



# Jamaica 2016

**Final Report for**  
**Norman Manley International Airport**  
**Sangster International Airport**  
**Ian Fleming International Airport**

**25-28 July 2016**

Dr. Teo A. Babun, Jr., Chairman  
Dr. Jim Smith, Technical Director  
Americas Relief Team,  
*An initiative of*  
*Outreach Aid to the Americas, Inc.*



*An initiative for a disaster mitigation network of airports throughout  
Central America and the Caribbean*  
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### *Serving 3 Great Airports*

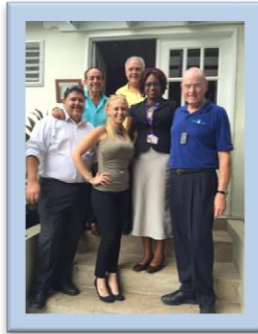
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*Team at Ian Fleming International Airport*



*Teo Babun, Jim Smith, Kathryn Prendergast, Claudile Syrdial and the Emergency & Fire Rescue Team at Ian Fleming*

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## Background

Growing out of lessons learned in Haiti after the 2010 earthquake, the Port Resiliency Program (PReP) began in 2012 as an effort to improve the resiliency of airports and seaports in disaster-prone areas of the Caribbean and Latin America. With strong sponsorship and support from FedEx and Miami International Airport (MIA), the program was pilot tested at Las Americas International Airport in Santo Domingo, the Dominican Republic, in 2013. Lessons learned there were applied to create PReP 2.0 that was successfully applied in 2015 at Juan Santamaria International Airport in San Jose, Costa Rica, and in an abbreviated form, at Meridá International Airport in Merida, Yucatan, Mexico. The fully operational PReP program was delivered to Jamaica's three international airports in July 2016.

## PReP Basics

PReP has three overarching goals:

- (1) To speed an airport's ability to restore function to allow humanitarian aid as quickly as possible after a disaster strikes.
- (2) To speed a region's, an island's, or a nation's economic recovery by restoring full airport function as quickly as possible.
- (3) To reconcile these two goals so that the benefits of both are maximized and conflicting demands for the use of a recovering airport are minimized.

In order to achieve these goals, PReP engages in a highly collaborative and interactive process with the airports that includes five steps:

- I. A self-evaluation of the airport's resiliency, preparedness, plans, mutual aid relationships, training, and equipment.
- II. A cooperative effort to identify gaps and design training to address each of them.
- III. Targeted training delivered during a site visit, with PReP Team members and local subject matter experts delivering the training in an informal but highly effective discussion setting.
- IV. A table top exercise to validate learning and to reinforce mutual aid relationships and awareness of the need for cooperation and collaboration in disaster response and recovery.
- V. Planning for the future—a continuing activity by the airports that will grow out of the experiences and lessons learned from the PReP self-evaluation and site visit training and exercise.

FedEx and Miami International Airport sponsor PReP.



## Jamaica

### Natural Hazards

PReP is focused on airport resiliency in the face of natural disasters. Jamaica's main natural hazards are hurricanes, flooding, landslides, drought, earthquakes, and tsunamis. Because the self-assessment (PReP Step I) and collaborative gap analysis (PReP Step II) revealed that the Jamaica airports were very well prepared for hurricanes, PReP for Jamaica focused on flooding, landslides, earthquake, tsunami impacts, response and recovery.

### Airports

Jamaica has two major international airports, Sangster International Airport (MBJ) at Montego Bay and Norman Manley International Airport (NMIA) at Kingston. Over 4.5 million passengers a year pass through MBJ, most of them tourists headed for the famous resorts on Jamaica's north and west coasts. NMIA is primarily a business traveler and Jamaica resident airport as well as a major cargo airport. It serves about 1.5 million passengers a year. In

addition to the two big international passenger airports, Ian Fleming

International Airport is a general aviation airport at Ocho Rios. It has many private jets that arrive nonstop from overseas points of origin as well as limited commercial and charter service. MBJ is operated by a private company. NMIA and Ian Fleming are operated by the Airports Authority of Jamaica, a government entity. All three airports are supervised by the Jamaica Civil Aviation Authority (JCAA). JCAA's focuses are safety, regulatory compliance, finance, accountability, and air traffic control.



*Map of Jamaica illustrating Kingston Airport and Montego Bay Airport*

### PReP and JAMERG

PReP had a unique advantage when going to Jamaica: PReP's technical director Dr. Jim Smith and exercise designer Captain Ricardo Garcia had been involved in a six-month effort called JAMERG. JAMERG is the airport-to-airport mutual aid pilot project being done in Jamaica as the first step in developing airport-to-airport mutual aid across national borders in the Caribbean, Central America, and Mexico. This is an initiative of the International Civil Aviation Organization (ICAO), which is the United Nations agency that regulates international air transport. In addition to the two volunteers from PReP, volunteers from the Federal Aviation Administration (FAA), Dallas/Fort Worth International Airport, Savannah/Hilton Head International Airport, Portland International Airport, Orlando International Airport, San Antonio International Airport, and Jack Brooks Regional Airport have been working with representatives of MBJ, NMIA, JCAA, and the Jamaica Office of Disaster Preparedness and Emergency Management (ODPEM) to prepare for and test the concepts for JAMERG. There were weekly webinars on many of the same topics that PReP features, and the culmination of the JAMERG training phase was a table top exercise designed and delivered by Captain Garcia on May 16, 2016. In short, PReP and Jamaica had a strong relationship established when PReP offered its services to the three airports.

The relationship between JAMERG and PReP continued into the PReP site visit to Jamaica in July 2016. The essential features of JAMERG were the topic of one of the main training topics,

so it reached a broader audience in Jamaica than had the webinars reached. The PReP table top exercise forced consideration of activation or non-activation of JAMERG at each decision point, which provided further discussion of key features in JAMERG. Overall, JAMERG enriched the PReP table top and PReP provided a final proof of concept for JAMERG, which will go into the final report on JAMERG that is due to ICAO by the end of August 2016.

Ever since the PReP pilot project at Las Americas International Airport in Santo Domingo in 2013, airport-to-airport mutual aid has been one of the resiliency tools encouraged by PReP. Findings from Santo Domingo informed the ICAO meeting in Mexico City in 2014 that led to the JAMERG pilot project. PReP and its sponsors, FedEx and Miami International Airport, strongly support international airport-to-airport mutual aid and hope to be part of the continuing process that follows JAMERG.

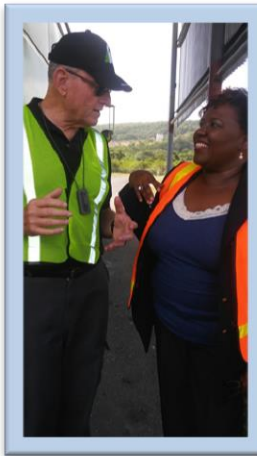
## PReP’s Jamaica Site Visit 25-28 July 2016

### Airport Familiarization Tours

The PReP Team—Dr. Teo Babun, Dr. Jim Smith, Captain Ricardo Garcia, Ms. Denise Fernandez, and Mr. Nelson Mejias—was in Kingston, Jamaica, from Monday, July 25, 2016, until Thursday, July 28, 2016. While there, they had a detailed tour of NMIA



*Ricardo Garcia, Teo Babun & Nelson Mejias at Ian Flemming*

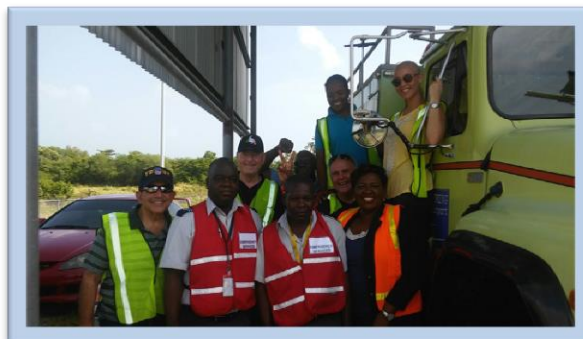


*Jim Smith & Claudile Sydial at Ian Flemming*

(Monday afternoon) and of Ian Fleming International Airport (Thursday morning). During the tours, the PReP team and Jamaican airport managers and workers interacted extensively with special attention to the resiliency and preparedness measures that the airports have taken. These measures are impressive at both airports. In addition, the team examined the two airports for space and facilities to handle incoming and outgoing humanitarian support logistics flights during disaster response and recover operations for the airports and the nation. Although MJB wasn’t visited, its preparedness posture was examined in detail and found also to be exemplary.



*Ludolph McLaughlin & Jim Smith at NMIA Airport*



*Emergency & Fire Rescue Team at Ian Flemming*



<b>Training Topics</b>
<b>Welcome &amp; Introduction of Participants</b>
<b>Purposes of PRéP</b>
<b>What is resiliency and types of resiliency as applied to an airport</b>
<b>Reason and necessity for a recovery plan</b>
<b>Caring for airport employees and their families</b>
<b>Sat phones and other alternative means of communications in emergencies</b>
<b>ATC failure</b>
<b>Cyber Security (attack, disruption, prevention, response, recovery)</b>
<b>Alternative fueling procedures and plan</b>
<b>Reconstitution of electrical systems (airfield electricians, inspectors, spare parts)</b>
<b>Financial and contracting (“pre-contracting”) arrangements in advance of emergency</b>
<b>Nature of command and control to coordinate airport and stakeholder actions</b>
<b>Airline-airport coordination for airline duties during operational disruptions</b>
<b>Interagency coordination on setting priorities</b>
<b>Evacuation, sheltering-in-place &amp; repopulation</b>
<b>Caring for airport employees and their families</b>
<b>Rotation plan/relief plan for employees during response and recovery ops</b>
<b>Customs procedures in emergencies</b>
<b>Immigration procedures in emergencies</b>
<b>Work permits</b>
<b>Emergency badging plan and access</b>
<b>JAMERG (Airport-to-airport mutual aid for Jamaica)</b>
<b>Marine Rescue</b>

**Table 1**  
**Training**  
*Shows all Training Topics*

## Training

All day Tuesday and Wednesday morning were spent on a series of targeted training sessions of various lengths. Some topics grew out of lessons learned during the JAMERG process, some out of the self-assessments by the airports, some were requested by JCAA or ODPEM, some were requested by NMIA or MBJ, and the rest grew out of PRéP’s prior experiences. The strong existing relationship between the Jamaicans and Dr. Smith and Captain Garcia allowed a different presentation method to be used, and it was hugely successful. Instead of lectures, most topics were presented as a dialog between a PRéP Team moderator and a Jamaican subject matter expert with the audience heavily involved through questions and comments. For example, the topics of customs and immigration procedures were handled with Dr. Smith moderating and a member of the Jamaica Customs and the Jamaica Passport, Immigration & Citizen Agency as the subject matter expert. Another example was airport-airline coordination where the subject matter expert was Barbara Dawkins of FedEx. The success of this approach will cause PRéP to use it at all future airports.



*Kathryn Prendergast & Jim Smith*

### Table Top Exercise

Wednesday afternoon, July 27, 2016, was devoted to the table top exercise (TTX), which was led by Captain Garcia. An informal seminar-type approach was used in order to encourage and facilitate discussion and comment among all participants. Four teams were formed from the participants. At each decision point, Captain Garcia called on one of the teams in rotation to present their decisions, concerns, and areas of uncertainty (if any). The other three teams then commented. As already noted, decisions about JAMERG activation or non-activation were a theme throughout the TTX.



*Rick Garcia participating group discussions during TTX*



*Nelson Mejias interacting with group discussions during TTX*

The TTX scenario began with a period of prolonged rains and landslides that blocked key roads. The main disaster was a major earthquake centered near Kingston with the possibility of a tsunami. NMIA and the road to it were damaged as were hospitals and infrastructure in the Kingston area. MJB and Ian Fleming International Airport were undamaged. The participants worked through a series of injects (that is, statements of new developments) and decision points from initial weather warnings through the earthquake and into disaster response and recovery. Great emphasis was placed on damage assessment, employee care, interagency cooperation, prioritization of resource utilization, and JAMERG activation.

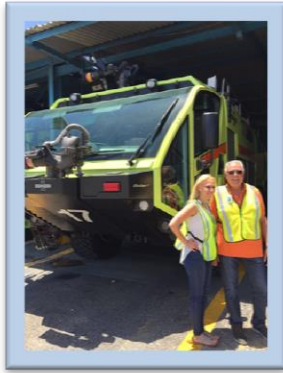


*Open communication deliberating ideas in free flowing discussions during TTX*



## Acknowledgments

Americas Relief Team and the PRéP Team wish to thank the ART Board of Directors, FedEx, and Miami International Airport for their strong, steady support over the past four years. We are grateful to our friends in Jamaica who helped arrange and carry out the site visit, with particular thanks going to:



*Denise Fernandez and Ricardo Garcia during NMIA tour*

- |       |                         |
|-------|-------------------------|
| FedEx | Ms. Barbara Dawkins     |
| FedEx | Julia Chicoskie         |
| FedEx | Francisco Santeiro      |
| MIA   | Joe Napoli              |
| MIA   | Ken Pyatt               |
| MIA   | Nelson Mejias           |
| IFIA  | Ms. Claudile Sydial     |
| JCAA  | Mr. Rohan Campbell      |
| JCAA  | Mr. Mark Phillips       |
| MBJ   | Mr. Benton Allen        |
| NMIA  | Lt. Cdr. John McFarlane |
| NMIA  | Mr. Ludolph McLaughlin  |
| NMIA  | Ms. Kathryn Prendergast |
| ODPEM | Mr. Horace Glaze        |
| ODPEM | Ms. Michelle Edwards    |



*NMIA tour of Marine Rescue boat*



*Ian Flemming Airport*



*Jim Smith, Barbara Dawkins, Denise Fernandez, Nelson Mejias*

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