Runway Safety Team and Aerodromes’ Certification

Session #8
The aim of this presentation is to review the importance of Runway Safety Team to Aerodrome Certification, and Egyptian regulation and practices in this matter
## Agenda

1. Introduction
2. Runway Safety Team Mission, and Primary Role
3. Goals and general description of the RST Programme
4. Egyptian Civil Aviation Authority Vision and Mission
5. Egyptian Civil Aviation Authority Safety Regulation
6. Real Cases
As ICAO statistics issued 2011 shows that one of the major Aerodrome Safety issues which is Runway Safety has a related accidents ratio 59% of all accidents reported between 2006 and 2010. Additionally, depending upon the carried out Universal Safety Oversight Audit Program, the Effective Implementation of Safety Oversight Systems by Aerodromes reached only 57%.
1 - introduction

• These two facts mean that more effort should be exerted towards aerodromes safety.

• There is a vital relation between Aerodrome certification and Safety Management System.
1 - introduction

• Under ICAO Annex14, states are required, as part of the certification process, to ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system (SMS), is submitted by the applicant for approval/acceptance prior to granting the aerodrome certificate.
1 - Introduction

• When an aerodrome is granted a certificate, it signifies that the aerodrome meets the regulatory Standards and Recommended Practices (SARPs) regarding the facility and its operation, and that it has the capability to maintain these specifications.

• Yet we should always remember that SARPs represent the minimum level of aerodrome specifications.
1 - introduction

- establishment of Aerodrome Local Safety team is highly appreciated.
- The participation of CAA in such activities will be an effective tool in building the bridge of safety implementation between the regulations and work practices.
1 - Introduction

- It gives the chance for better understanding of the operating difficulties of personnel working against regulatory requirements.

- It also helps in dealing with CAA findings and introducing more acceptable practical mitigation measures and recommending areas for improvement.
2 - Runway Safety Team Mission and Primary Role:

• Conduct ongoing risk management activities:
  • Collect, store and analyze data
  • Track progress and report trends

• Recommend mitigations and facilitate implementation
  • Provide and justify mitigation alternatives
  • Raise awareness regarding any residual risks
2 - Runway Safety Team Mission and Primary Role:

- Monitor effectiveness and identify any unintended consequences
- Educate and Promote - Raise awareness of the operational risks among all stakeholders.
2 - Runway Safety Team Mission and Primary Role:

- coordinated by a central authority,
- should be to develop an action plan for runway safety,
- advise management as appropriate on potential runway safety issues and recommend strategies for hazard removal and mitigation of the residual risk.
3 - Goals and General Description of the RST Programme:

These strategies may be developed based on local occurrences or combined with information collected elsewhere.

- Abnormal runway contact;
- Bird strike;
- Ground collision;
- Ground handling;
- Runway excursion;
- Runway incursion;
- Loss of control on ground;
- Collision with obstacle(s);
- Undershoot / overshoot, aerodrome
We aim to achieve high standard of safety and security, and to promote a sustainable development of Egyptian Civil Aviation Authority.
ECAA is committed to providing efficient, effective and economic aviation safety and security by:

I. Ensuring compliance and enforcement of regulations consistent
II. Promoting voluntary compliance
III. Active participation and regulatory cooperation in MID region.
IV. Overseeing the functioning and development of the industry
V. Creating a knowledge base and customer-focused organization
1. **Develop** general rulemaking and specific operational policies that build upon **safety management** principles, based on a comprehensive **analysis** of the Egyptian’s aviation system;

2. **Consult** with all segments of the aviation industry on issues regarding **regulatory development**;

3. **Support** the management of safety in Egypt through an effective safety **reporting** and communication system;
4. **Interact** effectively with service providers in the resolution of safety concerns;

5. **Ensure** that within the Egyptian civil aviation authority's safety oversight, sufficient resources are allocated, personnel have the proper skills and are trained for discharging their responsibilities, both safety-related and otherwise;
6. **Conduct both**, performance-based as well as compliance-oriented oversight activities, supported by analyses and prioritized resource allocation **based on safety risks**;

7. **Comply with**, and wherever possible, **exceed** international safety requirements and standards;

8. **Promote** and **educate** the aviation industry on safety management concepts and principles;
9. **Oversee** the implementation of **SMS** within aviation organizations;
10. **Ensure** that all activities under oversight achieve the highest safety standards;
11. **Establish** provisions for the protection of safety data, collection and processing systems (SDCPS), so that people where people are encouraged to provide essential safety-related information on hazards, a continuous flow and exchange of safety management data between Egyptian civil authority and service providers;
12. **Establish** and **measure** our safety performance against safety performance **indicators** and safety performance **targets** which are clearly identified; and;

13. **Promulgate** an enforcement policy that ensures that no information derived from any SDPCS established under the SSP or SMS will be used as the basis for enforcement action, **unless** gross negligence or willful deviation.
This policy must be understood, implemented and observed by all staff involved in activities related to the Egyptian Civil Aviation Authority.

(Signed)

Head of ECAA /Accountable Executive
Issuance of EAC00-19

- By March 2011 Egypt issued its Safety guidance material,
- Which included a chapter about Runway Safety Team
6- Real Cases: (New Runway (Hurghada airport))

**Safety committee Form**

**Title of Committee: Safety Committee Type: RWY & TXYW Safety Committee**

**Reasons to hold this Committee:**

- To ensure the safety regulations are followed and enforced.
- To address any incidents and improve safety measures.

**Committee Procedures:**

- Regular meetings with all stakeholders.
- Reporting and tracking of safety incidents.
- Implementation of safety protocols.

**Members:**

<table>
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<tr>
<th>No.</th>
<th>Name</th>
<th>Title</th>
<th>Company</th>
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6- Real Cases: (Hurghada airport) :

Airport Construction
6- Real Cases : Coordination with the Military Part :

Safety committee Form

Date: 16-5-2012

Committee No. 1

Location: Orbit room

Signatures: ____________

Airport Operator

Signature: ____________

Phases of implementation:

MS Project attach, if Applicable

Safety Manager

Signatures: ____________

Issue No. 1

Title of Committee: RWV Safety Team

Reason to hold this Committee:

Committee Procedures:

Members:

Company

Signature

Tel.

Company

Name

Issue date: 12-5-2012

Issue No. 1

Safety committee Form

Date: 16-5-2012

Committee No. 1

Location: Orbit room

Safety committee Form

Date: 16-5-2012

Committee No. 1

Location: Orbit room

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Location: Orbit room

Safety committee Form

Date: 16-5-2012

Committee No. 1

Location: Orbit room
### Real Cases: Sharm Airport Statistics

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<th>Service</th>
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<th>Bad</th>
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<tr>
<td>Runway Marking</td>
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<td>7%</td>
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<td>Taxiway Marking</td>
<td>94%</td>
<td>6%</td>
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<td>Apron Marking</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Aircraft Warning</td>
<td>93%</td>
<td>7%</td>
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<tr>
<td>Approach Lighting</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>RWY Lighting</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Aprt Flood Lights</td>
<td>99%</td>
<td>1%</td>
</tr>
<tr>
<td>TVY Lighting</td>
<td>94%</td>
<td>6%</td>
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<tr>
<td>Spot lights</td>
<td>92%</td>
<td>8%</td>
</tr>
<tr>
<td>RWY Surface</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>TVY Surface</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Aircraft Stand Straight</td>
<td>96%</td>
<td>4%</td>
</tr>
<tr>
<td>Wind cone</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td>PAPI System</td>
<td>95%</td>
<td>5%</td>
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#### 1- Radar Service

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<th>Service</th>
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<th>Bad</th>
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<tbody>
<tr>
<td>Radar Cover</td>
<td>96%</td>
<td>4%</td>
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#### 2- Communication

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<th>Service</th>
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<tbody>
<tr>
<td>Area</td>
<td>80%</td>
<td>20%</td>
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<tr>
<td>Approach</td>
<td>99%</td>
<td>1%</td>
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<tr>
<td>Tower</td>
<td>92%</td>
<td>8%</td>
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<tr>
<td>Gnd NM 121.5</td>
<td>94%</td>
<td>6%</td>
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</table>
6- Real Cases: Leaser, Papi Problems (Sharm Airport):

- Tolerance of light during landing operations.

- Frequent occurrence of debris in the apron (FOD) or runway area.

- Exposure of some issues between the pilots.

1. In case of landings (PAPI) 22R is not on the right side of the red 4 and 22R PAPI in the vicinity of 3 miles but visible.

2. Failure of landing at 7 miles and 3 miles.
Airports with no history of failures ARE NOT hazard free.
4. You don’t always have the ‘answers’ or know the ‘best practices’.

6- Real Cases: Runway Safety Team (Sharm Airport):
Question

If a major runway incursion or excursion happened on your airport today, would there be things you would do differently tomorrow?
Open for Questions