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Preparation Guideline

Typical **Airport Emergency Plan** (**AEP**) for a major, commercial **Airport** - **Volume 1**

Introductory / **Reference** / **Explanatory** / **Background** Material

Relevant to: **Airport *Authorities* / *Operators*** *etc.* (+ also ATS; Airlines; Ground Handling Agents; Airport Tenants / Franchisees; 'Surrounding Community' Responders [including 'government' type services] etc.)

Production of a 'fit for purpose' Airport Emergency Plan (***AEP***) is both an international (ICAO) and national regulatory requirement for most of the world's civil, licensed (certificated) aerodromes

If response to a major airport related crisis is to be effective, efficient and expeditious - all involved must be aware (training / competence) of the associated AEP / equivalent document's requirements and adequately practised (exercised) in same. This is not just an ***airport operator*** responsibility - but also relates (to a greater or lesser degree) to many others based at and / or using said airport - particularly ***airlines*** etc. and / or their local representative(s) (e.g. ***ground handling*** operators)

Appropriate responders in the '***off-airport surrounding community***' (including 'government type services / agencies etc.) also have vital roles to play in the input to and utilisation of an ***associated*** AEP. Ongoing liaison, co-operation, support, training, exercising etc. for / with the airport(s) concerned will help ensure that such preparation / utilisation is 'fit for purpose'

Completed AEPS should be 'maintained, reviewed, exercised, audited etc.' on a regular basis

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Please take time to read the following '*orientation*' notes - before proceeding further

Where necessary, see list of acronyms etc. - page 11

Note 1 - Our 'AEP guideline' series of documents provides comprehensive information / instruction etc. - regarding preparation, implementation, operation (plus ongoing maintenance, review, training, exercising etc.) of an ***airport emergency plan*** (**AEP**) - for a medium to large sized commercial airport

This particular * element of the / our AEP guideline (you are reading it right now i.e. ***Volume 1***) typically deals with introductory, background, general material etc. - but also provides response guidance to a limited number of airport related emergency / crisis situations - which do ***not*** easily lend themselves to being 'reacted to' in / via a ***checklist format***

* Comment - In total, this guideline comprises three, ***separate*** AEP volumes - i.e. Volume **1** (reminder - you are reading the latter right now) - together with Volumes **2A** and **2B**. The last two (typically developed in ***checklist*** format **only**) are ***separate*** documents - both from each other and also from ***this*** Volume 1

FYI (for now), Volume **2A** lists and comprehensively expands AEP checklists by ***emergency / crisis*** *type* (e.g. ***Aircraft Accident On-airport***; ***Aircraft Ground Incident*** etc.) - whilst Volume **2B** does the same thing by ***emergency responder*** *type* (e.g. ***Air Traffic Services***; ***Airport Medical Centre*** etc.)

Whilst our AEP guideline is not (pedantically) a ***100% true template*** for the actual (direct) production (of an AEP), it is an ***extremely useful aid*** in so doing - i.e. specifically designed to provide very significant assistance in producing a new AEP from the ground up; upgrading an existing AEP etc.

This AEP guideline is based on a ***fictitious*** but realistically representative airport (see next para below) - with additional 'guiding' notes / associated information included / embedded (latter ***must*** be omitted in the real [final version] of the plan, of course!)

This latter airport has been 'loosely' based on a combination of several ***real*** (major) ***international*** (civil / commercial) airports located around the world, all of which might be regarded as being 'above the average' in terms of the effectiveness and efficiency etc. of their airport emergency response planning efforts, outputs, capabilities, documentation, resources (including 'people') etc.

The intent for those wishing to use ***this*** guideline practically - is that as ***much*** or ***little*** of it as is required can be used, adapted, changed, downsized (it will probably be a little difficult to upsize!) etc. - in order to produce a new / upgraded AEP etc. - as required by a user's ***actual*** requirements

Note 2 - The ***fictitious*** but wholly representative airport referred to above / herein is as follows:

- Name = '***XYZ International Airport*** (3 letter IATA code = ***XIA***; 4 letter ICAO code = ***OXIA***)'
- The airport authority ('airport operator / airport management company etc.') responsible for managing & operating XIA = '***XYZ Airports Company***'
- XIA is located in country - '***XXX***'
- XIA is nationally regulated by the XXX '***Civil Aviation Authority***' (XXX CAA)

XIA can be assumed to be a very busy 24H international hub airport (PAX & Cargo) located near a large, modern and well developed city (with excellent infrastructure, resources etc). The airport has two parallel runways, each 12,000 feet in length, displaced laterally by 1 nautical mile (2 km) - and is equipped / managed etc. in all aspects / respects - to handle aircraft up to Airbus A380 size

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The surrounding terrain (within a 100 nautical mile radius of XIA) is neither mountainous nor 'naturally hazardous' in any way i.e. not prone to earthquake, hurricane / typhoon, tornado, tsunami, volcanic eruption, flooding, forest fire etc.

A coastline (e.g. the sea; e.g. a very large lake) lies variously within about 5 to 10 nautical miles of XIA. The geography of same is such that a significant degree of all XIA final approaches and initial departures must be made over one or other part of this body of water

Note 3 - Terms, abbreviations, concepts (used herein) are typically ***generic*** (i.e. Not being specific to any particular airport, airline, GHA [ground handling agent], external [off-airport] agency etc.) Whilst some (such terms etc.) will be the same / similar to those in ***actual use*** at and around many airports worldwide, the 'generic' use / nature of same herein should be accounted for - e.g. if producing a 'real' AEP, based on ***this*** generic guideline

Comment: With the exception (at least in some areas) of Air Traffic Services, '***standardisation***' (in any ***significant*** meaning) around the world does ***not*** yet exist for ***airport*** emergency response ops (as at 2023). This can and does cause unacceptable confusion amongst users of same - particularly for the aircraft operator (***airline***) - e.g. flying to possibly hundreds of ***different*** airports - most having markedly ***different*** AEP layouts, terminologies etc. - and many (too many) having no such viable plans (i.e. AEPS) whatsoever!

Adoption by commercial airports of the terms, abbreviations, concepts etc. contained in ***this*** AEP preparation / guideline series of documents, would go some considerable way to eventually establish such standardisation

Note 4 - The 'Controlled Document' concept is deliberately omitted herein for the sake of brevity, simplicity and clarity. However, those producing / updating their own AEPs (as based on our templates) should ensure that their versions comply with generally accepted 'controlled document' procedures e.g. list of effective pages with effective dates; a documented revision procedure etc.

Note 5 - It is important that Airlines (+ other types of aircraft operator as appropriate), GHAs etc. - are aware of the concepts, information etc. provided in a typical AEP - so that they might better understand the required integration processes of ***their own*** emergency response plans (especially Aircraft Operator [airlines] & GHA ***Station*** / ***Destination Airport*** emergency response plans) with those of the airports they operate to / from. Furthermore, and as a general 'concept', Aircraft Operator and GHA emergency response plans for their Destinations / Stations ***MUST*** be based on the ***AEP*** for the associated airport

Note 6 - There are typically two types of ***strategic*** (top level) command, control, co-ordination & communication (**C4**) ***models*** / ***systems*** used in airport emergency planning (security related emergencies excepted) around the world

The first involves the ***airport operator itself*** assuming such strategic C4 for (its own) ***on-airport*** emergencies. The second involves an ***OFF***-airport entity (typically e.g. off-airport Police; Fire and Rescue Service; similar) assuming such 'on-airport' strategic C4 - with the airport operator assuming subordinate (but obviously important) roles. Each has their own advantages and disadvantages

THIS / our AEP guideline series is predicated on the first model / system i.e. the airport operator assumes (strategic) C4 of all ***ON-airport*** accidents / incidents (***security related incidents excepted***)

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Note 8 - This guideline document should be regarded as a 'work of reference' relating to the particular subject area of ***airport*** emergency planning. The same applies to (***separate*** documents in this ***same*** series) AEP Volumes ***2A*** and ***2B***. The reader hopefully appreciates that, like any major 'work of reference', the result is inevitably a rather large document

It is anticipated that larger and / or busier and / or more complex airports will need to use (in one way or another, depending on said use) most / all of the information provided in ***this*** complete AEP guideline set - whilst smaller / quieter / simpler etc. airports might simply take (mix and match) and adapt - only what is appropriate to their specific circumstances

Note 9 - Procedures / checklists for a '***Passenger Terminal Evacuation Plan***' are ***NOT*** documented herein. However, when preparing 'real' AEPs based on these / our guidelines, such an Evacuation Plan(s) must be prepared, documented, trained and exercised for, of course. For a typical ***example*** of a ***real*** airport's Terminal Evacuation Plan - follow the below link:

https://www.perthairport.com.au/-/media/Files/CORPORATE/Work-with-us/Airport-Operating-Standards/AOS011-Terminal-evacuation-and-fire-safety.pdf

Note 10 - Please now take a look at both '***Reminders***' on page 87 - and then return here

Note 11 - The author / owner of this AEP guideline series has also (separately) produced equivalent (emergency response etc.) documents for ***airline*** (aircraft operator) and ***GHA*** (ground handling agent) use. Many subjects covered in these documents will be of significant interest to most major ***airport operators***. A few examples of the subject areas covered include:

- '**Crisis Communications**'
- '**Humanitarian** (Family) **Assistance operations**'
- '**Emergency Call / Contact / Information Centre operations**'
- '**Disaster Victim Identification & Personal Effects Recovery operations**'
- '**Business Continuity operations**' etc.

All such (separate) material / info (and much more) is already available separately and mostly free of charge (but with the same copyright limits applying as per our Note 7A further above) - via the author / owner's website at:

https://www.aviationemergencyresponseplan.com

Airport operator staff studying such ***separate*** material / info should note that it has been prepared, in the main, for ***airlines*** and ***GHAs*** - as appropriate. Consequently, it will / might need to be adapted accordingly (as required) before use in an '***airport***' context

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Note 12 - Re the definition of the ***GOLD / SILVER / BRONZE 'C4' System*** (see page 20) - adoption and slightly modified use of this system has been assumed in all of our AEP guideline documents

Note 13 - Re the definition of '**M**obile **I**ncident **C**ommand **C**entre - **MICC**' (starts bottom of page 21) - note that ***joint / combined / concurrent*** operation of a **F**orward **C**ommand **P**ost ('Forward Control Point' etc.) ***plus*** (+ [together with]) ***concurrent*** use of an associated MICC, has been assumed herein

Note 14 - See '***very important note***' (starts lower down on page 43) - and then return here

Note 15 - This document inevitably contain errors, omissions, oversights etc. of all types (including / especially links which may no longer function). Users identifying same are kindly requested to notify the original author accordingly (by email please) at:

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End of Orientation Notes

This AEP Volume ***1***, plus its associated (***BUT*** separate documents) Volumes ***2A*** and ***2B***, - forms a ***guideline*** which, if followed as designed / intended, should lead to the appropriate user(s) being able to produce (upgrade to etc.) a ***fully fit for purpose AEP*** - for most major, commercial airports, in most circumstances

However, note that exceptions exist which can and do adversely impact on what has been written just above e.g. consider some commercial airports regarded as being 'remote' (Male in the Maldives / Indian Ocean; Faa'a [Tahiti] in French Polynesia / Pacific Ocean; Easter Island / East Pacific Ocean (most remote airport in world); Seychelles International airport / South Indian Ocean etc.)

The main adverse impact (AEP wise) re all such airports as per last para above (and similar) is that they must plan and resource on reacting 'relatively' alone (for a significant period of time) when responding to a major aircraft accident locally / relatively nearby. Whilst there *might* be limited assistance from off-airport resources, same will typically be (relatively) very limited, depending on local circumstances prevailing at the time

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XYZ International Airport (XIA)

Airport **E**mergency **P**lan

VOLUME 1

GENERAL REFERENCE, EXPLANATORY and **BACKGROUND MATERIAL**

Important Note

Reminder: Volumes ***2A*** & ***2B*** of this AEP are ***separate*** documents - both from each other - and also being separate from ***this*** Volume ***1*** *(which [the latter] you are reading right now)*

FROM ICAO

The objectives of ***airport*** emergency planning are to anticipate the effects that an associated emergency / crisis etc. might have on associated life, property, airport ops etc.

Thereafter, to prepare appropriate courses of action (plans; resources etc.) to minimise / mitigate such effects, particularly with respect to the saving of life; prevention and / or mitigation of injury; limitation of damage; continuity of operations; maintenance of brand / image / reputation etc.

Provision of a comprehensive, fit for purpose and frequently trained for / practised / exercised **AEP** - developed and maintained in consultation with all associated / relevant airport users and responsible agencies (both on and off-airport), is thus essential

Note: International Civil Aviation Organisation (ICAO) historical surveys indicate that in ***most*** aircraft accidents on or near airports, ***the majority of aircraft occupants survive***

Note: In the United Kingdom, Ireland, the United Arab Emirates, Oman (and perhaps a small number of other countries) the equivalent of this **AEP Volume 1** document may be known as '***Emergency* ORDERS**'. For more details re the latter (as it applies in ***UK***), follow the link below - and review Chapter 9, paragraphs 9.32 to 9.38

https://publicapps.caa.co.uk/modalapplication.aspx?catid=1&pagetype=65&appid=11&mode=detail&id=6114

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AEP - **DOCUMENT LAYOUT**, **USE** and **CONCEPT of OPERATION** etc

The 'entire' guideline AEP (comprising [***separate***] Volumes **1**, **2A** and **2B** when taken together) relates to the most common crises, aircraft related or otherwise, anticipated to occur at or in the vicinity of XYZ International Airport (XIA)

It also provides (documents) typical ***on-airport*** 'responses' to such crises - together with ***suggested responses*** for selected organisations in the ***surrounding community*** - the latter typically being expected to assist XIA during its emergency planning preparations / actual response operations (including pre-planning, implementation and actual [real or exercise] response)

Such 'responses' are typically (but not exclusively) facilitated by use of specifically prepared (+ trained and exercised) ***checklists***. (Such checklists make up the ***vast majority*** of [separate documents] Volumes 2A and 2B of this AEP [reminder - the document ***which you are reading right now*** is AEP Volume **1**])

Further to the above, this guideline AEP has been split into ***two*** volumes:

The Volume ***1*** element of this AEP (i.e. ***the document which you are reading right now***) contains general reference, background and explanatory material - ***plus the small number of suggested crisis response ops which are*** *(exceptionally)* ***not presented in checklist format*** herein. Some examples of the latter are:

- Fuel Spills
- Dangerous Goods Crisis
- Public Health Crisis

In contrast and to re-iterate, the * Volumes ***2A*** and ***2B*** elements of this AEP guideline (Reminder - Vols 2A and 2B are *separate* documents - both from each other and also from *this* AEP Volume *1*) generally contain crisis response related ***checklists only***

* Reminder: To see how Vols 2A and 2B differ from each other, see again 'Comment' to 'Note 1'- found on page 2. Also see again (as required) both 'Reminders' on page 87 - and then return here

The intended purpose of the above AEP document split is for appropriate persons to use the information in Volume ***1*** to ***PRE-ACQUIRE*** the general / background knowledge and resources necessary to respond effectively, efficiently and expeditiously to the various crises anticipated - with the appropriate, associated ***checklists*** (contained in [separate documents] Volumes ***2A*** and ***2B***) then being used to provide guidance in / to the actual crisis response '***on the day***'

Practical (suggested) use of the XIA AEP will, therefore, require ***all*** potential users to become ***fully familiar*** with ***all*** of the information contained in Volume ***1*** as part of the overall ***pre-preparation*** for crisis response at or in the local area of XIA i.e. ***BEFORE*** any such crisis occurs. It is expected that the latter will be achieved by a process of self-study, training and testing (exercising) - typically being (for the latter two) on an initial and recurrent time basis

Once the required level of Volume ***1*** familiarity has been achieved (as per above) and is being maintained - there should only be the need for use / enactment of the relevant ***checklists*** (as per Volumes *2A and 2B*) during ***ACTUAL*** crisis response operations, associated exercises etc.

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AEP - *XYZ International Airport* *(XIA)* **/ *Volume 1***

Reminder - For the purposes of the document being read now (i.e. AEP Vol 1), AEP Volume ***2A*** exists only as a ***notional*** document ***i.e. it does NOT exist in reality***. However, if the 'user' wishes to produce a 'real' Vol ***2A*** version for his / her associated airport - then it is suggested that Volume ***2B*** (which ***does*** exist in reality as a guideline - but which is a separate document from the one you are reading right now) be used as a 'template', which can be (fairly easily) adapted accordingly - to produce the associated Vol ***2A***

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This AEP Volume **1** *guideline document comprises 204 pages - all dated 01 January 2023*

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Acronyms

ACI	Airports Council International
AEP	***Airport*** (Aerodrome) Emergency Plan
AEPC	***Airport*** Emergency Planning Committee (comprises XIA & Surrounding Community Reps)
AFS	***Airport*** Fire & Rescue Service (XIA) - see also 'RFFS'
AMC	***Airport*** Medical Centre (XIA)
AOC	*as used herein =* ***Airline*** Operator's Committee (at XIA airport)
ATC / S	Air Traffic Control / Services
C4	Command, Control, Co-ordination and Communication
CEO	Chief Executive Officer (of XYZ Airports Company)
CRC (A)	(Uninjured Survivor) ***Crew*** Reception Centre - ***Airside*** (at XIA)
CRPM	Crisis Response Planning Manual (for Aircraft Operators [***Airlines***])
DAC / DG	Dangerous Air Cargo / Dangerous Goods
DOHMS	(National) Department of Health & Medical Services (for XXX [country])
EOC	(XIA) ***Airport's*** 'Emergency Operations Centre'
ECC	Emergency (telephone) Call / Contact / Information Centre
ERP	(Aircraft Operator [***Airline***]) Emergency Response Plan
FAC	Family (Humanitarian) Assistance Centre
FCP	Forward Command Post (see also 'MICC')
FEC	FR Enquiry Card (as used at XIA)
FIDS	Flight Information Display System (located on Airport)
FOD	Foreign Object Damage
FR	Family, Relatives & Friends (of accident victims) (see also 'MGFR')
FRRC	FR Reception Centre (located at [or very close to] XIA - ***Landside***)
GHA	Ground Handling Agent(s) (based at XIA and representing certain aircraft operators)
HAC	Humanitarian Assistance Centre (preferred term - i.e. used instead of 'FAC')
HAT	* (Aircraft Operator [***Airline***]) Humanitarian (Family / Special) Assistance Team
IATA	International Air Transport Association (for airlines)
IATP	International Airlines Technical Pool
ICAO	International Civil Aviation Organisation
ICT	(XIA ***Airport's***) - Immediate Care Team (i.e. ***not*** 'info comms technology' - as used here)
MGFR	Meeters & Greeters (including FR type meeters & greeters at XIA - as appropriate)
MICC	***Airport's*** Mobile Incident Command Centre (based at XIA) [see also 'FCP']
PIC	Person in Charge
POB	Persons on Board (i.e. [as used here] on board accident flight's aircraft)
PPE	Personal Protective Equipment
P / VRC	(4 in 1) Passenger / Victim Record Card (as used at XIA)
RA (A)	Reuniting Area - ***Airport*** (landside at XIA)
RA (O)	Reuniting Area - ***Off-airport*** (remote [but usually close to] from XIA)
RFFS	Rescue & Fire-fighting Service (alternate name for 'AFS')
RVP	Rendezvous Point(s) - (on-airport and off-airport - as appropriate)
SAR / RCC	Search & Rescue / Rescue Co-ordination Centre
SRC (A)	(Uninjured) Survivor [**Passenger**] Reception Centre - Airside (located XIA - airside)
XCAA	XXX Civil Aviation Authority (XXX being the 'country' in which XIA airport is located)
XIA	XYZ International Airport - IATA 3 letter code
XXX	Name of the ***country*** in which XYZ is situated
XYZ	Name of the ***airport*** which is the subject of ***this*** document (the one you are reading now)

* Note that some (a ***very*** small number of) ***airports also*** have their own humanitarian (special / family) assistance teams (e.g. Frankfurt and Paris CDG) - and the titles of such teams ***may*** be the same or similar to those used by airlines - meaning that some care may be required in working out 'which is which'. In ***this*** AEP guideline - such an airport 'humanitarian assistance' team is known as the *'XIA **Immediate Care Team** - ICT'* - see glossary page **20** for definition

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Introductory Note 1

This document effectively starts with Section 1, commencing page 37

However, the reader should note that ***prior*** to Section 1, a PREAMBLE section is included (starts page 13) which should be studied ***before*** proceeding to Section 1 and onwards

IMPORTANT NOTE - the reader is advised that the official (e.g. as used by ICAO + most aviation related organisations worldwide) definition of '***aircraft accident***' (see first definition on *next* page) is ***NOT*** suitable for the ***specific*** purposes of aviation related emergency planning & response ops

For example, if a passenger on board an aircraft breaks a leg (because, say, they accidentally slipped) ***this is technically*** (according to the '***official***' ICAO etc. definition) ***an aircraft accident***!

Obviously, an associated airport (and the aircraft operator [airline etc.] also) would logically ***not*** (should not) formally declare an 'aircraft accident' (and thus should **not** require an emergency response in an ***operational*** context) in such circumstances

Of course, the example scenario described above ***is*** nevertheless ***technically*** (legally etc.) an aircraft accident - but, in reality, would be typically responded to 'administratively' (rather than 'operationally') by the appropriate airline / airport - apart from facilitating and possibly providing (e.g. via the airport's medical centre - if it has one - and also in close conjunction with the appropriate aircraft operator) appropriate medical and related assistance to the injured person

A clearer, more relevant definition is thus needed for the specific purposes of aviation related emergency planning and response ops - and a typical example may be found by clicking on the below link:

https://www.aviationemergencyresponseplan.com/information/

When the linked to webpage opens, scroll down until you find the 'info article' entitled:

* Information Article - **Glossary of Terms** - Aircraft Operator - Emergency Response Plan

Click on the document (PDF) to open it & then read the definition (page ***10***) of '***Catastrophic*** **Aircraft Accident**'

This latter definition ***is the one applicable*** / ***used in THIS*** Guideline AEP Volume **1** document unless clearly stated otherwise. Same applies to (separate documents) Guideline AEP Volumes **2A** and **2B**

Note that the above definition has been written in an ***airline*** context but is equally applicable and easily adaptable for ***airport***, ***GHA*** etc. purposes

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Glossary

Aircraft Accident (***Definition 1***) - GENERAL (ICAO terminology) (See '**IMPORTANT** NOTE' on previous page)

An occurrence, associated with the operation of an aircraft (which takes place between the time that any person(s) boards the aircraft with the intention of flight, until such time as the person(s) disembarks) - in which any such person(s) suffers death or serious injury or in which the aircraft receives *substantial* damage (Note - this is an abbreviated version of the full definition)

Aircraft Accident (***Definition 2***) - A type of emergency classification in use at XIA (ATS / Airport Term)
(See again '**IMPORTANT** NOTE' on previous page - as required)

A term used specifically in this AEP guideline Vol 1 - referring to an aircraft accident (as per definition [1] immediately above) which occurs on or in the 'relatively nearby' vicinity of XIA airport (also see definitions of '**Full Emergency**' & '**Local Standby**' which are similarly so classified)

Aircraft Operator

A person, organisation or enterprise engaging (or offerings to so engage) in aircraft operations (As used herein, the term typically [but not exclusively] relates to commercial ***passenger*** airlines / air carriers operating to / from XIA)

(XYZ) Airports Company (Airport Operator) (Airport Management Company / Airport Authority)

The XYZ Airports Company (airport operator) manages and operates XYZ International Airport and its associated infrastructure - with the exception of Air Traffic Services; franchisee, tenant and supplier operations etc.

The ***Emergency / Crisis Management Department*** / *Section* / *Business Unit* of the XYZ Airports Company is responsible (via its senior management team / organisation) - to the XXX Civil Aviation Authority, for the production, resourcing and maintenance of the XIA AEP - plus the associated training, exercising and oversight necessary to ensure the highest level of emergency / crisis management preparation, preparedness and response etc.

Airport Emergency Plan (AEP)

Documented procedures, information, checklists etc. - used to guide planning, resourcing, implementing, training, exercising, management etc. of associated airport emergency response activities (and those of other associated, involved agencies [some of which will be 'off-airport' based, managed etc.]) - typically activated when a major emergency / crisis occurs on or in the relatively nearby vicinity of the associated airport (XIA in this case)

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Airport Medical Centre (AMC) (Also known as 'airport clinic' and similar terminology)

A basic, medical facility (part of XYZ Airports Company) based at XIA, charged (during airport operating hours) with both timely medical assistance to all airport users (normal operations) - and with ***immediate / near immediate*** medical response in support of an airport or airport related accident or serious incident etc. (as appropriate to actual circumstances 'on the day') - pending arrival of specialist, ***OFF-airport*** medical / health / ambulance / stretcher etc. resources. In extremis (and with appropriate permissions / clearances) AMC resources might be deployed 'off-airport'

Airport Franchisees, Tenants, Service Providers etc. (and Similar)

A generic term (typically) referring to certain operations which might be in place at a commercial airport (e.g. ATS [possibly], security, airlines, shops / restaurants / 'duty free', ground handlers, transport providers, fuel providers, cargo operators, baggage operators etc.) - typically (but not always) other than any which are run / operated ***directly*** by the airport operator etc. itself

(XIA) Airport Police

Typically (but not always) the local government law enforcement agency charged with primary policing, security etc. regarding (XIA) ***ON****-airport* related matters. They are usually based 'on-airport'

Airside

The 'movement area' of an airport plus adjacent terrain and buildings etc. - to which 'general public' (e.g. passengers etc.) access is typically (strictly) controlled / restricted / prohibited

Alerting & Activation System

A system for rapidly 'alerting' pre-nominated emergency response, support and other personnel of an emergency situation, requiring same to report / deploy for emergency response duties immediately ('activation'). Such systems can be manual, semi or fully automated - or a mix of all

Ambulance Loading Point (See also 'Medical Transportation Area - Ground / Air Transport')

A temporary area (preferably hard standing) - typically located in close proximity to an accident (e.g. aircraft accident) site's associated 'medical care and / or treatment area(s)' - where *ground* ambulances etc. can be parked / manoeuvred and casualties loaded - for eventual transfer to hospital(s) / wherever. Equivalent provision for ambulance-type *helicopters* is also typically required

Medical Care / Treatment Area

The location (typically somewhere suitable on or near to the accident site's ***outer cordon***) where ***initial*** medical care / treatment is given to injured air accident victims (see 'Triage')

Note: 'Casualty Clearing (Clearance) Station / Area' is a similar term in common use. All refer to an area set up at or near to an accident site, in order to triage, assess and treat / stabilise casualties .....+ facilitate eventual evacuation of same to appropriate, off-airport medical treatment facilities e.g. hospitals

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Casualty Collection Area

The location to which ***injured*** accident victims are initially moved - pending triage and subsequent movement ***away from the accident site itself*** (for example, to the '**care** / **treatment**' area). The ***Casualty*** Collection Area should ideally be separate from the ***Uninjured*** Collection Area and any temporary collection area(s) (at and / or near to the accident site) used for the ***deceased***

Catering Facility (ABC In-flight Catering Company) (see also '***Mutual Aid Emergency Support Agreement***')

A 'Mutual Aid Emergency Support Agreement' exists between the 'XYZ Airports Company' and 'ABC In-flight Catering Company' - whereby the latter (based at XIA) will supply appropriate 'commissary' type items to the former (on a recharge basis) without delay, for use during emergency situations affecting and / or related to XYZ International Airport. Such items typically comprise, but are not limited to:

- Food and beverage (including baby food & other special dietary requirements if possible)
- Blankets
- Emergency clothing & footwear
- Sanitary items

Uninjured Collection Area

The location to which apparently ***uninjured*** victims are initially moved - pending triage and subsequent movement ***away from the accident site itself*** (for example, to the '**uninjured holding**' area). The ***Uninjured*** Collection Area should ideally be separate from the ***Casualty*** Collection Area and any temporary collection area(s) (at and / or near to the accident site) used for the ***deceased***

Civil Defence (Part of 'off-airport / surrounding community' provided Emergency Services. The term is not used in all countries - but the concept usually is. The term typically does ***not*** include 'Police' type services)

'***Surrounding Community***' civil /paramilitary etc. emergency response services / organisations - typically providing any / all of fire and rescue, ambulance / medical, stretcher and similar services

Contactable

A term used herein to denote the requirement for selected emergency response ***key personnel***, ***and*** / ***or*** their nominated alternates / deputies / proxies, to be reliably contactable and readily 'available' for crisis response duties, on a 24H roster on-call roster basis, as required / rostered

Crash Alarm

An appropriate 'sound' system used to simultaneously alert emergency services (e.g. AFS) and other, nominated responders, of a pending or actual emergency. Typical crash alarms comprise a loud, klaxon type noise signal, possibly accompanied by a PA type voice message (using e.g. all forms of telecommunications; megaphones etc.) - and usually activated by ATC, AFS etc.

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Aircraft Operator's (**Airline**'s) / **GHA**'s - Crash Site Team - CST

Selected and limited in number (typically a 2 person team) ***Aircraft Operator*** / ***GHA*** / ***Other*** (traffic / ramp / terminal services type) staff + associated ***Aircraft Engineering*** personnel - typically being allowed rapid access to an aircraft accident location, in order to achieve the following:

1. ***Traffic / Ramp / Terminal*** *(e.g. Aircraft Operator / GHA / Other) specialist staff* should (after reporting to the ***On-scene Commander*** at / near to accident site) typically render:

- Immediate liaison, communication & similar services at the accident site - on behalf of aircraft operator e.g. POB; passenger manifest & crew list; flight details etc.
- Details of Dangerous Goods carried (if any) + current estimated fuel on board
- Provision of appropriate ground equipment and transport etc. e.g. steps; tug; ground power, lighting, buses etc.
- Logging (for aircraft operator / GHA purposes only) details of which casualties / fatalities are sent to which hospitals / mortuaries - insofar as this is possible / practicable so to do
- Provision of transport for uninjured passengers & (separately) crew away from accident site
- Keeping aircraft operator / GHA etc. - continually updated of circumstances at crash site etc.
- Aircraft operator / GHA representation at airport's '**M**obile **I**ncident **C**ommand **C**entre' / '**F**orward **C**ommand **P**ost' vehicle. This person shall also act as the on-site '**Operational Commander** / Aircraft Operator'

2. Appropriate ***Aircraft Engineering*** *staff* (after reporting to the same ***On-scene Commander***) might typically have duties pertaining to e.g. 'making the aircraft safe' (shutting down engines, APU; isolating fuel leaks etc.) and securing essential information pertaining to eventual accident investigation (e.g. cockpit voice recorder, flight data recorder, quick access recorder ['black boxes'] etc.) - ***but*** *(for the latter)* ***only*** *when so instructed by an appropriate authority* (e.g. air accident investigator) and / or for vital *'preservation of evidence'* purposes - and, in all cases, only when safe so to do

Uninjured Crew Reception Centre - Airside - CRC (A)

All ***uninjured*** crew from an ***on*-airport** major aircraft accident should eventually be transported (e.g. from the accident site's 'Uninjured Holding Area') - to a secure and private ***initial*** holding area (CRC-A) within the ***airside*** part of the airport terminal building - or equivalent location. The latter should have adequate facilities / services e.g. good security, catering provision, toilets, seating, comms etc.

Most importantly, it should be located in an airside area which is physically ***SEPARATE*** from the 'Uninjured ***Passenger*** / Survivor Reception Centre - Airside' equivalent location, so as to prevent potential unwelcome attention (e.g. aggression) to uninjured crew from said uninjured passengers.
(See also 'Uninjured [Survivor] Passenger Reception Centre Airside - **SRC** [**A**] - page **28**)

XXX (Country) - Civil Aviation Authority - XXX CAA

In the context of this AEP document - the ***XXX*** CAA sets & oversees regulation, minimum operating standards etc. for XYZ International Airport - so as to ensure compliance for:

- Airport Operations
- Air Traffic Services

- Safety and Security
- Any other appropriate matters

Thus the XXX CAA is responsible (amongst many other matters) for ***oversight*** of the XYZ Airport Company's preparations & plans for airport / airport related emergencies & other contingencies - including preparation, production, implementation, maintenance, review, training and exercising of the XIA AEP

Dangerous Goods (formerly known as 'Dangerous Air Cargo') - DG

A generic ***transport industry*** term (used worldwide) which refers to 'hazardous materials' and / or 'restricted articles' - including explosives, dangerous gases (which may be flammable and / or toxic), flammable liquids or solids, oxidisers, poisonous and infectious substances, radioactive material, biological material, corrosives etc.

Department of Health and Medical Services - DOHMS

A 'generic' term used herein - referring to XXX's ***government*** (national, regional, tribal, local - as appropriate) organisations / agencies - charged (amongst many other things) with all aspects of medical, health, ambulance, stretcher etc. support for an airport related emergency at or in the vicinity of XIA

Emergency

Any occurrence or instance warranting immediate action to safeguard lives and / or to protect property, public health, safety etc.

Emergency Call / Contact / Information Centre - ECC

All crisis related telephone contacts, from potential family, relatives & friends (FR) (but not the Media etc.), enquiring about potentially associated aircraft accident victims, should be handled by an ECC of some type. The primary ECC objective is to capture crucial information from ***all*** appropriate sources (but primarily by the making, taking and processing of telephone calls to / from potential or actual FR) with the ultimate aim of accurately matching aircraft accident victims with associated FR, in the shortest possible timescale

Many (but by no means all) ***airlines*** have appropriate or semi-appropriate measures in place to operate an ECC of sorts at time of crisis. ***The vast majority of airports*** (as at 2023) ***do not!***

Important Note: An airport's own '***normal*** business' telephone exchange / system is ***most unlikely*** to be suitable (e.g. due insufficient size, capacity, manning, equipment, ICT systems etc.) for use as an ECC

This is a significant problem to which the vast majority of commercial airports in the world still (2023) need to find an adequate, workable solution. Some examples of the very few airports having a true (their own) ECC capability are believed to be - ***Frankfurt***, ***Munich*** and ***Paris Charles de Gaulle***

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Emergency Operations Centre - EOC (otherwise known as 'Crisis Management Centre'; 'Emergency Command & Control Centre'; 'Airport Emergency Centre', Emergency Response & Information Centre etc.)

A designated facility (on or very near to XIA) from where ***tactical*** (and often ***strategic***) C4 of an ***ON***-airport related major emergency / crisis is exercised, by the designated persons. The degree and type of C4 exercised for similar ***off***-airport crises is typically pre-agreed (by all involved parties) and documented accordingly in appropriate '***Mutual Aid Emergency Support Agreements***'

The XIA EOC is further defined as a fixed, secure and suitable ***airport*** based facility, readily accessible from both airside ***and*** landside. From here a suitably appointed (trained, exercised, experienced) team conducts overall (tactical and possibly strategic) C4 ops, related to the appropriate aspects of any ***airport*** related emergency, under the direction of an '***Overall Commander***'. A significant (but not exclusive) component of this 'joint agency' C4 team is provided by reps of the involved airport operator itself e.g. the latter typically provides / appoints the Overall Commander

Significant and appropriate ***off-airport*** representation is also typically provided to the EOC, as required by actual circumstances prevailing 'on the day'

Emergency Orders / Instructions

Used in UK, Ireland, UAE, Oman (and a few other countries), 'emergency orders / instructions' *'translate'* a basic AEP into amplified material (emergency orders) + associated specific instructions (emergency instructions [typically in checklists format]) for use by associated crisis responders

Family Assistance Centre - FAC (more correct term to use today is '***Humanitarian*** *Assistance Centre'* - HAC)

A ***landside*** location (typically a suitable off-airport [but nearby] hotel[s]) to which ***local*** 'Family, Relatives & Friends (FR) of air accident victims might eventually be taken (if they so wish), once their ***initial*** 'processing' has been completed (the latter typically [but not always] being 'done' at the airport located '**FR Reception Centre** - (FRRC)' facility). Note - the ***FRRC*** is also typically located ***landside*** at the accident airport itself (or near the accident site for ***off-airport*** incidents), as appropriate

The FAC provides FR with a more comfortable, local environment (i.e. more comfortable than the airport FRCC and / or accident site itself) where the ***aircraft operator*** and ***others*** involved might typically provide them with the necessary humanitarian, welfare, information, financial and other support required and / or mandated, post crisis. ***None-local*** FR travelling to (or as near as possible to) the accident location will ***also*** typically be accommodated in the FAC, upon local arrival. (Activation, operation & payment of / for a FAC is typically the 'accident airline's' responsibility)

Fatal Injury

Any injury leading to the death of a person within 30 days of injury occurrence - (ICAO)

Forensic Doctor (Medical Examiner / Coroner)

A 'public' officer whose principal duty is to investigate and enquire into the cause of any death, where there is reason to suppose that same was ***not*** due to natural causes. One duty for such persons is to issue formal 'death certificates'

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Family, Relatives & Friends - (FR, [MGFR]) (See also definition of FR Enquiry Card [FEC] - starts page 24)

A collective, generic term denoting the various categories of persons (***not*** having been on board the accident flight) having some form of valid relationship or otherwise (personal) link with associated air accident ***victims*** (including associated ***ground*** victims - if any). The term typically includes (as related to or otherwise 'known' to victims):

- Next of Kin (closest relative / equivalent person)
- Other family members, relatives and similar
- Friends
- Business colleagues / similar
- Meeters & Greeters (*of all categories*) waiting at the emergency flight's destination airport (***and*** / ***or*** FR who gather at the emergency flight's ***departure*** airport(s) - after it had departed [i.e. after it is 'off-blocks'] and subsequently experienced a major crisis)
- Any other person(s) having a reasonably valid relationship with the victim(s)

(XIA) Family, Relatives & Friends Reception Centre - (FRRC) (Known by ***many*** other, equivalent names)

For most arrival flights at a typical commercial airport, there will usually be a 'group' (anywhere from say 1 to 1000 +) of ***'family, relatives & friends'*** (FR) waiting at / near the airport arrivals area, to receive (meet & greet) their arriving loved ones, friends, colleagues, acquaintances etc.

Such ***meeting & greeting*** type FR (**MGFR**), waiting for an emergency flight, should be rapidly identified by Aircraft Operator / GHA / Airport / Police / other etc. ***responders*** - and sent / escorted ASAP to a separate, secured or otherwise private (typically airport landside) location (the FRRC). Such responders should include in their respective emergency response plans, ***specific, detailed, pre-agreed procedures*** for how this transfer of MGFR (e.g. from the XIA Arrivals Halls to the FRRC) is to be accomplished. (Such procedures should be trained for and regularly exercised)

The FRRC is typically located at a suitable ***on*** / ***near airport landside*** facility - having e.g. adequate space, facilities etc. to account for the required (anticipated) number of persons i.e. privacy / security, seating, toilets, communications, catering, medical support etc. The larger the aircraft operating at the airport, the greater the FRRC capacity / facilities required (think about potential MGFR numbers with regard to an Airbus A380 aircraft having e.g. an 800+ passenger capacity!)

For such an XIA related crisis - Airport Operator / Aircraft Operator / GHA / ICT / Police / other staff / 'volunteers' etc. would typically man the FRRC, assisting MGFR in any way possible (e.g. humanitarian, welfare and information support etc.), whilst also 'capturing' important information (about accident victims whom the MGFR have reason to believe were on board the emergency aircraft), using specifically designed forms. (*See example of '**Family, Relatives & Friends Enquiry Card** - **FEC***, appendix U, page 161). Note - it is likely that the ***departure*** airport(s) (in addition to the ***arrival*** airport) of an accident flight will ***also*** need to set up and operate an FRRC, as any associated FR living in that local and general area are likely go to that (those) departure airport(s) for associated information

Full Emergency - A type of emergency classification in use at XIA (ATS / Airport Term)

An aircraft approaching an airport is, or is suspected to be in such trouble - that there is imminent danger of an aircraft accident (see also definitions of '***Aircraft Accident*** [Definition 2]' & '***Local Standby***')

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Gold / Silver / Bronze - Type of (crisis related) Command, Control, Co-ordination & Communication System

For more information - see notes / links at bottom of page 66 and near top of page 68

(Crash) Grid Map

An area map, overlaid with a square (geographic) grid co-ordinate system, used to facilitate ready identification of geographical ground locations - and commonly used to facilitate guidance of emergency response services to the scene of an on-airport / nearby off-airport emergency

Airport's Immediate Care Team - (ICT) (Do not confuse with '***i**nformation **c**ommunications **t**echnology*')

An **airport** based / sourced ***volunteer*** team, capable of rapid deployment (at or ***very*** close to that airport and during airport operating hours only) - in order to care for (provide ***humanitarian*** [BUT typically NOT **medical**] ***assistance*** etc. to) crisis victims and their associated MGFR

ICT manpower typically comes from a variety of ***trained and exercised staff of all types*** e.g. airport operator itself, airlines, ground handling agents, other airport tenants, franchisees (e.g. airport shops / duty-free), cleaners, faith reps etc. (Airports with ICT type capabilities [as at 2021] included Frankfurt, Munich and Paris Charles de Gaulle. There ***might*** be a very small number of others- but it is thought that many [***most***] of the world's airports ***had absolutely no such capability*** at that time)

The ICT typically provides a ***shorter-term*** response e.g. until other dedicated / specialist teams can take over (e.g. accident airline's humanitarian [family] assistance team [if any]; off-airport equivalent teams; volunteers etc.) - at which time ICT staff revert to their normal duties. Due the multi-disciplines of contributing staff, ***regular training and exercising is absolutely essential***. The ICT typically deploys to the below locations, at time of major airport crisis involving aircraft operations:

- Appropriate Terminal Arrivals area(s)
- Appropriate Passenger Information Desk(s)
- 'Uninjured Passenger Reception Centre (Airside)'
- 'Uninjured Crew Reception Centre (Airside)'
- 'Family, Relatives & Friends Reception Centre' (Landside - at or ***very*** close to airport)
- 'Immediate Reuniting Area(s)' (Landside - at or ***very*** close to airport)
- .....and, **exceptionally**, '***off-airport***' e.g. to 'hospitals, mortuaries etc.'

For more detailed info re ***airport*** provided '***humanitarian* assistance**' - see appendix Y (starts page **179**)

(Aircraft) Incident (ICAO term)

An occurrence, other than an accident, associated with the operation of an aircraft, which affects, or could affect, the continued safety of the operation. Incidents (with the possible exception of security incidents) do not (by definition) result in serious injury to persons or substantial damage to aircraft

Inner Cordon / Perimeter (encircles Hot Zone [latter is basically the accident site itself])

An appropriately marked / delineated area (typically associated with an aircraft accident/incident site) which allows for secure / safe / co-ordinated emergency response ops, including the immediate access / exit of emergency response personnel and vehicles. An inner cordon is typically circular and based on an approximate 100 - 200 metre radius (possibly more) from the actual accident site itself

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Landside - Any location at an airport which is ***not*** considered to be 'airside'

Local Standby - A type of Emergency Classification in use at XIA (ATS / Airport Term)

Declared by ATS/C when an aircraft approaching the airport is known or is suspected to have developed some defect / problem - which will ***not*** typically present any serious difficulty to the pilot in making a safe landing (See also definitions of 'Aircraft Accident (2)' & 'Full Emergency')

Note: Something known as a ***'weather'*** standby is sometimes used as a discretionary measure if an aircraft is approaching an airfield where weather conditions are such (e.g. poor visibility, cross wind, exceptionally wet runway etc.) that they may be close to the aircraft and / or flight-crew's operating limits. Such events in themselves would ***not*** typically require any emergency related procedure to be invoked

Medical Co-ordinator

A generic term describing a pre-nominated DOHMS (off-airport) person - charged with the operational C4 of all ***on-site*** medical support services associated with a major airport /airport related emergency. For the purposes of this AEP guideline, this person will be known as the 'Operational Commander / ***Medical Services***'. He / she reports ***locally*** to the '***On-scene Commander***' / other appropriate person, having similar responsibilities / primacy at the accident site

Medical Disaster Centre

A pre-designated, (off-airport) major medical C4 facility (typically located in a pre-selected, major hospital) - from where all ***medical*** / ***health*** *and* ***related aspects*** of a major disaster response (including catastrophic aircraft accident) are ***centrally*** 'managed / co-ordinated etc.'

Medical Transportation Area - Ground Transport (see 'Ambulance Loading Point')

A designated, prepared and suitable location, close to the 'collection, triage and / or initial medical care' areas, where injured persons are held ready for ***GROUND*** transportation to better medical facilities e.g. hospitals - usually under the supervision of a ***'medical transportation co-ordinator'***

Medical Transportation Area - Air Transport

A designated, prepared and suitable location, close to the 'collection, triage and / or initial medical care' areas, where injured persons are held ready for ***AIR*** transportation to better medical facilities e.g. hospitals - usually under the supervision of a '***medical transportation co-ordinator***'

Medical Transportation Co-ordinator

An 'appropriate' person, as appointed by the '***Operational Commander*** / ***Medical Services***', to conduct / co-ordinate medical ***transport*** ops at the emergency site. Such responsibility includes the 'tally' or headcount record of which casualties have gone to which hospitals / wherever (together with when, how + 'medical status' of each such casualty on departure etc.)

Mobile Incident Command Centre (MICC) (***F****orward* ***C****ommand* ***P****ost /* ***M****obile* ***C****ommand* ***P****ost etc.*)

A purpose-built/adapted vehicle - providing suitable accommodation, facilities, comms etc. - for deployed operational use ***on-airport***, by an airport provided ***'On-scene Commander'*** + ***team***

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From here the latter oversees the ***operational*** *(Bronze)* ***C4 response*** required. Note 1 - as an ***MICC*** will typically take some [short] time to man & deploy, ***temporary*** on-scene C4 [via a ***Temporary*** *On-scene Commander*] at ***on-airport*** accident sites, is typically assumed by the senior AFS officer present, operating from his / her ***'Forward Command Post'*** vehicle. Note 2 - similar applies for ***off-airport*** deployment, but note that the On-scene Commander is now typically appointed from the most appropriate agency in the '***surrounding community***' - operating (with his / her team) from his / her own MICC ***equivalent*** facility. The ***airport's*** FCP / MICC will still typically deploy off-airport, but now in a ***subordinate***, operational role)

Relevant, functionally based '***Operational Commanders***' shall each assign '***liaison officers***' to any deployed MICC - representing their respective areas of interest + providing / receiving information, including the issue of directives / instructions / orders from the On-scene Commander. Other responding Operational Command Vehicles (Rescue / fire-fighting, Police, Medical, Aircraft Operator rep etc.) will typically be located close to the MICC (the latter located at the most appropriate location on the accident site's 'outer cordon' - typically at the main vehicle entrance / exit point)

The MICC should be 'ideally' equipped as follows (if large enough & such resources are available):

- Infrastructure e.g. seating, tables, toilet, utility supplies, heating, air-conditioning etc.
- Documentation e.g. manuals, checklists, hard copy contacts directory etc.
- Communications e.g. radios, phones (all types), FAX, megaphone, runners, etc.
- Appropriate 'technology' & associated comms systems (internet, email, social media, satellite, video meeting capability etc.)
- Logistics e.g. food & beverage facilities, television (both commercial news channels and close circuit), torches, hi-vis / identifying clothing, PPE, binoculars, cameras, SATNAV, fire extinguishers, first aid kits, stationery, triage tags, etc.
- Additional emergency equipment e.g. emergency lights, ropes, tools, body bags etc.
- Unique identifying pennant, beacon, vehicle paint scheme, markings etc.

Mobile Quarters (Inflatable Tents & Similar)

Shelters designed for rapid deployment to / use at an emergency response location, where they can be quickly erected e.g. to protect victims from exposure, to facilitate initial medical care etc. Ideal mobile quarters are '***inflatable tent***s' (preferably coloured in accordance with triage principles)

Mortuary / Temporary Mortuary

A storage facility for deceased accident victims - which can be as simple as a field (or the airfield surface), an aircraft hangar, refrigerated truck containers etc. *(temporary mortuary)* **OR** purpose built mortuaries in hospitals, at undertakers / funeral directors etc. *(permanent mortuary)*

Mutual Aid Emergency Support Agreements

Documented agreements established between XYZ Airports Company and appropriate agencies, (latter typically operating in the '***surrounding community***' near XIA) defining initial emergency notification and response requirements, typically as related to an airport / airport related major emergency - (and vice versa i.e. where the airport might similarly supports the local community).
Note: follow links below to see some 'real world' info (albeit somewhat 'dated' now) re Airport Mutual Aid Emergency Support Agreements

https://www.caa.co.uk/media/ljyou0xz/srg_asd_ip07mutualaid.pdf
https://www.trb.org/Publications/Blurbs/169180.aspx

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Off-loading / Landing Point (used for accident / incident 'on or over water' only)

Off-loading / landing points serve as a staging area(s) where emergency support personnel, vehicles, equipment etc. can be moved and held (in a state of readiness) - in preparation for the offloading / landing of aircraft accident victims involved in an emergency - **which occurs in the inshore sea / water area** adjacent to XYZ International Airport. Same shall be pre-designated in the XIA AEP if practicable (or, exceptionally, designated 'on the day' by the On-Scene Commander and / or other [appropriate] 'authority' e.g. Navy / Coastguard / Maritime Police etc.)

On-scene Commander (see also 'Overall Commander' and 'Operational Commander')

A pre-nominated (suitably senior, experienced, trained and exercised) ***XIA airport*** person, undertaking overall ***operational*** (BRONZE) C4 (XIA airport C4 aspects only ***if*** accident occurs off-airport) of emergency response ops, typically operating at or very close to the emergency site itself

Note - Due the nature of airport related emergency response ops, the ***On-scene Commander*** may also be required to (additionally) undertake certain aspects of ***tactical*** (***SILVER***) C4 ops on occasion - e.g. as per SOP, as directed or (more rarely) at own discretion. Provided that this concept is clearly understood and accounted for e.g. as documented in the AEP; as covered during training and exercising; as included in 'mutual aid emergency support agreements' etc. - this should not present undue difficulties

'On-scene Commanders' ultimately report to the airport's '***Overall Commander***' (latter located in the *airport's* fixed base '***Emergency Operations Centre*** - *EOC*' - exercising tactical [SILVER] + possibly strategic [GOLD] C4) insofar as (*airport* aspects of) ***airport*** related emergencies are concerned

Such 'On-scene Commanders' are expected to exercise their responsibilities from a 'unified, joint-agency (mobile) command centre' - typically located at / near to the emergency site - and known herein as a 'Mobile Incident Command Centre' (MICC) or, where there is no MICC, from an appropriate 'Forward Command Post' (FCP) vehicle or equivalent facility

Note: In the very early phases of a major emergency response, on-site ***Operational Commanders may*** need to decide amongst themselves (as appropriate) who will assume the ***temporary*** responsibility of ***On-scene Commander***, until the pre-nominated / designated person arrives in situ. This decision is typically dictated by the type of emergency e.g. for aircraft accident, the fire and rescue services commander 'on the spot' may take the responsibility; for security type crisis, the senior police / security officer present might do likewise etc. '*Mutual Aid Emergency Support Agreements*' should be prepared in advance (as required) to clarify same

Operational Commander / 'xxxxxxx' (see also 'On-scene Commander' & 'Overall Commander')

Note: The 'xxxxxxx' shown in the title above represents the specific emergency response support unit - which is '*operationally*' commanding '*something*' e.g. it is typically shown herein as "*Operational Commander* / ***AFS***; *Operational Commander* / ***Airport Police***; *Operational Commander* / ***Airport Medical Services***; *Operational Commander* / ***Off-airport Police***" etc.

A pre-nominated (suitably senior, experienced, trained &exercised) ***XIA airport*** person, commanding a (single) **specific '*operational* (BRONZE)'** airport emergency response support unit - typically operating 'for real' at or close to the emergency / accident site itself. Examples of same include *Airport Fire & Rescue Service*; *Airport Police*; *Airport Medical Services; Aircraft Operator* etc. The same principle is encouraged for ***off-airport*** responders potentially required to respond 'on-airport' ***and*** / ***or*** in conjunction with airport based responders

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Operational Commanders exercises operational (BRONZE) command & control (C4) of their ***own*** specific unit(s) ***only***, under the overall / overarching (operational) direction of an 'On-scene Commander' (Operational Commanders report to an On-scene Commander)

Operational Commanders typically exercise operational C4 from their own command / similar vehicles, located (as mentioned) at or very near the emergency site - and also in close proximity to the XIA *Forward Command Post* (FCP) and / or *Mobile Incident Command Centre* (MICC) vehicle(s).

They (Operational Commanders) might also be required to position 'liaison officers' in / at the airport operator's FCP / MICC - circumstances 'on the day' so requiring / permitting

Note: ***'Operational Commanders'*** can come from a ***wide*** variety of sources e.g. Airport Operator; Accident Airline / Rep, On & Off-Airport Police, Civil Defence / other Emergency Services; Military; Coastguard etc.

Outer Cordon / Perimeter (Note: a 'warm' zone typically lies between Inner and Outer Cordons)

A defined area ***outside of*** the 'inner' (hot zone) cordon (being free from unauthorised or uncontrolled interference) secured for immediate operational support and humanitarian assistance purposes. The outer cordon is typically circular, with a radius of 300 - 400 metres (or more), based on the emergency site location - and is delineated / marked accordingly, in an appropriate manner

Overall Commander / 'xxxxxxx' (see also 'On-Scene Commander' & 'Operational Commander')

The ***AIRPORT operator*** person pre-nominated (or otherwise so designated 'on the day') - to take charge of the ***strategic*** (GOLD) management of ***airport*** and / or *airport related* aspects of a major crisis. He / she will typically be a senior and relevantly experienced XIA ***airport operator*** manager - at least equivalent to 'General Manager / Vice President etc.' grade / rank (Reminder: the ***On-scene Commander*** [for an ***on-airport*** crisis] typically [but not always] reports to the ***Overall Commander***)

The Overall Commander + supporting team typically operate from the airport's (fixed base)
Emergency Operations Centre - EOC

Note: Due the very nature of airport emergency response ops, it will ***typically*** (but not always) be necessary for the Overall Commander / EOC to ***also*** become involved in ***tactical*** (**SILVER**) C4 operations. Some elements of such *tactical* ops will typically be delegated to the On-scene Commander. Provided that this concept is clearly understood / accounted for by all concerned / involved - this should not present undue problems

Family, Relatives & Friends (FR) - Enquiry Card - **FEC** (This form has ***many*** other, equivalent titles)

Note: **FEC** procurement, completion, utilisation etc. are typical responsibilities of the involved ***airline***(s) - ***BUT*** airports will also be involved, to a greater or lesser degree. In one reasonably realistic scenario (e.g. accident airline has no FEC capability) ***the accident airport will need to assume the responsibilities documented below*** (also assuming that said airport has such capability - ***many do not***. **Same principle applies to 'PRC' use**)

This 'standardised' form (FEC) is used to record ***FR*** etc. **provided** info about possible (associated) accident flight ***VICTIMS***. It is particularly useful when said info is provided ***before*** positive ID of such victims has become possible i.e. in general, ***where no passenger / crew lists are*** (or are ***not yet***) ***available*** (or, ***if*** available, such lists might be considered to be e.g. 'unreliable')

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It is anticipated that ***hard copy*** only FECs will be used and completed at the '***FRRC***' and / or (at some later time) at the (separate) '***Humanitarian*** (Family) ***Assistance Centre***' (or equivalent facilities) - in order to capture potential ***victim*** info as might be known to the providing ***FR*** / whoever

Any ***associated*** '***Emergency Call*** / ***Contact*** / ***Info*** etc. ***Centre(s)***' (ECC) concurrently operating (if any) should ***also*** complete FECs (hard and / or soft copy depending on ECC capabilities / software available) using info provided by callers 'assessed' as being 'genuinely involved' in some valid way (i.e. typically [but not always] being '***victim associated***' type **FR**)

FECs completed by ***non***-ECC sources should be forwarded to the associated ECC where they (together with any FECs completed by the ***ECC*** itself) are used in attempts to ***match*** with and continually ***update*** (as appropriate) associated ***'Passenger / Victim Record Cards'*** (P / VRC) - when the latter have been generated (a P / VRC can typically only be generated ***after*** the identity [at least a verified name e.g. from a PAX or crew list] of an associated accident victim becomes available)

Where use of an ECC (as described above) is ***not*** possible / available (for whatever reason), completed FECs should be forwarded to the ***XIA*** EOC (or other pre-designated location) where matching of FR with associated victims etc. will (typically) be manually made / attempted, by appropriately trained staff. Note that this is typically a time-consuming task

Passenger / Victim Record Card - **P / VRC** (Has ***many*** other titles) (FEC introductory note also applies here)

This 'standardised' form is used at XIA to record information on / about ***all*** accident flight ***victims*** (including any ground victims), either using info provided ***directly*** by the ***victims themselves*** (e.g. uninjured or slightly injured survivors at the ***Survivor Reception Centres - [Airside]*** telling 'data collector' personnel who they are, who they were flying with, who their [non-flying FR are] etc.)

..... **AND / OR** as might be generated from the accident flight's crew and passenger list(s)

..... **AND / OR** as might be provided ***indirectly*** e.g. from mortuary / hospital records etc. where victims' personal documentation (e.g. passport, ID card, driving licence [ideally with photographs]) + other corroborating info ***might*** be used (as available) to complete an associated P/ VRC

..... **AND / OR** by 3rd parties (e.g. FR) contacting the ECC / EOC / equivalent facility (where associated P / VRCs are then generated / completed / updated directly - based on the info provided)

..... **AND / OR** by associated FR completing ***FECs*** - which are then used to update ***associated*** P/VRCs (as they [PRCs] becomes available [are generated]) etc.

The P / VRC version as referred to herein is known as a '**4 in 1 P/ VRC**' i.e. simply a top copy, paper P/VRC + 3 lower / underneath (carbon) identical pages attached (or similar arrangement). Hence a 'data collection' person takes down P / VRC details from / about an air accident victim, and then distributes the top original + 3 copies to the various organisations requiring this information - (possibly including the airport operator, where circumstances 'on the day' so require / dictate)

Where use of an ECC (as described above) is ***not*** possible (for whatever reason), completed P / VRCs should be forwarded to the ***XIA*** EOC (or other pre-designated location) where matching of victims with associated FR etc. will (typically) be manually made / attempted, by appropriately trained staff. Note that this is typically a time-consuming task

Example FEC and P / VRC forms are shown at appendix **U** to this guideline document - starts page **163**

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(Off-airport) ***General*** Police / Equivalent Organisation

The government (federal etc.) and / or local government (state / county / city etc.) law enforcement agency / agencies typically charged with ***primary*** policing for ***off-airport*** aircraft related emergencies ***OR*** in providing off-airport policing etc. ***support*** of an ***on-airport*** emergency (see also 'Airport Police')

Primacy - (USA equivalent term = 'the Authority Holding Jurisdiction' [AHJ])

A term used during (joint) ***multi-agency*** emergency / crisis response ops - denoting which of the various responding agencies has ***ultimate*** C4 authority / jurisdiction etc. - of any particular emergency / crisis response operation(s) (and / or any particular sub-part[s] of same)

Reconciliation / Reuniting Area - Airport (RA [A])

An identified area / facility - typically located at or close to the ***emergency airport*** - which has been set aside for the purpose of reuniting of FR with their associated, ***uninjured*** aircraft accident victims (as applicable). An RA (A) is generally used in the shorter term (e.g. first 24H post crisis). The ***Airport Operator*** is usually responsible for the set-up / operation of an RA (A) - supported by other, appropriate agencies e.g. airlines, GHAs, Airport Police, other trained staff / volunteers etc.

Reconciliation / Reuniting Area - ***Off*** Airport (RA [O])

A generic term covering typical locations at which FR might be reunited with their associated, uninjured victims (if **not** already done at the airport RA [A]). The RA (O) is typically located at a local hotel(s) - for FR re-uniting with ***uninjured*** victims; in a hospital(s) - for re-uniting with ***injured*** victims or in a mortuary / mortuaries / equivalents, for re-uniting with the ***deceased***

The accident flight's **Aircraft Operator** (and / or its local rep [GHA]) is typically responsible for RA (O) set-up and operation for ***uninjured*** victims. It can be supported in this task by other, appropriate agencies e.g. GHAs, Police, other trained staff / volunteers etc. It is likely that the appropriate 'authorities' will manage re-uniting operations at the ***other*** facilities referred to in the last para above (e.g. the aircraft operator ***might*** be denied access to hospitals and mortuaries etc.)

Rendezvous Point(s) (RVP)

Pre-arranged / signposted reference point(s) / location(s) (typically on-airport and / or ***very*** close by), to which designated emergency response vehicles should ***initially*** proceed, in order to obtain direction and / or escort to '***staging area***(s)' and / or direct to the ***emergency site location*** itself (See also 'Staging / Holding Area')

(Search &) Rescue Co-ordination Centre (RCC)

The RCC typically co-ordinates search & rescue ops where the accident location (and / or location of accident victims) is unknown or unsure - and / or when other search and rescue resources are insufficient for the task required. RCCs are typically government provided resources

Serious Incident (ICAO Definition)

An aircraft incident where circumstances indicate that there was a high probability of an accident occurring. Note: the difference between an accident and a serious incident lies only in the result

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Serious Injury

An injury, sustained by any person having boarded an aircraft with the intention of flight, which:

- Requires hospitalisation for more than 48 hours
- Results in a bone fracture (except simple fractures of nose, fingers, toes etc.)
- Involves lacerations causing severe bleeding, nerve, muscle or tendon damage
- Involves internal organ injury
- Involves second / third degree burns or burns affecting more than 5% of body surface
- Involves verified exposure to infectious substances or injurious radiation

Special Assistance Team - SAT (***preferred*** term used today /now is ***HUMANITARIAN Assistance Team*** - ***HAT*** [but still widely known around the world as 'Family Assistance Team'; 'Care Team' etc.])

Specifically trained / exercised (usually [but not always] ***aircraft operator*** [typically airline] sourced) persons (generally volunteers) providing / facilitating the initial / ongoing (mainly face to face) humanitarian, welfare, emotional, financial and other assistance - provided to crisis (typically aircraft accident) victims and / or their FR - in the days, weeks (and possibly months or even years in some rare cases) post major crisis. The HAT typically deploy as a component of an ***airline*** GO Team - operating at / near to an associated crisis (e.g. aircraft accident) location - but also elsewhere, if / as required by actual circumstances 'on the day'

Note 1: - It is ***IMPORTANT*** to clearly understand that an airline HAT might (depending on actual circumstances 'on the day') need to deploy (typically by air but also via ground transport as required) to where it is needed. In extremis, this may mean not arriving at same for up to 48 hours (possibly longer) - post crisis occurrence time

Note 2: - Whilst the terms Humanitarian / Family / Special etc. Assistance Teams typically relate to personnel provided by ***aircraft*** operators (*and / or their representatives e.g. GHAs*) - a very small number of **airports** (e.g. Frankfurt FRA and Paris CDG) use the same / similar concepts and terminology to describe their equivalents of what is included under ***this*** definition. (**NB**: See also definition of '**(Airport)** Immediate Care Team' - page 20)

Stabilisation

Medical measures used to try to restore or maintain basic life functions to / in a casualty, in an attempt to ensure survival for further medical care. Stabilisation is ***different*** from 'Triage'

Staging / Holding Area (sometimes known as 'equipment assembly point')

A pre-designated and / or temporary, strategically placed ***on-airport*** location(s) / area(s) - where emergency support response personnel, vehicles and equipment can be held in readiness, prior to deployment to 'the emergency site location' itself (See also 'Rendezvous Point')

The '**Surrounding** (Local) **Community**'

A catastrophic emergency at or in the vicinity of an airport will typically require emergency response action, support and resources beyond the capabilities of the airport concerned

Thus, a vital component of any ***AEP*** is to **PRE-PLAN** for such support to be provided (as available) from the '***surrounding*** (local) ***community***' e.g. fire & rescue; ambulance / medical / stretcher; hospital; police / security / military; other 'official' services etc.

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Note that 'Surrounding Community' is a generic term and can typically be a busy metropolitan area (e.g. large city in a developed country, with full emergency services of its own - and also able to call upon comprehensive local and national government emergency response resources). Conversely, the location of the accident airport (e.g. remote) and the availability of emergency services / resources in the surrounding region, might dictate that there will be little or no support coming (at least in the shorter term) from 'outside'. In which case (the latter), consideration should be given to augmenting the airport's **own** emergency response facilities accordingly. (See also '**Mutual Aid Emergency Support Agreements**')

(Uninjured ***Passenger***) Survivor Reception Centre (***Airside***) - SRC (A) (Also known by ***many*** other titles)

All ***uninjured*** (and / or non-hospitalised) ***passengers*** (i.e. ***not*** including ***uninjured crew***) of an **ON**-airport or * very near airport aircraft accident, will typically (eventually) be transported from the accident site, to an initial, airport ***airside*** holding area (known herein as the 'Uninjured ***Passenger*** [***Survivor***] Reception Centre Airside' - ***SRC [A]***) - at that same airport

* For accidents occurring ***near to***, but 'off-airport' - ***uninjured*** passenger survivors should still be transported to the ***on-airport located*** SRC (A) - despite potential difficulties getting them from airport landside to airport airside. For accidents occurring well away from the airport - the accident ***airline*** (supported by the appropriate ***airport*** etc.) should try to arrange for equivalent (appropriate, alternative) arrangements to be made for handling ***uninjured*** survivors - typically with assistance of local, off-airport '***authorities***' etc. - as available

Such SRC (A) should ideally be located ***airside*** at this early stage of the crisis - as local law enforcement agencies will typically assume that an associated crime has been committed. Thus, all uninjured survivors are viewed as 'potential criminals' / 'witnesses' - and must be 'contained' in an appropriately secure location (the SRC [A]) - until such time as it is 'considered' that they can be released (as and when appropriate)

Note: Same concept applies to uninjured ***crew,*** except that (if possible) they should be 'contained' in a physically separate location from uninjured passenger survivors i.e. in the accident airport's 'Uninjured ***Crew*** Reception Centre (Airside) - ***CRC (A)***'. See page 16 for details

Essentially, the SRC (A) location should have adequate facilities to hold up to xxx uninjured survivors. (With e.g. security, catering, toilets, communications, airline amenity [wash] kits, blankets, emergency clothing and footwear, children's / infant's facilities, first aid etc. - all ideally available)

Note: Maximum size / capacity of an SRC (A) should typically be related to the maximum seating capacity of the largest aircraft type, routinely operating at the airport concerned

Aircraft Operator / Airport Operator / GHA / ICT / Police / Immigration / other trained staff and volunteers etc. - provide humanitarian, other welfare support and administration services to uninjured survivors at the SRC (A), whilst also capturing important information onto pre-prepared hard copy forms (4 in 1 ***P***assenger / Victim ***R***ecord ***C***ards - **PRC**) - which are then distributed to relevant authorities (Immigration, Police, Aircraft and Airport Operators etc.) for processing and action, as required. Once (if) the law enforcement authorities decide that there has been no 'crime' associated with the aircraft accident, uninjured survivors will typically be released from the SRC (A) and CRC (A) and permitted to go airport 'landside' (and leave the airport also if so desired - but immigration, customs, port health, baggage collection matters etc. will typically still need completion, as per SOP)

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Triage

The 'sorting' of ***injured*** accident victims with regards to the nature / severity of their injuries - with the objective of facilitating associated (rapid) medical treatment in accordance with pre-determined priorities. ***Note that triage itself does not provide for medical care to be delivered. Rather, the medical care process is eventually delivered in the priority order determined by the triage process***

See also Appendix **F** - starting page **136**

Temporary Body Holding Area

Casualties who **eventually** die ***at*** / ***near to*** the accident location itself (i.e. victims not killed immediately in the accident) should be moved to a nearby (discrete if possible) '***temporary body holding area***' prior to removal to any available Temporary or Permanent Mortuary

Reminder - victims who are killed immediately as a result of an aircraft accident should generally not be moved (from where they died) until an appropriate authority (e.g. air accident investigator) has given permission.

However, in certain circumstances such bodies will need to be moved without such permission e.g. to prevent a body being destroyed by fire; other preservation of evidence purposes etc. In the latter circumstances, photographs / sketches / some form of marking etc. should be used to indicate where the deceased was (and in what position) before being so moved

Uninjured Holding Area

A holding location (typically on or near to the accident site's outer cordon) to which (apparently) uninjured victims are taken, after being removed from the accident site itself. This location should ideally be separate from any 'care / medical treatment' area and any 'temporary body holding' area

Victim

For aircraft accident purposes, 'victim' is a term used herein, which refers collectively to ***all*** on board the accident aircraft (***air victims***) - together with any ***other*** persons ***DIRECTLY*** involved (third parties) as a consequence of said accident i.e. the latter referring specifically here to '***ground victims***' - being those killed, injured and / or traumatised (immediately for those so killed / injured and [as appropriate] in due course for traumatisation) as a ***direct*** consequence of the aircraft hitting the ground or similar / equivalent circumstance

(Note that the term '***victim***' does not refer to the dead alone nor is it a term which should be associated with others who might be termed herein as ***indirectly*** involved [***no matter how closely***] with the emergency e.g. family, relatives & friends [FR] of victims - where such FR had ***not*** been travelling on board the accident flight - and who thus ***cannot*** be classified as ***ground victims*** - are considered herein to be ***indirectly*** involved

Note also that the corresponding 'International Civil Aviation Organisation's [ICAO]' definition of Victim is very similar i.e. '..... An occupant of an aircraft, and / or any person outside the aircraft, who is unintentionally, directly involved in an associated accident involving that aircraft. Victims may include crew, revenue passengers, non-revenue passengers and ***third parties*** [i.e. ***ground victims***].....')

End of Glossary

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Note - it will be advantageous for ***airport*** operators to also have a clear understanding of the terms '***Next of Kin***' ('***Closest Relative***' / '***Emergency Contact Person***' etc.) For an explanation follow the below link:

https://www.aviationemergencyresponseplan.com/information/

When the associated webpage opens, scroll down and find the article entitled:

Information Article - Major Air Accident - '**Next of Kin**' / '**Closest Relative**' / '**Emergency Contact Person**'

(Click on it to read)

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PREAMBLE - **Part 2**

XIA AEP - **REGULATORY REFERENCES** (and equivalents)

1. ***ICAO Annex 14*** - Volume 1, Chapter 9, Section 9.1

EMERGENCY & OTHER SERVICES

2. ***ICAO Manual on Certification of Aerodromes*** (Doc 9974) - Appendix 1 / Part 4.3

3. ***ICAO Airport Services Manual*** (Doc 9137)

Part 1 - RESCUE & FIRE FIGHTING

Part 5 - REMOVAL of DISABLED AIRCRAFT

Part 7 - **AIRPORT EMERGENCY PLANNING**

4. ***ICAO SMM*** (Doc 9859) - Emergency Response Plan elements

5. ***XXX*** (Country / * Federation / ** Union etc.) - Civil Aviation Authority (CAA) / Equivalent Regulations.....re:

RESCUE & FIRE-FIGHTING

DISABLED AIRCRAFT (AIRCRAFT RECOVERY) PLAN

AIRPORT EMERGENCY PLANNING

* Example - USA's Federal Aviation Administration; ** Example - EU Aviation Safety Agency

6. ***Other applicable to XXX*** (Country) - Appropriate Notices, Bulletins, Publications etc.

7. ***XXX*** (Country) - ***National*** Aviation Security *and* **Airport** Aviation Security Programmes (*Restricted distribution / access documents)*

The above laws, rules, regulations etc. serve to guide preparation of this Airport Emergency Plan

Note - See also Appendix **Y** to this AEP Volume 1 - starts page **179**

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PREAMBLE - **Part 3**

Other appropriate Emergency Response Plans Requiring Co-ordination *(as required)* ***with XIA AEP:***

- (Airport & Off-airport) Customs, Immigration and Quarantine (Port Health) Plans
- On-Airport and Off-Airport Police etc. Plans
- Other XXX (Country) Security Services Plans (as appropriate)
- Aircraft Emergency / Disaster Plan - Medical Support by DOHMS (already produced in co-ordination with the corresponding Airport Medical Centre plan - and includes both 'Hospital' and 'Ambulance' type matters) (also includes 'public health' type contingency plans e.g. 'pandemic')
- Local, Federal, Regional and National Government Disaster Plans (as appropriate)
- Local Civil Defence / Civil Contingency Plans (as appropriate)
- Military Plans (as appropriate)
- Coastguard Plans (as appropriate)
- Search & Rescue Authority Plans
- Aircraft Operator Plans
- Ground Handling Agent (Aircraft Operator Rep) Plans
- Air, Ground & Over Water Transportation Company Plans
- Cargo Operators Plans
- Post / Mail etc. Organisation Plans (as appropriate)
- Public Utility Company Plans (as appropriate)
- Animal Health (Veterinary) Service Plans (as appropriate)
- International Relief / Non-Government / Voluntary etc. Organisation Plans (as appropriate)
- Other Major (located in or 'operationally' near XXX [Country]) Airport Emergency Plans
- Any Other, Relevant Plans TBA

See pages 46 - 48 for a more complete list

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PREAMBLE - **Part 4**

Re-Classification of Type of Emergency

Whilst an 'incident' aircraft is ***in the air***, upgrading or downgrading of emergency status shall be the responsibility of ***ATC*** / ***ATS***, in conjunction with the ***aircraft commander***, as appropriate

Whilst an 'incident' aircraft is ***on the ground***, upgrading or downgrading of emergency status shall be the responsibility of the ***AFS*** person in charge, in conjunction with the associated ***aircraft commander***, as appropriate. AFS is responsible for advising ATC (of associated details) accordingly

PREAMBLE - **Part 5**

Ready Identification *of* ***On-Scene Commander, Operational Commanders*** *and other* ***Emergency Response Team Key Personnel*** *+ their* ***respective Vehicles*** / ***Deployed Facilities*** *etc.*

Personnel Identification

Experience indicates that confusion in easily and rapidly identifying associated 'on-site' ***command*** personnel (during associated emergency response operations) can be problematic

As a means of easily identifying and distinguishing such ***airport based*** command personnel, a ***highly visible*** and ***distinctive*** / ***uniquely*** coloured ***tabard*** (vest) and / or ***coat*** and / or ***armband*** etc. of the same colour - should be worn by the relevant commanders. Where the wearing of helmets or hard hats is required or recommended, these items should (ideally) be of the same, appropriate colour

Ideally, the ***functional title*** of the relevant commander should ***also*** appear in suitably sized reflective letters on the front and / or reverse of tabards / coats + on the armband and on the front of the helmet / hard hat. For the armband and helmet only, an appropriate and clearly understood ***abbreviation*** (as documented in the associated AEP / other, appropriate documents) will suffice

Such identifying etc. apparel should not to be worn whilst the relevant person is responding to an incident but is ***not*** concurrently serving (or about to serve) in an associated ***command*** function

The following colours and wording are recommended:

Apparel Colour	***Wording*** *on* ***Apparel***
Yellow	**On-scene Commander**
Red	**Operational Commander - AFS**

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Dark Blue	**Operational Commander - Airport Police**
White (with red lettering)	**Operational Commander - Airport Medical Services**
Orange	**Operational Commander - Airport Operator**
Green	**Operational Commander - Aircraft Engineer**
Light Blue	**Operational Commander - Airline / Airline Rep** (e.g. GHA)
Brown	**Medical Examiner / Coroner** etc. (provided here for info only)

Vehicle Identification

Any or all of flags (pennants), light beacons, colouring, lettering and other, appropriate marking should be used to distinguish between the various (*airport based*) command vehicles, which might feasibly be present at an accident location. Again, where feasible, the colouring, lettering etc. should be the same as that used above for ***personnel*** identification

Note: Appropriate ***off-airport*** responders should be encouraged to also adopt / adapt a similar system to the above ***BUT*** ensuring that any such identifying system used is communicated and co-ordinated with all concerned - for the purposes of avoiding undue confusion

PREAMBLE - **Part 6**

Compliance with this Airport Emergency Plan

Employees of XYZ Airports Company and ATS staff working at XYZ International Airport

For employees of the XYZ Airports Company + the Air Traffic Services (ATS) organisation at XIA (if latter [ATS] is not already part of former [XYZ Airports Company]), this document and its associated content is to be considered as an ***internal directive*** for actions and procedures to be applied, during emergencies which affect the airport, either directly and / or indirectly

Same applies to both (separate) **AEP *Vol 2*** documents (*2A* and *2B*) and their content, as appropriate to actual circumstances 'on the day'

Note: - Further to above, and as appropriate throughout this plan, the above shall be regarded as supplementary ***to any established and approved work procedures*** / '***exercising of professional skills***' ref emergency response accountabilities i.e. this AEP does ***not*** instruct e.g. Rescue and Fire Fighting Services, Air Traffic Controllers, Medical Staff etc. - in how they conduct their own specific, professional responsibilities

However, ***do*** note this AEP ***does*** provide '***general guidance***' emergency response ***checklists*** for such responders (and others). Such checklists can be found in (***separate*** documents) AEP Volumes ***2A*** and ***2B***

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Airport Tenants, Franchisees etc. plus Support Agencies in the Surrounding Community

Airport tenants (including aircraft operators and / or their reps), franchisees etc. at XIA - together with supporting (surrounding) community agencies + any other entities which might possibly be involved with the co-ordinated response to an emergency directly or indirectly affecting XIA - should make ***'best endeavour'*** to comply with the actions and procedures contained in this AEP, as required

Where such airport tenants, franchisees etc. consider themselves ***unable*** (at the planning stage) to comply with the 'best endeavour' request above, written notification of same should be made accordingly to the XYZ Airports Company - together with associated reason(s) / explanation + details of alternative and acceptable (to the airport operator) procedures

Mutual Aid Emergency Support Agreements *(see definition page 22 if required)*

Such agreements are typically simple in format but should include appropriate attachments, appendices etc. - including at least:

- Pre-determination of legal authorities / liabilities etc. of all co-operating emergency agencies / personnel
- Clarification of political and / or jurisdictional (primacy) etc. type matters
- Establishment of agreed command and control systems to be used - by whom and in what circumstances
- Outline details of associated support etc. to be provided
- A co-ordinated radio and / or other (equivalent) communications plan(s)
- Pre-arrangement for supply and co-ordination of emergency transport / similar facilities
- Pre-arrangement for supply / use of portable, heavy rescue equipment - plus other specialist equipment - from any / all available sources
- Joint training and exercising provisions
- etc.

See also appendix **S** - starts page 160

PREAMBLE - **Part 7**

Consideration of Climatic Conditions, Darkness etc

For reasons of brevity etc. - measures for dealing with adverse climatic conditions, darkness etc. - as associated with each potential emergency / emergency response set out in this AEP (guideline preparation documents) have been omitted

In reality, they ***must*** (of course) be identified, documented (in this AEP), trained for (initial and recurrent) and exercised (ongoing)

END of PREAMBLE section

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XIA AEP

VOLUME 1 / Section 1

Emergency Contacts / Communications Directory

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Section 1 - Emergency Contacts / Communications Directory

ALL relevant contact info (particularly *mobile* ***and*** *landline* telephone contacts - but also including email, SMS text, FAX [as applicable], social media, radio frequencies, satellite comms details etc.) for ***all*** agencies (airport based, surrounding community, wherever) which could conceivably be involved in support of an airport emergency response (at or in the vicinity of XYZ International Airport) shall / should be obtained and recorded in a suitable 'emergency contacts / comms directory' - diligently prepared / maintained by the XYZ Airports Company - as part of and under the authority of this AEP

It is particularly important to ensure that current mobile / cell / smart phone and residence (home [landline telephone preferred]) contact details are recorded (as available), in addition to 'normal business / workplace' telephone etc. numbers - and any other viable forms of contact

The emergency contacts directory shall be verified / updated at intervals not exceeding 3 monthly, by an appropriate person(s) appointed by the XYZ Airports Company - and named as such for said purpose in this AEP (i.e. in an appropriate place, somewhere in ***this*** Section 1 of AEP Vol 1)

To facilitate said verification / updating, a ***soft*** copy of said directory should be electronically delivered (e.g. via email) at least 3 monthly - to ***all*** persons and / or agencies providing such associated contact details - requesting that they check the contacts (for which they are responsible / which they 'own' etc.) for accuracy, currency, relevancy and 'completeness'- and then formally advise (in writing, via email) the appointed XYZ Airports Company person (see last para above) of same. ***If there have been NO changes***, a formal response (in writing) to that effect is ***still*** required

Alternative methods of achieving the above can be devised as appropriate e.g. where updates using soft copy are not possible, available, inadvisable etc.

Reminder - The accuracy and currency of such contact information is so vital to the overall success of airport emergency response ops - that recipients of the 3 monthly check should be 'required / requested' to ***positively respond*** to the appropriate XYZ Airports Company person's periodic checks, whether or not they have changes to notify i.e. by stating (in said responses) something like:

…… *'Yes I have changes and here they are'* - **OR** - *'I confirm that there are no changes to make for this period / current check'*……

The emergency contacts directory should be included in a specially prepared Appendix **A** to the AEP Guideline ***Volume 1*** document. Where the directory is a large document (which is likely) it may be held (instead) separately from AEP Volume 1 - but its locations (**hard copies**) and access paths (**soft copies**) must still be clearly indicated in said Appendix A of said Volume 1

Note that the ***primary*** method of providing the crisis contacts directory ***MUST*** be via use of ***HARD COPY*** documentation. Whilst soft copy versions will obviously (also) be used - they must **never** be the primary source / repository of emergency contact information used for the purposes of this Section 1

A reasonable number of emergency contact directory ***hard copies*** should be held in appropriate locations which will facilitate ***business continuity*** requirements if so required e.g. some (at least) should be located at an appropriate ***off-airport site*** - at an ***appropriate distance*** from the airport. Associated details shall be documented herein accordingly

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XIA AEP

VOLUME 1 / Section 2

General Overview

Note: The general layout concept of this ***entire*** AEP Guideline (comprising Volumes 1, 2A and 2B) typically places information and background material etc. in ***this Volume 1*** - reserving Volumes ***2A*** and ***2B*** for checklists only (well.....almost - read on!)

As an exception to the latter, ***security*** related crises have appropriate information / background material ***and*** checklists contained ***together*** in Volumes 2A and 2B i.e. such security related information / background material is typically ***not*** documented here in ***this*** Volume 1

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Section 2 - General Overview

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NB: As necessary, refer to the associated list of abbreviations / acronyms (starting page 11) and the glossary / definitions (starting page 13). Same applies at any other time when reading any of AEPs Vol 1, Vol 2A and Vol 2B, if so required by 'the reader'

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'General Overview' (Intention / Suggested Use etc. of this Section 2)

1. The purpose of this Section 2 - 'General Overview' - is to provide the reader with a general orientation and explanation of the more important parts of this AEP's elements

2. A sufficient understanding of the general concepts of emergency response ops at / in the vicinity of XIA should hopefully be relatively easy to acquire - whilst also setting a foundation for what is to come in the remainder of ***this*** Volume ***1*** - ***and*** in the separate Vols ***2A*** and ***2B***

3. The general principle is that the 'appropriate' reader should understand (with relative clarity) what is covered in ***this*** Section 2, ***before*** moving on to other areas of this document

4. For the sake of clarity and brevity, this Section 2 does ***not*** include details of certain parts of the AEP considered unnecessary for 'general overview' purposes

5. Paragraph numbering commences with ***this*** Volume 1 / Section 2 - and is thereafter continuous to the end of Section 2. Similar applies to Sections 3 and 4. Note that paragraph numbering is ***not*** typically used in Volumes 2A and 2B (checklists) of this AEP

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IMPORTANT NOTE

- An AEP is ***not*** a Business Continuity / Recovery Plan and should thus ***not*** include any material related to same (except possibly in a general context only)
- An AEP is ***not*** a Risk Management Plan and should thus ***not*** include any material related to same (except possibly in a general context only)
- It would be prudent for any major, commercial airport to have a fit for purpose Business Continuity & Recovery Plan in place which, in turn, is typically based on Risk Management principles. However, both are beyond the scope of ***this*** AEP guideline document
- It is strongly recommended that the person responsible for the day to day management of an AEP is ***not*** appointed to concurrently (also) look after Business Continuity / Recovery / Risk Management type matters - due potential 'overload'

Introduction

8. Airport Emergency Planning is the process of preparing (in all and any necessary ways) to adequately cope with a significant on-airport emergency + a significant, airport related emergency occurring in the airport's vicinity + any other type of nominated / defined contingency for which such preparation is required. The objective is to minimise the adverse effects / impacts of an associated emergency, particularly with respect to the saving of life, the protection of property and the maintenance of airport operations - in that order

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9. This AEP documents (re [actual and exercise] airport related emergency response ops in general) the processes / procedures / resources etc. used at XIA - for preparing, co-ordinating etc. the emergency responses of the different ***airport*** agencies, services and customers (including customer airlines) etc. with each other and with the appropriate, responding emergency and other support agencies in the ***surrounding community***. It also provides detailed checklists for who will do what, when, where, how, in what order, with what resources etc. during actual and exercise emergency etc. response ops, relevant to XIA

Purpose of the AEP

10. This AEP has been designed with the intention of ensuring that there is / are (as required):

- Appropriate authorisations to prepare, produce, maintain, test, implement the AEP
- Orderly / efficient transitions from normal to emergency ops accountabilities / actions etc. and vice versa
- Adequate and timely assignments, delegations etc. of associated duties, responsibilities, accountabilities etc. - as required / intimated herein
- Co-ordination of joint planning and response effort for / with all and any (relevant) emergency response agencies and similar (both on and off-airport)
- Adequate training (content and assignment) and exercising provision (initial and recurrent) in place and delivered as required / directed
- Sufficient written guidance in what to do, when and how, typically (but not always) in checklist format
- * Adequate provision for ***humanitarian assistance***, welfare and similar matters
- A comprehensive, documented record of crisis related events, as required
- Facilitation for continuance of / return to 'normal business' airport ops - as required

* **VERY IMPORTANT NOTE** - ***Humanitarian Assistance***

Prior to October 2013 (and generally speaking) the ***vast majority*** of ***airport operators*** had no ***FORMAL*** accountability for the provision of ***humanitarian assistance*** (in any of its forms) to aircraft accident victims and the associated family, relatives and friends of the latter - even at the involved airport(s) itself. Commendably, a ***very*** small number of airport operators had voluntarily (best practice) already provided humanitarian assistance services / teams (e.g. at Frankfurt and Paris CDG) - but the vast majority did not - relying on the contents of appendix 7 of ICAO's Airport Services Manual (ASM) Part 7 (Airport Emergency Planning) to place humanitarian assistance accountabilities ***at their airports*** almost exclusively on the appropriate / associated ***aircraft operator*** and / or on the latter's *local representative* (***Ground Handling Agent*** or similar)

Even when ICAO produced (2002) ICAO Circular 285 - '***Guidance on Assistance to Aircraft Accident Victims and their Families***' - it (ICAO) singularly failed ***again*** to make ***airport*** operators adequately accountable for 'sharing in' the provision of humanitarian assistance ops at their airports - continuing to unfairly put the responsibility on the aircraft operator, GHA and other (non-airport operator) parties

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This most undesirable situation changed in October 2013 when ICAO upgraded circular 285's 'guidance' to become ***official ICAO policy*** (ICAO Doc ***9998***) - and replaced circular 285 with ICAO Doc ***9973*** - '***Manual*** *on Assistance to Aircraft Accident Victims and their Families*'. ***Doc 9973 today firmly & unequivocally assigns airport operators themselves as providers of appropriate and associated humanitarian assistance***, together with aircraft operators, ground handling agents, government agencies (at all levels), voluntary organisations etc. This means that ***ALL commercial airport operators*** should plan and resource (plus train and exercise) to provide humanitarian assistance services themselves (if not already so doing) - in conjunction with other, appropriate agencies - as already mentioned further above

Whilst ICAO Doc 9973 is not specific on the matter, ***this*** Guideline AEP (the document you are now reading) reasonably assumes that the delineation (geographical limits) of ***airport operator provided*** humanitarian assistance services be contained within the airport boundary or very close by (e.g. where the airport's * FRRC is possibly located at a ***nearby*** hotel / equivalent facility [instead of actually being located ***on***-airport])

* **FRRC** - **Family, Relatives & Friends Reception Centre** (see definition page 19)
See also Appendix **R** to this AEP Vol 1 (starts page 158)
See also Appendix **Y** to this AEP Vol 1 (starts page 179)

Use of Checklists versus Text

11. This Volume ***1*** element of the overall AEP is based on plain text descriptions - with little or no use of checklists. This is deliberate, due the need to explain in a fair amount of detail, appropriate aspects of some of the subjects concerned e.g. Dangerous Goods; Public Health Crisis Response Plan etc.

12. Conversely, Volumes ***2A*** and ***2B*** are typically (but not exclusively) documented as checklists

Emergency Planning Committee

13. The XIA Emergency Planning Committee (EPC) is a joint (i.e. comprising ***on*** and appropriate ***off***-airport members) agency forum - meeting regularly to make meaningful contributions to progressing the various issues pertaining to the AEP and other airport related emergency / contingency plans / issues - as required. ***This is particularly so, in association with those agencies in the surrounding community****(as applicable)* ***which might potentially provide associated aid to the airport, at time of crisis***

14. It is essential that follow-up actions assigned in such meeting minutes are addressed diligently / quickly - by all concerned / assigned - ideally before the next Committee meeting

15. The XYZ Airports Company shall appoint an appropriately experienced, qualified etc. person (and a deputy) to chair EPC meetings. The XYZ Airports Company 'Emergency Planning Manager' shall be responsible for the day to day activities concerning operational and administrative management of this committee - particularly re compliance with follow-up requirements / actions (emanating from said emergency planning committee meetings)

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Types of Emergencies Anticipated - Aircraft Related

16. The following are the types of ***aircraft related*** emergencies for which a procedural response has been included in this AEP:

Aircraft Accident - on-airport

Aircraft Accident - off-airport (can be '***on land***' or '***on / over water***')

Aircraft Incident in-flight (en-route)

Aircraft Incident on the ground (***not*** security related)

Aircraft Incident - sabotage, bomb threat etc.

Aircraft Incident - unlawful seizure etc.

Aircraft Incident - fuel spillage

Types of Emergencies Anticipated - Not Involving Aircraft

17. The following are the types of ***non-aircraft*** related emergencies, for which a procedural response has (or will be) been included in this AEP:

Fire on the Ground - including fires in airport terminals + any surface public transport facilities associated with the airport e.g. airport connected metro / light rail system

Sabotage / Security - including Bomb Threat

Dangerous Goods / Chemical Spills

Medical / Public Health

* **Fuel Spillage**

** **Removal of Crashed or Disabled Aircraft**

Landside (at the airport) **Transport Facilities** (e.g. XYZ Light Rail System)

Natural Disasters

* For example - from a fuel-tanker, fuel-farm etc.
** Strictly speaking this ***is*** aircraft related but has logically been placed here

Note: A viable 'Terminal Evacuation Plan / Equivalent' must also be in place of course - but is beyond the scope of this paragraph 17 and, indeed, this entire series of AEP guideline documents

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Compound Emergencies

18. The following are examples (list is not exhaustive) of compound emergencies. No specific procedural response for such is included in this AEP - but existing AEP procedures and checklists should be ***adapted*** to suit such situations - where so required:

Aircraft / Structure

Aircraft / Fuelling Facility

Aircraft / Aircraft

Aircraft / Large Public Transport Vehicle

Common-use Terminology

19. Many airports - (including XIA) use the following terminology when referring to some of the aircraft related emergencies already documented on the previous page:

- '**Aircraft Accident**' - used to classify an ***actual*** aircraft accident occurring on or in the vicinity of the airport
- '**Full Emergency**' - denotes that an aircraft in flight (typically approaching the airport) is ***actually or potentially in such trouble*** that there is imminent risk of an aircraft accident
- '**Local Standby**' - means that an aircraft approaching the airport or on the ground is ***actually or potentially subject to an adverse occurrence or defect***, but the problem is not such as would normally involve any serious difficulty for the pilot(s) and / or to aircraft safety

Note - the term '**Weather Standby**' is similarly used at some airports to cover potential, enhanced response requirements for the airport (for aircraft operations) - as related to adverse weather conditions

Typical Agencies potentially involved in an XIA Emergency Response

20. At 'generic' level, any / all of the following agencies might become involved with an emergency response at or in the vicinity of XIA. ***The lists are <u>not</u> exhaustive***:

*Agencies which are Generally Located **ON** or **very** close to Airport*

- Air Traffic Services
- Rescue and Fire Fighting Services (XIA Airport - Fire & Rescue Service - AFS)
- Airport Police + any other Airport Security Organisation(s)
- XYZ Airports Company (otherwise known as the 'airport authority / operator / management company')

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- Airport Medical Services / Centre / Clinic
- Aircraft Operators
- Ground Handling Agents / Supervisory Agents
- Other Airport Tenants
- Airport Franchisees
- Airport Based Customs, Immigration and Port Health
- Others TBA

*Agencies Generally Located **OFF** Airport*

- Police (General [Federal and / or Local]) + Police (Paramilitary) etc.
- Department of Health & Medical Services - DOHMS (includes hospitals, ambulances, stretchers and stretcher bearers) and similar
- Civil Defence / Equivalent
- Other appropriate Government Authorities (national, regional and local)
- Military Services
- Security Services
- Coastguard and Harbour / Port agencies
- Rescue Co-ordination Centre (Search & Rescue)
- Coroner / Forensic Doctor - or equivalent
- Transportation Authorities
- Telecommunications Authorities
- Public Utilities
- Postal Authorities
- Public Information Office

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- Veterinary Services
- Religious / Faith Organisations and Services
- Mental Health Agencies (if not covered by government type 'health' systems)
- International Relief Agencies e.g. Red Cross & Red Crescent
- Volunteer Organisations (including Charities)
- Other TBA

Typical (suggested and as appropriate to circumstances) duties for ***some*** of the above agencies will be documented in the appropriate Volume and Sections of this AEP (i.e. those dealing with direct operational response + associated roles, responsibilities, procedures etc. - more particularly found in separate [i.e. separate from each other and also from ***this*** AEP Vol 1] AEP Volumes ***2A*** and ***2B***)

Rescue Co-ordination Centre *(RCC)*

The main role of the RCC is to co-ordinate search and rescue operations - generally where the accident location (and / or location of accident victims) is unknown and / or when emergency support resources (over and above those available to the airport and associated surrounding community etc.) are required

*The **potential** importance of the RCC during an aircraft accident / emergency etc. is such that it merits a specific reference at this point in this AEP - as suggested by ICAO*

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Emergency at Sea / Over Water

21. In addition to responding to accidents on airport, the XYZ Airports Company and supporting airport agencies will ***consider*** reacting to aircraft emergencies occurring within an 8 km (4.5 nautical miles or 5 statute miles) radius of the XIA aerodrome reference point - which (the latter) may be taken as being approximately at the centre of the airport (exact location is 89.15.2N 025.21.9W [*fictitious position for the purposes of this AEP Vol 1 guideline*])

    Note - the level of response by the XYZ Airports Company to an ***off-airport*** aircraft accident will depend on several circumstances, not the least of which is to ensure continued emergency response coverage for any ongoing aircraft operation at XIA. The XIA emergency response ***Overall Commander*** (or ***alternate*** XYZ Airports Company senior manager) should make the appropriate decision 'on the day'

22. The '8 km radius' referred to above takes in an area of (inshore) sea / water to the south of XIA, with the radius cutting the coast at approximately the mouth of *Shana Creek* then again at the eastern extremity of the coastal part of *Botanical Park*. This effectively means that a significant area of water lies under much of the extended (approach) paths of both XIA 'northerly' runways - and departure paths for both 'southerly' runways

23. Appropriate procedures and associated resources are documented in this AEP to cover the eventuality of an aircraft accident at sea / on water - particularly in the inshore area described immediately above

    Where appropriate, full use of suitable responders and their resources in the surrounding community should also be incorporated via use of appropriate ***'Mutual Aid Emergency Support Agreements'*** with e.g. coastguard / lifeboat services; marine police; navy; SAR authority (RCC); harbour master; commercial marine companies etc.

24. Suitable location aids, personal protective equipment, buoyancy aids etc. should (be provided for and carried / used / worn) by all XIA emergency responders when deploying over or on water. The XYZ Airports Company shall ensure that same are procured, available, maintained, distributed and utilised - as appropriate. Associated training / exercising (ongoing) shall also be provided / undertaken

Alerting & Activation

On Airport

25. Alerting and Activation for an ***ON*** airport aircraft emergency response (aircraft accident) at XIA is typically (but not always) initiated by Air Traffic Control / Services (ATC) - the latter typically being the first to become aware of and / or to be alerted to a 'state of emergency'

26. ATC will typically activate the 'crash alarm' which will, in turn, alert the XIA Airport Fire & Rescue Service - AFS. The latter will be further contacted by ATC and receive initial details of the emergency, via an ATC broadcasted 'crash message' - on the designated radio frequency (frequencies) monitored by AFS (in addition to passing the alarm message to the AFS ***watch-room*** via direct line [RED] telephone / equivalent method(s) of immediate / high priority contact etc.)

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27. AFS is also typically responsible for commencing the alert and activation 'cascade tree callout' system for ***other*** specified recipients, who will, in turn, pass on the crash (emergency) message to additional specified recipients, and so on - i.e. the AFS watch-room is an integral and initiating part of any further callout processes

28. The system described just above (cascade tree callout) will eventually alert all agencies and individuals required to respond to the emergency. Additionally, all those needing to know about the emergency (but not necessarily having a direct emergency response role) would also be notified e.g. the executive board of the XYZ Aviation Corporation (parent organisation of the XYZ Airports Company)

Off Airport

29. Essentially, the same process as described above for the on-airport situation will take place, but with additional ***external*** notifications over and above those already indicated above e.g. civil defence / fire and rescue, off-airport medical / health, ambulance and stretcher services, off-airport police, military, coastguard, additional government authorities etc.

Note - effective, efficient, rapid and economical ***automated alerting systems*** are (as at 2023) available for procurement / lease from around USD $5 - 10,000 annually. Such systems can accomplish, in just a few minutes, what a 'cascade tree' ***manual*** alerting system (as described a little further above) might take several hours to accomplish

Rescue & Fire-Fighting

On Airport

30. The XIA (On) Airport Fire and Rescue Service (AFS) will provide immediate response fire-fighting and rescue ops, as per XXX (Country) CAA requirements - together with (XIA) AFS SOPs - plus any other appropriate procedures / checklists etc. contained elsewhere (e.g. Volumes 2A and 2B) in this XIA AEP series of documents

All airport runways shall be considered active unless specifically advised otherwise by ATC

Where appropriately trained / qualified / experienced / exercised '***spare*** AFS manpower capacity' is available - a triage and immediate medical care operation should ***additionally*** (concurrently) be commenced (as required) until such time as arriving medical staff (e.g. from airport clinic / medical centre; off-airport medical resources etc.) can take over

31. ***Additional*** fire-fighting, rescue and medical / health / ambulance etc. resources will typically be deployed as soon as possible (in support of AFS), by appropriate ***off airport*** resources

Pre-agreed ***'Mutual Aid Emergency Support Agreements'*** will typically (but not exclusively) guide this process e.g. who will eventually assume ***ultimate*** command & control (primacy) of the fire & rescue operation; the triage and medical care / transport operations etc.?

32. When appropriate, AFS shall appoint a suitable liaison person to the XIA ***'On-scene Commander'*** - whenever he / she is operating 'on-site' from the deployed XIA ***'Mobile Incident Command Centre / Forward Command Post'*** etc. vehicle ..... or equivalent facility

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Off Airport

33. AFS will only deploy ***off airport*** if so directed by the XIA *Emergency Operations Centre's* ***'Overall Commander'*** or * equivalent person. Again, such deployments will be governed mainly by actual circumstances at XIA airport 'on the day' + by any appropriate 'Mutual Aid Emergency Support Agreements' in place (* details documented elsewhere in this AEP)

Initial Headcount of 'Persons on Board' Accident Aircraft

34. Airport Police and / or equivalent, typically assisted by AFS, Airport Medical Centre (AMC), the aircraft operator and / or latter's rep e.g. a GHA (if / as available for all of the aforesaid) etc. - will typically assume responsibilities for the initial 'headcount tally' of all 'persons on board' (POB) (and / or who ***had*** been on board) an ***on-airport*** accident / incident aircraft. If feasible, this initial tally is typically conducted (ASAP) at / near to the actual accident site itself

35. The aircraft operator and / or its rep (e.g. GHA) should produce ***ASAP*** a tentative (unverified / unconfirmed) total POB number + (as eventually available) a name list of ***all*** persons (crew and passengers etc.) believed to have been on board the accident aircraft. XIA ATC and the XIA 'Normal' and / or 'Emergency' Operations Centre(s) (as appropriate) need this latter info, for (amongst other purposes) immediate, onward transmission to AFS, Airport Police, On-scene Commander, other appropriate responders as permitted (both on and off-airport) etc.

    Such name lists are typically expected to (eventually) be ***'verified'*** (double checked for accuracy / 'completeness') by the aircraft operator and / or its rep - and any updates / changes again passed-on / forwarded immediately, as per above

    The above requirements shall be adapted accordingly for the ***'off-airport'*** situation

Access to / from Accident Site - Access and Exit Control

On-Airport **Accident** / ***Access Control*** .....i.e. ***to*** on-airport **l**ocations (via surface transport)

36. Access to the actual ***on-airport*** accident site itself shall be controlled by Airport Police and similar XYZ Airports Company / other security services, using the 'RVP' / 'Staging Post' / 'Inner and Outer Cordon' etc. principles (see appropriate 'definitions' - as required)

37. ***On-airport Emergency*** services will deploy to the accident location as quickly and directly as possible - in accordance with standard procedures and / or as directed / cleared 'on the day'. ***Other*** (***on***-airport) emergency response ***support*** agencies deploying likewise will (typically) deploy initially to a (pre)nominated, on-airport location known as the 'personnel staging post and emergency equipment assembly area' where they, their vehicles and appropriate equipment will wait to be 'called forward' (typically under escort) to / near to the accident site

38. ***Pre-prepared*** (emergency use) airside passes *and / or* appropriate identifying apparel *and / or* equivalent arrangements etc. - will be provided to pre-designated on-airport responders (before and / or upon arrival at the 'personnel staging post' / other nominated location[s]) - where the wearing of 'normal business' type apparel - together with the displaying of 'normal business' ID / markings etc., does **NOT** ***clearly*** identify such responders as already being permitted airside access. This (pre-prepared / documented, trained and exercised) process will be managed / controlled 'on the day' by Airport Police / Security etc.

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39. Several different staging areas are nominated in this AEP to facilitate rapid deployment to accident sites on any part of the airport (see Section xx, paragraph yy for details and Appendix zz for map locations, GPS co-ordinates etc.). The initial emergency (alerting & activation) message(s) and / or subsequent communication(s) from ATC, On-scene Commander etc. - will clearly designate the particular staging area(s) to be used 'on the day'

40. Emergency support agencies responding from ***off-airport*** shall typically route to airport emergency access gate(s) (*crash gate*[s]) as nominated and communicated 'on the day' by the airport EOC *OR* On-scene Commander OR other appropriate airport agency (e.g. ATC; Airport Police etc.) - depending on (the on-airport) accident site location, anticipated location of hospitals to be used (as appropriate), local off-airport road traffic conditions etc.

Note - As the allocation of crash gates as per para 40 above will not be 'instantaneous', off-airport emergency responders ***not*** receiving a definitive crash gate to which to proceed in the initial emergency (alerting & activation) message(s), should (by default) report to either gate ***aa*** for access to the part of the airport ***west*** of the main XIA north-south runways **OR** gate ***bb*** for access to the part of the airport ***east*** of these runways - as per actual circumstances prevailing 'on the day'

41. *Deliberately Blank*

42. Once ***off-airport*** emergency support agencies arrive at the designated or default / briefed access crash gate(s) - Airport Police / equivalent agency(ies) shall immediately issue pre-prepared emergency airside passes and / or appropriate identifying apparel and / or whatever equivalent(s) is (are) deemed so suitable 'on the day' - and then provide / arrange escort for them (off-airport agencies) to eventually move on to an appropriate 'Rendezvous Point - RVP' - where they can wait to be called forward, under further escort, to the accident site area itself (possibly via a nominated ***staging area***)

Note - the above (paras 40 & 42) represent a typical, ***example*** situation only. In reality, it is possible that e.g. ***off***-airport agencies might be directed to a ***landside*** RVP(s) (possibly just outside the airport boundary) - and from there be escorted to the on-airport accident area (possibly via a nominated staging area) itself

43. Off-airport agencies will typically be escorted (airport provided) at all times whilst on-airport

44. On initial arrival at the general area of the accident site, **ALL** responding emergency support agencies (whether based on or off-airport) shall follow the appropriate one-way ***access*** (entry) system (as set up, marked and monitored by Airport Police etc.). Upon subsequent arrival at the designated parking location, the senior officer / person from each such agency so doing, shall identify and report to the **most appropriate** 'Operational Commander' present. For example, ***off-airport*** fire and rescue services will typically report to the '(XIA) Operational Commander / AFS'. Off-airport medical services / ambulances will initially report to the '(XIA) Operational Commander / Airport Medical Centre' (Note - the latter person will eventually (typically) transfer this operational command responsibility to the designated off-airport senior medical officer, after the latter's arrival on-site)

45. Parking arrangements on arrival at the outer cordon should have already been made and suitable signage or similar direction established. If not, arrivees should park in a suitably clear area just outside the outer cordon and seek further direction (re 'what to do now?) from e.g. Airport Police / Airport Security / an appropriate (on-site) XIA Operational Commander etc.

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On-Airport Accident / ***Exit Control***.....i.e. ***from*** on-airport accident location (Surface Transport)

46. Emergency Support agencies leaving the accident site should route as briefed by the appropriate Operational Commander and / or Airport Police / similar security agency etc.

    Typically, the marked one way ***exit*** system should be used to leave the immediate area of the accident site - subsequent to escort being provided to other on-airport locations (as appropriate) **OR** designated airport exit points (as appropriate)

47. Pre-prepared emergency passes, identifying apparel etc. (which might have been previously issued as per paras 38 and 42 above [as applicable]) should be returned to Airport Police / similar personnel when leaving the accident site / exiting the airport - as appropriate. For *on-airport* based responders, however, return of same should only be made when there is no longer further expectation to attend / re-attend the accident location

Helicopter Access / Exit Procedures

48. *To be Issued*

Access to / from XIA.....via local (off-airport / external) **Road Traffic System**

49. Depending on the time of day, day of the week etc. – all roads to / from the airport can become 'gridlocked'. Public holidays, local exhibitions etc. can exacerbate this situation

50. For an ***on-airport*** emergency the XIA EOC (and / or other appropriate airport agency e.g. 'Temporary' EOC; ATC; AFS; Airport Police etc.) shall consider (on the day) the location of the accident site itself, prevailing off-airport traffic conditions, locations of hospitals vs locations of airport crash gates / rendezvous points (RVPs) / staging areas etc.

    Subsequently, (and after similar consultation with e.g. **off**-airport Police / Traffic Officers etc.) it (XIA EOC etc.) shall nominate and promulgate an appropriate crash gate(s), considered to best facilitate (external) emergency support services access to / exit from said RVP(s), staging area(s) etc.

51. The above considerations might mean e.g. that the airport crash access / exit gates geographically ***nearest*** to associated hospitals etc. will ***not*** necessarily be the ones nominated for use 'on the day' of the 'incident' - as per para 50 above

52. Once the decisions referred to above have been made and promulgated, all appropriate / involved parties should work / communicate closely together, in order to (try to) ensure that appropriate parts of the ***off***-airport road system, to / from the nominated crash gates and to / from nominated hospitals etc., are kept as clear as possible (e.g. at least a single lane in each direction might be reserved for emergency traffic only [provided that it can be cleared of non-emergency traffic in the first place of course!])

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Off-Airport *Accident Location* - Access / Exit Procedures

53. The same general principles used further above for the ***on**-airport* situation should similarly apply (as appropriate and insofar as is possible / practicable) - where a deployed ***airport based** response agency* finds itself (**rarely** but not impossible) 'in charge' (having 'primacy') of an ***off**-airport* emergency response situation

    In such circumstances - initiative, common sense, effective communications, flexibility etc. will be required ***due to the lack of*** e.g. a boundary (such as the airfield perimeter fence and crash gates), pre-designated locations such as staging areas and rendezvous points, the road traffic situation, terrain difficulties, crowd control problems etc.

54. Where an ***off-airport** agency* has control (primacy / are in charge) of an off-airport aircraft accident site (which is the norm), the associated / appropriate (pre-agreed and issued) ***'Mutual Emergency Aid Support Agreement**(s)'* should have already (beforehand) pre-determined the basic 'ground rules' etc. e.g. to the effect of using equivalent ***on-airport*** procedures (and / or equivalent plans) as closely as possible in the ***off-airport*** situation. (Note: the latter is provided as an example only)

    Similar constraints to those documented for an ***on***-airport response might still apply, together with additional (potentially problematic) matters - some of which are mentioned in para 53 above

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Victim Management (Casualties [the Injured])

55. Assuming an ***on-airport*** **accident**, suitably trained / exercised ***AFS*** responders deployed (to accident site) may be assigned by the on-site ***'Operational Commander / AFS'*** to commence casualty clearance, triage & immediate medical care ops - as required. (Assuming that such AFS personnel can be operationally spared from their primary 'fire-fighting & rescue' duties)

56. As available, suitably trained / exercised responders from the ***Airport Medical Centre*** (AMC) will deploy to the accident site and commence / oversee 'on-site' casualty clearance, triage and delivery of immediate medical care ops. An ***'Operational Commander / Medical Services'*** will be appointed (typically the most senior [and / or experienced], available medic) - and (manpower permitting) an AMC liaison rep appointed and deployed to the ***'On-scene Commander's Mobile HQ'*** (upon latter's arrival 'on-site')

57. AFS etc. provided inflatable tents and / or equivalent facilities from other sources (e.g. airport buses with seats removed) should be erected / utilised as soon as possible - with regard to the triage / immediate medical care operation. Portable electric generators, air conditioning / heating (for the tents - as appropriate), ground sheets / cover, potable water, rubbish sacks etc. - should also be provided (as available / list is far from being exhaustive)

58. *Deliberately Blank*

59. Upon eventual arrival of the *zzzz* 'Hospital Disaster Medical Team' (part of the ***off***-airport DOHMS), the senior / most experienced doctor / medical person in said team will typically ***take over*** (from the equivalent AMC person) the role of *'Operational Commander / Medical Services'* - and an appropriate member of his / her team will take over from the AMC person (previously appointed as /medical liaison to the On-scene Commander's [on-site] Mobile HQ)

60. With clearance from the 'new' Operational Commander / Medical Services (as per last para above) - all / part of the AMC team (depending on total medical manpower required / available ***at accident site***) should relocate to the XIA airside **SRC** (**A**) and **CRC** (**A**) facilities, in company with ***uninjured*** survivors (passengers & crew ***respectively***). This team's primary role will now be medical support of the uninjured at those centres (***just in case*** some of them do, in fact, have injuries not detected earlier e.g. shock; smoke inhalation; internal trauma etc.)

61. The Operational Commander / Medical Services shall appoint a ***'Medical Transport Co-ordinator'*** from his / her team

62. The Operational Commander / Medical Services shall oversee the ongoing effective, efficient, expedient and co-ordinated operation of the ***entire*** on-site casualty collection, triage, immediate medical care and casualty evacuation (e.g. to local hospitals) programme - priorities being the saving of life, prevention of further injury and rapid removal of appropriate casualties to better medical care / conditions

    It is **VITAL** that careful tracking (typically via the Medical Transport Co-ordinator and / or other specifically appointed person[s]) is maintained re ***which*** casualties have gone ***where***, ***when***, in ***what*** medical state + ***how*** / in ***what*** form of transport (+ identification details of latter [e.g. 'number plates'; ambulance number; air ambulance registration etc.]). The ICAO '**triage tag**' system (or equivalent) should be used to facilitate such tracking (see App **F** - page 136)

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63. The Operational Commander / Medical Services will typically ***not*** become ***directly*** (i.e. 'hands-on') involved in either triage or immediate medical care functions

Note - Further to the above, an appropriate person should be assigned to co-ordinate the eventual collection and removal of all litter etc. at the above mentioned locations / facilities, to prevent the possibility of associated FOD

Victim Management

Uninjured Survivors / Survivors with Very Minor Injuries

64. Part of the triage process ***at*** / ***near the accident location*** involves appropriate 'triage tagging' (see last para, previous page) of ***uninjured*** (and ***very*** slightly injured) survivors and moving them to a separate, nearby area (reserved for this purpose specifically) known herein as the *'**Uninjured** Collection Area'*

65. The *'**Operational Commander** / **Aircraft Operator** ..... and / or his / her Local Rep'* (e.g. GHA for latter) shall call (e.g. via XIA deployed FCP / MICC) for appropriate transport to remove all ***uninjured*** etc. survivors from the 'Uninjured Collection Area', when so cleared by the 'appropriate authority'. Concurrently, he / she should (discretely) physically separate (or otherwise arrange for separation of) uninjured ***crew*** from uninjured ***passengers***

66. Deliberately Blank

67. Uninjured *passengers* should then be transported directly to the 'uninjured Survivor (***passenger***) Reception Centre - Airside' - SRC (A) facility. Uninjured *crew* should be similarly despatched (**BUT** - in ***separate*** transport) to the ***separate*** 'uninjured ***Crew*** Reception Centre - Airside' - CRC (A) facility

68. Where an aircraft accident involves an ***XIA based*** aircraft operator, the *Operational Commander / Aircraft Operator* will typically be provided by that same aircraft operator

69. Where an aircraft accident involves a ***non***-XIA based aircraft operator, the *Operational Commander / Aircraft Operator* may still be provided by that aircraft operator's staff (***if*** same is available locally) - but is more likely to be provided by an appropriate, locally contracted Ground Handling Agent - GHA (airline / aircraft operator representative) and / or possibly an appropriate representative from the XIA **A**irline **O**perator's **C**ommittee (if such exists)

70. The ***SRC (A)*** at XIA is located at: (Insert location & contact info here)

.....

71. The *alternate SRC (A)* at XIA is located at: (Insert location & contact info here)

.....

72. The ***CRC (A)*** at XIA is located at: (Insert location & contact info here)

.....

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At the SRC (A)

73. Upon arrival at the SRC (A), uninjured ***passengers*** will typically be provided with humanitarian, welfare, information etc. type support by the XIA '***Immediate Care Team***' (ICT) and others

74. For an emergency involving an XIA based ***aircraft operator*** - the latter will typically ***also*** deploy its local * '***Humanitarian Assistance Team***' (HAT) to the SRC (A) ASAP (if it has such a team - many airlines do not). Upon arrival, the HAT typically (but not always) takes a handover from the airport ICT - the latter's staff then returning to their normal, airport duties

    * Still (today) confusingly known by many other titles - most common of which are 'special assistance team' and 'family assistance team.' The preferred term (for all sorts of valid reasons) is 'Humanitarian Assistance Team'. For more info re this matter see definition of '***Special Assistance Team***' - page 27

75. Example '***information cards***' for use at such reception centres etc. (including use at the SRC [A]) can be found at appendix W (starts page 169)

76. Uninjured ***passengers*** are typically 'processed' at the SRC (A) by e.g. the ICT, HAT and others - involving (amongst many other matters) completion of the (4 in 1) '***Passenger / Victim Record Card - P/VRC***' (see appendix U - page 165)

    Similar applies to uninjured crew located at the (typically separate location) CRC (A)

    NB: Despite its title, the P/VRC is used for both passengers, crew ***and*** (if any) ground victims (see 'Glossary' [page 29] for definition of 'ground victim' - as required)

77. Correct completion of the P/VRC (with a copy provided to the Airport Immigration rep [who should be] present in the SRC [A]) should (amongst many other things) satisfy Immigration 'landing' requirements (e.g. clearance / re-clearance to enter 'the country') if the appropriate travel document(s) is / are not available to a victim e.g. due to the accident circumstances

78. *Deliberately Blank*

79. Uninjured passengers will typically receive a brief 'vital signs' medical check (typically conducted by AMC staff present) - to ensure that they really are 'uninjured'. If fire had been associated with the accident, a check for smoke inhalation injury should also be made. Any minor injuries found will be treated at the SRC (A) and / or the person(s) removed to AMC or hospital (as required). 'Emotional' support (as available)should also be provided, as required

80. AMC staff (or similar) shall keep appropriate written records of the checks etc. referred to just above. Persons refusing such checks etc. should be asked to complete an appropriate indemnity form accordingly (to be provided and retained by AMC staff)

81. *Deliberately Blank*

82. Customs staff should make appropriate arrangements for uninjured passengers to eventually reclaim their baggage (as available) without undue difficulty / red tape etc.

83. On eventual release from SRC (A), uninjured passengers will typically (but not always) transfer to ***aircraft operator*** (and / or latter's local rep e.g. GHA) responsibility e.g. for assistance reclaiming baggage (as required / available), re-uniting with appropriate persons (if not done already), assistance with what they wish to do next (continue journey; return to home) etc.

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84. At this stage, the aircraft operator and or latter's local rep (e.g. GHA) should also typically continue to provide humanitarian, welfare, information and similar services / support to their passengers and other, associated victims (whatever their status) and also to the latters' family, relatives and friends (**FR**)' - wherever in the world they might be (the latter [FR] having ***not*** been on board the accident flight [by definition], of course)

At the **CRC (A)**

85. The process at the CRC (A) is typically similar to that of the SRC (A) described just above. Main points to note:

- The flight crew (pilots) will almost certainly be subject to a detailed medical examination and an 'interview' with the Police and / or Air Accident Investigators - both of which might take place at a location other than the CRC (A)
- It is possible (in some parts of the world) that some / all crew might be 'detained' (e.g. imprisoned - legally or otherwise) by appropriate authorities - pending air accident investigation; due legal process etc.
- Legal Assistance should be made available to crew if so required. This should be arranged by the aircraft operator and / or on-site rep (e.g. the contracted GHA or similar)
- When uninjured crew are released from the CRC (A), the aircraft operator and / or on-site rep shall take measures to ensure (if possible) that they (crew) ***continue to be separated*** from uninjured passengers - and also (when cleared to landside) from any associated ***FR*** (including any MGFR) of ***any*** passenger. Said crew should also be 'protected' from the Media. Appropriate humanitarian, welfare, emotional and similar support should be provided, as required

Reminder: For more detailed info (including definition) re ***airport*** provided '**humanitarian assistance**', welfare etc. - see appendix **Y** (starts page **179**)

IMPORTANT NOTE / *OFF-AIRPORT ACCIDENTS*

Concerning ***off-airport*** accidents, it is strongly suggested that you (i.e. the interested reader) might NOW wish to take a look at (***separate*** document in this series) AEP Volume ***2B*** (pages 146 - 147) before returning to ***this*** document - and then reading further

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86. The dead should be triage-tagged accordingly

87. They (whether whole bodies and / or body parts) should then be left in their final resting place at the accident site - ***unless*** it is vital to move them for the purposes of 'preservation of evidence' etc. This is because the position and condition of the deceased at time of death might possibly offer valuable evidence / clues as to the ***cause(s)*** of the accident

88. Excepting for the above, the dead should ***only*** be moved (in general) from the final resting place - with the permission of the Air Accident Investigation Authority and / or the Coroner (Forensic Doctor / Medical Examiner or equivalent) and / or the appropriate Police agency

89. If it is ***essential*** to move the dead, each body / body part should (if possible / practicable / safe) be tagged and a corresponding and cross-referenced mark (e.g. stake / marker etc.) placed where the body / body part lay before removal. Photographs and / or sketches showing the relative positions of bodies / body parts to aircraft wreckage and / or ground features etc. should also be taken / made. Such bodies etc. should then be moved to a nearby '***temporary body holding area***'. (Note that actual circumstances 'on the day' may make some / none of the above possible)

90. The XYZ Airports Company should make arrangements to ensure that an adequate stock of body bags (e.g. *a minimum of 1,000* is recommended to cover hi-density seating Airbus A380 operations) is ***readily available for rapid delivery*** to accident location / wherever

91. Off-airport and Airport Police, XYZ Airports Company security etc. shall provide a high degree of security at any temporary body holding area(s)

92. When cleared for further removal by an 'appropriate authority', bodies / body parts will typically then be transported to the designated facility (usually termed '***temporary mortuary***'), the latter located at (TBA)

93. *Deliberately Blank*

94. Casualties who eventually die ***at / very close to the accident location*** (i.e. victims not killed immediately) should be moved (from the location where death occurred) to the temporary body holding area - prior to eventual removal to the temporary mortuary

95. Deceased victim identification (sometimes known as '***disaster*** victim identification (**DVI**) in the case of death caused e.g. by an aircraft accident), cause of death, reconciliation ('reuniting' of the deceased with FR), body (including body parts) removal and disposal, recovery and reconciliation of personal effects, religious / cultural / ethnic considerations, memorial services, monument erection etc. - are all likely to follow on in due course (possibly over a period of many months - possibly even longer)

96. Whilst 'government' agencies (national and / or regional and / or local) are responsible for much of the above in many countries / jurisdictions - many ***airlines*** also retain ***third party commercial*** (specialist) ***companies*** to provide all / most of what is required - as referred to in para 95 above (with appropriate permissions of course) e.g. where such government type interventions may not be possible, for whatever reason (note that 'least developed' and many 'developing' countries may **NOT** have the resources etc. to undertake such work themselves)

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Emergency Medical Supplies - ICAO Recommendation

97. ICAO Document 9137 ***'Airport Services Manual / Part 7 / AEP'*** recommends that the following medical supplies & equipment be **immediately** available from ***airport*** and / or ***very*** close-by ***external*** sources:

- 500 Triage Labels
- 100 Stretchers
- 10 Immobilising mattresses for backbone fractures
- 10 Backboards for backbone fractures
- 50 Splints (Conventional and / or Inflatable)
- 50 First Aid Kits (Typical Contents as per ICAO Document 9137 / Part 7)
- 20 Resuscitation Kits (Contents as per ICAO Document 9137 / Part 7)
- 3 Electrocardiograph type apparatus
- 3 Manual or Mechanical Respirators
- 10 Intravenous infusion packs (Saline or HAEMACELL) + 'giving' sets
- 3 Suction devices
- 2 ENTONOX analgesic cylinders & equipment - or equivalent
- 500 Body Bags or equivalent

98. ICAO Doc 9137 / Part 7 bench-marked against an aircraft the size of a *Boeing 747* when making the above recommendations. As XYZ International Airport operates ***Airbus A 380*** aircraft, consideration should be given by XYZ Airports Company to:

- Procuring equipment listed above and storing at a suitable, ***on-airport*** location - ***and***
- Increasing above figures by up to **100%** - to account for hi-density seating A380 operations (don't forget - there might be [***additional***] ***ground*** victims [see definition page ***29*** if so required] to ***also*** account for)

99. *Deliberately Blank*

100. *Deliberately Blank*

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Management of Meeters & Greeters / Family, Relatives & Friends (MGFR)

MGFR located at XIA Airport

101. The following applies to the anticipated situation / response (for / to) MGFR waiting (for what turns out to be 'the accident flight' [for the purposes of this para 101 and para 102 below) ***in*** *(or very near to)* ***the appropriate Terminal ARRIVALS Hall***(s) at **XIA**

102.

- * A suitably worded ***PA*** will be made (targeted at 'relevant / potential' MGFR [i.e. those FR & others waiting {to meet the emergency flight} in the appropriate XIA Terminal Arrivals Hall and / or close-by airport areas]) - asking them (MGFR) to ***'make themselves known'*** to the uniformed (or otherwise clearly identifiable) aircraft operator and / or airport and / or other, equivalent staff (e.g. GHA; Airport Police etc.) - who will have been rapidly deployed to the most appropriate airport location(s) - where said MGFR are most likely to assemble

  * Alternatively - and where an airport Terminal(s) is so equipped, relevant / potential MGFR should be requested (in the associated PA message[s]) to report to a nominated ***airport information desk****(s)*. All such message should also be simultaneously displayed on electronic '***flight information display systems*** (**FIDS**') (as available) located in the relevant 'arrivals' / other appropriate areas - of the airport concerned

- Responding MGFR are then confirmed or otherwise (by such responding staff etc. - using a variety of methods) as being 'genuine' or 'potentially genuine' i.e. thought to be directly associated in some way (actually or potentially) with certain persons (victims) believed to be / have been on board the accident flight. (The availability [to such deployed, responders] of the ***most up to date version*** of the accident flight's crew and passenger lists is ***essential*** to this procedure working as it should)

- 'Genuine' / 'potentially genuine' MGFR are then moved in groups, 'under escort', to the XIA provided 'Meeters & Greeters / Family, Relatives & Friends Reception Centre (**FRRC**)'

  Insert locations of primary and back-up XIA FRRCs here:

  ..... (Primary FRRC Location)

  ..... (Secondary FRRC Location)

- At the ***FRRC***, MGFR will be provided with humanitarian, welfare, information etc. support - administered by e.g. the airport's volunteer (trained and exercised accordingly) '***Immediate Care Team***' (ICT) and / or equivalent (also trained & exercised) support teams - as available

- For an example 'information card' for MGFR etc. use at the FRRC - see App W (page **170**)

- For an emergency involving an ***XIA based aircraft operator*** - the latter ***also*** typically deploys its own ***'Humanitarian Assistance Team'*** (HAT [if it has one - many do not!]) to the XIA FRRC ASAP. Upon arrival, the ***HAT*** typically (but not always) takes a handover from ***the airport's ICT*** - the latter's members then typically (but not always) returning to their 'normal' / or otherwise re-allocated ***airport*** duties (as appropriate)

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- Medical care (if needed) shall be provided at the FRRC by AMC staff (or equivalent e.g. airline provided medical staff; government medical / health agency personnel etc.) as required e.g. for treatment of shock / onset of traumatic stress etc.

- MGFR are then 'processed' (by the ICT and / or HAT and / or whoever) - typically including (amongst other things) completion of the XIA ***'Friends & Relatives Enquiry Card'*** (**FEC** - see appendix U - page **164**)

- MGFR at the FRRC (having no valid association with accident victims) will be asked to leave

- Where possible and in due course, the ICT / HAT / whoever - shall provide MGFR with on-going ***info updates*** as to the status, locations etc. of the persons they are waiting to meet

- Where relevant / possible (and in due course), attempts will be made to ***re-unite*** MGFR with the person(s) (victim[s]) whom they were waiting to meet. For uninjured victims, this might typically take place at the airport (immediate or shorter term re-uniting) - usually conducted at a pre-designated location known herein as the ***'Reuniting Area** (Airport)' - **RA (A)***

  State Location of the XIA RA (A) here: .....

- Appropriate arrangements should be made for ***medium to longer term*** re-uniting, if immediate and / or shorter term re-uniting at the airport is not possible / is not complete. This will typically be overseen and conducted ***off-airport*** by the accident flight's ***'aircraft operator and / or local representative**(s)'*, aided by various local agencies (e.g. Police; Volunteers; Faith Reps; Hospitals; Mortuaries; Undertakers; Hotel staff etc.) as appropriate

- Re-unions with **uninjured** victims will typically take place at a suitable, local hotel(s)
- Re-unions with **injured** victims will typically take place at a local hospital(s)
- Re-union with **deceased** victims will typically take place at local mortuaries / funeral homes

- For a reasonable period (e.g. where associated Search & Rescue ops might continue), the ***'aircraft operator** / **local rep'*** and *'others'* might continue providing humanitarian, welfare, info etc. support to MGFR (amongst other 'types' of FR), ***after*** they have left the airport. For example, for FR living locally to XIA (including MGFR type FR) and / or other FR who eventually choose to travel to the XIA area from non-local locations worldwide - the ***'aircraft operator / local representative'*** might set-up / pay for / operate etc. a dedicated facility - typically known today as a ***'Humanitarian Assistance Centre - HAC'***. The latter allows for provision of longer term support etc. for those wishing to use it / receive same

  The HAC will typically (but not always) be located in a suitable hotel(s). ***Non***-local FR will typically be accommodated, supported etc. in the HAC. ***Local*** FR may do likewise - but also have the option of only attending the HAC as required e.g. for the daily 'FR Briefings' etc.

- Lastly, it is likely that an FRRC ***and*** a HAC ***might*** also need to be set up, manned, operated etc. at the ***departure*** airport(s) of an accident flight - even though the accident did not occur there (due the latter being the first location that many FR [living locally or *relatively* local to such **departure** airport{s}] will choose to go for information). Note that for multi-sector flights (e.g. airports A to B to C etc.) more than one departure airport will be involved

For more detailed info (including definition) re ***airport*** provided ***'humanitarian assistance'***, welfare etc. - see appendix Y (starts page **179**)

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IMPORTANT NOTE - *OFF-AIRPORT* ACCIDENTS

If not already done, see (*separate* document) AEP Volume **2B** / pages 146 - 147 **NOW** – before returning here

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Strategic &**Tactical** (**GOLD** and **SILVER**) - ***Command, Control, Co-ordination & Communication*** (C4)

On-airport / *Aircraft Accident or Incident*

103. Responsibility for the overall (strategic) ***airport*** operator ***C4*** function for an aircraft accident / incident type crisis occurring ***on-airport*** at XIA - typically lies with a designated, senior XYZ Airports Company manager - functionally known herein as the ***'Overall Commander'***

104. The latter typically operates from the XIA ***'Emergency Operations Centre'*** (EOC) located at:

.....

With the backup / alternate XIA EOC facility being located at:

.....

105. The Overall Commander will be nominated 'on the day' from a core team of trained, exercised and suitably experienced XYZ Airports Company senior managers (typically Vice President / General Manager / Equivalent grade - or above) - with a ***minimum*** of two persons initially chosen to cover 24 hour emergency response ops (e.g. via 12 hour [back to back] shifts)

106. For AEP related ops specifically, it is not unusual for the Overall Commander to be responsible for ***both*** the *strategic* ***and*** *tactical* aspects of airport related **C4** (leaving on-site ***[operational]*** C4) to the ***On-scene Commander***, the ***Operational Commanders*** and equivalents etc.)

Note, however, that in some countries / circumstances the ***Overall Commander*** might exercise *tactical* (SILVER) C4 **only**, leaving 'strategy' (GOLD) C4 to the airport's (***separate***) **top** management team - the latter typically operating from an appropriate facility near to the airport EOC and / or from a pre-designated ***off-airport*** location, co-located with other (***non***-airport operator) GOLD commanders involved (as appropriate)

The response *strategy* chosen 'on the day' typically includes the overarching direction, co-ordination, support, resourcing etc. of the various, participating emergency response agency operations, - with the objective of ensuring the success of the subordinate and associated *tactical* and *operational* responses

107. The team operating / running the airport EOC (under direction of the Overall Commander) typically represents all vested interests in the ***specific*** emergency concerned e.g. for ***on****-airport* aircraft accident type situations, this team will typically have representation from the following areas - depending on actual circumstances 'on the day' (NB: List is ***not*** exhaustive):

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- Air Traffic Services
- Airport Fire & Rescue Service - AFS
- Airport & Off-Airport Police
- Airport Safety & Security
- Airport Medical / Ambulance Service - AMC
- XYZ Airports Company - Terminals
- XYZ Airports Company - Airside (Airfield / Ramp / Apron)
- XYZ Airports Company - Engineering (Mechanical, Structural, Electrical etc.)
- XYZ Airports Company - Logistics / Procurement
- XYZ Airports Company - Crisis Communications (PR / Media Response)
- XYZ Airports Company - ICT Department / Business Unit
- XYZ Airports Company - Legal ,Finance & Insurance Departments / Business Units
- Aircraft Operator and / or Local Representative (e.g. GHA)
- XIA - Local Airline Operators' Committee
- Ground Handling / Supervisory Agent(s)
- Airport Customs / Immigration / Port Health
- Appropriate representation from Civil Defence / off-airport emergency services
- Appropriate representatives from other off-airport Mutual Aid / Support agencies
- Appropriate representatives from Faith / Charity / Voluntary etc. support agencies
- * Any other representation as appropriate to accident circumstances 'on the day'

* Depending on the location and / or severity and / or type of emergency, other agencies might also attend the XIA EOC - e. g. Navy, Coastguard, Harbour Master etc. for an accident occurring at sea; relevant Government department representation; security forces (for unlawful interference) etc.

108. For ***other*** types of ***on****-airport* emergencies ***not*** related to aircraft, the most suitable person, by dint of seniority, training, background, experience etc. - shall be nominated as the Overall Commander - supported by an appropriately constituted EOC team e.g. for a security related crisis, a suitably senior, specialist officer from the Airport or Off-airport Police (or possibly off-airport specialist security services / military etc.) might be so nominated

For a Public Health type crisis, a suitably senior, specialist and experienced medical officer from off-airport DOHMS / equivalent might be so nominated etc.

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***Off-Airport* Emergencies**

109. An appropriate person shall be nominated as Overall Commander (or equivalent term), based on existing protocols established in the appropriate **Mutual Aid Emergency Support Agreements** - or else as required by actual circumstances 'on the day'. Such person is ***unlikely*** to be appointed from XIA staff / personnel

110. Whilst XIA EOC will almost certainly be activated for such emergencies, the location from which ***off-airport C4*** will typically be directed /managed etc. will be governed by existing protocols (as established in the appropriate Mutual Aid Emergency Support Agreements and / or associated SOPS) - or else as required by actual circumstances 'on the day'

*Command, Control, Co-ordination & Communication (C4) - **Reporting Chain** in use **at XIA***

111. For ***aircraft*** etc. accident type emergencies occurring ***on-airport*** / in the *very close* vicinity:

- Operational Commanders report to the On-scene Commander
- The On-scene Commander reports to the Overall Commander
- The EOC team reports to the Overall Commander
- In ***some*** circumstances, the Overall Commander might be required to report to an associated and appropriate GOLD Commander (typically [but not always] located ***off-airport***)

112. For ***security*** related incidents, particularly those concerning 'unlawful interference' and similar - a senior and suitably trained and / or experienced officer from the XXX ***security services*** or ***military*** etc. is expected to be appointed - and will have ***overall*** (absolute) **C4** of the situation

In such circumstances, the specific set up and manning of the XIA EOC shall be primarily related to matters concerning the ***airport*** itself (rather than direct handling of the security crisis) - whilst also providing full support to the aforesaid commander having overall (absolute) charge of said security situation

Note: As already mentioned herein and very generally speaking, there are two types of crisis / emergency / incident ***C4*** systems in use around the world i.e. the '***GOLD*** / ***SILVER*** / ***BRONZE***' system.....and the '***Incident Command System*** - **ICS**' (a sub-component of the '***National Incident Management System***' - NIMS). Most others are typically adaptations of one or the other of the above. For more details, follow below link:

www.aviationemergencyresponseplan.com/information

When this webpage opens, scroll down the list of info articles and click on the one entitled:

* **Information Article** - Typical **Crisis Response Command & Control Systems**

The C4 system used at / for XIA (in ***this*** guideline document i.e. the document you are reading now) is loosely based on the GOLD / SILVER / BRONZE system (e.g. as used for real in UK, Ireland, UAE, Oman and some other countries / jurisdictions)

Note again that the 'Incident Command System' is primarily (but not exclusively) used in the USA

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Some Typical Requirements *- re an 'Ideal' Airport Emergency Operations Centre (EOC)*

113. When planning the set-up of an airport EOC, consider the following (list is ***not*** exhaustive):

- Ideally located ***on-airport***, in a fixed and secure location, overlooking the airport movements area(s) - including any ***i***solated ***a***ircraft ***p***arking ***p***osition(s) (the latter [IAPP] is particularly important for security related crises)
- Have easy and quick access from ***both*** airside and landside at the airport
- Be of a size appropriate to its role and manning requirements
- Be equipped appropriately & adequately (particularly with ICT etc.)
- Be equipped appropriately & adequately (stationery, consumables etc.)
- Be equipped appropriately & adequately (e.g. furnishings; fixtures & fittings etc.)
- Be '24H ready to go' - or (if not possible / required) - capable of being set-up in a ***very short timescale*** (e.g. less than 30 minutes during airport operating hours)
- Be adequately 'climate controlled' (e.g. heating; air conditioning etc.)
- Have a reliable 'no-break / uninterrupted electrical power supply system (UPS)'
- Toilets, catering, rubbish collection etc. - all easily & quickly available / provided
- Have other resources, admin and business continuity type support - as required

Important Note

Before leaving the subject of '*strategic* C4' the reader is referred to '***Important notes 1 and 2***' found on page 267 of (***separate*** document) AEP Volume 2B - 'Emergency Response Checklists'

The above refers to the 'C4 difficulties' which will be encountered by any airport responding to a major emergency - in the time period ***BEFORE*** the associated ***EOC*** becomes operationally functional

The notes also explain that such airport ***might*** need to ***concurrently*** manage / respond to any ***on-airport*** emergency - possibly from 3 different aspects i.e. the emergency response itself **+** any associated, disruption response (e.g. accident closes the airport [or, at least, part of the airport]) **and / or** any normal ops still taking place (e.g. airport ***not*** closed due adequately displaced parallel runway being available in conjunction with adequate AFS resources also being available etc.)

Lastly, the most appropriate (possibly the '***only***') solution to such 'difficulties' is also suggested in those same notes

(After reading the above page of Vol 2B - please return here)

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Operational (BRONZE) Command, Control, Co-ordination & Communication (**C4**) Ops

All ***operational*** crisis response units, whether provided by ***on-airport*** and / or ***off-airport*** resources / agencies etc. - are expected / requested respectively to produce and document their own, (independent / separate) detailed procedures and checklists, (based on this XIA AEP together with their ***own***, ***specific*** requirements), when responding in support of an XIA / XIA related Aircraft Accident / Incident - or similar severity event

Reminder: If necessary - see again 'Note' found at the bottom of page 66

On-airport */ Aircraft & Other Types of Accident or Incident* (**Except** major ***security*** type Incidents)

114. The ***'On-scene Commander'*** shall direct / oversee all subordinate, *operational* (**BRONZE**) *C4* activities, when responding to all types of ***on****-airport* emergencies

115. He / she shall be the most appropriate person readily available 'on the day' - based on skill, experience, knowledge etc. - in directing / overseeing the operational crisis response required

116. He / she will operate from the deployed XIA ***Mobile Incident Command Centre*** (MICC) vehicle (or equivalent mobile facility) - typically located at or very near to the emergency site itself

117. Subordinate '***Operational Commanders***' shall be responsible for directing their ***own*** specific, specialised operations e.g. fire and rescue; medical services, policing / security, aircraft operator etc. - under oversight of the On-scene Commander. They shall also (each) typically provide a specialist rep to the on-site MICC (or equivalent mobile facility) - if available / as appropriate to actual circumstances 'on the day'

118. The most appropriate *Operational Commander* present shall ***temporarily*** assume the role of *On-scene Commander* - if circumstances 'on the day' so require. He / she will typically (but not always) be the senior AFS officer present and will oversee ***operational*** / ***bronze*** *C4* from his / her fire and rescue / similar vehicle (latter known herein as the 'XIA ***Forward Command Post*** [FCP]')

119. Subordinate Operational Commanders report to the On-scene Commander

Off-Airport

120. Operational C4 for off-airport situations will generally be governed by the appropriate ***Mutual Aid Emergency Support Agreements*** in place - or else as required / agreed etc. by actual circumstances 'on the day'

Security *Related Incidents*

121. Security related incidents typically lead to the appointment of a ***specialist*** On-scene Commander together with ***specialist***, subordinate Operational Commanders - typically sourced from e.g. the appropriate off-airport police, security and / or military services - supplemented by other, appropriate staff, possibly including from the airport and the surrounding community

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Radio & Similar Communications Plan

122. A clear, concise, co-ordinated, documented, current, trained and exercised, fit for purpose (***emergency*** / ***crisis*** response) ***communications plan*** is vital to the successful response to any XIA ***on-airport*** emergency - otherwise noise level, poor radio telephone (R/T) discipline, incorrect frequency use, ignorance etc. - ***will*** quickly lead to utter confusion on the various emergency radio nets in use

123. The communications plan shall also account for the communications needs of ***off-airport*** agencies and how same might be best integrated with those in use at XIA - ***and vice versa***

124. At its simplest, the emergency response communications plan should enable direct and discrete communication between the ***Overall Commander*** (wherever located) and the ***On-scene Commander*** (located MICC or equivalent facility). Subordinate ***Operational Commanders*** should also make use of this discrete radio net as available and as required

125. Additionally and where available / possible, subordinate Operational Commanders should ***each*** have their own (separate) discrete radio net used only by the agency for which the subordinate Operational Commander is responsible. However, such discrete nets ***can*** be shared between several responding agencies where e.g. efficiencies can be made - but only in circumstances expected to cause no undue risk of confusion / degraded comms performance

126. ***Adequately trained, exercised etc. 'liaison' personnel*** placed by subordinate Operational Commanders in the XIA EOC and / or MICC and / or FCP (and / or equivalent facilities) - should be provided with suitable radio comms equipment and plan(s) (as appropriate) so as to permit them direct and easy access to the appropriate Operational Command radio net(s)

127. All radio communications used should be backed up by at least two alternative communication systems e.g. secure mobile (cell) phone; secure satellite phone; secure email system; secure social media system(s); secure SMS / text; deployment of human messengers / runners etc.

128. ***Mutual Emergency Aid Support Agreements*** shall include and reflect the appropriate radio and other communication plan(s) procedures, details etc. as required

129. For more information on this subject, see ICAO Doc 9137 / Part 7 - Chapter 12. See also Appendix P (see page **150**) of this document (i.e. the document which you are reading now)

Aircraft Operator

130. Whilst aircraft operators (and / or their local reps) may (and should) have their own ***'airline'*** emergency response plans ***specific to XIA***, it is imperative that all such 'airline' etc. plans be 100% co-ordinated ***beforehand*** with the ***XIA AEP*** - e.g. in order that responding aircraft operator personnel (and / or their local reps e.g. GHA) know which crisis response actions are their own responsibility; which belong to the airport / others; which need to be shared etc.

131. Similarly, any ***separate Ground Handling Agent*** emergency response plan(s) for ***XIA*** (if any) must be co-ordinated with the XIA AEP and, furthermore, if the GHA is representing an aircraft operator at XIA - with that specific aircraft operator's emergency response plan for its XIA station

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132. ***Aircraft operators*** and / or their ***local representatives*** (GHA etc.) are typically responsible for the following during (associated) aircraft accident type emergencies at, near or otherwise related to XIA - as appropriate to actual circumstances 'on the day':

- Deploying a suitably experienced ***aircraft operator*** (and / or local rep e.g. ***GHA***) person to the actual accident location, to act as 'general liaison' and provide associated, 'expert' representation. This person should ideally have an airline '***airports services / ground operations***' (e.g. traffic / ramp / terminal etc.) type background. He / she shall assume the title '***Operational Commander / Aircraft Operator***' - and typically reports to the '***On-scene Commander***' insofar as any 'on-site' etc. XIA emergency response effort is concerned

  Concerning the 'accident flight', the 'Operational Commander / ***Aircraft*** Operator' typically takes (with him / her) to the local accident location (list is not exhaustive):

  - The ***latest*** Passenger Name List (Passenger Manifest) available (updated as required)
  - The ***latest*** Crew Name List (General Declaration) available (updated as required)
  - Quantity of fuel estimated to be on board at time of accident
  - Details of Dangerous Goods carried
  - Details of baggage, cargo, mail, livestock, human remains etc. carried
  - Appropriate comms equipment & emergency contacts list, relevant airline documentation, protective and / or identifying clothing, appropriate passes & permits etc.

- Also deploying a suitably qualified, experienced and appropriately equipped ***aircraft engineer*** (if available and ideally 'qualified' [in some valid way] on the accident aircraft type) to the accident location, in order to offer technical assistance to the On-scene Commander, (and eventually) to the Air Accident Investigation Team etc. This aircraft engineer should ideally be equipped with appropriate tools, sample bottles, comms, documentation (including appropriate sections of accident aircraft type's manuals; 'cut here for access' type diagrams; relevant checklists etc.) and the required protective and / or identifying clothing. He / she should also be tasked with making an ***initial*** assessment of the potential factors governing removal / salvage of the accident aircraft / aircraft wreckage - as appropriate

  The aircraft operator's local (i.e. at XIA in this case) ***airports services / ground ops*** person / rep - together with the ***aircraft engineer*** - should ideally deploy to the accident location ***together***. Both persons are known collectively at XIA as the 'xxxxxx Airline **Crash Site Team**' (**CST**) - where 'xxxxxx' refers to the name of the aircraft operator(s) involved

- Sending a suitably experienced and senior aircraft operator (and / or equivalent local rep e.g. GHA) person to the XYZ Airports Company ***'Emergency Operations Centre'*** (or equivalent facility) to represent said operator. This person should ideally have an airline 'airports services / ground operations' (e.g. traffic / ramp / terminal etc.) type background

- Deploy airline's ***humanitarian*** (family / special) ***assistance team*** - as available / appropriate

  Note 1 - see also (FYI) definition of '**Airport** Operator - **Immediate Care Team** - **ICT**' - page **20**

  Note 2 - whilst many ***airlines*** have and deploy their own humanitarian assistance teams (HAT) in support of an associated, major ***airline*** emergency / crisis - ***most*** ***airports*** (as at 2023) ***do not possess equivalents of the airline HAT*** (i.e. they simply do ***not*** have an ***airport ICT*** capability [see page **20** if required] or anything remotely similar) (See also [again] Appendix **Y** - starts page **179**)

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Lack of an *airport* ICT (immediate care team) **is a *very* significant limitation to the effectiveness of any associated airport emergency / crisis response operation** e.g. who will provide ***immediate*** humanitarian assistance to uninjured accident victims and / or their associated families, relatives and friends ***at the accident airport*** - in circumstances where e.g. ***the airline HAT*** needs to deploy (to said accident airport) from the other side of the world / similar 'worst case' (but reasonable) scenario?

- Set up and operate an aircraft operator ***'Command & Control Crisis Centre'*** - possibly located at XIA (but more typically at airline HQ location - which could be anywhere in the world). However, there should at least be an airline representative 'presence' of some kind ***at XIA*** itself (e.g. provided by an associated GHA; 'local' Airline Operators' Committee [AOC] etc.)

- Set up / operate an aircraft operator '***Emergency Call / Contact / Info Centre***' (ECC) - which does not (***almost certainly will not***) need to be located at XIA / in XXX. The purpose of such ECC is to deal with the various ***airline*** aspects (i.e. ***not*** airport aspects) of calls from the 'public' etc. - concerning the crisis. The ECC will typically be located at / near the involved airline's main HQ. Note that ***if*** (***very*** rarely) the ***airport operator does*** have the capability to ***also*** operate its own ***ECC*** - then a significant degree of communication, co-ordination and consistency etc. (between the 2 ECCs) will be absolutely **ESSENTIAL**

  Note - many ***airlines*** operate ECCs (directly or via a third party, specialist provider) at time of major crisis - and train / exercise for use of same accordingly. For the very, very few ***airports*** which also operate ECCs at time of major crisis - the **essential** communication, co-ordination and consistency procedures (between ***airline*** and ***airport*** ECCs) referred to just above - should be effected as part of emergency / crisis response ***PRE-planning*** - and ***jointly trained*** for and ***exercised*** accordingly

  The same applies to ***airport ECC ops*** where any ***OTHER*** responding agency (i.e. in addition to the accident airline) also operates the equivalent of an ECC e.g. in Germany, Ireland, Oman, UAE and UK - ECC equivalents can be and are operated by national and / or local **Police** forces. In a small number of other countries, one or other level of an appropriate government etc. service might do likewise

- In conjunction with the XYZ Airports Company, Airport Police / Security, GHA, Airport Immigration and Customs, ICT etc. - the ***aircraft operator*** (and / or local rep e.g. ***GHA***) shall assist with the set up and operation of the ***XIA*** ***'Uninjured Crew Reception Centre - Airside'***; the ***'Uninjured Passenger Reception Centre - Airside'***; the ***'Meeters & Greeters / Family, Relatives & Friends Reception Centre - Airport'*** and the ***'Reuniting Area - Airport'***

- The aircraft operator will typically continue to provide for the welfare of aircraft accident victims and their FR (as appropriate and 'up to a point') - ***after*** they leave the ***accident airport's jurisdiction*** (or otherwise as appropriate to actual circumstances 'on the day')

  Note - where an ***airline*** (aircraft operator) has minimal / no staff of its own at a regular destination airport (a common situation), it typically engages the services of a local ***Ground Handling Agent*** (GHA) to provide local handling of its operation. Consequently, ***GHAs*** must ***also*** be prepared to assist / represent client ***airline's*** local emergency / crisis response interests, as already described above

  Where an ***airline*** in emergency at ***XIA*** has **NOT** engaged such ***GHA*** services ***and is unable to provide them itself*** - the ***airport operator*** (XIA) will typically 'request' (i.e. direct) an appropriate XIA based ***GHA / GHAs / whoever*** to provide such services (on behalf of the accident / incident airline) instead. Note that payment / reimbursement etc. may be required (by the accident airline) for such services

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Matters such as 'who reimburses who for what' - should hopefully have been adequately addressed beforehand - as part of 'pre-planning' accountabilities?

Note further that ***GHAs*** typically also have their ***own specific*** responsibilities (over and above what has been described just above) for an on-airport or local vicinity airport emergency / crisis. Further info concerning same can be found in (separate documents in this series) - AEP Volumes ***2A*** and ***2B***

Crisis Communications

PR / Media / Internal Comms; Website; Social Media etc

133. The XYZ Airports Company ***Corporate Communications / PR Department*** (or equivalent business unit), in close conjunction / co-ordination with similar reps from appropriate agencies (e.g. Civil Aviation Authority, involved Aircraft Operator, Police etc.) - is responsible for the collection, preparation, dissemination / delivery etc. of crisis communications type information (as cleared by airport senior management) - re any major crisis ***involving XIA***

134. Such information shall primarily be disseminated to relevant Government departments, the 'public' and the 'mass Media' (***external*** crisis comms) - but also circulated within the internal departments of the XYZ Airports Company (***internal*** crisis comms) as required

135. All press releases / press statements etc. should reflect the mutually and jointly agreed position of ***all*** affected / involved parties (stakeholders) and should be pre-cleared by an appropriate representative of the most senior management within ***each*** of those parties - before final release into the public domain

136. The XYZ Airports Company should ***pre-identify*** the location (and name it in ***this*** AEP) from where it is anticipated that press conferences (jointly managed by all parties concerned with a major crisis at and / or affecting XIA) will be held. All and any ***pre-crisis*** preparations shall be implemented so as to ensure that the chosen facility will always be fit for its anticipated purpose 'on the day'. Such preparations shall be ***outlined in this AEP***

137. XYZ Airports Company shall ensure that appropriate staff receive the associated crisis comms training / exercising required to adequately carry out their responsibilities

138. For further amplification of the crisis communications related roles and responsibilities of the XYZ Airports Company during crisis, see the ***'Corporate Communications / PR Department - Crisis Communications Plan'*** at Appendix **T** (see page **162**)

XYZ International Airport - Emergency Call / Contact / Information Centre

139. A commercial ***airport's*** 'normal business telephone system / telephone exchange' etc. (i.e. both telecomms equipment, software, operating staff etc.) ***is extremely unlikely*** to be able to adequately cope with both the number and type of inbound telephone calls - as might be generated by an (airport associated) major (mass fatality) ***aircraft*** accident. This situation (insofar as it concerns said airport) is not expected to improve over the first day or two following the crisis - despite the fact that the '***accident airline***' (aircraft operator) itself ***might*** (repeat - ***'might'***) have set up and 'publicised' its ***own*** (***separate***) emergency call / contact centre operation - probably operating from 'elsewhere' in the world i.e. ***not*** at XIA (unless said 'accident airline' is main based at XIA)

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140. High volumes of telephone calls to the 'accident related ***airport***' should be anticipated (e.g. initially in the low thousands - but, quite feasibly, considerably more with the passing of time)

Such calls broadly fall into four main areas i.e.

- Requests about the operation of the airport re the 'normal business' situation (in the main from the general public - i.e. no ***direct*** involvement re the accident)
- Calls from the 'media' etc.
- Calls from regulatory authorities (accident investigation; aircraft salvage/removal etc.)
- Calls from persons (public etc.) having a ***genuine or perceived interest in the accident itself*** (e.g. from FR of those who ***might*** have been on board the accident flight)

141. Any major, commercial ***airport*** in such situation has a duty to ***adequately*** deal with (pre-plan for) all such telephone calls - e.g. for calls from potential FR, an associated 'intercept' message could be placed on all inbound calls to the airport telephone exchange, re-directing such calls to e.g. the accident ***airline's*** emergency call centre number(s) ***if appropriate*** - and if said airline agrees. For other calls, the ***airport*** should be prepared to invoke its own ***pre-prepared plans*** to ensure operation of a reasonably effective and efficient telephone service in such circumstances. The latter 'directly translates' as 'more telephones (lines and equipment); more (trained and exercised) supervisory / operating telephone staff; an adequate, associated operating system (software); documented procedures, checklists, protocols etc.

142. The immediately above 'requirements' typically involve an airport running an expanded / extended (emergency) telephone call centre operation itself - **AND / OR** procuring such services from an appropriate (external) 3rd party provider. As the latter providers are relatively 'rare', care should be taken that (if this 3rd party option is used) said provider is ***NOT*** also potentially contracted to respond on behalf of any airline which operates to / from XIA

143. A further factor for ***airport*** consideration is that the accident ***airline*** itself may ***NOT*** be capable and / or have the resources etc. to run (or contract out) its own ***emergency call / contact / info centre***. If the ***accident airport*** also has no such capability, the blame for same (lack of communication / info provision etc.) will be shared by both the airport and the airline - with consequent (potential) detrimental effects on brand, image and reputation - not to mention an unacceptable disservice to accident victims and their FR. Furthermore, **airline, airport etc. staff at ALL levels** (grades) **can today be personally** (and legally) **held accountable for such potential negligence** (e.g. this might 'translate' as prison; extremely large fines etc.)

144. In conclusion, and for a variety of valid reasons, an ***airport operator should*** have the capability to effectively and efficiently handle both the number and type of telephone calls anticipated - as related to a major aircraft accident, associated in some way with said airport. Not doing so could result in significant damage to brand, risk and reputation post a major crisis - together with the eventual (and realistic) prospect of legal action taken against appropriate airport staff

Note - the above concerns ***telephone*** communications. ***Airports*** should similarly plan for ***internet / website*** and ***social media*** type comms. Examples of real ***airports*** operating such emergency response telephone and ICT systems include ***Frankfurt*** and ***Paris CDG*** - amongst a ***very*** small number of others

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Air Accident Investigation

145. For civil aircraft accidents within XXX (Country), the associated Civil Aviation Authority - CAA (or equivalent) has a statutory responsibility for the preservation of the accident aircraft / aircraft wreckage, so that the cause(s) of the accident might be better investigated and reported on, with a view to preventing further accidents. This responsibility and the associated investigation is typically delegated to the CAA's '***air accident investigation agency / bureau / board / unit***' etc. (latter has many different 'titles' in use around the world)

146. Accordingly, no accident aircraft or wreckage must be disturbed or interfered with, unless absolutely necessary to e.g. extricate casualties, prevent fire or further damage, for reasons of safety and / or security etc.

147. When dealing with fatalities / human remains etc. - the provisions of Section 2 herein ('Victim Management - Fatalities at the Accident Site' - page **59**) should be reviewed and complied with

148. Particular precautions must be taken to avoid disturbance of anything in the cockpit area (as applicable). Should anything be so disturbed, the occurrence must be accurately recorded and brought to the attention of the air accident investigation agency, without delay

149. After fire and rescue ops have been completed, security procedures at the accident location should be rigidly enforced such that only specifically authorised persons are able to access the aircraft or aircraft wreckage itself. At this point ***full control of all operations at the accident site*** is typically ceded to / assumed by the involved air accident investigation agency/ies

150. All personnel operating at or in the vicinity of the accident location must wear appropriate PPE and display appropriate identification

151. It is highly desirable that all persons with potential emergency roles inside the ***inner cordon*** of any air accident location - attend initial and recurrent '***Blood Borne Pathogen***' training - e.g. this is a **mandatory requirement** for accidents occurring in the ***USA*** and some other countries

Removal of Crashed / Disabled Aircraft

152. The involved ***aircraft operator*** is typically responsible for the removal / recovery / salvage of a (its) crashed or disabled aircraft. This shall apply to any location within XXX (country)

153. Aircraft operators are also responsible for producing appropriate '***pre-crisis***' documented plans and procedures for the removal of crashed / disabled aircraft at XIA. Such plans / procedures shall be filed (and kept current) with, and approved by, the XYZ Airports Company

154. It is recognised that the above tasks might be beyond the resources of many aircraft operators which operate at XIA. Accordingly, XYZ Airports Company has entered into an associated contract with the Aircraft Engineering Department of XIA based '**ABCX Airways**' (airline) concerning this matter

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155. If the accident flight's aircraft operator is unable or unwilling to remove any crashed / disabled aircraft using its own resources - and / or within a reasonable timescale as decreed by XYZ Airports Company at the time of the crisis, then the XYZ Airports Company shall request ABCX Airways (see para 154 just above) to remove the aircraft

156. Where the procedure described immediately above is enforced, all charges and costs incurred by the XYZ Airports Company, ABCX Airways and any other parties involved - shall be borne / reimbursed by the involved aircraft operator(s)

157. Furthermore, whilst the ABCX Airways operation (as aforesaid) is expected to be performed with due care and attention, the XYZ Airports Company, ABCX Airways and any other 3rd parties involved - shall be considered to be indemnified by the involved aircraft operator regarding all damage / further damage caused to the aircraft, persons etc. - however caused, excepting in proven cases of gross negligence or wilful misconduct, by an appropriate party

All aircraft operators at XIA shall sign an appropriately worded legal agreement with XIA - reflecting what has been described in paras 155 to 157 above. Such signature will be conditional to any airline operating (or applying to operate) at XIA

158. The aircraft operator can also ***independently*** request assistance concerning aircraft removal (e.g. from ABCX Airways, the **IATP** or any other appropriate party), if so required

159. For further amplification of the above see - ***'Aircraft Removal / Recovery / Salvage Plan for XIA'*** - at Appendix **Q** to this document (starts page **151**)

Airport Emergency Plan Exercises / Tests - Modular System

Note: The above (referred to) 'modular' system (title and concept) has been approved by the XXX CAA - and is based on ***UK CAA's*** document - CAP 1168 (2017) - page 6 - UK-AltMoC1 ADR.OPS.B.005 (c) - Emergency Exercises.....which reads as follows:

'.....As an ***alternative*** to the testing method found at AMC1 ADR.OPS.B.005(c), ***Aerodrome Operators may wish to test their emergency plan by conducting***: **1.** a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding ***four*** years; and **2.** Periodic reviews thereafter, or after an actual emergency, so as to correct any deficiency found during such exercises or actual emergency.....'

160. The regular holding of Airport Emergency Exercises tests and enhances the adequacy of:

- The response itself (particularly with regards to personal performance)
- Emergency Plans, Procedures, Mutual Support agreements etc.
- Emergency Equipment, Communications and other required resources

161. As used herein, there are three main methods of testing (exercising) an AEP:

- ***Table-top*** Exercises (Paper / Verbal Discussion Exercise)
- ***Partial Practical*** Exercises (Partial Simulation)
- ***Full-scale Practical*** Exercises (Full Simulation)

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Table-top Exercises

162. Designed to test the integration and capabilities of emergency response plans, resources etc. - ***without the expense and disruption to services associated with full-scale and*** *(to a lesser degree)* ***partial practical exercises***. Typically, table-top exercises are run relatively frequently in order e.g. to reconfirm procedures, policy, emergency contact information, radio frequencies, changes in key personnel etc.

163. Table-top exercises usually only require use of a suitable room, appropriate documentation (e.g. checklists; a large scale map of the airport and surrounding area etc.) and the attendance of the responsible and appropriately empowered representatives - from all agencies involved as part of any particular exercise scenario. An appropriate 'facilitator' oversees the exercise

164. Typically a 'virtual' accident scenario and location are selected and each exercise participant describes what actions they / their parent agency would take in response. The exercise should be 'inter-active' between all participants i.e. testing all aspects of associated inter-agency co-ordination, co-operation etc.

165. 'Lessons learned' from table-top exercises should be documented and distributed (for action / follow-up purposes) to all agencies associated with the emergency response. Where necessary, the AEP is to be reviewed and updated accordingly

166. Table-top exercises should typically be run ***quarterly***, testing a ***different*** aspect of the ***overall*** AEP during each e.g. it will be necessary to cover both on-airport and off airport procedures / co-ordination etc. The emergency at sea (over water) situation should be included (applicable to XIA), as should night-time scenarios etc. - as required

167. Table-top exercises should ***not*** be scheduled during the same quarterly period in which a full-scale or partial practical exercise is planned to take place. In such circumstances either of the latter two exercises substitutes for any associated (quarterly) table-top exercise

Partial (Practical) Exercises

168. Partial exercises involve ***an actual, physical response***. Such exercises may be required e.g. to train new personnel; to evaluate new equipment, techniques or procedures; to comply with mandatory recurrent training requirements etc.

169. Partial exercises are relatively economical because of their limited scope and are effective and efficient due to the ability to repeat such exercises on a relatively frequent basis

170. Such exercises might only involve one responding agency - e.g. the fire and rescue services or the medical services. However, they can also be scaled up to additionally involve co-ordination & co-operation activities between several different responding units (including 'off-airport' participation), if so required

171. Partial exercises should be run ***six monthly***, testing a different aspect of the overall AEP during each. Similar provisions to those documented in para 167 above should be applied

172. Partial exercises should not be scheduled during the same six monthly period for which a ***Full-scale*** exercise is scheduled - and should also be de-conflicted with Table-top Exercises

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Full-scale (Practical) **Exercises**

173. Provided that the modular system is implemented as per above, a full scale exercise / test of **ALL** personnel, facilities, procedures etc. associated with the XIA AEP should be held at intervals ***not exceeding 4 years***

174. All major agencies expected to respond (in reality) to an ***actual*** (major) emergency at or in the vicinity of XIA (including off-airport agencies) shall / should participate in Full-scale exercises

175. Post exercise, a full debriefing, analysis and critique shall take place - at which reps of all exercise participants shall /should be present. 'Lessons learned' shall / should be compiled and documented and ***all*** associated 'agency' emergency response plans (including this AEP) updated, as required. Identified deficiencies (non-compliances) etc. shall / should be subject to a (pre-agreed) appropriate, approved and robust 'corrective action' process - by all involved

176. The conduct & planning of Full-scale exercises should typically accord with the requirements contained in ***ICAO Doc 9137*** / ***Part 7*** (Airport Emergency Planning') - ***Chapter 13***, together with any others e.g. which might be required ***nationally*** / ***regionally*** / ***locally*** *etc.*

177. The document found at the end of the below link might be useful for ***USA located*** airports

https://www.trb.org/Publications/Blurbs/178084.aspx

Exercise Objectives

178. All exercises outlined above shall have pre-determined objectives - against which the performance of the exercise may be clearly measured (audited)

Note - for more info re ***audit*** of airport emergency response ***exercises*** - follow below link:

https://www.aviationemergencyresponseplan.com/information/

When the link opens, scroll down until you see the document (***information article***) entitled:

'**Information Article** - Airport Emergency Plan (AEP) - **Exercise Audit Checklist**'

Click on the above information article to download and read it

AEP Review

179. The most effective and efficient method of undertaking regular reviews of the AEP is by means of ***rigorously applying the recurrent emergency exercise programme*** - already described just above. Review of the AEP shall also be undertaken following an actual, major emergency/crisis

180. See ***ICAO Doc 9137*** / ***Part 7 - Chapter 14*** for further information - particularly concerning the selection of evaluators and the production of critiques, feedback and written reports

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XIA AEP

VOLUME 1 / Section **3**

Aircraft Related Emergencies / Crises

Note re this AEP Volume **1** / Section **3**

The reader is referred to Volumes ***2A*** and ***2B*** of this AEP (latter are *separate* documents i.e. separate from each other and also from ***this*** AEP Volume **1**) - in order to review the various ***checklists*** dealing with emergency / crisis re **aircraft** related operations at XIA

However, note that (exceptionally) ***fuel spillage*** (**aircraft related**) ***has*** been included in ***this*** Volume **1** / Section **3** - page 81 *(as it is **not** available in a **checklist** format [Volumes 2A and 2B being typically reserved for **checklist** format documents only])*

Reminder

The general layout concept of this entire AEP Guideline (comprising Volumes ***1***, ***2A*** and ***2B***) typically places ***info*** *and* ***background material*** etc. here in Volume 1 - reserving (to a greater or lesser extent) Volumes 2A and 2B for associated ***checklists only***

As an exception to the latter, ***security related crises*** have appropriate information / background material ***and*** checklists contained ***together*** in Volumes 2A and 2B i.e. such security related information / background material is ***not*** generally covered / included in ***this*** Volume 1

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XIA AEP / Volume 1 - Section 3

Aircraft Related Emergency / Crisis

Contents

- For *aircraft* related emergency / crisis (other than 'fuel spill') - see (*separate* documents) Section **3** of Volume **2A** **OR** Section **3** of Volume **2B** - of this overall XIA AEP

VERY Important Note

*The reader is reminded that Volumes **2A** and **2B** of this Guidelines AEP provide (in Section 3 of each such document) **checklists** for all required **aircraft** related emergencies / crises at or directly affecting XIA*

*Any associated, explanatory material for these checklists will have already been included in **this** Volume 1 (the document which you are now reading) - **except for** **security** **related incidents***

*Whilst Volumes 2A and 2B are separate from each other (and also separate from **this** AEP Volume 1) - they have been designed to provide the same information as each other **BUT** presented in different formats - Volume 2A presenting **checklists** by '**type of emergency / crisis**', whilst Volume 2B presents the **same checklists** by '**responder type**'*

*The author / owner of this AEP Guideline document has fully completed the separate Volume **2B***

*The author / owner of this AEP Guideline document has **NOT** completed **any** part of the separate Volume 2A*

*Should the potential user also / alternatively wish to view and use the checklists by 'type of emergency / crisis' (as per Volume 2A) - **he / she will need to write / produce Vol 2A** (him / her-self) **from the very beginning** e.g. by 'copy /pasting' the required information from Volume 2B into Volume 2A and 'adjusting / re-labelling / re-arranging / supplementing' it accordingly*

*To make this 100% clear, the AEP Guideline Volume **2A** only exists **notionally**. It does **not** exist in reality in any of our own documentation*

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FUEL SPILLAGE FROM AIRCRAFT

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GENERAL

Introduction

1. The XYZ Airports Company (Airport Operator) shall stipulate and document elsewhere (i.e. ***other*** than in ***this*** AEP) its own, appropriate ***oversight*** requirements (procedures & processes) for aircraft fuelling and de-fuelling operations at XIA

2. In the event of an aircraft fuel spillage, immediate action shall be taken to stop, contain and remove the spilled fuel - in order to prevent any safety hazard and / or contamination to the environment

3. The info provided herein stipulates appropriate response procedures required for a fuel spillage incident involving ***aircraft*** only, during e.g. servicing or manoeuvring, on the Airside Movements and / or Operational Areas at XIA

4. Due to the potential adverse impact of same on airside operations, fuel spillages have been categorised as ***minor*** or ***major***. This assists in deciding the type of response required

   For general guidance purposes, '*minor spill*' refers to a spill of or less than 20 litres and not of a running (flowing) nature. '*Major spill*' refers to a spill of more than 20 litres or of a running nature

5. A list of typical equipment for dealing with aircraft fuel spillage is provided at Attachment 1 to this Section 3 (page **85**)

ROLES & RESPONSIBILITIES

Airport Fire (and Rescue) Services

6. AFS will provide a suitable level of standby coverage in the vicinity of the fuel spill incident site, in order to contain any safety risks that might arise

7. AFS is also responsible for providing rescue and fire-fighting services if a 'situation' so requires and, additionally, 'wash-down' facilities may also be required

Airport Police

8. The Airport Police (assisted by XYZ Airports Company Security - as / if available) shall secure the 'spill' area and provide general security and 'people control' - as required

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Airport Operator

9. Upon receipt of fuel spillage notification, the Airport Operator shall alert AFS - regardless of whether or not the spill is assessed as minor or major. The Airport Operator shall then ***oversee*** response activities at the incident site, including:

    - Controlling people / equipment movement into, in and from the affected area
    - Co-ordinating response activities rendered by service providers
    - Minimising disruption to airport operations and preventing safety hazards

10. The Airport Operator is further responsible for the oversight of minimising damage to airport assets and safeguarding associated, environmental interests arising (i.e. from the incident)

11. The Airport Operator shall provide appropriate assistance in cleaning of the affected area if the spill takes place on the airside Movements and / or Operational Areas of the airport

Aircraft Operator (or nominated / designated representative)

12. If passengers are on board the fuel spill aircraft, the aircraft operator shall decide (in conjunction with the aircraft commander, as appropriate) whether disembarkation of passengers is required. Associated passenger movements (if so required) must be supervised and assisted by the aircraft operator and / or its local representative (e.g. GHA etc.)

13. The aircraft operator shall maintain communication and liaison with the appropriate (local) 'Line Maintenance Engineer in Charge' until the incident is concluded

Ground Handling Agent - GHA (possibly representing and / or assisting the aircraft operator)

14. The appropriate GHA shall communicate with the aircraft operator and / or aircraft commander for instructions on passenger, cargo and baggage handling - and also for any other services required

    The GHA shall also represent the aircraft operator at XIA where circumstances so require

Line Maintenance Engineer In-charge

15. The Line Maintenance Engineer (or equivalent, qualified person) in charge of the refuelling / de-fuelling operation shall immediately notify the ***airport*** operator of any spill and also provide technical management of the on-site situation - including initial assessment of spill as 'minor or major'

16. In the event of a ***major*** fuel spill, the Line Maintenance Engineer shall take / make appropriate initial action & arrangements to stop and contain the fuel spill from the aircraft - and shall immediately communicate with the aircraft commander / crew (as applicable) (and subsequently with the aircraft operator and airport operator) - re any further response, assistance etc. requirements

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17. *Deliberately Blank*

Into-plane Fuelling Company

18. In the event of a fuel spill, the Into-plane Fuelling Company operative shall stop the fuel flow into the aircraft (as applicable) and immediately notify the Line Maintenance Engineer in-Charge (or equivalent, qualified person) of the situation (also immediately notify the aircraft commander / available crew member [i.e. before notifying the Line maintenance Engineer] ***if*** there are any passengers / crew on board the aircraft , as appropriate)

19. The Into-plane Fuelling Company is responsible for cleaning up the affected area if the spill is ***less*** than 20 litres and ***not*** of a running nature

Cleaning-up of Spilled Fuel

20. Every effort should be made to contain and recover the spilled fuel

21. Spilled fuel should not be washed into drains or culverts, if practicable so to avoid

22. Contained, spilled fuel and cleaning wastes / residues should be removed to a safe and appropriate location for disposal. The selection of tools and equipment to be used in removing spillage and the disposal of contaminated materials should have regard to minimising the risk of ignition - and also minimising pollution to the environment

Associated Material

23. See sub-section 4A (Dangerous Goods) of ***this*** Volume **1** of the XIA AEP (starts page **89**)

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(Typical) **List of Equipment for dealing with Aircraft Fuel Spillage at XIA**

Equipment Type	***Operational Purpose***	***Available from***
Empty Fuel Barrels (adequate quantity)	To temporarily store spilled fuel	TBA
Liquid Vacuum Cleaner x 2	To remove spilled fuel from the contaminated pavement / surface	TBA
Sand Bags (adequate numbers)	To prevent spilled fuel from getting into the airport drainage system	TBA
Pit Cleaning Vehicle x 2	To remove any spilled fuel trapped in the airport drainage chamber(s)	TBA
Absorbent material	To remove minor fuel spills via direct absorption	TBA

Above list is a suggestion only and it is proposed that this be researched further by XIA Airport Operator and added to / completed - as required

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XIA AEP

VOLUME 1 / Section **4**

NON-aircraft Related Emergencies / Crises

Note to this AEP Volume **1** / Section **4**

For ***NON*-aircraft** related emergency / crisis covering '***ground* / *structural fire***' and (separately) '***bomb warning* / *sabotage***' (both being in checklist format) - see (separate documents) Section **4** of AEP Volume *2A* OR Section **4** of AEP Volume *2B* - of this XIA AEP

All ***other*** non-aircraft related emergencies / crises (***NOT*** being in checklist format) will be found in ***this*** Section **4** of ***this*** Volume ***1*** (i.e. the document you are now reading) - starting on page **88**

Reminder 1

The general layout concept of this AEP Guideline (comprising Volumes 1, 2A and 2B) typically places ***information*** and ***background material*** etc. here in Volume 1 - reserving Volumes 2A and 2B (in general) for associated ***checklists*** ONLY

Exceptionally - *'**security**'* and *'**airport ground* / *structural fire***'* type incidents have appropriate information / background material ***and*** checklists contained ***together*** in Volumes 2A and 2B ***only***

Reminder 2

Whilst AEP Volumes 2A and 2B are separate from each other (and also separate from ***this*** AEP Volume 1 [you are reading the latter right now]) - they have been designed to provide the same information as each other.....BUT presented in ***different*** formats - i.e. Volume 2A checklists by '***type of emergency* / *crisis***', whilst Volume 2B does likewise by '***responder type***'

Note that Volume ***2B*** has been fully (100%) completed. However, should potential users also / alternatively wish to view and / or use the checklists by 'type of emergency / crisis' (as per Vol **2A** specification) - they will need to write / produce Volume 2A ***themselves*** from the very beginning

This latter (producing a Vol 2A) can be fairly, simply accomplished by using Volume 2B as a base template - and then copy and pasting, adjusting and re-labelling as required. However, simple as this may be, ***it will take considerable time, care, co-ordination and cross-referencing***

To make the above 3 paragraphs absolutely clear, the AEP Guideline Volume ***2A does not exist*** (except as notionally referred to herein) in any documentation which we produce. So, if you want your own equivalent of a Volume 2A - you will need to produce it yourself!

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Reminder

Procedures and checklists for a '***PASSENGER TERMINAL EVACUATION PLAN***' have ***not*** been included in this Guidelines AEP series of documents - for a number of valid reasons

However, when preparing 'real' AEPs based on these guidelines, it is vital that an appropriate Passenger Terminal Evacuation Plan is prepared, documented, trained and exercised. That this is adequately accomplished is left to the appropriate airport operator to execute

For an example of some useful elements of a ***real*** airport's Terminal Evacuation Plan - follow the below link:

https://www.perthairport.com.au/-/media/Files/CORPORATE/Work-with-us/Airport-Operating-Standards/AOS011-Terminal-evacuation-and-fire-safety.pdf

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XIA AEP - Volume 1 / Section 4

Sub-section **4A**

DANGEROUS GOODS & CHEMICAL SPILLS

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GENERAL

Introduction

1. Dangerous Goods (DG) are articles / substances meant for transportation (by air for the purposes of this sub-section **4A**) - which are capable of posing a risk to health, safety, property and / or the environment. Same are documented in the 'list of dangerous goods' found in ICAO's '***Technical Instructions for the Safe Transport of Dangerous Goods by Air***' document (***ICAO Doc 9284***) and are classified according to same. Other guiding documentation includes:

   - ***ICAO Annex 18*** - The Safe Transport of Dangerous Goods (DG) by Air
   - ***ICAO Doc 9481*** - Emergency Response Guidance for Aircraft Incident Involving DG
   - ***IATA*** - Dangerous Goods Regulations
   - Appropriate ***National , Regional and other*** appropriate DG type regulations etc. - as typically promulgated by a country's 'civil aviation authority' and / or equivalent agency / agencies

   A simplified DG classification is shown in Attachment 3 (page **103**)

2. A range of DG is routinely stored, handled and used at XIA - both by the airport operator itself (XYZ Airports Company) and by appropriate airport tenants, franchisees and operators - as part of and in support of normal airport etc. operations

3. Jet aviation fuel (kerosene) typically represents the biggest, potential DG problem type at XIA. Additionally, gasoline (petrol) and diesel are used extensively. All are delivered by road to bulk storage facilities / petrol etc. filling stations located at or very near XIA

4. This sub-section 4A sets out the responsibilities of all parties concerned, together with emergency response procedures required - in the event of an accidental spillage (or similar / equivalent DG type crises) concerning DG used and / or stored and / or present (e.g. on board an aircraft) at XIA

5. The procedures documented herein do ***not*** cover incidents involving the use (or the threatened use) of radiological, biological and chemical (RBC) substances serving ***terrorist*** and / or ***criminal*** purposes

General Procedures

6. Procedures for dealing with DG etc. within operator / tenant / franchisee etc. controlled premises located at ***XIA*** (including those of the airport operator itself) - shall be documented in the respective crisis response plans (DG section) for the particular operator / tenant / franchisee etc.

   The airport operator shall oversee responsibility for the existence, maintenance, review, training and exercising of such crisis response plans and associated procedures, practices and resources - including the provision and availability of appropriate, associated (trained / exercised) personnel

   The XXX CAA in turn (as part of its statutory responsibilities) provides oversight of the airport operator's responsibilities with regard to DG operations

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7. Operators, tenants and franchisees etc. shall immediately report DG incidents to the airport operator (+ any other authorities as provided for by appropriate statute / regulation / instruction / this AEP / other crisis response plans / best practice etc.)

   The airport operator shall monitor / oversee said DG requirements / responses etc. - and provide necessary advice and support to operators / tenants / franchisees etc. accordingly (as required)

8. Emergency procedures for dealing with DG incidents associated with / related to the ***transport of dangerous goods by air*** are referred to later in this sub-section 4A (under the heading *'DAMAGE to CONSIGNMENT of DANGEROUS GOODS'* - see page **94**)

9. Emergency procedures for dealing with fuel spillage from an aircraft during servicing or manoeuvring on the ***Airside Operational Areas*** of XIA are covered in *this* Volume ***1*** / sub-section **3**

10. Emergency procedures for dealing with fuel spillage at ***Aviation Fuel Receiving Facilities*** at XIA shall be documented in the relevant Aviation Fuel ***Supply*** Company's and / or ***Receiving*** Company's own Crisis Response Plans. The airport operator shall routinely check that such plans exist and are maintained, in accordance with all and any statutory / regulatory / best practice etc. requirements - and that appropriate personnel are trained and exercised in same accordingly (+ associated reports / records of same maintained by all concerned)

DANGEROUS GOODS INFORMATION

11. If DG were carried on board an aircraft which subsequently experiences an accident or serious incident, the following information is to be provided ***without delay*** (by the aircraft operator / representative / whoever) - to the responding emergency services (***wherever in the world they might be responding***) - using any and all means possible to transmit said information:

    - Proper shipping names
    - UN Number
    - Class / Division of Dangerous Goods
    - Compatibility Group for Class 1 Dangerous Goods
    - Identified Subsidiary Risk(s)
    - Quantity
    - Location on board aircraft
    - Brief, plain language description of Dangerous Goods
    - More definitive information on any radioactive material carried

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12. Further to para 11 above, where DG are carried by air and an ***accident*** or ***serious incident*** occurs to the carrying aircraft, ICAO stipulates that it is the duty of the **aircraft operator** to provide details of the DG carried (as per para 11 above) to the ***responding emergency services without delay*** - *and also to the* ***State of the Operator*** *and* ***State of Occurrence*** (if different) *authorities* ***as soon as possible***

The same applies to an aircraft ***incident*** *(i.e. in contrast to a 'serious' aircraft incident)* - except that the information is to be provided ***'upon request'*** - and does ***not*** need to be provided to the State of the Operator

PHASES of the DG **SPILL** etc RESPONSE PLAN

Reporting

13. Any person discovering a dangerous goods spillage etc. must report same to the airport operator ***immediately*** i.e. to the 'Aviation Unit / Airside Operations' if the spillage occurs on the Airside Operational Area of the airport - or to the 'Aviation Unit / Terminal Management Operations' - if the spillage occurs in the Passenger Terminal Buildings or any other landside areas of the airport

As much as possible of the following information should be provided in the report:

- Location, nature and extent of spillage etc.
- Plain language details of material(s) involved
- Details of any injuries / contaminations / deaths
- If fire is involved or is there an imminent danger of a fire
- Shipping names, UN numbers and classes / divisions of DG involved (if known)

The airport operator will then initiate the appropriate alerting and activation process

Initial Control and **Containment of Spillage**

14. ***The party responsible for the DG concerned*** shall initiate an immediate response effort (in accordance with the appropriate procedure, training and if safe so to do) intended to stop / contain / control the spillage, so as to prevent or minimize any safety hazards to persons, infrastructure and / or contamination to the environment

The airport operator will co-ordinate any ***additional*** resources required to control and contain the dangerous goods spillage e.g. the latter's various Emergency Response Teams may (depending on circumstances) be mobilised to standby / respond at the scene - in order to render assistance in the control and containment of the spillage, as required

15. In addition to providing rescue and fire-fighting services (and further to the last para above), AFS is responsible for containing any safety hazards arising from accidental spillage of dangerous goods (or similar incident) on the airport. Where necessary, the AFS will advise the airport operator on the need for additional response assistance from appropriate, off-airport resources

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Where so required (particularly where the nature / consequences of the spill material is unknown), the spillage site is to be cordoned-off to a distance of at least 25 metres from the furthest extent of the spill. Where the spill is known (or suspected) to involve radio-active material and / or pathogens and / or toxins - the cordon radius is to be increased beyond 25m in accordance with the appropriate procedure and / or specialist advice

Evacuation

16. Depending on the nature and extent of the spill, the AFS Person in Charge (PIC) at the scene (or equivalent person), in consultation with airport operator, (and possibly external) specialists etc. - will decide if evacuation of the affected area(s) is required. Where no such consultation is possible, the area should be evacuated as a precaution

17. If partial or full evacuation of the Passenger Terminal Building(s) is required, standard emergency evacuation routes and procedures will be followed. (**IMPORTANT** - see Orientation 'Note 9' to ***this*** AEP Volume 1 - page **5**)

Removal, Clean Up and **Recovery of Spilled Material**

18. Once the incident area is declared safe by AFS (or equivalent / specialist agency), the party responsible for the DG involved is required to physically ***remove*** spilled material at the earliest opportunity - by any means necessary / possible (including, but not limited to, soaking up as much spilled material as possible using absorbent materials - as appropriate)

    AFS (and / or equivalent / specialist agency) retains the responsibility for spill or waste removal, if the incident area and / or the handling of involved substances is considered to be 'hazardous'

19. ***Clean up*** of the affected area(s) is also required. If practicable, avoid flushing the area with water if there is a significant risk of the spilled material entering the airport drainage system. If an Environmental Management System Plan is in use at the airport, the appropriate procedure(s) should be followed

20. Every effort should be made to ***retain*** and ***recover*** the spilled material. Any such material not suitable for re-use or reprocessing shall be handled, stored and disposed of as one or other form of chemical / appropriate waste type, by an appropriately licensed waste collector

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DAMAGE to CONSIGNMENT of **DANGEROUS GOODS** (to be / being transported - ***by air***)

Introduction

21. The following information indicates the responsibilities of parties potentially involved in dealing with incidents concerning damage / suspected damage etc. to consignments of DG - at and / or involving XIA, in some significant way

22. Dangerous Goods comprise substances having potential danger to life and / or property. They include obvious substances such as acids, radioactive material, poisons, infectious material and explosives - together with the more unlikely items e.g. ***magnets***, ***wheel-chairs*** with ***wet-cell batteries***, ***breathing apparatus*** with ***compressed air cylinders***, perishables packed in ***dry ice***, ***pesticides*** etc.

23. It is assumed herein that damage to cargo consignments involving DG is ***more likely to occur*** during an aircraft-related emergency and / or possibly during the process of delivery to / collection from air cargo franchisees' premises etc.

Definitions

24. DG ***Accident*** - An occurrence associated with the transport of dangerous goods by air (not necessarily occurring on board an aircraft) which results in ***fatal*** and / or ***serious*** injury to a person(s) and / or ***major*** property damage and / or ***major*** environmental issues etc.

25. DG ***Incident*** - An occurrence other than a DG accident - associated with / related to the transport of dangerous goods by air (not necessarily occurring on board an aircraft) which e.g. results in injury to a person(s), property damage, fire, breakage, spillage, leakage (of fluid, gas, radiation etc.) - or other evidence that the integrity of the packing has not been maintained etc. (The difference between DG 'accident' and 'incident' classification depends on the 'severity' of the related DG occurrence. In para 24. just above the words '***fatal***', '***serious***' and '***major***' haves been used to demonstrate such differentiation)

Any occurrence relating to the transport of DG which ***seriously jeopardises*** an aircraft and / or its occupants - can also be classified as a DG incident

Procedures and **Training**

26. The appropriate procedures for a DG accident / incident within a cargo franchisee's premises ***at XIA*** shall be documented in the Operations Procedures Manuals (or equivalent document[s]) of said franchisee. In circumstances where a DG accident or incident occurs during handling at the airport or in flight, the appropriate documented procedure shall be followed by the aircraft operator (including crew) / ground handling agent / cargo agent / appropriate franchisee etc. - as per actual circumstances 'on the day'

27. Designated personnel shall receive appropriate training and exercising in order to be able to better oversee and / or implement what has been described in para **26** just above. Associated records shall be maintained and retained for inspection / audit / oversight purposes

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28. The (XIA) airport operator shall routinely check (oversee) that the procedures, training, exercising etc. (referred to in the last two paras immediately above) are documented, routinely trained and practised - and comply with all statutory / regulatory / best practice requirements

The XXX CAA, in turn (as part of its statutory responsibilities), provides oversight of the (XIA) airport operator's responsibilities with regards to this matter

Radioactive Materials

29. Additional measures and procedures will be required in the event that a dangerous goods accident / incident involves radioactive material considered to be 'hazardous'

30. When the presence of hazardous radioactive material is known / suspected, the associated AFS procedures shall include the provision for calling on the services of a suitable 'radioactive materials expert' or similar - to provide specialist advice and assistance. The following guidelines are provided to enable some planning action to be taken pre any potential incident:

Rescue and Provision of Medical Aid to Victims

Contaminated persons (actual and / or suspected) should be wrapped in blankets or other available and suitable covering (reduce possible spread of contamination) and immediately transported to ***appropriate*** medical / specialist facilities, with instruction to the drivers / attendants that the 'injured persons may be radioactively contaminated' - and that they (drivers etc.) should pass on details to the medical personnel to whom they are delivered

Appropriate PPE must be worn / used by all responders, where the seriousness of any such contamination (actual / suspected) so requires

Control of Fires

As far as possible, rescue and fire-fighting personnel should stay upwind and out of smoke, fumes and dust. Any fire should be handled as though it involves toxic chemicals

Appropriate PPE must be worn / used by all responders - as required / directed

Control of Radiation Hazard and Prevention of the Spread of Radioactive Contamination

The following initial actions should be completed:

- Appropriate PPE to be worn / used by all responders
- A cordon (of appropriate radius) to be established in accordance with associated guidelines and the circumstances of the actual situation 'on the day'
- Authorised persons only allowed inside cordoned-off area (to be strictly controlled)
- Cover damaged / suspect materials by a suitable, heavy-duty material e.g. tarpaulin
- Seriously contaminated persons (actual/suspected) to be isolated and hospitalised
- Less seriously / non-contaminated persons to be positioned (at an appropriate distance) upwind of cordon - to await monitoring for radiation contamination and (as required) delivery of appropriate treatment (possibly including hospitalisation)

- Re last bullet point above, segregate persons who have (or might have) been in contact with radioactive materials
- Re last bullet point above, commence basic on-site decontamination measures (of such segregated persons) without delay i.e.
    - Removal of clothing
    - Initial hosing down with water
    - Subsequent warm shower with soap etc. (no scrubbing)
    - Await medical / specialist advice
    - Respond accordingly
- Suspect contaminated vehicles, materials, equipment, other items etc. should not be removed from site - until released by appropriate radiological monitoring personnel
- Eating, drinking and smoking to be prohibited in suspected, contaminated areas

Subsequent Access to the Accident / Incident Site

Only appropriately protected and authorised rescue and fire-fighting and / or radioactive specialist responders etc. should operate at the scene. All others should be kept as far away as possible

Vehicles, buildings, areas, equipment etc. which have (or might have) been contaminated should not be occupied or returned to service until they have been decontaminated and received a radiological 'all clear' survey by qualified personnel

If there has been any release of radioactive material, persons with appropriate experience (being equipped and protected to handle radioactive material accordingly) - must be present during its repackaging, disposal, removal etc. - and their instruction / advice followed by all concerned, accordingly

Infectious Substances

Note - adapt following paragraphs 31-38 where the Infectious Substances involved are ***Toxins***

31. Additional measures and procedures will be required in the event that a dangerous goods incident involves (or is suspected to involve) infectious substances

32. When the presence of infectious substances (biological hazard [biohazard]) is suspected, the airport's (or equivalent) 'Port Health' agency is to be alerted immediately - the latter then deploying staff to the incident site in order to conduct an initial assessment i.e. try to identify the biohazard substance and its level of 'danger' - and (where appropriate) provide advice and assistance on the removal and clean-up operation, as required / permitted

    Unless the biohazard is known for certain ***not*** to present significant risk to humans, it is to be assumed that such risk exists. Accordingly, ***all*** responders must wear the ***appropriate*** PPE when so deploying - or otherwise arrange for specialist, off-airport personnel to assume such responsibilities

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33. Control of biohazards / prevention of the spread of infectious contamination shall be implemented as follows:

- AFS / Airport Police / Airport Operator / Security etc. - to establish a cordon of appropriate radius surrounding the damaged packages / containers / material - in consultation with the Airport (or otherwise appropriate, external specialist) Port Health Team
- Only suitably protected (e.g. PPE / vaccinated etc.) and specifically authorised and trained persons allowed access inside the cordon
- Suspected contaminated vehicles, materials, equipment or other items should not be touched, removed etc. until cleared by the specifically authorised person(s)
- Eating, drinking and smoking prohibited unless outside of the cordon ***and*** full 'decontamination' procedure has been completed
- Segregation of anyone who has been (is suspected to have been) in 'unprotected' contact / possible contact with certain / suspected infectious substance(s) / person(s) - for the potential purposes of medical examination, treatment, isolation / quarantine, etc.
- Disposal / removal of spilled, infectious substances under the control of suitably responsible and biohazard qualified persons i.e. experienced in / qualified to handle the associated infectious substances

34. Depending on the nature of the infectious substance(s), the Airport (or equivalent) Port Health Team will decide the biohazard level of the substance. Classification and characteristics of bio-hazardous materials will be found at Attachment 1 to this sub-section 4A (page **99**)

35. For substances assessed as biohazard levels BL1 or BL2 - the airline / airline representative / cargo franchisee concerned will arrange with specialist agent(s) to remove the consignment and clean up the affected area. Any consignment removed from the incident scene plus contaminated clothing etc. should be sent to a Public Health Laboratory (Local Government's Department of Health and Medical Services [or equivalent]) - for inspection / analysis

    If no leakage is detected from the consignment, the Department of Health and Medical Services (or equivalent) will notify the airline / representative / cargo franchisee concerned to collect the consignment. Damaged consignments, however, together with the contaminated clothing, will be safely disposed of by the Department of Health and Medical Services itself

36. *Deliberately Blank*

37. The removal and clean-up work of biohazard levels BL1 or BL2 substances should only be conducted by properly trained (e.g. blood-borne pathogen training completed and current), qualified and experienced personnel, following the guidelines provided by the appropriate Department of Health and Medical Services (or equivalent). Some typical (generic) guidelines are shown at Attachment 2 to this sub-section 4A (page **101**)

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38. For substances assessed as biohazard levels BL3 or BL4, the national / regional Department of Health & Medical Services (or equivalent) can be expected to take charge of the containment and disposal of the infectious substance(s) and any appropriate decontamination measures required - assisted by appropriate specialists, as required

NB - The above situation is a major emergency and must be treated as such

Only trained, qualified and experienced biohazard specialists - working under the strictest direction of the appropriate Department of Health & Medical Services (or equivalent organisation) should deal with emergencies related to BL3 or BL4 classified biohazard materials

It is likely that the World Health Organisation (and equivalent regional / national organisations) will become involved in the response to BL4 classified biohazard type crises

In such circumstances (depending on the biohazard involved) airport and airline operations might be subject to extreme, adverse consequences (e.g. operational; financial; administrative; manpower resources; brand/image/reputation etc.)

Mutual Aid Emergency Support Agreements

39. The XIA Airport Operator shall vigorously pursue the appropriate mutual aid emergency support agreements, in support of a major dangerous goods type crisis occurring on or in the vicinity of XIA

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Classification of Bio-hazardous Materials

Introduction

A bio-hazardous (biohazard) material is a biological agent which is potentially harmful to humans and / or the environment. Biological agents can be categorized (in accordance with hazard levels and categories of containment) into the below biohazard levels:

BL1

BL2

BL3

BL4

Materials of Biohazard Level 1 BL1

- Not known to cause disease in healthy adults
- Organisms can typically be used e.g. in biology lessons in secondary school
- *Examples* of such organisms include:
    - Non-pathogenic ESCHERICHIA COLI (E Coli)
    - BACILLUS SUBTILIS (Soil Bacterium)
    - Fermenting yeast

Materials of Biohazard Level 2 BL2

- Can be associated with human disease
- May be hazardous to 'frequent use' handlers / users
- Hazard typically relates to auto-inoculation, ingestion, mucous membrane type exposure etc.
- Exposure rarely produces infection
- Unlikely to spread in the community
- Effective prophylaxis / treatment is generally available
- *Examples* of such organisms / pathogens:
    - Common Salmonella
    - Staphylococci
    - CLOSTRIDIUM TETANI (Tetanus)
    - VIBRIO CHOLERAE (Cholera)
    - Influenza Viruses (***not*** associated with a pandemic type situation)
    - Measles

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- Mumps
- Hepatitis A and B viruses
- ASCARIS SPP (Roundworm)
- TRICHOPHYTON RUBRUM (Ringworm / Athletes Foot)
- Human Immunodeficiency Viruses (HIV)

Materials of Biohazard Level 3 **BL3**

- Includes pathogens which may cause severe disease and / or have lethal consequences
- Presents a serious hazard to frequent use handlers
- May present a risk of spread in the community
- Typically (but not always) an effective prophylaxis / treatment is available
- *Examples* of organisms / pathogens:

  - BACILLIUS ANTHRACIS (Anthrax)
  - ESCHERICHIA (E) COLI O157 H7
  - YERSINA PESTIS (Plague)
  - Mycobacterium Tuberculosis (TB)
  - Dengue viruses
  - Yellow Fever
  - Rabies
  - Influenza viruses (Pandemic potential). NB: ***NOT*** the same as seasonal flu' type viruses
  - Coronaviruses (one such corona virus caused the COVID-19 Pandemic of 2020 - 2022)

Materials of Biohazard Level 4 **BL4**

- Highly dangerous agents - posing high risk of life-threatening disease
- Aerosol transmitted or unknown risk of transmission
- May present a high risk of spread in the community
- Usually no effective prophylaxis or treatment
- *Examples* of organisms / pathogens:

  - Ebola virus
  - Marburg virus
  - Smallpox

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Typical Decontamination Procedures for Materials of Biohazard Levels BL1 & BL2

I. Outside the cordoned-off location - put on (don) personal protective equipment e.g. gowns (disposable or normal working gowns), disposable gloves, protective masks (of the recommended type re the nature of the biohazard), goggles, overshoes etc.

II. Soak pieces of absorbent cloth (such as large towels) with fresh 10% hypochlorite solution (1 part concentrated hypochlorite solution diluted with 9 parts water) for 'wiping up' (see below)

III. Inside the cordoned-off area

- Remove any plastic or other covering carefully
- Cover spill with absorbent materials (e.g. the soaked towels mentioned above)
- Carefully pour a freshly prepared 10% hypochlorite solution around the edges of the spill - and then into the spill

IV. Avoid splashing and allow at least a 10 minutes contact period

V. Use absorbent materials to wipe up the spill, working from edges into centre

VI. Remove plastic or other coverings plus all the used absorbent cloth at the spillage spot and put them into red plastic bags or autoclave bags of appropriate size - with appropriate biohazard labels affixed. Seal the bags

VII. Thoroughly wash / wipe down the area with water and leave to dry (take care that the water does not drain anywhere where it might cause significant harm to humans, animals etc.)

VIII. Remove personal protective equipment (PPE) - using an appropriate technique such that none of the outside of the PPE touches the skin, hair, internal clothing etc.

IX. Using clean gloves, place the removed PPE in red plastic bags or autoclave bags - with appropriate biohazard labels affixed. Seal the bags. Wash the gloves (still on the hands) with a 10% hypochlorite solution and wait for 10 minutes before removal and disposal

X. Arrange for delivery of all contaminated items and leakage material to the Public Health Laboratory or similar of the local Department of Health and Medical Services - for sterilization / disposal / re-package etc.

XI. Take a long, full body shower - washing the body with an appropriate, approved disinfectant solution and soap etc.

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Typical Decontamination Kit - Biohazard Level BL1 & BL2 Material

a) CHLOROX or equivalent (10% solution freshly prepared)

b) Plastic boxes or dustbins (Heavy duty, large - with lids)

c) Appropriate Personal Protective Equipment (including protective mask [to the required specification for the purpose of dealing with biohazard waste])

d) Absorbent cloth - as much as possible

e) Red plastic bags (plenty)

f) Bio-hazard labels

g) Adhesive tape (plenty)

Decontamination Procedures for Materials of Biohazard Levels BL3 and BL4

Extreme caution must be taken when dealing with the above. However, the recommended procedures / precautions / PPE to use etc. are beyond the scope of this AEP series of preparation guideline documents - and are thus not included here

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The UN classes & divisions for Dangerous Goods are shown below:

Class 1	Explosives
Class 2	Gases
Class 3	Flammable Liquids
Class 4	Flammable Solids and Reactive Substances
Class 5	Oxidisers and Organic Peroxides
Class 6	Toxic and Infectious Substances
Class 7	Radioactive Materials
Class 8	Corrosives
Class 9	Miscellaneous Dangerous Goods

Note: For more details on the subject of the 'transport of dangerous goods by air' follow below link:

https://aviationemergencyresponseplan.com/information/

When associated webpage opens, scroll down the list of info articles shown until you reach the one entitled:

* Information Article - **Dangerous Goods** (transport by air)

Click on it to 'open and read'

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Note - paragraph numbering has ***not*** been used in this Sub-section 4B and the ***remainder*** of this AEP Volume 1

IMPORTANT NOTE - 09 November 2021

On the above date the world had been in the grip of the SARS-CoV-2 coronavirus (COVID-19) ***pandemic*** for around 20 months***. Infections*** up to that time were estimated as being around 250 million - with more than 5 million associated ***deaths***. For a number of valid reasons (not expanded upon further here) ***BOTH*** figures were almost certainly gross ***UNDER***-estimates e.g. India ***alone*** had probably had ***at least*** 5 million+ (5,000,000 plus) deaths by that same date

Accordingly, this Sub-section 4B has been updated to better reflect the above situation with regards to an '***appropriate public health RESPONSE***' by ***commercial*** (passenger) ***AIRPORTS***

On the ***reasonable assumption*** that the above response is based on an actual '***as bad as it is*** *(probably)* ***ever going to get***' type public health crisis (i.e. like the COVID-19 pandemic itself) - no other types of (lesser impact) public health crisis / incident are addressed herein

That is to say - if your airport's public health emergency plan is potentially capable of adequately responding to a pandemic such as COVID-19 - then we assume herein that it will be similarly so adequate for all other types of *(lesser adverse impact)* ***public health type situations***

DEFINITION - '**Pandemic**'

A ***pandemic*** typically starts as a significant infectious disease (e.g. an epidemic) 'somewhere in the world' - subsequently spreading / expanding fairly rapidly throughout human populations - until it eventually becomes 'big and widespread enough' to be formally re-classified (by the UN's World Health Organisation - WHO) as a pandemic

Note that pandemics do ***not*** necessarily equate to high infection to death ratios e.g. the 2009/10 ***swine-flu*** pandemic did not result in a particularly high death rate (relatively speaking). In contrast, past ***Ebola*** virus ***epidemics*** have averaged around (a huge) 2:1 (50%) infection to death ratio

*A widespread **endemic** disease, which is **stable** in terms of how many people are getting sick, is **not** a pandemic **or** an epidemic. Furthermore, **influenza virus based pandemics** are not the same thing as '**normal**' seasonal (winter) flu outbreaks - for which associated (and updated) vaccinations are routinely made available for each such season*

Historically there have been a number of pandemics such as plague, smallpox, tuberculosis etc.

Examples of more recent pandemics include Spanish flu (1918-1920); Asian flu (1957-58); Hong Kong flu (1968-69); Swine flu (2009-10) + **COVID-19** (SARS-CoV-2 coronavirus) (2020-2022)

Definition continued on next page

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'Novel' (new) pandemics typically start with a virus (typically an influenza virus or a coronavirus) which firstly infects animals (particularly birds and mammals), with a few cases where (due virus mutation / re-assortment in the 'spreader' animal) they can (and do) subsequently infect humans

The next stage occurs when (if) the virus begins to spread ***directly and significantly between people*** (epidemic) - possibly leading, with time, to a much larger scale ***pandemic***

A 'disease' or 'condition' is not necessarily a pandemic because it is widespread and / or causes many deaths. It must also be ***infectious*** e.g. cancer is responsible for high numbers of deaths (***very*** approximately 10 million in 2020) worldwide - ***BUT***, as it is not infectious, it cannot be classified as a pandemic, epidemic etc.

Note - ***endemic*** refers to a disease which is constantly present to a greater or lesser degree in people of a certain 'class' and / or in people living in a particular location e.g. ***malaria*** is endemic to parts of Africa. ***Tay-Sachs*** is a (usually fatal) genetic disease endemic to Ashkenazi (Eastern European sourced) Jews and certain French Canadians (typically depending on where they live for the latter)

An ***epidemic*** is a sudden, severe outbreak ***within a specific region or specific group of persons***, as with AIDS in Africa and also AIDS in intravenous drug users etc. respectively. Ebola fever outbreaks are also typically classified as epidemics, if they are large enough so to do

A ***pandemic*** occurs when an ***epidemic*** (or equivalent e.g. a declared 'public health emergency of international concern - PHEIC') becomes so widespread that it eventually affects entire continents and, in time, the whole world (e.g. COVID-19 went from being a PHEIC to a pandemic in only around 40 days)

Introduction

As per the 'important note' on the previous page, this 'Public Health Crisis' element (of this guideline AEP Volume 1 document) is based purely on the ***COVID-19 pandemic situation of 2020-2022***. This is because we (reasonably) surmise that if (in future) an ***airport*** can successfully plan for / adequately respond to a public health incident of the same severity as COVID-19, then it should also be capable of successfully dealing with any lesser impact form of public health crisis

The 'report' (starts next page/finishes page 116) was based on 'lessons learned' (some in a very hard way) from the latter pandemic - which not only (commercially) devastated large numbers of ***airports*** - but also airlines and most other sectors of commercial aviation worldwide - for almost 2 years

Looking forwards, 'commercial ***airports***' should read, understand and absorb what is contained in said report - and then act on it (if not done already). Whilst said report is USA centric (i.e. set in a USA context) its findings are typically applicable/ adaptable to any commercial airport worldwide

Note: The same team which produced the above ***airport*** related report ***also*** produced a (separate but similar) report for the ***commercial airlines*** - which use such airports. For the interested reader that (airline based) report can be found by following the link just below:

https://cdn1.sph.harvard.edu/wp-content/uploads/sites/2443/2020/10/HSPH-APHI-Phase-I-Report.pdf

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Report: Aviation Public Health Initiative (APHI) Assessment of Risks of SARS-CoV-2 Transmission during Air Travel + Non-Pharmaceutical Interventions to Reduce Associated Risk

'Curb-to-Curb' Travel Through Airports - during the COVID-19 Pandemic of 2020-2022

Prepared by: **Faculty and Scientists at the Harvard T.H. Chan School of Public Health**

ACKNOWLEDGEMENTS

This project arose in response to a complex set of problems during an unprecedented crisis. Three months into the COVID-19 pandemic, the aviation industry faced a massive decline in passenger traffic and revenue

There was thus interest in finding an independent, science-based resource to answer difficult public health safety questions, critical to both protect the workforce and the public, and essential to restarting this important segment (i.e. aviation) of the national (USA) economy. Out of that interest to reopen the sector safely, discussions began between Airlines for America (A4A) and faculty at the National Preparedness Leadership Initiative (NPLI), a joint program of the Harvard T.H. Chan School of Public Health and the Harvard Kennedy School of Government

Those conversations led to development of the 'Aviation Public Health Initiative' (APHI) for the USA

As lead sponsoring organisation, A4A engaged their member organisations, together with a group of manufacturers and airport operators - who generously provided (for the APHI) financial support, shared data and information, facilitated conversations with airport COVID-19 working groups - and opened opportunities to speak with airport operators

That breadth of conversation and data access was critical to collecting the body of knowledge required to reach the findings and recommendations made in this report. That interest also led to discussions and briefs with numerous government officials associated with the aviation industry. Through it all, this group of industry and government leaders respected the independence of the APHI scientists and their research

The APHI project team included faculty and associates of the Harvard T.H. Chan School of Public Health. This remarkable cadre of people who came together, most of whom worked exclusively in a virtual environment, devoted countless hours in pursuit of answers to deeply complex questions

The findings and recommendations of this report (found via the link just below) are the independent conclusions of the APHI. The associated team hopes that its contents will underscore the importance of following the science of SARS-CoV-2 in order to save lives, reinvigorate our economy and help lead the country and the world in efforts to overcome the COVID-19 crisis

https://www.researchgate.net/publication/349393219_Aviation_Public_Health_Initiative_Assessment_of_Risks_of_SARS-CoV-2_Transmission_During_Air_Travel_and_Non-Pharmaceutical_Interventions_to_Reduce_Risk_Phase_Two_Report_Curb-to-Curb_Travel_Through_Airports

Note: What follows in the next 9 pages is an *executive summary only of the full report* (latter can be found by following the link immediately above)

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EXECUTIVE SUMMARY

The APHI initiative resulted in the preparation of this Phase Two '***Curb-to-Curb***' report. Its focus is on the examination and risk mitigation of SARS-CoV-2 (Covid-19 pandemic associated) transmission at ***airports***

It is the second report developed by the APHI, the first being the (separate document) Phase One '***Gate-to-Gate***' report which focused on reducing the risks of SARS-CoV-2 on ***aircraft*** (***passenger airlines*** in particular)

This report is an independent, scientifically based ***analysis of the COVID-19 crisis as it applies to travel through airports***. The primary research reported here reflects data secured through a ***survey*** of 25 airports (23 within the United States [U.S.] and two elsewhere), ***interviews*** with six U.S. ***airports***, specialized ***modelling studies*** and ***visits*** to two U.S. ***airports***. The APHI team also interviewed representatives of the ***U.S. Transportation Security Administration*** (TSA), ***U.S. Customs and Border Protection*** (CBP), ***associations representing the airport industry*** - and ***specialists*** in ***virus testing***, ***ventilation systems*** and '***indoor chemistry***' related to cleaning and disinfection

An ongoing dialogue with a consortium of ***airport and airline operators***, ***aviation industry manufacturers*** and ***aviation sector bodies*** also helped inform the multidisciplinary scientific and technical APHI team

The sample of U.S. ***airports*** used reflected different areas of the country, airport sizes and international and domestic facilities. Whilst there are common features amongst the approximately 450 commercial airports in the U.S. (e.g. federal security processes), they can also vary considerably e.g. in terms of their governance, culture, infrastructure, volume of passengers etc. Despite said variations, our surveys and interviews, together with the modelling studies, provide a substantive basis upon which to assess ***airport*** pandemic practices - ***and to thus suggest recommendations relevant to reducing the risks of SARS-CoV-2 transmission in airport settings***

This report presents scientific evidence in support of adopting a non-pharmaceutical intervention (NPI) strategy, using a layered approach, to control the transmission of the novel coronavirus SARS-CoV-2 - in an ***airport*** environment

The APHI team recognises that airports are already using risk mitigation strategies to reduce SARS-CoV-2 transmission for passengers, employees, concessionaires, contractors and visitors etc. Current practices target activities that deal with known 'routes' of SARS-CoV-2 transmission. Further tailored application of the layered NPI approach can further mitigate SARS-CoV-2 related risk in airport settings and help restore public confidence in air travel, the latter being considered essential to any global, economic recovery

This report thus offers a series of recommendations for risk mitigation against SARS-CoV-2 in a 'commercial airport' context

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Context

This report focuses on the traveller's journey - whether departing, arriving or connecting (including any inter-airport transfers i.e. terminal to terminal) - and designated herein as '***Curb-to-Curb***' travel. (Note: travel to and from airports does ***not*** form part of [is beyond the scope of] this report - as is associated travel on board the / an aircraft itself)

It (said report) considers traveller / passenger activities from the point at which they arrive at the ***airport*** terminal (***curb-side*** or ***entrance*** etc.) and further includes e.g. (list is not exhaustive) check-in, baggage drop-off, security screening, customs / immigration / quarantine etc. checks (as required), concession / retail outlet visits, use of support facilities (e.g. restrooms), ground travel (as required e.g. bus; light railway; walk etc.) to departure holding facilities / final gate areas etc. - before finally boarding the / an aircraft

After an associated flight has terminated, the ***Curb-to-Curb*** journey continues - from the point that a passenger etc. disembarks the aircraft and enters the terminal building. It includes security screening, customs / immigration / quarantine etc. checks (as required), baggage claim etc. - up to the point where the traveller leaves the airport terminal. Whilst airside, ground travel etc. (as required /available) is included as part of the traveller's curb to curb journey

The focus of this report is on travellers / passengers using airport facilities across a 'typical' flight / trip - in the manner relating / common / applicable to ***economy*** class customers ***only***

Other passengers with 'certain privileges / special status' etc. (e.g. first and business class customers; certain VIPs etc.) who might enjoy shorter processing time through check-in, security / customs / immigration etc. - and / or avoid crowded gate areas by using dedicated lounges and / or priority boarding - were ***not*** considered separately

Employees of airports, airlines, security, customs/immigration/quarantine agencies, concessionaires and others who work 'day to day' on / via airport property - typically spend longer inside an airport (and use it spaces etc. more) - compared to typical passengers. Many also interact with passengers on a regular basis. As such and where appropriate, any relevant differences in risk re employee type settings are highlighted herein

Whilst the NPI framework for assessing and mitigating risk of SARS-CoV-2 transmission is similar for both the airport and the aircraft (in-flight for latter) phases, the airport environment is significantly more complex than an aircraft's - re SARS-CoV-2 transmission risks and mitigation efforts

For example, once on-board an aircraft, passenger movements are restricted and can be monitored; people are seated and mostly facing the same direction (forwards); the ventilation system might (probably will) be capable of filtering, diluting and rapidly removing (a significant amount but not all of) contaminants (including the SARS-CoV -2 virus) from the aircraft cockpit and cabin areas etc.

However, in an airport terminal etc. travellers typically undertake a range of activities, some of which are defined / mandatory (e.g. checking-in, dropping off baggage, going through the security check and queuing in the gate area). Other activities are discretionary e.g. spending time in one of the concessionaires / retail outlets; dining at a restaurant or bar (depending on COVID-19 restrictions in place - as set by state and local authorities), using the restrooms, lounge areas etc.

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Travellers / passengers thus spend time in different physical spaces within an airport - for varying reasons and periods of time. As such, and in contrast with the aircraft situation, their movements are relatively unrestricted. Furthermore, diverse (differing) airport terminal layouts affect ventilation efficiency, people congestion etc. - whilst ***airline*** schedules, daily / seasonal travel cycles etc. (in themselves) also influence passenger numbers and congregation patterns in associated ***airports***

The recommended NPI measures contained herein conform to a generic airport operational context - whilst also recognising that no two airports are alike. The associated *(layered)* ***approach to risk mitigation lends itself to the design of a combination of engineering and physical controls - together with personal hygiene and physical distancing measures, which can be tailored to any particular airport setting***

In response to the COVID-19 pandemic, airport operators and other key stakeholders acted promptly to reduce the risks of disease transmission in their facilities. However, without extensive contact tracing and testing, it was difficult to measure the success of such measures. Whilst the International Civil Aviation Organisation (ICAO) may have reported (December 2020) that, of scheduled flights carrying over 2.8 billion passengers internationally, there had been no recorded outbreaks among passengers at ***airports*** - ***assessing overall transmission rates in an airport environment is notoriously difficult***

Whilst airport operators followed guidance (e.g. from the Centres for Disease Control and Prevention (CDC) and state and local health authorities) they were largely responsible for determining their own (COVID-19 pandemic related) strategies, with a variety of practices seen in the U.S. and internationally. Further complicating the situation, different ***airlines*** operating at e.g. the same airport, sometimes adopted slightly different policies and protocols to associated COVID-19 matters, adding to passenger confusion re what were the appropriate COVID-19 'prevention rules / protocols' prevailing

Mitigating the risk of transmission of SARS-CoV-2 is a shared responsibility between passengers and airport operators (in conjunction with others of course, including airlines, concessionaires, customs / immigration / quarantine / security staff, others who work in or regularly visit airport terminals etc.)

Passengers seeking to reduce the risk of contracting SARS-CoV-2 need to comply strictly with wearing face mask rules, observing physical distancing, practicing personal hygiene protocols etc.

The USA's 'presidential executive order' issued on 21 January 2021 mandated that "masks be worn in compliance with CDC guidelines in or on: airports, commercial aircraft" and a number of other public conveyance locales [The White House, 2021])

Whilst the challenges of behavioural compliance might be particularly complex in the airport environment, said airports have found some success in enabling travellers / passengers / staff etc. to relatively easily make risk-mitigating choices. Going forward, maintaining and improving the 'public health agenda' is an imperative for airport operators

Given recent reports of more contagious SARS-CoV-2 variants *(see Chapter 2)* ***comprehensive compliance with face mask / covering requirements will likely remain a first-order action to mitigate transmission, even as more and more people are vaccinated***

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In addition to the measures already underway by airports (i.e. [Chapter 3] - cleaning and disinfection; [Chapter 4] - viral testing; [Chapter 5] - health screening; [Chapter 6] - ventilation; [Chapter 7] - further enhance risk mitigation) the CDC now recommends ***enhanced*** ventilation (in some settings) as an important component of a layered approach to mitigate transmission risks. However, airports are cautioned to avoid implementing any ***unproven*** measures of limited or no material impact - or that might even increase the risk of transmission

The scientific basis and rationale of the recommendations in this Curb-to-Curb report are presented in detail in Chapters 3 through 7, alongside relevant reference to other studies and data - so that key findings may be placed in context. What follows are the key findings and highlights from the report. Interested readers are encouraged to review in detail the relevant section(s) in order to better gain a full understanding of the key findings

KEY FINDINGS AND REPORT HIGHLIGHTS

Airport Practices

Airports studied were determined to make concerted efforts to reduce the risk of COVID-19 transmission (in the airport environment) by use of layered risk mitigation strategies. This demonstrated a substantive grasp of the pandemic's transmission routes, with (associated) timely interventions designed to reduce spread by all known methods relevant to the health & safety of passengers, employees, concessionaires, contractors, visitors etc

Current practices by the airports surveyed included enhanced cleaning and disinfection regimens, upgrades to ventilation delivery and air handling systems (including increasing filtration efficiency), adoption of various means to encourage physical distancing (e.g., floor decals, barriers, signage, communication), promoting compliance with wearing face coverings / masks and use of technology to support contactless procedures in certain circumstances etc. Collectively, these efforts play an important role in providing layers of protection and risk mitigation to reduce transmission of SARS-CoV-2 in airport settings, and can thus also help maintain / restore traveller confidence

Innovation in the sector was strong, as seen in the adoption of contactless technologies, sensors and automation of process and procedures. Use of same typically leads to faster processing, which could further reduce congestion and risk

There was a variety of practices across airport employees, tenants, contractors and visitors. Further consistency will support peer-to-peer compliance as well as make it easier for passengers to understand what is expected of them. Aviation industry-wide consistency, * ***which could be achieved through federal requirements in the U.S.*** - would promote faster dissemination of good practices, help support passenger confidence and enable targeted financial investments in support of faster industry-wide recovery

* ***Work on achieving this had started in early 2021 and was expected to be incorporated into US federal law by approximately the end of that same year***

In some states, airport restaurants were required to close seated dining (even if properly spaced) in line with state or local rules, with food pick-up and delivery only. The unintended consequence of this policy was increased congestion in gated and seated areas and mixing of unmasked (face mask removed to eat or drink) with masked travellers. This is an example where one precautionary measure could potentially exacerbate overall transmission risks

Concerned airports lobbied states to change these policies - and the science supports the importance of these considerations in overall risk mitigation

Airports also expressed concern re the ability to maintain physical distancing once passenger volume increases e.g. with current reduced flows, the number of active airport gates can be distanced to avoid concourse crowding. The layered approach to risk mitigation is relevant here as it affords a level of 'redundancy' so that when some practices are not possible (e.g. maintaining physical distancing of 6-feet/1.83 meters), the proper wearing of face masks and enhanced operation of ventilation systems might e.g. still usefully mitigate risks of transmission

Overall, the airports in the study are implementing comprehensive strategies to mitigate the impact of COVID-19 on their employees, passengers and the wider airport community. They have adopted a layered risk mitigation approach in line with the science of SARS-CoV-2 and known routes of transmission. Good practices are present across the airport operators surveyed. More harmonisation of practices across the industry will support focused investment whilst precluding same offering little risk mitigation benefit

NPI Risk Mitigation

Face coverings / masks are highly effective in preventing SARS-CoV-2 infections caused by virus-containing droplets and aerosols. All passengers should wear same whilst at the airport, except when eating or drinking - and even then, should limit time unmasked to a minimum

Disinfection refers to the deactivation or killing of infectious agents, while cleaning relates to the process of removing visible dirt and particles. Overall, disinfection and cleaning practices at airports are substantial. High-touch surfaces are cleaned frequently, with effective disinfecting agents approved by governmental agencies and reinforced by industry oversight bodies

The visibility of enhanced cleaning and disinfection measures supports public confidence in the public health safety of the airport environment. Some airports have or are in the process of obtaining voluntary accreditation or certification of their cleaning and disinfection practices e.g. from the 'American Association of Airport Executives' (AAAE) partnership with the 'Global Biorisk Advisory Council' (GBAC) and / or from the Airports Council International (ACI)

Enhanced surface disinfection by hand using U.S. Environmental Protection Agency (EPA) approved cleaning agents has a similar effectiveness in reducing SARS-CoV-2 infections when compared to more sophisticated systems such as 'electrostatic spraying' and 'high energy ultraviolet (UV)-C (222 nanometres [nm]/254 nm)' disinfection. The differences between these options are in equipment investment, time required to disinfect large-areas plus levels of staffing and personnel training requirements. A careful analysis considering this information and overall effectiveness goals should be performed before investing in new technologies

Ultra-violet radiation (FAR-UVC; 207 – 222 nm) might be suitable for continuous surface disinfection in queues, food courts, bars, restaurants, store counters, security checkpoint bins and other surfaces typically found in airports. FAR-UV disinfection can be a complement to, but ***not*** a replacement for, surface disinfection

Whilst there is a low probability of being infected via *fomites* in an airport environment, particularly as transmission of SARS-CoV-2 is mostly airborne, disinfection and cleaning should continue to be frequent and comprehensive, as a continued precaution

It is recommended that hands be disinfected after touching door handles, elevator buttons, faucets (taps), self-service kiosks, point-of-sale keypads, luggage carts etc. - as SARS-CoV-2 coronavirus might still survive for approximately two to four hours on people's hands

Visual and audible signalling to maintain physical distancing and crowd control are easy to display and relatively inexpensive and effective in encouraging behaviours that reduce the risks of COVID-19 transmission. Airports began using these communications techniques early in the pandemic

To explore the risk reduction potential of the layered NPI approach in various areas encountered during the Curb-to-Curb journey, a 'Monte Carlo analysis' was undertaken to compare a base-case, an enhanced-case and an augmented-case across five segments in the Curb-to-Curb journey, namely:

Check-in area; ***security checkpoint***s; ***airport shops***; ***eating outlets*** and ***boarding gates***

The ***base-case*** scenario generally represented the conditions that existed in these segments at airport terminal buildings, ***prior to*** airports putting in place the different NPIs to respond to the COVID-19 pandemic. The ***enhanced-case*** scenario largely represented the application of a set of NPIs relatively typical of those being employed by airports in response to the current pandemic. The ***augmented-case*** scenario represents maximally applied NPI under optimal conditions (but which would be unlikely to achieve in a real-world setting)

For all segments, there was significant risk reduction between the base-case and enhanced-case scenarios i.e. indicating the effectiveness of a layered NPI strategy. However, there was only a marginal difference between the enhanced and augmented-case scenarios. This latter might be helpful for airport operators in determining 'return on risk mitigation investments'

Viral Testing

In the setting of air travel, viral testing should be viewed as a public health screening measure rather than a diagnostic clinical tool, with the more limited but important goal of identifying infected travellers and keeping them out of airports and off aircraft

The high sensitivity of reverse transcriptase polymerase chain reaction (RT-PCR) tests for SARS-CoV-2 mean it may not be ideal for public health screening, e.g. in situations where permission to board a flight is based upon said test. This is because RT-PCR tests cannot distinguish between replicating virus (i.e. a person is infectious) and the presence of remnants of viral RNA/DNA that will be present - even after an infected person is no longer infectious

To answer the question, "Is this individual infectious right now?" which is highly relevant to air travel, appropriate antigen tests provide the answer quickly. Antigen tests are not only faster but also sensitive enough to reflect active virus. Given the primary goal is to reduce individual-level risk during travel, pre-travel testing should be performed as close to the travel event as possible, namely the same day or one-day prior, using a test with appropriate sensitivity and specificity

Harmonisation of testing protocols and requirements is critical to restoring passenger confidence in air travel. This harmonisation should be a collaborative undertaking by national governments with their public health service sectors

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Health Screening

For travel by air, as with other public-facing activities during a pandemic, a self-assessment of health status should start ***before*** a person leaves home etc. (being a critical component of an effective layered risk mitigation strategy)

It is unlikely that body temperature screening for COVID-19 in airport settings will be useful to risk mitigation due to limits in sensitivity. The same is true for other potential screening methods considered, such as measuring decreases in oxygen saturation and changes in olfaction (smell) or gustation (taste) sensations

Canine sensing is being explored in some airport settings with dogs trained to detect volatile organic compounds produced by COVID-19 through the odour from sweat, tracheobronchial secretions, urine and or saliva. However, there are considerable logistical issues to be overcome before this would be useful in routine practice

A new research avenue being explored is the use of artificial intelligence (AI) to compare the coughs, spoken words (in different languages) and respiration patterns of COVID-19 infected people with those of healthy people. Small differences in same have been demonstrated in laboratory settings and may support the development of a new screening approach

Engineering and Physical Controls

Given the (mainly) airborne transmission route of the SARS-CoV-2 virus, airport ventilation systems can be adapted to reduce transmission risks

Ventilation systems used in airport terminal buildings have typically not been designed to mitigate the airborne spread of respiratory pathogens. Additional functionality may thus be required to augment the capacities of existing systems when appropriate physical distancing cannot be maintained - and / or there is insufficient mixing, dilution and removal of air in the immediate area

As the World Health Organisation (WHO) and the CDC have confirmed the potential for ***aerosol*** transmission of SARS-CoV-2, it is imperative that airport heating, ventilation and air-conditioning (HVAC) systems operate at performance levels which will maximize protection from transmission. It is recommended that a qualified HVAC engineering professional audit the airport air handling system and its control settings

In areas where passengers tend to congregate and physical distancing of 6 feet (1.83 meters) is difficult or impossible to maintain, airport ventilation systems need to be capable of delivering more than six air changes per hour (ACH) to travellers' breathing zones during such times. The number of ACH that are appropriate for 'comfort' needs alone may not be sufficient to protect against airborne infections, especially in congested areas

Given that there is yet little or no evidence of SARS-CoV-2 transmission through recirculated or mechanical air systems with long ductwork runs and adequate filtration, it can be assumed that the supply air is virtually virus free and will not introduce an infectious dose to the spaces being ventilated. Therefore, increasing airflow to promote dilution and mechanical removal are reasonable adjustments. Given airport terminals typically have high ceilings and large volume spaces, dilution can be achieved as long as the air is well mixed

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Airports should consider installing automatic sensors to detect excessive congestion of passengers to allow for the rapid adjustment of air supply to associated areas. Adding carbon dioxide (CO_2) sensors in the areas of concern may be an appropriate strategy

Eating in the gate holding areas or other places where crowding can occur - such as security queues - should be strongly discouraged. Otherwise, six-plus ACH may be inadequate to prevent potential exposure to infectious doses. If passengers unmask to eat in crowded areas, then virus-shedding rates could increase, resulting in the potential for near-field exposures

Supplemental air cleaning and enhanced mixing of air should be evaluated for areas where passengers might congregate in close proximity for a period of 15 minutes or more. Properly sized portable air purifiers and upper room UV-C lamps will increase effective air exchange and support dilution and removal of any pathogens including SARS-CoV-2. Similarly, supplemental air cleaning should be considered for break rooms for security, customs, airport, airline and other employees - especially if those areas are used to eat and interact socially

A key objective should be to maintain transmission risk below 1% for passengers on airport transport vehicles. The detailed modelling analysis performed on a limited number of exemplar vehicles assumed the vehicles (airside buses, smaller shuttle buses, terminal trains etc.) had their ventilation systems set at maximum (according to the manufacturer's specification) and that one single infectious passenger (shedding virus at a modestly high quanta / hour rate) was on-board such example vehicle. The results showed that all passengers should be masked and passengers and loads typically limited to 50% or less for no longer than 15 minutes

Of course, there are many different vehicle configurations and ventilation rates in use in airport transport fleets. Airport operators etc. should evaluate their fleets and implement appropriate recommendations to maintain transmission risk below 1%

Installing physical barriers such as plastic barriers at customer facing service areas and passenger queuing areas can reduce the spread of exhaled virus plumes, ***but*** they must be appropriately designed, sized and ventilated to achieve their specific control goal. Detailed simulations have demonstrated that incorrect installation of plastic barriers ***can*** create a 'microenvironment' which might ***reduce*** air exchange effectiveness of the existing ventilation system in certain areas

Plastic barriers to separate lines where passengers are queueing at check-in, security checkpoints, immigration / customs inspection points etc. are ***not*** recommended ***without*** detailed analysis of the adequacy of air exchange and mixing of air in the associated breathing zones. Partitions might create plastic 'canyons' that inhibit airflow

Whilst such barriers might offer some protection to others waiting in adjacent lines, ***a passenger in front or behind an infectious person is likely to experience concentrations higher than they would have in an open well-mixed space***. The analysis supporting this finding assumed 8-foot partitions in a security area with 12-foot ceilings; this might well be a worst-case scenario. Spaces like departure lobbies with higher ceilings and good vertical air mixing might mitigate concerns for restricted airflow in these plastic-sided queues

Installation of disinfection devices in air ducts is not recommended at this time. While many commercially available devices claim to disinfect supply air effectively, efficacy needs to be demonstrated through independent third-party verification before adoption

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Furthermore, there are no peer-reviewed published case studies to support airborne transmission of SARS-CoV-2 through typical central mechanical ventilation systems

Under no circumstances should disinfecting devices that emit ozone into the air be used in occupied settings. Ozone is a strong oxidizing molecule that can damage respiratory systems, irritate mucus membranes and cause asthmatic symptoms at elevated concentrations

Modelling tools are available to help airport operators assess ventilation and passenger management strategies to reduce the risk of airborne viral transmission. Some calculations are straightforward and can be done by facility managers to evaluate specific spaces, like break rooms

For use in more complex, open, contiguous spaces at an airport - selecting the most appropriate model and its application may require assistance from professionals who understand building systems and COVID-19 risk model applications and limitations. Such tools can provide guidance on operating existing HVAC systems and determining when supplemental air cleaning may be needed.

Furthermore, some models can be used in a dynamic sense to inform airport management on how to enhance ventilation mitigation measures and those that manage passenger behaviours. Models that are more sophisticated can incorporate real time sensor data (e.g. CO_2 levels, occupancy sensors) to improve risk-reducing ventilation strategies

Passengers, and to some extent employees working at an airport, have sufficient autonomy to reasonably manage their exposure risk. For example, a passenger is not compelled to crowd around the gate at boarding time and can move away from fellow passengers who are unmasked and eating nearby. Eating at an airport restaurant will be an optional activity for most

Being aware of activities that diminish distances between passengers, a traveller might reduce his / her time in close quarters with others through reasonable adjustments of own behaviour, where a residual risk might be reasonably considered to still exist

The findings and recommendations in this report show it is possible to implement various complementary strategies that can be layered to mitigate the risk of transmission of SARS-CoV-2 at airports. Following the science and acting upon it can enhance public health safety

END of EXECUTIVE SUMMARY

Note: The interested reader might also wish to take a look at appendix X (page **172**) **of this AEP Volume 1**

Said appendix X contains a list of useful links related (in the main but not exclusively) **to pandemic preparation and response related operations etc. for aircraft operators (*passenger airlines*)**

However, it is well worth study by commercial *airport operators* too

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VERY IMPORTANT NOTE

Due the devastating impacts of the ***COVID-19*** pandemic (2020 - 2022) on commercial ***airport*** operations worldwide, some airports might now think that they need to produce contingency response plans which will enable them to respond to a catastrophic ***aircraft accident*** type situation ***concurrent with*** ***simultaneously*** responding to a major (sometime in the future) ***pandemic*** similar, in relevant aspects / impacts, to e.g. COVID-19

'Best guess' odds (as at 2022) for the catastrophic aircraft accident situation occurring are ***very*** approximately ***1 in 30,000,000*** (1:30 million). 'Best guess' odds (also as at 2022) for another pandemic on the 'adversity' scale of COVID-19 are very approximately ***1 in 60 years*** (and e.g. ***1 in 400 years*** for the equivalent impacts of the 1918-1921 influenza [Spanish Flu] pandemic)

Whilst we leave it to any 'interested reader' to work out the ***combined*** occurrence odds (catastrophic aircraft accident + a ***simultaneous*** pandemic on the COVID-19 impact scale) - they will be so incredibly small that we consider it to be ***an absolute waste of time and effort to pre-plan for such a situation***

Accordingly, the latter (no such ***combined*** planning envisaged whatsoever) is the concept that we have applied throughout our entire series of CRPM / Guideline documents and associated procedures - including those related to ***airport*** emergency response planning

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XIA AEP Volume **1** / Section **4**

Sub-section **4C**

FUEL SPILLAGE - ***not*** aircraft associated

Use Section **3** of this AEP Volume **1** (see page **81**) as a guide to the required response for fuel spillages ***not*** associated with aircraft, as per this sub-section 4C (i.e. no further information on latter subject is provided herein)

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XIA AEP Volume **1** / Section **4**

Sub-section **4D**

REMOVAL of **CRASHED** / **DISABLED AIRCRAFT**

See Appendix Q to ***this*** XIA AEP Volume **1** (page **151**)

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XIA AEP Volume **1** / Section **4**

Sub-section **4E**

METRO LIGHT RAILWAY ACCIDENT / INCIDENT (Involving / Affecting XIA)

Note - This sub-section is ***only*** to be completed ***if*** the airport concerned is ***directly*** (physically / geographically) connected (e.g. co-located) in some relevant / appropriate manner - to something like / similar to a '***general public use*** railway / metro / subway system'. (Typical [real] examples of the latter airports include Hong Kong [HKG]; Dubai [DXB]; London Heathrow [LHR] etc.)

Further to the above, it is also for the concerned airport to produce an appropriate accident / incident response plan for any ***'light railway' or equivalent system*** which it uses ***exclusively*** '***on-airport***' to convey passengers e.g. to / from 'remote' boarding gates (typical [real] example of the latter being Orlando Airport [ORD] in the USA)

Accordingly, it is for any airport concerned to complete this sub-section 4E ***itself*** if so required

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XIA AEP Volume **1** / Section **4**

Sub-section **4F**

NATURAL DISASTER

1. XYZ International Airport is situated geographically, geologically, 'meteorologically' etc.in a part of the world which is seldom, if ever, affected by any type of major, natural disaster - such as earthquake (including related tsunami), hurricane / typhoon / tropical cyclone (+ the associated side-effects e.g. storm surge, mudslides etc.), volcanic eruption, tornado, inundation (flooding), forest / bush-fire etc.

2. Accordingly, the risk / benefits analysis of the above situation indicates that there is nothing further to include here - and this is thus the accepted 'natural disaster' policy for XIA

3. This policy shall be reviewed 'when and as required' by XYZ Airports Company

> ***Reality Check*** - For airports actually situated in geographical etc. regions where there ***is*** historically and / or statistically a real threat of some type of natural disaster etc. type occurrence - then the appropriate airport pre-preparations, response plans etc. are to be documented here (AEP Vol 1 / sub-section 4F), in the necessary detail - (with title ***xxx*** [name of airport] - ***Natural Disaster Plan***)
>
> Airport 'natural disaster' plans shall be trained and tested (exercised) at specified intervals - and documented reports and records etc. of same, produced and retained

Some links are included just below which may be of some use (to the interested reader) in exploring a little further, the subject of 'airports' vs 'natural disaster':

Jacksonville Airport Authority (JAA) - Hurricane Preparedness Manual 2014
http://www.flyjacksonville.com/PDFs/JAAHurricanePrep2014.pdf

Cairns Airport Cyclone Plan - June 2022
https://www.cairnsairport.com.au/home/cyclone-plan/

Natural Disaster - Earthquake Response Plan - Kathmandu Airport
https://www.thenewhumanitarian.org/feature/2013/04/02/earthquake-proofing-nepal-s-risk-airport

Natural Disaster Planning (particularly volcanic eruption) - Bali Airport
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwihsK37wsPvAhWQTsAKHa1cBDIQFjAAegQIAhAD&url=https%3A%2F%2Fdownload.atlantis-press.com%2Farticle%2F25889400.pdf&usg=AOvVaw03EeuzEApd8Gm2FAvi4HND

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AEP Guideline Volume 1 - Appendix **A**

Emergency Contacts Directory

To be completed by XYZ Airports Company

(A typical [blank] template follows - which will require further development i.e. action required here)

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XYZ International Airport

Crisis Contacts Directory

Front Cover

Effective Date: .....

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XIA Crisis Contacts Directory - Alphabetical ***Contents*** List

Contact Details Page No

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XIA Crisis Contacts Directory - Listings

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XIA Crisis Contacts Directory - Listings (continued)

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AEP Guideline Volume 1 - Appendix **B1**

Alerting & Activation - **Manual Callout Tree** (Generic)

Note 1 - The alerting method (see ***next*** page) shown in this appendix B is based on a simple, **manual** system. Where required, different manual callout trees can be used by different parts of the business

Note 2 - fully automated alerting systems are now common place - capable of alerting very large numbers of persons in very quick timescales e.g. 'thousands in minutes' for the fastest systems - using all and any forms of ***modern*** (electronic) communications e.g. telephone, text message, email, social media etc.

Such systems are relatively inexpensive to procure (lease) - with the cheapest coming in at around USD $10, 000 or less per annum (2022 prices) - where associated alerting requirements involve around 300 to 500 persons (the more persons added the more expensive the lease becomes)

However, a manual callout tree should always be produced and maintained where such automated systems are used

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(Manual) **Cascade Callout Tree Alerting** (Notification / Callout) **System** - ***Typical Example***

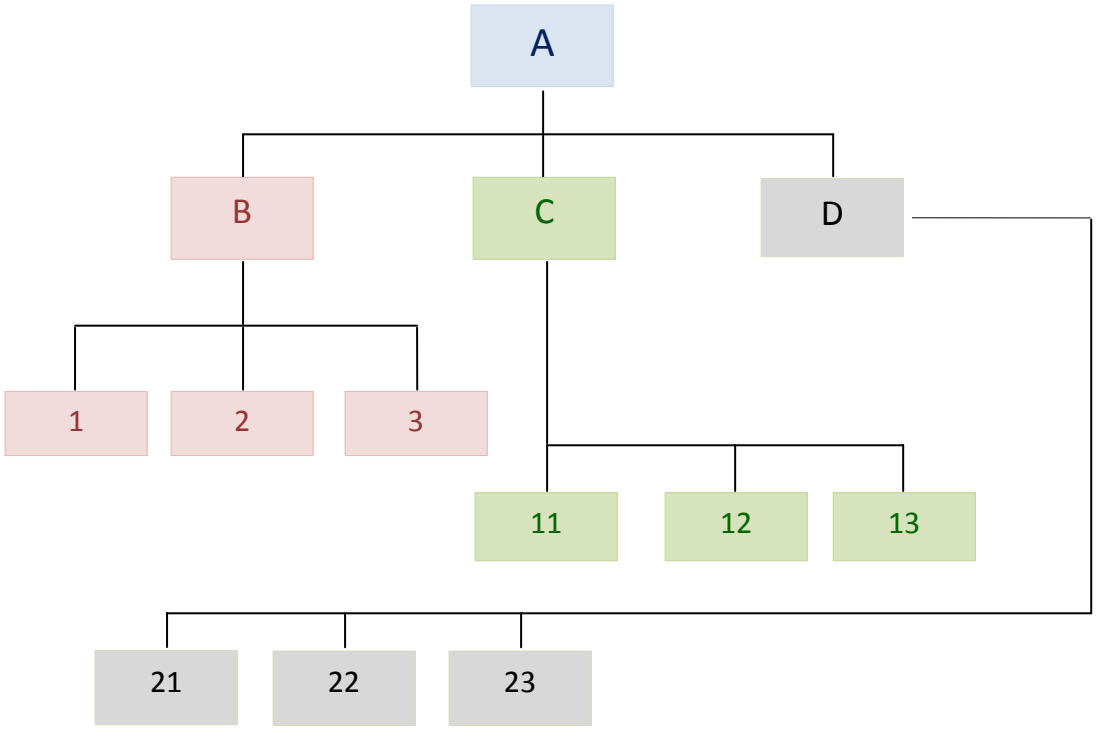
One of the simplest types of manual alerting & activation system requires the person commencing the alert (e.g. person **A**) to make telephone calls to persons **B**, **C**, **D**, E and F etc. In turn, person **B** would then pass on the alerting message to persons **1**, **2**, **3**, **4**, **5** etc.

Person **C** would pass on the alerting message to a different group of persons than those contacted by person **B** - say persons **11**, **12**, **13**, **14**, etc. and so on - until the full list of persons to be alerted has been contacted

At the 'letters' level referred to above (B, C, D, E etc.) - if a person to be contacted does not respond, then the person 'doing the contacting' (person A in this case) takes over the alerting job for that specific person, making a note of the person unable to be contacted

At the 'numbers' level shown above (1, 2, 3, 4, 5 etc.) - if a person to be contacted does not respond, then the person 'doing the contacting' simply moves on to the next contact in that particular alerting group, making a note of those unable to be contacted

The system's main advantage is simplicity. A significant disadvantage is that it takes time - especially for large numbers of persons to be contacted - and requires personal contact details (office, home and mobile telephone numbers etc.) and the associated procedures to be constantly updated and / or maintained. (Note - as mentioned, automated alerting systems can be commercial purchase - or can be designed 'in-house' if budget and adequate IT / telecommunications expertise are available)



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AEP Guideline Volume 1 - Appendix **B2**

Alerting & Activation - Manual Callout Tree

Insert her actual Contact Lists and associated Diagrams (who contacts who; in which order; on what telephone number[s] etc. - see generic example previous page)

Also insert here details of the 'backup / fall-back' procedure if the 'primary' contact listed fails to respond (e.g. by not answering the associated telephone call etc.)

Appendix B2 to be completed & inserted here by XYZ Airports Company

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AEP Guideline Volume 1 - Appendix C

XYZ International Airport / ON-Airport Gridded Crash Map

To be prepared & inserted here by XYZ Airports Company

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AEP Guideline Volume 1 - Appendix **D**

XYZ International Airport - OFF-airport (Surrounding Area [to be defined]) **Gridded Crash Map**

To be prepared and inserted here by XYZ Airports Company

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AEP Guideline Volume 1 - Appendix **E**

Map(s) **Showing** * **Locations of** (local) **Major Local Hospitals relative to XYZ International Airport**

* It would be advantageous to also include detailed and associated 'driving instructions' from the airport to each such hospital - possibly providing one or two alternative routes to consider should use of the primary route (typically shortest / quickest) not be available / advisable (e.g. due traffic congestion etc.)

To be prepared and inserted here by XYZ Airports Company

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Diagrams Showing Front and Back of a 'Standard' ICAO Triage Tag

F1 - *Front*

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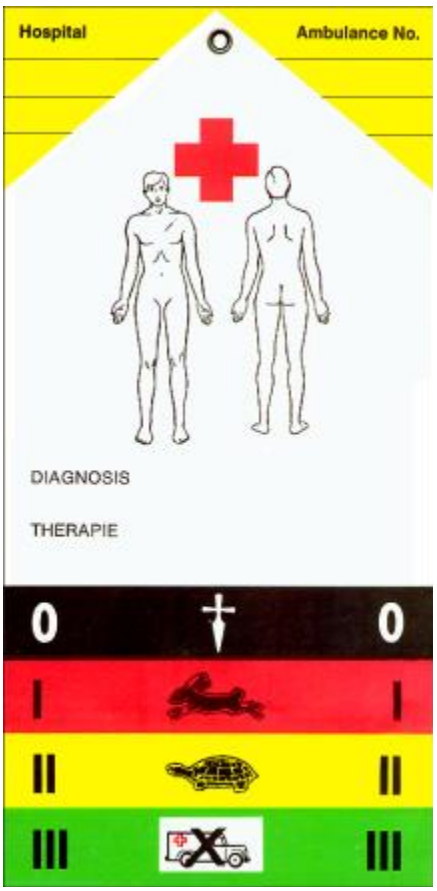
Diagrams Showing Front and Back of a 'Standard' ICAO Triage Tag

F2 - ***Back***



Black	**0**	=	Deceased (Dead) - ***OR*** not expected to survive in the very short term
Red	**I**	=	Critical (life-threatening) Injuries - immediate hospitalisation required
Yellow	**II**	=	Seriously Injured - hospitalisation required quickly - but not immediately
Green	**III**	=	Uninjured or Minor Injuries only - no hospitalisation required

For a more detailed explanation of the triage process follow the below link:

https://www.aviationemergencyresponseplan.com/information/

When webpage opens, scroll down displayed list of info articles until you find the one entitled:

* Information Article - **Triage**

Click on the word 'Triage' to open and read the article

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Uninjured Holding Area

Medical Treatment Area

Deceased Holding Area

Medical Services

TRIAGE AREA

Upwind

Inner Cordon

Inner Cordon

Airport Fire & Rescue Service

Airport Police / Security

Mobile Incident Command Centre / Forward Command Post

Accident Airline's Crash Site Team

TYPICAL CRISIS RESPONSE ACTIVITIES AT / NEAR TO ACCIDENT SITE (On-airport accident assumed)

CST - This 2 person team represents the accident airline at the **MICC** / **FCP**. Amongst other things it e.g. delivers the accident flight's Crew List, PAX List & Dangerous Goods info to those needing same

The *MICC* / *FCP* conducts operational [Bronze] command & control (delegating as required) of all resources shown opposite - whilst same are operating at / near to the accident site. Each agency present in the diagram should send a liaison rep to the MICC / FCP

For simplicity, diagram is not 100% complete e.g. *outer cordon* not shown - but all agencies shown opposite [except AFRS] operate from the outer cordon; *off-airport* responding resources not shown; *Tactical* [Silver] & *Strategic* [Gold] lines of command & control etc. omitted for both on-airport & off-airport agencies etc.

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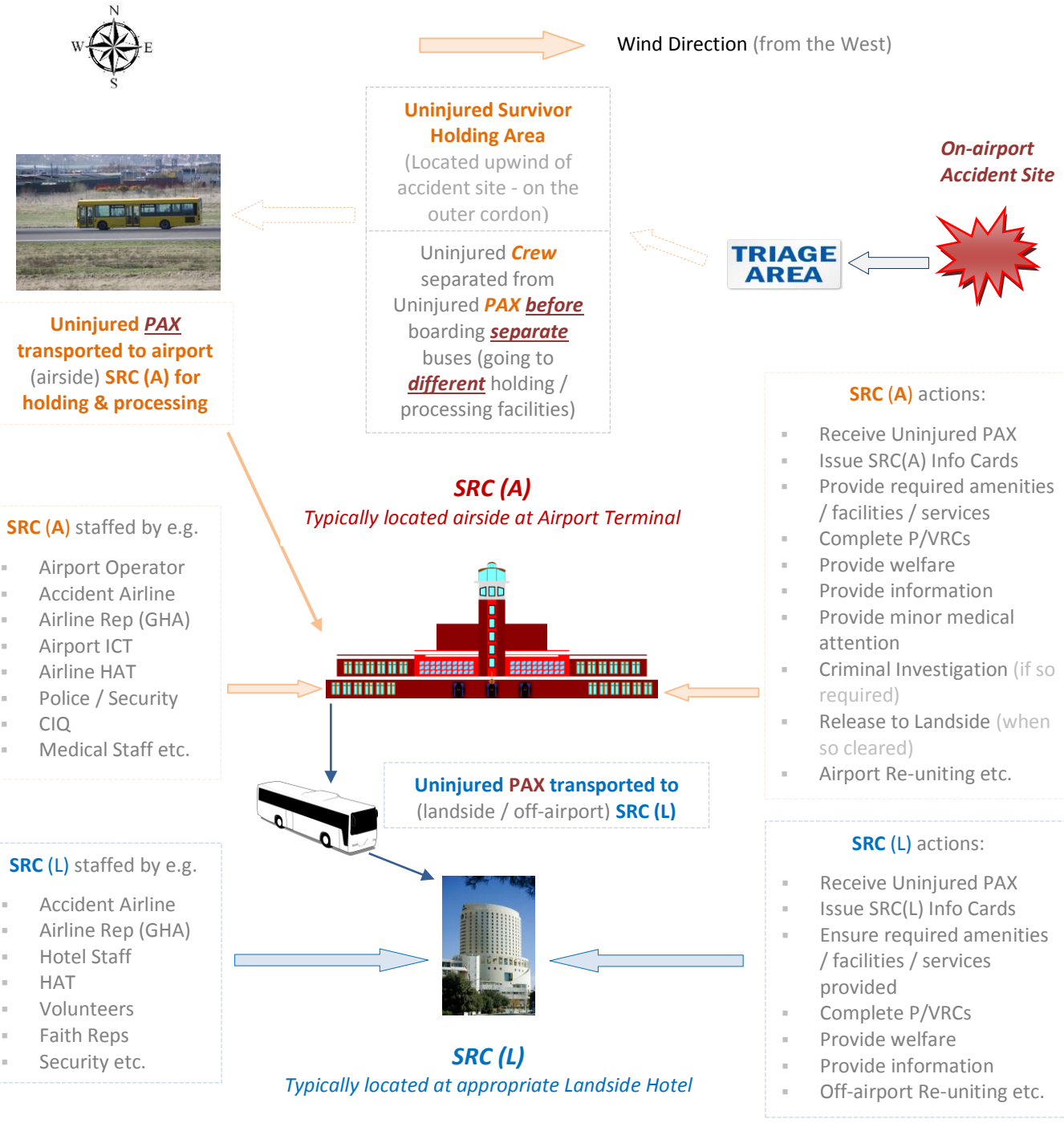
Typical Movement of Uninjured *Passengers* from (*on-airport*) Accident Site



Note - Instead of going to the SRC (L) (after release from the SRC [A]) uninjured PAX may instead 1. Go to any other local accommodation (including homes); 2. Carry on with journey; 3. Return to journey start point; 4. Anything else achievable (Accident airline will assist with 1. to 4. above - insofar as is possible / practicable)

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Typical Movement of Injured & Deceased *Victims* from (*on-airport*) Accident Site

Wind Direction (from the West)

Injured Victim Holding Area
(Located upwind of accident site - on the outer cordon)

Deceased Holding Area
/ Temporary Mortuary

TRIAGE AREA

On-airport Accident Site

Injured Victims transported to Hospital(s)

Deceased Victims transported to Mortuary etc.

- Respect culture/custom/religion etc.
- Post Mortem / autopsy
- Identification
- Repatriation (as required)
- Enquiry (as required)
- Burial / cremation etc.

Notes: **1. P/VRCs** (or equivalent local form) to be completed for hospitalised victims (if possible). **2.** P/VRCs to be completed for any accompanying, **uninjured** FR type victims (travelling companions from accident flight) also present at hospital(s). **3.** FECs(or equivalent local form) to be completed for any other FR / MGFR present at hospital(s) - (unless any such FR / MGFR has **already** been re-united with his / her associated, hospitalised victim). **4.** Apply same principles / actions (as per items 1 to 3 above) to any mortuary / mortuaries in use for deceased victims. **5.** The accident airline and / or its local airline rep should have enquired beforehand as to whether or not its representatives (e.g. the HAT) will be allowed access to the potential hospital(s) involved. If not, appropriate agreements, SOPs etc. should have been pre-negotiated so as to ensure that the accident airline is given access to the appropriate information, in order that it can carry out its humanitarian and equivalent duties. Nevertheless, in some countries / jurisdictions the airline might still be denied such access / info. **6.** The latter (item 5) *might* also apply to some mortuaries. **7. In some countries / circumstances it is possible to encounter insensitive / inhumane / degrading etc. handling of the injured and** (particularly) **the deceased**. **8.** In some countries / circumstances etc. only some (or none) of what has been written on

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AEP Guideline Volume 1 - Appendix **H1**

Set-up Procedure / XIA - * Crew Reception Centre (Airside) - CRC (A)

** Note - the term 'crew' as used here refers to **uninjured crew victims***

To be completed & inserted here by XYZ Airports Company

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AEP Guideline Volume 1 - Appendix **H2**

Diagram Showing Location and Layout of XIA - CRC (A)

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Set-up Procedure / XIA - * Survivor Reception Centre (Airside) - **SRC (A)**

** Note - the term 'Survivor' as used here refers to **uninjured passenger victims***

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Diagram Showing Location and Layout of XIA - SRC (A)

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Set-up Procedure / XIA - Family, Relatives & Friends Reception Centre (Airport) - **FRRC**

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AEP Guideline Volume 1 - Appendix **K2**

Diagram Showing Location and Layout of XIA FRRC

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AEP Guideline Volume 1 - Appendix L

Diagram Showing Location and Layout of XIA Re-uniting Area - On Airport

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AEP Guideline Volume 1 - Appendix **M**

Diagram Showing Location and Layout of XIA (Airport) - **E**mergency **O**perations **C**entre

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AEP Guideline Volume 1 - Appendix **N**

Diagram Showing Images & Layout of XIA - **M**obile **I**ncident **C**ommand **C**entre (Vehicle)

Note 1 - use additional pages where necessary

Note 2 - if your airport does not have an MICC - substitute with the '**F**orward **C**ommand **P**ost' vehicle

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AEP Guideline Volume 1 - Appendix **P**

XIA Major Incident - **Radio** (& Similar) **Communications Plan**(s)

To be completed and inserted here by XYZ Airports Company

Note - Follow the ***link*** found near the top (of ***this*** AEP Vol 1 Guideline / page **180**)**.** When linked to document opens, see **Section 5** (starts page 46) entitled '***Information Management & Communications***'. Where appropriate, the reader should study and apply / adapt the most relevant / appropriate content of this latter **Section 5** - to his / her ***own*** airport's particular '***radio*** (and similar) communications plan(s)'

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AEP Guideline Volume 1 - Appendix Q

XYZ International Airport

Airport Directive xx - dated 10 March 202x

Aircraft Recovery / Salvage

INTRODUCTION

It is a 'Condition of Use' of XYZ International Airport (XIA) that 'airport instructions' issued by the Airport Operator (XYZ Airports Company) are complied with by all airport users. Furthermore, it is a requirement of the current XIA Airport Emergency Plan (AEP) that every airline / aircraft operator using the airport *must have local crisis response plans and resources in place* - compatible with this AEP, *re appropriate pre-arrangements having been put in place - together with establishment of firm contracts* - ***for the removal of disabled aircraft / wreckage***

This Instruction sets out the Aircraft Recovery procedures and forms part of the AEP - which in turn is part of the XIA Aerodrome Master Manual - thus making Aircraft Recovery Procedures part of the Aerodrome Licensing (Certification) process

This Instruction and the processes and procedures it describes, also ensures XIA (airport operator) complies with the recommended practices concerning same found in ICAO Annex 14 - 'Aerodromes' together with Airport Services Manual Part 5 'Aircraft Recovery'

GENERAL

The primary aim of an aircraft recovery / salvage plan is to ensure that, in the event of an incident or accident, the aircraft or wreckage does not constitute a danger or obstruction to the public, to air navigation or to the environment, and that normal airport facilities are restored as soon as possible. The need to avoid causing further damage to the aircraft, airport property or environment, must be observed as far as is practicable

In the case of a "reportable accident" within the meaning of the Civil Aviation (Investigation of Air Accidents & Incidents) Regulations 20xx, the aircraft or wreckage must not be moved or interfered with until permission has been given by XIA (Airport Operator) following consultation with the Air Accident Investigation Authority. (The on duty Air Traffic Control Watch Manager is responsible for notifying reportable accidents to the Air Accident Investigation Authority)

The recovery of a disabled aircraft / wreckage will not be undertaken until the Aircraft Accident or Aircraft Ground Incident as defined in the XIA AEP has been cancelled. Furthermore, the Air Accident Investigation Authority must release the aircraft and the airline and / or its Insurers give permission for removal. The XIA Airport Police / local Police will also need to release the site from any 'scene of crime' requirements

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XYZ Airports Company (Airport Operator) will be the overall co-ordinating body throughout the recovery operation

*RESPONSIBILITIES OF AIRLINE (**Aircraft** Operator)*

The airline / aircraft operator or designated aircraft recovery agent is responsible for removing the aircraft / wreckage as quickly as possible after permission has been obtained as stated above and taking all practicable steps to minimise any health, safety and environmental impacts which have resulted from the accident / incident

The airline / aircraft operator or designated aircraft recovery agent is responsible for the provision of the necessary technical advice (including insurer advice), supervision and any required equipment & materials

Airline / aircraft operator users of the airport must have adequate facilities to conduct their own recovery operations at XIA. If they do not have such adequate facilities themselves, they must have ***pre-prepared*** contractual arrangements in place with e.g. ***an appropriate airline*** and / or ***agent***, either being capable of expeditiously removing the associated aircraft / wreckage, including the remediation of any adverse health, safety and environmental impacts resultant from the incident (e.g. containment and removal of aircraft fuel, chemical and oil spillages). If information or assistance is required concerning such contracts then contact should be made with the appropriate XIA Manager on (insert contact details here)

The airline / aircraft operator or its designated aircraft recovery agent is responsible for making any arrangements with local Customs and Immigration regarding removal of baggage and cargo

The airline / aircraft operator or its designated aircraft recovery agent is required to defray any charges for work involved in making good damage to XIA property and / or infrastructure - and to meet the cost of their (own) recovery operation, including any charges for use of any XIA equipment and personnel used in said operation (as appropriate)

If the airline / aircraft operator or designated aircraft recovery agent should refuse to remove a damaged aircraft / wreckage ***OR*** otherwise fails or neglects to do so:

- within a reasonable time period ***AND / OR***
- when the aircraft / wreckage is creating an operational obstruction ***AND / OR***
- where the impact caused has resulted or will / might result in a breach of health & safety and / or environmental regulations ***AND / OR***
- where any embarrassment or nuisance to XIA (Airport Operator) arises in fulfilment of its responsibilities as an Aerodrome Licensee

……then XIA (Airport Operator) may take independent action to remove the aircraft / wreckage

XIA (Airport Operator), its servants or agents, will not accept responsibility for any loss or damage of any kind resulting from any such action and the airline / aircraft operator shall be responsible for all costs incurred and shall indemnify XIA (Airport Operator), its servants and agents accordingly

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*RESPONSIBILITIES OF XYZ AIRPORTS COMPANY (**Airport** Operator)*

The Airport Operator's manager assigned the responsibility for overseeing overall aircraft recovery / salvage operations at XIA (the 'designated manager') will request all interested parties or their representatives to confer at or near to the incident site as soon as is permissible and practicable.

This group is expected to be able to offer advice and assistance on the formulation and implementation of an appropriate recovery plan. Typically this group will comprise reps from (in no particular order - and list is not exhaustive):

- The Incident Airline / Aircraft Operator
- Any assisting Airline / Aircraft Operator (e.g. a local airline with the experience and facilities to conduct aircraft removal / salvage operations at XIA)
- Any specialist third party recovery agent engaged by the Airline / Aircraft Operator / XIA
- The Air Accident Investigating Authority
- Airport Operator (XIA) Engineering and any other appropriate staff
- AFS
- ATC
- Airport and local government Health & Safety
- Local Police & Airport Security
- The local Environment Agency
- The local Water and Sewage /run-off Utility Provider
- Aircraft Manufacturer's Representative
- Into-plane Refuelling Company
- Insurers (technical experts)

The 'designated manager' (acting as overall co-ordinator for the operation) shall:

- Define the area in use for recovery operations and arrange for its safeguarding (by Police and / or Security etc.) and promulgation of entry / exit procedures
- Specify the arrangements for personnel and equipment to proceed to and from the area
- Promulgate any limitations to the operation

The Airport Operator shall, on a repayment basis and at the request of and under the oversight of the airline / aircraft operator or designated recovery agent - provide assistance with such of its recovery equipment (if any) and / or manpower as appropriate. Whilst such assistance (if any) will be conducted with due care and attention - XYZ Airports Company, (plus its servants and agents), will not be liable for any loss or damage resulting from the use of its equipment, materials or personnel during the recovery operation and / or for their non-availability, for whatever reason

A formal (legal) hire agreement / contract and general indemnity must be entered into by the airline / aircraft operator or designated aircraft recovery agent before XYZ Airports Company recovery personnel or equipment can be brought into operation as per the para above. Such equipment must be returned in the same order / condition as it was in prior to the hiring of same - otherwise an appropriate replacement (type / condition etc.) must be provided

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RECOVERY - FIRST ACTIONS

Once the 'restricting' conditions (if any) of the emergency / incident have been cancelled, the AFS officer in charge will hand over control to the 'designated manager'. The former shall advise the latter of all known damage to the aircraft and whether it was caused through the accident and / or through fire-fighting and / or rescue work

In the case of a reportable accident, the aircraft / wreckage must generally not be moved / interfered with until the designated Air Accident Investigation Authority (AAIA) has been consulted. Furthermore, bodies / body parts should not be moved or removed (unless exceptional circumstances apply-– see next para below) without clearance from the AAIA, the Police and the Medical Examiner / Coroner

An air accident investigation process is ***unlikely*** to preclude (stop) ***preparatory*** work for the removal of the aircraft / wreckage or any detached parts - or of preparation of a plan of action. However, such plan may be affected by AAIA requirements to preserve particular items intact for examination after they have been removed from site. Other items may need to be left in situ or their position marked prior to removal. Accordingly, no items must be moved on the site or removed from the site without AAIA authority - unless critical preservation of life and / or evidence so dictates

Removal of wreckage (assuming that AFS operations have been completed and the emergency / incident terminated) prior to the AAIA investigation may be required in order to alleviate any immediate danger or obstruction to the public, air navigation or other transport. As such, it will only be removed on the authority of the 'designated manager' - who shall notify the AAIA of any such decision as soon as possible. He / she shall also ensure that every effort is made to mark and photograph the position of 'items' before removal - including bodies and body parts, as appropriate

The 'designated manager' shall record (log) all action taken and also arrange for the following:

- Attendance of photographers to make a video record and take photographs of the aircraft and wreckage
- More appropriate cordoning off / securing the site to prevent unauthorised access
- Access to the site for authorised personnel, ensuring personal health and safety is taken into account
- The promulgation of changes to aerodrome facilities caused by the crash and / or the recovery operation e.g. via NOTAM

The XYZ Airports Company has limited capability aircraft recovery equipment / operators - and, dependant on the size and type of the 'accident etc.' aircraft, will provide - where possible:-

- TBA by Airport Operator
- TBA by Airport Operator
- TBA by Airport Operator etc.

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THE RECOVERY OPERATION

The 'designated manager' shall convene the initial (and further) meeting(s) outlined above - and agree a broad plan of action with attendees. The following factors should be considered:

- Aircraft / wreckage is electrically safe i.e. the aircraft batteries have been removed or earthed and electrical services in the area isolated
- Aircraft oxygen system isolated
- Residue of liquid fuel is neutralised / removed to prevent contamination and / or ignition when recovery commences
- How the recovery operation should be attempted considering aircraft damage
- Can the aircraft be towed on its own landing gear
- The firmness, condition and slope of the site and how it would affect the most practical method of lifting (if required)
- Types & quantities of lifting equipment required (e.g. inflatable bags, slings, hawsers, jacks)
- Moving equipment / vehicles required (e.g. cranes, bulldozers, steps, cherry pickers etc.)
- Possibility of constructing temporary load bearing access roads e.g. for:
    - Facilitating de-fuelling
    - The movement of baggage, mail and freight
    - The movement of recovery vehicles
    - The movement of the aircraft onto firm ground
- Necessary measures to lighten the aircraft, in addition to de-fuelling. (Note - it is important that sufficient surface de-fuelling vehicles are available)
- Any adverse / unsafe effects on the aircraft's centre of gravity, of further structural damage to the aircraft and of any 'lightening' measures anticipated
- Possible requirements to reduce the height of the wreckage (e.g. removal of the vertical tail-fin [stabiliser] - in order to remove an obstruction to normal aircraft operations)
- Provision of structural support to avoid uncontrolled and sudden movement during lifting operations
- Safety precautions to safeguard personnel during all stages of the operation
- Timing the removal of the aircraft so as to minimise disruption of normal airport operations
- Measures required for containing / minimising any health, safety and environmental risks and impacts - including any appropriate notification(s) to Statutory Bodies and Authorities

QUESTIONNAIRE FOR AIRLINES / AIRCRAFT OPERATORS

On the next page will be found a typical 'sample' of the type of aircraft recovery / salvage questionnaire - which ***all*** *a*ircraft operators at XIA ***must*** complete as a condition of their use (i.e. before use) of the airport:

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AIRCRAFT RECOVERY ARRANGEMENTS - QUESTIONNAIRE FOR AIRCRAFT OPERATORS AT XIA

- Name, local address and full contacts details of Airline / Aircraft Operator

- Who is responsible for recovery / salvage of one of your company aircraft at or in the vicinity of XIA?

- Do you have a contract or a memorandum of understanding with an appropriate, * local party / agency - for aircraft recovery / salvage of one of your aircraft at or near to XIA?

  State 'YES or NO'

  * Note - the term '***local***' should be interpreted as being available at the accident / incident location within 6 hours of activation

  If 'YES' do you have a Contract ***OR*** a Memorandum of Understanding (MOU) and what is the effective date and duration (term) of the contract or MOU?

  If 'YES' provide name and contact details of the local Company providing the recovery / salvage service

- Which person or persons and / or title designations (e.g. Duty Operations Controller) from your airline / company are to be contacted (in order of precedence) if one of your aircraft is disabled at XIA? (Please provide reliable 24H contact details for at least ***three*** persons / designations)

- Please name your airline / company representatives who are empowered to sign indemnity forms ***before*** an aircraft recovery operation (involving third parties) can commence

- Please provide details of any airline / company owned and / or leased equipment available at XIA which can be used to assist in an aircraft recovery operation - and (if any such equipment is available) also confirm that you have appropriate qualified operating staff (include e.g. de-fuelling capability, jacks, airbags, wheel-change kits, undercarriage change kit, track-way, steel towing cables, cranes and spreaders, belly-bands / webs for lifting, portable lighting with generators, heavy-duty tugs and cranes etc.)

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Form Completed by:

Name (please print):

Position in Airline / Company:

Date:

Signature:

Please return the completed form to:

TBA by XYZ Airports Company

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Following a ***major*** aircraft accident (typically involving the larger, passenger airline and resulting in multiple fatalities and serious injuries) it is an international, 'legal' (ICAO 'Standard') requirement for the involved, 'accident airline(s)' to offer transportation of accident victims' ***families, relatives and friends*** (FR) (who had ***not*** been on board said accident flight) to the accident location (or as near as practicable to such location). For the large, international airline this could mean arranging (and paying for [so this risk should be pre-insured!]) such transportation for large (to very large) numbers of such FR, from absolutely all corners of the planet, via all forms of transport

Under the terms of ICAO Annex 9, Chapter 8, Clause **I** (Assistance to Aircraft Accident Victims and their Families), paras 8.42 to 8.48 - the following is required of all United Nations (UN) 'states' (countries) - which means it is typically mandatory in almost every country in the world:

8.42 ***Standard***. The 'State of Occurrence' of an ***aircraft*** accident (+ adjacent States as required) ***shall*** facilitate temporary entry into its / their territory/ies, of ***family members*** of ***victims*** of said accident

8.43 ***Standard***. Said 'State of Occurrence' (+ adjacent States as required) ***shall*** facilitate temporary entry into its / their territories, of ***authorized reps*** of the accident aircraft's ***operator*** - and / or of any associated codeshare / alliance partner etc. - so as to enable it / them to provide assistance to **a)** accident survivors and their family members; **b)** family members of deceased victims and **c)** the relevant authorities in said States

(Note: Codeshare and Alliance etc. type agreements etc. might typically require 'partner(s)' to act as "first responder(s)" on behalf of the accident aircraft's operator, if the former can reach the accident location in a significantly quicker timescale than the latter)

8.44 ***Recommended Practice***. In arranging for the entry of persons referred to in 8.42 above , the State of Occurrence and adjacent States ***should NOT*** require any travel document other than a passport - or an emergency travel document issued specifically to such persons - so as to enable them to travel to said States. However, where the State of Occurrence or an adjacent State ***does*** still require entrance visas etc. for persons referred to in 8.42 ***and*** 8.43 above, it should facilitate and expedite issuance of same

8.45 ***Standard***. ICAO Contracting States ***shall*** make arrangements to issue emergency travel documents, as required, to any of their own nationals who have survived said accident

8.46 ***Standard***. ICAO Contracting States ***shall*** extend all necessary assistance (e.g. clearing customs, arranging transport, ensuring associated dignity etc.) in the repatriation of human remains to countries of origin etc. - if so requested by family members of the deceased and / or the accident aircraft's operator etc.

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8.47 ***Standard***. **ICAO Contracting States** (countries) ***shall*** **establish legislation, regulation and / or policies etc. in support of assistance to *aircraft* accident victims and their families**

(Note - Attention is drawn to ICAO Doc 9998, '***Policy*** on Assistance to Aircraft Accident Victims and their Families' - and ICAO Doc 9973, '***Manual*** on Assistance to Aircraft Accident Victims and their Families' [Comment: note that at time of writing this {2023}, both aforesaid documents were 10 years old!])

8.48 ***Recommended Practice***. **ICAO Contracting States** (countries) ***should*** **ensure that their associated *aircraft* and *AIRPORT* operators, as relevant, develop their own** (appropriate) **PLANS - to provide timely and effective assistance to aircraft accident victims and their families**

(Such ***Airport*** operators' plans may form part of the associated ***Aerodrome*** Emergency Plan (AEP), (latter as per / required by {separate] ICAO 'Annex 14 - ***Aerodromes***')

Further Explanatory / Useful Information (i.e. ***not*** part of the above as originally produced by ICAO)

At most major, commercial airports, ***non-based*** (at any particular airport) ***aircraft*** operators (passenger airlines for purposes used here) rarely have significant numbers of their own staff serving their (own) associated flights. Instead, they contract the services of an appropriate '***ground handling agent*** - ***GHA***' so to do

Thus the associated role of such GHA in airport (aircraft accident) **emergency response ops is vital - and should thus *be additionally accounted for by all concerned***, in addition to what has already been written further above

*Note 1 - other parts of ICAO Annex 9, Chapter 8 (paragraphs **8.3 to 8.7** - **not** re-produced herein) require a similar type of facilitation (assistance) to be provided to **Air Accident Investigation Teams** (including airline teams) **+ their equipment** - when deploying in support of an aircraft accident*

*Note 2 - other parts of ICAO Annex 9, Chapter 8 (paragraphs **8.8 and 8.9** - **not** re-produced herein) require a similar type of facilitation (assistance) to be provided to **relief flights** responding to the various 'needs' associated with **natural and / or man-made disasters** which **seriously endanger human health and / or the environment** etc.*

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Example Template - 'Mutual Aid Emergency Support Agreement'

See next page

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Example Only

XYZ International Airport

XYZ Airports Company - Airport Emergency Plan

Mutual Aid Emergency Support Agreement

Details of ***Agency*** supporting the XYZ Airports Company - Airport Emergency Plan (AEP)

Insert Agency Details Above

This agency endorses and approves the specific ***Mutual Aid Emergency Support Agreement*** referred to herein. *(See Appendices to **this** Agreement for full details of **this** specific agreement + its associated instructions, procedures, resources required etc.)*. Accordingly, this agency shall use its best endeavours to comply with this agreement when requested so to do by XYZ Airports Company - insofar as such is applicable to the agency and (the agency) is capable of doing so - and where no overriding conflict(s) of interest exists

This XYZ Airport Company (the company) endorses and approves the specific ***Mutual Aid Emergency Support Agreement*** referred to herein. *(See Appendices to **this** Agreement for full details of **this** specific agreement + its associated instructions, procedures, resources required etc.)*. Accordingly, the company shall use its best endeavours to comply with this agreement when requested so to do by the agency - insofar as such is applicable to the company and the company is capable of doing so - and where no overriding conflict(s) of interest exists

Signature of Authorised Agency Representative:

Signature of XYZ Airports Company:

Date:

Note: follow links below for some 'real world' info (albeit somewhat 'dated' now) re Airport Mutual Aid Emergency Support Agreements

https://www.caa.co.uk/media/ljyou0xz/srg_asd_ip07mutualaid.pdf

https://www.trb.org/Publications/Blurbs/169180.aspx

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AEP Guideline Volume 1 - Appendix **T**

XYZ Airports Company - Crisis Communications Plan

To be completed and inserted here by XYZ Airports Company

Note 1 - a very comprehensive guideline / template *(separate document)* re ***airline*** *(aircraft operator)* ***crisis communications planning*** has been produced by the same author / owner of this ***AEP*** Volume 1 guideline *(latter is the document which you are reading now)*

Said '***airline***' crisis communications document is fairly 'aviation generic' and should thus be capable of being (relatively easily) used in / adapted to an ***airport*** context - without too much additional work. It is for the airport itself to take and 'manage' this option - if so required

You can find the ***airline*** version at:

www.aviationemergencyresponseplan.com/guideline-template

When the above webpage opens, scroll down until you find the title:

'**Emergency Response Plan for Aircraft Operators**'

Look down a little further and you will find the title:

'ERP Component Documents (CRPM Part 1 [ERP] - Volumes 1 to 10)'

Look down a little further & you will find the required link to the document (as shown immediately below):

"CRPM Part 1 (ERP) / Volume 9 - **Crisis Communications**"

Click on that link (in that webpage) to open and access the document

Note 2 - a (separate) USA sourced document provides some guidance on the use of Social Media tools / procedures during ***airport*** emergency response operations. It is entitled 'ACRP Synthesis Report **82** - ***Use of Social Media to Inform Operational Response & Recovery during an Airport Emergency***' - 30 August 2017. You can link to it via:

https://www.trb.org/Main/Blurbs/176496.aspx

Note 3 - Follow the link found near the top of ***this*** AEP Vol 1 Guideline / page **180**. When linked to document opens, look at **Section 5** (starts page 46) entitled '***Information Management & Communications***'. Where appropriate, the reader should study and apply the most relevant / appropriate content of this Section 5 - to his / her own airport's particular crisis communications circumstances

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AEP Guideline Volume 1 - Appendices **U1**, **U2** and **U3**

U1 = XIA - Family, Relatives & Friends Enquiry Card (FEC) - see page 164

U2 = XIA - (Uninjured) Passenger / Crew (Victim) Record Card (P/VRC) - see page 165

U3 = Recommended Use for FEC & P/VRC - page 166

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U1 / ABCX Airways - **FAMILY, RELATIVES & FRIENDS ENQUIRY CARD FEC**

Flight No		Date of Flight		Flight Route	
Details of "the ***person***" *(i.e. the **person** reporting / providing information **here** about a possible **Victim**)*					
Full Name				Relationship to Victim	
Telephone Contacts *(Country code + area code + No)*					
Home Address / Equivalent					
What is *'person's'* preferred Language		Has *'person'* already had contact with the victim *(e.g. by mobile phone, text, face to face etc.)*			
Details of the *possible* '***Victim***' as provided by the ***'person reporting'***					
Last / Family Name		First / Other Names			
Known by any Other Names (Aliases)					
Male/Female/Child/ Infant		Nationality		Religion	
Existing Medical conditions (if any)					
Other information (e.g. skin / hair/ eye colour, marks / scars / tattoos) etc.					
Total Journey Details of ***Victim*** (***all*** sectors) as known to *'person reporting'*					

Other persons believed to have travelled with ***this Victim*** (as known to *'person reporting'*)	Last / Family Name	First / Other Name(s)	Relationship to ***this Victim***

Closest relative (or equivalent) of ***this Victim*** - if known to *'person reporting'*	Full Name	Full Contact Details & Address	Relationship

Remarks / Notes: (Continue on separate sheet if necessary and securely attach to ***this*** top sheet)

Form completed by - Name / Contact: Date/Time:

Note: If more space needed to enter information, use *separate sheet(s) of paper & attach securely to FEC*

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U2 / ABCX Airways - (*4 in 1*) PASSENGER / CREW (VICTIM) RECORD CARD PRC / VRC

Flight No		Flight Date		Flight Route	
Details of the '***Victim***' i.e. the person who this VRC is about					
Last / Family Name		First / Other Names			
Known by any Other Names?					
Type of ***Victim***: *(Flight Crew, Cabin Crew, Passenger, Positioning Crew / Staff, Ground Victim etc.)*					
Male/Female/ Child/Infant		Nationality		Religion	
Existing Medical Problems *(if any)*				Date of Birth	
Total Journey Details *(all sectors)*					
Home Address			Alternate Address		
Telephone Contacts - *Country & area code + No*			Preferred Language		
Victim Status - ☐ Missing ☐ Un-injured ☐ Hospitalised (non-life threatening) ☐ Hospitalised (life threatening) ☐ Dead ☐ Unknown					
Victim's Current Location					
Victim's Intentions: ☐ Travel to local address ☐ Continue Journey ☐ Proceed to SRC (L) ☐ Other (Provide Details)					
Passport #		Issue Date		Expiry Date	Issue place

Other persons believed to be travelling with ***this Victim***	Last Name	First Name(s)	Relationship to ***this Victim***

Known closest relative/Next of Kin of ***this Victim***	Full Name	Full Contact Details & Address	Relationship

Meeter/Greeter info (i.e. person(s) *meeting* ***this Victim***)	Full Name	Full Contact Details & Address	Relationship

Remarks / Notes: (Continue on separate sheet if necessary and securely attach to this top sheet)

Form completed by - Name / Contact Date/Time:

Note: If more space needed for information, *use separate sheet(s) of paper & securely attach to P/VRC*

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U3 / Notes on Recommended Use of FEC and (4 in 1) P/VRC (Forms)

A specific information article (*separate* document) has been produced re how the ***FEC*** and ***P/VRC*** forms might be best used. This article can be found at:

http://www.aviationemergencyresponseplan.com/information/

When you get to the above web page, scroll down until you find the information article entitled:

* '**Victim Record Card** & **Family, Relatives & Friends Enquiry Card**'

Click on it to open and read

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Bomb Threat - Aircraft / Summary - List of Typical Counter Measures

See next page

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Bomb Threat - Aircraft / Summary Check List of (some) ***Typical*** Counter-measures

Counter-measure	Threat Category		
	RED	AMBER	GREEN
Disembark passengers and hand baggage	♦		
Remove aircraft to 'isolated aircraft parking position'	♦		
Set up appropriate cordon around suspect aircraft & secure	♦		
Off-load hold baggage	♦		
Off-load cargo and mail etc.	♦		
Police (or equivalent) specialist search of aircraft flight deck and cabin using aircraft operator technical assistance where possible / feasible	♦		
Aircraft Operator check or re-check of flight deck and cabin	♦	♦	
Re-check hold baggage manifest for irregularities in the associated accounting and authorisation procedures	♦	♦	
Re-screen hold baggage at a suitable screening facility. (If this is not possible - see * [highlighted box] further below)	♦		
Conduct physical reconciliation of passengers with their hold baggage; verify baggage tags against baggage manifest	♦		
Re-screen passengers and their hand baggage	♦		
Reconciliation of passenger travel documents against passenger manifest / boarding pass	♦	♦	
Check integrity of catering supplies	♦		
* Delay cargo, mail & unaccompanied baggage for a minimum of the (associated) scheduled flight duration **+ 8 hours** - unless re-screening accomplished as per above	♦		
Interview / debrief crew & passengers regarding threat	♦		
Increase vigilance at check-in area (as person making threat may be present to see what reaction there is to the threat)	♦	♦	♦
Check if any irregularities at check-in (e.g. passengers denied check-in, arriving too late, arousing suspicion etc.)	♦	♦	♦
Check if any irregularities at the boarding gate (if possible)	♦	♦	

Explanatory Note - The above table summarises a ***typical*** range of counter-measures which threat assessors ***might*** consider for the 'bomb-threat aircraft' type situation

For the purposes of ***this XIA AEP*** the reader should clearly understand that this is just an example which might typically be used for general training purposes - and does not reflect the ***actual*** counter-measures which might be considered for use during '***real***' security type incidents - the latter usually being contained within appropriate 'restricted access / confidential' type documents produced by appropriate security agencies - typically at 'government' type / sourced levels

Consult your own ***airport*** security department for actual details of 'Bomb-threat Aircraft' at your airport specifically (as appropriate)

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Examples of pre-prepared **Information Cards** for use at Airport **CRC (A), SRC (A)** & **FRRC**

See examples pages 170 and 171

Airports are strongly advised to ***pre-prepare*** Information Cards for use with (the 'processing' of) crisis ***victims*** at the (airport's or otherwise appropriately located) CRC (A) and SRC (A) - and with (potentially victim associated) ***MGFR*** at the (airport's or otherwise appropriately located) FRRC

The cards ***MUST*** be produced in ***English*** - but may also be produced in additional languages. However, to avoid potential confusion, it is suggested that a maximum of only one other language be used (if required)

The aim of using such cards is to provide appropriate information to victims / MGFR etc. on what will be happening to them in the immediate and very near futures - thus freeing attending staff of this task, so that they might address higher priority matters

Airports should alter the wording of the ***'generic'*** sample cards which follow, to suit their own, local circumstances

Information cards should be printed in sufficient numbers, based on the absolute maximum estimated to be required when set against a '* worst case' scenario. Cards should be strategically stored at a location(s) permitting rapid distribution at time of crisis

* For example, where the airport concerned operates max seating capacity A380 aircraft ***and*** / ***or*** also where it is common for very large numbers of MGFR to be present in / near to the arrivals terminal(s) to meet arriving passengers

Note 1 - The SRC (A) information card should ***also*** be used (adapted) for use with ***uninjured crew*** - as required

Note 2 - It is possible that ***aircraft*** operators (or their local representatives) using the ***airport*** may have also produced similar information cards independently. If so, this must be accounted for by the airport as follows:

Provided *that the* ***airport*** *has already produced such cards itself - and they are* ***'100% fit for purpose'*** - aircraft operators / local reps should be asked ***NOT*** to use their equivalent versions (if they have them?) at ***airport based*** reception centres

However, they (aircraft operators / local reps) ***must*** also be advised / reminded to still use their own versions at any ***off-airport*** based reception centre(s) or equivalent type circumstances - as applicable to actual circumstances 'on the day'

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Uninjured Survivor (**Passenger**) **Reception Centre** - **AIRSIDE** - at Airport - **SRC** (**A**)

IMPORTANT - DO NOT TAKE PHOTOGRAPHS / MAKE ELECTRONIC IMAGES (HOWEVER DONE) **WHILST YOU ARE IN THIS CENTRE**

This Centre has been set up to support you. The Centre comprises (describe here the Centre's layout and available facilities / resources etc. - as appropriate)

Airport, Airline & other personnel (describe here who else comprises "other" personnel e.g. GHA, Police, Volunteers, etc.) will staff this Centre. They are responsible for your welfare and for making other arrangements to look after you whilst you are here

All staff in this Centre come under the authority of the (insert here details e.g. Police, Airport Operator, Security Services etc.) who have certain legal and other obligations to carry out. This might lead to some delay in you being able to leave this Centre

Your patience, tolerance and understanding are respectfully requested, as there is no alternative to the above process. However, be assured that all concerned are well aware of the urgency of moving you to more comfortable surroundings as soon as possible

Arrangements will be made to try to notify your family, relatives and friends (including any who had been travelling with you but are not here with you now) of your circumstances

Someone will assist you to complete a form known as a (insert details here e.g. '***XIA Airport Passenger / Victim Record Card***' or similar). You might also need to complete additional forms

If possible, try to contact your family, relatives and / or friends (***not here with you now*** e.g. those that had been on the incident flight with you [as applicable]; those who might be at this airport waiting to meet you; anyone else etc.) as soon as possible - to advise them of your circumstances

Do this e.g. by using (as available) personal mobile phones (including use of SMS text, email, social media etc.) public phones, other internet facilities etc.

If you have already done this, please advise Centre staff ***immediately***. If not, tell staff when (***if***) you ***have*** done this - (as appropriate)

If necessary (and if possible), airport / airline and other staff will try to arrange for you to be re-united with any family, relatives and friends as soon as is practicable - including any that you might have been travelling with - but who are not with you here now

If you wish to speak with a religious / faith representative, please advise Centre staff

On leaving this Centre, airline staff / others will try to assist you further if you so wish e.g. you might be offered the opportunities to proceed to your home address (in country or elsewhere); to carry on with your original journey (as applicable); to be transported to a special, ***local*** facility, provided by the airline, where further support / information / other associated services can be provided to you

Before leaving we ask that you provide us with details of where you intend to go, plus relevant & ***reliable*** contact information (address, telephone numbers, email etc.) if appropriate

Your interests are paramount to us. Please do not hesitate to ask for clarification of any of the above

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Family, Relatives & Friends Reception Centre - ***LANDSIDE*** - at airport **FRRC** or equivalent facility

IMPORTANT - DO NOT TAKE PHOTOGRAPHS / MAKE ELECTRONIC IMAGES (HOWEVER DONE) **WHILST YOU ARE IN THIS CENTRE**

This Centre has been set up to support you. The Centre comprises (describe here the Centre's layout and available facilities / resources etc. - as appropriate)

Airport, Airline & other personnel (describe here who else comprises "other" personnel e.g. GHA, Police, Volunteers, etc.) will staff this Centre. They are responsible for your welfare and for making other arrangements to look after you whilst you are here

All in this Centre come under the responsibility of the (insert here details e.g. Police, Airport Operator, Security Services etc.) who have certain obligations to perform. They are also responsible for ensuring that only those with a genuine relationship to those who might have been on board the incident flight are in this Centre. If ***you*** should not be here, please leave now. If you are aware of others that should ***not*** be in this Centre, please advise Centre staff immediately

You will be assisted to complete a form known as a (insert details here e.g. '***XIA Airport Family, Relatives & Friends Enquiry Card***' or similar) plus possibly other forms as required. Completed form(s) will enable Centre staff to pass on your information to others who will use it e.g. to assist in positively identifying those on board the incident flight

Such information might also assist in the eventual re-uniting process (if possible) between you and the person(s) you are enquiring about (as applicable). This might take some time, so your understanding, patience and tolerance is requested, despite the very stressful circumstances

If possible, try as soon as you can to contact your family, relatives and / or friends from the incident flight - e.g. by using (as available) personal mobile phones (including SMS text, email, social media etc.) public phones, other internet facilities etc.

If you have already done this, please advise Centre staff ***immediately***. If not, tell staff when (***if***) you ***have*** done this (as appropriate)

If you wish to speak with a religious or faith representative, please advise Centre staff

Once you leave this Centre, airline staff and others will try to assist you further if you so require. You might e.g. choose to either proceed to your home address if it is relatively nearby - or proceed to a special facility (typically provided by the ***airline*** and known as a '***Humanitarian Assistance Centre***') where further support, information and other assistance can be provided to you

You may leave this Centre at any time

Before leaving this Centre, please provide staff with details of where you intend to go, together with relevant & ***reliable*** contact information (address, telephone numbers, email etc.) if appropriate

Your interests are paramount to us. Please do not hesitate to ask for clarification of any of the above

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AEP Guideline - Volume 1 - Appendix **X**

A Selection of Recommended Reading References - *reader should check following links etc. for on-going availability, currency, usefulness, context etc.* *(all working on date of publication of this AEP Vol 1))*

Note - much of the below is essential background reading (hard-going as it may be at times) for all those serious about preparing a 'fit for purpose' public health incident plan for an airline. (Whilst this guideline [the document you are reading right now] is essentially targeted at passenger airlines, some links provided relate to airports)

Pandemic (aviation related) - ***Preparation and Response - Some Useful Links***

US Government (via CDC) - **National Aviation Resource Manual for Quarantinable Disease** - Dec 2006

Note 1 - despite being prepared in 2006 (and thus not benefitting from 'lessons learned' from the swine-flu pandemic of 2009-2010 ***and*** COVID-19 pandemic of 2020-2022) - ***this is nevertheless still a useful reference to use in both airline and airport incident response planning for the influenza pandemic scenario*** (and similar communicable disease e.g. a ***coronavirus*** pandemic similar to COVID-19)

Of particular note is detailed reference to the set-up and operation of 'mass' quarantine holding facilities ***which, in certain parts of the world,*** may need to be implemented ***in the main by the concerned airline and / or airport - perhaps with minimal support from government and similar 'official' authorities at national, regional and local levels. This particularly*** *(but not exclusively)* ***pertains to some 'developing' and most 'least developed' counties*** *(as categorised by the United Nations)*. The main areas of interest will be found in Sections 5, 6, 7 and 9 - together with Appendix G (the latter providing a basic example of a mass quarantine plan for airports)

Note 2 - The above document has now been '***retired***' by CDC. However, it ***may*** be possible to still find it via the above link - or via an internet search using the search words ***'National Aviation Resource Manual for Quarantinable Disease - Dec 2006'***. It is probably worth trying to find it!

Note 3 - The following (pages 172 - 177) provides various ***aviation*** related links which readers might find useful - from 'public health incident' (pandemic etc.) viewpoints:

(Note to Reader: It is very likely that, with the 'passage of time', some of the following links will cease to work)

Article - 27 Oct 2020
20-10-27 Almost 200 European airports facing insolvency in coming months PRESS RELEASE.pdf (aci-europe.org)

Article - 8 Dec 2020
A final call for passengers: How airports will change after the pandemic | E&T Magazine (theiet.org)

WHO - Pandemic Influenza Risk Management - 1 May 2017 (Note**:** ***Most*** content relates to ***2013*** and ***earlier*** - thus requiring update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from the 2020-2022 COVID-19 pandemic)
WHO-WHE-IHM-GIP-2017.1-eng.pdf;jsessionid=E305B31B325AA695E67D89537691FCB1

WHO - International Health Regulations - 11 July 2016 (Note: Requires update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic)
International Health Regulations (2005) Third Edition (who.int)

WHO - Handbook for the Management of Public Health Events on Air Transport - 2015 (Note: Requires update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic)
OMS-Transport Handbook-US.indd (who.int)

WHO - Guide to Hygiene & Sanitation in Aviation **- 3rd** edition 2009. (Note: Requires update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic)
https://apps.who.int/iris/handle/10665/44164?search-result=true&query=Guide+to+Hygiene+and+Sanitation+in+Aviation&scope=&rpp=10&sort_by=score&order=desc

WHO - Emergencies - Disease Outbreak News (DON) - site continually updated?
https://www.who.int/emergencies/disease-outbreak-news

WHO public health checklist for controlling the spread of COVID-19 in aviation - late 2021
https://apps.who.int/iris/handle/10665/346701

ACI - **https://www.aci-europe.org/industry-topics/covid-19.html**

ACI - Airport Preparedness Guidelines for Outbreaks of Communicable Disease - ACI / April 2009. (Note: Requires update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic) **https://aci.aero/wp-content/uploads/2021/08/Airport-Preparedness-Guidelines-For-Outbreaks-of-Communicable.pdf**

ACI - Airport Updates re Outbreaks of Communicable Disease **-** ACI / sites continually updated
https://aci.aero/About-ACI/Priorities/Health/

ACI - COVID-19 - Some useful links and resources (some will probably become non-functional, as the adverse impacts of COVID-19 on aviation diminish [relatively speaking] with time)
https://aci.aero/advocacy/health/covid-19/

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IATA - Public Health Emergency Preparedness - Fact Sheet - Nov 2020 (as updated)
IATA Fact Sheet

IATA - Operational Considerations - Managing COVID-19 Cases / Outbreak in Aviation - March 2020
https://apps.who.int/iris/bitstream/handle/10665/331488/WHO-2019-nCoV-Aviation-2020.1-eng.pdf

IATA - Air Transport & Communicable Diseases - IATA / site continually updated
https://www.iata.org/en/programs/safety/health/diseases/

IATA - Communicable Diseases and Pandemic - Useful Resources (Note: Requires update [if reader so desires and is so 'capable'] to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic)

Based on past experience with different 'outbreaks' etc., IATA has produced an **Emergency Response Plan and Action Checklist** (pdf) (Jan 2018), for use by air carriers in the event of a public health emergency

An important part of this document involves a series of guidelines and best practices for airline and related staff - for use in the event of public health emergencies. (Click on any of the links below to view these guidelines and best practices): Note: links might 'break' / become outdated with the passage of time

- Crew health precautions during pandemic (Edition 2 - 2021)
- Guidance for Cabin Operations During & Post Pandemic - Edn 5 - 18 May 2021
- Cabin Announcement Scripts (Dec 2017 - Updated to 19 Feb 2020)
- Universal Precaution Kit (Dec 2017 - Updated to Feb 2020)
- Cabin Air Quality Brief (Jan 2018 - Updated to Feb 2020)
- Bird Strike (Dec 2017)
- Maintenance Crew (December 2017 - Updated to Feb 2020)
- Cargo & Baggage Handlers (December 2017 - Updated to Feb 2020)
- Cabin Crew (December 2017 - Updated to Feb 2020)
- Cleaning Crew (December 2017 - Updated to Feb 2020)
- Passenger Agents (December 2017 - Updated to Feb 2020)
- Passenger Locator Form (Sep 2012) - needs update re 'lessons learned' from COVID-19 pandemic

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ICAO - Managing Communicable Disease in Aviation - ICAO - Site continually updated?
http://www.icao.int/safety/aviation-medicine/Pages/healthrisks.aspx

ICAO / Procedures for Air Navigation Services - ATM - Doc 4444 ATM / 501 (October 2009 [Any use in 2021])
https://ifalpa.org/publications/library/changes-to-communicable-disease-notification-procedure--1522

ICAO -Collaborative Arrangement for the Prevention & Management of Public Health Events in Civil Aviation (CAPSCA) - ICAO - Site continually updated? (Might require update to incorporate 'lessons learned' from 2020-2022 COVID-19 pandemic???) - **https://www.icao.int/safety/CAPSCA/Pages/default.aspx**

ICAO - **Public Health Events & Aviation (icao.int)** (ICAO - Site continually updated?)

ICAO - Council Aviation Recovery Task-force (CART) (ICAO - Site continually updated?)
https://www.icao.int/covid/cart/Pages/default.aspx

CDC - Preventing Spread of Disease on Commercial Aircraft - Guidance for Cabin Crew - (CDC 30 August 2019 i.e. before the COVID-19 pandemic of 2020 - 2022)
https://www.cdc.gov/quarantine/air/managing-sick-travelers/commercial-aircraft/infection-control-cabin-crew.html

CDC - Travel Industry Resources - latest news (USA perspective) - (CDC - continually updated)
http://wwwnc.cdc.gov/travel/page/travel-industry-information-center

CDC - Guide to Masks (General) - (CDC - 9 Sep 2022)
https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html

ACRP - Synthesis Report 83 - Preparing Airports for Communicable Diseases on Arriving Flights (USA sourced document - 2018) - **http://www.trb.org/Publications/Blurbs/176419.aspx**

ACRP - Report 91 - Infectious Diseases Mitigation in Aircraft and at Airports (USA sourced document - 2013)
http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_091.pdf

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EASA **https://www.easa.europa.eu/the-agency/faqs/passenger-health-safety-covid-19** (9 June 2020)

EASA - Guidance on Management of Crew Members in relation to the SARS-CoV-2 pandemic (30 June 2020) **https://www.easa.europa.eu/document-library/general-publications/guidance-management-crew-members**

EASA - Review of Aviation Safety Issues Arising from COVID-19 Pandemic - Version 2 (April 2021) **https://www.easa.europa.eu/community/system/files/2021-05/Review%20of%20Aviation%20Safety%20Issues%20From%20COVID-19%20Final%20-%20v2%20-%20April%202021.pdf**

EASA **https://www.easa.europa.eu/easa-covid-19-resources** (19 July 2021)

Other Articles - Various

New England Journal of Medicine - Article 'Pandemic Preparedness & Response - Lessons Learned from the H1N1 Influenza of 2009' - Updated to 03 April 2014, by Harvey V Fineberg - MD PhD

'……Implementation of the International Health Regulations (2005): report of the Review Committee on the Functioning of the International Health Regulations (2005) in relation to pandemic (H1N1) 2009 - Geneva: World Health Organization, ***May 5, 2011***……' (Mr Fineberg was Chairperson of this Review Committee) **Pandemic Preparedness and Response — Lessons from the H1N1 Influenza of 2009 | NEJM**

Air Travel & Communicable Diseases - USA (June 2020) **https://www.gao.gov/products/gao-20-655t**

Medical Journal of Australia - Efficacy of airport arrivals screening (Sydney Airport) during swine-flu pandemic of 2009 (Conclusion - Screening is almost certainly non-effective in terms of the 'bigger picture' i.e. it is probably not worth doing). Airport arrivals screening during pandemic (H1N1) 2009 influenza in New South Wales, Australia - PubMed (nih.gov) (2014)

EMBRY RIDDLE Aeronautical University (July 2021) *- Impact of COVID-19 on Airline Industry……. and Strategic Plan for its Recovery (with special ref. to 'Data Analytics' technology.)* **https://commons.erau.edu/publication/1564/**

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Scientific American (November 2020). **https://www.scientificamerican.com/article/evaluating-covid-risk-on-planes-trains-and-automobiles2/**

Journal of Air Transport Management - Study / Report valid June 2021 re 'Airline Crisis Communications (Dealing with the public; the Media etc.) vs COVID-19'. (Although report is dated June 2021, it was actually conducted around mid-2020 and involves a selection [30+] of European Union airlines only. Might be worth a read by airline Corporate Comms / PR departments / business unit - **https://www.sciencedirect.com/science/article/pii/S0969699721000867**

Journal of Air Transport Management (July 2021) *- Study / Report valid March 2021 re 'COVID-19 pandemic and air transportation: Successfully navigating the paper hurricane'*
https://www.sciencedirect.com/science/article/pii/S0969699721000454

Statista - Covid-19 Coronavirus Pandemic - Impacts on Aviation Worldwide - Facts & Statistics / Sep 2022
https://www.statista.com/topics/6178/coronavirus-impact-on-the-aviation-industry-worldwide/#dossierKeyfigures

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Guide to Preparing a Plan for:

Airports - Provision of Humanitarian Assistance to Air Accident Victims & their Families

Reference **1A**: ICAO Annex 9 **Standard** (Ch 8; Clause **8.47** / 2022) - Assistance to Aircraft Accident Victims & their Families (applies to all United Nations [UN] Countries at ***government*** level)
Reference **1B**: ICAO Annex 9 **Recommended Practice** (Ch8; Clause **8.48** / 2022) - Assistance to Aircraft Accident Victims & their Families (applies to major, commercial ***airports*** in all UN Countries)
Reference **2**: ICAO Doc 9998 (2013) - **Policy** - Assistance to Aircraft Accident Victims and their Families
Reference **3**: ICAO Doc 9973 (2013) - **Manual** - Assistance to Aircraft Accident Victims and their Families

BACKGROUND INFORMATION

Up to about 2020 ***very*** few commercial ***airports*** worldwide (relatively speaking i.e. with a small number of notable exceptions e.g. Frankfurt, Hong Kong, Paris CDG) had made ***adequate*** preparation for dealing (from an ***airport*** viewpoint ***specifically*** [as opposed to e.g. the ***airline*** / ***aircraft operator*** viewpoint]) effectively, efficiently, expediently and adequately - with the ***humanitarian***, ***welfare***, ***information*** etc. type aspects, needs etc. - of the * ***victims*** of a catastrophic air accident type situation (or equivalent) - in which they (**airports**) might (***VERY*** potentially) need to become ***very*** closely involved

* Together with associated (***NOT*** having been on board the 'accident flight') '***ground victims***'; '***family***, ***relatives*** & ***friends***' (FR) of all such victims' etc.

By early 2017 this 'unacceptable situation' was gradually changing for the better - driven mainly by the requirements contained in the cross-referenced documents shown at the top of this page - and other 'drivers / influences' - particularly the ongoing ICAO and derivative '***safety management system*** - ***SMS***' initiatives for aviation (see [separate document] ***ICAO Doc 9859*** [**SMS**] - for further detail)

The historical 'fault / blame' for said 'unacceptable situation' doesn't rest with '***airports***' alone e.g.

- The ***International Civil Aviation Organisation*** (ICAO - the United Nations civil aviation body) only started to play a ***meaningful*** role (re ***airport*** provided humanitarian assistance etc. ops) within the relatively recent past (i.e. since about 2012) - but still (2023) had significantly further to go
- Most ***countries*** ('States' as they are termed by ICAO) around the world had / have been equally reluctant - and still are (e.g. the ***European Union*** introduced a ***BINDING*** [mandatory] regulation in late 2010 requiring all ECC members [around 28 countries at that time] at government level to produce ** '***family*** [humanitarian] assistance plans' - re the catastrophic air accident type situation.

  As at early 2023 only 3 countries [Italy, Holland and Spain] are thought to have done so meaningfully.

  Of course, if a '***country***' can't get it right, what chance is there for how ***airports*** based in such countries ***can*** get it right? [Although a ***very*** small number of airports have, to their credit, done so])

** The concept of air accident related '***humanitarian***' etc. assistance has been around for quite a long time. It has traditionally been known as '***family***' assistance (amongst other 'titles') - but the term '***family***' is no longer appropriate (it never was!) as such assistance is not just reserved for 'families'. Should the reader require more clarification, refer to the appropriate definitions in the glossary (starts page **13** of ***this*** AEP Volume ***1*** Guideline document. In particular, start with the definition of '***Family, Relatives & Friends***' and [separately] of '***Victims***')

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There's some ***really*** good 'stuff' here re how to establish a first class family assistance plan at ***commercial airports***

Even the United States (which has had an excellent record since 1996 in advancing the cause of air accident related humanitarian assistance ops etc.) has always put the emphasis on ***airlines*** providing same - with no particular, historical emphasis on ***airport*** participation. This situation changed significantly for the better in April 2017 (click on below link for details):

- - - - - - - - - - - - - - - - ▶ https://www.trb.org/Main/Blurbs/175605.aspx

(Note: When above webpage opens, click on 'View this PDF' - and then proceed to '***download as a guest***'. NB: Downloaded doc size = 28MB)

- The 'trade body' for many commercial airports (***Airports Council International - ACI***) has also contributed very little in the past to ***practically*** advance the cause of ***airport*** provided humanitarian etc. assistance ops (for the catastrophic aircraft accident type situation) - and, like ICAO, seems to have been content (until relatively recently) to 'dump' the matter, in the main, on the ***airlines*** (aircraft operators)

Further to the above 'disappointing' aspects etc. - progress was finally (as at early 2017) beginning to be made - due in no small measure to the part that '*** ***victim / family groups***' have played (and still are playing) in advancing (e.g. by 'lobbying'; 'championing' etc.) the cause of air accident related humanitarian assistance and similar / related matters, over recent years

*** '**Victim / Family Groups**' sometimes form after a major air accident (typically involving mass fatalities / injuries). Their main (but not exclusive) purpose is to provide ***mutual and other*** associated humanitarian etc. support in the 'aftermath'

Such groups typically comprise persons from amongst the ***surviving*** victims of a particular air accident - together with representatives of ***family, relatives and friend***s of **all** said accident victims (regardless of whether or not the latter [accident victims] survived the particular accident)

A ***second*** group of victims (known herein as '***ground victims***') ***might*** also be involved. (Ground victims are persons killed, injured and / or traumatised as a direct consequence of the accident aircraft hitting the ground or equivalent event i.e. they would ***not*** have been on board the accident flight). Of course, ***ground*** victims (just like '***air***' victims) also typically have associated 'family, relatives & friends' - which the 'accident airline' will also need to support

Victim / family groups typically assume an appropriate group 'title' which is related in some way to the airline name and flight number of the associated accident

See also the associated '***Note of Interest***' - page 200 - before returning here

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In 2013 ICAO updated what had been, up until then, ***inadequate*** guidance on the matter (latter published in 2001 as *'ICAO* **Circular 285***-AN/166 - Guidance on Assistance to Aircraft Accident Victims & their Families'*) by producing:

- 'ICAO Doc 9998 - ***Policy*** - Assistance to Aircraft Accident Victims and their Families' - and (+)
- 'ICAO Doc 9973 - ***Manual*** - Assistance to Aircraft Accident Victims and their Families' (being the accompanying and amplifying 'partner' document to ICAO Doc 9998)

To view Docs **9998** and **9973** click on the below links respectively:

http://www.icao.int/Meetings/a38/Documents/DOC9998_en.pdf

https://www.icao.int/SAM/Documents/2016-AIG-RECORDSPRO/Doc%209973.Family%20Assistance_en.pdf

In February 2016 ICAO issued (in significant part due the 'lobbying' etc. of certain ***victim*** / ***family groups***) an 'ICAO Recommended Practice' (ICAO Annex 9, Ch 8, Clause 8.46 referred) stating:

Contracting States (ICAO ***Countries***) ***should*** **establish legislation, regulation and / or policies in support of assistance to aircraft accident victims and their families**

Note 1 - Whilst issue of the above 'recommended practice' was a significant move forward after many, many years of inaction - ***ICAO missed a vital opportunity here*** by making the subject of 'Assistance to Aircraft Accident Victims and their Families' a ***'recommended practice'***, instead of going directly for the more exacting (and typically mandatory to comply with) ICAO ***'standard'***

In essence an ICAO '**Recommended Practice**' has only an **advisory** (as opposed to compulsory) status on ICAO's ***193*** (as at 20***23***) member countries (states) - whereas an ICAO '***Standard***' may typically (but not exclusively) be thought of as being ***binding*** / ***compulsory*** on ***all*** such members

Whilst Docs 9998 / 9973 and the above 'recommended practice' provided some relatively minor but nevertheless welcome improvements (in contrast with the preceding ICAO 'Circular 285' etc.), one significant advance was the clear inclusion (***for the very first time*** - ***EVER***) of many commercial '**AIRPORTS**' - as one of the required, potential providers (***passenger airlines*** are another as are **ICAO member countries** / states) of said humanitarian, welfare and similar assistance

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Unfortunately, as at 2023 there was little evidence that many (most?) of the world's commercial ***airports*** were taking the above matter 'seriously'

An example of a ***notable exception*** (there are more - but not a lot!) to the latter was the ***United Arab Emirates*** (UAE - being a UN Country / State) which required regulatory compliance with its own, national / federal equivalents of ICAO Docs 9998 and 9973 (and also in compliance with the associated ICAO 'recommended practice' - as documented on the previous page) by a deadline of mid-2018. This not only impacted upon all UAE * registered ***airlines*** - but all UAE located ***AIRPORTS*** too

* Yes - ***airlines*** are also included in all of this - but (in contrast to ***airports***) a relatively large number of airlines (including UAE airlines) ***had previously and still are*** dealing, at least ***adequately***, with the air accident / humanitarian assistance etc. matter. Furthermore, ***non***-UAE ***airlines*** wishing to operate [continue to operate etc.] to / from UAE ***also*** needed to demonstrate compliance with certain parts of the above UAE regulation by the same deadline

So, in conclusion, we know what the problem is. For those ***airports*** which are still part of the problem - ***BUT*** which now want said problem to be adequately addressed (i.e. by addressing it themselves), read on

The (this) **GUIDE** (see title - page **179**)

What follows comprises a fairly comprehensive ***guide*** to how a relatively complex, commercial ***airport*** may research, prepare, implement, train, exercise, maintain and review a '***plan for the assistance of aircraft accident victims and their families***'. Smaller / simpler airports should adapt same accordingly so as to suit their own, specific circumstances

For convenience and consistency, this guide is based on the fictitious but 'realistic' airport referred to in 'Note 2' (starting on page **2** of ***this AEP Volume 1*** guideline document)

It is proposed that the best way to use this *guide* is just 'as it is written' here, in this appendix **Y** (i.e. starting with '**Orientation Notes**') .....and then change (add to / subtract from / amend / rewrite / reposition etc.) the appropriate bits which follow - so that they best describe the situation which best fits appropriate circumstances, at the particular (real) airport, for which the 'guide' is being produced. Note, however, that a person(s) preparing such a guide is / are still advised to use his / her / their parent airport's standard method of ***document formatting*** (e.g. logos, colours, fonts, layouts etc.) as required.....**+** adopt the appropriate 'controlled document' system in use.....**+** adopt any other matters of a documentation / administrative / similar nature, as required

Where appropriate, this guide (the one you are reading now) ***very*** loosely follows in part (but generally set in an ***airport*** context ***only***) the ***sequence*** of what has been written in ***ICAO Doc 9973*** (First Edition - 2013 / see link previous page)

Lastly, 'someone' suitable will need to be appointed / confirmed (1. preferably by the airport's top manager 2. at least one deputy should also be appointed 3. it is likely that this will be a secondary duty for the appointee[s]) to take on overall responsibility, control, oversight etc. of anything and everything to do in producing said ***guide*** and, as required, its use in exercises and 'in anger'. It may well be that an externally sourced subject matter 'expert' needs to be recruited ***initially*** to start and take the whole project forward - to the point where it can be 'safely / confidently' etc. handed over to an appropriate, ***airport*** appointee(s)

The guide itself starts with '**Orientation Notes**'.....see *next* page

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The (this) **GUIDE** (continued).....

Orientation Notes (ADVISORY)

See again 'orientation notes' starting page 2 of ***this*** AEP Volume ***1*** document - to get some idea of the type of ***equivalent*** (orientation type) notes which ***might*** need to be included here, in ***this*** 'guide'

Terminology (MANDATORY)

The meanings of certain terminology used in this 'guide' are the same (unless stated otherwise) as that shown in the glossary to ***this*** AEP Volume ***1*** document - as applicable. (Glossary starts page **13**)

Also see again the '*important note*' shown on page **12** herein re the definitions of '***aircraft accident***' vs '***catastrophic aircraft accident***' - and particularly note again the meanings of the following (as they appear in said glossary):

- Catering Facility
- (***Uninjured***) Crew Reception Centre (typically located Airport ***Airside***) - CRC (A)
- Emergency Call / Contact / Information Centre
- Family (Humanitarian; Special etc.) Assistance Centre - FAC / HAC
- Family, Relatives & Friends - FR
- Family, Relatives & Friends Reception Centre (typically located Airport ***Landside*** [or possibly at a nearby ***off***-airport facility]) - FRRC
- (Airport's) Immediate Care Team - ICT
- Family, Relatives & Friends - Enquiry Card
- Passenger / Victim - Record Card
- Reconciliation / Reuniting Area - *Airport* - RA (A)
- (Aircraft Operator's [Accident Airline's]) Special (***Humanitarian*** / Family) Assistance Team - HAT
- (***Uninjured***) Survivor / Passenger Reception Centre (typically located Airport ***Airside***) - SRC (A)
- Victim (see both 'air victim' and 'ground victim')

It would be advantageous for appropriate ***airport operator*** personnel to ***also*** have at least an outline understanding of the term '***Next of Kin***' (Closest Relative / Emergency Contact Person etc.). For an explanation see:

https://www.aviationemergencyresponseplan.com/information/

When the webpage opens, scroll down until you find the article entitled: (click on it to read)

* Information Article - Major Air Accident - **'Next of Kin' / 'Closest Relative' / 'Emergency Contact Person'**

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Lastly, an understanding of ***additional*** definitions (starts immediately below) is also required for the specific purposes of ***this*** Appendix **Y**:

Air Accident Investigation Authority *(might also be known as 'Safety Investigation Authority' & similar)*

A government agency / body etc. responsible for the investigation of air accidents - as per the requirements of ICAO annex 13 etc. The primary accountability of such an authority is to investigate and ascertain the cause / causes of an air accident in order to (try to) prevent re-occurrence.

Apportionment of 'blame' is typically (***but not always***) outside of such authority's 'terms of reference'

Airport Emergency Plan - '***Areas of Interest***'

An airport's accountabilities for its ***own*** aspects (***areas of interest***) of emergency planning and response - typically relate to potential operations conducted ***within*** the airport boundary itself

However, an airport might ***also*** be required to assume certain, ***limited*** accountabilities for same - re such operations conducted within pre-defined and mutually agreed (e.g. with the appropriate off-airport 'authorities') limits ***outside*** of the airport boundary i.e. ***off***-airport

Re ***this*** AEP Volume 1, Appendix **Y** - and relating to the matter of ***airport*** provided humanitarian (family; special etc.) assistance and similar ops ***only*** - the ***off-airport*** situation has ***not*** been considered herein. However, and in reality, it ***must*** be accounted for, of course

For a brief summary re how this latter might be achieved, see (our ***separate*** document) *AEP Volume **2B*** / pages *146* - *147* via the following link:

https://aviationemergencyresponseplan.com/airport-operator/

(When above webpage opens, scroll down until you find the link to ***AEP Volume 2B***. Follow the link, open the document and read pages *146* -*147*)

Appropriate / Involved Persons

A term used in ***this*** appendix **Y** ***only***. It covers aircraft accident victims - ***together with*** the latters' associated and appropriate (had ***not*** been travelling on board the accident aircraft) family, relatives and friends. Exceptionally, the term can also include others (e.g. associated emergency responders who might also suffer significant stress / distress etc. as a consequence of their duties re aircraft accident response)

Co-ordinator / Co-ordinating Agency

A co-ordinator / co-ordinating agency is a ***specifically appointed*** person / organisation etc. required to ensure (***typically re a catastrophic air accident type situation***) that the necessary resources, agencies, accountabilities, capabilities etc. are available and (effectively & efficiently) brought together' - into the required relationships. Such appointment is necessary to better provide accurate, timely, consistent, co-ordinated etc. information - together with optimum & timely humanitarian, welfare, financial and other required assistance.....to surviving air accident victims (including any ground victims) and the (not on board the accident flight) families, relatives and friends etc. of ***all*** such victims (living or deceased for latter)

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The co-ordinator / co-ordinating agency shall ensure, insofar as is possible / reasonable, that the various responders / providers etc. involved (including ***airport*** responders) can (and do) effectively and efficiently conduct their pre-determined (and / or ad hoc where actual circumstances 'on the day' so require) roles / responsibilities - in an adequate, co-operative, co-ordinated, de-conflicted etc. manner

In certain circumstances, the co-ordinator / co-ordinating agency ***may*** also be appointed to act as the primary point of contact / intermediary etc. between surviving accident etc. victims (together with [+] ***all*** associated family, relatives and friends [of ***all*** such victims - whether the latter be alive or deceased] - as appropriate) and the various government (national, regional, local, tribal etc.), quasi-government and other appropriate (typically pre-selected) agencies also involved

The appointment, empowerment, accountabilities etc. of said co-ordinator / co-ordinating agency require/s careful consideration to ensure that the full potential of available resources, agencies etc. involved is realised as quickly as possible ***and*** used in the most effective / efficient ways possible

A co-ordinator / co-ordinating agency is typically appointed by the appropriate representative (e.g. Civil Aviation Authority) of the appropriate ***national*** / ***regional*** government / equivalent 'authority'. Such appointment may be on a full time or / 'as required' basis. The former option is typically the best solution for all concerned

Judicial Authority

An appropriately constituted and independent (in theory!!!) legal body / committee (typically appointed by national / regional etc. government) tasked with the ***legal*** investigation of a specific air accident, with a view (in certain countries / jurisdictions) to making legal findings (+ possible prosecutions and the awarding of punishments of / to those who might potentially be held 'to blame' for the accident - in one way or another)

Whilst the 'general theory' is that an air accident investigation and a judicial investigation (of the same air accident) should be totally independent of each other, this is rarely the case e.g. the judicial investigation using air accident investigation evidence, findings etc. to apportion blame and prosecute e.g. the flight crew of the accident flight (generally [***but not always!!!***] - where there is good reason so to do, of course)

Humanitarian *(Family etc)* ***Assistance*** (used here in the 'catastrophic aircraft accident' type context only)

Appropriate assistance (in the widest, appropriate sense) provided (as / if available) to (all of) the ***victims*** of an aircraft accident (more particularly, a catastrophic type aircraft accident)..... + also to said victims' associated ***family, relatives and friends*** as appropriate / possible..... + also to * ***others***

* For example, it is possible that emergency responders, providers of 'humanitarian assistance etc. (i.e. 'others') - may also find ***themselves*** in need of one aspect or another of humanitarian assistance

Note that whilst appropriate ***physical*** medical / health treatment and support will **obviously** be provided (by whoever) as required / available - same (i.e. physical medical / health treatment) is not within the scope of the '**humanitarian assistance**' definition / concept - as used herein

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Such humanitarian assistance provision ***might*** *(repeat -* ***might****)* typically include (list is ***not*** exhaustive):

- Physical welfare (e.g. privacy, security / protection; lodging; sustenance [food, drink etc.]; transport, travel and other logistics; clothing; finance /money etc.)
- Providing (if possible / as available) timely, accurate and relevant information (e.g. who, what, where, when, why & how?)
- Mental / emotional /spiritual welfare (support [e.g. 'peer support', 'mental health first-aid', counselling, 'debriefing', religious / faith]; psychiatric / psychological; medication etc.)
- Providing access to comms (telephone / text / satellite; internet [email / social media] etc.)
- Facilitating movement in / to / within / around / from - the appropriate airport(s) / other locations involved etc.
- Matching - as appropriate (e.g. accident victims with associated family, relatives & friends etc.)
- Re-uniting - as appropriate (e.g. accident victims with associated family, relatives & friends etc.)
- Immediate to short-term Financial Assistance
- etc

Whilst more can be added to the above list in the wider context, it suffices here for the specific purposes of ***airport*** emergency response planning (e.g. in contrast with equivalent ***aircraft operator*** [e.g. airline] emergency response planning - ***which is significantly more complex and much wider in scope etc.***)

Meeter & Greeter type Family, Relatives & Friends (MGFR)

The above term refers to Family, Relatives and Friends assumed herein to ***already*** be waiting (at the destination / other involved airport[s] of [what was to become] the ***accident flight***) - in order to meet & greet passengers (and possibly / sometimes [some of the] crew also) from (again - what was to become) said accident flight

The definition ***also*** applies to Family, Relatives and Friends who ***subsequently*** arrive at that / those airport(s) in the ***shorter-term*** period (e.g. typically measured in terms of a few hours only) following the accident - but who were ***not*** actually at said airport(s) when the accident occurred / was reported

Note 1 - for the sake of simplicity it is assumed herein that all such MGFR live relatively local to the appropriate airport(s). In reality, this will not always be so

Note 2 - accident victims' 'family, relatives and friends' worldwide (who do not fall under the terms of the above definition of MGFR and its associated 'Note 1' just above) are specifically (and hopefully obviously) ***not*** classified as ***Meeter & Greeter*** type FR (MGFR) herein i.e. they are simply classed as '***family***, ***relatives & friends***' - (FR)

Acronyms / Abbreviations (MANDATORY)

Acronyms etc. used herein can be assumed to have the same meanings (unless stated otherwise) as those shown on page 11 of *this* AEP Volume ***1*** document

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Contents List (MANDATORY)

You should provide / insert your own (i.e. as specific to your own airport) contents list here

Foreword (MANDATORY)

An aircraft accident is typically an unexpected and sometimes catastrophic event. (Note that for the purposes of this appendix **Y** guide - a ***catastrophic*** (mass fatality / injury) ***aircraft accident*** is to be assumed)

Concern for ***appropriate*** / ***involved persons*** suffering significant distress (physical, mental, emotional, spiritual etc.) and / or loss (physical, personal, financial, material etc.) as a consequence (direct and / or indirect) of a catastrophic aircraft accident, is gradually leading to increased efforts at appropriate international, national, regional, local etc. government levels (and also within the aviation industry itself [amongst others e.g. the travel industry in general]) - to establish means by which the various ***needs*** of such persons might be adequately addressed - in effective, efficient, timely, compassionate, adequate etc. manners / ways

Others (in addition to those already mentioned in the last para above) potentially involved in addressing such needs might also include e.g. 'non-government' type organisations (NGOs) - including charities (often managed and operated by volunteers - trained or otherwise), faith (religious / spiritual / similar) representation etc. The latter 2 examples are far from being exhaustive

Whilst the words '*appropriate / involved persons*' (as used a little further above) apply in context to all, catastrophic aircraft accidents - such use in ***this*** guideline document lies in the main with ***civil*** aviation accidents. Nevertheless, the principles and spirit of same should be similarly followed for appropriate (e.g. passenger carrying) ***military*** aviation accidents (as required - see again definition of '***appropriate*** / ***involved persons***' in the **'Terminology'** section of this Guide [page **184**])

Similarly, the word '*needs*' should be interpreted flexibly and widely by all concerned - as required by actual circumstances prevailing 'on the day / at the time'. In the main, however, this word typically relates to health and well-being (physical, mental and emotional) - together with humanitarian, welfare and information related matters (as they concern appropriate / involved persons). The definition of '*Humanitarian Assistance*' (see page **185**) will further assist in understanding what the word *'needs'* refers to here i.e. in the appropriate ***airport*** context

Where to Start ..... 1 (MANDATORY)

For person(s) intending to use this guide (the document you are reading now) to produce a 'fit for purpose' ***airport*** specific plan for the '***Provision of Humanitarian Assistance to Air Accident Victims and their Families***' - it will be necessary for each such person to firstly have an ***absolutely complete, 100%*** understanding of all factors, considerations, requirements, anticipated timelines etc. involved

An aid to achieving the latter might be to cross-refer to a ***separate*** document (also produced and maintained by the same person who authors and 'owns' ***this*** AEP Volume ***1*** [i.e. the document which you are reading right now]). This separate document has been specifically produced to advise ***surviving***, (catastrophic) ***air accident victims*** (together with their ***'non-flying' family, relatives and friends etc.***) what they can expect to ***'happen next'*** - i.e. in the ***immediate***, ***short***, ***medium*** and ***longer*** terms (running into years if necessary) following on from the time of the accident occurrence itself

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Whilst the above mentioned (separate) document is targeted primarily at surviving accident victims and their FR - it will also be useful to emergency responders themselves (particularly airlines, GHAs and ***airports***) - for what are hopefully obvious reasons. So do take the time and effort to study this separate document, which can be found as follows:

Go to - www.aviationemergencyresponseplan.com/information

When the webpage opens, scroll down until you find the info article entitled:

* Information Article - Passenger Aircraft Just Crashed? - '**What Happens Now**'

Click on the article to open and read

Note: It ***is*** worth reading the entire document. In so doing, ***airport*** staff will (amongst many other things) be able to better appreciate the very considerable burden put on ***airlines*** and their local reps (e.g. ***GHAs***) by such associated humanitarian assistance ops and related matters - together with the often long, arduous and distressing aftermath for ***surviving accident victims*** + the ***family, relatives & friends*** of ***all*** such victims - surviving or otherwise

Where to Start ..... 2A (**MANDATORY**)

Next job is to take / extract the / any and all required information (as relevant to ***airport*** operations) from the 'separate' document referred to just above, give it an appropriate title(s) and insert it (in the appropriate places + ***adapted*** as appropriate / required to the specific circumstances of the ***actual airport*** involved + as required by the guide writer) into the associated sections of the ***airport*** specific guide (i.e. ***this*** guide - ***but being your own version of the one you are reading now***) relating to the '***Provision of Humanitarian Assistance to Air Accident Victims and their Families***'

Whilst doing this, it will also be necessary to ***research*** and ***document*** (cross-refer to) the appropriate and associated (international, national, regional and [where so required] local) legislation, regulation, best practice, policy, code of conduct etc. - which applies to the actual ***airport*** involved

At the very least there will always be the associated international (ICAO) requirements to account for, in one way or another (e.g. ***appropriate*** parts [& derivative documents as appropriate] of ICAO Annexes 6, 9, 11, 12, 13, 14 (including Airport Services Manual - Part 7), 17 and 19; ICAO Docs 9859, 9973, 9998 etc.)

By competently researching and documenting the above information (in the appropriate place and manner) in ***your own airport*** humanitarian assistance guide, subsequent readers / users of same should be able to more easily acquire all of the necessary background material needed to better understand 'why it is needed', 'how it is to be applied', 'when and in what circumstances', 'who is involved and why', 'what are the required resources / facilities' etc.

Thus it is vital for the guide writer to get this particular part of the document as fully comprehensive, accurate and clear as possible

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Where to Start ..... 2B (OPTIONAL)

Where felt appropriate and desirable, the ***layout*** of the guide can be managed so that it ***very loosely*** follows in part (**but** generally set against an ***airport*** **only** context) the ***sequence*** of what has been written in ICAO Doc **9973** (First Edition - 2013 [see associated link on page **181**]). If this is done (at this point in the production of the 'guide') you will need to be cross-relating to ***Chapters 1 - 5*** - of said Doc 9973

Next (Background Material)

What will have been provided in the *real* ***airport guide*** prepared so far / as per above (i.e. as based on ***this*** appendix **Y** guidance material) will, in the main, be background and informational material (the 'bones' of the guide)

Now the 'meat' needs to be put on said bones

Thus we have arrived at the part of the ***guide*** where it is now necessary to describe ***in detail*** how it (the guide) is actually to be put into effect i.e. by transitioning the written word / theory / info etc. - as documented so far further above, ***into reality***. This might best be done by addressing any / all of what is documented and / or inferred under the following general headings (not necessarily in the order shown). NB: Below list is ***not*** exhaustive:

- ***Further research of subject matter*** - as required (e.g. types of airport related crisis for which the plan might be activated; types and degree of airport resourced assistance to be provided; which particular airport agencies will actually 'apply / deliver' the assistance; what [non-airport provided] assistance will be required e.g. because the airport is unable to provide same itself; which mutual emergency aid support agreements need to be prepared and signed etc.)
- ***Planning*** (including liaison & co-operation with other parties involved e.g. appropriate government agencies [including civil aviation authority; emergency services etc.]; appropriate aircraft operators [e.g. via the local 'airline operators' committee] and / or their local representatives [GHAs etc.]; other airports in the same country [to enhance standardisation and mutual support]; appropriate victim / family support groups etc.])
- ***Design and development***
- ***Resourcing*** (budget; external expertise; manpower; facilities; equipment etc.)
- ***Documenting***
- ***Implementing***
- ***Training*** (initial and recurrent [ever ongoing])
- ***Exercising*** (initial and recurrent [ever ongoing])
- ***Maintaining*** (the plan [ever ongoing])
- ***Reviewing*** (the plan [ever ongoing])
- ***Anything else as required***

The above equates, very approximately, to what is contained in ***Chapter 6*** of (separate document) ICAO Doc 9973 (2013)

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For the purposes of 'putting the meat on the bones' itself - it is now suggested that the task be further accomplished in two, related parts:

The first part (**Part 1**) relates to ***what needs to be addressed*** / ***done*** / ***accomplished*** etc.

The second part (**Part 2**) relates to the ***production and use of the associated checklists*** - specifically designed to serve as an 'aide memoire' (during actual emergency / crisis response operations) for addressing the response requirements stipulated in Part 1

For the sake of clarity and brevity, only the catastrophic aircraft accident situation is considered below and (as a further reminder) for the ***on****-airport* situation only. Furthermore, only the briefest outline information, details etc. are provided herein

It will thus be for the ***airport*** person (him / herself) responsible for preparing the ***guide*** 'in reality' - to take what has been covered (and / or referred to) in the above paragraph and expand, adapt and further document it accordingly - ***as related to the particular purposes*** / ***requirements of the specific airport for which the guide is being produced***

Part 1 (MANDATORY)

What needs to be done / addressed (If not ***already*** accomplished) to a 'fully fit for purpose' level?

- Obtain buy-in, approval and support for the project from the ***airport's*** top manager

- Appoint an appropriate person to the role of '***Humanitarian Assistance Manager*** (co-ordinator / specialist / officer etc.) - XYZ International Airport'

  Note - whilst the above should ideally be a dedicated role, circumstances at most airports will dictate that it be accomplished instead by e.g. assignment as a secondary duty or embodied as an additional role to an appropriate person's existing job description - typically that of e.g. the '*AEP Manager XYZ International Airport*' or the '*Chief Fire & Rescue Officer XYZ International Airport*'..... etc.

- Airport's 'top manager' to appoint an appropriate person from his / her ***senior*** *management team* to be the airport's '***champion***' for all things related to *airport* humanitarian assistance operations

  Note - main roles of said '***champion***' include **a**. top level support, troubleshooting etc. for the appointed ***Humanitarian Assistance Manager***; **b**. facilitating provision of associated budget, resources etc.; **c**. regular briefings to top manager & senior management team; **d**. liaising as required with off-airport, senior level counterpart(s) etc.

  Practically speaking, it is ***likely*** that the top manager's choice of '***champion***' for the ***overall*** (***whole*** *of the AEP*) - will also be the ***same*** *person* who ***specifically*** takes on the airport's '***Humanitarian Assistance***' ***component*** (of said AEP) accountabilities

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- Establish a 'fit for purpose' airport ***alerting*** *and* ***activation system*** - if not already in place

Note - it is ***very*** strongly recommended that an appropriate, commercial (third party) ***automated*** 'alerting & activation' system is procured for this purpose. Such systems are capable of alerting and activating large numbers (e.g. thousands) of persons in extremely quick timescales (e.g. minutes) - and are relatively inexpensive to retain and operate. They also have other useful functions to enhance response to an emergency itself - and can additionally be deployed during / for *some* ***normal*** business activities, business continuity issues etc.

Manual alerting should (today) be considered as 'fit only' as a backup to an automated system

An example of one of the better (quality, capability etc.) automated systems can be found at:

https://www.f24.com/en/

- Establish a 'fit for purpose' ***airport immediate care team*** - ICT

Note - an ***airport ICT*** is similar in many (but not all) ways to its ***airline*** equivalent team - the latter being known herein as the *(name of airline) '****Humanitarian Assistance Team*** *(****HAT****)'*

A useful document briefly describing the roles, responsibilities etc. of a typical ***airline*** HAT can be found by following the link (in the box) just below. That same material might ***also*** be useful, in part, for any ***airport*** equivalent '***Immediate Care Team***' project - and it is recommended that it should thus be studied accordingly:

https://www.aviationemergencyresponseplan.com/information/

When the above webpage opens, scroll down until you find the article you need i.e. entitled:

Information Article - **The Airline Humanitarian** (Family) **Assistance Team** (HAT)

Click on the article to open and read

- Establish a 'fit for purpose' system permitting rapid deployment, erection and manning of appropriate '***mobile***' ***facilities*** *to / near to* ***the accident location*** - said facilities typically used to e.g. provide adequate 'shelter' (+ safety, security, privacy etc.) for accident victims (at / near to the [typically 'on-airport'] accident site itself) until such time as the latter can be moved to more appropriate 'quarters / facilities / locations etc.'

Note - said ***mobile facilities*** typically comprise tents (inflatable and / or otherwise); airport buses (adapted [e.g. seats removed] and / or otherwise) etc. The reader is reminded that we are considering only '***humanitarian*** assistance' here (i.e. in contrast with e.g. ***medical*** assistance) - thus the primary context relates to shelter (from the elements) together with personal safety, security, privacy etc.

In a different context (but not pertinent, however, to ***this*** appendix **Y** ***specifically*** - thus provided 'for info' only herein) such mobile facilities will probably need to be 'shared' with immediate life-saving and medical treatment operations at / near to the accident site. ***Where this gives rise to a 'conflict of interest'***, medical related operations ***must*** typically ***always*** take priority

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In an 'ideal world', good planning and logistics should ensure that no such (latter) conflict occurs i.e. sufficient tents, buses (with e.g. seats removed / stretchers fitted for the medical context) and supporting personnel should be available to cover both contexts simultaneously. As we do not live in an ideal world, however, careful consideration should be given by the 'planners' as to how all of the above is to be accomplished (if at all), resourced, managed / prioritised, funded etc.

From the ***humanitarian assistance context only***, ***manning*** resources related to such mobile facilities are likely to be provided / facilitated by AFS (e.g. erection / inflation of tents), deployed elements of the XIA 'Immediate Care Team', drivers /operators, security, selected (airport based) volunteers etc.

Many of the better (from an emergency response planning viewpoint) airports around the world go a step further by providing 'desirable' services with regards to tent-type etc. mobile quarters e.g. mobile electrical power (generators) and associated lighting, heating and cooling etc.

- Establish a 'fit for purpose' process / system for ***reliably / rapidly identifying, segregating, containing etc.*** (i.e. from 'others' ***not*** involved) - ***those MGFR already waiting at airport landside*** (and / or those MGFR subsequently arriving at airport landside in the short[er] term[s] post-accident occurrence) - to meet their 'associated person(s)' from (what is to become) the 'accident' flight

Note - there are several ways to accomplish the above e.g. put out regular airport messages (via PA; FIDS; electronic / physical message boards; loudhailer / megaphone; shouting, website; social media etc.) - asking that all such persons (potentially being accident flight associated ***MGFR*** located at the airport) waiting for the 'accident' flight (this would be worded much more diplomatically and clearly in reality) - should report to the appropriate (landside) ***airport information desk***(s) - located e.g. in the appropriate airport terminal(s)

On eventual arrival of said reporting MGFR at said airport information desk(s) / equivalent facility, (trained, exercised, appropriately equipped and briefed) ***staff*** etc. ask a series of questions to verify that such person(s) ***really do have some form of genuine / appropriate relationship*** with a person(s) believed to have been on board the accident / emergency / crisis flight

If the answers indicate that the MGFR concerned might feasibly be 'involved' in some way - he / she / they (MGFR) are typically then 'invited' to use the services of (i.e. go to / be escorted to) the ***airport's*** *(landside)* ***FRRC*** - particularly re further verifying such potential involvement; receiving associated info as it becomes available; receiving appropriate welfare and humanitarian services etc.

Where use of an airport info desk is ***not*** possible / available (for whatever reason) there will be other ways of achieving what is required e.g. MGFR might be asked to report to the appropriate airline and / or ground handling agent desk(s) instead (even though this ***might*** e.g. mean them moving / being moved from the arrivals terminal [landside] to e.g. appropriate departures terminal [landside] etc.)

Alternatively, ***suitably identifiable*** (trained & exercised etc.) staff, volunteers etc. (e.g. from airport; airline; GHA; security; ***off***-airport agencies etc.) might 'mingle' with the potential MGFR in the ***arrivals*** area - said staff e.g. holding up signboards and using loudhailers / megaphones / shouts etc. - to try to identify and then 'process' (move to the FRRC) those MGFR who might ***potentially*** be involved

Personnel / staff (responders) involved in all of the above typically come from airport, airline, GHA, police, security, faith, voluntary etc. sources. They should be regularly trained / exercised appropriately beforehand. It is also essential that they have rapid and reliable access to the latest passenger and crew lists from the accident flight - as same will be crucial in the 'linking' procedure between accident victim and (potential) associated MGFR (whilst e.g. also permitting 'elimination' of ***other*** MGFR present who are ***not*** so involved i.e. not associated with the accident flight)

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- Identify, establish, equip etc. '***fit for purpose***' and ***separate facilities*** - to be used at 'time of crisis' as:

  - An *airport*, ***air*side** located CRC (A)
  - An *airport*, ***air*side** located SRC (A)

  - An *airport*, ***land*side** located * FRRC
  - An *airport*, ***land*side** located * RA (A)

  * Note 1 - where necessary, the latter two facilities may need to be located at a ***very close-by*** (off / near airport) ***facility*** - typically being a suitable hotel / hotels and / or equivalent. If so, provision of associated transport (by the accident related airport) might need to be a consideration

  Note 2 - the term 'fit for purpose' as used here - includes ensuring that the facilities chosen are of adequate size for the maximum numbers of persons expected to use them; are acceptable with respect to safety, security and privacy; have adequate access to a sufficient number of acceptable washrooms / toilets; have appropriate heating / cooling etc. systems in place; do not have windows overlooking e.g. the airport's runway etc. area(s) (this is a desirable rather than essential requirement); have adequate seating capacity; are capable of being easily 'divided / partitioned' in some way - e.g. in order to separate those present who have already been processed from those who have not (this is a desirable rather than essential requirement); have appropriate briefing facilities (physical & electronic) etc. **NB**: This latter (the above) list is ***not*** exhaustive

  Note 3 - once said facilities have been established, they must be provided with everything else necessary for them to function effectively, efficiently and expediently - over and above what has been described in 'note 2' above e.g. provision of food & beverage (including children and infants requirements); replacement (but basic) clothing / foot-ware (including children's and infant's requirements) ***(CRC[A] & SRC[A] only)***; access to 'personal health' type products (especially for women and infants) ***(CRC[A] & SRC[A] only)***; appropriate paperwork / forms / ICT used for processing; physical identification tags / bracelets / similar etc. - used to manage / differentiate the 'processed' from the 'unprocessed'; adequate comms e.g. access to telephones, internet, social media etc.

  Note 4 - appropriate (adequately trained & exercised, available & replaceable, in required numbers etc.) manpower resources are required to set-up, manage and run all aspects of what is referred to in Notes 1 to 3 above (e.g. on a 2 x 12 hour shift basis for as long as is necessary [anticipated as being for no more than 24 - 48 hours in extremis ***for an airport*** located type situation]). Manpower will typically come from airport resources (e.g. the ICT); police / customs / immigration / port health etc. staff; airline and / or GHA resources; medical / health (including mental health) personnel; religious / faith and voluntary groups (including NGOs) etc.

  An ***important*** consideration here is that many of the above persons (manpower resources) will need to **immediately** go ***airside*** at the accident airport, in order to deliver their crisis related duties. A significant number will ***not*** already have the required ***airside*** passes / permits. Coming up with an appropriate process for how such airside passes can be ***rapidly, reliably and safely issued*** (particularly from a security viewpoint) at time of major crisis is relatively easily accomplished (by the airport - in conjunction with e.g. police / security and immigration etc.) - as is how such personnel physically get to where they need to go (CRC [A] & SRC [A] etc.) without delay, to undertake such ***airside*** duties

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- Establish a 'fit for purpose' process for immediate to short-term '***matching*** *and* ***reuniting***' of ***airport*** located victims (typically the ***uninjured***) with their associated MGFR etc. ***at the airport***

- Establish a 'fit for purpose' ***emergency call*** / ***contact*** / ***info*** centre for / at the ***AIRPORT*** - which will augment / replace the equivalent 'normal business' telephone contact centre etc.

  Note 1 - this ***airport*** emergency call / contact / info centre should serve to ***concurrently***:

  - Take 'public' calls related to the crisis itself
  - Take 'public' calls related to disrupted airport operations caused by the crisis
  - Take 'normal business' calls as per 'usual' (and as applicable)

  Such a facility is required due to the expected, very significant increase in the number of calls coming into the airport 'switchboard' following a major, airport related crisis - which would typically be way beyond the capabilities of the 'normal business' (airport) telephone system / team to deal with

  If such an emergency etc. call centre is ***not*** established by the crisis airport, the latter will be failing to comply with part of its 'humanitarian assistance' liabilities with respect to the provision / exchange etc. of essential crisis related information to / with those having some degree of 'involvement'

  Note 2 - How much bigger (than its 'normal airport ops' equivalent) should the emergency call centre be? A precise answer is impossible. As a guide, 10 times bigger is a starting point - e.g. if the airport's 'normal business' telephone system requires 2 operators + supporting technology - a major crisis situation might call for 20 operators and a commensurate increase in ICT capabilities. It is possible that even this measure might not be enough to ***adequately*** cope with ***actual*** call loads '***on the day***'

  However, it is anticipated that such an increase will be beyond the capabilities and resources of ***most*** airports - but at least the interested reader will now understand the principle and the problem. Accordingly, and practically speaking, airports should ***plan*** to increase their call centre capabilities at time of crisis - insofar as resources and capabilities permit. ***BUT*** - the latter 'practicality' should ***not*** be an excuse to do nothing!

  Note 3 - How long might it be necessary to run the ***airport's*** emergency call centre for? Again, a precise answer is not possible. However, it is likely to be fairly short-term with regards to the crisis itself, for a number of valid reasons. By 'short-term' we might be considering perhaps 24 - 48 Hours. However, it might be necessary to extend this due associated business continuity / disruption related requirements (rather [now] than related directly to the crisis itself)

  Some of the 'valid reasons' referred to immediately above include:

  - When ***uninjured*** accident victims eventually leave the ***airport***, they typically (but not always) become (very generally speaking and for the purposes here of the 'provision of humanitarian assistance') the ***accident airline's*** responsibility. Like the accident ***airport***, the accident ***airline*** should set up / operate its own (separate from its 'normal business' and the airports) emergency call centre (***BUT***, like airports, many airlines do not have such capability) – thus possibly permitting the accident ***airport*** to reasonably quickly reduce (and eventually cease) its own emergency call centre operation

- As soon as the accident airline is able to bring its own emergency call centre 'on line' (if it has one of course) - the accident airport's emergency call centre can start to redirect ***crisis related*** callers (i.e. calling ***the airport***) to the ***accident airline*** - using whatever capabilities are available to achieve this e.g. many call centres use a long established technology known as '***IVR***'. Using this (or similar, 'modern' ICT systems) would thus e.g. permit crisis related calls to the ***airport*** - to be ***automatically intercepted and diverted*** to the involved ***airline****(s)*

Note 4 - We have already mentioned further above the subject of leasing automated '***alerting & activation***' systems. Some of the latter include the capability to activate a certain number (say 20 to 30) of ***their own*** provided telephone lines (with a dedicated telephone number) and put them at the disposal of the 'customer' (in this case - the accident airport). Thus the 'technology' (if not the manpower) to expand an ***airport's*** normal business call / contact centre into a viable 'emergency call centre' can be made available by simply procuring an appropriate alerting and activation system

The latter's simplest ***use*** might be to divert (using IVR etc.) crisis related callers (calling the ***airport***) to the accident ***airline***. However, this should not be done in the shorter term for reasons already explained i.e. initially the airport will / might need to handle such calls itself. If 20 extra / dedicated telephone lines are available (as already described above), the airport should do everything possible to put 20 of its own (appropriately trained and exercised) staff on the end of those lines, for as long as is necessary (e.g. if 12 hour shifts are anticipated, a total of 40 such staff will be required for 24H ops). The best way to accomplish this might be by use of ***pre***-trained and ***pre***-exercised ***volunteers*** from all parts of the airport (and even from outside the airport, if so required / possible / feasible etc.!)

IMPORTANT NOTE - Whenever several different organisations (e.g. airport, airline, government etc.) are using information (in whatever manner and format) related to aircraft accident victims and / or the latters' family, relatives and friends (amongst others) - it is vital that everything of relevance is shared, co-ordinated and made consistent (amongst all such providers) throughout such use

IMPORTANT NOTE - Whenever information of a personal nature (personal data) is collected and / or used and / or stored and / or shared etc. - some form of associated 'data protection' type legislation etc. ***may*** apply - particularly in the more developed countries

From emergency response viewpoints, this latter situation can (will) potentially cause significant problems in / interfere with the task of adequately providing humanitarian assistance to aircraft accident victims and their associated FR

The above subject (data protection) can be complex and is also beyond the scope of ***this*** AEP Guideline (of which this appendix **Y** is a part) to take account of. However, for more information on this subject, including suggested 'workarounds' - the interested reader should follow the below link:

https://www.aviationemergencyresponseplan.com/information/

When the webpage opens, scroll down until you find the info article entitled:

Information Article - **Data Protection Aspects of Airline Emergency Response Ops**

Click on the article to open and read

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- Establish a 'fit for purpose' ***dark site*** (as an integral part of the ***airport's*** main website) which can be activated and used (as a communications tool) at time of major crisis. Review the two 'important notes' shown on the *previous* page - as they can also apply here

- Establish a 'fit for purpose' ***social media*** capability which can be used (as a further ***airport*** communications tool) at time of major crisis. A reminder again of the two 'important notes' shown on the *previous* page - as they can also apply here

  Note - unless the ***airport*** already has a ***very*** capable / sophisticated ***social media*** capability (from both technical and human operator viewpoints) - ***only*** use social media as a method of ***distributing*** crisis related information i.e. do ***NOT*** enter into two way (or more) 'conversations' via social media

- ***Plan to Make Maximum Use*** (re a major crisis response situation at the ***airport*** - particularly re the provision / communication of crisis related information) ***of any of the following*** (which ***might*** be in place in the 'public facing' parts of the airport [list is not exhaustive]):

  - Airport Information Desks
  - Flight Information Display System (FIDS)
  - Electronic Message Boards
  - 'Physical' Message Boards (e.g. to write on; on which to attach paper notices etc.)
  - Public Address (PA) System
  - Personnel / Staff / Responders etc. using Megaphones / Loudhailers / Shouting etc.

- Ensure that appropriate * authorities / agencies at the ***airport*** make it as easy as possible (***facilitate***) for others at / arriving at the airport ***to do what is required of them with regards to the humanitarian assistance aspects of a major crisis response (at or closely involving the airport)***

  * For example - airport police; airport security; customs; immigration; port health; airport operator; aircraft operator and / or local rep (GHA etc.); ground servicing equipment (GSE) and transport providers; appropriate airport tenants and franchisees (particularly catering type services); appropriate off-airport agencies etc.

  Activities / issues which might feasibly benefit from such ***facilitation*** (at time of crisis) include (list is not exhaustive):

  - Evacuation, securing, setting up and equipping of airport ***airside*** reception centres (including catering requirements)
  - Manning of ***airside*** reception centres (especially by those trained persons ***not*** already having ***airside passes*** for the ***required airside areas*** i.e. a reliable, ***pre***-practised and ***approved*** process is required [regularly trained & exercised for etc.] in order to effectively and efficiently achieve this)
  - Transportation of ***uninjured victims*** from accident site to ***airside*** reception centres
  - Processing and welfare of uninjured victims at ***airside*** reception centres
  - Evacuation, securing, setting up and equipping of airport ***landside*** reception centres
  - Manning of airport ***landside*** reception centres
  - Alerting / gathering / screening etc. of associated (involved) ***MGFR*** + getting (transferring) them (somehow) to the ***landside FRRC*** facility
  - Processing and welfare (including provision of information) of MGFR at FRRC

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- Airport re-uniting process (1) - (***Administrative*** [e.g. 'on paper'] matching of uninjured victims with associated MGFR etc.)
- Eventual release of uninjured victims from ***airside*** reception centres (Consider - Immigration / Customs / Baggage / Security / Safety etc.) to airport ***landside***
- Airport re-uniting process (2) (i.e. ***physical*** [actual] re-uniting between uninjured victims and associated MGFR - as / if appropriate and possible)
- Facilitating onward travel of uninjured victims (as required)
- Release from the airport + handover of responsibilities (re humanitarian type matters) to e.g. ***accident airline*** / whoever (e.g. for those uninjured victims ***not*** undertaking onward travel as per their original schedule etc. [i.e. not, at least, in the shorter term])

- ***Pre*** -provide / issue some form of appropriate, easily recognised and readily accepted identification / identification system for all ***humanitarian assistance*** related crisis responders potentially deployable at the ***airport*** (e.g. airport's 'Immediate Care Team'; accident airline's 'Humanitarian Assistance Team'; appropriate off-airport responders etc.

*Note - we are **not** referring above to [**normal business** related] ID cards etc. here [which must **also** /additionally be displayed of course, as appropriate]*)

Just one way to achieve the above might be by the wearing of an appropriately (pre-prepared / procured and issued) coloured and marked tabard / vest.....and / or armband etc. Some suggestions for titles to use on same might include e.g.

'XIA IMMEDIATE CARE TEAM' (or, simply, 'XIA ICT')

'ABCX AIRWAYS HUMANITARIAN ASSISTANCE TEAM' (or, simply, 'ABCX Airways HAT')

Note: - See again pages **33** and **34** of ***this*** AEP Guideline Volume ***1*** re use of 'identifying colours' for emergency responders, their vehicles etc. Try to pick an appropriate colour for ***humanitarian assistance type responders*** which does not clash with any of the latter e.g. black tabards / armbands with white lettering (as shown just above) might be a reasonable suggestion?

- Establish a specific '***humanitarian assistance***' cell within the *airport's* ***emergency operations centre*** (EOC). For smaller / simpler airports this *cell* might be manned by e.g. just 1 or 2 persons per duty shift. For large / busy / complex airports *at least* 4 to 5 persons (probably more?) might be needed per shift e.g. airport rep + accident airline rep + the most appropriate off-airport rep(s) etc.

  Until the airport's ***EOC*** becomes fully active (can take several hours or considerably longer in certain circumstances / on certain dates etc.) it will be necessary for the *accident airport's* '***normal ops***' command and control centre / equivalent facility to additionally (but temporarily) oversee execution of the ***airport emergency plan*** - including ***humanitarian assistance*** aspects / accountabilities

  An appropriate procedure(s) is required to manage this (develop one if so required) together with development of the associated checklist(s). All potential staff involved ***must*** then be trained (initial & recurrent) and exercised (ongoing) accordingly, in such accountabilities

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- Ensure that each ***airline*** (air carriers / aircraft operators etc.) operating regularly to / from / at the ***airport*** also prepares an ***airline specific*** plan for providing humanitarian assistance to aircraft accident victims and their families, in the event that a major accident involves any such airline……in circumstances where that ***airport is*** / ***might be closely involved***

  In reality this is probably best accomplished initially at / via ***country*** / ***government*** (in which the *airport* is situated) level. For example, **ALL** airlines (foreign or otherwise) operating / planning to operate to an *airport* or *airports* in e.g. country *XXX* - are required (as mandated by *XXX*) to prepare and submit their ***airline specific*** humanitarian assistance plans for *XXX* - to the designated *XXX* government agency - i.e. typically a representative of e.g. a 'civil aviation authority' (or equivalent), an 'air accident investigation agency' (or equivalent) etc.

  In such circumstances it should typically be for the particular countries / governments etc. involved to provide overview guidance / requirements to all such airlines on what is expected of them ***in general terms only***, with regard to the provision of humanitarian assistance planning etc. ***in said countries*** - i.e. leaving the airlines to prepare, implement etc. the actual plans themselves (in general accordance with [and oversight from] the ***XXX provided guidance*** / ***requirements***)

  Completed (airline) humanitarian assistance plans would then need to be 'filed' with the appropriate government agency of the country (e.g. ***XXX***) concerned, approved and retained (and updated as required) for the entire period during which any specific airline continues to operate to / from / in that country. If this is not done, pre-defined 'sanctions' could be imposed on any non-complying airline - the most obvious one being the barring of the offending airline's operation in the specific country

  Using their completed and filed 'country' plans for guidance, the next step is for ***airlines*** to then conduct ***further*** work - in conjunction with the ***airports*** that they operate to / from / at in the particular country of concern - in order to ***expand*** their filed plans (which, at this point, might be regarded as being relatively simple and also generic to the concerned country) to make them fully fit for purpose at any particular **airport** so served, in the particular country of concern

  The ***United States*** is an example of a country where some of what is written above (e.g. need for airlines to ***file*** a 'Humanitarian Assistance Plan for Air Accident Victims & their Families' - with the appropriate [USA] government agency) has been in place for many years. (No filed plan = [generally] no permission to conduct defined flight operations [typically {but not exclusively} passenger airline operations] within / over the USA and its Territories)

  Note that the US government agency concerned (as per last para above) does ***not*** actually check such filed airline plans in detail, to ensure that they comply with what is stipulated. However, they can and will take serious action against any airline having a serious accident within / over US territory - where it is subsequently proven that the appropriate element(s) of the accident airline's humanitarian assistance plan, as filed, was / were not 'fit for purpose'

  To see a simplified example of the USA's requirements as referred to above - follow the instructions shown in the box at the top of the *next* page:

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Go to - https://www.aviationemergencyresponseplan.com/guideline-template/

When the webpage opens, scroll about half-way down it until you see the title:

'**Airline ERP** - **Component Documents**'

Look a little further in the bullet-point list below that title and find the document entitled:

'CRPM Part 1 (ERP) / Volume 2 - **Command & Control** Operations'

Click on the document to open and read

Pages to study are **157** - **161** (i.e. Appendix **C**)

- Comprehensively ***debrief*** the humanitarian assistance aspects of any major crisis response operation involving the airport (once the crisis is terminated)

  An initial (hot) debriefing should be conducted within 24 - 36 hours of crisis termination - followed by a fully comprehensive debriefing within the following 7 days after that. All 'lead' agencies in the humanitarian assistance response should be adequately represented at both debriefings. The latter are mandatory for all involved on-airport based departments, business units, agencies, franchisees etc. - and it is highly desirable that the appropriate off-airport equivalents also attend - especially the accident airline of course, as appropriate

  The debriefings shall be chaired by an appropriate airport EOC Commander who had been actively / significantly involved in the associated crisis response operation. The appointment of said chairperson shall be made by the airport's top manager. Comprehensive minutes of the debriefings shall be taken and allocation of corrective actions made. Recommendations and observations shall also be recorded

  The chairperson shall appoint an appropriately constituted team to ensure that adequate follow-up and closure is addressed re associated corrective actions, recommendations and observations

  The chairperson shall oversee the production of an associated report reflecting the conclusions of all of the above. The completed report shall be presented to the airport's top manager for review, change (as required) and airport operator final 'sign-off' - before being distributed internally (also as required)

  (Note: - it is expected that appropriate ***internal*** (XIA) recipients will re-distribute the report accordingly e.g. if the ***accident*** airline is not based at XIA / in XXX then that airline's representative at XIA / in XXX shall forward the report to that airline's HQ - wherever the latter might be located - etc.)

  The report shall also be submitted to appropriate off-airport agencies e.g. Department of Transport; Civil Aviation Authority; Air Accident Investigation Agency; Civil Defence (or equivalent) etc.

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Part 2 (MANDATORY)

Providing Associated ***Checklists*** for the ***Airport's Humanitarian Assistance Response***

How to prepare and produce ***checklists*** associated with an ***airport's*** humanitarian assistance response ***is beyond the scope*** of this Appendix **Y**. However, it is nevertheless ***essential*** that the airport ***does*** produce same and then ***trains*** and ***exercises*** with them on a recurrent basis. Said checklists must also be routinely reviewed, maintained and updated etc.

The vast majority of the appropriate material ***to consider*** in the formulation and content of such *checklists* will be found in ***this*** 'AEP ***Volume 1*** Guideline'. It is for the airport's humanitarian assistance ***guide writer*** to 'translate' such generic material into what is specifically required for the actual ***airport*** concerned. Said 'guide writer' will ***also*** need to refer to matters ***specific*** (as opposed to 'general') to the ***airport*** concerned and ensure that same is included in said *checklists*, as required

Said guide writer is also referred to (***separate*** document in this AEP series) *AEP Guideline Volume **2B*** - in order to get some idea of how AEP related *checklists* might be best originated, put together and 'populated' with the appropriate material. You can find *Volume **2B*** via:

https://aviationemergencyresponseplan.com/airport-operator/

When associated webpage opens, find the title '**Airport Emergency Plan - Preparation Templates** - AEP **/ Vol 2B - CHECKLISTS**' - and click on the associated link entitled: Click *HERE*

Conclusion (OPTIONAL)

The guide writer can provide a conclusion here - if so desired

Note of Interest re this Appendix **Y**:

It might be possible for surviving victims of a specific air accident + associated FR (of **all** victims of ***that*** accident) to be periodically briefed and updated by those 'officials' carrying out the associated **air accident investigation** process. Such 'officials' will also decide if visits (e.g. to the accident location [if accessible]) by surviving victims and associated FR might be permitted and, if so, under what circumstances

See more details in the boxed info provided immediately below (which also provides a list of various 'family associations' formed following some of the more recent air accidents - with regard to which such families were adversely impacted in one or other manner)

The info provided is targeted at EU countries - but will also be broadly of interest elsewhere:

Click on the below link

https://www.aviationemergencyresponseplan.com/information/

When associated webpage opens look down list of info articles until you find the one entitled:

* **Information Article** - Air Accident Investigation Process - **Briefing Victims & their Families etc.**

Click on article to open and read

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Examples of some *REAL* (Good Quality) AEPs

Follow below link to view a real, modern AEP for a ***major*** airport in the USA. This is assessed as a ***good*** AEP from a quality viewpoint and, whilst it necessarily complies with the national USA crisis command, control, co-ordination and communications (C4) system (known as NIMS / ICS) - is nevertheless adaptable to different C4 systems (e.g. Gold / Silver / Bronze etc.) as might be used in other countries

https://dot.alaska.gov/stwdav/documents/AEP/FAI-AEP.pdf

Another example of a good quality AEP (this one for a ***major*** UK airport) can be found at the end of the below link. Note that civil airport emergency plans in the UK are practically 'implemented / operated' using procedures, processes etc. known as '*Emergency Orders*' and '*Emergency Instructions*':

https://assets.live.dxp.maginfrastructure.com/f/73114/x/cf1a4cb6a1/manchester-airport-emergency-response-manual-general-2022.pdf

Note: As at January 2024 the above link no longer worked. We are taking steps to try to rectify this situation but, at time of writing this, Manchester Airport is not responding to our associated communications. If this situation cannot be remedied we will find another suitable airport to take Manchester's place

The last example relates to a good quality AEP for the 'smaller / simpler' commercial airport - this one being in New Zealand:

https://www.kapiticoastairport.co.nz/media/pdfs/Kapiti-Coast-Airport-Holdings-Ltd_Exposition_Airport-Emergency-Plan.pdf

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Some Further Assistance in Preparing Airport Emergency Plans (1)

A USA organisation ('Transport Research Board - TRB' / part of the USA's 'National Academies [Sciences, Engineering and Medicine]) produces a number of ***airport*** related reference docs (amongst other subjects) under something known as the '***Airport*** *Co-operative Research Program* - ***ACRP***'

The ACRP comprises several types of literature aimed at assisting USA commercial airports (typically [but not exclusively] the larger ones) to 'better do what they do' re a wide range of airport related subjects - including the ***Airport Emergency Plan*** - ***AEP*** + associated matters

Whilst said literature is USA specific, some of it (see link at end of next sentence) is useful for commercial airports worldwide, and thus worth 'taking a look at'. A list (current to early 2003) of such documents can be found by clicking ***here***

Note: To access / view any particular document found under the latter link (i.e. once / after said link has itself 'opened') firstly click on the ***separate*** link found at the head of ***each*** such opened ***list*** (i.e. the list which contains the particular [AEP related] document of interest to you). You will be taken to a much larger list - which you will then need to scroll through until you find (by title) that same required document of interest. Click on latter to access and read

One example (there are 3 in total) of such separate link, as shown in said opened document list, is:

https://www.trb.org/Publications/PubsACRPProjectReports.aspx

Note: In carrying out the above you will be required to provide an (your) email address and tick the associated 'consent' box - following which a PDF version of the particular document to be viewed can be downloaded

Some Further Assistance in Preparing Airport Emergency Plans (2)

Follow this ***link*** to get the Australian 'take' on the subject of the AEP etc.

It is presented as a 'webinar' and the sound quality is not the best at times, but is does take the interested 'listener' to some quite useful information - as to what a typical AEP is all about, albeit Australia oriented. (Note: You may want to skip the first 2 minutes of this webinar)