



International Civil Aviation Organization

**The Twenty-Second Meeting of the APANPIRG ATM/AIS/SAR Sub-Group  
(ATM/AIS/SAR/SG/22)**

Bangkok, Thailand, 25 – 29 June 2012

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**Agenda Item 4: Review outcome of relevant meetings**

**REGIONAL RUNWAY SAFETY SEMINAR OUTCOMES**

(Presented by the Secretariat)

**SUMMARY**

This paper presents information from the Regional Runway Safety Seminar (RRSS), held in Bali, Indonesia from 21 to 24 May 2012.

This paper relates to –

**Strategic Objectives:**

A: *Safety – Enhance global civil aviation safety*

**Global Plan Initiatives:**

GPI-10 Terminal area design and management

GPI-12 Functional integration of ground systems with airborne systems

GPI-13 Aerodrome design and management

GPI-14 Runway operations

GPI-16 Decision support systems and alerting systems

**1. INTRODUCTION**

1.1 The four day seminar/workshop was convened by ICAO in partnership with DGCA Indonesia, Flight Safety Foundation and the Association of Asia Pacific Airlines in Bali, Indonesia from 21 to 24 May 2012. The event involved professionals from diverse professional domains as well as runway safety experts from airport operators, Air Navigation Service Providers (ANSPs) and Civil Aviation Authorities (CAAs) sharing a wide spectrum of lessons learnt and operational challenges.

1.2 The objective of the seminar/workshop was to promote the establishment and enhancement of airport specific multidisciplinary runway safety teams, in an effort to improve runway safety.

1.3 The seminar/workshop was attended by 273 participants from 17 APAC member States, seven States from other Regions and eight International Organizations.

**2. DISCUSSION**

2.1 ICAO Assembly Resolution A 37-6 on Runway Safety urged States to take measures to enhance Runway Safety including the establishment of Runway Safety Programmes using Multi-disciplinary approach that included regulators, aircraft operators, ANSPs, aerodrome operators and aircraft manufacturers to prevent and mitigate the effects of runway excursions, runway incursions and other occurrences related to runway safety.

2.2 One of the key outcomes of the Global Runway Safety Symposium (GRSS, Montreal May 2010) was the promotion of runway safety through the delivery of a series of Regional Runway safety Seminars to promote best practices including the establishment of runway safety teams.

2.3 APANPIRG/22 (Bangkok, September 2011) recognized the importance of runway safety took note of the Assembly Resolution 37-6, and urged States to take initiatives to enhance runway safety through the establishment of Runway Safety Programmes in order to prevent and mitigate runway accidents and serious incidents.

2.4 The seminar noted the threats that could cause runway safety issues and the mitigation solutions to improve safety. Some of the threats and mitigation solutions discussed are presented below:

#### Aerodromes

##### a) Threats:

- runway end safety areas not provided;
- accumulated rubber deposits and other contamination on the runway surface mainly at touchdown areas;
- deficient markings, signage and lighting;
- non-compliant signage ;
- Foreign Object Debris (FOD) on movement areas and apron;
- construction on the movement areas;
- Lack of training for airside vehicle drivers; and
- Presence of birds and wildlife on airside.

##### b) Mitigation solutions to improve runway safety:

- periodic removal of rubber deposits and other contaminants from the runway surface
- provision of runway end safety areas
- periodic renewal of airfield markings
- provision of runway guard lighting system/stop bar lighting system and road hold position signage/light;
- provision of enhanced taxiway centerline marking;
- establishment of wildlife management program to prevent bird/wildlife strikes;
- provision of perimeter security fence to prevent animals from entering airside;
- provision of runway longitudinal and transverse slopes including slopes on runway strips in accordance with Annex 14, Volume I for quick drainage of rain water;
- incorporating Annex 14 requirements at design phase-build a safe airport;
- demarcation of construction area with unserviceable lights, provision of 'no entry' signs and closed marking; publish in NOTAM
- training program for airside vehicle drivers;
- implement SMS in accordance with ICAO provisions;

- fostering safety reporting culture;
- use of standard phraseology;
- effective communications and coordination among all stakeholders;
- produce hot spot charts; and
- investing in new technology to improve safety.

#### Air traffic management

##### c) Threats:

- aircraft entering runway without clearance;
- inadequate visibility;
- Air traffic controller workload- shortage of ATC staff;
- phraseology and communication (use of standard phraseology);
- frequency congestion;
- unstable approaches;
- inaccurate surface/MET information; and
- construction works on movement areas.

##### d) Mitigation solutions:

- recruitment and training of additional ATC staff
- training on un-stabilized approaches;
- development of SOPs for use during airport works;
- advise flight crews and amend affected procedures when signage is unserviceable;
- provision of awareness and refresher training on runway safety issues and capacity enhancing procedures
- identify and publish hot spots-develop controller awareness of high risk areas
- develop mitigation procedures for blind spots; use surface surveillance equipment including CCTV if needed;
- manage radio frequencies; and
- establishment of local runway safety teams.

Outcomes from the RRSS

- 1) ICAO to continue to advocate and support establishment of Runway Safety Teams (RSTs) using various means (including the on-line tools).
- 2) ICAO to promote that Regional Aviation Safety Group (RASG) identifies RST and related safety priorities.
- 3) Industry safety partners undertook to promote runway safety and RSTs through their constituencies.
- 4) Safety Partners invited ICAO and COSCAP to participate at association safety events.
- 5) ICAO to present a paper on RSTs at the next RASG meeting proposing a mechanism for monitoring RST activities under APRAST.

**3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to note the information provided in this paper.

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