

XVII INTERNATIONAL HURRICANES SEMINAR

AIRPORT DISASTER RESILIENCY THROUGH COMMUNITY PREPARATION



DECISION SERVICES INTERNATIONAL, LLC

Dr. Patricia Ryan

March 2-4, 2022



Hazards for Many Airports



Hurricanes



Flooding



Landslides



Earthquakes



Volcanic Eruptions/ Ash



Pandemics



Communicable diseases

Effects of a Natural Disaster

How will an airport be affected directly during a natural disaster?



Location of airport in proximity to the ocean

Airports Need Community Involvement

Airports do not have sufficient resources to respond to every emergency situation independently.

✈️ Every airport must depend to some degree on community resources.

✈️ Memorandums of Understandings must be prepared and both parties agreed upon.



The FAA encourages community involvement in the development of an Airport Emergency Plan (AEP) for mutual benefit.



Before a disaster



Be



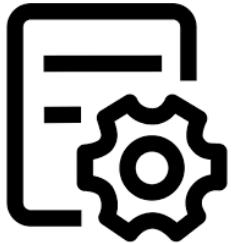
**Prepared
Calm
Resilient**



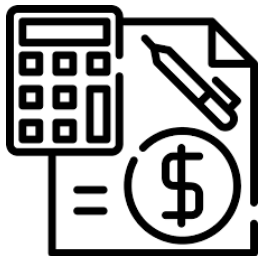
Planning and Preparedness



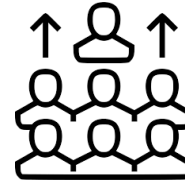
Hazard and Risk Analysis



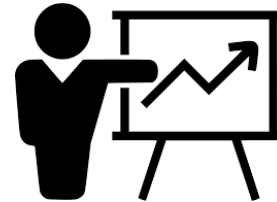
Plan for Event



Resource mobilization
& Budgeting



Workforce Assignment and Recruitment



Training, Drilling and Exercising



Coordination with partners
and the community

Planning and Preparedness (continued)



Response to immediate issues



Response to long term issues



Recovery



Continuous Improvement Process



After Action Review and Improvement Plan



Track Corrective Actions

Coordination of AEP with Local/Regional Disaster Plans



FAA's suggested integrated plans:



AEP Planning Team Members

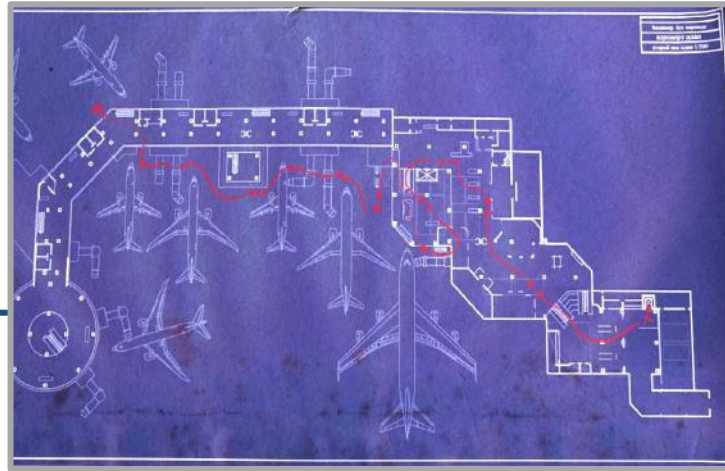
| | | |
|-------------------------------------|---|---|
| 1. Air carriers | 13. Emergency Medical Services | 25. National Weather Service |
| 2. Air Traffic Control | 14. EPA | 26. NTSB |
| 3. Aircraft operators | 15. EOD | 27. Police/Security |
| 4. Airport Authority/Mgmt. | 16. FAA | 28. Post Office |
| 5. Airport employees | 17. Firefighting & Rescue | 29. Public Information/Media |
| 6. Airport tenants | 18. Government authorities (e.g. local community emergency planners, TSA and FEMA, as appropriate) | 30. Public Works & Engineering |
| 7. Animal Care/Control | 19. HAZMAT Response Team | 31. Public Utilities |
| 8. Clergy | 20. Health & Medical | 32. Red Cross |
| 9. Coast Guard/Harbor Patrol | 21. Hospitals | 33. Resource Support |
| 10. Communications Services | 22. Mental Health Agencies | 34. Search & Rescue |
| 11. Coroner | 23. Military/National Guard | 35. State Aviation Authority |
| 12. Emergency Mgmt. Agency | 24. Mutual Aid Agencies | 36. Civil Air Patrol |
| | | 37. Morgue |

Managing Volunteer Organizations

What is the plan to manage volunteers and any other organization that is volunteering?



Have the volunteers been trained?



Do they understand the layout of the airport ?



Do they understand where the designated areas to manage the disaster?

On Site Airport crash

An aircraft has crashed off the runway on the airport site at 1600 hours. There are no fatalities reported, but several passengers are injured.



Who from the community needs to get involved?



On Site Airport crash (continued)

Four phases of emergency management:



Mitigation



Preparedness



Response



Recovery

Airport Limiting Factors

What will be the limiting factors on airport functionality?



Emergency Communication

The means and methods for exchanging communications and information necessary for successful incident management.



Communication with Everyone



The U. S. Homeland Security has a National Emergency Communications Plan which states:

- Emergency communications is a shared mission across all levels of government, the private sector, nongovernmental organizations, and even the public.
- The National Incident Management System (NIMS) provides a set of standardized structures and systems which help understand how to involve multiple jurisdictions, functional agencies and emergency responders.



Coordination With Other Entities

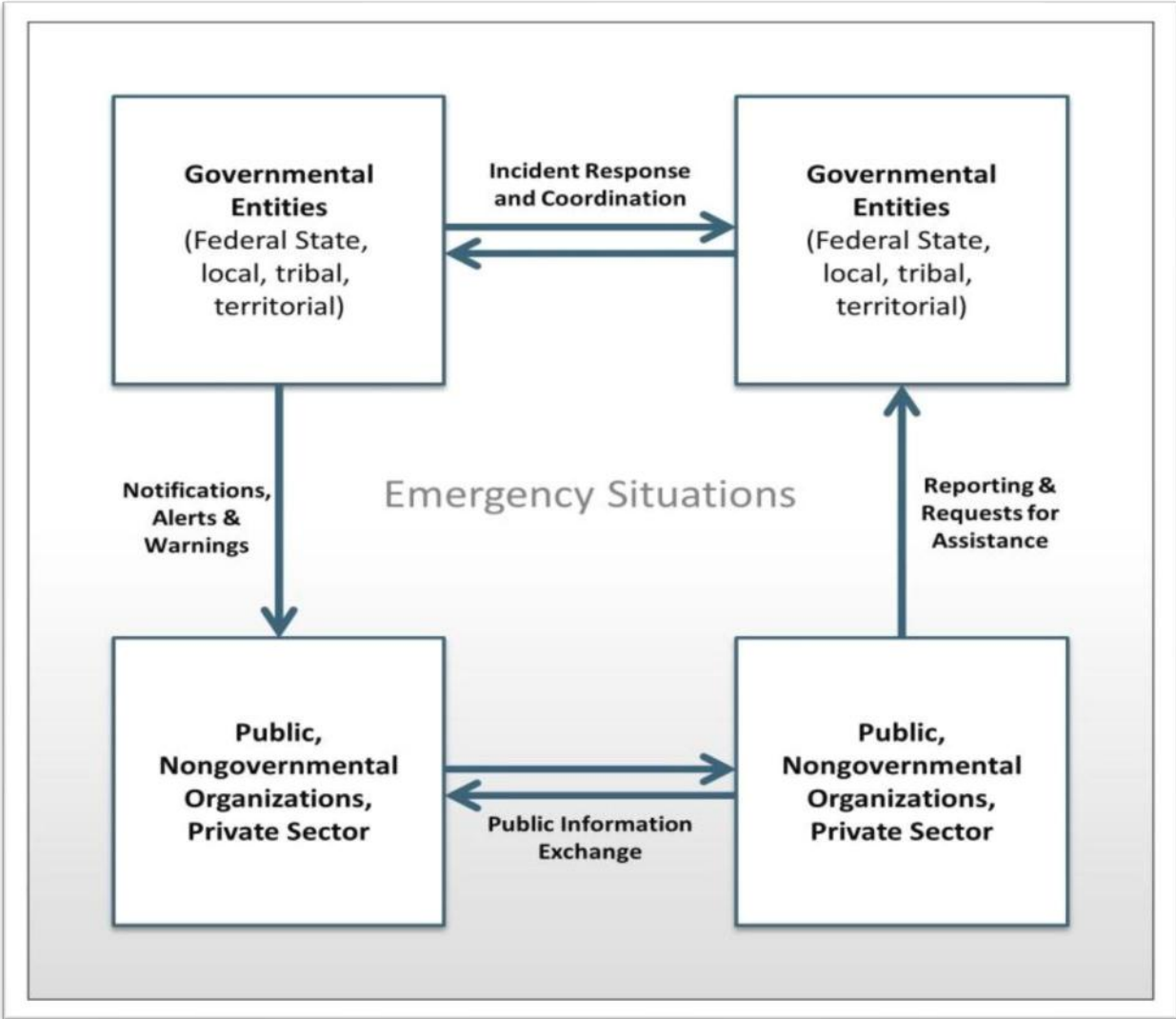


Coordination between airport staff and entities becomes critical so that everyone knows what is going on, what is expected of them, and the actions that need to be taken

Emergency Plan Eco-System



Source: Homeland Security National Emergency Communications Plan, 2014



Community or Airport?

Who helps the passengers on the airplane with their injuries?



Community Coordination



Who communicates from the Airport to get additional medical assistance?



Who communicates from the Airport to get additional medical assistance?

Mobilization of Partners

Partners agencies and the community start to get involved:



Royal St. Vincent and the Grenadines Police Force assists



Immigration and customs are notified



Airline representative is on the scene



The local emergency agency is alerted and is mobilizing support



Customs is required to secure luggage, mail and cargo.



Red Cross and other NGOs are on standby



The Press arrives at the airport



Family and friends not already waiting at arrivals start to arrive at the airport

Effects of a Hurricane on the Airport



Communication with Other Agencies



Every community agency must designate a contact person and several means of communication and provide this information to the Airport for inclusion in its Emergency Plan

The Airport must designate a specific person and a backup along with the means of communication to every community agency.



Example of Communication



- Who is communicating to whom?

How do we know where the injured passengers have been taken?
How will their loved ones meeting them at the Airport know where to go?

- *Who is responsible for communicating this information?*

Success in Communication

Interoperability/communication between institutions - Boston Bombings April, 2013

Emergency Communications during the Boston Marathon Bombings – April 2013

“Interoperability was a success story. Over the years, millions of dollars have been invested under local, regional and state interoperability plans, and our investments in mutual aid channels, tactical channel plans, radio towers, new radios, and specialized training allowed first responders, as well as command level personnel, to effectively communicate by radio between agencies, between disciplines, and between jurisdictions.”

- **Kurt N. Schwartz**, Undersecretary for Homeland Security & Homeland Security Advisor Director,
Massachusetts Emergency Management Agency
Testimony before the House Homeland Security Committee



Taking Care Of Loved Ones

There is an immediate issue to take care of families/ friends waiting for their loved ones, alerting family members that are unaware of the crash, in addition to passengers on the aircraft itself.



How do you find and notify family members/ friends that someone has been injured and taken to the hospital?



Where do you place the family members/ friends who are waiting for news of their loved ones?



How do you handle the Press who wants immediate coverage and pictures now?



How do you coordinate the medical teams that are trying to deal with injured passengers and/or crew?



How do you accommodate the crew?

Victims Care And Coordination



Medical operations coordination with regional providers



Patient tracking



Family reunification and privacy laws—sharing of patient status information



Mass care at the airport



Family Assistance Center



Demobilization and stand-down notification



Coordination of Immigration and Customs for victims



Caring for unaccompanied and separated minors

Resources

Airport Cooperative Research Program (ACRP) Reports and Syntheses:

- *ACRP Report 73: Airport-to-Airport Mutual Aid*
- *ACRP Synthesis 50: Effective Cooperation between Airports and Local and Regional Emergency Management Agencies for Disaster Preparedness and Response*
- *ACRP Synthesis 60: Airport Emergency Post-event Recovery Practices*
- *ACRP Synthesis 73: Emergency Communications Planning for Airports*
- *ACRP Synthesis 82: Uses of Social Media in Operational Response and Recovery during Airport Emergencies*

Available as free PDFs at:

<http://www.trb.org/Publications/PubsACRPPublications.aspx>

Questions



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