Port Resiliency Program (PReP)
Final Report of Pilot Project at Las Americas International Airport
Santo Domingo, Dominican Republic
5-7 February 2013

March 20, 2013

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Introduction

Purpose
The Port Resiliency Program (PReP) prepares airports and seaports in Caribbean and Latin America to be more resilient in face of natural disasters by applying lessons learned in Hurricane Katrina and the Haiti earthquake. PReP’s focus is on support for essential employees and their families, rapid damage assessment and repair, interagency cooperation, and mutual aid. AmericasRelief Team, a nongovernmental organization, is the program’s initiator.

The purpose of the pilot project is to test the validity and effectiveness of the basic PReP approach and procedures at an actual airport before extending the program to other airports and to seaports.

Approach
PReP uses a three-step process:

- Initial self-assessment by the airport or seaport;
- Planning workshop in Miami to identify gaps and training needs
- Site visit to present targeted training and a table top exercise to assess the preparedness of the airport or seaport.

Commitment to Continuous Improvement
PReP, AmericasRelief Team, and the sponsors are fully committed to the continuous improvement process. Every step will be subjected to self-evaluation and external evaluation, and the findings will be used to improve the program.

Sponsors
FedEx is the primary sponsor of PReP with Miami International Airport (MIA), Florida International University (FIU), the Port of Miami, AERODOM, American Airlines, and Smith-Woolwine Associates as additional sponsors.

Pilot Project
Selection of Site
AmericasRelief Team in consultation with FedEx, MIA, and American Airlines developed a list of 34 candidate airports in the Caribbean, Central America, and northern South America. AERODOM’s Las Americas International Airport (AILA) in Santo Domingo, Dominican Republic, best satisfied the criteria for the pilot project airport. AERODOM is the privately held corporation that operates six airports in the Dominican Republic under long-term lease from the government.
Criteria

- Medium-sized airport in terms of enplanements
- Airport with recent history of dealing either directly or indirectly with a natural disaster
- Airport with management that is enthusiastic about participation

Why Do an Airport First

Initial analysis indicated that seaports may involve more variables than airports. Seaports typically have more different stakeholders and are subject to fewer national and international regulations that regulate their operations.

Timing

The pilot project was conducted 5-7 February 2013 in Santo Domingo, Dominican Republic.

Participants

AERODOM participants were Ms. Monika Infante (CEO), Mr. Christian Moreira (COO), Mr. Luis Mejia (Corporate Security Manager), Mr. Juan Manriquez (Corporate Safety Manager), Mr. Manuel Real (Corporate Manager for Aircraft Rescue and Fire Fighting), Mr. Carlos Rodoli (AILA Director of Operations), Ms. Santa Cuevas, Ms. Sandra Felix, Mr. Rolando Medrano, Mr. Jose Villar, Mr. Jaime Marte, Mr. Guillermo Beriguet, and Mr. Crioni Belliard.

Airline participants were Mr. Ricardo Javier (American Airlines) and Mr. Dorian Martinez (Delta Airlines). Mr. Martinez is also president of the international airlines committee at AILA.

Ms. Aida Acosta (Menzies Aviation) participated; Menzies Aviation is a ground handling contractor in the AILA terminal.

Representatives of national agencies of the Dominican Republic were: Mr. Julio Cesar Mejia (IDAC), Mr. Alexander Ramirez (IDAC), Ms. Francia Peña Rivas (IDAC), LTCOL Francisco Abreu (CESAC), Mr. Edwin Olivares (COE), Mr. Luis Osoria (COE), Mr. Michel Made (Policia Nacional, PN), Mr. Cristino Linares (Departamento Aeroportuario, DA), and CAPT Juan Carlos Porcella (Auxiliares Navanes Dominicano, AND).

The pilot project was led by the PReP team: Dr. Teo Babun (ART), CAPT Ricardo Garcia (FIU), LT Luis Santana (Miami-Dade Fire-Rescue Department), Mr. Nelson Mejias (MIA), Ms. Ana Guevara (Aventi Associates), Ms. Dulce Boza (ART), and Dr. Jim Smith (Smith-Woolwine Associates).

Observers for the pilot project were: Mr. Shane O'Connor (FedEx), LCDR Lee Titus (USCG, Military Attaché), Mr. Josue Ceballo (USAID/Dominican Republic), and Ms. Elaine Gutierrez (U.S. Consular Service).

Appendix C lists the participants in the Miami workshop on 11-13 December 2012, and Appendix D lists the participants during the site visit to Santo Domingo on 5-7 February 2013.
Process

Pre-Evaluation

The first step in the PReP process was the evaluation of Las Americas International Airport’s emergency and disaster plans, first by the AERODOM staff and then by the PReP team.

Risk Analysis

AERODOM performed a risk analysis, finding that a hurricane was the highest risk and that an earthquake was the second highest risk.

Self-Evaluation of Preparedness

AERODOM applied the risk analysis to each aspect of its facility and operations: airfield, airfield support, mutual aid, human factors, business continuity, facility documentation (as-built plans), training, airport emergency plan, and airport security program. For each risk and aspect, AERODOM answered the question whether it had a written or electronic documentation.

List of Essential Personnel

AERODOM developed a list of essential personnel, and this became the basis for planning for the site visit.

Outside Review (PReP staff) of Airport’s Disaster and Preparedness Plans

AERODOM provided its airport emergency plans including its hurricane plan. The ART team reviewed the plan for its strengths, weaknesses, and gaps.

Miami Workshop
ART hosted a workshop in Miami 11-13 December 2013. Sessions were held at MIA Hotel and at FIU’s Emergency Operations Center.

**Familiarization with Las Americas International Airport**

Mr. Rodoli of AERODOM presented the characteristics of the airport and its operational and regulatory environment in the Dominican Republic. In this, he was assisted by the representatives of three government agencies (CESAC, COE, and IDAC) and two airlines (American and Delta). Mr. Rodoli said AILA had three objectives in a disaster in the following order of priority: 1st objective – save lives, 2nd objective – preserve the property, 3rd objective – business continuity.

He identified the following specific items that need more attention: 1) investigating best communications equipment to use for example satellite phone, walkie talkies, cellular phones, etc.; 2) the need to get high impact windows or shutters for the tower; 3) more best practices on the interoperability between airlines and airports; 4) evacuation of public in two aspects (flying people out of the country and getting people out of the airport to nearby safe locations; 5) the need to have a best practice of listing the succession planning for specific jobs and SOP – it is ad hoc at this time; 6) best practices plan for how to interact with hospitals and include them in the partners plan; and 7) how to interact with municipalities.

Mr. J. C. Mejia discussed the air traffic control system, its relation to AILA, and the experiences in the Dominican Republic with the 2010-2011 effort to support disaster relief and recovery in Haiti.

**Review of Pre-Evaluation and Gap Analysis**

Dr. Smith led a discussion of AILA’s emergency and preparedness plans and the apparent gaps: earthquake preparedness, essential employee support, administrative measures to ease or speed airport recovery after a disaster, and alternative communications methods in a disaster. In the ensuing discussion, the group identified evacuation procedures and interagency coordination as appropriate areas for training and the table top exercise during the site visit.

**Planning for Training Targeted at Gaps**

The Miami workshop group discussed the training desired for delivery at Santo Domingo in February and agreed to focus on essential employee support, administrative measures to enhance preparedness, and alternative communications. Dr. Babun, Ms. Guevara, and Mr. Almaguer gave short previews of the possible contents of these three topics.

**Planning of table top exercise (TTX)**

As a result of all the discussions at the Miami workshop, the group decided that the table top exercise in Santo Domingo in February would involve an earthquake and tsunami scenario and include these features:

1. Essential employees
2. Rapid damage assessment and repair
3. Multiagency coordination including COE, CESAC, and IDAC
4. Communication, especially alternative or backup communications
5. Evacuation of civilians
6. Recovery processes
7. Security, and 8. Public information
Site visit

The PReP team arrived in Santo Domingo on Monday, 4 February 2013. On Tuesday, 5 February 2013, the AERODOM management team and the ART team had an inbrief and orientation session at AILA followed by a tour of the airport. On Wednesday, 6 February 2013, the day was devoted to training to address the gaps identified in the pre-evaluation and Miami workshop. The training took place at the Hilton Santo Domingo. Wednesday evening the ART team hosted all participants at dinner in Santo Domingo. On Thursday, 7 February, 2013, the morning was devoted to the table top exercise. In the afternoon, there was an after action review of the table top exercise and a full review of the entire pilot project and the overall PReP program. The PReP team left at 17:05 on 7 February 2013.

Training

Essential employee support

Ms. Guevara presented a number of methods to improve support to essential employees and their families to make sure that the airport would have skilled personnel present to maintain or restore operations after a disaster.

Administrative measures to enhance preparedness

Dr. Babun and Dr. Smith presented several low-cost administrative measures that can enhance airport preparedness. Models from Savannah-Hilton Head International Airport and San Antonio International Airport were provided to show ways in which pre-contracting, pre-authorization of vendors, and airport-to-airport mutual aid can enhance preparedness and speed the recovery of an airport after a disaster.

Alternative communication methods

LT Santana presented both procedures and equipment for alternative communications in a disaster when normal telephones, cell phones, and radio systems are lost or overloaded.

Exercise

Who designed

Mr. Almaguer and Captain Garcia devised the table top exercise, wrote the script, and prepared a PowerPoint with the injects and points for responses by players.

Rationale

The earthquake/tsunami scenario was chosen because Santo Domingo is near seismic zones and an earthquake contingency plan was one of the gaps identified during the Miami workshop. The simulated duration was extended to seven days to allow for the typical lags in the restoration of airport function and the arrival of national and international aid from various sources.

Scenario

Table 1 summarizes the earthquake/tsunami scenario used in the table top exercise for the pilot project at Santo Domingo. The scenario was designed to emphasize the gaps identified in phases 1 and 2 of PReP and planning and interagency improvements made in the Dominican Republic since 2010.
<table>
<thead>
<tr>
<th>Day and Time</th>
<th>Major Events</th>
<th>Operational Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Feb 2013, 0259 hours</td>
<td>Situation normal</td>
<td>Planes on ground, one en route</td>
</tr>
<tr>
<td>7 Feb 2013, 0300 hours</td>
<td>Major earthquake offshore</td>
<td>Power fails, cell service fails, control tower damaged, airfield and apron lighting out, NAVAIDS out, terminal damaged, no damage to runways and taxiways</td>
</tr>
<tr>
<td></td>
<td><strong>What do you do?</strong></td>
<td></td>
</tr>
<tr>
<td>7 Feb 2013, 0310 hours</td>
<td>Tsunami warning to COE</td>
<td>50 minutes warning, 10-meter wave expected at Santo Domingo</td>
</tr>
<tr>
<td></td>
<td><strong>What do you do?</strong></td>
<td></td>
</tr>
<tr>
<td>7 Feb 2013, 0350</td>
<td>Tsunami hits</td>
<td></td>
</tr>
<tr>
<td>7 Feb 2013, 0900</td>
<td>National Disaster declared, major coastal flooding and structural damage to roads</td>
<td>Route 66 to airport blocked, control tower and NAVAIDS inoperable, debris blocks roadways, parking lots, and some aprons at airport, lower level of terminal flooded, no structural damage apparent to terminal, many passengers stranded in terminal, airport employees preoccupied with their families and homes</td>
</tr>
<tr>
<td></td>
<td><strong>What do you do?</strong></td>
<td></td>
</tr>
<tr>
<td>After 72 hours, 10 Feb 2013</td>
<td>External aid (DR and international) begins to arrive</td>
<td>Airport must be able to handle incoming aid and personnel, route 66 partially restored, ramps and aprons cleared of debris, some NAVAIDS restored, temporary control tower operational, urban search and rescue operations using airport, stranded passengers have been evacuated by land or air, only 1/3rd of airport workers have reported to work, drinking water is contaminated, sewage is inoperable</td>
</tr>
<tr>
<td></td>
<td><strong>What do you do?</strong></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1. SCENARIO FOR TABLE TOP EXERCISE
EARTHQUAKE AND TSUNAMI AT SANTO DOMINGO

<table>
<thead>
<tr>
<th>Day and Time</th>
<th>Major Events</th>
<th>Operational Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 7 days, 14 Feb 2013</td>
<td>Commercial and relief air operations underway</td>
<td>Access roads restored, runways, ramps, and aprons fully operational, only some NAVAIDS operational, temporary control tower still in use, much competition for use of airport by commercial and humanitarian aid flights, huge amount of humanitarian aid arriving at airport</td>
</tr>
</tbody>
</table>

What do you do?

Discussion of lessons learned and gaps identified
Self-evaluation by participants

Participants

For the exercise, the group was divided into five tables:

- AERODOM senior management
- AILA operations staff
- Airlines and airport support company
- National agency representatives (COE, IDAC, CESAC, PN, DA, and AND)
- Observers
Outcomes

Evaluation

TTX

The table top exercise, its scenario, the presentation, and the performance of the airport, agency, and airline participants were evaluated by the participants themselves using the form that is reproduced in Appendix A. Table 2 summarizes the results of the evaluation marks given by the participants.

<table>
<thead>
<tr>
<th>During the TTX...</th>
<th>No</th>
<th>Part of the Time</th>
<th>Most of the Time</th>
<th>All the Time</th>
<th>Not Sure</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understood my role.</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>17</td>
<td>0</td>
<td>3.7</td>
</tr>
<tr>
<td>Existing plans were sufficient to guide decisions.</td>
<td>1</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>Communications worked well.</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>12</td>
<td>0</td>
<td>3.3</td>
</tr>
<tr>
<td>Interagency coordination was good.</td>
<td>0</td>
<td>4</td>
<td>11</td>
<td>7</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>Damage assessment procedures were adequate and rapid.</td>
<td>0</td>
<td>3</td>
<td>13.5</td>
<td>4.5</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Coordination of commercial &amp; emergency air operations was satisfactory.</td>
<td>0</td>
<td>3</td>
<td>13</td>
<td>6</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>Evacuation operations went smoothly.</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>2.7</td>
</tr>
<tr>
<td>Concern with safety was maintained at a high level throughout.</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>I was pleased with my organization’s performance.</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>13</td>
<td>0</td>
<td>3.6</td>
</tr>
<tr>
<td>Overall</td>
<td><strong>3.2</strong></td>
<td><strong>3.2</strong></td>
<td><strong>3.2</strong></td>
<td><strong>3.2</strong></td>
<td><strong>3.2</strong></td>
<td><strong>3.2</strong></td>
</tr>
</tbody>
</table>

As seen in Table 2, a large majority of the participants found that they were able to perform well on all elements of the TTX most of the time or all of the time. However, the scores on evacuation operations and concern with safety indicate that more attention must be given to those areas in both future PReP airport visits and at Santo Domingo. The TTX diagnosed a problem area but did not develop a fix in real time during the exercise. These two issues were not diagnosed in PReP’s phase one (self-evaluation and review of plans and documents).

In addition to the scores on the nine elements listed in Table 2, open-ended questions on the evaluation questionnaire garnered 150 comments on how the exercise can be improved or on
how the participants’ performance can be improved, or both. Both the scored items and open-ended comments were used to develop the findings and recommendations in the Outcomes section of this report.

**Overall program**

All participants including observers but excluding the PReP team evaluated the entire pilot project—pre-evaluation, Miami workshop, training, and table top exercise—using the form that is reproduced in Appendix B. Figure 1 presents the scores on 12 elements of the PReP program as delivered in the pilot project. This evaluation included all three phases of PReP, so it allows a cross-check on the TTX evaluation. The overall rating of the value of PReP was 3.7 out of 4.0, indicating a very high approval of the program. Scores on the eight individual elements ranged from 3.5 to 3.9 with phase 1 (self-evaluation and plans and documents review) scoring 3.8-3.9, phase 2 (training) scoring 3.5-3.7, and the TTX scoring 3.6-3.9. The basic PReP approach was strongly validated.

In addition to the close-ended questions that yielded scores, there were five open-ended questions that sought criticisms and suggestions to improve PReP for future applications. These open-ended questions triggered 38 different comments that were used to develop the findings and recommendations in the Outcomes section of this report.

![FIGURE 1. EVALUATION SCORES](image)

<table>
<thead>
<tr>
<th>PROGRAM ELEMENTS</th>
<th>AVERAGE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall value of PReP as presented</td>
<td>3.7</td>
</tr>
<tr>
<td>TTX adequately addressed gaps</td>
<td>3.6</td>
</tr>
<tr>
<td>TTX was challenging</td>
<td>3.7</td>
</tr>
<tr>
<td>TTX was enjoyable</td>
<td>3.9</td>
</tr>
<tr>
<td>TTX scenario was realistic</td>
<td>3.7</td>
</tr>
<tr>
<td>TTX was useful and pertinent</td>
<td>3.8</td>
</tr>
<tr>
<td>Training on alternative communications was useful</td>
<td>3.7</td>
</tr>
<tr>
<td>Training of administrative measures was useful</td>
<td>3.6</td>
</tr>
<tr>
<td>Training on essential employees was useful</td>
<td>3.5</td>
</tr>
<tr>
<td>Training was useful and pertinent</td>
<td>3.5</td>
</tr>
<tr>
<td>External review of our plans was useful</td>
<td>3.8</td>
</tr>
<tr>
<td>Self-evaluation was useful</td>
<td>3.9</td>
</tr>
</tbody>
</table>
The overall evaluation asked the airport, agency, airline participants, and observers how often PReP should be repeated at a given airport. The results are shown in Figure 2. Overwhelmingly, the choice was to repeat PReP annually. Two related open-ended comments seemed to suggest that the PReP refresher be done in conjunction with the annual drills required by international regulations.

An indirect indicator of the participants’ favorable opinion of the PReP approach and program is shown in Figure 3. Without any detailed information on how their employer (AERODOM, airline, or agency) would handle the logistics of serving as a mentor or member of a PReP team at future airports, 61% gave an unconditional “yes” and 26% said they would need more information to decide. Taken together, this indicates that 87% of the participants found PReP to be worthy to join. This is the highest form of validation.
Findings and Results

Concerning the Table Top Exercise (TTX)

Based on the TTX evaluations and the PReP team members’ observations, the following specific changes or additions are recommended for the TTX:

1. Emphasize primary goals—preserve lives, property status, continuity of business, and continuity of operations—at all stages of TTX.
2. Build security and access issues (i.e., CESAC in the case of the Dominican Republic) much more strongly into every part of the TTX.
3. Recalibrate the chronology—the passing of time—to make more realistic. The existing TTX has the right steps and sequence, but the time required for decisions and actions may not be realistic. The best way to accomplish this may be incrementally through runs at first few airports. TTX participants should be asked to state time requirements for their actions leading in each “What now?” point in the TTX.
4. Require participants to break down contingencies and planning assumptions, and to state these at each “What now?” point in the TTX.
5. The TTX should have required participants to develop specific content requirements for earthquake/tsunami emergency plan including handling of warnings from COE.
6. Increase emphasis on communications, especially radio and alternative communications methods, in all parts of the TTX. Participants should have to deal with communications difficulties and assess success at dealing with problems. The exercise injects should include specific types of communications difficulties.
7. Add how to communicate to essential employees if phones and cells inoperable.
8. Add evacuation of airport employees and non-employees more emphatically.
9. Include repositioning of essential equipment outside tsunami risk zone.
10. Include human resources staff.
11. Require more participation of airlines and vendors.
12. Require participants to identify and call out resources, human and material.
13. Add PIO piece with simulated releases to TTX.
15. Create an online exercise that an airport could use for practice. This could be used as part of PReP phase 1 (pre-evaluation) or follow-up review, or both.
16. Make lessons learned from the earthquake/tsunami TTX transfer to other situations—a large degree of commonality in disaster response and recovery?

A final recommendation was to revise the TTX and test it again at Las Americas, perhaps stepping it up to a functional exercise. This recommendation has serious cost implications for PReP, so a solution in which the airport would be supported with information and evaluation tools to run its own repeat TTX is probably preferable.

Concerning the Overall PReP Program

Based on a detailed analysis of the participants’ evaluations of the overall program and the PReP team members’ observations, the following specific changes or additions are recommended for PReP:
1. Produce an airport resiliency manual (or port resiliency manual) within six months. AERODOM managers offered to help design and review this document. The manual should, among other things, include:
   a. Copies of PReP training materials
   b. Exercise scenarios for practice
   c. Templates for specialized emergency plans such as hurricanes or earthquake/tsunami.

2. Add a fourth phase to PReP—Aftercare. This phase would include the following activities:
   a. A written procedure for updating PReP system and info.
   b. Procedures to report and track monthly progress on resiliency improvements discovered in PReP process.
   c. Systematic dissemination to airport of updates and enhancements to PReP as additional airports are served and knowledge is gained. This could take the form of a blog, newsletter, listserv, or new periodical.
   d. PReP training modules left with airport for their own training programs.
   e. Mentoring by experienced airport, agency, or airline personnel to airports working through PReP to improve resiliency. See Figure 3 concerning the high feasibility of this approach.

3. Create a dedicated PReP website for:
   a. Training modules
   b. Follow-up reporting
   c. Dissemination of plans
   d. Dissemination of results
   e. Notices of programmatic enhancements and updates to PReP
   f. Handling pre-evaluation, TTX evaluations, and overall evaluations using online tools
   g. Receiving requests for aid from additional airports
   h. Receiving suggestions

4. Add final activity on last day—participants outline plan for their follow-up actions.

5. Add training modules:
   a. Airport evacuation and repopulation—planning and procedures
   b. Disaster-related transportation
   c. Protection of essential equipment
   d. Airport-emergency management agency (or EOC) coordination tools and methods
   e. Management of volunteers

6. Encourage airports to add a formal evaluation process to their own drills and simulations.

7. Expand stakeholders involved in all three stages of PReP. More airlines and vendors should be involved

8. Ask airports to involve more junior staff in all phases of PReP.

9. Make all materials more graphically and visually appealing.

10. Have airport, agencies, and airlines bring plans and manuals to training and TTX.

11. Set up method to keep past participants aware of changes in PReP and improvements—newsletter, list_serv, blog? This should involve the dedicated PReP website (Recommendation 3).

12. Focus on airport’s team building efforts.
13. Promote familiarization with airport by stakeholders
15. Develop system for communicating PReP results and findings to international organizations.
16. Expand interdisciplinary team to cover all aspects of the emergency plan. The basic approach as used in the pilot project was excellent, and the concept was validated. However, a larger PReP team is probably needed.
17. Related to recommendation 16: Create several PReP teams to support a faster pace of helping more airports and avoid burn-out.
18. PReP should be repeated at a given airport annually.
19. Continue PReP phase 2 activity (Miami workshop for planning) but reduce number of invitees.
20. All written materials, Miami workshop, and in-country training and TTX should be in local language. This strongly confirms the approach used in the pilot project. Use of online tools for evaluations and dissemination will reduce the number of times documents will have to be translated. PReP needs to be ready to use in English, Spanish, French, and Portuguese.

One of the most promising concepts that emerged during the pilot project was the potential for PReP to become the basis of airport-to-airport mutual aid for the entire Latin America-Caribbean (LAC) region. AERODOM strongly advocated this development. Certainly, the PReP pre-evaluation, training, exercise, and aftercare approach would work well to prepare airports to participate in voluntary assistance to other airports after a disaster that put extreme stress on the facilities and personnel at an airport. The proposed dedicated PReP website could be the communications vehicle for such a system. Two such mutual aid systems—SEADOG and WESTDOG—have proven their worth in the U.S. Extension further development and close coordination with airport organizations and national agencies will be required to bring this concept to fruition.

Two very strong general conclusions emerged from the pilot project at Las Americas International Airport in Santo Domingo. First, the PReP concept and approach is valid, practical, and highly cost-effective. Second, the tone of the program made it highly acceptable to the full range of stakeholders. By being low-key and respectful while being based on mutually identified needs and gaps, PReP is designed to work. Now, it needs fine-tuning, and the evaluation comments and suggestions received from the participants have helped identify the direction for these adjustments.

**The Way Forward**

ART must immediately review the costs of the pilot project and create a budget projection per airport for future airports and a total budget projection for each of the next three years.

ART must create a strategic plan for at least the remainder of 2013 and preferably for the next three years within three months. This strategic plan should identify either the airports or the countries that PReP will give priority to in the remainder of 2013.

ART should continue to seek the endorsement and support of the Airports Council International (ACI), Airports Council International – Latin America & Caribbean (ACI-LAC), Airports
Council International – North America (ACI-NA), and the American Association of Airport Executives (AAAE).

ART should continue to seek broader financial and in-kind sponsorship to allow as rapid expansion of the program as possible.

ART and the PReP team must create the *Airport Resiliency Manual* or *Port Resiliency Manual* within 6 months. AERODOM senior management has volunteered to help in this process, which is most welcome.

ART should publicize the program and results of the pilot project as widely as possible and as soon as possible.

ART, AERODOM, and ACI World should work together to ensure smooth coordination between ACI’s Airport Excellence (APEX) program and PReP. Port-au-Prince is a priority airport for both APEX and PReP.

ART, AERODOM, and their partners should explore the feasibility and procedures to make airport-to-airport mutual aid happen in the LAC region.

**Acknowledgments**

ART and the PReP team wish to thank the ART Board of Directors and FedEx Corporation for their unstinting support as PReP has been developed over the past 18 months. Credit also goes to the other organizations that have given financial or in-kind assistance: Miami International Airport, Florida International Airport, AERODOM, Las Americas International Airport, American Airlines, and Smith-Woolwine Associates. The ART staff made the arrangements and did the translations. Ms. Teresa Herrara handled coordination at Las Americas International Airport. AERODOM, IDAC, COE, CESAC, American Airlines, and Delta Airlines extended wonderful fellowship and hospitality during the site visit to Santo Domingo.
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**PReP PROGRAM**

**FLOW CHART**

1. **Initial On-Site Screening & Assessment:**
   - Identify guiding principles and strategic planning consideration
   - Identify Relevant standards
   - Plan, Design & Prepare an assessment strategy
   - Identify continuity of operations standard
   - Identify and get commitment from local stakeholders and create a local working group.

2. **Mission & Commitments**

3. **Miami Workshop-Phase II:**
   - Tour MIA
   - Develop and analyze weakness and strengths of SOP
   - Identify GAP Areas
   - Increase Awareness and Understanding

4. **Conduct Gap Analysis Against Standards:**
   - Identify and select standards underperforming the final standards
   - Identify Gaps to be discussed in local workshop
   - Identify technical assistance

5. **Training of Stakeholders and Essential Personnel-Phase III:**
   - Conduct exercise and collect observations
   - Organize and test the response capacity of all organizations involved.
   - Conduct "Train the trainers"

6. **Evaluation, After Action Reviews and Analysis:**
   - Analyze results from the exercise against established objectives
   - Discuss exercise results with participants and collect feedback
   - Write after action report

7. **Development of New Strategic Plan:**
   - Apply Lessons Learned
   - Refresh Strategic Plan and Direction
   - Selection of New Target Airports and Seaports
   - Encourage and facilitate two-way communications

8. **The Way Forward**
# Expenses Explanation

## 1.0 PERSONNEL

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Cost/Unit USD</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Total Prog Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Staff</td>
<td>611 hrs</td>
<td>$36/ave</td>
<td>12,000</td>
<td>5,000</td>
<td>5,000</td>
<td>22,000</td>
</tr>
<tr>
<td>M&amp; E Staff</td>
<td>607 hrs</td>
<td>$28/ave</td>
<td>13,000</td>
<td>2,000</td>
<td>2,000</td>
<td>17,000</td>
</tr>
<tr>
<td>Resource Staff</td>
<td>511 hrs</td>
<td>$23/ave</td>
<td>3,250</td>
<td>4,250</td>
<td>4,250</td>
<td>11,750</td>
</tr>
</tbody>
</table>

Sub-Total

|                      |        |               | 28,250  | 11,250  | 11,250  | 50,750              |

## 2.0 PROGRAM TRAVEL COSTS

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Travel - to port</td>
<td>7</td>
<td>571</td>
<td>4,000</td>
<td>0</td>
<td>0</td>
<td>4,000</td>
</tr>
<tr>
<td>1A Lodging &amp; Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Travel-from port to Miami</td>
<td>8</td>
<td>553</td>
<td>0</td>
<td>4,425</td>
<td>0</td>
<td>4,425</td>
</tr>
<tr>
<td>2A Lodging and Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Travel-to port</td>
<td>7</td>
<td>500</td>
<td>0</td>
<td>0</td>
<td>1,113</td>
<td>1,113</td>
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<tr>
<td>3A Lodging and Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub-Total

|                      |        |               | 6,500   | 7,245   | 4,706   | 18,451              |

## 3.0 PROGRAM DIRECT COST

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site Visit &amp; Assessment</td>
<td>1</td>
<td>11,500</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11,500</td>
</tr>
<tr>
<td>1a Identify stakeholders and coalesce;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b Conduct screening; identify experts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c Research standards and best practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d Create assessment template; conduct screening</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1e Report and findings; write report; identify and presentation to stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Miami Workshop                    | 1      | 0             | 14,250  | 0       | 0       | 14,250              |
| 2a Participants of the workshop include representatives of airports or seaports | |               |         |         |         |                     |
| 2b Discussion of topics for table top exercise (TTX); discussions and decisions at workshop; | |               |         |         |         |                     |
| 2c Best practices & review of weaknesses and strength of operational manuals | |               |         |         |         |                     |
| 2d Plan and design final workshop on-site | |               |         |         |         |                     |
### Phase 3 Workshop Onsite 'Conduct a Functional Exercise'

Events took place in Santo Domingo. Cost includes technical support as well as the cost of events/meetings (refreshments & handouts).

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Quantity</th>
<th>Cost 1</th>
<th>Cost 2</th>
<th>Cost 3</th>
<th>Total Costasse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.3 Final Workshop On-Site</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>12,585</td>
<td>12,585</td>
</tr>
<tr>
<td>3.3a Review of findings from workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3b Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3c PReP drill: sample triggering event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3d Table Top exercise (TTX)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3e After-Action Review (AAR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.4 Emergency Aid Kits for Essential Personnel</strong></td>
<td>20 each</td>
<td>0</td>
<td>8,300</td>
<td>8,300</td>
<td>8,300</td>
</tr>
<tr>
<td>3.4a Purchase of Emergency Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4b Delivery of Emergency Kits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td></td>
<td>11,500</td>
<td>14,250</td>
<td>20,885</td>
<td>46,635</td>
</tr>
</tbody>
</table>

### Indirect Costs

Communications, space, security, IT, and others.

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Quantity</th>
<th>Cost 1</th>
<th>Cost 2</th>
<th>Cost 3</th>
<th>Total Costasse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1 Program portion of overhead such as communications, space, security, IT, and others.</strong></td>
<td>1</td>
<td>3,750</td>
<td>4,708</td>
<td>5,890</td>
<td>14,348</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td></td>
<td>3,750</td>
<td>9,000</td>
<td>4,500</td>
<td>14,348</td>
</tr>
</tbody>
</table>

**Total Expenses**: $50,000 | $41,745 | $41,341 | $130,184

**Program In-Kind/Cost-Shared Support**

- FIU-Emergency Center: $23,300
- Avanti Associates: $34,000
- Smith-Woolvine Associates: $10,500
- American Airlines: $1,633
- Miami International Airport: $325
- Additional Volunteer Time Calculated: $12,000

**Total Cost-Share**: $81,758
Evolution of PReP- Outcomes

Original Concept

PHASE I
• Meet With Interested Parties
• Present PReP: How it can PReP work to make the facilities more resilient
• Plan a date for Miami Workshop

PHASE II
• Participants of the workshop include representatives of airports or seaports
• Discussion Of Topics For The Table Top Exercise (TTX)
• Discussions and decisions at workshop; Review weaknesses and strength of operational manuals
• Plan and design final workshop on-site

Phase III
• Orientation & Brief
• Training
• PReP drill: sample triggering event
• Table Top Exercise (TTX)
• After-Action Review (AAR)

Revised Concept Post-Pilot Program

Phase I
PRE-EVALUATION
REQUEST PReP INFORMATION PACKET
RISK ANALYSIS FORM
SELF-EVALUATION FORM
SEND PORT RESILIENCY MANUAL
ANY PORT THAT CONTACTS

Phase II
MIAMI PLANNING WORKSHOP
GET PLANS AND DOCUMENTS
ANALYZE FOR PLANS AND DOCUMENTS
CAP ANALYSIS INITIAL VISIT TO PORT
TARGET PORT

Phase III
ON SITE TRAINING
ESTABLISH RELATIONSHIPS
VERIFY GAP ANALYSIS
CHOOSE TOPICS TO EMPHASIZE
CHOOSE TTX SKILLS
SET DATES FOR PHASE III

Phase IV
ALL CALL
MONTHLY REPORTS BY PORT ON PROGRESS WITH IMPROVEMENTS COMMUNICATE PReP PROGRAM UPDATES AND NEWS MENTORING

ALL POST-PReP PORTS
Appendix A – Evaluation Form for Table Top Exercise

SELF-EVALUATION FOR TTX

This evaluation is to be performed by the airport, agency, and airline participants in the tabletop exercise (TTX).

1. I understood my role in the scenario.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

2. If (1) or (2), what I did not understand was:

3. The plans at hand were sufficient to carry out the actions required by the scenario.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

4. If (1) or (2), the plans that were missing or insufficient were:

5. The most important strengths I noticed were:
   a., b., c.

6. The most important weaknesses I noticed were:
   a., b., c.

7. During the TTX, communications were clear and adequate.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

8. During the TTX, interagency coordination was good.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

9. During the TTX, damage assessment procedures were adequate and rapid.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

10. During the TTX, coordination of commercial air service and emergency air operations was satisfactory.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

11. During the TTX, evacuation operations were smooth.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

12. During the TTX, concern with safety was maintained at a high level.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

13. On the basis of the TTX, I would recommend the following changes to airport procedures to improve resiliency:
   a., b., c.

14. I am pleased with my organization’s performance on the TTX.

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Part of the time</td>
<td>Most of the time</td>
<td>All of the time</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

15. Comments:

16. My affiliation is:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Airport</td>
<td>Agency</td>
<td>Airline</td>
</tr>
</tbody>
</table>

Thank you.
Appendix B –
Evaluation Form for Overall Pilot Project and PReP Program

EVALUATION

Please rate this week’s experiences on a scale on the scale below. Please circle your choice.

Advanced Preparations

1. The self-evaluation was useful.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

2. The outside review of our plans was useful.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

Training

3. The training sessions overall were useful and pertinent to our situation.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

4. The essential employees support session was useful and pertinent.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

5. The administration actions to improve resiliency session was useful and pertinent.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

6. The alternative communications session was useful and pertinent.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

Table Top Exercise (TTX)

9. The TTX was useful and pertinent to our situation.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

10. The TTX scenario was realistic.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

11. The TTX was enjoyable.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

The TTX was challenging.

12. The TTX adequately addressed the gaps identified in the planning workshop.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

Overall Experience

14. How often should PReP be performed at an airport?
   Only once (1) Every year (2) Every two years (3) Every three years (4) Every five years (5)

15. What is the best way for PReP to work with an airport?
16. What changes would you make to the overall PReP program?
17. Overall, the PReP experience here has been successful.
   Not at all (1) A little (2) Partially (3) Very (4) No opinion (5)

18. Would you like to be involved as a mentor when PReP works at other airports?
   Yes (1) No (2) Not sure (3) Need more info (4) 

Your name (optional): __________________________________

Thank you for your participation in PReP and in this evaluation.
### Appendix C – Participants at Miami Workshop 11-13 December 2012

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teniente</td>
<td>Francisco Abreu Castillo</td>
<td>Airport Security Corp and Civil Aviation (CESAC)</td>
</tr>
<tr>
<td>Mr.</td>
<td>Ruben Almaguer</td>
<td>Florida International University</td>
</tr>
<tr>
<td>Dr.</td>
<td>Teo Babun</td>
<td>Outreach Aid to the Americas</td>
</tr>
<tr>
<td>* Abr</td>
<td>Drew Bayliss</td>
<td>SOUTHCOM</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Victor O. Bisono Haza</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Mr.</td>
<td>Jean-Marc Bourreau</td>
<td>IOS Partners</td>
</tr>
<tr>
<td>Ms.</td>
<td>Dulce Boza</td>
<td>Outreach Aid to the Americas</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Jose Burdie</td>
<td>UPS</td>
</tr>
<tr>
<td>* Ms.</td>
<td>Nivia Butler</td>
<td>SOUTHCOM</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Geoffrey Cleasby</td>
<td>U.S. Embassy, Dominican Republic</td>
</tr>
<tr>
<td>Mr.</td>
<td>Lonnie Craven</td>
<td>Miami International Airport</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Jaime Daly</td>
<td>Latin American Airports Holding (LAAH)</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Cliff Deeds</td>
<td>FedEx</td>
</tr>
<tr>
<td>* Mr.</td>
<td>John Dickerson</td>
<td>SOUTHCOM</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Johan Estrada</td>
<td>Instituto Dominicano de Aviacion Civil (IDAC)</td>
</tr>
<tr>
<td>Mr.</td>
<td>Ricardo Garcia</td>
<td>Florida International University</td>
</tr>
<tr>
<td>Mr.</td>
<td>Manny Gonzalez</td>
<td>Miami International Airport</td>
</tr>
<tr>
<td>Ms.</td>
<td>Ana Guevara</td>
<td>Aventi Associates</td>
</tr>
<tr>
<td>Mr.</td>
<td>Robert Hans</td>
<td>IOS Partners</td>
</tr>
<tr>
<td>* Ms.</td>
<td>Teresa Herrera</td>
<td>AERODOM</td>
</tr>
<tr>
<td>* Ms.</td>
<td>Monika Infante</td>
<td>AERODOM</td>
</tr>
<tr>
<td>Mr.</td>
<td>Ricardo Javier</td>
<td>American Airlines</td>
</tr>
<tr>
<td>Dr.</td>
<td>Kenneth Jessell</td>
<td>Florida International University</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Gustavo A. Majia Ricart</td>
<td>AMCHAMDR</td>
</tr>
<tr>
<td>* Ms.</td>
<td>Yolanda Mañan</td>
<td>AERODOM</td>
</tr>
<tr>
<td>Mr.</td>
<td>Juan Manriquez Viñas</td>
<td>AERODOM</td>
</tr>
<tr>
<td>* Ms.</td>
<td>Sylvia Marley</td>
<td>FedEx</td>
</tr>
<tr>
<td>Mr.</td>
<td>Dorian Martinez</td>
<td>Delta Airlines</td>
</tr>
<tr>
<td>Mr.</td>
<td>Julio Cesar Mejia Alcántara</td>
<td>Instituto Dominicano de Aviación Civil (IDAC)</td>
</tr>
<tr>
<td>Mr.</td>
<td>Luis Mejia</td>
<td>AERODOM</td>
</tr>
<tr>
<td>* Mr.</td>
<td>Christian Moreira</td>
<td>AERODOM</td>
</tr>
<tr>
<td>Mr.</td>
<td>Jim Murphy</td>
<td>Miami International Airport</td>
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<tr>
<td>Mr.</td>
<td>Shane O’Connor</td>
<td>FedEx</td>
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<tr>
<td>* Mr.</td>
<td>Eric Olafson</td>
<td>Port of Miami</td>
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<td>* Mr.</td>
<td>Chester W. (Bill) Olej jawz</td>
<td>DHS, Customs and Border Patrol</td>
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<tr>
<td>Mr.</td>
<td>Edwin Olivares Luciano</td>
<td>Emergency Operations Center</td>
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<tr>
<td>Name</td>
<td>Title/Position</td>
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<tr>
<td>Mr. Jeffrey Pashai</td>
<td>SOUTHCOM</td>
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<td>* General Luna</td>
<td>Dominican Republic</td>
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<tr>
<td>* M. Miguel Paulino</td>
<td>Airport Security Corp and Civil Aviation (CESAC)</td>
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<td>Ms. Rocio PelleranoNadal</td>
<td>Consulate General of the Dominican Republic</td>
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<tr>
<td>Mr. Carlos Perez Compres</td>
<td>Consulate General of the Dominican Republic</td>
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<tr>
<td>* Mr. Franklin Polanco</td>
<td>Instituto Dominicano de Aviacion Civil (IDAC)</td>
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<td>* Mr. Juan Carlos Porcella</td>
<td>Auxiliares Navales Dominicanos</td>
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<td>Mr. Shawn Powell</td>
<td>SOUTHCOM</td>
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<td>* Mr. Ken Pyatt</td>
<td>Miami International Airport</td>
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<td>* Mr. Manuel Real</td>
<td>AERODOM</td>
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<td>Mr. Carlos Rodoli Conde</td>
<td>AERODOM</td>
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<td>Ms. Jennifer Rodriguez</td>
<td>Outreach Aid to the Americas</td>
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<tr>
<td>Dr. Jim Smith</td>
<td>Smith-Woolwine Associates</td>
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<tr>
<td>* Mr. Miguel Southwell</td>
<td>Miami International Airport</td>
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<tr>
<td>* Mr. Jacob Steele</td>
<td>SOUTHCOM</td>
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<tr>
<td>* Mr. Alejandro Tejeda</td>
<td>AERODOM</td>
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<tr>
<td>Ms. Shanae Turner</td>
<td>Miami-Dade Seaport Department</td>
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*Invited but unable to attend.
Appendix D – Participants during Site Visit, Santo Domingo, 5-7 February 2013

Francisco Abreu  
Aida Acosta  
Teo Babun  
Crion Belliarc  
Guillermo Beriguete  
Dulce Boza  
Josue Ceballo  
Santa Cuevas  
Sandra Felix  
Ricardo Garcia  
Ana Guevara  
Elaine Gutierrez  
Monika Infante  
Ricardo Javier  
Cristino Linares  
Michel Made  
Juan Manriquez  
Jaime Marte  
Dorian Martinez  
Rolando A. Medrano  
Julio Cesar Mejia  
Luis Mejia  
Nelson Mejias  
Christian Moreira  
Shane O’Connor  
Edwin Olivares  
Luis Osoria Lara  
Francia J. Peña Rivas  
Luis Benito Peralta  
Franklin Polanco  
Juan Carlos Porcella  
Alexander A. Ramirez  
Manuel Real  
Carlos Rodoli  
Luis Santana  
Jim Smith  
Lee Titus  
Jose Villar  

CESAC  
Menzies Aviation  
ART/OAAUSA  
AERODOM  
AERODOM  
ART/OAAUSA  
USAID/Dom Rep  
AERODOM  
AERODOM  
FIU  
ART/OAAUSA  
U.S. Consular Services  
AERODOM  
American Airlines  
Dpto Aeroportuario  
POLICIA NACIONAL  
AERODOM  
AERODOM  
Delta Airline  
AERODOM  
IDAC  
AERODOM  
MiA International Airport  
AERODOM  
FedEx  
COE  
COE  
IDAC  
SSI AERODOM  
Instituto Dominicano de Aviacion Civil  
Auxiliares Navanes Dominicanos  
IDAC  
AERODOM  
AERODOM  
MDFR/FIU  
ART/OAAUSA  
USCG  
AERODOM  
Appendix E –
Training Team Biographic Information

Teo A. Babun, Jr.
Executive Director & CEO
Outreach Aid to the Americas, Inc

Teo Babun is the Executive Director of Outreach Aid to the Americas, a relief, development and advocacy organization committed to helping vulnerable people in the Americas Region. At OAA, Dr. Babun advances inclusive approaches to humanitarian development by fostering partnerships between NGO partners and key humanitarian logistics actors/stakeholders, including governments, U.N. agencies, global and local civil society, US Agencies and other actors.

Teo has an extensive career in the field of humanitarian relief, logistics and shipping. At International Maritime Shipping Corp. he managed a fleet of 12 ocean going vessels, later he was the President of Carifreight Shipping Co. serving most of the Caribbean islands with a fleet of container vessels. He created Babun Shipping of New York to serve strategic cargo needs in the Dominican Republic, and later created Caribbean Development Consulting LLC. to provide a full range of international business services for companies seeking to establish or expand business ventures in the Caribbean region. In 1997 Teo decided to dedicate the rest of his life to charitable and non-profit endeavors.

In 1981, he received the Outstanding Young Alumni Award from MTU for his innovative business efforts. In 2007 he was selected to the Electrical and Computing Engineering Academy at Michigan Tech. He earned a Doctor of Philosophy, Ph.D, from Vision International University, 2006, and an Honorary Doctor of Letters, D. Litt., from Miami International Seminary in 2002.
James F. Smith has established an active research program in the field where airport preparedness for non-aviation disasters intersects with communities and other stakeholders. His most recent major papers have been "Airport Disaster Preparedness in a Community Context," "Regional Cooperation, Coordination, and Communication among Airports during Disasters," and "The Roles of General Aviation Airports in Disaster Response." He has just completed work as principal investigator for Airport Cooperative Research Program (ACRP) Report 73, Airport-to-Airport Mutual Aid, as a consultant to IEM Inc. Jim has also published on the implications of FAA Advisory Circular 150/5200-31C, the benefits and challenges of airport compliance with the U.S. National Incident Management System (NIMS), and designing airports to sustain operations in a multithreat environment. He is currently involved in five ACRP projects.

Jim serves as the technical coordinator and airport subject matter expert for the Port Resiliency Program (PReP), a public-private partnership that seeks to improve the resiliency of airports and seaports in the Caribbean and Latin America.

Jim is professor emeritus of emergency and disaster management at American Public University System, which helped initiate his airport research with a series of four APUS Faculty Research Grants. He is the president of Smith-Woolwine Associates Inc., a consulting firm based in Floyd, Virginia. He serves as the corresponding member for aviation on ASCE's Committee on Critical Infrastructure. Jim's doctorate in environmental design & planning is from Virginia Tech, and he is a Professional Engineer registered in VA. He lives in southwestern Virginia and Newfoundland.
Ruben Almaguer is an emergency management professional with over 27 years’ experience in public sector positions. He has extensive hand on practical knowledge of international and domestic disaster operations at all levels of government, including working with the United Nations Office of Coordination and Humanitarian Affairs, U.S. Department of Homeland Security, and State and local government. Mr. Almaguer also has a vast educational background with knowledge of emergency management, homeland security, public administration and strategic management.

Mr. Almaguer currently serves as the Assistant Vice President of Disaster Management and Emergency Operations for Florida International University. Ruben also serves as the Executive Director for the International Center for Disaster Preparedness. This center focuses on providing graduate level certificates and degrees in the field of emergency management, homeland security and humanitarian assistance. Previously he served for three year as the Interim Director and Deputy Director for the State of Florida’s Division of Emergency Management. In these Governor appointed leadership roles, he had the responsibility for coordinating all disaster responses state wide as the State Coordinating Officer, as well as serving as the State Liaison to both FEMA and the Department of Homeland Security on behalf of the Governor of Florida.

Prior to his role at the State of Florida’s Division of Emergency Management, Mr. Almaguer gained international disaster response experience serving as a task force leader, an assessment team member, and as a team leader in Venezuela, Colombia, El Salvador, Turkey, Africa, and Taiwan after floods, hurricanes, and earthquakes. Domestically, Mr. Almaguer also has extensive domestic disasters response experience including; Oklahoma City Bombing, Pentagon, 9-11 Attacks, and Hurricane Katrina. During these disasters his response roles included, medical specialists, safety officer, operations chief and incident support team leader.
Mr. Ricardo Garcia is a retired captain from the Miami-Dade Fire Rescue Department, where he worked 29 years. As Program Manager for the Office of Foreign Disaster Assistance (OFDA) Emergency Responder Program, he coordinated, developed and implemented emergency responder training courses and exercises in Latin America, Caribbean and South Asia. Mr. Garcia was also a member of the Federal Emergency Management Agency (FEMA) Incident Support Team (IST) tasked with coordinating Urban Search Rescue efforts after disaster, and has responded to different types of incidents of national significance. He is also a certified State of Florida Fire Instructor and has been certified by FEMA and USAID/OFDA as instructor of numerous courses. Mr. Garcia is fluent in both English and Spanish.

Rick is also serves as a Disaster Risk Reduction Consultant, at Florida International University, Latin American Caribbean Center, Disaster Risk Reduction Program, as a Consultant for the Pan American Health Organization, Regional Office for the Americas of the World Health Organization, Washington, DC., and as a Lead consultant to ICMA on a United States Southern Command.
Nelson Mejias is the Airport Manager for Opa-Locka Executive and Dade-Collier Training & Transition Airports in Miami, Florida and is a Code Enforcement Officer for the Miami-Dade Aviation Department. He has authored Miami International Airport’s Airport Certification Manual, Airport Emergency Plan, the Airside Operations Training Manual, and developed the FAR Part 139 Training Program for the airport.

Nelson is a subject matter expert in the National Incident Management System, Airport Emergency Plan and exercises, Airport Construction, Airport Lighting & Signage, and Airfield Markings. He developed the Derelict Aircraft Management system for MIA and several computer applications currently utilized by the Aviation Department.

Nelson is an instrument rated private pilot and is CDL certified for bussing operation. He is AutoCAD certified and maintains all current airfield geometry exhibits for MIA and auxiliary airports. Nelson currently holds an AS in Airport Management. He lives in Ft Lauderdale, Florida.
Manny is Chief of MIA’s Business Ventures. He is an International business executive with over 20 plus years in developing and drafting comprehensive strategic plans for international trade development for Latin America, Europe, Africa and Asia.

Manny’s strong relationship building and coordination skills in business development, conferences, and marketing projects in conjunction with local and international organizations experience, comes from managing a County Department with a staff of nine and budget of $1.3 million resulting in over $100 million in reported sales. I also served as the Chief Operating Office for the City of Miami International Trade Board.

In addition and in a consulting capacity for over ten years, served as US Manager for El Comercio, Ecuador’s leading news daily. This experience has given me a clear insight into the Latin American media market by participating in pan regional efforts thru Grupo Dairios America (gda.com). Currently leading a start up effort for Miami International Airport in new revenue generation projects. Successfully completed projects generating aviation and non aeronautical revenue projects.