

COMMUNICATIONS

APPROACHES TO CRITICAL EVENT COMMUNICATION MANAGEMENT

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Effective Communication During Crisis

Communications before, during, and after any critical event for public safety agencies such as law enforcement, emergency medical services, and fire rescue is the most important element of a preparedness plan.

It becomes vital that those within emergency response organizations know how to communicate effectively; which tools are available to communicate; and have a plan in place if any or all primary systems fail.



Miami-Dade Office of Emergency Management



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Planning Checklist

- Identify and prioritize Mission Essential Functions (MEF).
- Identify the top threats and vulnerabilities.
- Identify the resources needed to protect those functions and create a plan.
- Test the plan.
- Deploy solution.



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Identifying and Prioritizing Mission Essential Functions

- With regards to communication, what abilities and functions are critical to your mission?
 - Can you operate radios in all areas of the aerodrome including in-building structures?
 - Do you have the ability to communicate between operations, law enforcement, and Fire Rescue?
 - Where are your landlines vulnerable? Can you lose communication with a wide-spread power outage?
 - Does communication to not only the Airport's Operations Center (AOC) but to the Country's EOC have any weaknesses?
 - Will the radios be overly congested due to lack of frequencies available?
 - Which band works better for your environment? UHF (shorter range, more expensive system, but resistant to electromagnetic interference) or VHF (longer range less expensive, but susceptible to electromagnetic interference)?
 - Is the system capable of Devolution (the capability to transfer statutory authority and responsibility for essential functions from an organization's primary operating staff and facility to another)?
 - Can your system support redundant connection to a public switched network?

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Available Systems and Limitations

Satellite Phones connects to orbiting satellites instead of terrestrial cell sites.

- Pros:

- Does not depend on cell towers or landlines.
- Can be used in any remote location as long as you have line-of-sight to the satellites.
- New features include messaging service and internet. Newer systems are available to utilize up to eight cell phones to one satellite connection.

- Cons:

- Can loose connections with low Earth orbit (LEO) systems as satellites rotate around the earth.
- User will still need to have a clear line-of-sight to the sky.
- Signal can be blocked by terrain, such as mountains or forest.
- Certain countries either limit or restrict satcom usage.
- Not recommended for high-security communications.
- Expensive to operate.



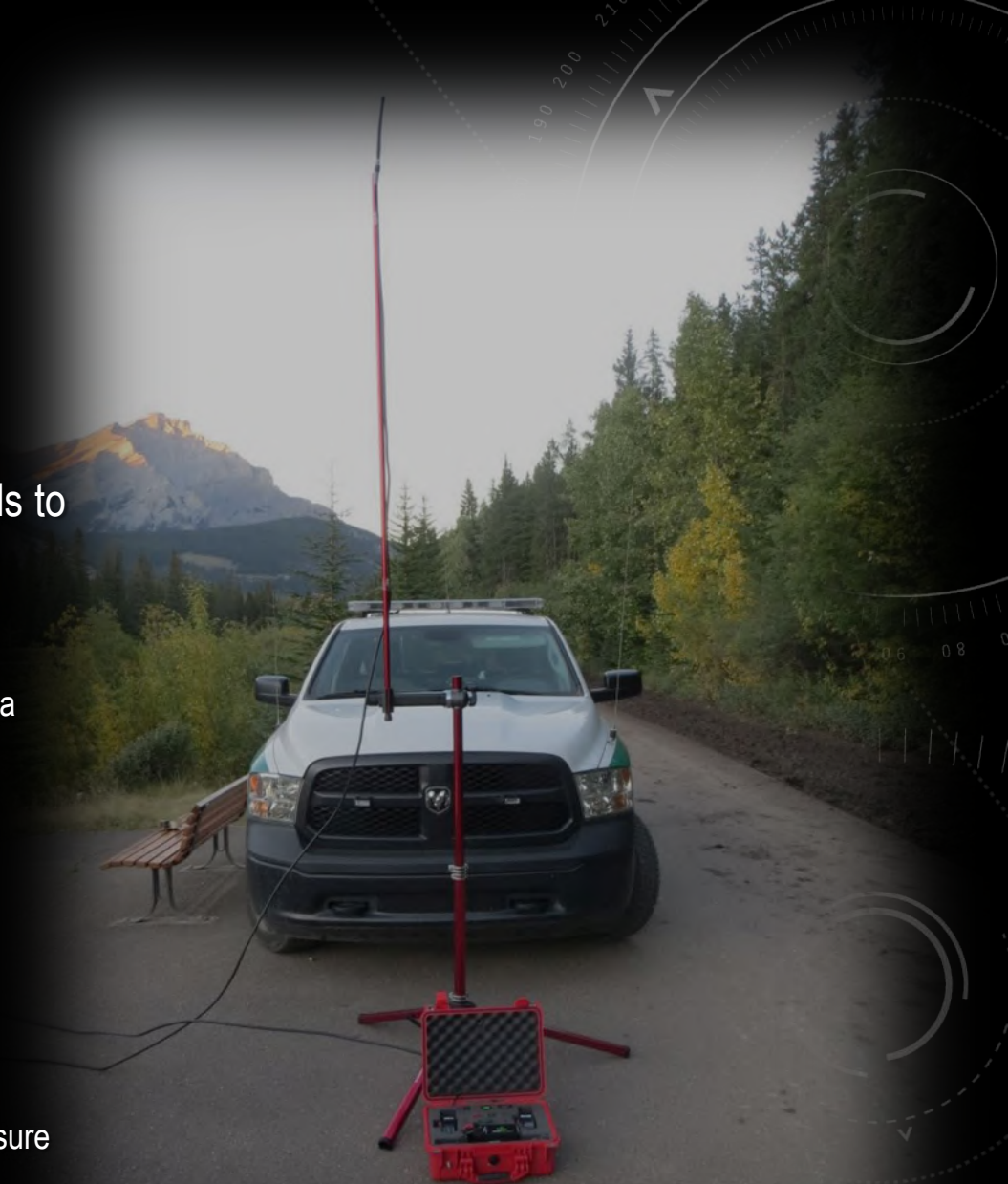
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Available Systems and Limitations

Repeating Infrastructure

Communications gaps can be addressed with the deployment of repeating infrastructure that receives, amplifies and retransmits radio communication signals to improve coverage.

- Pros:
 - Repeaters available are portable, mobile (e.g., truck-mounted), or air-based (e.g., on a deployable balloon).
 - Can support reliable communications in most cases if it is designed, installed and maintained properly.
 - Can be installed inside or outside a building.
- Cons:
 - Can be expensive
 - Extensive testing must be done to ensure the best locations throughout the city to ensure best coverage



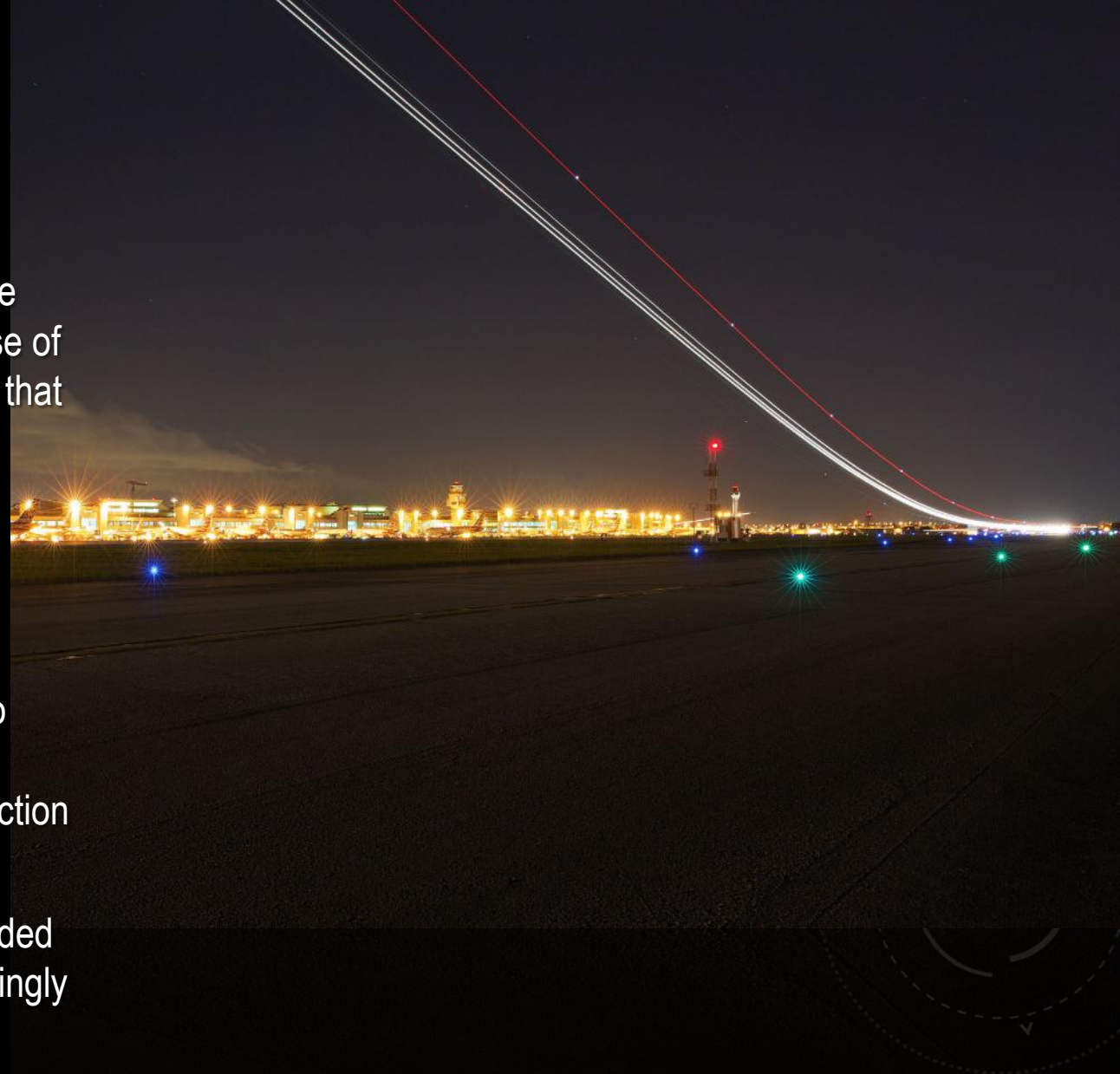
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Coordinating With Local Partners

Ideally, redundancy in communications systems is the goal, but in the grand theme of things, you need to keep the options available in case of catastrophic communication failure. The following ideas are options that will require Letter of Agreements and coordination:

Air Traffic Control Tower (ATCT) frequency

- In cases of extreme communication emergencies, the Air Traffic Control Tower can help you by sharing one of their frequencies.
- Many Airports have worked with their Air Traffic Control Towers to establish an emergency frequency to allow first responders to communicate directly with the pilot of the Alert aircraft. It is a function detailed in the Airport Emergency Plan.
- You must remember that all of these frequencies are being recorded and are accessible by anyone with a ground radio, so act accordingly and keep Security information out of this frequency.



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Partnerships With Local Agencies

Establishing Letter of Agreements (LOA) or Memorandum of Understanding (MOU) with partners will provide entities with the ability to share frequencies. This methodology is dependent on your radio's ability to share a common frequency.

Working in advance with Cell Service Providers.

- The most effective Continuity of Operation Plans (COOP) automatically set recovery in motion to facilitate the fastest path to normal operations.
- Coordination not only with the Power Company but with the Cell providers to restore the most critical facilities in the City should prioritize the airport.
- Cell providers have the ability to set up mobile towers until permanent structure repairs are made.



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Communication Protocols & Training

One of the major factors which will lead to a communications system breakdown will be how communications are utilized and the complexity of the critical event (such as a Mass-Casualty event).

- Training of personnel who manage the communication system is important but it is the users which will grind the system to a halt.
- Establish protocols and enforce radio discipline, specifically if the system is limited in frequencies and you have a large event requiring priority communication.
 - As an example, if you have Terminal Operations and Airside Operations sharing the same frequency, then who receives priority when the Airport has an Alert or even worse, if it has a mass casualty incident?
 - Does Terminal Operations understand that unless they are requested on the frequency, they must remain off? Do they have the ability to communicate using landlines or a separate frequency?



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News and Social Media

“Sound and thoughtful risk communication can assist public officials in preventing ineffective, fear-driven and potentially damaging public responses.”

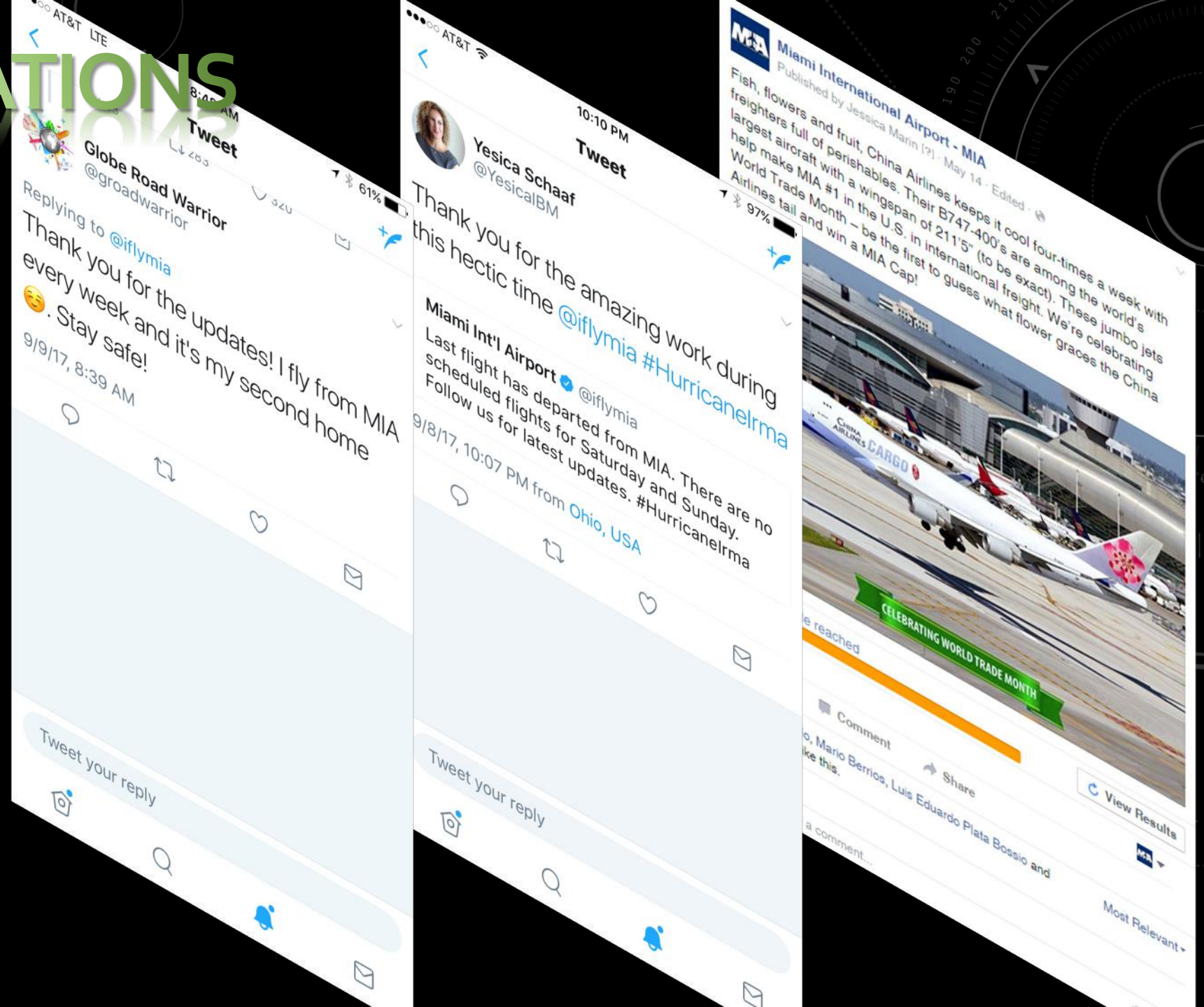
- The advent of news and social media has created a useful tool for Airports needing to disseminate critical information to the public.
- Actions can be taken in advance of any incident to prepare communities, EOC managers, Information Officers, public health officials, news media, and hospitals to respond to the challenges of managing these incidents.
 - What information is crucial to convey?
 - What messages will be provided before, during, and after an incident?
 - What response will these messages create?
 - How will this information be conveyed?



BREAKING NEWS

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News and Social Media



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Human Resources In Emergencies

One of the greatest resources the Airport has is it's personnel and the Incident Command System (ICS). Resources (such as personnel, equipment, or supplies) are needed to support critical incident objectives. The flow of resources must be fluid and adaptable to the requirements of the incident. Standardizing this process will save time.

- Personnel must understand their role prior to the emergency. If they are essential, then their response needs to be automatic in the case of communication failure.



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Human Resources In Emergencies

- Will they be required to respond to the airport automatically in case of Hurricane Warning?
- Do they understand their role in the emergency?
- Do they know the specific point to rendezvous? Is there an alternate location if the first is unreachable?
- Do they already carry the equipment required for their mission?



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Human Resources In Emergencies

- Has the airport set in place their extended response plan?
- Will there be a backup team to relieve the primary team?
- In regions that have more than one airport, is there need to establish support teams for another airport?

- Will there be a demobilization plan?
- How will the airport track all the employees?
- How will the airport track or assist those employees that did not return after the hurricane or natural emergency?



THANK YOU

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