with the AEP manual and the relevant parts of the aerodrome manual and log books. The mobile command post may also have suitable office arrangements, such as a video conferencing facility, computers and printers;
- c. The mobile command post preferably should have a 360-degree wireless camera facility on the roof, with a capability to take and transmit on-site images to the EOC;
- d. It preferably should have air conditioning and heating, in order to operate in hot or cold weather conditions;
- e. A conference table and adequate sitting capacity;

- f. A generator set with adequate lighting arrangement; and
- g. Safety cones, ropes and signage for managing and controlling the affected area.

The mobile command post should be easily identifiable, bearing a marker or beacon light on top.

The command post becomes the site office on the scene of the accident and is where the on-scene commander is positioned to manage and record events.

The facilities positioned and installed in the mobile command post should be inspected regularly for serviceability and the complete mobile unit should periodically be functionally tested.

3.8.1.5 Controlling and Securing an Emergency Scene

An aerodrome operator should ensure there is an adequate first response to any emergency occurring at the aerodrome or in its vicinity as appropriate and should secure the emergency scene and relevant areas until the appropriate agencies arrive to take control of the scene.

Unless appropriate emergency response agencies are present, the first response for securing an emergency site will fall under the responsibility of assigned and properly trained emergency response personnel at the aerodrome. They should continue this responsibility until relieved by the designated emergency response agency that is authorized to take over the scene. Coordination with this agency or agencies should always be maintained, and phone numbers/contacts should always be kept up-to-date.

Assigned and properly trained emergency response personnel can be from the police, security, RFF or aerodrome services, or any other source of properly trained personnel.

The AEP should consider the jurisdictional obligations between on-site security and external law enforcement agencies. The plan should provide a clear description of the assignment of authority on the aerodrome and in surrounding areas where the need for an emergency response may be anticipated.

Wherever required, assigned and properly trained emergency response personnel who take on the duty of securing the necessary areas should facilitate the use of access roads for ease of ingress and egress of all emergency vehicles.

It is the responsibility of these personnel to ensure that only authorized persons are permitted on the scene of an emergency and all traffic that is not essential to the emergency response should be diverted a safe distance away from the emergency.

The emergency response personnel who take on the duty of securing the necessary areas should also be responsible for initial crowd control operations when an emergency involves or takes place near a public area.

All appropriate emergency response personnel should be trained and acquainted with current aerodrome grid maps, rendezvous points and communication procedures during an emergency.

Personnel controlling the rendezvous point also should consider the suitability of vehicles for adverse terrain conditions at the accident site and should prevent obstruction of the access route by unsuitable or disabled vehicles. Staging of vehicles can prevent traffic jams and confusion at the accident scene. Further Information on difficult terrain can be found in [Section 4.5](#) of this handbook.

3.8.2 Air Traffic Control Service

In most aircraft-related emergencies, ATCS, in the form of the Aerodrome Control Tower (TWR) or Aerodrome Flight Information Service (AFIS), is required to act as a notification and contact service for the other agencies involved in the response until such time as the EOC is activated. The responsibilities of ATCS generally include activating an alarm notification system.

ACI advocates that the information contained in [ICAO Doc 9137 – Airport Services Manual Part 7 Section 3.2, 4.1.2 and 4.2.3](#) is provided in an emergency situation. The information summarizes the responsibilities of ATCS in an emergency situation. This includes, but is not limited to:

- a. Activating alarm notification systems;
- b. Identifying the type of aircraft involved;
- c. Detailing the amount of fuel on board;
- d. Providing grid map references for the location of the emergency;
- e. Identifying rendezvous points;
- f. Identifying the aerodrome entrances to be used by emergency vehicles (RFF, medical or security);
- g. Detailing the responsibility of assignments if the accident or incident is off the aerodrome site;
- h. Giving the number of people on the aircraft;
- i. Advising whether dangerous goods are on board;
- j. Providing the name of the aircraft operator; and
- k. Issuing appropriate NOTAMs as required by the aerodrome operator or as established by the aerodrome procedures.

In addition to communicating with services related to the emergency, ATCS is also responsible for coordinating the aircraft and ground vehicle operations on the movement area that may occur during the accident/incident.

A formal coordination process between the emergency response procedures of ATCS and the aerodrome operator's ERP should be in place

3.8.3 Medical Services, Ambulances and Hospitals

Adequate medical services and supplies should be available at an aerodrome. To define the levels of medical service and supplies that the term "adequate" implies, national laws, regulations and plans, and their regional and local equivalents, must be consulted and considered. These laws and regulations may stipulate how to organize aerodrome medical care services and/or support and give guidance to the aerodrome operator.

3.8.3.1 Aerodromes with Medical Care Services

The purpose of on-site medical services is to provide triage, first aid and medical care in order to:

- a. Save as many lives as possible by locating and stabilizing the most seriously injured, whose lives may be in danger without immediate treatment;
- b. Provide comfort to the less seriously injured and to administer first aid; and
- c. Transport casualties to the proper medical facility.

It is essential that provision of medical services such as triage, stabilization, first aid, medical care and the transporting of the injured to hospital(s) be carried out in the most expeditious manner possible.

To this end, well-organized medical resources (personnel, equipment and medical supplies) should be available at the accident site in the shortest time possible. The medical aspects of the emergency plan should be integrated with local community emergency plans and should be coordinated as agreed upon in the mutual aid emergency agreement.

A medical coordinator should be assigned to assume control of the emergency medical operations at the accident site. If aerodrome medical services exist, the designated medical coordinator may be from the aerodrome medical staff.

In some cases, it may be necessary to appoint an interim medical coordinator, to be relieved when the designated medical coordinator arrives on site. The interim medical coordinator can be designated from among the RFF personnel.

Medical and ambulance services may be an integral part of the aerodrome services, particularly whenever an ambulance service is a part of the RFF service.

Whenever medical and ambulance services are not available at the aerodrome, pre-arrangements should be made with local, private, public or military medical and ambulance services to provide such services. The plan has to ensure the expeditious dispatch of a satisfactory assignment of personnel, equipment and medical supplies.

To ensure a rapid response, the plan can include arrangements for land, sea and airborne transportation of medical services to the scene, and subsequent transportation of persons requiring immediate medical care.

Pre-arrangements are necessary for the availability of doctors and other medical personnel for all aerodrome emergencies. The plan should list a sufficient number of doctors to offset any absences at the time an emergency occurs.

The plan should designate a medical transportation officer whose responsibilities would include:

- a. Alerting hospitals and medical personnel of the emergency;
- b. Directing transportation of casualties to appropriate hospitals suitable for treatment of their particular injuries;
- c. Accounting for casualties by recording for each casualty the route of transportation, destination hospital, and casualty's name and extent of injuries;
- d. Advising hospitals when casualties are en route; and
- e. Maintaining contact with hospitals, medical transportation, the senior medical officer, on-scene command post and the command post.

3.8.3.2 Aerodromes without Medical Care Services

At any aerodrome without dedicated medical care facilities (either a medical clinic or first-aid room), the aerodrome operator should make arrangements to have available sufficient personnel trained in advanced first aid to cover all active hours of aerodrome operation. Equipment for first aid work at these

aerodromes should consist, at minimum, of an emergency medical care bag.

Further Information on the recommended contents of the medical care bag can be found in Appendix 3 to the [ICAO Airport Services Manual, Doc 9137, Part 7](#).

3.8.3.3 Local Hospitals

Regardless of on-site medical facilities, local hospital and medical services should be included in the AEP.

Participating mutual aid hospitals and medical staff should have internal contingency emergency plans to provide for mobilization of necessary medical teams to the accident site in the shortest possible time. Availability of qualified personnel and adequate facilities at the hospitals to deal with aerodrome emergency situations is vital.

In this respect, it is mandatory to establish in advance an accurate list of surrounding hospitals. They should be classified according to each hospital's effective receiving capacity and specialized capabilities, such as neurosurgery or burn treatment. In most circumstances it is unwise to deplete the hospital nearest to the accident site of essential medical and nursing personnel.



Courtesy of ISAVIA

A hospital's distance from the aerodrome should be considered, as well as its ability to receive helicopters where possible. Reliable two-way communication should be provided among the hospitals, ambulances and helicopters. Any alert of an aircraft accident should be made to a single medical facility, which then should alert all other local or regional medical facilities in accordance with its local medical communications network.

A formal coordination process between the emergency response procedures of these organizations and the aerodrome operator's AEP should be in place.

3.8.4 Aircraft Operators

Aircraft operators hold a vital position in any aircraft-related emergency before, during and after any emergency at an aerodrome.

In the event of an emergency involving an aircraft, the aircraft operator must be prepared quickly to provide vital information such as, but not limited to, the number of persons on board, fuel on board, quantities and location of dangerous goods and a passenger manifest.

The above information is vital to any aircraft-related emergency and can influence the tactics and strategies used by the on-scene commander.

During the actual accident/incident, the aircraft operator may be responsible for assisting in the process of identifying the injured and providing information to their respective relatives.

Aircraft operators are responsible for making arrangements for any uninjured persons who may need to continue their journeys, or need accommodation or other assistance. Additionally, aircraft operators may be responsible for contacting the next of kin of deceased passengers.

The aerodrome operator should ensure as far as practicable that each aircraft operator using the aerodrome has a designated person available at the aerodrome as its representative during an emergency involving its aircraft.

Additionally, the proper disposition of all cargo, mail and baggage aboard an aircraft involved in an accident is the responsibility of the aircraft operator.

Permission to remove these items from the aircraft may be granted by the on-scene commander only after the emergency has been abated, the accident scene secured and the requirements of the accident investigators have been met.

A formal coordination process between the emergency response procedures of aircraft operators and the aerodrome operator's AEP should be in place.

3.8.5 Government Agencies

The AEP should clearly define the obligations, controls and limitations placed on the aerodrome operator by government agencies. Post-accident investigation, unlawful seizure of aircraft, bomb threats and bombings, and customs and postal matters, may all fall into jurisdictions other than that of the aerodrome operator. Government authorities may also become involved in notification of relatives if the emergency involves foreign victims.

3.8.6 Military, Coast Guard and Harbour Patrol

Depending on the location of the aerodrome, and depending on national regulations or mutual aid agreements, the AEP might include the integration of military operations during an emergency. Coast Guard and Harbour Patrol services may also be important when an aerodrome is located close to an ocean or large areas of water. Where appropriate, a mutual agreement should be in place for cooperation,

integration and coordination of the AEP and the military, the Coast Guard and any applicable harbour patrol agencies.

Further Information can be found regarding Water Rescues in [Section 4.5.1](#) of this handbook.

3.8.7 Environmental Agencies

When available, an environmental agency should be responsible for protecting water, land and air in the event of an aerodrome emergency. Whenever necessary, the environmental agency's role is to:

- a. Take action to prevent or lessen the effects of the accident on the environment;
- b. Provide specialist advice;
- c. Warn people who are likely to be affected;
- d. Monitor the effects of an accident on the environment; and
- e. Collect evidence for prosecutions or recovering costs in the future when these are directly related to damage to or clean-up of the environment.

Further Information can be found regarding Environmental Concerns in [Section 4.4.7](#) of this handbook.

3.8.8 Clergy

When required, clergy should be contacted to provide comfort to all those affected by an aircraft emergency.

3.8.9 Mental Health Professionals

ICAO Doc 9137 – Airport Services Manual Part 7, Section 3.19 states that an emergency plan should include local mental health agencies. Immediate critical incident stress management and specialized therapeutic treatment should be made available for survivors, relatives, eyewitnesses and emergency scene personnel. Mental health professionals should also be available for post-incident treatment for dealing with the possible long-term effects of the emergency.

ICAO has also published [Doc 9973 - Guidance on Assistance To Aircraft Accident Victims And Their Families](#).

3.8.10 Agencies for Clean-Up and Site Services

After the rescue and containment process of an emergency response, many additional agencies will become involved with the operation. With business continuity in mind, the aerodrome operator should possess contact information for a clean-up service, when internal services are not available. This clean-up service should operate in cooperation with the aerodrome operator and nationally regulated transport inspectors. The goal is to clear operational areas on, or in the proximity of, the aerodrome in order to resume or continue its function efficiently.

Where larger and more complicated accidents occur, contact information should be provided in regard to aircraft removal equipment.

Further information regarding the removal of disabled aircraft and aircraft removal equipment can be found in [Section 4.4.3](#) in this Handbook and in [ICAO Doc 9137, Airport Services Manual, Part 5, Removal of Disabled Aircraft](#).

3.8.11 Other Agencies and Services

Where required, agreements with additional agencies may exist, especially at those aerodromes which provide service to international civil aviation. The following sub-sections provide two examples of such agencies

3.8.11.1 Foreign Language Speakers

The aerodrome operator should consider including within the AEP up-to-date contact information for either a nearby foreign language agency or a 24-hour phone line interpreter. If the aerodrome handles a large number of passengers using a particular language, the aerodrome operator should consider having available for emergency situations at least one member of staff who can speak that language fluently. This staff member's contact information should then be included in the AEP.

3.8.11.2 Consular Services

When an aerodrome offers international service, proactive consular assistance is often imperative in an aerodrome emergency. An aerodrome operator should possess contact information for various consular missions, while also ensuring that these missions have current contact information for the aerodrome.

Consular services may also be required for the following:

- a. Work in cooperation with the State of registration of the aircraft or aircraft operator, or of origin of flight;
- b. Assisting in crisis management at the reception centre;
- c. Preparing appropriate condolence/injury messages to be sent to out-of-border contacts;
- d. Liaison for the return of personal effects and/or remains into the country of origin; and
- e. Post-accident assistance for families who wish to travel to the disaster site.

4

EMERGENCY RESPONSE

Part of the AEP is to plan for emergency response to all potential emergencies. The success of the response has been shown to be dependent on the planning, organization and exercises, including division of areas and tasks and the communication and preparedness of the responding personnel and co-ordination between agencies.

The outcome or result of any emergency at aerodromes or in the vicinity of an aerodrome is dependent on how the emergency is handled by the aerodrome operator. A professional operational approach and professional behaviour in an emergency will create goodwill for the aerodrome, whereas an unprofessional approach and unprofessional behaviour may harm the aerodrome's reputation for a long period of time. To be ready for an emergency the four "C"s – Command, Control, Coordination and Cooperation – must be prepared, tested and validated. Training of personnel and exercises of various kinds are essential in order to obtain the best results.

Command structures must be implemented and tested. These structures should resemble ordinary command structures as much as possible, to make it easy for deployed personnel to adapt quickly to the emergency at hand. Key personnel should be provided with adequate training and should be offered various types of related exercises.

Control mechanisms have to be prepared and tested. Coordination with internal and external resources must be identified and documented in order to define the appropriate functions and structures. The methodology to be used may differ from aerodrome to aerodrome, but should not be neglected

4.1 NOTIFICATION/CALL-OUT PROTOCOLS

The alert is the first step in the initiation of an AEP. The purpose of the alert is to notify all agencies which are considered first responders to a potential, impending or actual emergency that has occurred at the aerodrome.

Emergency communications and warning protocols, systems, processes and procedures should be developed, periodically tested and used to alert people potentially impacted by an actual or impending emergency.

When defining the methods and sequences to be used, it should be ensured that a description of the

various alert and warning systems and equipment available is given. Additionally, the designs of the types of alerts used for the public, aerodrome personnel and organizations should be considered.

Various methods of transmission may be used to issue alerts, including (but not limited to) crash phones, fire alarms, sirens, pagers, radios and road signage. It is important that the method used and the service responsible for the activation of the alert is clearly identified in the AEP.

4.2 EMERGENCY CONTACT INFORMATION

As indicated in article 12.5.2 of Part 7 of the ICAO Airport Services Manual, Doc 9137, a complete and current list of telephone numbers and other relevant contact details should be available to all agencies on and off the aerodrome which participate in aerodrome emergency response, and to personnel responsible for the AEP. These phone numbers and contact details should be verified regularly to ensure they are correct. Updated lists should be distributed to all emergency plan participants on a continual basis.

Certain aerodromes have their own dispatch or call centres which monitor aerodrome operations, public safety, and audio and video communication systems, and which receive and direct aerodrome emergency and non-emergency calls that require assistance. All emergency contact information could be managed at these types of facilities.

For aerodromes that do not have dispatching services or call centers, it is recommended that the contact lists be part of the AEP and be amended when necessary.

4.3 CLOSURE DURING EMERGENCIES

Depending on the aerodrome's capacity, interruption of regular operations or even closure for a period of time may be necessary in the event of an emergency.

If the aerodrome operation is disturbed by an emergency or for any other reason, a NOTAM should be issued in accordance with Aeronautical Information Service (AIS) procedures.

SARPs for NOTAMs and other elements of the Integrated Aeronautical Information Package which may be relevant are contained in ICAO Annex 15, Aeronautical Information Services.

Where applicable, MOUs with surrounding aerodrome facilities may be developed to ensure potential alternate aerodromes are available when diversions are required.

4.3.1 Runway Closure

A runway closure may be necessary due to weather, maintenance, construction or emergency situations (for example), and any such closure is likely to have a significant impact on aircraft operations into, out of and within the aerodrome, or close the aerodrome altogether in the case of a single runway aerodrome. Where required, a NOTAM must be issued to notify pilots of the closure.

The process for coordinating such information with ATCS and aerodrome tenants in the event of an emergency must be included in the AEP.

4.3.2 Closure of Other Parts of the Movement Area

Taxiways and aprons can become unusable or hazardous for aircraft operation for similar reasons as the runways.

When such areas are closed, this may have significant impact on aircraft operations on the aerodrome. Where required a NOTAM must be issued to notify pilots of the closure.

4.3.3 Airspace Closure

Airspace closure at the aerodrome or around it could have a major impact on the aircraft and passenger traffic handled at the aerodrome. This could lead to significant departure delays or diversions of arriving flights to nearby aerodromes.

An airspace closure at the aerodrome could be due to any of the following reasons (as well as other ones):

- a. Military exercises;
- b. Security imperatives;
- c. Weather conditions;
- d. Aircraft-related emergencies at the aerodrome;
- e. Natural events such as volcanic eruptions, etc.; and
- f. National requirements

The following actions may need to be taken by the aerodrome operator:

- a. Providing adequate parking space for aircraft delayed on the ground (or to receive aircraft diverted to that aerodrome);
- b. Providing passenger amenities in the terminal building for stranded passengers;
- c. Rescheduling flights and providing related information to passengers;
- d. Issuing a NOTAM and communication of it to all stakeholders; and
- e. Management of road traffic and additional parking on the landside

4.3.4 Closure of Other Areas

An event may occur on aerodrome territory and on access roads which could significantly impact the flow of passengers, vehicles and other users wishing to go to or leave the aerodrome. Traffic jams on aerodrome roads, and on neighbouring road networks, can cause delays for users and emergency vehicles needing access to parts of the aerodrome.

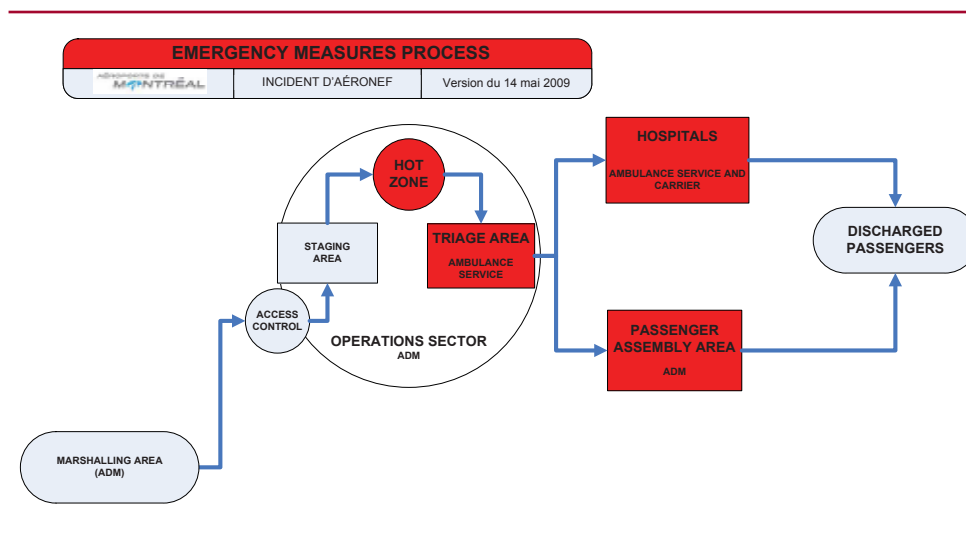
Safe access to the aerodrome must be maintained. To facilitate the movement of users, the need for adequate signage such as road and pedestrian signs, as well as the need for additional staff to direct users and vehicles, must be foreseen. Aerodrome users and organizations can be informed by alert systems.

Also, aerodromes frequently have unique aspects, such as dedicated vehicle lanes, areas not visible to controllers or non-standard aerodrome traffic patterns, which are required to be taken into account in emergency situations.

4.4 AERODROME AND AVIATION-RELATED EMERGENCIES

Aerodromes must consider many types of emergencies, including occurrences which are considered extremely unlikely.

Whether an emergency is related to the aerodrome itself or an aircraft, it is crucial that the aerodrome operator develops an AEP that includes the functions and roles common to most emergency situations.



Example of a generic emergency measures process

4.4.1 Crash on the Aerodrome

A large number of trained personnel may be required in order to respond successfully to an accident, both at the site of the accident as well as at the EOC.

When an aircraft is implicated in an accident, strict procedures must be adhered to.

These procedures should be made available in a chapter of the AEP which pertains to an aircraft incident/accident on the aerodrome and should make references to at least the following topics:

- a. The objective of the procedures;
- b. An alert classification system that clearly defines the state of the aircraft;
- c. A detailed description of the roles and responsibilities for the EOC;
- d. Initial information, if known. Information regarding the accident needs to be as detailed as possible:

- i. Apparent cause of incident (e.g., engine trouble, landing gear, smoke in cockpit);
- ii. Runway involved;
- iii. Time of accident;
- iv. Its exact location;
- v. Type of aircraft;
- vi. Fuel on board;
- vii. Number of passengers/crew (including any occupants with disabilities; and
- viii. Hazardous material (dangerous goods on board, including quantity and location);
- e. Response teams for each phase of the accident, including but not limited to:
 - i. Aerodrome firefighters and support from external firefighters;
 - ii. Mobile command post/on-scene emergency commander;
 - iii. Aerodrome security/police forces;
 - iv. First aid responders/ambulance teams;
 - v. Investigative teams;
 - vi. Aircraft technical experts; and
 - vii. Air carrier representatives with specific knowledge of the aircraft;
- f. Organizational contact information and a proper process of notification;
- g. Reliable and effective communication procedures;
- h. Proper preservation of the wreckage until the accident investigation authority assumes custody of the aircraft wreckage. The aircraft must be moved only when necessary, for example to:
 - i. Remove passengers/crew who are injured or trapped;
 - ii. Protect the site of the wreckage (including buildings and equipment in their immediate post-accident condition) from further damage;
 - iii. Protect the public from injury; and
 - iv. Ensure that after-accident investigation needs are met. The aircraft operator is responsible for moving the disabled aircraft, or would be asked by the aerodrome operator to sign an agreement for release of liability, so that the aircraft can be moved;
- i. Appropriate actions to be taken to evacuate or close certain areas of the aerodrome if needed for public safety;
- j. Identification of resources for response and recovery actions;
- k. Identification of responsible parties and checklists for the inspection of the movement area and return to normal operations;
- l. Procedures for the issuance of NOTAMs; and
- m. Provision of crash charts for each aircraft type using the aerodrome. These can either be acquired through ICAO or aircraft manufacturers. Examples are shown in [ICAO Doc 9137 Part 1](#).

Aircraft information provided by crash charts should include, but should not be limited to:

- a. Dimensions and specifications;
- b. General characteristics;
- c. Materials;
- d. Fuel quantities;
- e. Special information;
- f. Fuel tank locations;
- g. Oil tank locations;
- h. Batteries;
- i. Gasoline combustion heater locations (if any);
- j. Hydraulic fluid reservoir locations;
- k. Exit door locations and opening recommendations;

- l. Potential forcible entry locations;
- m. Oxygen tanks;
- n. Alcohol or water-methanol tanks; and
- o. Escape chute locations.

4.4.2 Crash Off the Aerodrome

In certain situations, an aircraft accident off the aerodrome could be managed by both the local authorities and the aerodrome operator. Depending on the location of the accident, the aerodrome operator may or may not be able to deploy on site.

Agreements for emergency management of or assistance for an accident off the aerodrome may be taken with the surrounding community and should enable the aerodrome operator to take the following actions:

- a. Respond to the accident site;
- b. Activate the aerodrome EOC and the mobile command post (if required);
- c. Assist by providing expert knowledge;
- d. Support as much as possible the agency in command of the off-aerodrome accident; and
- e. Notify the aircraft operator involved, concerned agencies (environmental, etc.), aerodrome services (RFF, ATCS, etc.) and military, Coast Guard and Harbour Patrol (if applicable).

4.4.3 Disabled Aircraft

The safe and timely removal of a disabled aircraft and rendering the movement area fully operational are critical elements of an airport's emergency plan. Especially at a single-runway airport, it is vital to minimize any closure period for safety, continuity of operations and economic reasons.

The AEP should include a plan or guide for the removal of disabled aircraft. All major users of the aerodrome should be informed of the preparations and capabilities contained within the disabled aircraft removal plan.

When a disabled aircraft is on a part of an aerodrome where it interferes with the movement of other aircraft, the disabled aircraft should be moved as quickly as is consistent with the safety of life and property. However, the aircraft must be released by the accident investigation authority concerned before being removed.

The responsibility for the recovery and removal of an aircraft that may be disabled at an aerodrome remains with the aircraft operator. The aircraft operator should in addition have a plan in place to remove fuel from a disabled aircraft, and store it as necessary, in conjunction with its fuel supplier or another suitable entity. The aerodrome operator should ensure that such plan, including facilities, procedures and equipment, is in place.

If removal is required before the aircraft is released, all efforts should be made to record the location of the accident, the initial state of the aircraft, its components and any other element that constitutes the scene of the accident.

The disabled aircraft removal plan should be based on the characteristics of the aircraft types that may normally be expected to operate at the aerodrome, and should include, among other things:

- a. A list of equipment and personnel on, or in the vicinity of, the aerodrome which would be available for such a purpose;
- b. Arrangements for the rapid receipt of aircraft recovery equipment kits available from other aerodromes (if necessary);
- c. A list of nominated agents acting on behalf of each aircraft operator at the aerodrome;
- d. A statement of the aircraft operator's arrangements for the use of pooled specialist equipment; and
- e. A list of local contractors (with contacts and telephone numbers) with suitable removal equipment for hire.

Further information about the removal of disabled aircraft can be found in [ICAO Doc. 9137, Airport Services Manual, Part 5](#).

4.4.4 Hazardous Material

The risk to the aerodrome operator of a hazardous materials incident comes from many sources. Of concern is not only the threat from the materials that are shipped by air to and from the aerodrome but the threat from other sources as well.

Hazardous materials are defined as any substance or material that, when involved in an accident and released in sufficient quantities, poses a risk to health, safety and/or property. Many aerodromes are located in or near a primary risk area such as highways, railroads, manufacturing/processing facilities, etc.

Hazardous material related to facilities in the vicinity of the aerodrome should also be considered in the ERP process. Aerodrome operators should also assess the risk associated with hazardous materials transiting or being used at the aerodrome. Representatives of aerodrome tenants, including air freight carriers and the aircraft operators, should be contacted and involved in the ERP process.

It is unlikely that aerodrome resources by themselves will be sufficient to manage major incidents involving hazardous materials. Thus, planning with local emergency preparedness organizations should be part of the ERP process.

4.4.5 Acts of Unlawful Interference against Civil Aviation

Incidents of hijacking, sabotage, destruction of aircraft or of air navigation facilities and any other unlawful acts against civil aviation can involve the intervention of different organizations. Aerodrome operators should conduct planning sessions involving all of the potential players. Without going into detail, an overview of the roles and responsibilities of organizations involved should be included in the AEP.

Organizations other than the aerodrome operator are mandated by laws and regulations to respond to hijack and sabotage incidents. Because the response time of these other agencies and organizations may be significant, the aerodrome operator should be prepared to take action in the interim. Aerodrome operators must establish emergency response procedures for sabotage, hijack and other unlawful acts interfering with civil aviation.

The AEP should guide the aerodrome operator for the management of any situation which involves unlawful interference with the operation of the aerodrome or an aircraft. The security section of the AEP may be issued as a separate document in order to conceal sensitive information. As a guideline for the AEP’s reference, information should be included on, but should not be limited to, the following acts:

- a. Hijacking;
- b. Terrorism;
- c. Bomb threat;
- d. Arson;
- e. Biochemical attack;
- f. Damage/sabotage of aerodrome property; and
- g. Unlawful conduct by passengers, crew members and/or visitors.

Actions to be taken by the aerodrome operator should be kept confidential and only disclosed to those agencies with a need to know.

Crisis Management		Consequence Management			
Respond Activities		Restoration Activities			Recovery Activities
Notification	First Response	Characterization	Remediation/Cleanup	Clearance	Reoccupancy
Receive and assess information	HAZMAT and emergency actions	Detailed characterization of biological agent	Decontamination strategy	Clearance sampling and analysis	Renovation
Identify suspect release sites	Forensic investigation	Characterization of affected site	Remediation action plan	Clearance decision	Longer-term environmental and public health monitoring
Relay key information and potential risk to appropriate agencies	Public health actions	Site containment	Worker health and safety		Reoccupation decision
	Screening sampling	Continue risk communication	Site preparation		
	Determine agent type, concentration, and viability	Characterization/ Environmental sampling and analysis	Source reduction		
	Risk communication	Initial risk assessment	Waste disposal		
		Clearance goals	Decontamination of sites and/or items		
			Decontamination verification		

The Livermore – Sandia project identified a set of activities for restoring a contaminated facility following a Bioterrorist attack. Activities table from Lawrence Livermore national laboratories report.

4.4.6 Fire

In fire situations, all required services must be ready and on stand-by to be called into action. In the case of aircraft fires, the quantity of fuel on board, the presence of dangerous goods on board and the number of occupants is essential information which must be provided. Subsequent calls may expand this information by providing details on the aircraft operator, a detailed list of cargo and specific

characteristics of passengers (i.e., how many passengers are physically impaired and how they are impaired, infants, etc.).

A description of and specific identification of fire-fighting equipment and fire-fighting teams should be included in the AEP. Aircraft fires and structural fires will utilize different types of fire trucks and employ different numbers of firefighters.



*Aircraft accident at San Francisco – Boeing 777-200ER
(Photograph from The Irish Examiner, published July 19, 2013)*



Montreal Airport RFF vehicle (Photograph: Aéroports de Montréal)

Aerodrome categories for rescue and fire-fighting are based on the overall length of the longest aeroplane normally using the aerodrome and its maximum fuselage width, as detailed in [table 9-1](#) in [ICAO Annex 14](#).

It is vital that resources that are normally available for fighting fires, whether these are aircraft or structural fires, be available to the EOC. However, the level of response at any given time may vary depending on the availability of personnel and equipment at the time of the emergency.

The method for determining required quantities of fire-fighting agents at an aerodrome is also based on aircraft length and fuselage width.

Compared to aircraft fires, structural fires require specific fire-fighting equipment, such as trucks with extra-long ladders. The AEP should address the differences.



Hangar at Prince George Airport, British Columbia (Photograph: Canadian Broadcasting Corporation)

For responding to structural fires, the following information should be included in the AEP:

- a. Role of RFF personnel and equipment;
- b. Deployment of fire trucks/equipment and personnel;
- c. Activation of the EOC;
- d. Method for the evacuation of the affected area (if required);
- e. Medical assistance to injured passengers/public (if required);
- f. Establishing of a security area;
- g. Re-routing of traffic;
- h. Proper media management; and
- i. Assessment of damages.

4.4.7 Environmental Concerns

In the event of an environmental emergency, the safety and health of individuals takes precedence above everything else. Nonetheless, the protection of the environment when responding to an occurrence must also be part of the objective in order to achieve full success. In many instances, specific laws and regulations will require the aerodrome operator to take specific actions to protect the environment. Thus, this topic should also be covered in detailed guides, procedures and plans that support the AEP.

Other than the legal requirements, there are many reasons to develop an environmental component in the AEP. Among them are:

- a. The response must follow the adopted policies;
- b. Harmonization with other action plans;
- c. Safety;
- d. Liability; and
- e. Public image and acting as a responsible corporate partner within the community.

The environmental component of the AEP should describe the roles and responsibilities of the response teams when managing occurrences.

When responding to an environmental emergency, the following information should be included in the AEP:

- a. Plans of the area (for liquids depicting drainage, water flows, etc. is important);
- b. Activation of the EOC;
- c. Rapid evaluation of the situation:
 - i. Risk of fire? Explosion? Threat to life (short term, longer term)? Danger to the environment?
 - ii. Nature of the product(s) involved and estimation of the quantity;
 - iii. Identifying the cause of the incident (if possible);
 - iv. Identifying the person and company implicated; and
- d. Identification of the response teams required (field maintenance, firefighters, etc.) and actions to be taken.

4.4.8 Civil Unrest

Civil unrest and mass protests can seriously disrupt tourism and air transport. Aerodromes are key assets linking different regions and countries, and in order to maintain this connectivity, aerodromes should be kept safe and secure during times of civil unrest.



Cairo Airport – Egypt Civil Unrest (AFP/Getty image)

During any civil unrest, it is more than likely that aerodrome operators will require assistance from police and military forces, as well as private security organizations. In all cases, threat assessments and escalating levels of alert should be adopted. The ultimate goal should be to maintain a safe and secure operation. If this situation cannot be achieved, shutting down the aerodrome could be the only viable option.

When responding to civil unrest, the following information should be included in the AEP:

- a. Role of the aerodrome police/security/military personnel;
- b. Deployment of security personnel;
- c. Activation of the EOC;
- d. Liaison with Police and Armed Forces (if required);
- e. Medical assistance to injured passengers/public/employees (if required);
- f. Protection of all controlled and restricted areas;
- g. Access to the aerodrome;
- h. Flight management;
- i. Proper media management; and
- j. Assessment of damages.

4.4.9 Strikes, Work Stoppages

Strikes and work stoppages may cause disruption, which can intensify and become an operational hazard. When dealing with strikes and work stoppages, contingency plans must be made beforehand so that the aerodrome's regular operations may continue, even if at a limited capacity.

4



An air traffic controllers' strike in France went into a second day, forcing the cancellation of 1,800 flights. (New York Times photo)

When responding to strikes and work stoppages, the following information could be included in the AEP:

- a. Role of the aerodrome police/security personnel;
- b. Deployment of security personnel;
- c. Activation of the EOC;
- d. Actions required to protect the passengers, the employees and other aerodrome users;
- e. Actions required to protect all controlled and restricted areas;
- f. Actions required to mitigate the effects of the occurrence;
- g. Defined areas acceptable for peaceful demonstrations;

- h. Access for vehicles and employees; and
- i. Proper media management.

4.4.10 Loss or Interruption of Utilities and Essential Supplies

Electricity, water supply, heating/cooling, lighting and fuel for aircraft are essential to aerodrome operation. Disruption of these services/supplies will jeopardize the entire operation and will have major impacts on customer service. The widespread use of new technologies and IT systems has increased the speed and capacity of many processes at the aerodrome. Disruption of these systems may have severe impacts on the level of service at the aerodrome.

In such events, the AEP should guide the aerodrome operator to mitigate the effects of such losses and interruptions. As a guideline, the following reference information should be included in the AEP, but relevant information should not be limited to these categories:

- a. Impact on operations (flight delays, baggage delivery, check-in operations, etc.);
- b. Impact of the interruption on all facilities, including lighting, heating and ventilation;
- c. Emergency equipment (generators, heaters), communications equipment, navigational aids, pumps and other critical systems;
- d. Supply of fuel, oil, propane, etc.;
- e. Activation of the EOC to coordinate all efforts and inform the aerodrome community;
- f. Retention of duty personnel to assist as needed (security of controlled and restricted areas), assistance to stranded passengers;
- g. Emergency supplies – water, pillows, food, telephone cards, beds, clothes and blankets for passengers stranded at the aerodrome;
- h. Other emergency supplies such as first aid kits, sanitation services and supplies, lighting, etc.;
- i. Availability of nearby hotel accommodation; and
- j. Assistance and liaison with key city officials.

4.4.11 Security-Related

There are many security-related events, not all of which fall under the umbrella of “acts of unlawful interference against civil aviation.” Although civil aviation might not be the primary or initial target, the aerodrome must be prepared to prevent and respond to security-related occurrences that could impact negatively the public’s confidence level. Such occurrences could be related to criminal activities in the vicinity of the aerodrome, to special events or to high-profile visitors.

At a minimum, the AEP should cover the following:

- a. Role of the aerodrome police/security personnel;
- b. Deployment of security personnel;
- c. Activation of the EOC;
- d. Actions required to protect passengers and other aerodrome users;
- e. Actions required to protect all controlled and restricted areas;
- f. Role of other security/law enforcement organizations; and
- g. Proper media management.

4.4.12 Weather-Related Events and Emergencies

As part of their AEP, aerodrome operators should prepare for action to be taken in emergencies that arise from weather-related phenomena such as rain, snow, frost, hurricanes, sandstorms and tornadoes. ICAO Doc. 9137, *Airport Services Manual, Part 7* recommends in Section 4.8.1.3 that an AEP includes provisions for initial protective measures, emergency supplies pertinent to local disaster exposure, personnel shelter and post-storm clean up and restoration.

In relation to the preparation of the AEP, a risk assessment should be conducted to determine what kind of weather-related emergencies are likely to occur in the area where the aerodrome is located and the potential consequences of such an event.

The aerodrome should coordinate with the appropriate meteorological service provider to obtain information about potential threats from weather. Communication to the aviation community of reduced services at the aerodrome and emergency action is important, in the form of the appropriate NOTAM format; as is communication to the public, by means of a method predefined and coordinated in the AEP.

Protective action should be taken as soon as possible after the aerodrome has become aware of approaching problematic weather. Aerodrome operators should have means to contact owners of facilities and equipment on the aerodrome that should be secured, and aircraft owners and/or crew of aircraft that are parked on the aerodrome, in order to notify them of a potential threat to their aircraft.

4.4.13 Other Natural Events

Earthquakes, floods and volcanic activity are examples of other natural disasters that may cause the activation of an AEP. Some of these are related to the weather: for example, the drift of volcanic ash is determined by wind direction. Actions to be taken in such an event should be documented in the AEP for initial protective measures, emergency supplies pertinent to local disaster exposure, personnel shelter and post-event clean up and restoration. After such an event, an inspection of the movement area should always be conducted.

Communication to the active aviation community of reduced services at the aerodrome and emergency action by means of the appropriate NOTAM form should be planned for. Additionally, the public and owners of facilities, equipment and aircraft at the aerodrome should be notified appropriately by other means, predefined in the AEP.



Supplies being loaded into a transport aircraft. (Photograph: Aéroports de Montréal)

4.4.14 Public Health Emergencies

The International Health Regulations (IHR) published by the World Health Organization serve as the international legal basis for the handling of public health emergencies of international concern (PHEICs). The purpose and scope of these regulations are to prevent, protect against, control and provide a public health response to the international spread of disease, and to do so in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.

Apart from aerodromes, the IHR also calls for action by concerned local authorities and governmental agencies, etc. Each country is responsible for the implementation of the IHR. Aerodrome operators must carefully note this, since local aerodrome action plans must be in line with the national implementation of the IHR. Further information is provided in the [ACI publication “Airport Preparedness Guidelines for Outbreaks of Communicable Disease.”](#)

4.4.14.1 Point of Entry

Each State Party must ensure that the capacities for designated points of entry (i.e., aerodromes, etc.) are developed.

Each State Party must also identify the competent authorities at each designated point of entry. “Competent authority” means an authority responsible for the implementation and application of health measures under the IHR.

4.4.14.2 Role of The Competent Authority

Article 22 of the IHR states that the competent authorities should:

- a. Be responsible for monitoring baggage, cargo etc., to make sure they are free of sources of

infection or contamination;

- b. Ensure that facilities used by travellers at points of entry are maintained in a sanitary condition;
- c. Be responsible for the supervision of any disinfection, disinsection or decontamination of baggage, cargo, etc.;
- d. Advise aircraft operators of their intent to apply control measures to an aircraft;
- e. Be responsible for the supervision of the removal and safe disposal of any contaminated water, food, waste etc.;
- f. Take all practicable measures to monitor and control discharges by aircraft which might be contaminated;
- g. Be responsible for supervision of service providers for services concerning travellers, baggage, cargo, etc.;
- h. Have effective contingency arrangements to deal with an unexpected public health event; and
- i. Communicate with the National IHR Focal Point.

4.4.14.3 Aircraft in Transit

An aircraft in transit at an aerodrome may be restricted to a particular area of the aerodrome and may not be allowed to embark/disembark or load/discharge. Any such aircraft must be permitted to take on, under the supervision of the competent authority, fuel, water, food and supplies.

4.4.14.4 Core Capacity Requirements for Designated Aerodromes

According to Annex 1B of the IHR, designated aerodromes of entry should be prepared for events that may constitute a PHEIC and should be able to allocate the necessary resources in order to take action against such events.

Annex 1B of the IHR is reproduced below:

- B. Core Capacity Requirements for Designated Airports, Ports and Ground Crossings
 1. At all times

The capacities:

- a. To provide access to an appropriate medical service including diagnostic facilities located so as to allow the prompt assessment and care of ill travellers, and adequate staff, equipment and premises;
- b. To provide access to equipment and personnel for the transport of ill travellers to an appropriate medical facility;
- c. To provide trained personnel for the inspection of conveyances;
- d. To ensure a safe environment for travellers using point of entry facilities, including potable water supplies, eating establishments, flight catering facilities, public washrooms, appropriate solid and liquid waste disposal services and other potential risk areas, by conducting inspection programmes, as appropriate; and
- e. To provide as far as practicable a programme and trained personnel for the control of vectors and reservoirs in and near points of entry.

2. For responding to events that may constitute a public health emergency of international concern

The capacities:

- a. To provide appropriate public health emergency response by establishing and maintaining a public health emergency contingency plan, including the nomination of a coordinator and contact points for relevant point of entry, public health and other agencies and services;
- b. To provide assessment of and care for affected travellers or animals by establishing arrangements with local medical and veterinary facilities for their isolation, treatment and other support services that may be required;
- c. To provide appropriate space, separate from other travellers, to interview suspect or affected persons;
- d. To provide for the assessment and, if required, quarantine of suspect travellers, preferably in facilities away from the point of entry;
- e. To apply recommended measures to disinsect, derat, disinfect, decontaminate or otherwise treat baggage, cargo, containers, conveyances, goods or postal parcels including, when appropriate, at locations specially designated and equipped for this purpose;
- f. To apply entry or exit controls for arriving and departing travellers; and
- g. To provide access to specially designated equipment, and to trained personnel with appropriate personal protection, for the transfer of travellers who may carry infection or contamination.

4.4.15 Restricted/No Access to/from the Aerodrome

There are many situations that might affect access to or from the aerodrome. Severe weather conditions (snow or tropical storms), road accidents, civil unrest, security-related events or even construction can negatively affect the access roads and other means of transportation connecting the aerodrome to its surroundings. Consequently, access of passengers, aerodrome personnel and external emergency services could be affected.

The AEP should contain a section addressing this type of situation. It should cover at least the following items:

- a. A communication plan: It is important to identify the means by which key messages will be sent to passengers and employees;
- b. Possible alternate routes or means of transportation (for example, if the main road collapsed, is access via rail a viable option?);
- c. Control points where staff or barricades are required;
- d. A plan for ensuring that food and shelter for stranded personnel on duty is available;
- e. Special considerations, (for example, if the aerodrome is located on an island or accessible only by a single bridge);
- f. Access that must be kept serviceable, at all times, for emergency services; and
- g. Liaison, mutual aid agreements or contracts with external organizations, such as those responsible for road maintenance.

Maps of aerodrome access roads prepared in advance for such contingencies will make the communication and the intervention easier, thus improving the overall performance of the AEP.

4.4.16 Major Industrial Accident

A major industrial accident in the aerodrome surroundings can affect the normal operating capability of the aerodrome. In a VP, the aerodrome operator should identify hazards and assess risks associated with industrial activities in the area.

Depending on this risk assessment, aerodrome operators should prepare their emergency procedures to cover risks with their internal and/or appropriate external resources.

The principal types of hazards encountered are:

- a. Fire;
- b. Explosion;
- c. Radioactivity; and
- d. Toxic release.

Each of these hazards, individually and collectively, may expose both people and the environment to risk.

Examples of risk sources and common hazards can be found in [Annex 4](#) to this handbook.

4.5 DIFFICULT TERRAIN

As ICAO document 9137 *Airport Services Manual – Part 7* says: “Off-airport accidents in adjacent mountains, marshes, deserts or water can present unique and difficult access and logistical problems. It is therefore important that communities so located have adequate plans for rescue in such areas. This could require an analysis of the availability of such special service vehicles as fire boats, rescue boats, helicopters, hovercraft, swamp buggies, snowmobiles, half-tracks, forest fire-fighting equipment, etc., and arrangements for their utilization. Consideration also may need to be given to:

- a. The availability of specialized rescue teams such as scuba divers, mountain or desert squads, ski patrols, search dogs and bomb squads;
- b. The handling of radiological incidents or chemical spills; and
- c. Equipment for the emergency transfer of fuel from the aircraft wreckage, from a water surface or from pools formed in ground depressions, etc.”

Therefore, the aerodrome must evaluate in its risk assessment analysis if there are any areas with special requirements for procedures and resources to attend an emergency in difficult terrain. This is particularly important where a significant portion of approach/departure operations take place over these areas.



Courtesy of ISAVIA



Courtesy of Copenhagen Airports

4.5.1 Water Rescue

It is common for aerodromes to be located adjacent to large bodies of water, a situation which requires additional emergency services.

In this situation, special provisions should be made for rescue and fire-fighting operations in the event of an aircraft accident/incident in the water.

Specialized equipment for rescue and fire-fighting may include fire/rescue boats, air cushion vehicles, helicopters, coastal patrol boats or amphibious vehicles. This equipment can be provided by the aerodrome operator or by others. In any case, the AEP must define the way in which such services and equipment operators are alerted.

Local water conditions should be evaluated in order to choose the appropriate equipment for a particular aerodrome.

As in any aeronautical emergency, response time is important. Those responsible for operating the special equipment should guarantee a minimum response time following reception of an alert.

The amount of special equipment required should be evaluated according to the aircraft operating at the aerodrome. For example, the number of boats required should be adequate for the number of passengers expected.

A command post should be established at the most feasible location on an adjacent shore.



An airport rescue boat (Courtesy of Copenhagen Airports)

4.6 PRESERVATION OF EVIDENCE

Aerodrome fire-fighters and other rescue personnel should understand the basic need for and the techniques and procedures used in aircraft accident investigation. Emergency first responders should adhere to the criteria contained in the national regulations for evidence preservation and accident investigation. Reasonable measures must be taken to protect the evidence and to maintain safe custody of the aircraft and its contents.

Whenever possible, the wreckage, including any fatalities caused by the accident, should remain undisturbed until the arrival of the first accident investigator and for such a period as may be necessary for the purpose of an investigation. Prior to the time the investigator or its authorized representative takes custody of aircraft wreckage, mail or cargo, such wreckage, mail or cargo may not be disturbed or moved except to the extent necessary:

- d. To remove persons who are injured or trapped;
- e. To protect the wreckage from further damage; and
- f. To protect the public from injury.

When it is necessary to move aircraft wreckage, mail or cargo, aerodrome personnel should make sketch plans, descriptive notes and take photographs (preferably from four separate angles, if possible) of the original position and condition of the wreckage and any significant impact marks.

4.6.1 Safety/Security

Isolation of the wreckage and security measures within the wreckage area should be established as soon as possible. All authorized personnel should possess and display proper “Emergency Access” identification as required in the AEP.

All security personnel should be briefed on proper identification procedures. Two-way radio communication with appropriate authorities on the site can help identify any person seeking entry whose credentials are questionable.

Accident sites can be exceptionally dangerous areas because of the possible presence of flammable fuels, dangerous goods and scattered pieces of wreckage. All necessary safety precautions in the emergency area should be carried out rigidly. These include exercising good judgment during fire control and throughout all rescue efforts. Safety equipment and protective clothing must be worn by all personnel involved.

4.6.2 Investigation

The investigator-in-charge should have unhampered access to the wreckage and all relevant material, including flight recorders and ATS records, and must have unrestricted control over it to ensure that a detailed examination can be made without delay by authorized personnel participating in the investigation.

When practical after the emergency, all participants in the fire-fighting and rescue activity should be debriefed and their observations recorded by the proper authorities. Sketches, diagrams, photographs, as well as audio and video recordings made on the accident site, and appropriate details of the tagging of victims and aircraft parts removed from their locations, are invaluable tools for investigators. Such materials should be handed to the investigator-in-charge upon this officer’s arrival.

4.6.3 Special Conditions

If a request is received from the State of Registry, the State of the Operator, the State of Design or the State of Manufacture that the aircraft, its contents and any other evidence remain undisturbed pending inspection by an accredited representative of the requesting State, the State of Occurrence must take all necessary steps to comply with such a request, insofar as this is reasonably practicable and compatible with the proper conduct of the investigation.

However, the aircraft may be moved to the extent necessary to extricate persons, animals, mail and valuables, to prevent destruction by fire or other causes or to eliminate any danger or obstruction to air navigation, to other transport or to the public, and provided that it does not result in undue delay in returning the aircraft to service, where practicable.

4.7 COMMUNICATION

Communication failures as a result of an emergency are not unusual. In order to limit and mitigate such failures, focus should be put on technical communication infrastructure and verbal and written

communication. The aerodrome operator should prepare for additional communication infrastructure to be used in an emergency. Correct and adequate internal and external verbal and written communication is essential for the outcome of an emergency.

4.8 MEDIA COMMUNICATION AND HANDLING

The aviation industry attracts significant media interest and in the event of an accident or an incident at or near an aerodrome, the aerodrome may become the focal point of media attention. Even smaller occurrences at an aerodrome may generate headlines in newspapers and news broadcasts. It is important for aerodrome operators to set up a media communication strategy in advance.

The strategy should include a communication policy, a designated spokesman, pre-identified media contacts, routines for press releases and press conferences, and a designated location where the media can be received. The communication strategy is preferably complemented by a communication plan including instructions, checklists, contact lists and templates to make communication tasks easier during a stressful situation.

The plan should identify which channels are to be used to provide information – the aerodrome’s Internet homepage, switchboard, information centers, information screens and boards, etc. The plan should ensure that all outgoing information contains the same content.

At aerodromes the media-communication operation involves various stakeholders. It is therefore important to clarify differing responsibilities among ALL the stakeholders, and determine who says what, when and where. A common press conference is advisable.

“If the airport has a media center, this should become the location of media briefings by any of the parties involved (e.g. the operating carrier). Where appropriate, joint press briefings may be arranged which could involve the airport authority, emergency services, Operating Carrier and/or investigating body.”

Full details on best practices and general guidelines for media communication and handling and for using online and social media may be found in [Annex 5](#) to this document: [Dealing with the News Media after an Aviation Accident; Best Practices in the Age of Social Media; Guidelines for Airlines, Airports, Manufacturers - IATA Corporate Communications 2012](#).

Time is a critical factor in media relations during an event and the aerodrome should be prepared to respond to questions. Statements and comments should focus on the following:

- a. Expressing concern for survivors and/or sympathy for victims and their loved ones;
- b. Factual information about the circumstances of the accident/incident;
- c. The progress of the search and rescue operation;
- d. Facilities and equipment which the airport has provided to support the search and rescue or recovery operations;
- e. Support provided by the airport authorities to the aircraft operator (e.g., assistance in establishing a reception center for “meeters and greeters”;
- f. The impact on the ongoing operation of the airport; and

- g. Actions which the airport has taken to mitigate the impact on other airlines and to minimize passenger inconvenience.

All other questions should be directed to the aircraft operator, the emergency services or the investigating body. The aerodrome operator should not:

- a. Speak on behalf of other involved parties;
- b. Be the first to release information about the number of injuries or fatalities, or their identities;
- c. Speculate about the potential cause of the accident/incident; or
- d. Comment on the accident investigation.

It should be ensured that all employees are familiar with the communication strategy and to whom any questions from the media should be directed.

4.8.1 Social Media

The modern use of social media has created new challenges for aviation organizations in the event of an accident or an incident which gets the public's attention. Smartphones and other mobile devices enable comments and pictures to be publicly shared in a matter of moments. This may result in a situation where the public may have more detailed information about a crisis than even the aerodrome personnel or management do.

Anything posted on the internet – in social media forums, on news sites or on other web pages such as blogs – may become impossible to erase. Even the person who posted the material originally may not have control over where the material ends up, or have the proper means to delete it. Therefore, it is not uncommon to be faced constantly with previous events and mistakes. A thorough “lessons learned” exercise focusing on communication and how information has been received – both by the public and the media – should be included in the evaluation of a crisis event.

The aerodrome media communication strategy must take this new information channel into account by including specific actions in its media communication plans. It is important that the aerodrome coordinates and takes part in distributing information in times of crises and therefore it is equally important that social media channels are constantly monitored.

4.9 FAMILY ASSISTANCE

In every emergency, the response procedures should provide for the prompt evacuation of survivors from the accident site to a safe collecting point. The medical coordinator must be responsible for the first medical evaluation of uninjured before evacuation and should co-ordinate transportation to the designated areas.

Survivors should be triaged, given available emergency medical aid as required and then promptly evacuated to appropriate medical facilities.

Occupants departing an aircraft using evacuation slides may be barefoot or not wearing proper apparel for the outside environment. Where the aircraft accident occurred in water or a marshy area, survivors

may be wet and uncomfortable. These problems should be anticipated by having supplies of clothing, footwear and blankets readily available.

There is furthermore an identified need to have in place processes within the AEP to provide for assistance to families of victims.

“A detailed, well-considered plan that is periodically exercised is critical to the provision of family assistance. The need to provide such assistance may occur with little or no warning, requiring an immediate response, and may involve large numbers of trained personnel, significant expense and dedicated resources.” (ICAO Doc 9998). Further guidance on policy and suggested processes on assistance to aircraft accident victims and their families can be found in ICAO Doc 9998 and in ICAO Doc 9973.

The provision of family assistance may involve several groups, such as government agencies, aircraft operators, aid and humanitarian organizations, private contractors and not least the aerodrome operator. Each of these providers has a specific role and responsibility.

Each group brings different resources and responsibilities to the family assistance efforts. The work of these groups should be synchronized in order to conduct an effective family assistance response.

4.9.1 Aerodrome Operator’s Roles and Responsibilities

When an accident/incident has occurred at an aerodrome or in its near vicinity, the obvious place for relatives of passengers, families and friends to receive information is at the aerodrome.

Many aerodromes have gained experience that this situation must be planned for in advance. It is necessary for aerodrome operators to provide immediate care and support following an accident. The coordination of the work of the above mentioned groups should be carried out by the most suitable actor, and in many cases this will be an important task for the aerodrome operator.

4.9.2 Reception Centres

The aerodrome should provide a designated area for passengers in order to assemble and process those who were not injured, or apparently were not injured, in the emergency. Depending on local circumstances, this area should also be able to take care of injured passengers. The area selected should provide for both passenger stabilization and secure protection from the news media.

Taking care of passengers and providing them with all necessities including food and beverages, warm clothing, etc. is of major importance. Holding together all groups involved in the accident and in the recovery phases of an accident makes it easier for all parties to control the flow of information both to passengers and to relatives.

A reception centre should be established in order to accommodate and facilitate the presence of governing agencies, aircraft operator representatives, health care agencies, police, customs or any other organization involved. The reception centre will be the natural point of contact for families, friends, meeters and greeters to get in contact with passengers.

When considering areas where the various functions for caring of survivors can take place, thought should be given to, at minimum, the following factors:

- a. Security of the area;
- b. Access/egress;
- c. The size of the area;
- d. Facilities such as seating, toilets, etc.;
- e. Telephones/facsimile machines;
- f. Refreshments, etc.;
- g. Processes that need to be undertaken within areas such as triage, medical and welfare;
- h. Wheelchair and stretcher access;
- i. Identification of all persons, including passengers (See [Annex 1](#) to this handbook);
- j. Areas for relatives, friends and authorized personnel;
- k. Location and availability of various supplies such as first-aid kits, blankets, stretchers, etc.;
- l. Power supply for equipment; and
- m. Removal and distribution of luggage and personal effects.

The reception centre and areas where equipment is located should be shown in the AEP. Annex 2 lists information that should be kept in an emergency kit at reception centres.

Consideration needs to be given to arrangements for the release of survivors from the Reception Centre, as follows:

- a. Reconciliation with relatives;
- b. Survivors without waiting relatives; and
- c. Survivors waiting for other survivors.

4.9.2.1 Friends and Relatives Reception Centre

A secure and comfortable area should be provided for the assembly of friends and relatives, located landside in a discreet and comfortable location which is secure and out of the eye of the public. There, these persons can be registered as legitimate friends and relatives of the passengers involved in the accident/incident. This is the first place that families and friends are taken to provide for their basic needs, to record details of the family and to provide information updates.

The Care of Relatives Plan should be automatically activated when the emergency operational response to the following emergencies is activated:

- a. Aircraft crash on-aerodrome; and
- b. Aircraft crash off-aerodrome, where the aircraft originated from or was destined for the aerodrome.

A senior official of the aircraft operator will be responsible for the initial notification of relatives and friends.

4.9.2.2 Reunion and Exit Centre

A secure and comfortable area for the exit of uninjured passengers and their reunification with friends and relatives should be established. This may include a private area where friends and relatives will receive information of a passenger's status.

4.9.2.3 Control of Survivors on an Aerodrome in Operation

In the transportation area(s), the Incident Command Post should control and record the transportation of every survivor.

For uninjured survivors, the aerodrome operator, aircraft operator (where involved) or other pre-designated agency selected for the purpose is responsible for:

- a. Interviewing the uninjured and recording their names, addresses, phone numbers and where they can be reached for the next 72 hours;
- b. Notifying relatives or next of kin where deemed necessary;
- c. Co-ordinating efforts with the designated international relief agency (Red Cross, etc.);
- d. Preventing interference by unauthorized persons or those not officially connected with the operation in progress; and
- e. Keeping contact data for every survivor so that the emergency response process can be continued. (see [Annex 1](#) to this handbook)

4.9.3 Aircraft Operator Roles and Responsibilities

The aircraft operator is normally the best entity to establish whether or not a person has been involved in an aircraft accident. Some States have legislation that requires each aircraft operator to maintain an accurate passenger manifest. The aircraft operator may also be required to have a plan for the provision of family assistance in the event of an accident. This plan may cover financial support, crisis counselling, etc.

The aircraft operator should have suitably qualified and trained persons available to answer inquiries concerning the passengers involved. In general, aircraft operators have an extensive and comprehensive emergency plan for handling accidents. These plans must be synchronized with the emergency plans of the aerodrome to minimize any reduction of effectiveness of deployed resources.

4.9.4 Government Responsibilities

The State of Occurrence of an aircraft accident and adjacent States should make arrangements to facilitate the temporary entry into their territories of family members of survivors of an aircraft accident, as well as authorized representatives of the aircraft operator whose aircraft is involved in the accident, or the operator's alliance partner.

States should make arrangements to issue emergency travel documents, if required, to their nationals who have survived the accident.

States should extend all necessary assistance, such as arranging transport and clearing customs, in the repatriation of human remains to their countries of origin, upon request by family members of the deceased or the aircraft operator whose aircraft is involved in the accident.

4.9.5 Responsibilities of the Accident Investigation Authority

It is recognized that following an accident/incident there are often simultaneous investigations (e.g., safety-related investigations, judicial investigations and criminal investigations). Each investigation has its own restrictions regarding the management and release of information. However, steps should be taken to provide investigation information within these restrictions to family members and survivors.

As the accident investigation authority proceeds through the investigation, family members and survivors should be given updated information on the progress of the accident investigation by means of periodic advisories.

The provision of family assistance should be separate from the accident investigation. The accident investigation authority should remain focused on the investigation of the accident. Nevertheless, the accident investigation authority has a responsibility to provide relevant and timely information to the families and the accident survivors.

The investigation authority should be aware of the concerns of the families and the survivors. To keep them informed, the authority might consider appointing a liaison as a focal point for inquiries.

4.9.6 CAA Responsibilities

The aviation accident investigation authority typically develops recommendations to improve safety following its investigation. These recommendations may be addressed by the CAA. The CAA may decide to inform the public of the actions it intends to take as a result of the recommendations. Here “the public” would include family members and survivors.

4.9.7 Crisis Counselling

Crisis counselling for accident survivors and their families is a need to be expected and planned for. Such support can vary from providing immediate psychological first aid to common-sense advice on dealing with the practical aspects of life after an accident, and to more significant long-term mental health care.

ICAO Doc 9137 – Airport Services Manual Part 7, Section 3.19 states: “The emergency plan should include local mental health agencies. Therapeutic treatment, as well as follow-up procedures for dealing with the possible long-term effects of the emergency, should be available for survivors, relatives, eyewitnesses, and emergency scene personnel.”

Welfare coordinators and mental health specialists trained in stress management should:

- a. Give support and comfort to relatives and friends of passengers and crew members on board the aircraft; and

- b. Provide care, comfort, and assistance to the “walking injured,” uninjured survivors and responding personnel if required.

Providing support to the families will require well-coordinated logistics which should not be the responsibility of the caregivers. The mental health providers should concentrate solely on caring for the well-being of the families. The responsibility for crisis counselling can be expected to be a part of both the aircraft operator’s emergency plan and the AEP.

4.9.8 Financial Assistance

The families and the survivors often require immediate financial assistance. In particular, these funds must be of a sufficient amount to meet the families’ immediate needs. Advance payments recognize the immediate needs of families to meet on-going financial obligations and proof of these obligations should not be required. Family members should also be offered advice on how to take advantage of the other forms of family assistance available. This is primarily a responsibility for the aircraft operator.

4.9.9 Immigration and Customs Formalities

The families and the survivors will often need assistance with immigration and customs formalities. Survivors who have lost their identity papers and tickets in the accident will require assistance to complete their travel. Family members may need to travel to the accident site, a hospital or another location to meet injured survivors, attend memorial services or visit the State of Occurrence for reasons directly related to the accident. Assistance from immigration and customs agencies will also be required for the repatriation of human remains and personal effects.

4.9.10 Other Roles and Responsibilities

Police, coroners and health authorities may each have an important role in identifying and caring for the remains of victims. This responsibility may be shared or may be the sole responsibility of a specific authority, depending on the convention of the State of Occurrence. Aircraft operators generally have no legal role in the victim identification process but do often get involved with facilitating the return of remains to the family and burial. Victim recovery and identification is a resource-intensive process which often requires collaboration between States and agencies. Some aircraft operators may delegate their responsibilities in this matter to an authorized commercial entity.

5

COORDINATION OF INTERFACING EMERGENCY RESPONSE PLANS

Coordination of emergency response between the various organizations that have to activate emergency response plans or respond to an aviation emergency is an ICAO requirement based on [Annex 14, paragraph 9.1.3](#). Ensuring this coordination is a requirement in [Annex 19, Appendix 2, component 1.4](#) of the SMS framework.

5.1 COORDINATION OF EMERGENCY RESPONSE PLANS OR EMERGENCY RESPONSE PROCESSES

As part of its AEP, an aerodrome operator must have in place documented processes and procedures to coordinate its AEP to the emergency response plans or emergency procedures of those organizations with which it must interface during the provision of its products and services.

Examples of such organizations are aircraft operators, air navigation service providers, police, national, regional and local community entities, hospitals and rescue teams. Relevant procedures should be developed for the processes to provide compatibility of plans and coordination of any response to an emergency on the aerodrome or in its vicinity.

5.2 ENSURING THE COORDINATION OF EMERGENCY RESPONSE PLANS

The aerodrome operator should also ensure that the AEP is properly coordinated with the emergency response plans or processes of other relevant organizations. To ensure this the aerodrome operator should apply its SMS processes such as safety risk management and safety assurance where appropriate, including internal safety audits of the AEP coordination procedures.

6

TRAINING

This chapter introduces training expectations relating to the development and application of an AEP.

The training and checking of knowledge and skills should be applicable not only to aerodrome personnel, but also to the personnel of all responding agencies and participating organizations.

As part of the AEP, a training program should be in place for the development and teaching of knowledge and skills related to emergency response. It should be closely connected to the exercises and testing of the AEP. The training program should contain safety training which could be embedded in the aerodrome emergency training program and exercises or provided separately. The training program should be documented.

6.1 THEORETICAL TRAINING

Aerodrome personnel and any persons with a role in the emergency response should receive adequate, applicable preparation and training so they can execute their duties in the most competent manner.

ACI Global Training offers practical competency-based courses on SMS, Emergency Planning and Crisis Management as part of the Global Safety Network (GSN) Diploma Programme, as well as other classroom and online training to assist airports in fulfilling this requirement.

It is important that no persons take part in emergency exercises, respond to emergencies or work on emergency preparedness on the movement area of an aerodrome unless they have received relevant aerodrome safety training in addition to their emergency response training.

This includes general safety awareness and familiarization with the relevant parts of the aerodrome manual and the aerodrome SMS.

6.2 PRACTICAL AND ON-THE-JOB TRAINING

Practical emergency response training should be provided to responding personnel in their response environment. This training should be provided initially and should then also become part of recurrent training and exercises.

This practical safety training should be performed on the aerodrome and in its vicinity. Personnel could receive those portions of their on-the-job safety training related to emergency response as part of their initial safety training or as separate training.

On-the-job safety training should also be included in emergency exercises.

6.3 RECURRENT TRAINING

Recurrent training for emergency response participation should be provided regularly. Recurrent safety training should form part of the training program. It should be developed and implemented in the operations of each participating organization. Recurrent training could in part be provided separately and also partly embedded within emergency exercises. Recurrent training needs should be defined and documented for each of the relevant personnel.

6.4 CHECKING KNOWLEDGE AND SKILLS

As part of the training program, safety knowledge and skills should be verified as appropriate and the results documented.

6.5 FEEDBACK FROM TRAINING

Participating organizations and responding agencies are encouraged to ask persons receiving training to provide feedback about the training. This feedback should be provided anonymously in order to improve the possibility of achieving reliable ratings of the training. The results should be used for continuous improvement of the training program. All feedback should be documented.

7

EXERCISES AND TESTING

After the initial development and documentation of the AEP, it should be tested regularly. This testing should be performed by means of conducting exercises to check for discrepancies in the performance of the plan, in order to allow for corrections and changes to keep the plan up to date and to improve it continuously.

For this purpose [Annex 14, Section 9.1.13](#) requires that the emergency plan be tested either by conducting a full-scale exercise every two years and a partial exercise in the intervening year, or by conducting a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding three years.

More detailed information can be found in [ICAO Doc 9137, Airport Services Manual, Part 7 – Airport Emergency Planning](#).

7.1 PARTIAL EXERCISES

Note 1 to [Section 9.1.13](#) in [Annex 14](#) states that the purpose of a partial exercise is to ensure the adequacy of the responses by individual participating agencies to each component of the plan, such as the communication system. Partial exercises are used to test specific parts of an emergency plan. They may be used to train new personnel, evaluate new equipment or techniques, or to test individual parts of the emergency plan.

More detailed information can be found in [ICAO Doc 9137, Airport Services Manual, Part 7 – Airport Emergency Planning](#).

7.1.1 Table-Top Exercises

Table-top exercises are usually conducted on desks in a meeting room where participants act out or demonstrate their relevant responses to an accident location. The table-top exercise is the simplest form of emergency exercise, and it may be very useful – particularly for the organization, coordination, orientation and communication necessary to execute any real emergency response successfully.

7.1.2 Modular Tests

An alternative to the process of conducting full-scale exercises every two years and partial exercises in the intervening years is to conduct a series of modular tests over a measured time period.

Smaller and more detailed elements of the AEP will be tested. Altogether 10 modular tests, with a defined period in between each module, may be conducted over a period of 3 years, with the 10th module being a full-scale exercise.

Note 1 to [Section 9.1.13](#) in [Annex 14](#) states that the purpose of a modular test is to enable concentrated efforts on specific components of established emergency plans.

7.2 FULL-SCALE EXERCISES

A full-scale emergency exercise is conducted with the purpose of testing the whole AEP when responding to a staged accident on an aerodrome or in the vicinity of an aerodrome.

All relevant agencies, on and off the aerodrome, with a defined role in the emergency plan should participate in a full-scale exercise.

An accident is staged in the most realistic way possible, with ATC communication and involvement, if possible, of a simulated crashed aircraft, lifelike fires and actors made up to display various kinds of injuries taking their positions on the scene.

Preparation in briefings before the exercise and debriefing after the exercise are of great importance for the successful conclusion of every full-scale exercise. The whole process should be documented.

An element of surprise amongst the persons performing in this exercise is desirable. It will also benefit if critics are positioned at some crucial positions to evaluate the response at these positions. These critics should be provided with a copy of the roles to be played at these positions and evaluation forms may also be provided.

For further information on full-scale emergency exercises, please refer to [Annex 3](#) to this document, [Full-Scale Exercises](#).

8

DOCUMENTATION

It is important to document every aspect of aerodrome emergency plans. Documentation provides consistency of actions and enables communication of intent. The plan should be documented in the Aerodrome Manual or in an emergency response document, the AEP Manual, which can be considered part of the aerodrome manual.

The AEP document should contain a full description of the aerodrome emergency plan.

8.1 PROCESSES

A process describes what to do in a particular situation. The AEP should contain processes which list the various tasks contained in the plan. These tasks include, but are not limited to, coordination of interfacing emergency plans; training; testing and exercises; and what responses and rescue actions will be applied if there is an emergency.

8.2 PROCEDURES

A procedure describes how to perform a task. The processes contained in the AEP should contain procedures which outline, in sequence of events, step by step, how to perform the tasks. It should be possible to draw a procedure as a flow chart.

8.3 RECORDS

Processes, procedures and records obtained from the operation of the AEP, agreements, MOUs, exercise reports, training records and other relevant records should be kept available for internal and external audits.

ANNEXES

ANNEX 1 PASSENGER INFORMATION FORM (Annex to section 4.9.2)

The Passenger Information Form (PIF) is the form that should be used at the Reception Centre for Survivors and in any other Holding Area that may be required for friends and relatives.

The data contained in the PIF will be distributed among the emergency-response personnel responsible for ensuring the prompt reunion of passengers involved in an aircraft accident/incident with their relatives and friends.

The back page of the PIF will serve as an extra sheet should there be any additional information that will help in expediting the identification and reunion of a passenger with his or her friends and relatives.

Please see the next page to view the front page of a typical example of a Passenger Information Form. This particular PIF is reproduced by kind permission of Doha International Airport.

PASSENGER INFORMATION FORM (PIF)

Fill out the information as possible (use block capitals and black ink)

Doha International Airport Copy

PIF Registration No.

Date

DETAILS OF MEETER & GREETER

Location where this form is completed

Last Name/Family Name		Gender	Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Age
First Name		Relationship to Pax					
Middle Name		Contact No.					
Permanent Address		P.O Box					
Nationality	Qatar ID No. (If any)	Spoken Language					

DETAILS OF THE PASSENGER

If applicable, Matched Triage Tag No.

PRC No.

Last Name/Family Name		Gender	Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Child	<input type="checkbox"/>	INF	<input type="checkbox"/>		
First / Other Names		Date of Birth (D/M/Y)										
Middle Name		Age										
Nationality	Religion	Language Spoken				Religion						
Passenger Home Address		Passenger Contact Address at Destination (If known)										
P.O Box Post Code		P.O Box		Until								
(Country Code + Area Code + No.)		(Country Code + Area Code + No.)										
Telephone No.		Telephone No.										
Mobile No.		Mobile No.										
Eyes color	Black	<input type="checkbox"/>	Brown	<input type="checkbox"/>	Blue	<input type="checkbox"/>	Other Specify					
Distinguishing Marks (specify location on the body)		Hair Color				Black	<input type="checkbox"/>	Brown	<input type="checkbox"/>	Blue	<input type="checkbox"/>	Other Specify
		Ht		Cm								
		Wt		Kgs								
Is there other Person/s believed to be travelling with above Pax		If Yes, number of the person/s travelling with the above										
Yes <input type="checkbox"/> No <input type="checkbox"/>		_____										

LAST NAME / FIRST NAME	Relationship to Pax	Gender / Age								
		Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Child	<input type="checkbox"/>	INF	<input type="checkbox"/>	Age
		Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Child	<input type="checkbox"/>	INF	<input type="checkbox"/>	Age
		Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Child	<input type="checkbox"/>	INF	<input type="checkbox"/>	Age
		Male	<input type="checkbox"/>	Female	<input type="checkbox"/>	Child	<input type="checkbox"/>	INF	<input type="checkbox"/>	Age

DETAILS OF THE NEXT OF KIN

Known Closest Next of Kin		
Relationship		
Address		
Telephone No.		
Mobile No.		
Notified?	If Yes	Date/Time
Yes <input type="checkbox"/> No <input type="checkbox"/>		
By Whom		
Reunited?	If Yes	Date/Time
Yes <input type="checkbox"/> No <input type="checkbox"/>		
Where		

NAME OF OFFICER/PERSON-COMPLETING FORM

Name (Signature)	Rank/Staff No.	Date
Position/Company	Time	

ADDITIONAL INFORMATION

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ANNEX 2 EMERGENCY KIT FOR RECEPTION CENTRE FOR UNINJURED SURVIVORS (Annex to section 4.9.2)

All personnel of the centre should have knowledge of the location of the emergency kit. The kit must contain writing pads or forms on which to list the following information for each passenger:

- a. Name, address and home telephone number of the passenger;
- b. Name and telephone number of the person to be notified of the passenger's condition;
- c. Arrangement requests of the passenger (i.e., future flight, hotel, transportation within the local area, etc.); and
- d. Where the passenger can be contacted during the next 72 hours.

The kit should also contain adhesive name tags to identify passengers who have been processed and those for whom arrangements have been made.

Telephone numbers for the following resources should be available in the emergency kit:

- a. Doctors to attend to minor injuries: Each aircraft operator should have a letter of agreement with a physician(s) who will respond to a designated holding area;
- b. Hotels where passengers can be billeted: It is beneficial to place passengers in the same hotel, or at least in groups at hotels;
- c. Linguists, who should be available on a 24-hour basis and preferably people who work on the aerodrome, for quick response. (Local schools and private language departments can also be contacted);
- d. Caterer (if commissary items are required);
- e. All local reservations offices of aircraft operators;
- f. Ambulance companies, in case a passenger unexpectedly requires transportation;
- g. Taxicab companies; and
- h. Emergency telephone numbers to be disseminated on radio and television, so that families of the casualties may telephone and receive information.

A current copy of a recognized airline guide should be available in the emergency kit. Local airline schedules would be most helpful for registrars who will be making reservation arrangements on future flights.

ANNEX 3 FULL-SCALE EMERGENCY EXERCISES (Annex to section 7.2)

The objective is to test the overall functioning of the emergency plan and integrate all participating agencies, as defined in the emergency plan, on and off the aerodrome. Participants will demonstrate their actual roles by performing them during the exercise.

This annex contains a shortened and slightly edited extract from the text appearing in [ICAO Doc 9137 Airport Services Manual – Part 7, Section 13.5](#). For the full text please refer to the document.

Objectives for what shall be achieved should be set for the full scale emergency exercise.

A passenger aircraft should preferably be sought for the full-scale emergency exercise to add realism to the on-aerodrome exercise and to familiarize participants with the problems of removing casualties from aircraft. If an aircraft is not available, a bus or similar large vehicle may be used to simulate an aircraft.

The emergency exercise should be held in a location which will provide maximum realism while ensuring minimum disruption of aerodrome operations. Various scenarios can be used. The exercise may be held either during the day or at night.

Scenarios include accidents involving:

- a. Aircraft and structures;
- b. Aircraft and aircraft; or
- c. Aircraft and ground vehicles.

The exercises may, be held in the runway end safety areas, or the approach or take-off areas. Inclusion of small fires in the area can add realism for the fire services. Volunteer casualties should be simulated in order to provide realism for the medical responders.

In preparing the scenario, the use of real names of aircraft operators and types of aircraft should be avoided.

Preparations and Timelines

Preparation for the full-scale exercise should start in timely fashion and should involve all relevant authorities and participating agencies. All agency heads must be thoroughly familiar with the AEP and must develop a plan for their individual departments in co-ordination with the general plan. The agency heads should meet regularly to develop an understanding of their agencies' responsibilities and requirements in co-operation with other agencies.

120 days prior to the scheduled full-scale emergency exercise, the aerodrome operator should hold a meeting of key supervisory personnel of all 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 confirmed as defined in the emergency plan. A suggested time schedule and checklist is as follows:

D Minus 120 days (that is, 120 days before the exercise): Supervisory personnel of participating agencies hold organizational meetings to outline aims, formulate the scenario, assign work tasks and select emergency plan co-ordinators. (See Chapter 6);

D Minus 90 days: First progress report on arrangements;

D Minus 70 days: First meeting of all participating agencies (individual committee representatives);

D Minus 60 days: Complete arrangements for full-scale emergency exercise site or staging area. Written scenario completed;

D Minus 50 days: Training for moulage team begins. Second meeting of individual committee representatives. A moulage chairman can be selected from hospitals, rescue and fire-fighting personnel, civil defence, military personnel, etc.;

D Minus 40 days: Arrangements for transportation, feeding, stretcher bearers and volunteer workers completed;

D Minus 30 days: Third meeting of individual committee representative. A preliminary “warm-up” communication exercise is held;

D Minus 21 days: Fourth meeting of individual committee representatives. Make-up for members who missed previous team training and arrangements for volunteer casualties completed;

D Minus 14 days: Final meeting and briefing for all participants, including critique team;

D Minus 7 days: Final meeting of supervisory personnel to review assignments;

D Minus 0 days: Conduct the exercise;

D Plus 1 to 7 days (1 to 7 days after the exercise): Conduct a critique following the exercise so that all participants may hear the observers’ reports; and

D Plus 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.

Evaluators and Observers

In order to obtain the maximum benefit from a full-scale emergency exercise, it is important to review the entire proceedings. An observer critique team should be organized, comprised of members who are familiar with mass casualty accident proceedings. A team chairman should be appointed and should be present at all meetings.

The team should be present at the final organizational meeting (seven days prior to the drill) and, in co-ordination with the authority in charge, should ensure that significant problems are introduced into the exercise.

Each member of the critique team should observe the entire exercise and complete the appropriate emergency drill critique forms.

As soon as convenient after the exercise (not later than seven days after the exercise ends), a critique meeting should be held so members of the team can present their observations and recommendations for improvement of the AEP procedures and associated AEP document.

Debriefings

For assessment of results from the exercise, debriefing should be organized. After the exercise, it should be possible to review specific skills that were learned; new environmental conditions that were explored; communications systems that were tried out; additional mutual aid units that were integrated into the emergency plan; new equipment that was used; and other benefits or problems.

The debriefing should be as thorough as possible and should involve giving feedback to all participating agencies. The personnel of participating agencies should receive relevant debriefing to enable them to improve their performance and to obtain a sense of ownership of their roles and of belonging to the plan.

The debriefing reports should contain any discrepancies found and also praise for successful procedures and work well done.

ANNEX 4 EXAMPLES OF RISK SOURCES AND COMMON HAZARDS

The following table sets out the hazards commonly associated with specific types of objects or equipment that can create risks of industrial accidents occurring.

Examples of Risk Sources	Common Hazards
Docks	Dangerous substances (flammable, explosive, poisonous, etc.); cranes, vehicles.
Warehouses	Dangerous goods/hazardous material.
Depots, terminals, stores	See Docks.
Ships	Dangerous goods/cargo safety. oil.
Railway marshalling yards	Dangerous goods/cargo safety, oil.
Aerodromes	Fuel, dangerous goods/cargo safety.
Aircraft	Fuel, lithium batteries, other dangerous goods/cargo safety.
Processing industry: Refineries, petrochemical, inorganic chemical, pharmaceutical, paint, steel/metal	Pressure vessels, tanks, stores, containers, processing equipment with hazardous substances in the form of raw materials, catalysts, products, by-products, waste and high-voltage electricity.
Other industry: Plastics, rubber, engineering, saw mills, etc.	Pressure vessels, stores, storage tanks with poisonous/flammable substances, etc.
Hydro-electric power stations	Dammed water, high-voltage electricity.
Thermal power stations	Flammable substances, pressure vessels, high-pressure steam, high-voltage electricity.
Nuclear power stations	Radioactive and poisonous reactor materials, pressure vessels, high-pressure steam, hot water, high-voltage electricity.
Pipelines	Flammable gas, pressured pipelines. Environmentally hazardous substances.
Petrol stations, oil depots	Flammable, poisonous and environmentally hazardous substances.
Department stores	Combustible and poisonous substances, aerosols.
Builders' merchants	Large quantities of wood.
Hardware stores	Explosive and combustible substances.
Municipal facilities such as water purification plants, sewage treatment plants, swimming pools	Hazardous substances (chlorine).
Hospitals, schools	Hazardous substances.
Hotels	Tall buildings.
Silos	
Mines, quarries and other large mountain/underground sites	Unstable rock/soil, gases, drainage water, vehicles.



**DEALING WITH THE NEWS MEDIA
AFTER AN AVIATION ACCIDENT**

**BEST PRACTICES IN THE
AGE OF SOCIAL MEDIA**

**GUIDELINES FOR AIRLINES, AIRPORTS,
MANUFACTURERS**

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1. INTRODUCTION

Accidents or serious incidents with passenger or cargo aircraft often attract overwhelming public interest, particularly if they involve large numbers of fatalities or a well-known and respected operator. Online and conventional media channels can flash “breaking news” to audiences around the world before the airline itself is fully aware of the event. The airline and other involved parties – which may include the aircraft and engine manufacturer, airport, air navigation service provider and the investigating body – will be inundated with requests for information and explanations, from numerous directions.

Any organization which appears to be floundering in its response, or which fails to quickly reassure its numerous internal and external stakeholders, may suffer serious damage to its reputation, to its key relationships, and to its ongoing business. Companies must be prepared to engage proactively with the news media and with other audiences to ensure that they are seen to respond swiftly and appropriately, and that they intend to do “the right thing”.

These “best practice” communication guidelines are intended to help airlines, manufacturers, airports, investigating bodies and other involved parties to communicate effectively after an aircraft accident or major incident, to protect their own reputation and the reputation of the industry itself.

The proper time to prepare for an accident or serious incident is before it occurs, and these preparations should be exercised on a routine basis. In addition to this publication, IATA has detailed Emergency Response Planning (ERP) guidance materials on how to prepare for these rare events from an operations perspective.

2. FIRST PRINCIPLES

Be proactive

A key challenge for any company involved in a crisis is to minimize negative or hostile media coverage which can undermine the confidence of customers, employees, investors, business partners and other stakeholders. There is no chance of influencing the media coverage if you refuse to engage with reporters or hide behind “legalese” or “no comment”.

While what you will be able to say will be limited, you should aim to establish yourself as a credible and trusted source of information about what your company is doing, as quickly as possible. The aim is to show that your organization is supportive, engaged, very concerned and responding responsibly. Once you have issued a first “holding statement” acknowledging your involvement, maintain a steady flow of information through the news media and via other communication channels – for example, the company website. Focus on your response to the event, and what you are doing to mitigate the consequences.

Be quick to establish yourself as the best source of information about your organization and how it is responding

Airlines and other involved parties no longer have the traditional “golden hour” in which to gather information before issuing a statement. With the proliferation of Social Media channels like Twitter, Flickr and YouTube, there are numerous examples of eyewitnesses posting comments, photos and videos of aviation incidents within minutes of the event. This includes “tweets” from survivors who were on board the aircraft itself. The development of onboard internet access suggests it is only a matter of time before someone broadcasts live commentary and/or images of an aviation emergency from an aircraft which is still airborne.

If your organization is involved in an accident or major incident, you should aim to issue a brief “holding statement”, confirming your involvement, as quickly as possible. Without it, you will surrender your opportunity to influence the developing news coverage. This first statement should contain whatever factual information is available, however limited, together with a commitment to release further updates. You should also describe the immediate steps you have taken in response to the event, and what you intend to do next.

The holding statement should also be posted on the company website and used as the basis for an initial internal bulletin to employees and for communications with other important stakeholders (for example, customers or business partners).

Be honest

One of your key objectives must be to establish – and maintain – credibility. This will ultimately depend on the audience’s perception of the honesty and sincerity of the statements you make. If you lose credibility - and with it, the trust of your audience - they will stop listening, or will disregard any further comments you make.

Acknowledge the facts. Do not hide behind evasions, obfuscation or legal jargon. If you have been involved in a major accident, do not try to pass it off as an “incident” or an “operational issue”.

This will indicate that you either do not understand, or are not willing to admit, the full extent and implications of what has occurred. More dangerously, it will suggest that you have not accepted responsibility for dealing with the consequences.

Of course, it is possible that what at first genuinely appears to be an “incident” may escalate into something more serious. If the story is still developing, you should therefore acknowledge that the information you have is incomplete and may change over time. Qualify your statements with expressions such as: “the details currently available...” or “based on what we know at the moment...” This ensures that your credibility will not be undermined if the situation becomes worse.

Express regret

In some countries (for example, Japan or other Asian societies), a formal “apology” is expected from parties involved in any incident which causes damage, inconvenience or distress to others – regardless of whether they were to blame for the event. Companies which fail to express regret or sympathy for those affected can expect to be severely criticized, particularly if there has been loss of life or serious injuries. Their relationships and standing within the local community may also be damaged.

Foreign companies, particularly those originating in more litigious societies, may see an expression of regret as an admission of guilt, and therefore an acceptance of legal liability. Indeed, your legal counsel may specifically advise against making any such statement, for that reason. However, a carefully-worded expression of regret, which does not specifically admit liability or blame, can play a critical role in establishing a positive view of the company involved, and will ease the recovery of its business. This principle applies universally.

If you are involved in an accident in a country which you are unfamiliar with, or which involves people from another culture, you should take advice on the most appropriate way to express regret and to show sincerity and respect. This may go beyond verbal statements to include bowing or making a “wai” gesture with the hands. In some cultures, an immediate offer of compensation for loss of life or damage to property is expected.

Review and cancel any upcoming company events or announcements that may be inappropriate.

Understand the audiences

News reporters are just one audience you need to engage with after an accident, as they in turn will influence the perceptions of the stakeholders who will ultimately determine the true impact of the event on your business. Each party will need to consider its own list of key stakeholders, and their relative importance.

But many of these audiences overlap, and all will be sensitive to the media coverage. They include:

- Survivors of the incident (if any)
- Family and friends of those on board
- Other individuals or organizations directly affected
- Employees
- Customers (individual/corporate/loyalty program members)
- Your customer’s customer (i.e. the ultimate consumer of the product or service)
- Your customer’s employees (eg. airline pilots or cabin crew)

- Investors
- The financial markets
- Insurance brokers and underwriters
- Business partners
- The travel trade (eg. corporate/consumer travel agencies; tour operators)
- Codeshare/alliance/franchise partners
- Suppliers
- Service providers
- The investigating bodies (technical/judicial/criminal)
- Family advocates and support groups
- Regulatory agencies
- Local/provincial/national governments
- Embassies
- Governments whose citizens were involved or affected

Be clear about what you can – and cannot – provide

In the first few hours after an accident, factual information is usually at a premium. The investigation into the likely cause may take months or even years to reach a conclusion, although the news reports may be filled with speculation and “expert” opinion.

Despite the pressure to speculate, the airline and the other parties involved should very carefully avoid discussing the potential cause(s), and should not identify specific factors that may have (or may not have) contributed to the accident (such as potential weather issues, mechanical problems, etc.) or reveal details of the investigation. Ensure that all of your employees are aware that they should say nothing to the media or other stakeholders outside of the investigation.

But do not use the investigation as an excuse to say nothing. There is a wealth of other information you can legitimately provide – for example, factual details about the flight; the aircraft and engine combination; the airline’s operations and history; its training and maintenance capabilities. You can also make a statement that you have instructed your employees to fully cooperate with the investigating authorities, and that you have complete faith in the ability of the investigating bodies in determining the causes of the accident.

In many cases, it is wise to discuss potential statements with the head of the investigating authority prior to making the statement.

Collate and track all public release statements made by the investigation authority and others involved in the crisis. Whenever a specific question is asked regarding the investigation, you should always refer back to the public statements of the investigators.

Be consistent across all channels

It is easy to become fixated on the news media, as the pressure they place on companies involved in an accident can be overwhelming. But there are numerous alternative channels through which you can engage, or influence, your stakeholders. The “tone of voice” used to different audiences may vary (for example, communication with families versus briefings to investors), but the messaging and factual information must be consistent.

You should assume that information or communications sent to any party will become known to all parties. As an example, internal emails can be expected to be leaked and therefore employees should be cautioned against speculation and in forwarding any information to anyone (including employees) not directly involved in the investigation.

You should therefore ensure that your messaging is consistent across all of these additional communication channels:

- The company website
- Employee intranet
- Individual or group briefings (eg. for families, employees, unions, shareholders etc.)
- Personal letters from the company
- Customer communications
- Communications from company representatives (eg. law firms/insurers)
- Social media platforms (eg. CEO blog, company Facebook page)

Don't forget that there are numerous other "touch points" through which stakeholders engage with your organization and which may influence their perceptions. They include:

- The Passenger Information Center (i.e. the emergency call center)
- Reservation agents (at ticket desks & call center)
- Front-line employees (check-in agents, cabin crew)
- Marketing materials
- Direct mailers (for example, to members of the Frequent Flyer Program)
- Advertisements
- In-flight magazine

At the very least, you should ensure that front-line employees are briefed on what they can say in response to questions about the situation from customers (who may decide to publicize what they are told). You should also review marketing and advertising campaigns to check that they do not contain inappropriate messaging or images - for example, a promotional campaign featuring an aircraft model or engine type which has just been involved in an accident.

Coordinate with other parties involved

Journalists are usually highly attuned to discrepancies or inconsistencies between statements made by different parties involved in any major news story, particularly a fatal accident where issues of cause or "blame" will be a major factor in the coverage. It is therefore important that the various parties (particularly the airline, the manufacturers and the investigating body) coordinate the release of information to ensure basic facts are consistent and to minimize any perception of "finger-pointing".

Establish communications with the investigating bodies, regulatory authorities immediately. Note that any investigation that occurs outside of your own country will most likely involve your own Civil Aviation Authority (CAA), the local CAA, the investigation authority in your own country (if applicable), and the investigation authority where the accident occurred.

As a professional courtesy to other parties involved in the accident, or who may otherwise be affected (see below), you should also provide them with advance warning or a copy of any statement which contains new information, before it is released into the public domain. This will allow them time to

prepare responses to any new questions from the news media or other stakeholders.

Be aware of the impact your statements may have on others

Any aviation accident or serious incident raises questions about safety. At various times, the media may focus on the safety of the aircraft and/or engine type; on pilot training, maintenance, airport equipment and procedures; air traffic control; or the regulatory environment. Every accident therefore has the potential to implicate a wide spectrum of “secondary” parties who were not involved in the original event – for example, other operators of that aircraft type, or of the specific airframe/engine combination.

A decision to ground a particular aircraft “in the interests of safety”, taken unilaterally by one airline or regulatory body, creates serious issues for every other operator of that type, regardless of whether they (or their regulator) take the same action. Similarly, statements or actions by any party involved in an accident may have implications for all parties. The image of the industry itself is damaged if individual airlines, manufacturers, service providers or regulators appear to be trying to protect their own reputation by deflecting blame or “pointing the finger” at someone else. Safety should not be a competitive issue.

3. BEST PRACTICE FOR AIRLINES

3.1 Operating Carrier

The operator of the aircraft will inevitably attract the most intense media interest and demands for information after an accident. Confirmed information may be difficult to obtain, and the airline may be unable to verify or comment on “facts” obtained by journalists from other sources, including social media postings by survivors or eyewitnesses.

In the absence of hard facts about the accident or incident, the airline should focus on what it knows for certain at that point in time, particularly the details of how it has responded, and the actions taken to support those affected.

Statements from the Operating Carrier should include some or all of the following:

- Expressions of regret and concern for the wellbeing of passengers and crew members and/or sympathy for victims and their loved ones
- Factual information about the flight (eg. flight number; aircraft type; origin; destination; number of passengers and crew; departure time; where and when the incident occurred; codeshare partner/s involved)
- Specific actions the airline has taken since it was notified of the event (eg. activating crisis management center/s; activating a passenger information center; deployment of special assistance teams; establishment of family assistance center/s; care and support provided for survivors and/or families; financial assistance; memorial ceremonies)
- Factual information about the aircraft (aircraft and engine types; dates of manufacture and acquisition; flight hours, number of flights; how many in the fleet; seating configuration; routes operated; cargo capacity; maintenance history)
- Factual information about the crew (names*; designations; operating experience; type ratings; history with the airline)
- Factual information about the passengers on board (number of passengers; names*; nationalities; number of adults/children)
- Expression of support for the investigation
- Factual information about the airline (history; company structure; network; aircraft fleet; alliance, codeshare and franchise operations; crew training; maintenance; previous accidents or incidents)

*NB: Names of passengers and/or crew members should not be released publicly until their legal next-of-kin have been notified

The Operating Carrier should avoid issuing statements or commenting on any of the following:

- How the investigation will be structured, and what it will focus on
- Information in the maintenance records
- The possible cause/s of the accident – for example, failure of onboard systems or airport equipment
- The way the aircraft broke apart, and what this might indicate
- Finding key pieces of evidence, for example flight data or cockpit voice recorders
- The actions of the crew before the accident, or what they might have done to prevent it
- The possible relationship between crew training and the accident (eg. “Our pilots are trained to

recover from unusual attitudes. They would never have done that”)

- The possibility of pilot error, or of error or wrongdoing by any other employee of the airline
- The likelihood that someone else must be to blame (eg. the aircraft manufacturer or airport)
- The role of weather or air traffic control
- The condition of human remains, and how they will be identified

3.2 Franchise/“feeder” services: Operating Carrier

Many airlines, particularly regional carriers, operate in the livery, and using the flight designator code, of a larger “mainline” carrier, under franchise agreements. The smaller airline may (or may not) be owned by the airline on whose behalf it operates, but it is legally designated as the Operating Carrier, and should therefore take the lead role in dealing with the news media after an accident or major incident.

Press releases should be issued under the letterhead and in the name of the Operating Carrier, and any spokespeople quoted in statements or appearing at press briefings or interviews should be employed by the Operating Carrier.

However, the fact that a franchise flight carried the livery, flight number and passengers of another airline cannot be ignored or denied. If this relationship is not acknowledged and clarified, it may cause considerable confusion among the news media, families, and other stakeholders. In addition to the “best practice” guidelines described in section 2(a), a franchise or “feeder” airline should therefore also include some or all of the following in its public statements or in comments to the news media:

- The nature of its relationship with the “mainline” carrier on whose behalf the flight was operated
- The support which the “mainline” carrier is providing to survivors and/or to family members of those on board
- The support which the “mainline” carrier is providing to the Operating Carrier (eg. logistics; activation of its call center to handle enquiries about passengers; assistance in establishing family assistance center/s)

3.3 Franchise/“feeder” services: Mainline Partner

After an accident involving an outsourced franchise or feeder operation, any attempt by the Mainline Partner to distance itself from the accident or from the Operating Carrier will raise serious questions about its behaviour and integrity, and the way it treats customers. It is therefore in the interest of the Mainline Partner to be seen to support the smaller Operating Carrier and that statements from the two companies are consistent.

While the Operating Carrier should take the lead in dealing with the news media, the Mainline Partner should focus on the following in any statements or responses to questions:

- Expressing concern for survivors and/or sympathy for victims and their loved ones
- Acknowledgement that the accident/incident involved a franchise service operated on its behalf, and carrying its customers (ticket-holders)
- Describe the actions taken to provide care and support for survivors and/or families of the victims
- Describe assistance provided to the Operating Carrier (eg. logistics; activating telephone enquiry center; establishing family assistance center)
- Defer all other questions to the Operating Carrier, or to the investigating body

The Mainline Partner should not:

- Deny or downplay the existence of the franchise partnership
- Speak on behalf of the Operating Carrier
- Issue statements or make any comments which contradict or are inconsistent with statements made by the Operating Carrier

3.4 Codeshare partner/s

The proliferation of codeshare and alliance partnerships has made it increasingly likely that two or more airlines may be involved in the same incident – either as the Operating Carrier or as a Codeshare Partner whose flight designator code is carried on that service, and whose passengers or crew members may be on board.

In such cases, the Operating Carrier should always take the lead in dealing with the demands of the news media. However, it is important that any Codeshare Partner/s are prepared to respond to questions from journalists or from other stakeholders. The Codeshare Partner should focus on the following:

- Expressing concern for survivors and/or sympathy for victims and their loved ones
- Acknowledgement that the accident/incident involved a codeshare service on which its own customers (ticket-holders) and/or crew members may have been on board
- Describe the actions taken to provide care and support for survivors and/or families of the victims
- Describe assistance provided to the Operating Carrier (eg. logistics; activating telephone enquiry center; establishing family assistance center)
- Defer all other questions to the Operating Carrier, or to the investigating body

The Codeshare Partner should not:

- Deny or downplay the existence of the codeshare partnership
- Speak on behalf of the Operating Carrier
- Issue statements or make any comments which contradict or are inconsistent with statements made by the Operating Carrier

4. BEST PRACTICE FOR AIRCRAFT AND ENGINE MANUFACTURERS

After an aircraft accident or serious incident, the primary role of the aircraft and engine manufacturer is to support the accident investigation and to keep the Operating Carrier and other operators informed of any relevant information or recommendations which may result from the investigation. The manufacturers will normally be in constant contact with the airline's flight operations or engineering departments after an accident. A similar dialogue should also be maintained with the airline's Public Relations staff, to ensure they have access to the latest information and to ensure that responses to the news media and other stakeholders are consistent from both parties.

While the manufacturers will often attract intense media interest, particularly if the performance of the aircraft or engines appears to be a factor, they are strictly bound by the "party" rules on the release of information which are normally imposed by the investigation body. However, the manufacturers still have a role to play in providing factual background information about the specific aircraft or engine type, as long as the information is not intended to encourage journalists to make judgements or reach conclusions about the likely outcome of the investigation.

In statements to the news media, the aircraft and engine manufacturer should focus on:

- Expressing concern for survivors and/or sympathy for victims and their loved ones
- Factual information about the aircraft or engine type (serial number; date of delivery; flight hours; number of flights; number in service; number of operators)
- Expressions of support and commitment to the accident investigation
- Description of actions taken in response to the accident/incident (eg. deployment of accident investigation team)
- Safety record of the aircraft or engine type
- Actions taken (if any) as a result of the investigation

The manufacturers should not:

- Comment or speculate on the progress or likely outcome of the investigation
- Selectively "leak" information which tends to exonerate the aircraft or engine type or implies that other parties or factors were responsible
- Comment on or publicly dispute statements made by the investigating body
- Attempt to discredit or undermine the investigating body, or its findings

5. BEST PRACTICES FOR AIRPORT OPERATORS

If there is an accident or serious incident at or near an airport, the airport itself will become the focal point of media attention. Journalists will congregate in the terminal area attempting to find company spokespeople, eyewitnesses and the friends and family of those on board. TV crews and photographers will also demand access to the accident site, or a suitable vantage point.

The airport operator has an important role to play in dealing with the news media on-site and coordinating any press briefings or media access to the accident scene. If the airport has a media center, this should become the location of media briefings by any of the parties involved (eg. the Operating Carrier). Where appropriate, joint press briefings may be arranged which could involve the airport authority, emergency services, Operating Carrier and/or the investigating body.

The airport itself should also be prepared to respond to questions from journalists. Any statements or comments should focus on the following:

- Expressing concern for survivors and/or sympathy for victims and their loved ones
- Factual information about the circumstances of the accident/incident
- The progress of the search and rescue operation
- Facilities and equipment which the airport has provided to support the search & rescue or recovery operations
- Support provided by the airport authorities to the Operating Carrier (eg. assistance in establishing a reception center for “meeters and greeters”
- The impact on the ongoing operation of the airport
- Actions which the airport has taken to mitigate the impact on other airlines and to minimize passenger inconvenience

All other questions should be directed to the Operating Carrier, the emergency services or the investigating body.

The airport operator should not:

- Speak on behalf of other involved parties – for example, the Operating Carrier
- Be the first to release information about the number of injuries or fatalities, or their identities
- Speculate about the potential cause of the accident/incident
- Comment on the accident investigation

6. BEST PRACTICE FOR AIR NAVIGATION SERVICE PROVIDERS

There have been numerous examples of accidents which implicate the Air Navigation Service Provider – for example, mid-air collisions or accidents in which questions were raised about the information or instructions given to the crew by Air Traffic Controllers. In these cases, the Air Navigation Service Provider (ANSP) can expect to become one of the targets of media and public attention as well as being a party to the investigation.

The ANSP should be prepared to respond to questions from journalists, and from other stakeholders (for example, employees). Any statements or comments should focus on the following:

- Expressing concern for survivors and/or sympathy for victims and their loved ones
- Factual information about the circumstances of the accident or incident
- Expression of support and commitment to the investigation
- Description of actions taken in response to the accident/incident
- Factual information about the nature of the service provided by the organization, its resources, operating structure, ownership etc.
- The training and experience levels required of front-line staff such as air traffic controllers
- Actions taken (if any) as a result of the investigation

The ANSP should not:

- Comment or speculate on the progress or likely outcome of the investigation
- Selectively “leak” information which tends to exonerate individuals or the ANSP itself, or which implies that other parties or factors were responsible
- Comment on or publicly dispute statements made by the investigating body
- Attempt to discredit or undermine the investigating body, or its findings

7. BEST PRACTICE FOR INVESTIGATING BODIES

The investigation body is normally the main source of information about the progress and conclusions of the technical investigation into any aircraft accident or serious incident. All parties invited to participate in the investigation are generally required to accept rules prohibiting the disclosure of information on the progress or findings of the investigation, unless that information is released by the investigating body itself.

As the investigation team comprises recognized experts in their respective fields, there is usually enormous interest from journalists in any information they provide, particularly in the first few days after an accident. The investigating body should therefore consider holding regular press briefings and maintaining a flow of information as it becomes available. Statements or comments to the news media from the investigation body could include:

- Factual information about the accident or incident (aircraft and engine types; operator; circumstances of the accident; persons on board; number of injuries and/or fatalities)
- Actions taken by the investigation body to date (deployment of investigation team; name of investigator in charge; parties invited to participate in the investigation)
- Structure of the investigation team and focus areas
- Potential timeline for the investigation
- Timeline and channels for the release of further information (eg. daily press briefings, press releases, statements posted on website)
- Statements of initial findings and resulting safety recommendations (if any)
- Date and location of any public hearing
- Date when the final investigation report will be published
- Summary of key findings and safety recommendations, if any

8. BEST PRACTICE FOR USING ONLINE AND SOCIAL MEDIA PLATFORMS

8.1 The impact on “breaking news”

The proliferation of Social Media channels has created a new dimension to the challenge of influencing breaking news coverage of a major aviation event. To illustrate how Social Media can lead the conventional news media, and the problems this creates for the parties involved, consider how your organization would cope with the following scenario, which occurred in November 2010:

- Wide-body aircraft suffers uncontained engine failure on climb-out, four minutes into the flight. Crew faced with a cascade of failures due to serious damage to aircraft systems. Aircraft remains airborne for 1hr 39 minutes while crew assess damage and dump fuel before returning for an emergency landing at the originating airport
- 40 minutes after the engine failure, while the aircraft is still airborne, a 24-hour TV news channel reports “breaking news” of an explosion overhead a populated area
- 6 minutes later, first “tweet” by a viewer about an “aircraft crash”, identifying the location. Starts a flood of tweets from other users talking of an “aircraft explosion”, which alerts other news organizations to the story
- Within 15 minutes, AP newswire quotes local police chief confirming aircraft debris found – this report “re-tweeted” by CBS News producer in New York
- 20 minutes later, Bloomberg identifies the airline. Every major international news organization now following the story
- Photos of aircraft debris posted on Flickr, appearing to show the airline’s logo – numerous responses confirm the airline’s identity
- 1hr 27 minutes after the event, Reuters reports “breaking news” of a crash, identifying both the airline and the aircraft type
- 12 minutes later, aircraft lands safely at the originating airport, despite suffering significant structural damage
- Passengers with smartphones almost immediately start uploading photos, videos and commentary onto Social Media channels
- 2 hours after the engine failure occurred (and 20 minutes after it landed), the airline issues its first statement, confirming the safe emergency landing and denying the aircraft has crashed

8.2 General guidelines

Social Media platforms are a potentially powerful tool for engaging and interacting with audiences such as employees or customers. But Social Media programs which work (or appear to work) for other organizations may not be appropriate for you. As with any other form of communication, you should be clear about which audiences you need to reach; the reason for doing so; and the most appropriate channel for engaging with them.

Best practice for using Social Media:

- Develop your Social Media policy in “peacetime” – do not attempt to engage with online audiences “piecemeal” in the midst of a crisis
- Perform an audit of all Social Media channels already used by the organization. You may find that sales or marketing staff, for example, already use sites like Twitter for sales promotions.

Don't overlook sites which may be operated by overseas offices

- Identify the audiences you wish to reach online – and then focus on the channels which are most likely to reach them. Once you have identified the appropriate Social Media platforms, focus only on these channels
- If a decision is made to develop an online presence on platforms like Facebook or Twitter, ensure that these channels are fully integrated with your ongoing communication program, so they are regularly updated and become regarded as a prime source of news and information about the organization. This will enable you develop a dedicated “follower” network over time, with which you can engage in a crisis
- Remember that any online channel (even if it appears to be password-protected) is potentially open to anyone. Your postings may also be forwarded or “re-tweeted” with added commentary
- Include monitoring of Social Media channels as part of your conventional media monitoring program. There are numerous low-cost or free-to-use programs which allow you to track online conversations about your organization, your competitors, or the industry generally
- Include monitoring of employee unions activity on social media and websites and consider providing them with direct feed of your statements
- If you decide to engage with online conversations about your organization, this should be a policy decision made at a senior level, and not left to junior staff members. Once you have decided to engage, it is very difficult to withdraw
- Determine who will be your “spokespeople” – in other words, which members of staff will be responsible for posting information on Social Media platforms, and for engaging in online dialogues on behalf of the company (if that policy decision has been made). Ensure that these staff have the appropriate training and are clear on your communication policy and messaging
- Never hide behind anonymous user names – make clear that any postings or comments are made on behalf of the organization
- If you are building a Social Media presence for the first time, work on the assumption that you will face a major crisis on the day your sites go “live”. In other words, ensure that you have the appropriate resources to cope with a flood of online enquiries and comments, and that you are prepared to track and correct any inaccurate or hostile Social Media postings about the organization, from Day One
- After an accident or major incident, any online postings should appear on all Social Media channels operated by the company – do not overlook channels used primarily for sales or marketing purposes. Any inconsistency in your messaging or approach across different channels may be noticed and commented on by online audiences and by the news media

8.3 Company website

The company website is a primary communication channel, and one of the first places journalists, customers and other audiences will look for information about an accident or major incident, and how it might affect your ongoing operations. You should refer to the website in press releases, statements and Social Media postings – but only if you have posted updated information on the site.

Best practice for using your website:

- For airlines, prepare a “dark site” during “peacetime”. This is a special site which can be activated almost immediately (i.e. within minutes) after notification of an accident and replaces the normal home page on the website. Only activate the “dark site” in the event of an accident with fatalities

- For lesser events (or for non-airline parties involved in the accident), a link displayed prominently on the home page is sufficient, using the words “For more information on the incident involving xxxx, click here”
- The “dark site” should be branded very simply, without any of the colourful logos or images which normally appear on the home page. It should display the latest statement on the situation. Previous statements should be archived and available via a link
- You should also display a link to the “normal” home page, as you should not prevent customers from being able to use the site for online bookings etc.
- Other information you may wish to provide via the “dark site” includes:
 - o Background information on the aircraft and engine type
 - o Background information on the company and its operations
 - o Summary of previous accidents or serious incidents (where appropriate)
 - o Links to public statements and reports from the investigating bodies
 - o Summary of the company’s response to date
 - o Video of statements made by the CEO or other senior executives
- Once the “dark site” is active, refer to it in all your press releases and other statements so audiences are directed there

8.4 Third-party websites

There are numerous examples of third parties (for example, law firms or family groups) setting up websites which are positioned as “official” sources of information about an accident. The purpose of these websites is usually to solicit business from people considering legal claims for compensation, or to offer advice and information about the status of the investigation and any associated litigation. Family associations may also form after an accident, and may create websites as online “memorials” to the victims.

In each case, the airline should be careful not to allow the name or URL of these websites to be associated or confused with the airline’s own website. While you cannot prevent third parties from creating websites dedicated to a particular accident, you can minimize the potential for confusion by immediately registering any domain names which they might try to use.

These could include:

- Air xxxx accident.com
- Air xxx Flight xxx accident.com
- Flight xxx.com
- Flight xxx accident.com
- Air xxx accident information.com
- Flight xxx information.com

8.5 Facebook

Facebook is arguably the best Social Media channel for engaging with customers, employees and “fans” of the company, as it is the most widely-used. Many people within your target audiences will already have their own Facebook pages and be familiar with using it. Numerous airlines operate Facebook pages, and several are also the subject of unofficial pages created either by critics or “fans” of the airline.

If you have a Facebook page, it should be treated as a primary communication channel after an accident or serious incident. You should post the same statements and background information that are displayed on the company website, and update them at the same time. The major difference is that Facebook users can add their own comments and refer users to other sources of information. You should therefore constantly monitor your Facebook page and take a policy decision on whether to respond to negative comments, or to correct any misinformation or incorrect statements which are posted.

8.6 YouTube

Hundreds of hours of video material are uploaded onto YouTube every day. Some airlines have created their own dedicated “TV channel” on YouTube, through which they communicate regularly with customers and other audiences. It has also become a primary source of images of aviation accidents and incidents, some of which are posted by people directly involved (for example, passengers or eyewitnesses).

Even if you don’t have your “own” YouTube channel, you should consider posting video of statements made by your CEO or by other senior executives after an accident. As with Facebook and other Social Media sites, other users may post comments in response to anything you place on YouTube. You should monitor these comments and make a policy decision on whether to respond to any negative or misleading statements.

8.7 Twitter

The use of this “micro blogging” service is growing rapidly, with millions of users posting short messages (“tweets”) to their online followers every day. Any Twitter user can become a “follower” of anybody who tweets. Anyone receiving a tweet on their computer or smart phone can forward or “re-tweet” it to their own followers, which can create an exponential surge in the number of users talking about a compelling story or issue.

Twitter has therefore become a primary source of breaking news, particularly in fast-developing situations like an aircraft accident. A tweet from a survivor or eyewitness can reach tens of thousands of users around the world in minutes. The 140-character limit does not allow space for detailed explanation or context. But companies which use Twitter as an “instant messaging” service are usually perceived to be showing a greater degree of transparency and a willingness to engage with the online audience.

If you decide to use Twitter as a “news feed” service, best practice includes:

- Determine your Twitter policy in advance. If you decide to set up a Twitter news feed, are you going to tweet about every operational incident, however trivial? If not, what are the criteria for deciding which incidents will be publicized?
- Be equally as careful in validating information before releasing it on Twitter as you would for any other channel
- Never post anonymously, or under an assumed name. Use a Twitter name (@xxx) which makes it clear that messages are posted on behalf of the company (for example, “@Airxxx newsfeed”)
- Place a hash tag (#) in front of key words in your message – for example: “#Flight xxx” or “#xxx accident”. This “tags” the subject matter and allows you (and other users) to “group” and identify Twitter conversations on this topic

- Monitor the online conversation using a hash tag tracking service such as Hashtags.org, Twemes, Tweetchat, Tweetgrid or Twitterfall. Twitter itself provides a limited search function which allows you to follow grouped conversations
- Use tweets to update followers on the latest information on the company's response (for example: "#Flight xxx accident. Passenger information center now open. Call 800 1234 5678")
- Direct followers to other, more detailed, sources of information - for example, the company website
- Any postings (including comments made in response to criticism) must be consistent with the organization's overall messaging strategy.

8.8 Online forums

There are numerous online forums dedicated to the aviation industry. Some are "members-only" and intended to be used exclusively by people working within a specific community (for example, members of a cabin crew union). Others can be accessed by anyone with an interest in the subject, such as the Professional Pilots' Rumour Network, (www.PPRUNE.com).

Best practice for engaging with online forums:

- Conduct an audit of online forums which are likely to be used by specific audiences which are important to the organization – for example, employees
- If necessary, register for any forums you have identified as priority targets so you can monitor conversations and post information when appropriate
- Never join forums or post comments under a pseudonym. If you are joining the forum on behalf of the organization, create a username which clearly identifies you (for example, "Air xxx Communications")
- Ensure that any information or comments posted are identified as official statements, and are consistent with your overall messaging strategy
- Remember that any material you post can be copied and forwarded to anyone. Work on the assumption that anything you say, even on "member-only" forums, may become known to the news media, or to other stakeholders such as family members.

8.9 Web Logs (Blogs)

Many organizations publish "blogs" from the CEO or other members of the senior management team in order to demonstrate transparency and speak directly to key audiences such as employees or customers. Blogs are often less formal in tone than other forms of executive communication, and are intended to show the "human" face of a large and otherwise impersonal organization.

In the event of an accident or serious incident, a senior executive blog can be an effective means of demonstrating a genuinely "caring" response by talking about the personal impact of the event and what it meant to the author. But this needs to be very carefully worded to avoid appearing glib or insincere. If the sentiments expressed are not authentic, do not publish the blog.

Best practice for using blogs:

- Conduct an audit of all blogs published across the organization, including any run by the sales and marketing teams. Identify the purpose of each blog, and the intended audience

- Treat all blogs as you treat any other communication channel in a crisis. Ensure that the information provided, and the messages used, are consistent with the organization's overall communication strategy
- If there has been an accident with fatalities, ensure that blogs do not resort to "corporate-speak" or "legalese". They should be used to express a genuine human response to the loss of life and to express sympathy for those affected
- Remove any inappropriate images (eg. the smiling face of the blogger), company slogans or a cheerful signoff ("Thanks for keeping us moving forward with xxx!").

8.10 Employee Social Media Policy

Everyone within the organization is potentially a spokesperson. This applies particularly to employees who use Social Media channels to keep in touch with friends and contacts around the world. Employees who identify their connection to the company (for example, on their LinkedIn profile, or Facebook page), may be tracked down and "befriended" by unscrupulous journalists or other interested parties (for example, lawyers) after an accident. These new "friends" can then access their photo albums and read comments by them or by other work colleagues in their network.

While you cannot prevent employees from using Social Media channels in their personal time, you should introduce an Employee Social Media Policy which includes the following:

- Guidelines on whether employees can access Social Media channels during working hours (some may need to do this in the course of their work)
- Prohibition on posting photographs or video taken on company premises, or in the course of their employment with the company, on Social Media sites
- Prohibition on posting comments on Social Media sites relating to their work for the company, or about senior executives, their supervisors or colleagues
- After an accident or serious incident, issue a reminder to all employees not to post information, or to engage in online discussions, about the event.

9. BEING PREPARED

The day after an accident is not the time to develop a crisis communication strategy. Invest the time to create a robust communication plan in “peacetime”, and on training and exercising the people who will implement it.

If your organization has limited resources, or does not employ fulltime communication professionals, consider where you could source external help to deal with the full spectrum of communication challenges you would face in a crisis. Focus on what you can do with your current resources, rather than on what you can't.

9.1 Creating a Crisis Communication plan

The main elements of a robust Crisis Communication plan include:

- Statement of company communication policy, including authorised spokespeople
- Outline of the communication organization, and its interface with the corporate Crisis Management Team (the head of communications should sit on the CMT)
- Description of functional roles and responsibilities, and candidates to fill them
- Checklists for each functional role, outlining the main tasks
- Templates for initial “holding statements” which can be issued immediately after key information is confirmed (for various possible scenarios, including aircraft accident; serious incident; diversion; hijacking or other security incident; service disruption)
- Contact lists for important internal and external contacts (including media lists and service providers)
- Standard forms and documentation (for example, media call logging form, press conference registration form)

9.2 Training your spokespeople

Dealing with the news media in the midst of a major crisis, particularly with the added emotional stress of dealing with a fatal accident, is not “business as usual”. Spokespeople need to understand how to defend the organization under pressure from aggressive reporters who may know more about the situation than they do. Front-line operational or commercial managers based far from head office (for example, country managers or airline station managers) may be the first company representatives to reach the scene, and may have no previous experience of dealing with the news media.

Anybody designated as a potential spokesperson in a crisis should receive appropriate training. This includes senior executives who may have previously received “media training” or who may feel that they are already familiar with how journalists work.

Crisis communication training should provide:

- An understanding of the challenges the organization will face after an accident, and what audiences expect to see and hear
- How the news media work, and what they will look for
- The impact of Social Media on breaking news coverage
- The role of company spokespeople
- How to deliver “key messages”
- Handling different interview situations – live, recorded, stand-up, “down the line”, “ambush”

- The importance of non-verbal communication
- Interview techniques – “blocking and bridging”
- Holding a press conference

9.3 Exercising the plan

Do not leave your crisis communication plan on the shelf and allow it to gather dust. The moment you most need it, the plan will be out of date, nobody will understand their roles, and key players may no longer be with the organization. Ensure that you review or update your plan at least every six months. Check contact lists and the nominated candidates for key positions. Ask whether the current version of the plan still reflects the “real world”, or if it is now outdated as a result of organizational changes.

At least once per year, conduct an exercise to test the plan and to ensure that everyone understands their role, and the purpose of the plan. An exercise may be a simple table-top or a full-scale input-response exercise run by a “control team”.

Accidents do not happen with plenty of warning, during working hours. Neither should your exercises. Run no-notice exercises at inconvenient times, or when key players are absent. This will provide a far better indication of your true capabilities, and your ability to respond effectively to a major event which occurs at 2 a.m. on a Sunday morning.

The proper time to prepare for an accident or serious incident is before it occurs, and these preparations should be exercised on a routine basis. In addition to this publication, IATA has detailed Emergency Response Planning (ERP) guidance materials on how to prepare for these rare events from an operations perspective.

Communications exercises which you may consider running include:

- Notification exercise: Check contact numbers are valid and key players can be reached quickly
- Slow walk-through: Take a potential scenario and ask a series of questions of your team. Check whether your current plan provides the answers
- Tabletop: Run through a simple scenario and test one aspect of the plan – for example, developing updated press statements
- Input-response exercise: Test the entire communication plan by using an exercise control team to provide “inputs” via phone calls, emails, social media postings and “news reports”.

After each exercise, conduct an immediate de-brief to capture key learning points and ensure the plan is updated and improved. Exercises may include other departments, or overseas offices. You may also wish to include third parties (for example, codeshare partners) in your exercise.

Time invested in preparing, training and exercising your communication plan is never wasted, even if you never experience an accident or major incident. Remember the old military adage:

“Fail to prepare = prepare to fail”

10. FEEDBACK

10. Feedback

Feedback and comments about these guidelines are welcome. Please write to us at corpcomms@iata.org.

ABBREVIATIONS INDEX

ACI	Airports Council International
ACRP	Airport Cooperative Research Program
AEP	Airport (Aerodrome) Emergency Plan
ANSP	Air Navigation Service Provider
ATCS	Air Traffic Control Service
ATS	Air Traffic Service
AFIS	Aerodrome Flight Information Service
RFF	Rescue and Fire Fighting
AVSEC	Aviation Security
BCP	Business Continuity Planning
CAA	Civil Aviation Authority
DOC	Document
EOC	Emergency Operations Centre
ERP	Emergency Response Planning
FAA	Federal Aviation Administration (US)
ICAO	International Civil Aviation Organization
IHR	International Health Regulations
MOU	Memorandum Of Understanding
NGO	Non-Governmental Organization
NOTAM	Notice to Airmen
PIF	Passenger Information Form
PHEIC	Public Health Emergency of International Concern
RP	Recommended Practice
SARPs	Standards and Recommended Practices (ICAO)
SMS	Safety Management Systems
VA	Vulnerability Assessment
VIP	Very Important Person
VP	Vulnerability Plan
WHO	World Health Organization

USEFUL DOCUMENTS AND REFERENCES

The following list contains select publications* from civil aviation authorities, national, regional, international and professional organizations, as well as other industry stakeholders providing important information on safety.

ICAO Publications

ICAO – Annex 9, Facilitation

ICAO – Annex 13, Aircraft Accident and Incident Investigation

ICAO – Annex 14, Aerodromes, Volume 1, Aerodrome Design and Operations

ICAO – Annex 18, The Safe Transport of Dangerous Goods by Air

ICAO – Annex 19, Safety Management

ICAO – Doc. 9137, Airport Services Manual – Part 1, Rescue and Fire Fighting

ICAO – Doc. 9137, Airport Services Manual – Part 5, Removal of Disabled Aircraft

ICAO – Doc. 9137, Airport Services Manual – Part 7, Airport Emergency Planning

ICAO – Doc. 9137, Airport Services Manual – Part 8, Airport Operational Services

ICAO – Doc. 9157, Airport Design Manual – Part 5, Electrical Systems

ICAO – Doc. 9184, Airport Planning Manual, Part 2, Land Use and Environmental Control

ICAO – Doc. 9683, Human Factors Training Manual

ICAO – Doc. 9973 – Guidance on Assistance to Aircraft Accident Victims and their Families

ICAO – Doc. 9998 – ICAO Policy on Assistance to Aircraft Accident Victims and their Families

ACI Publications

ACI – Policy Handbook, Policies and Recommended Practices

ACI – Airside Safety Handbook

ACI – Best Industry Practice Safety Management Systems (SMS) Gap Analysis and Audit Tool

ACI – Business Continuity Management Framework and Case Studies

ACI – Airport Preparedness Guidelines for Outbreaks of Communicable Disease

Other Publications

ACRP – Report 43 – Practices for Improving Environmental Performance at Small Airports

ACRP – Report 5 – Quarantine Facilities

ACRP – Report 65 – Irregular Operations

Boeing – Aircraft Recovery Planning

FAA – AC 150/5200-31C, Airport Emergency Planning

FAA – AC 150/5210-13B, Water Rescue

NFPA 1600 – Standard on Disaster/Emergency Management and Business

Transport Canada – TP12863 Human Factors for Aviation – Basic Handbook

World Health Organization – International Health Regulations

** – ACI provides the above list of publications for informational purposes only and does not take any responsibility for the accuracy of the publication, nor the contents thereof.*

USEFUL WEBSITES

The following list contains select links* to civil aviation authorities, national, regional, international and professional organizations, as well as other industry stakeholders providing important information on safety.

Airbus www.airbus.com

Airport Cooperative Research Program (ACRP) www.trb.org/acrp/public/acrp.aspx

Airports Council International (ACI) www.aci.aero

Australasian Aviation Ground Safety Council (AAGSC) www.aagsc.org

Boeing www.boeing.com

Bird Strike Canada www.birdstrikecanada.com

Canadian Airports Council (CAC) www.cacairports.ca

Civil Air Navigation Services Organization (CANSO) www.canso.org

Civil Aviation Safety Authority - Australia (CASA) www.casa.gov.au

Direction Générale de l'Aviation Civile (DGAC) – France www.dgac.fr

Eurocontrol www.eurocontrol.int

European Aviation Safety Agency (EASA) www.easa.europa.eu

European Civil Aviation Conference (ECAC) www.ecac-ceac.org

Federal Aviation Administration (FAA) www.faa.gov

Flight Safety Foundation (FSF) www.flightsafety.org

Health & Safety Executive (HSE) www.hse.gov.uk

Helicopter Association International (HAI) www.rotor.com

(The) International Air Cargo Association (TIACA) www.tiaca.org

International Airlines Technical Pool www.iatp.com

International Air Transport Association (IATA) www.iata.org

International Association of Airport Executives (IAAE) www.iaae.org

International Association of Air Traffic Controllers' Associations (IFATCA) www.ifatca.org

International Bird Strike Committee (IBSC) www.int-birdstrike.org

International Business Aviation Council (IBAC) www.ibac.org

International Council of Aircraft Owner and Pilot Associations (IAOPA) www.iaopa.org

International Civil Aviation Organization (ICAO) www.icao.int

International Federation of Air Line Pilots' Associations (IFALPA) www.ifalpa.org

International Helicopter Safety Team (IHST) www.ihst.org

International Organization for Standardization (ISO) www.iso.org

Language Line www.language.com

National Fire Protection Association (NFPA) www.nfpa.org/index.asp

National Safety Council www.nsc.org

Skybrary www.skybrary.aero

Transport Canada (TC) www.tc.gc.ca

UK Civil Aviation Authority (CAA) www.caa.co.uk

World Health Organization (WHO) www.who.int

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