Aerodrome Emergency Plans
AEP

Seminario/Taller sobre “El impacto de la actividad volcánica en la aviación”

Mexico City, Mexico, 22-26 September 2014

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The ICAO Model

• An overview of the importance of Emergency planning and annex 14 Volume I provisions on aerodrome Emergency planning

• Airport Emergency Plan as part of certification process
Top 10 protocol questions directly related to Annex 14 Vol 1 provisions not satisfactorily implemented by 53 Contracting States audited

<table>
<thead>
<tr>
<th>Audit protocol number (Associated Annex provision)</th>
<th>% of audited States not satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.363 (1.4.4, 1.4.5, 1.4.6)</td>
<td>67.9</td>
</tr>
<tr>
<td>8.083 (1.4.1, 1.4.3)</td>
<td>60.38</td>
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<tr>
<td>8.257 (10.2.8)</td>
<td>60.38</td>
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<tr>
<td>8.165 (3.5.1, 3.5.2, 3.5.4)</td>
<td>58.49</td>
</tr>
<tr>
<td>8.139 (RP 2.6.7)</td>
<td>52.83</td>
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<tr>
<td>8.293 (9.1.12, 9.1.13)</td>
<td>41.51</td>
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<tr>
<td>8.319 (9.2.36, 9.2.37)</td>
<td>41.51</td>
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<tr>
<td>8.321 (9.3.1, 9.3.2)</td>
<td>41.51</td>
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<tr>
<td>8.327 (9.4.1)</td>
<td>39.62</td>
</tr>
<tr>
<td>8.207 (5.2.15.1, 5.2.15.3)</td>
<td>39.62</td>
</tr>
</tbody>
</table>
ICAO Provisions on AEP

- **Annex 14**
  Aerodromes
- **Vol. I** Aerodrome Design and Operations
- **Chapter 9, Section 9.1** Aerodrome Emergency Planning (AEP) contains 15 Standards and Recommended Practices (SARPs)
ICAO Provisions on AEP

• What is AEP?
  The process of preparing an aerodrome to manage with an emergency occurring at the aerodrome or in its vicinity.

• What are the objective(s) of AEP?
  To minimize the effects of an emergency, particularly in respect of saving lives and maintaining aircraft operations.
ICAO Provisions on AEP

• What do the AEP contain?

The aerodrome emergency plan establish the procedures for coordinating the response of different aerodrome agencies (or services) and of those agencies in the surrounding community that could be of assistance in responding to the emergency.
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• Planning for AEP should include provisions for:
  – Emergency Operations Centre (EOC/COE)
  – Command Post (CP)
  – Communication System (CS)

• Testing of the Plan
ANNEX 14, VOL I - PROVISIONS

• Chapter 9, Section 9.1

• Introductory Note – objectives

• 9.1.1 (Std) - An aerodrome emergency plan shall be established at an aerodrome, according with the aircraft operations and other activities conducted at the aerodrome
ANNEX 14, VOL I PROVISIONS

• 9.1.2 (Std)

• Coordination of actions to be taken

• Examples of emergencies:
  – 6 types involving aircraft
  – 5 types not involving aircraft
  – 3 types compound emergencies
ANNEX 14, VOL I PROVISIONS

• INVOLVING aircraft:

1. Acft accident on-airport
2. Acft accident off-airport (land and water)
3. Acft incident in flight (turbulence, decompression and structural failure)
4. Acft incident on ground
5. Acft incident (sabotage/bomb threats)
6. Acft incident (legal Authority)
ANNEX 14, VOL I PROVISIONS

• NOT INVOLVING aircraft:

1. Structural fire
2. Sabotage/bomb threat
3. Natural disaster (including Volcanic Ash)
4. Dangerous goods
5. Medical emergencies/pandemics
ANNEX 14, VOL I PROVISIONS

• COMPOUND emergencies:

  1. Acft/structures
  2. Acft/fuelling facilities
  3. Aircraft/aircraft
ANNEX 14, VOL I PROVISIONS

• 9.1.3 (Std)

• Coordinating responses/participation of existing agencies

• Examples of agencies located:
  • *on aerodromes – ATS, RFF, ADM, HEALTH, ACFT OPTRS, SECURITY/POL
  • *off aerodromes – FIRE DEPT, POLICE, MEDICAL, AMBULANCE, HOSPITAL, MILITARY, HARBOUR PATROL
ANNEX 14, VOL I PROVISIONS

• 9.1.5
• An AEP should include:

- types of emergencies
- agencies involved
- responsibility and role of each agency, EOC & Command Post, for each type of emergency
- coordinates of offices/people to be contacted
- grid maps of aerodrome & immediate vicinity
GRID MAPS

Hospital 1
55 beds
Capable of handling all emergency medical cases

Hospital 2
70 beds
Capable of handling most emergency medical cases except special cases such as extensive burns

Hospital 3
40 beds
Capable of handling common emergency medical cases such as simple wounds or fractures

Figure 7.2. Sample grid map -- airport and surrounding community
ANNEX 14, VOL I PROVISIONS

- 9.1.7 to 9.1.10
  Availability of a fixed Emergency Operations Centre and mobile Command Post for use during emergency
- 9.1.11
  Need for 2-way communication systems between EOC and CP and for all airport agencies involved in emergency
ANNEX 14, VOL I PROVISIONS

• 9.1.12 & 9.1.13 (Stds)

Periodic testing & review results

Frequency of exercise:
- full-scale once every two years
- partial exercise during intervening years
ANNEX 14, VOL I PROVISIONS

• 9.1.14 (Std) & 9.1.15

Plan to include specialist rescue services for emergencies in difficult environment

Plan to include establishment, testing and assessment at regular intervals of a predetermined response for specialist rescue service
ICAO Provisions on AEP

- **Annex 14** — *Aerodromes Volume I: Aerodrome Design and Operations*
- **Annex 18** — *The Safe Transport of Dangerous Goods by Air*
- *Airport Services Manual, Part 1 — Rescue and Fire Fighting* (Doc 9137)
- *Airport Services Manual, Part 7 — Airport Emergency Planning* (Doc 9137)
ICAO Provisions on AEP


• *Security Manual for Safeguarding Civil Aviation Against Acts of Unlawful Interference* (Doc 8973 Restricted)

• *Human Factors Training Manual* (Doc 9683)

• *Guidance on Assistance to Aircraft Accident Victims and their Families* (ICAO Circ 285)
Thank You

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