

FAA Field Incident Response (FIR)

Technical Operations Disaster Preparedness - Stakeholder Presentation

Presented to: Aviation Partners / Industry
Stakeholders
By:

Date: 2023



Federal Aviation
Administration



Objective of this presentation:

To provide stakeholders with a general understanding the FAA Technical Operations Incident Management Process



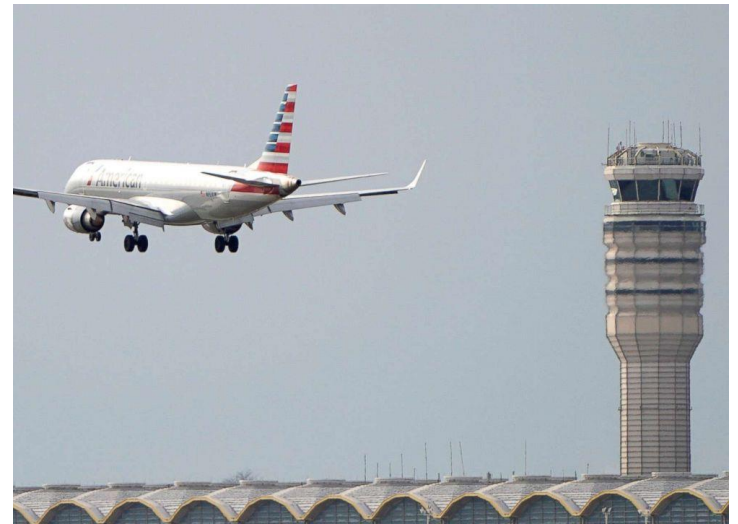
Overall Goal of the FAA's Incident Management Process:

Before, During and After a Disaster . .

☐ Sustain Air Navigation Services to users *(this is an FAA primary “Essential Function”)*

☐ Prepare and Protect

- **FAA's Infrastructure**
- **FAA Employees**



How Do We Accomplish This?

Develop and maintain a standardized incident management system:

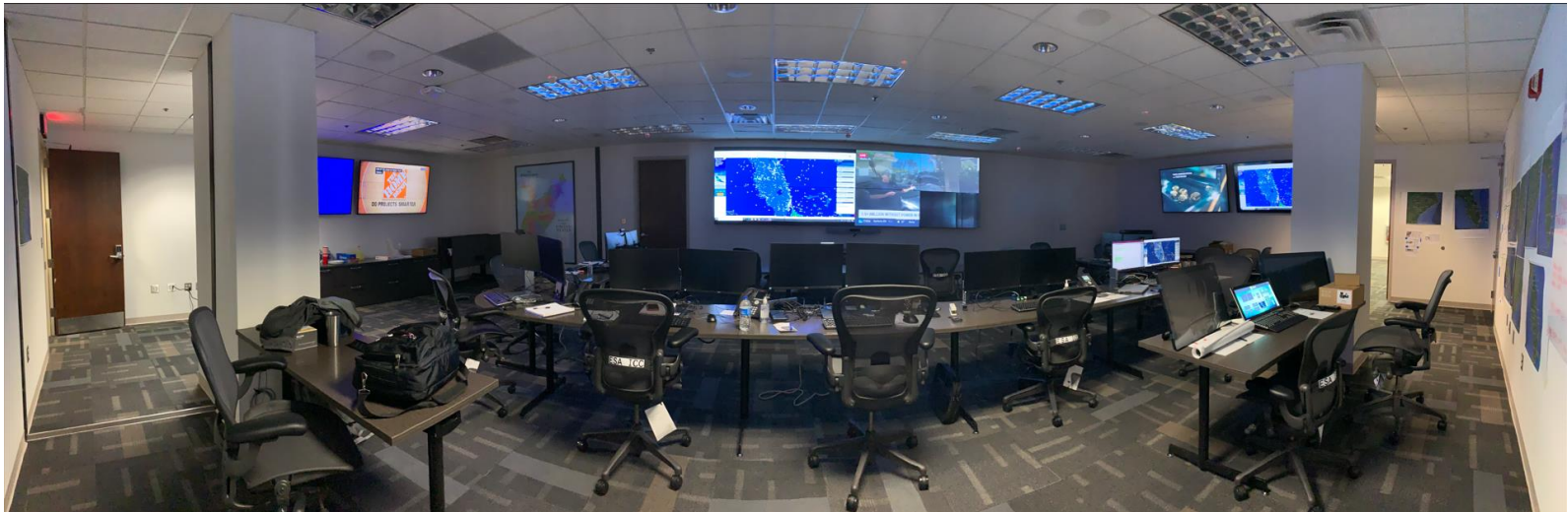
- Establish a pre-determined organizational incident response apparatus *(For FAA Technical Operations, we established a **Field Incident Response** or “FIR” organization).*
- Define and assign pre-designated roles and responsibilities.
- Identify/obtain/stage emergency response resources.



FAA Technical Operation's Field Incident Response (FIR) Objectives:

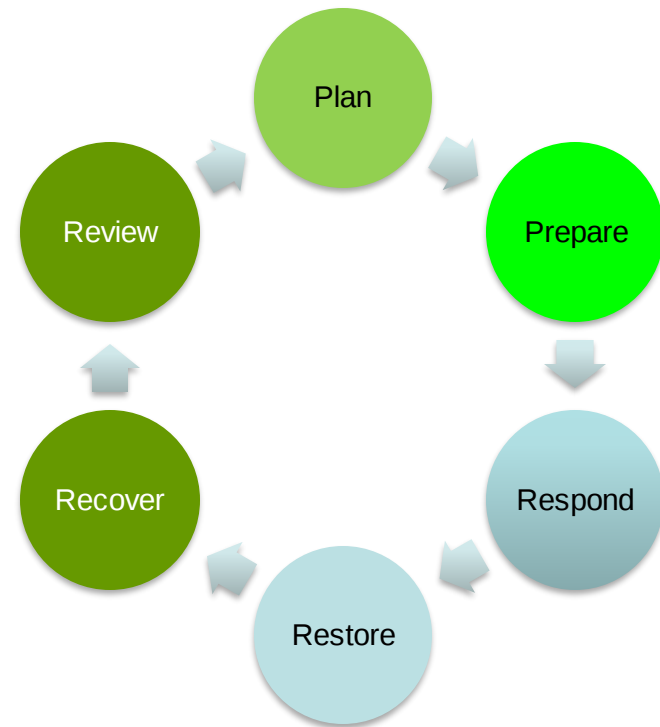
- ✓ Provide an organized approach to disaster management
- ✓ Provide the training, tools and business processes needed to effectively respond to significant events:

Communicate - Coordinate - Collaborate



Disaster Management Process:

- **Plan** – develop policies, plans, and procedures for responding to incidents
- **Prepare** – Organize, train and equip.
- **Respond** – Assess, coordinate response actions, activate and deploy resources
- **Restore** – Restore Air traffic services to a certifiable, useable condition.
- **Recover** – Impacted services are restored to a point where routine operations can assume control (reporting and management of the long-term recovery efforts to pre-incident state)
- **Review** – Process and procedure review for future responses.



Plan

- Review standing policies, procedures and existing processes.
- Create Standard Operating Procedures (SOP's)
- Train, Exercise, and Educate Response Personnel and processes
- Review site specific operational contingency plans and exercise them



Prepare

Establish Incident Command Center (ICC) / Emergency Operations Center (EOC)

- **Incident Command Center (ICC)** - Overall Command and Control of a response effort
- **Emergency Operations Center (EOC)** - can be formed at or near the incident site(s) to support the on-site response to execute assessment, stabilization and restoration

Incident Commander – Tactical lead in managing the incident response within their assigned geographic area of responsibility.

Safety Manager – Manages all EOSH elements of the field operations such as water intrusion, structure inspections, personnel safety, and HAZMAT control and abatement.

ICC / EOC Command Team (cont.)

Information Manager – Manages all incoming and outgoing information for the team. Manages all TELCON's, Bridges, and responsible for the accurate and timely dissemination of all reports and logging.

Technical/Tactical Manager – Collaborates with Field Incident Command Teams to establish “plan-of-the-day” for damage assessment and recovery

- Provides tactical support and management to all “boots on the ground” personnel responding to the incident.
- Works directly with the field response teams for their respective geographical areas.

Fiscal Manager – Consults with Technical management and deployed teams to prepare scopes of work, preliminary cost estimates, and insures proper accountability of personnel travel and purchases.

Field Incident Response (FIR) Mission



Safety First!



- **Minimize the risk to FAA personnel and responders pre, during and post disasters while preparing and/or recovering the NAS.**

Safety Safety Safety

Established Tech Ops Disaster Response Safety Standards:

- We do not recover at night
- Technical Operations employees will not work in sustained winds > 39mph/34Knots (tropical storm force).
- We do not wade (or drive) through standing water
- 2-person rule is always in effect during a response
- Operational Risk Management is utilized – minimize potential interruptions to adjacent services while performing restoration and recovery.
- Air Traffic Control Tower evacuation memo - **75 Mph gusts** (39 Mph sustained – Mobile ATCT's)
- Standard job safety measures are always in effect - proper PPE, training, and published EOSH compliance

Prepare

Shelter in place:

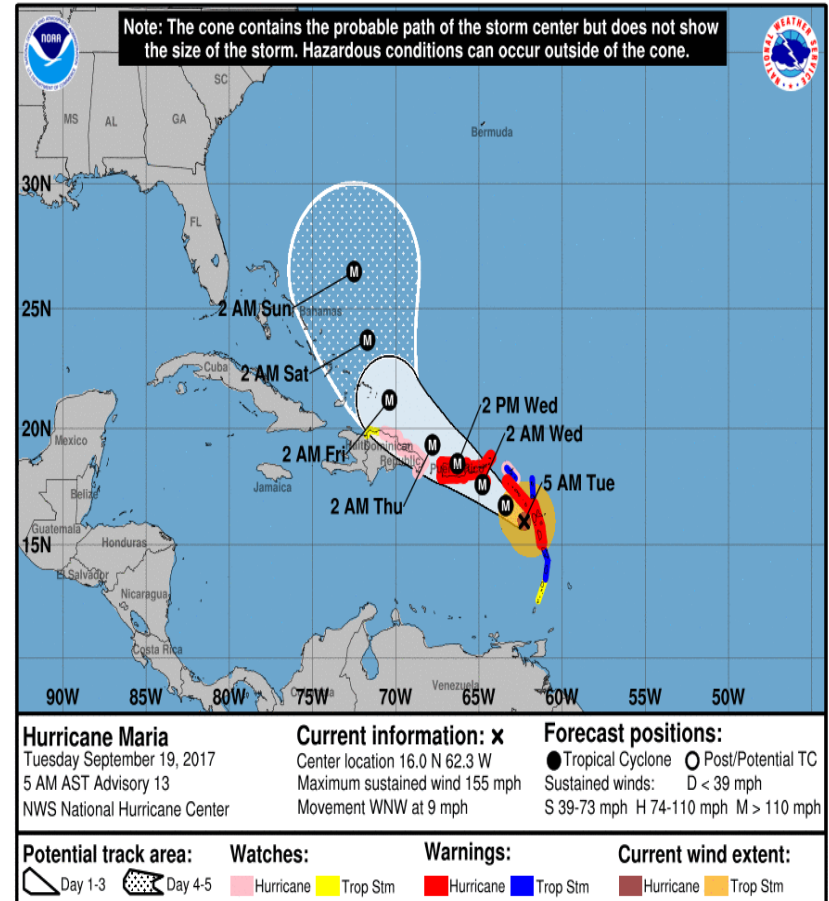
Activate pre-established shelter in place plans for operational employees

Protective shutdowns:

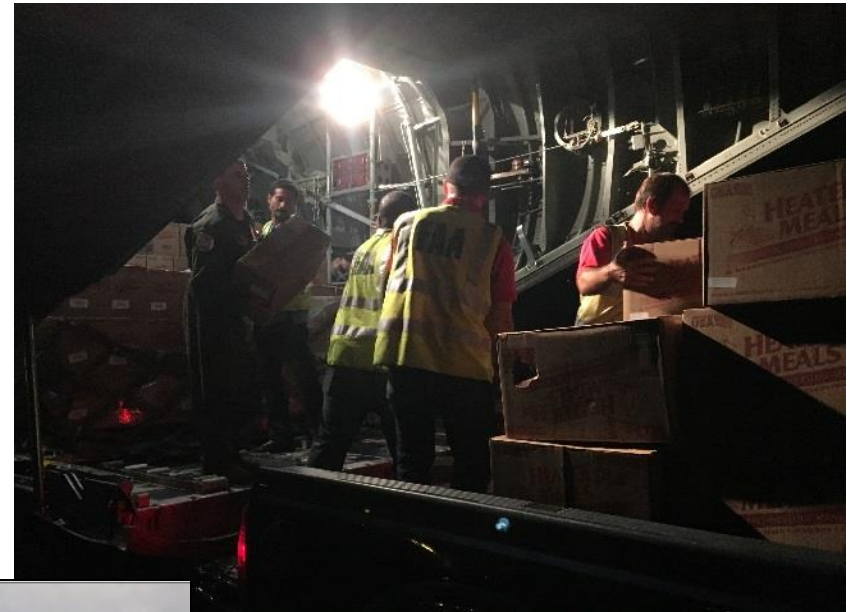
- Shutdown and prepare RADAR, Navigation and communication Equipment
- Issue NOTAM's

Stage supplies / equipment:

- ✓ Potable Water
- ✓ Safety equipment
- ✓ Inventory response trailers
- ✓ Top off fuel storage tanks
- ✓ Mobilize Standby Power Equip.



Stage . . .



Prepare cont.

Checkpoints For Tropical Cyclones:

- ✓ 72 hours from landfall
- ✓ 48 hours from landfall
- ✓ 24 hours from landfall
- ✓ T0

Issue Corresponding Readiness Levels –

Alpha, Bravo, Charlie, Delta

Required Preparation

Actions – FAA's FIR

Preparedness Checklist:

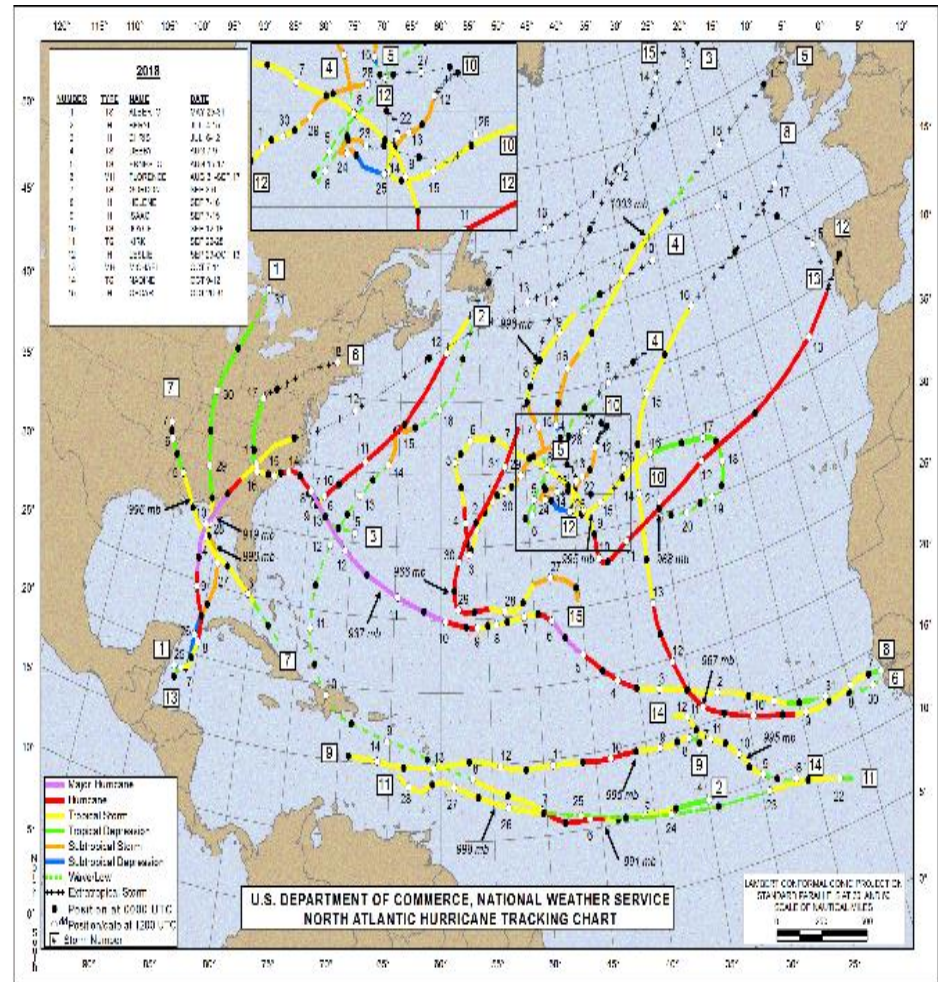


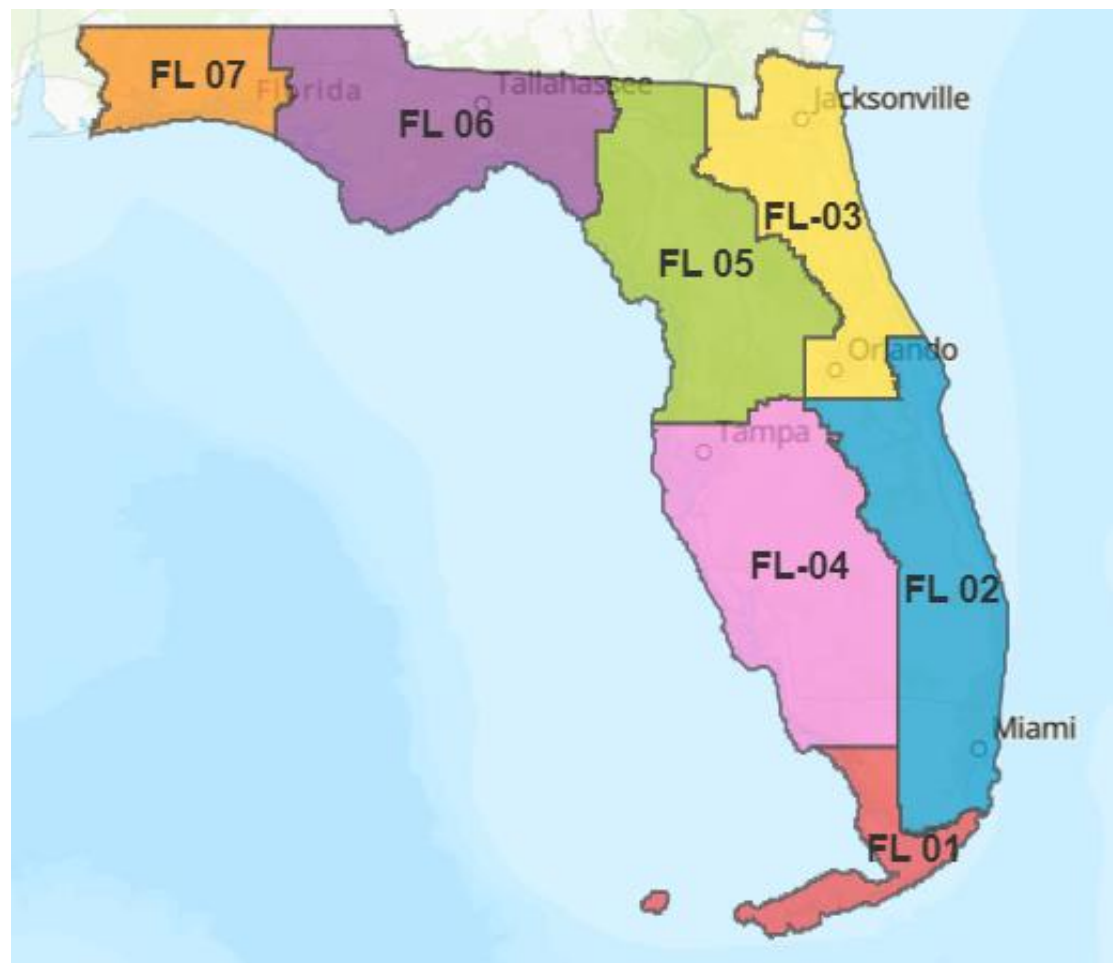
Figure C-1. FIR Preparedness Checklist

FIR Advisory Checklist/ (H-72 Hours)		Primary Responsibility
☐ FIR-A1	FIR Command, Control, Communication - Established (IC)	
☐	Activate and scale the FIR apparatus to adequately manage the situation.	
☐	Communicate among FIR Incident Management Team the location, name of Service Area Incident Commander (IC), Field Incident Commander(s) (FIC), and bridge number of the ICC and each EOC.	
☐	Establish and communicate with FIR Incident Management Team the TELCON schedule and dial in number.	
☐	Establish and communicate with FIR Incident Management Team the incident watch area and mandated Readiness Levels.	
☐	Coordinate with the appropriate Control Center(s) to open an incident summary ticket.	
☐	Notify the Mobile Asset Program Manager of the developing situation.	
☐	Respond to requests for information through the appropriate operational chain of command: SSC Manager, TOM, District Manager, Control Center, Field Incident Commander, and Incident Commander.	
☐ FIR-A2	FAA Emergency Related Policy and Guidance - Reviewed (ALL)	
☐	Review Emergency Related Policy and Guidance as needed to include employee/facility/equipment reporting requirements and damage mitigation procedures for FAA facilities and equipment.	
	FAA orders:	
	FAA order 1900.1, <i>FAA Emergency Operations Plan</i>	
	FAA order JO1920.5, <i>Technical Operations Services Field Incident Response (FIR)</i>	
	FAA order 1600.69C, <i>Facility Security Management Program</i>	
	FAA order JO1900.47, <i>Air Traffic Control Operational Contingency Plans</i>	
	Human Resources Policy Manual Vol 11: Guidance on Emergency Situations EMS-11.4	
☐	Service Area/District/Locality-specific emergency-related Sups, SOPs, Handbooks	
☐	Facility Security Plans and Contingency Plans	

Figure C-1 FIR Preparedness Checklist (Continued)

FIR Watch Checklist (H-48 Hours)	Primary Responsibility
FIR- ☐ B1 Facility and Equipment Damage Mitigation Plan - Implemented ☐ Fully implement employee protection and damage mitigation plan. ☐ Test engine generators under full load and ensure transfer switch is operational. ☐ Load test engine generator starter batteries. ☐ If the pending threat warrants: ● Wrap VOR Teepee's in shipping plastic. ● Strap or drive wooden stakes in ground against ventilator hoods to help hold them in place where appropriate. ● Place wooden blocks between air intake louvers of engine generators. ● Close and secure doors of unmanned buildings by tying or locking. Once coordinated with Air Traffic, secure VASI and PAPI light housing assembly with appropriate strapping material. Secure A/C unit doors utilizing cargo straps to prevent them from opening ● Secure roof hatches of towers by cargo strapping them shut to prevent from inadvertently opening. ● Secure equipment hatches/doors to prevent them from inadvertently being turned off due to high winds rattling the hatch/door ● Sandbag facilities and equipment if required. ● Board and tape windows. ● Close water control gates and other mechanisms (pumps). ● Coordinate with ATC to free-wheel radar antennas and/or power down as soon as practical. ● Cover vulnerable equipment racks and items with heavy plastic as needed. ● Where possible, elevate loose items indoors to protect from water damage. • Lower and secure any tilt-down towers and poles. • Lower NDAG fiberglass poles IAW	

Readiness Zones



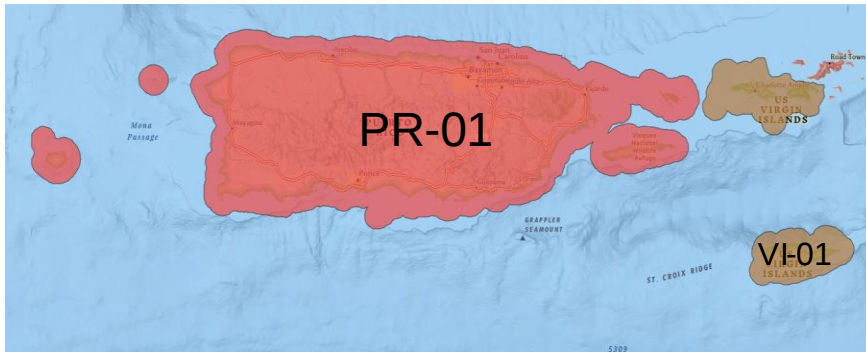
CONUS and Territories are divided into Pre-established Zones:

(Allows for variety of Readiness Level declarations to be directed towards specific zones)

i.e. – “Zone FL02 must reach Readiness level Alpha by 1200z, 06/13”

Readiness Zones Cont.

• Readiness Level Zones – Puerto Rico & US Virgin Islands



PR-01
ATCT
SJU-San Juan Airport
CERAP
ZSU-San Juan CERAP
FCT
BQN-Rafael Hernandez Airport
SIG-Fernando Ribas Dominicci Airpot
Non-NAS AVS
-San Juan FSDO
VI-01
ATCT
STT-Cyril E. King Airpot
FCT
STX-Henry E. Rohlsen Airport

Mobilize Assets

- The FAA maintains and stages numerous mobile assets that can be deployed in the event of a “total loss”: ATCT’s, communications, navigation, etc.



- FAA Technical Operations also stages other mobile support assets – Mobile Generators, Mobile Fuel tanks, Response Trailers, Mobile HVAC’s, etc.

Summary:



Organizational Information Sharing & Situational Awareness

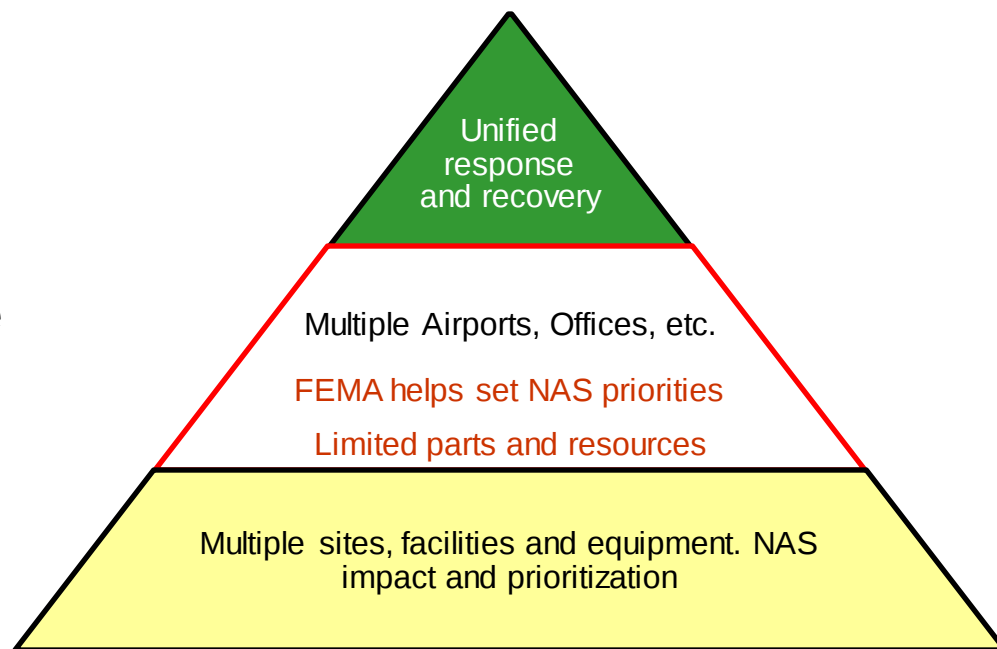
- **“WEB EOC” - FIR Emergency Management Portal KSN**
 - <https://ksn2.faa.gov/env-osh/FAC/FIR/SitePages/Home.aspx>
- **Aviation Weather**
 - <https://aviationweather.gov/>
- **National Hurricane Center**
 - <https://www.nhc.noaa.gov/>
- **National Weather Service (Storm Prediction Center)**
 - <https://www.spc.noaa.gov/products/>
- **National Weather Service**
 - <https://www.weather.gov/>
- **National Weather Service (Enhanced Data Display)**
 - <https://preview.weather.gov/edd/>
- **Disaster Preparedness Government Site**
 - <https://www.ready.gov/hurricanes>

Backup Slides

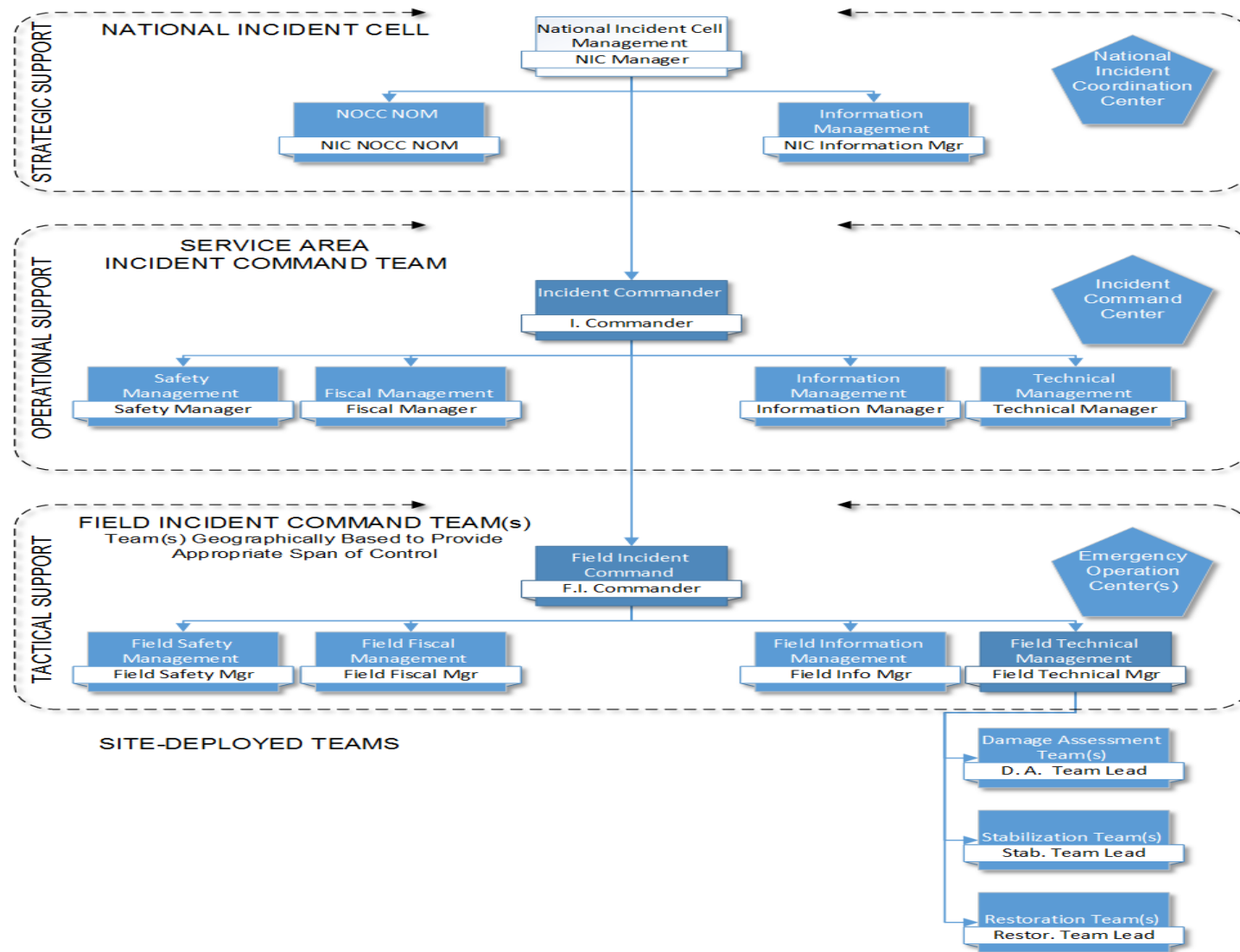


Unified Response and Recovery:

- Requirements must be compared across Districts.
 - Fixing an issue in one area may not enhance their capability if areas around it are still limited.
 - This allows Tech OPS to manage the recovery and accomplish it in accordance with a coordinated master planning concept.
- FEMA is not a normal stakeholder in daily NAS OPS but become a major stakeholder in disaster response



FIR Incident Command Structure



Emergency Response

- **Logistics**

- Transportation
- Over the road (OTR)
- Hazardous material transport I.E Gas and Diesel
- Asset tracking
- Orders
- GOV Usage

