

Outcomes and Actions Promise Sector-wide Improvements for Runway Safety

ICAO and its industry partners came together at the Organization's and the sector's first-ever Global Runway Safety Symposium (GRSS) this past May, agreeing on a range of measures to reduce runway-related accidents. Four hundred and twenty participants from 73 ICAO Member States and international aviation organizations attended the GRSS event, which was held at the Organization's Headquarters in Montreal.

Outcomes of the GRSS discussions included joint recognition of the need to develop guidance to initiate specialized Runway Safety Teams. Additionally, participants reinforced the need to harmonize runway safety definitions, taxonomies and the reporting of runway conditions and other safety indicators. The need to standardize and improve communication procedures in and around runways was also highlighted.

"We now have a clearer understanding of the roles and responsibilities of each of the partners as we continue to address, reduce and work towards eliminating runway incursions and excursions," commented ICAO Air Navigation Bureau Director, Nancy Graham. "The multidisciplinary approach we undertook at GRSS 2011 is the only option for coming to grips with the complex set of operational and human factors issues associated with this safety domain."

Runway operations continue to represent the most significant single source of aviation accidents and fatalities.



Over the past five years, about one third of all aviation accidents reported to ICAO were linked to runway operations. Eighteen percent of these were the result of runway 'incursions' or 'excursions'. Runway incursions involve the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. Excursions occur when aircraft veer off or overrun the runway surface.

"While 2010 was the safest year ever in the history of civil aviation, the consistent growth in air traffic over the coming decades means that we have to act now to develop and implement proven technological and operational solutions that will make sure we improve upon our remarkable safety record," Graham added.

The GRSS results mean that ICAO and its partners will now be increasing the scope and frequency of their runway safety data sharing. Partners will also be helping ICAO to promote and encourage the implementation of new runway safety solutions, committing to working with the Organization and its Member States to fund and deliver 12 Regional Runway Safety Seminars that will be held across every continent over the next three years (see sidebar, page 18).

The Regional Runway Safety Seminars will result in the development of action plans to promote the establishment of collaborative runway safety teams

PRIMARY OUTCOMES OF THE 2011 ICAO GLOBAL RUNWAY SAFETY SYMPOSIUM

One size does not fit all:

- Solutions need to account for local conditions yet be standardized and harmonized to ensure interoperability.
- Runway incursions and excursions are the main issues but other aspects such as Bird Strike,
 FOD present additional runway safety risks.

Collaborating at multiple levels:

- International organizations have committed to work together to compile and promote proven solutions and endorse best practices.
- Runway Safety Teams will be established locally and hosted by the airports.

Improve standardization and harmonization:

- Develop guidance to define and launch Runway Safety Teams.
- Harmonize "Runway Safety" definitions, taxonomies and reporting of runway conditions and other safety indicators.
- Standardize and improve communication procedures.
- ICAO to ensure that Standards and Guidance material are fit for purpose.
- Implementation of ICAO Standards monitored through the Continuous Monitoring Approach.

Promote and encourage implementation of solutions, such as:

- Training & collaboration.
- Runway & taxiway markings & signage.
- Runway End Safety Areas (RESAs).
- PBN approach implementation.
- Arresting Systems.
- EFBs, on-board awareness and alerting systems.
- All partners have committed to increasing the exchange of runway safety information.

ICAO dedicated runway safety page:

- Library of downloadable toolkits and documents.
- Contributions from partner organizations.
- Links to Skybrary and other runway safety partner sites.

Regional Runway Safety Seminars (RRSS):

- All Runway Safety Programme Partners have committed to support delivery of Regional Runway Safety Seminars.
- RRSS events will result in action plans to create runway safety teams and provide support to those already in place.
- Progress will be monitored with updates provided to all partners through RASGs and other appropriate means.
- Reduction of risks will be monitored on a regular basis, with follow-up actions taken as required.
- Communication and outreach plans are being established.



involving airlines, airports and air navigation service providers.

Other commitments included agreement to further develop best practices and improve the sharing of these among ICAO Member States and industry. Work will also be started towards the development of common definitions, metrics and analysis methods which will facilitate the reporting of hazards encountered in the runway operational environment as well as related information sharing initiatives necessary to support a multidisciplinary runway safety programme.

ICAO and partner organizations will also begin to develop more multidisciplinary guidance material and training workshops for relevant personnel in flight operations, air traffic management and airport operational areas.

The close cooperation between aviation's major stakeholders that

will be driving all of these actions has already led to a number of solutions, including the Runway Excursion Risk Reduction Toolkit (RERR Toolkit).

The second edition of this toolkit, a joint collaboration with IATA and with contributions from ACI, CANSO, IFALPA and other industry partners, was released at the GRSS event. It provides information, training modules, presentations, videos and best practices in an interactive format.

"I'm very impressed with the progress that has been made on the runway safety portfolio and with the level of multidisciplinary collaboration that has led to these achievements," commented IATA's new Director General, Tony Tyler. Tyler replaced Giovanni Bisignani as of July 2011.

"IATA's carriers take this issue very seriously and we have been working very hard with all concerned stakeholders to enhance the new edition of the RERR Toolkit," Tyler noted. "We've all brought a wide range of data and input to bear on this problem and IATA is very happy to see how quickly industry and regulators are making use of the latest information to both provide and implement practical solutions."

ACI World Director General Angela
Gittens, who announced a new global
safety programme at GRSS 2011 called
Airport Excellence in Safety (APEX),
also stressed the importance of all
runway safety programmes working
closely together to coordinate
successful results.

"To drive down the number and severity of runway safety incidents, all those involved in safety at the airport must work together to meet that objective – including airports, airlines, pilots, air traffic controllers and the many people on the ground who contribute to delivering safe travel," Gittens stressed. "This close collaboration is critical in



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Nancy Graham Director, ICAO Air Navigation Bureau

order to reduce the potential for accidents and improve airport response in case of an incident."

ACI's APEX programme components build on ICAO principles of airport certification in line with Annex 14 and Safety Management Systems (SMS), as well as information transparency. To learn from experience, an APEX database

for incident information sharing will be based on a non-punitive, 'just culture' environment.

"ACI will also be facilitating a 'Safety Partners' network to further promote mutual assistance," Gittens commented. "We recognize that not all regions, nor even all airports in the same region, may be facing the same hurdles. To this end we'll be working in close collaboration with our ACI regional offices and our local aviation partners on tailoring the common framework with flexibility for meeting specific and identified local needs. ACI airports are also looking forward to assuming central coordination roles with respect to on-site stakeholder safety teams, demonstrating not simply a willingness to collaborate but also to take on a management and leadership role in facilitating joint runway safety efforts at the airport."

CANSO Director General Graham Lake highlighted his organization's efforts to promote a better understanding of the role ANSPs play in preventing runway excursions and incursions at GRSS 2011. He drew attention to the recently published CANSO educational booklet: *Unstable Approaches - ATC Considerations*, which was developed by the organization's Safety Standing Committee.

"We have to work together, we have to improve together and we have to share data," Lake remarked during his GRSS address. "CANSO also places a great deal of emphasis on the need to establish a just, non-punitive reporting culture and also the development of improved and agreed methods and terminology to better harmonize the reporting process and make it more effective. All stakeholders have to recognize that they have a role in contributing to the improvement of runway safety and CANSO is very pleased to be playing its part."

UPCOMING REGIONAL RUNWAY SAFETY SEMINARS			
Proposed Date	Location	State Co-host	International Organization Co-host
* 2011: 24 – 25 October	Miami	FAA	IFATCA
* 2011: 13 – 14 December	Delhi	CAA, India	IATA/FSF
* 2012: 08 March	Amsterdam	Eurocontrol	ATC Global/CANSO
2012: April/May	Middle East		CANSO
2012: July	South America		CANSO
2012: August	Asia Pacific		AAPA/IATA
* 2012: October/November	Cape Town		CANSO
2013: March	Western Africa		ACI
2013: June	Europe	Eurocontrol	
2013: August	Asia Pacific		AAPA/IATA
2013: September	Europe	Eurocontrol	IATA
2013: November	Asia Pacific		FSF

^{*}Confirmed