



**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

Air Traffic Organization Policy

**ORDER  
JO 1920.5B**

Effective Date  
04/23/2024

**SUBJ:** Technical Operations Field Incident Response (FIR)

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This order prescribes the framework of national policies, doctrine, responsibilities, and procedures that define Technical Operations (AJW) incident management operations capabilities.

The framework's design enables AJW's incident management to be unified and effective while making efficient use of resources in responding to significant threats and hazards. Daily incidents are managed effectively, at the lowest organizational level, from begin and end through routine National Airspace System (NAS) operations. When a significant incident occurs, local or regional Technical Operations quickly may consume their resources, or may be affected by the incident themselves, degrading their ability to maintain or restore services. Effective restoration of services depends on our ability to integrate a standardized and scalable incident management system across Directorates and District/Service Area boundaries to supplement routine NAS operations.

The responsibilities and actions prescribed in this order are designed to remediate impact on the NAS from significant incidents that exceed AJW's capability to prepare, respond, manage, and restore services through routine operations.

Directorates will incorporate this policy into their Directorate-specific supplement or Standard Operating Procedures for Field Incident Response.

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## Table of Contents

Paragraph	Page
<b>Chapter 1. General Information</b>	
1-1. Purpose of This Order.....	1
1-2. Audience.....	1
1-3. Where Can I Find This Order? .....	1
1-4. What This Order Cancels .....	1
1-5. Policy.....	1
1-6. Order Organization. ....	2
1-7. Scope .....	2
1-8. Range of Response .....	2
1-9. FIR Cycle.....	3
<b>Chapter 2. Roles and Responsibilities</b>	
2-1. Vice President of Technical Operations (AJW-0).....	5
2-2. Director, Operational Support (AJW-1). ....	5
2-3. Director, ATC Facilities/Engineering Services (AJW-2).....	5
2-4. Director, NAS Security and Enterprise Operations (NASEO, AJW-B).....	6
2-5. Director, FAA Logistics Center (FAALC, AJW-L).....	6
2-6. Manager, National Operations Group (AJW-B3).....	6
2-7. National Tactical Operations Programs Team, CREO Manager (AJW-B62) .....	7
2-8. Service Area Director(s) of Technical Operations .....	7
2-9. Service Area Incident Command Team Manager (ICTM).....	8
2-10. Service Area FIR Manager .....	9
2-11. Senior Technical Operations Watch Officer (STOWO).....	10
2-12. Control Centers.....	10
2-13. District Manager .....	11
2-14. AJW Employees .....	12
2-15. Incident Management Teams (IMT).....	12
2-16. Service Area Incident Command Team (ICT).....	14
2-17. Field Incident Command Teams.....	18

Chapter 3. Concept of Operations/Coordinating Structure

3-1. Levels of Response ..... 19

3-2. National Level Response ..... 19

3-3. Service Area Level Response ..... 19

3-4. Tiered/Scalable Response ..... 20

3-5. Operational Coordination. .... 20

3-6. Emergency Response Communication Principles ..... 21

3-7. Significant Incident Critical Information Requirements (CIR) ..... 21

3-8. Incident Watch Area (IWA) ..... 21

3-9. IWA Development..... 22

3-10. Incident Watch List (IWL) ..... 22

3-11. Readiness Zones (RZ) ..... 22

3-12. Readiness Level Identification and Descriptions..... 23

3-13. Reports..... 23

3-14. FIR TELCONs..... 27

3-15. Communication Bridges..... 29

3-16. FIR Contingency Planning. .... 29

3-17. National Volunteer Program..... 30

3-18. Field Operations ..... 30

Appendix A. FIR Training and Exercise Program..... A-1

Appendix B. FIR Post-Incident Review ..... B-1

Appendix C. FIR Tropical Cyclone Preparedness ..... C-1

Appendix D. Pandemic Response and Recovery..... D-1

Appendix E. Earthquake Response.....E-1

Appendix F. FIR Risk Kits ..... F-1

Appendix G. FIR Safety ..... G-1

Appendix H. Damage Assessment..... H-1

Appendix I. National Volunteer Program.....I-1

Appendix J. ANS Divestment of Airspace Services & Infrastructure SOP ..... J-1

Appendix K. Glossary of Acronyms and Special Terms ..... K-1

## List of Tables and Figures

Table or Figure

Page

C-1.	FIR Preparedness Checklist.....	C-5
E-1.	Earth's Crust.....	E-1
E-2.	Modified Mercalli Scale .....	E-2
E-3.	Frequency of Damaging Earthquake Shaking .....	E-3
F-1.	FIR Risk Kits .....	F-2
G-1.	Example FIR Work Assignment.....	G-7
H-1.	Safety Screening/Damage Assessment Safety Checklist.....	H-2
H-2.	Example Technical Operations FIR Facility Safety Screening .....	H-3
H-3.	Screening Questionnaire Instructions .....	H-9
H-4.	Example Placard Posting Instructions .....	H-12
H-5.	Example FAA Inspected .....	H-13
H-6.	Example FAA Restricted Use Placard.....	H-14
H-7.	Example FAA Unsafe Placard.....	H-15

## Chapter 1. General Information

**1-1. Purpose of This Order.** This order establishes the Technical Operations (AJW) Field Incident Response (FIR) program. The FIR program is the incident management system used by AJW to temporarily supplement routine National Airspace System (NAS) operations. Typically, this will occur when an incident has exceeded or has the potential to exceed the capability of local AJW resources to safely deliver or restore services that directly support the Federal Aviation Administration's (FAA) Mission Essential Function Priority #1 to "provide Air Navigation Services (ANS), which enable the operation of the NAS." In a broader context, this program supports the Federal Emergency Management Agency's (FEMA) Emergency Support Function #1 (ESF1), Transportation.

**1-2. Audience.** All Technical Operations Directorates: AJW-1, AJW-2, AJW-B, AJW-L, AJW-E, AJW-C, AJW-W, and employees.

**1-3. Where Can I Find This Order?** You can find an electronic copy of this order on the [Directives Management System \(DMS\) Website](#). Or go to the [MyFAA Employee Website](#); select "Tools and Resources;" then select "Orders and Notices."

**1-4. What This Order Cancels.** This order cancels Order JO 1920.5A, Technical Operations Services Field Incident Response, dated January 15, 2020.

**1-5. Policy.** It is Technical Operations policy:

a. To develop and maintain a standardized incident management system that provides the Directorates with a pre-determined organizational incident response structure/apparatus, defines pre-designated roles and responsibilities, and outlines processes and procedures to coordinate, communicate, and collaborate effectively across District and Directorate boundaries when responding to a significant incident that affects the NAS. By devolving management of the significant incident response to an ad hoc team of technicians, engineers, Environmental Occupational Safety and Health (EOSH), and Control Center (CC) personnel, the remaining NAS not affected by the incident can continue to be maintained safely and efficiently by routine NAS operations;

b. To delegate responsibility for executing the FIR within the Service Areas (SA) to SA Directors;

c. To scale the FIR apparatus to temporarily supplement routine NAS operations and not replace routine NAS operations. Specialists, technicians, engineers, and EOSH personnel remain responsible for assessing, maintaining, restoring, and recovering NAS facilities, systems, and services. The CC specialists remain responsible for monitoring, coordinating, logging, notifying, and reporting NAS facility, systems, and service status. The FIR program provides an ad hoc command structure, under a single Incident Commander (IC) who brings employees together from across the Nation, to form a special response team to assist in the normalization of the NAS following a significant incident. The use of the term "manager" when defining functional positions within the FIR ad hoc command structure is not intended to correlate to the use of the term "manager" as it relates to the Human Resource Policy Manual;

d. To ensure any responsibility, process, or procedure established within the FIR program emulates, where possible, routine NAS operations and is not reliant on a select few to execute efficiently and effectively; and

e. For all employees responding to FIR activation to perform work in accordance with all applicable standards and orders.

**1-6. Order Organization.** The main body of this order contains the basic policy, concepts, and program-related information. The appendices, which form part of this order, contain detailed information that supplements topics found in the order but may require more frequent changes and updates. The appendices contain example templates that can be modified to document FIR-related work assignments and damage assessment findings. These templates can be converted into a digital platform to streamline the collection, interpretation, and storage of data. Annexes to this order normalize functional responsibilities, processes, and procedures in more detail and will be managed and released by the National Crisis Response, Emergency Operations (CREO) Program (Nat-CREO) Office.

**1-7. Scope.** This order applies to Technical Operations. It gives guidance and a framework for safely managing incidents that cause or threaten to cause NAS service interruptions of a magnitude that has exceeded or has the potential to exceed the capability of local AJW resources to safely deliver or restore services. Typically, these service interruptions stem from physical damage to FAA facilities and equipment. Regardless of what caused the incident, if the incident affects the ability of local FAA employees to report for duty, and personnel resources from outside the local jurisdiction are required to safely deliver or restore services, then the FIR apparatus can be engaged at the SA Director's discretion, and this order would apply.

**1-8. Range of Response.**

a. During "Steady-State" operations, the Directorates will be in the Preparation phase, as described below, and focused on preparing for the next incident. In addition, AJW has a large number of elements that are operating continuously, which include the CC and STOWO, located in the Joint Air Traffic Operations Command (JATOC). Therefore, the Nat-CREO Manager, CCs, SA- ICT Managers, STOWO, and National Operations Control Center (NOCC) will maintain a persistent situational awareness of their respective geographic areas of responsibility for threats that could cause NAS service interruptions of a magnitude that exceeds the capability to recover through routine NAS operations. Communicate those threats to the appropriate organizational level, ensuring those who maintain the equipment and facilities within the threat area are aware and take appropriate actions.

b. The resources required to sustain routine NAS operations fluctuate. Therefore, no quantifiable threshold/trigger exists to define when to escalate the AJW FIR apparatus.

c. The Control Center, which operates 24/7, typically will make the initial assessment of the incident/threat/hazard. If warranted, the affected NAS Operations Manager (NOM)/Team Leads will communicate the situation to the STOWO, at a minimum, and if warranted, the SA ICT and Nat-CREO. CREO Program Managers (Nat-CREO and SA-ICT) are responsible for notifying their respective leadership, as required by local procedures. Collaboratively, they will determine the scope and scale at which to implement the policies and procedures in this order. Once initiated, the FIR apparatus will be scaled-up in stages, making real-time adjustments in concert with changing conditions and the latest prediction.

d. Likewise, as service interruptions resulting from the incident are restored to the point where Steady-State NAS operations can assume control of the restoration and recovery efforts, FIR-related efforts will cease. The Nat-CREO Manager and appropriate ICT Manager(s), in coordination with their FIR Managers, appropriate District FIR Liaison(s), District Manager(s) (DM), CC, IC, and SA Director, will make that decision.

### **1-9. FIR Cycle.**

#### **a. Prepare**

- (1) Plan: Develop policies, plans, and procedures for responding to significant incidents.
- (2) Organize, train, and equip: Develop an overall organizational structure and assemble well-qualified IMTs with the resources necessary to respond.
- (3) Exercise: Assess and validate proficiency levels; clarify and familiarize personnel with roles and responsibilities; and improve coordination and communication.
- (4) Evaluate and improve: Compare actual performance against objectives; identify gaps and opportunities for improvement; and then develop corrective action plans.
- (5) Gain and maintain situational awareness: Continuously monitor relevant sources of information regarding actual and developing incidents;

#### **b. Response**

- (1) Assess the situation; identify and prioritize requirements; establish incident objectives; activate available resources and capabilities immediately to begin restoring NAS services;
- (2) Coordinate response actions. Use the predefined FIR command structure, clear delegation of assigned roles and responsibilities, and communicate critical information through established communication channels;
- (3) Activate and deploy resources and capabilities to transition the affected NAS systems, facilities, infrastructure, and equipment through three phases in sequence:
  - (a) Damage Assessment. Identify hazards to employee safety and damage to NAS facilities, infrastructure, systems, and services;
  - (b) Stabilization. Mitigate hazards to employee safety identified during damage assessment;
  - (c) Restoration. Restore Air Traffic Services to pre-incident state. Attempt to restore the site/facility to withstand typical weather for one year, utilizing normal maintenance procedures. If unable, proceed with full recovery process (e.g., Corporate Work Plan [CWP]). Once a system or service is restored, return it to routine NAS operations' jurisdiction, unless they lack resources to monitor and maintain that system or service effectively;
  - (d) Divestment of Airspace Services and Infrastructure. This process may be implemented in conjunction with other response operations taking place. Authority to divest services and/or infrastructure lies with the senior leadership, based on the Crisis Response Team (CRT) plan of action. For detailed response procedures, refer to Appendix J, ANS Divestment of Airspace Services & Infrastructure SOP.

**c. Recover**

(1) Recovery begins once impacted NAS services are restored to the point where routine NAS operations can assume control of reporting and management of long-term recovery efforts that will return facilities and equipment to their pre-incident state. Typically, this transition back to routine NAS operations occurs once long-term recovery planning has been initiated and when the CWP entries are made;

(2) Gradually scale down the FIR apparatus to pre-incident state as FIR roles and responsibilities are transferred back to routine NAS operations. Each ICT member, to include the Field Team members, will ensure their functional counterpart in the District and Directorate is debriefed on current status of service restorations and recovery of the facility and systems;

(3) Demobilization. Assets are returned to the proper cost center and restored to deployable status funded by the incident;

(4) FIR Post-incident review. Conduct a post-incident review, as needed, at the appropriate organizational level, with a focus on FIR processes and procedures. See Appendix B.

## **Chapter 2. Roles and Responsibilities.**

### **2-1. Vice President of Technical Operations (AJW-0).**

- a.** Is responsible for the overall command and control of the AJW FIR Program;
- b.** Communicates information needs, incident response goals, priorities, values, and expectations to Directors and Incident Management Team;
- c.** Cultivates a one-team culture across Directorates that constantly seeks to improve and standardize the interoperability of FIR processes to produce more effective and reliable results;
- d.** Delegates tactical authority to respond to a significant event to the lowest appropriate organizational level;
- e.** For significant incidents that affect multiple SA Directorates, the Vice President (VP) will activate the position of National Incident Cell Manager, appointing the Deputy Vice President (DVP), a Senior Advisor, or Executive within AJW as the cell manager;
- f.** Defines FIR-Related Critical Information Reporting Requirements (Essential Elements of Information).

### **2-2. Director, Operational Support (AJW-1).**

- a.** Accounts for AJW-1 employees temporary or permanently assigned within an incident watch area (IWA) by providing employee accountability data within an IWA to the applicable SA Incident Command Center (ICC). See paragraph 3-13 for Employee Accountability and Reporting procedures;
- b.** Identifies and provides the ICTM with a single point of contact to act as the Director's FIR Liaison for support requests and employee status/accountability inquiries;
- c.** Provides engineering support to the FIR effort.

### **2-3. Director, ATC Facilities/Engineering Services (AJW-2).**

- a.** Accounts for AJW-2 employees temporary or permanently assigned within an IWA by providing employee accountability data to the applicable SA ICC. See paragraph 3-13 for Employee Accountability and Reporting procedures;
- b.** Identifies and provides the ICTM a single point of contact to act as the Director's FIR Liaison for support requests and employee status/accountability inquiries;
- c.** Provides engineering, EOSH, and EOSH Support Operations Group (ESOG) support to the FIR effort;
- d.** Provides program support for the Mobile Assets Sustainment Program (MASP; AJW-244).

(1) During a significant incident response operation, all mobile assets are available to the IC and subject to deployment after coordination with the SA Director responsible for maintaining that asset when not deployed. Conflicts with the availability of mobile assets will be negotiated among the Nat-CREO Manager, SA Directors, IC, and MASP Office;

(2) The MASP will support FIR program by tracking the location and condition of all mobile assets Nationwide and maintaining the [Mobile Asset eXchange tool](#) with accurate information to include specifications needed to facilitate quickly the asset's shipment over road or by air freight (e.g., Air Transportation Test Loading Agency paperwork);

(3) During a significant incident response, MASP will assist the FIR program in locating and preparing mobile assets for shipment and coordinating resources to support deployed assets.

#### **2-4. Director, NAS Security and Enterprise Operations (NASEO, AJW-B).**

a. Accounts for AJW-B employees temporary or permanently assigned within an IWA by providing employee accountability data to the applicable SA ICC. See paragraph 3-13 for Employee Accountability and Reporting procedures;

b. Supports the FIR effort by providing National situational awareness of NAS infrastructure services as well as telecommunication system expertise and support of enterprise services;

c. Is the principal staff element for AJW oversight of FIR policy;

d. Determines effectiveness of AJW's FIR program;

e. Monitors, evaluates, and provides advice to the Nat-CREO Manager;

f. Defines performance measures to identify trends;

g. Directs, on a case-by-case basis, the Nat-CREO to monitor and forward reports from SA-level incidents of significant interest to AJW leadership;

h. Is the Office of Primary Responsibility for this Order JO 1920.5, Technical Operations Field Incident Response.

#### **2-5. Director, FAA Logistics Center (FAALC, AJW-L).**

a. Accounts for FAALC employees temporary or permanently assigned within an IWA by providing employee accountability data to the applicable SA ICC. See paragraph 3-13 for Employee Accountability and Reporting procedures;

b. Designates a single point of contact to work significant incident response-related logistics policy and procedures;

c. Supports FIR effort by providing the following logistics support:

(1) Shipping and tracking parts, supplies, via sea, air, and land;

(2) Dedicating logistics personnel to ICT at the SA level and in the field, when requested;

(3) Establishing necessary contracts to facilitate FIR-related logistical needs.

#### **2-6. Manager, National Operations Group (AJW-B3).**

a. Continues to provide managerial oversight of the OCC, NOCC, STOWO, Enterprise Control Center (ECC) and NAS Cyber Operations (NCO) teams supporting FIR efforts;

b. Remains responsible for managing the reporting and messaging of NAS facility, systems, and service status, regardless of report format, method, or reason for outage;

c. Supports FIR program effort by providing necessary resources to assist the FIR team in managing NAS facility, systems, and service status reporting and messaging;

d. Designates a Control Center Liaison to be primary point of contact for SA ICT Managers during emergency response operations relating to facility, systems, and service status reporting.

## **2-7. National Tactical Operations Programs Team, CREO Manager (AJW-B62).**

a. Is the National focal point facilitating standardized policy, procedures, training, and guidance among SA ICT teams;

b. Is AJW-appointed representative during National level response/surge operations;

c. Is CREO program focal point for FAA Headquarters and interagency exercises;

d. In addition to National FIR Program, is responsible for:

(1) Integrating AJW's response capabilities to significant incidents at the National level. Serves as AJW representative assigned to the Joint Air Traffic Operations Command (JATOC) Crisis Action Team (J-CAT) core staff, when activated (e.g., surge operations);

(2) Provides National level oversight and direction for the collection, validation, analysis, synthesis, and dissemination of critical status information on impact of significant incidents to the NAS, specifically including ANS operations, systems, infrastructure, and personnel;

(3) Technical Operations National Contingency (TONC) Program;

(4) National Continuity of Operations Program (COOP, Devolution);

(5) Divestment of Airspace Services and Infrastructure Program.

e. Conducts an annual audit of each SA FIR program;

f. Provides AJW Vice President (VP)/DVP and Director, AJW-B, an annual program review, when requested;

g. Is the FIR liaison with William J. Hughes Technical Center;

h. Is the Office of Primary Responsibility for Order JO 1920.5, Technical Operations Field Incident Response;

i. Is the Office of Primary Responsibility for approving and releasing Annexes to Order JO 1920.5;

j. Conducts AJW Training and Exercise Program in conjunction with SA ICT Managers;

k. Supports SA ICCs, as needed.

## **2-8. Service Area Director(s) of Technical Operations.**

a. Oversees overall incident response within his/her SA (jurisdiction) and is the final authority for the command and control of the SA's response to the incident;

b. In coordination with ICT Manager, applicable DM, and Nat-CREO Manager, SA Director will determine when and to what scale to engage and disengage his/her FIR apparatus in response to an incident within their jurisdiction.

- c. The SA Director will ensure the decision to engage or disengage his/her FIR apparatus is communicated up and down organizational channels;
- d. Assumes position of SA IC, or delegates those duties and responsibilities to an individual authorized to act on his/her behalf;
- e. Provides necessary resources, to include positions, funding, and staffing, to meet the SA requirements of this order;
- f. Designates an ICT Manager to perform duties defined in this order;
- g. Designates a FIR Program Manager;
- h. Ensures FIR policy compliance within organization;
- i. Provides oversight and determines effectiveness of his/her SA FIR program;
- j. Formalizes in a supplement, SOP, or handbook, the SA's internal guidance on how to execute the requirements of this order; and
- k. Oversees consolidation and upward reporting of employee status to the AJW J-CAT desk, Readiness Level attainment for AJW employees and facilities, systems, and services within his/her SA, in accordance with this regulation.

## **2-9. Service Area Incident Command Team Manager (ICTM)**

### **Steady State**

a. Manages CREO Program within his/her respective SA. The following programs fall under the umbrella of CREO. This list is not all-inclusive and may include SA requirements designated by the SA Director:

- (1) FIR Program
- (2) Technical Operations Contingency Program
- (3) Divestment of Airspace Services and Infrastructure
- (4) Service Area COOP/<sup>1</sup>Devolution

b. Builds and maintains SA training and exercise program; works with Nat-CREO to fulfill National training and exercise requirements.

### **Surge Operations**

- a. Integrates SA response capabilities to significant incidents (National or SA level);
- b. May assume title of IC when ICT is activated;
- c. Provides SA oversight and direction for collection, validation, analysis, synthesis, and dissemination of critical status information on impact of significant incidents in the NAS, specifically including ANS operations, systems, infrastructure, and personnel;
- d. Assists Nat-CREO in establishing restoration priorities of ANS and Air Traffic Control (ATC) facilities;

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<sup>1</sup> Central Service Area is the only service area required to maintain a Devolution Plan.

- e. Maintains situational awareness of respective SA at all times.

## **2-10. Service Area FIR Manager.**

### **Steady-State**

- a. Provides SA FIR guidance, coordination, procedures, and training;
- b. Assists Contingency and Resiliency team in establishing Divestment of Airspace Services and Infrastructure plans;
- c. Assists ICTM with standardization of policy, procedures, and training to assure interoperability and collaboration among Districts and AJW organizations;
- d. Assists ICTM with implementing instructions, including FIR supplement, FIR SOPs, handbooks, manuals, checklists, job aids, and divestment processes and procedures;
- e. Facilitates establishment and maintenance of the SA ICC;
- f. Manages SA FIR Volunteer Program by soliciting volunteers, entering and maintaining the National Volunteer Database, and developing processes for evaluating volunteer training, experience, competence, and proficiency;
- g. Develops, conducts, and evaluates SA FIR Training and Exercise program;
- h. Incorporates lessons learned into SA FIR program;
- i. Participates and provides relevant expertise in Regional/Headquarters-directed exercises;
- j. Provides assistance in developing SA-specific procedures and local guidance for emergency actions, such as:
  - (1) Accounting for employees and reporting injuries;
  - (2) Communicating readiness, security conditions, and operational status changes;
  - (3) Reporting extent of damage to equipment and facilities; and
  - (4) Identifying major shortages or deficiencies that may delay response/restoration efforts.
- k. Maintains situational awareness and alerts respective SA for potential threats that could cause multiple NAS service failures over a widespread area or impact critical NAS services that affect local, high volume airspace.

### **Surge Operations**

- a. Reports directly to the SA-ICTM during an incident requiring FIR activation;
- b. Facilitates development of ICT required to meet the demands of the incident;
- c. Provides incident management guidance to the ICT at the SA and District levels;
- d. Supports ICT in executing its duties and responsibilities;
- e. Gathers, analyzes, and assesses incident information within their SA and disseminates that information, forming a common operating picture;
- f. Substitutes for or assists other SA FIR Managers;

**g.** If directed by the SA-ICTM or Director/Deputy Director, represents AJW on respective regional emergency management teams within the Air Traffic Organization (ATO).

**2-11. Senior Technical Operations Watch Officer (STOWO).** Serve as AJW senior management presence in the Joint Air Traffic Operations Command (JATOC). They are tasked with leading the NOCC team who monitor NAS systems and services performance on a national scale, exercising judgement on facility status and potential impacts. They translate very complex, technical topics into clear, concise information for stakeholders. STOWOs have a supporting workforce of NOCC NAS Operations Managers (NOMs) to coordinate and oversee technical operations, ensure seamless communication, and respond to emergencies in real-time.

**a.** The STOWO is AJW's executive oversight of the NAS. As a direct report to the VP and Deputy VP, the STOWO is the facilitator of safety and efficiency in NAS operations. The STOWO will collaborate, on behalf of the VP, with internal Lines of Business (LOBs) and external stakeholders to ensure and improve safety and efficiency. A STOWO will guide and mentor the AJW team in a professional manner to ensure that the decision making power is at the lowest possible level;

**b.** The STOWO maintains situational awareness of the NAS and keeps senior leadership (e.g., VP/DVP) informed of potential and ongoing impacts (i.e., operational, political, safety, and security) pertaining to AJW;

**c.** Upon notification/knowledge of a significant incident affecting the NAS, will make positive contact with Nat-CREO to coordinate incident monitoring and reporting;

**d.** During J-CAT activations, the STOWO continues executive oversight of the NAS and keeps senior leadership informed. Will collaborate with Nat-CREO for incident briefings, reports, and response actions to provide a comprehensive briefing for senior leadership.

## **2-12. Control Centers**

**a.** Control Centers include: National Operations Control Center (NOCC), Operations Control Center (OCC), Service Operations Centers (SOC), ECC, NCO, and their successors, as well as any Control Center created in the future;

**b.** Control Centers exist to provide a 24 hour, 7 days per week oversight of scheduled and unscheduled events involving NAS services, systems, and infrastructure. As such, likely they will be the first service management organizational structure to recognize when the AJW FIR apparatus may handle an incident or potential incident more efficiently. In those situations, the appropriate Control Center will make an initial assessment of the incident/threat/hazard, and if warranted, communicate the situation to the Nat-CREO Manager and ICTM. The CREO Program Managers will engage with SA and National leadership to decide the best course of action, based on incident details;

**c.** When the FIR apparatus is activated, the Control Center may be called on to assist in response operations by any of the FIR Managers. The Control Centers potentially could be asked to assist in the SA ICC or National level J-CAT.

**d.** OCC/SOC:

(1) Manages all related event tickets in Remote Maintenance Logging System (RMLS), from opening to closing;

- (2) Checks the “Event Scope” NOCC box for all FIR-related RMLS tickets;
- (3) Identifies all incident-related tickets in RMLS and annotates with appropriate incident name, as directed by the Nat-CREO or SA FIR. Enter *//NAME//* in log summary section of RMLS. Typically, FIR-related tickets are associated with natural disasters or deliberate manmade incidents, such as terrorism or accidental hazardous material releases, including nuclear, biological, or chemical;
- (4) Creates an incident-specific informational ticket within RMLS to capture non-systems/facility-related data, such as mandated and achieved Readiness Levels and employee accountability data;
- (5) Creates a plain language description within OCC/SOC Event Manager’s Summary field of the facility, systems, and service status for all facilities, systems, and services affected by the incident. This translation should include a description of the fault/failure/damage, any related degradation or complete loss of service, and status of redundant/backup/alternate service;
- (6) Assists in the dissemination of FIR information, such as mandated Readiness Level status and changes.

**e. NOCC:**

- (1) Monitors “OCC/SOC view” of Event Manager for related event tickets tagged “NOCC” and imports the parent ticket into the NOCC Event Manager;
- (2) During a response event, will message out specific incident-related facility, system, and service outages;
- (3) Coordinates with appropriate Control Center when facility, systems, and service status clarification and correction is required;
- (4) Monitors and participates in CREO teleconferences, when requested;
- (5) Opens and maintains a National bridge with Control Centers, upon request from Nat-CREO;
- (6) Works with STOWO and Nat-CREO Manager to produce correspondence requested by senior leadership regarding National level response events.

**2-13. District Manager.**

- a.** Provides oversight for the incident response within his/her District;
- b.** Identifies a primary and alternate District FIR Liaison to be the FIR Manager’s primary point of contact for FIR issues within the District;
- c.** Is the primary liaison between their District and his/her assigned Field ICT;
- d.** Collaborates with the Field IC and local Air Traffic to establish District priorities and develop the plan-of-the-day;
- e.** Procures and manages all District resources required to support response activities;
- f.** Develops a procedure for accounting for District employees and assists other groups within the District in accounting for theirs;

- g.** Maintains a District employee roster along with the appropriate information necessary to enable positive contact with each employee before, during, and after an incident;
- h.** Manages protective shutdown of equipment in advance of disaster;
- i.** Supports and promotes District participation in the FIR Familiarization and Exercise program;
- j.** Ensures that employee safety is not compromised during disaster operations;
- k.** Oversees preparedness efforts to protect employees, facilities, systems, and services within his/her jurisdiction;
- l.** Facilitates gathering and assessment of incident information within the District and disseminates that information to the appropriate ICC, providing a common operating picture;
- m.** Reports Readiness Level attainment and employee status through the operational chain of command to the respective ICC, if activated.

#### **2-14. AJW Employees.**

- a.** Ensure their respective Control Center is aware of any significant incident or potential incidents that may exceed capability of local AJW resources to safely deliver services;
- b.** Report their status per Human Resources Policy Manual Volume 11: Guidance on Emergency Situations EMS-11.4, this order, and local guidance;
- c.** Keep their supervisor updated with contact information and emergency evacuation and communication plans. If not available, notify EOC/Field Incident Commander (FIC) or Control Center;
- d.** If off duty, follow local emergency management agency instructions. Those agencies include local fire and police departments and State and county emergency management departments;
- e.** If assigned to FIR team, report to and check-in with FIC or appropriate team lead to receive assignment;
- f.** Will not begin any FAA damage assessment, stabilization, or restoration unless directed by management to do so;
- g.** When deployed to assist FIR, will have all Time and Attendance verified by the appropriate IC, FIC, or FIR Team Lead before submitting to supervisor/manager;
- h.** Ensure that their FAA Profile, which includes their emergency contact information, is accurate and current in the Agency's Emergency Contacts Records by accessing FAA's [MyProfile](#).

#### **2-15. Incident Management Teams (IMT).**

- a.** National Level Emergency Management Cell (EMC)

(1) Significant incidents, such as major hurricanes, require unified ATO response efforts that quickly and effectively integrate diverse capabilities and discrete activities of Service Units at all levels. ATO significant incident management and response efforts focus on two fundamental goals.

(2) To sustain the NAS by maintaining continuity of FAA's ANS using ANS-related capabilities to cooperate with operators and other aviation stakeholders to maximize the resiliency of the NAS.

(3) To maximize use of FAA's ANS-related capabilities to support the broader response efforts of FEMA, State Emergency Management Agencies, Department of Defense (DoD), and other Federal, State, and local Tribal Territories partners, Non-Government Organizations, and private sector to save lives, protect critical infrastructure, and safeguard property in crisis or significant situations.

#### **b. JATOC**

(1) The JATOC is a fused, ATO operational organization located within the Air Traffic Control System Command Center's (ATCSCC) operations floor. The JATOC is responsible for integrating ATO's operational capabilities during steady-state periods and in response to incidents of increasing severity. In addition to its steady-state functions, the JATOC serves as ATO's "first responder" for unexpected significant events.

(2) The JATOC's ATO Watch Officer (AWO) coordinates and directs initial response to significant incidents, including characterizing the incident, providing notifications to ATO leadership, and taking steps to stabilize the situation.

(3) Once a significant incident is identified, the AWO, in concert with other JATOC elements, will take initial actions to assess and stabilize the situation and notify the ATO Incident Director (AID).

(4) ATO's National level capabilities used to respond to significant incidents are integral to the JATOC. When circumstances dictate, the AWO may escalate ATO's response efforts. The AWO position's responsibilities are detailed in JO 7200.25, Joint Air Traffic Operations Command (JATOC).

#### **c. JATOC Crisis Action Team (J-CAT)**

(1) The JATOC Crisis Action Team is a surged element of JATOC, in support of the AID, Chief Operating Officer (COO), Deputy COO (DCOO), and Officers Group (OG). It serves as ATO's primary hub for coordinating National level response efforts and orchestrates activities of other National level response elements that are used by ATO to respond to significant incidents, as outlined below.

(2) Reporting on status of Air Traffic operations and ANS to ATO senior leadership, other key players, and partners outside of ATO during significant incidents must be coordinated through the JATOC; or, if activated, the J-CAT; or as directed by the designated AID. Upon deactivation of the J-CAT, post-incident reporting may continue through AJW channels to Nat-CREO and STOWO. Service Area ICC reports will be channeled through the Nat-CREO and STOWO until the SA ICC deactivates or senior leadership dictates otherwise.

(3) The provisions of these procedures, specifically including activation of National level response elements, such as J-CAT, are intended to unify and strengthen – not replace – other response efforts (e.g., FIR team activities) carried out by individual ATO Service Units or elements.

(4) Continuity – While effective, unified, significant incident management is a critical aspect of ATO’s Continuity capabilities (e.g., COOP and Devolution provisions), this SOP does provide procedures specific to Divestment of Airspace Services and Infrastructure Program only. COOP is addressed in FAA Order 1910.1K, FAA Continuity Program.

(5) The J-CAT’s alerting and notification procedures complement provisions in JO 1030.3, Initial Event Response. However, this appendix specifically does not address the JO 1030.3’s post-incident, compliance-focused review and investigation activities, which generally will not be started until the conclusion of the response.

**d.** National CREO J-CAT Cadre Team is a surge element of AJW that directly supports ATO’s response effort during J-CAT activations. It serves as AJW’s primary hub for coordinating National level response efforts and orchestrates SA activities and field level response elements used to respond to significant incidents.

**e.** ATO Incident Director (AID) articulates strategic guidance on objectives and incident management efforts to communicate direction and intent of the OG, COO, and DCOO. Typically, the AID will be a member of the OG, principally AJR-1. However, the COO and DCOO may decide to designate someone who is not part of the OG.

**f.** Forward ATO Incident Director (FAID) is an ATO senior leader, designated by the AID, who is forward-deployed to a location within the area impacted by the significant incident. The FAID, under the direction of the AID, will coordinate and lead ATO response efforts within this area. The FAID also serves as the on-site representative of the AID, as well as COO, DCOO, and OG. When deployed, the FAID may lead the Joint-Forward Operations Response Team (J-FORT), as assigned by the AID.

**g.** J-FORT serves as expeditionary ATO operations support element who are deployed into or near the area most impacted by the significant incident. J-FORTs coordinate unified ATO response efforts focused within this area. These teams may deploy at any point before or during a significant incident. The AID will determine what ATO units will provide staffing for deployed J-FORTs, based on mission needs.

**h.** Airspace Access Response Cell (AARC) is a surged component of the JATOC. It regulates flow of aircraft into and out of select airports and airspace critical to response operations. The AID will determine what ATO units will provide staffing for the AARC, based on mission needs.

**i.** National Response Coordination Center (NRCC) ESF-1 Aviation Element represents FAA’s operations-focused response equities, as part of the U.S. Department of Transportation (DOT) National Response Program-led ESF-1 contingent at FEMA’s NRCC. The AID will determine what ATO units will provide staffing for the NRCC ESF-1 Aviation Element, based on mission needs.

## **2-16. Service Area Incident Command Team.**

**a.** The SA ICT provides operational support and coordination to Field Incident Command Team(s). Supports Field ICT(s) by relieving the burden of external coordination and performing the following core functions: response coordination; communications; resource acquisition, allocation and tracking; and information collection, analysis, and dissemination. The SA ICT will develop broad objectives for the impacted area and coordinate development of

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individual field team objectives and strategies. Additionally, SA ICT will set priorities for use of critical resources allocated to the incident;

**b. Service Area Incident Command Center (SA ICC).** The SA ICC is the physical location that houses the SA ICT. Form the ICC at the location most appropriate for providing operational support and coordination to field responders;

**c. Activation**

- (1) As directed by the SA Director or ICTM;
- (2) When an incident exceeds the capability of the SA or District's first responders to recover the NAS through routine NAS operations; or
- (3) When an incident warrants activation of one or more EOCs;
- (4) At the direction of the VP/DVP, Nat-CREO.

**d. Deactivation**

- (1) As directed by the SA Director or ICTM
- (2) As service interruptions resulting from an incident are restored to a point where steady-state operations can assume control of restoration and recovery efforts, the FIR-related efforts will cease, and the remaining post-incident efforts will be managed through routine NAS operations. The SA IC will coordinate the decision to deactivate and transfer restoration and recovery efforts back to routine NAS operation through the appropriate FIC(s), DM(s), and SA Director.

**e. Service Area Incident Commander**

- (1) Has overall authority and responsibility for management and direction of AJW's incident response within the SA. This includes ensuring that conflicts are resolved, compatible incident objectives are established, and strategies are selected for use of critical resources;
- (2) Delegates non-incident command-related duties to his/her respective deputy or suitable alternate so full attention can be dedicated to FIR efforts;
- (3) Collaborates with ICC to assign the position of FIC(s) to qualified individual(s);
- (4) Has clear authority and knows Agency and Service Unit policy;
- (5) Obtains briefing from AJW executive team (e.g., VP/DVP/Senior Advisor/SA Director) on incident-specific expectations, concerns, and constraints;
- (6) Scales SA ICT and Field ICT and structure to effectively manage the incident;
- (7) Sets SA priorities, in coordination with Air Traffic, and determines incident response goals and objectives;
- (8) Resolves conflicts between incident realities and AJW executive team expectations;
- (9) Approves ICT's Incident Action Plan (IAP) and oversees plan execution;
- (10) Ensures that advance planning and forecasting of response is being done;
- (11) Conducts daily joint TELCONs with all Field ICTs;

- (12) Coordinates activities of the SA ICT;
- (13) Approves resource requests and use/deployment of FIR volunteers;
- (14) Establishes and staffs staging/mobilization sites needed to support resource requirements for the field response;
- (15) Oversees consolidation and upward reporting of employee status, Readiness Level attainment for AJW employees and facilities;
- (16) Maintains log of major actions and decisions;
- (17) Establishes appropriate SA ICT: ESOG Manager, Information Manager, Technical Manager, and Fiscal Manager;
- (18) Facilitates establishment of the appropriate Field ICT(s): IC, OSH staff, Information Manager, Technical Manager, Fiscal Manager, Damage Assessment Teams, Stabilization Teams, and Restoration Teams.

**f. ESOG Manager**

- (1) Gathers information about the nature of the situation, AJW employees within the incident management zone, and hazards involved;
- (2) Advises IC on matters relating to health and safety of incident personnel with the intention of mitigating risk;
- (3) Analyzes response options and potential protective measures;
- (4) Participates in planning meetings and advocates effective risk management;
- (5) Reviews IAPs for safety implications;
- (6) Monitors incident communications for events that pose safety concerns;
- (7) Confirms that needed hazard information is being communicated effectively to all responders;
- (8) Develops and communicates incident safety messages, as appropriate;
- (9) Directly supports and advises all Field EOSH personnel;
- (10) Liaises and represents FIR with EOSH personnel for the entire incident.

**g. Information Manager**

- (1) Manages incoming and outgoing information and requests for action or information for the ICT;
- (2) Manages ICT's FIR TELCONs/bridges; disseminates notification, invitations, and schedules; establishes and monitors FIR TELCONs and bridges; records pertinent information and relays to IC;
- (3) Oversees embedded Control Center personnel's facility, system, and service status reporting. Reference paragraph 2-12 for Control Center duties and responsibilities during a significant incident;
- (4) Updates appropriate FIR online collaboration Websites;

- (5) Maintains a log of events, major actions, and decisions;
- (6) Maintains an employee status log summary;
- (7) Maintains a log of mandated and attained Readiness Levels by District/Zone;
- (8) Collects, validates, and produces FIR Report (FIRREP);
- (9) Communicates and maintains ICT's duty roster/schedule.

**h. Technical Manager.** Given the corporate structure of the SA, the Technical Manager encompasses three of the five major functional areas recommended by the National Incident Management System's Incident Command System. Those three major functional areas are Planning, Logistics, and Operations. The Technical Manager will oversee a team of employees executing the duties of Technical Management. If the scale of the incident warrants, the Technical Manager may establish Section Chiefs for each of the three functional areas.

- (1) Analyzes current RMLS data and coordinates with the Control Center to assess the current status of the NAS;
- (2) Collaborates with Field Technical Managers in developing plan-of-the-day for damage assessment, stabilization, and restoration, and then consolidates those plans into a single SA ICT IAP;
- (3) Manages staffing, mobilization, and demobilization of deployed FIR Teams;
- (4) Assesses damage assessments reports submitted from the field and works with Field Technical Managers to develop recommendations for restoration, recovery, or demolition;
- (5) Assists Fiscal Manager in preparing budget, cost estimates, and cost tracking documentation;
- (6) Assists Field Technical Managers in developing project management and restoration schedules, and then consolidates those schedules into a single SA ICT product;
- (7) Coordinates with Planning and Requirements, Business Services, and Logistics Center;
- (8) Assesses mobile asset requests and coordinates deployment;
- (9) Identifies, tracks, and coordinates parts, material, and equipment within SA;
- (10) Designates and coordinates team leads for deployed FIR Teams;
- (11) Assists Field Technical Manager in coordinating lodging and transportation for deployed teams.

**i. Fiscal Manager**

- (1) Consolidates Field Fiscal Manager's scopes of work, preliminary cost estimates, and justification narratives for facilities;
- (2) Disseminates the Delphi cost code for FIR;
- (3) Consolidates all cost estimates for immediate restoration, material ordering, and tracking;

(4) Consolidates all Facility and Equipment (F&E) and Operations (Ops) expenditures associated with field response operations and predicts future cost of FIR operations;

(5) Coordinates with Business Services Group on all incident-related financial matters.

## **2-17. Field Incident Command Teams.**

**a.** Form Field ICT(s) geographically at or near incident site(s) to support on-site response and execute assessment, stabilization, and restoration of the NAS. Form multiple Field ICTs, as needed, to provide appropriate span of control over a geographically-dispersed incident area.

**b.** EOC. EOCs are physical locations from which the Field IC(s) will direct their Field ICTs. Support each Field ICT by a dedicated EOC. All deployed FIR Teams and local AJW responders will check in and out with the appropriate Field Technical Manager to confirm assignment, receive safety briefings, and debrief system/equipment status and restoration efforts.

**c.** Activation/Deactivation. As directed by the SA Incident Commander or designee, in collaboration with the DM, District FIR Liaison.

### Chapter 3. Concept of Operations/Coordinating Structure

**3-1. Levels of Response.** A specialized group provides unified incident management and response efforts for all of AJW. At the National level, this group comprises representatives from ATO Service Units. At the SA level, this structure consists of technicians from all specialties. CREO Program Managers and their appointees lead both the National and SA response mechanisms.

#### 3-2. National Level Response

**a. National Level Response.** A National level response is a surge element consisting of the following:

- (1) National Traffic Management Officer
- (2) Terminal National Traffic Management Specialist
- (3) Severe Weather National Traffic Management Specialist
- (4) Flight Program Operations
- (5) FAA Air Traffic Services (AJT)
- (6) Interagency Coordination Officer
- (7) DoD Air Traffic Services Cell
- (8) Contingency Operations
- (9) Technical Operations (AJW)
- (10) SA Incident Command Teams

**b.** An expanded explanation of their J-CAT duties may be found in the J-CAT Standard Operating Procedures (Contact AJR-12 for SOP).

**c.** If the incident is determined to be a National level incident, the J-CAT will be responsible for leading response efforts.

#### 3-3. Service Area Level Response

**a.** If the incident is determined to be an SA level incident, the ICTM and SA leadership will be responsible for response efforts.

**b.** The ICTM or appointee will assemble the ICT, as required, to respond to the significant incident.

**c.** Reporting will be accomplished at the SA; however, reports will be distributed to the Nat-CREO, at a minimum, for situational awareness.

**d.** The Nat-CREO is responsible for ensuring situational awareness at the National level and will be available to assist the SA ICT, as required.

**3-4. Tiered/Scalable Response.** Manage incidents at lowest organizational level that most effectively supports the field responders. Examples:

a. If an incident is isolated to a specific District, and in coordination with the SA Director, the DM may assume Incident Command and establish the ICT, at the District level, without ICC activation.

b. If an incident involves multiple Districts, the SA Director may assume or delegate duties of IC, establish ICT, at the SA level, and then establish an appropriate number of Field ICTs to manage the incident.

c. If an incident involves multiple SAs, the VP may assume or delegate the duties of National Incident Manager, and then direct each SA to establish an ICT. Each SA IC would establish the appropriate number of Field ICTs.

**3-5. Operational Coordination.**

a. The ICT will be standardized across SAs to facilitate interoperability. Where possible, the ICT will be organized, staffed, and managed in a manner consistent with U.S. Department of Homeland Security's (DHS) National Incident Management System (NIMS) principles. Homeland Security Presidential Directive-5, Management of Domestic Incidents, mandated development and administration of NIMS and represents a core set of doctrines, concepts, principles, terminology, and organizational processes that enable effective, efficient, and collaborative incident management.

b. The ICT organizational structure will evolve in a modular fashion, based on size and complexity of the incident, as well as specifics of the hazard environment created by the incident.

c. Once an IWA is established, and the SA Director has engaged the FIR apparatus, all responders permanently assigned to that watch area will coordinate their damage assessment, stabilization, and restoration efforts through the appropriate ICT.

**d. National Level Response**

(1) AJW J-CAT Cadre Team

(2) NOCC

(3) STOWO

**e. SA ICT Structure**

(1) SA IC

(2) ICTM

(3) ESOG Manager

(4) Information Manager

(5) Fiscal Manager

(6) Technical Manager

f. Deploy teams, as needed, to conduct damage assessment, stabilization, and restoration, in coordination with and in support of assigned System Support Center (SSC) personnel within the affected area.

### **3-6. Emergency Response Communication Principles.**

a. **Timely.** Because information is perishable, it must be gathered, vetted, organized, and distributed expeditiously and in sequence with other Agency/LOB reporting requirements.

b. **Accuracy.** Accurate information is critical to risk mitigation and incident management. Any technical information reported, such as system, facility, and service status, must match RMLS. If the accuracy of an RMLS entry is questionable, that entry must be reconciled prior to release. All other information released outside of AJW must come from a credible source and be verified for accuracy. Since the initial phase of an incident often is characterized by confusion, if the sender believes that it would be prudent to release unverified information, then the sender should caveat release of that information as “preliminary and unverified” and provide a timeframe when to expect further clarification.

c. **Brevity.** The bullet format is the preferred layout to relay essential information concisely. Use simple, fact-based bullets/sentences.

d. **Clarity.** Logically present information in plain language. Acronyms should be avoided or defined, and do not use codes.

e. **Information Security and Consistency:**

(1) It is imperative that all FIR-related facility, system, service, Readiness Level, and employee status reported outside of the SA FIR apparatus be consistent with reporting distributed to the Nat-CREO Team and AJW/ATO senior executives.

(2) Do not publicize information about how an emergency or incident has affected a specific [named] individual.

### **3-7. Significant Incident Critical Information Requirements (CIR)**

a. Leadership uses critical information to establish priorities for information gathering and reporting. CIR are a prioritized list of information requirements approved by the VP as critical for decision making. CIR should identify opportunities and vulnerabilities that assist the VP in advising senior FAA leadership.

b. The following CIR require immediate telephonic notification of the VP by Nat-CREO followed up with an emailed FIRREP or Executive Summary (EXSUM) of the incident to the VP and DVP: Deaths or life threatening injuries or lifesaving needs of AJW employees engaged in or affected by significant incidents.

c. The following CIR will be reported to the Nat-CREO Manager who will report to the VP and Directors:

(1) Risk of damage or actual damage to Tier 1 facilities and equipment;

(2) Personnel or logistics shortfalls that will delay, or have potential to delay, restoration of services and require Headquarters attention.

### **3-8. Incident Watch Area (IWA).**

The IWA defines the geographic boundary of the area under threat. It narrows response focus to facilities, systems, and services within the defined watch area. It also helps to establish the scale of potential impact to the NAS. The watch area is dynamic and may require periodic adjustments due to changing environmental/weather conditions or threats.

### **3-9. IWA Development.**

**a.** Barring external input from another emergency management group within ATO, the IC, in collaboration with the SA ICT Manager, will define the IWA. Several decision support tools are available through the National Hurricane Center, U.S. Geological Survey (USGS) Earthquake Hazards Program, and U.S. Forest Service Active Fire Mapping Program to help define watch area boundaries.

**b.** An IWA can be defined manually by describing boundaries using common land features, such as geopolitical boundaries (States/counties), rivers, or highways. When possible, use Geographic Information Systems (GIS) mapping applications to draw IWA boundaries for distribution and importing into applications capable of overlaying the watch area above our NAS facilities and systems.

**c.** When an incident affects multiple SAs, the incident //NAME// established by the first Control Center affected will be adopted by subsequent Control Center(s).

### **3-10. Incident Watch List (IWL).**

**a.** The IWL provides a means of identifying critical facilities, systems, and services on an incident-by-incident basis, not normally considered critical or priority under routine NAS operations. For example, FEMA may identify a municipal airport as a “FEMA reliever” airfield for humanitarian airlift. If so, that airfield and associated facilities, systems, and services are added to the IWL.

**b.** Once on the IWL, manage that facility, system, or service like a “Core 30” to include reporting/messaging/notification of service interruptions. Take measures to reinforce/protect its redundant/backup channel/path/service. Remove from IWL when not warranted.

**c.** The IWL is not a comprehensive list of all the NAS facilities, systems, and services found within the watch area. The list does not replace any current (e.g., “Core 30” or “Tier 1”) or future prioritized list of facilities, systems, or services used during routine NAS operations.

**d.** Instructions. Adding or removing a facility, system, or service to/from the IWL requires coordination with Air Traffic, IC, FIC(s), ICTM, Nat-CREO Manager, NOCC, and appropriate Control Center.

### **3-11. Readiness Zones (RZ).**

**a.** When a significant incident, such as a hurricane is forecasted to make landfall within the U.S. or one of its territories, pre-incident planning begins with identifying an IWA. Within the IWA, predefined and fixed RZs (smaller geographic areas/localities) are identified.

**b.** RZs are smaller geographic areas that may contain facilities and/or FAA employees who would follow preparedness instructions when an incident threatens the area. Specific instructions include Readiness Level implementation, evacuations, and return to steady-state.

c. RZs provide leadership with flexibility to tailor Readiness Level(s) within each SA, according to the threat. It allows parts of an SA to be placed in response/readiness posture versus the entire SA. This would limit disruption of operations to those areas in the impact area or IWA.

d. Defining RZs. The Regional Administrators are responsible, in coordination with the SA ICT Manager, for establishing RZs and the name/identifier for each. Publish this information in the SA's FIR supplement, SOP, handbook, or internal published guidance.

e. Incidents affecting multiple SAs:

(1) A RZ may cross two different SAs. For example, AL-01 encompasses both Central Service Area (CSA) and Eastern Service Area (ESA). If an incident potentially may affect CSA or ESA, and will include RL-01 in the IWA, the SA ICT Managers will coordinate how AL-01 will be upward reported.

(2) SA ICT Managers, with concurrence of Nat-CREO and J-CAT management, may decide the entire RZ does not require a Readiness Level change. Partial zones or specific SSCs may have RL change, with concurrence of J-CAT management and Regional counterparts.

### **3-12. Readiness Level Identification and Descriptions**

The term "Readiness Level" identifies a group of actions to be implemented when there is a known potential hazard for which there is time to prepare. Generally, Readiness Levels are related to natural phenomenon, such as major storms. For ease of communication, RLs are designated by using the prefix "R," which identifies the action as part of the RL system – "A," "B," "C," or "D" – to identify the Readiness Level and numbers to identify the measure (specific action to be accomplished). An example is "RB 3," which means Readiness Level Bravo, measure 3. Expanded descriptions of RLs and their associated measures may be found in FAA Order 1900.1, FAA Emergency Operations Plan, Appendix D. In addition to FAA Readiness Levels, AJW developed RLs centered on its own organizational preparedness measures. Report completion of these measures, as required, in addition to the FAA RL, in the attainment report. The AJW RLs are in Appendix C of this order.

### **3-13. Reports.**

a. Standardize incident reporting to maintain situational awareness and so that executives/decision makers have access to critical information. Reports offer a snapshot of a specific operational period [typically, operational periods are 24 hours in duration] and contain validated information regarding explicit details relating to the incident.

b. Information Sources. The sources and methods used for reporting will be dependent upon the type of incident. All reported information will be fact-based and supported by data obtained from authoritative sources.

(1) Facility, Systems and Service Status. The Control Centers remain the subject matter experts during a significant incident for reporting NAS facility, systems, and service status in conjunction with the SA ICT and SA ICT Managers. RMLS is the official source of validated information on the status of NAS facilities, systems, and service for both routine and crisis response operations. The ICT will vet NAS facility, systems and service status derived from RMLS. The ICT will correct any errors through the Control Center before releasing the

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information. In some situations, the best, timeliest source of information is communicated by phone or FIR Bridge. Use that information if it originated from an ICT member and captured in the appropriate RMLS ticket.

(2) National Situational Awareness. During a response operations refined, composite products from Government agencies, such as DHS, National Weather Service, U.S. Geological Service, U.S. Forest Service, and the Department of Energy will be utilized along with Technical Operations (Control Centers, CREO Program Managers, STOWOs, etc.) to maintain situational awareness. To control the length of the FIRREP and expedite prompt release of information, summarize this information and provide a hyperlink to the source for detailed information.

(3) Readiness Levels. Declare Readiness Levels in accordance with FAA Order 1900.1, FAA Emergency Operations Plan. If an RL is mandated by someone other than FAA Administrator, Deputy, Regional Administrator, or Directors of FAA's Aeronautical or Technical Centers, the mandating source should be identified when reporting. Each DM will consolidate the Readiness Level reports for their jurisdiction and communicate that information according to policy.

(4) Employee Status. Each DM, Technical Services Manager, and AJW-1/2/B/AML Directorates' Group Managers, with employees temporarily or permanently assigned within an IWA, will consolidate their employee status reports and communicate that information, as required, to the appropriate ICT.

c. Readiness Level Reporting. Report RLs attained by Districts through their operational chain of command to the SA ICT. The SA ICT will consolidate District RL reports and send to the appropriate SA Significant Incident Response Group or equivalent. The same Readiness Level information will be included in the FIRREP to ensure consistency.

d. Employee Accounting and Status Reporting. Reference Human Resources Policy Manual (HRPM) Volume 11.1: Guidance on Emergency Situations and FAA Order 1900.1 for additional employee accounting guidance.

(1) The employee accountability requirements found in the HRPM require employees to contact their supervisor and assume that the employee and his/her supervisor are co-located within the same geographic region. However, Directorates AJW-1, AJW-2, AJW-B, and AJW-AML routinely assign employees to temporary or permanent duty locations far removed from their direct reporting official or supervisor. These Directorates, with remotely-assigned employees in a threat/hazard area, will confirm and report to the respective SA ICT the status of their employees. The SA ICT will include the status of these employees in its FIRREP.

(2) Each District and Technical Services Manager, with employees temporarily or permanently assigned to a duty location within a threat/hazard area, will confirm and report to the SA ICT the status of their employees within the threat area. The SA ICT will consolidate District, Technical Services, and Engineering Services employee status and send the consolidated report to the appropriate SA ICT Manager or equivalent. The same employee status data will be included in the FIRREP to ensure consistency.

(3) When Readiness Level **ALPHA** is mandated, each District, Technical Services Manager, and AJW-1/2/B/AML Directorates will ascertain leave and travel status of AJW employees permanently and temporarily assigned to duty location(s) within the threat area. The

result should reflect the total number assigned against the number on leave and the number in travel status. Although reporting of leave and travel status data is not required for the Regional Crisis Response Working Group, it should be consolidated and readily available. Report the total number assigned to the duty location(s) within the threat area through the operational chain of command to the SA ICT. Include the same number in the FIRREP.

(4) When Readiness Level **DELTA** is mandated, to the extent possible and reasonably permitted by the emergency, available infrastructure, and safety conditions, supervisors and managers will make a good faith effort to make positive contact with employees. Determine the employees and their dependent(s)' status by collecting the following information:

- (a) Can the employee report for duty. If not, why?
- (b) When might the employee reasonably be able to report for duty?
- (c) Employee's current location?
- (d) Any necessary information about the employee's situation (e.g., dependent welfare, personal property damage) that aids in determining what emergency-related services and benefits might be needed and/or made available.

(5) Once positive contact is made and information collected, supervisors and managers will report the number of employees accounted for as a ratio, the number of employees and immediate family members requiring medical treatment, and the number of employees suffering damage to their residence, or displaced due to the incident. For example:

- (a) 120 assigned : 110 accounted for
- (b) 5 employees and 2 family members injured
- (c) 3 employees experienced property damage
- (d) 1 employee and family in temporary housing

**e. FIR Report (FIRREP)**

(1) FIR Advisory. A FIR Advisory is used to make leadership aware that an imminent threat exists that could require activation of the FIR apparatus above steady-state, but not enough verifiable information is known currently, and the circumstances warrant prompt notification. There is no formal format for a FIR Advisory. A brief description of the potential threat is all that is expected, with an assurance that the FIR Team will continue to monitor and update, as more details are known.

(2) FIRREP. The FIRREP represents a standardized summary of the incident that provides an overview of incident details and impact on AJW employees, NAS facilities, systems, and services. Typically, the FIRREP will not include impact to Air Traffic Services, Operational Contingency Levels (e.g., ATC /Limited/Zero), or Airport/Runway opening/closings. That remains the responsibility of JATOC. Distribute the FIRREP to keep the SA Director and Nat-CREO apprised of the incident-specific FIR efforts within the SA. The Nat-CREO will forward the SA FIRREP to AJW VP and Directors to keep them apprised of response efforts. The FIRREP will include two sections.

(a) An overview of the incident, status of AJW employees, RLs, mobile assets, notable accomplishments since last report, a general description of the IAP for the next reporting period, including notable restoration priorities, mitigation efforts, team deployments, critical facilities, systems, or services that require special attention, and any limiting factors of which leadership should be made aware; and

(b) A facility, systems, and service status summary typically attached to the FIRREP as a separate file. This attachment will include a plain language description of each open “Full,” “Reduced Service,” and “Reduced Equipment” RMLS ticket related to the incident and organized in a logical manner. For example, the summary could be organized by discipline: communication, surveillance, navigation, weather, automation, and environmental. Alternatively, the summary could be organized by boundaries: Air Route Traffic Control Center (ARTCC), Terminal Radar Approach Control (TRACON), Airfield or SA, District, and SSC.

(3) The Nat-CREO may consolidate the FIRREPs of a single reporting period from multiple SAs into one EXSUM. Disseminate EXSUM to keep AJW VP, Directors, and appropriate ATO Incident Response Reporting Group apprised of response efforts.

#### f. FIR Reporting Trigger

(1) Disseminate FIR Advisory, when in the opinion of Nat-CREO or ICTM, the severity of the threat warrants immediate notification.

(2) The SA FIRREP will be initiated:

(a) When RLs are mandated or a SA ICC, J-CAT, or equivalent is activated for a significant incident; or

(b) As requested by AJW VP, Nat-CREO, or SA Director; or

(c) When the ICTM deems the scope of the threat or incident warrants a FIRREP.

(3) The FIR EXSUM will be initiated:

(a) Any time two or more SAs are affected by an incident; or

(b) As requested by the VP, NASEO Director (AJW-B0), or Tactical Operations Programs Manager (AJW-B620); or

(c) When, in the opinion of the Nat-CREO, the scope of the threat or incident warrants an EXSUM.

(4) Frequency/Synchronization

(a) Disseminate FIR Advisories within approximately 60 minutes of acquiring knowledge of an incident or threat.

(b) The initial SA FIRREP should be disseminated as soon as possible, once verified information is received of a pending incident, occurrence of a FIR-related incident, or as determined by ICTM.

(c) Recurring SA FIR Advisories and FIRREPs should be distributed to meet the needs of AJW leadership and J-CAT operations tempo. Upon J-CAT deactivation, SA reporting will be channeled through the Nat-CREO and STOWO. All subsequent reporting should

continue until reporting triggers have ceased, ICC deactivation, or otherwise dictated by SA leadership.

### **3-14. FIR TELCONs.**

**a.** The ICT hosts the FIR TELCON. They will provide an opportunity to exchange and clarify vital information, in real-time, to fill gaps not covered by other reporting methods. They should facilitate communication concerning the current threat, incident status, employee health and safety, systems/facility/service status, identified limiting factors, significant accomplishments since the last TELCON, and plan for the next operational period. Typically, operational periods are 24 hours in duration. Discussions should be as brief as possible. Participants should have specific information to report.

**b.** Standard participants will include the SA ICT, Field ICTs, affected Control Centers, DMs, Technical Service Managers, and AJW Managers.

#### **c. Frequency**

(1) Daily. SA ICT Manager, FIR Managers, or Information Manager will host FIR TELCONs, as needed, to facilitate communication between the field and SA. These TELCONs should occur prior to distribution of the daily FIRREP so the latest information can be analyzed and included in the SA FIRREP. A late afternoon/early evening TELCON also is recommended to capture action items accomplished during the day.

(2) Ad Hoc. Dependent on the pace and complexity of the incident. Additional FIR TELCONs may be required.

#### **d. Notification and Invitation**

(1) Nat-CREO and SA ICT Managers control access to their FIR TELCONs and will distribute/publish dial-in instructions, as needed.

(2) Nat-CREO and SA ICT Managers should publish the date and time of their next scheduled FIR TELCON in their daily FIRREP or EXSUM.

**e.** FIR TELCONs should follow a standardized agenda published in the SA's FIR supplement, SOP, handbook, or internal published guidance. See the example outline for a FIR TELCON below.

(1) Preamble. Instructions to participants.

(2) Roll Call. The roll call sequence should be the same for each TELCON. An example sequence would be:

(a) DMs

(b) Field ICTMs

(c) SA Support Staff (e.g., Engineering Services Manager, Technical Services Manager, Operations Engineering Service Group Manager, TSOG Manager)

(d) Service Center Support Staff (e.g., Business Support Group, Plans and Requirements, ESOG)

(e) Respective Crisis Response Working Group

(f) National participants (e.g., Logistics Center, FAA Telecommunications Infrastructure (FTI), NOCC, Nat-CREO]

(g) SA Director

(h) Guests

(3) Opening Remarks/Overview (Incident Commander)

(a) Current and forecasted state of the incident that triggered FIR team activation;

(b) Description of IWA and/or facilities, systems, and service priorities/watch lists being monitored by ICT;

(c) Brief review of previous day's IAP accomplishments; and

(d) Summary of current IAP, including priorities for the day, team mobilizations, status of critical mobile assets, and resource requests managed by ICC;

(4) Participant Statements. All participants should be prepared to communicate relevant information regarding their response role. Those responsible for accountability of their employees and for achieving mandated Readiness Level within their jurisdiction should start their statement with that information.

(a) Employee accountability and impacts;

(b) Readiness Level attainment;

(c) Summary of impacts to facilities, systems, and services within their jurisdiction, organized by location/airfield;

(d) Notable accomplishments since last reporting period;

(e) Overview of the plan for the next reporting period;

(f) For those participants who are team leads, FICs, or Technical Managers with teams deployed in the field, be prepared to brief how many team members are on their team(s), their specialty, their team plan for the day, including itinerary and priorities, what time they will check-in for their daily debrief, and where they will be remaining overnight;

(g) Limiting factors that may affect plan execution;

(h) Resource requests (e.g., personnel, parts, supplies, fuel, transportation);

(i) Mobile Asset Status (e.g., requested, in route with estimated time of arrival, staged, on site, being prepped for service, and in service.

(j) Targeted requests for information;

(k) EOC status, location, and hours of operation (FIC)

(5) Open TELCON for questions;

(6) Senior participating executive remarks;

(7) Closing statement;

(a) Review follow-up tasking;

- (b) Emphasize safety message;
- (c) Communicate next scheduled TELCON date and time.

### **3-15. Communication Bridges.**

**a.** Bridges are critical and enable the AJW response apparatus to maintain an open line of communication between key National and SA response team members. They also provide AJW executives a direct line of communication for answering time-critical questions. When activated, each SA ICC and FIC teams will establish and monitor their respective bridges.

**b.** Cross-Service Area Incidents. For incidents that affect multiple SAs, the Nat-CREO will establish and monitor the National Response Bridge to facilitate communication between two or more SA ICC.

### **3-16. FIR Contingency Planning.**

#### **a.** Nat-CREO and SA ICT Managers.

(1) The National CREO Team consists of several members who will be designated as alternates when the National manager is on leave or called away. If the National CREO Team is unable to produce an alternate, then the ICT Manager will be selected as the alternate Nat-CREO Manager.

(2) SA Directors will ensure alternate ICTMs are designated and prepared to act for their respective ICT Manager during a leave of absence or personnel action. Managers will brief alternates on all aspects of their specific FIR response program.

#### **b.** Alternate Incident Command Centers.

(1) Each ICTM will develop and be prepared to execute a plan for relocating his/her ICC and ICT when the primary ICC location is no longer viable. This relocation plan will be incorporated into the SA's FIR supplement, SOP, handbook, or internal published guidance.

**c.** Loss of Communication and Power. SAs must account for potential loss of commercial power and/or telecommunications lines when developing incident response processes and procedures.

**d.** Transfer of Command. The process of moving responsibility from one IC at the SA or field level to another is called "transfer of command."

(1) The incoming IC personally should perform an assessment of the incident situation with the existing IC;

(2) The incoming IC must be briefed adequately on:

- (a) Situation status
- (b) Objectives and priorities
- (c) Current plan
- (d) Current organization/command structure/key players
- (e) Delegations of authority
- (f) Resource assignments

- (g) Resources needed, ordered, and in route
- (h) Established Command Centers and staging areas
- (i) Communication plan
- (j) Constraints or limitations
- (k) Prognosis, concerns, and related issues

(3) At the appropriate time, notice of a change in incident command should be made to the DM, Field ICT, SA ICT, SA Director, and Nat-CREO.

### **3-17. National Volunteer Program.**

**a.** During a significant incident, SAs may experience a shortage of qualified response personnel and may use the National Volunteer database to identify additional personnel resources to support AJW response efforts. The decision for temporary release of an individual from his/her primary duty assignment will be at the sole discretion of the individual's supervisor/front line manager. As such, it is the manager's responsibility to backfill the vacant position, as needed.

**b.** You can find further guidance in Appendix I. National Volunteer Program.

### **3-18. Field Operations.**

**a.** Field response activities are actions taken before, during, and immediately after disaster impact and are designed to protect FAA employees and property, control secondary hazards, and minimize impact to NAS services.

**b.** Safety Protocols. Employee safety is a core value and goal of FIR. Disaster response activities will be managed according to severity of the incident and any potential hazards. FIR Safety Protocols are captured in Appendix G of this order.

**c.** Phased Response. Once the threat to the NAS passes, FIR is designed to transition the affected facilities/structures and equipment in four phases:

(1) **Damage Assessment.** Damage assessment is a two-stage, triage process involving an initial Facility Safety Screening (FSS), and if warranted, an Engineer's Assessment (EA). The goal of this process is to provide determinations for as many buildings as possible, as quickly as possible, while making the most efficient use of employees with critical technical skills and engineering expertise. The results of each stage will be documented and provided to the ICT and management entity with jurisdiction for the facility/building.

(a) **Facility Safety Screening.** An FSS will be conducted on each building/structure and surrounding area before response teams access the site and enter the building to stabilize the environment or restore services.

This level of evaluation identifies obviously unsafe and safe buildings. FIR team members selected by the ICT, following the proper questionnaire, may conduct a FSS. This allows structural and civil engineers to concentrate on situations where their subject matter expertise is required. Questionable structures are scheduled for more detailed, visual examination, designated as an EA. A screening team, with the appropriate FAA training and Personal Protective Equipment (PPE), can mitigate any hazards found before they leave the site.

(b) Engineer's Assessment. If during the FSS, a hazard is identified that cannot be immediately mitigated, an EA is required. This assessment will follow industry standard protocols for inspecting structures damaged by earthquakes, high winds, or flooding and will consist of a thorough visual examination of the structure – inside and out – as well as the grounds surrounding the structure. If during the EA, a more in-depth investigation is needed, the assessor will coordinate an expert evaluation by the proper subject matter expert.

(c) Additional resources. ICC have resources to assist with damage assessments when safety conditions do not allow FSS to be completed by assessment teams. AJW Unmanned Aerial Systems (UAS) Operations Program office has contracted support available to conduct stand-off missions to provide high resolution media analysis of facilities. Flight Program Operations (AJF) has aerial resources available for transportation of personnel, equipment, and parts. Assessment teams may conduct fly-by operations utilizing these resources. Coordination for additional resources will be channeled through J-CAT, when activated, or the National CREO Manager.

(2) Stabilization. Once the damage assessment is complete, and all the hazards are identified, the building and surrounding area will be stabilized by mitigating identified hazards so FIR teams can enter safely to restore systems and services.

(3) Restoration.

(a) Objective: To restore services safely to the pre-incident state as quickly as possible. Once a service is restored, it is returned to routine NAS operations' jurisdiction, unless they lack resources to monitor and maintain that service effectively.

(b) Restoration Priorities. Service restoration priorities will be set, in collaboration, by the J-CAT, SA ICTM, ATCSCC, FEMA, AJT, and Airlines for America (A4A). The National CREO Manager will coordinate with the SA ICTM to ensure all requirements are met. In terms of discipline, and barring any external input from Air Traffic, restoration of services will be in the following order: Communication, Surveillance, Navigation, Weather, Automation, and Environmental. Once a service is restored, its redundant/backup channel/path/service will be prioritized against remaining interruptions. Establishment of priorities does not prevent ICT from restoring other services concurrently, particularly when the proper resources may remain available to restore higher priority services.

(4) Recovery. This phase is reserved for facilities, systems, and services that cannot be restored immediately. These facilities, systems, and services are transitioned into long-term recovery and entered into the CWP, if required.

**d.** <sup>2</sup>Shelter in Place. The ATO has no expectation or requirement for personnel to shelter in place at any FAA Air Traffic Control facility. There will be no standard practice of routinely placing employees in "long duration" sheltering where there is a likelihood that employees would require life sustainment provisions, or where employees could potentially be placed in a rescue situation. However, AJT, AJR and AJW may consider sheltering in place at FAA Air Traffic Control facilities only in rare circumstances. Employee safety shall be the primary consideration for decision-making.

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<sup>2</sup> National Shelter-in-Place guidance is currently in coordination. This order will be updated with additional or new guidance once published.

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## Appendix A. FIR Training and Exercise Program

- 1. Purpose.** Establishes the Technical Operations FIR Training and Exercise Program.
- 2. Funding.** SAs are responsible for funding all training and exercise participation and travel for their respective ICT members and FIR teams.
- 3. Suggested Training.** The term “training,” as it relates to the AJW Response Program throughout this order, simply is to imply the familiarization with the command, control, and communication processes and how we bring together employees from across jurisdictions to restore the NAS. As mentioned previously, the AJW Response Program does not replace routine NAS operations. The basic skills sets required to return the NAS to service during routine NAS operations remain the same during an incident managed through the response system. What the AJW Response Program provides is an ad hoc command structure where we can gather a “special team” to assess, stabilize, restore, and recover the NAS.

### 4. Roles and Responsibilities.

#### a. Nat-CREO Manager

- (1) Sets training and exercise objectives at the Headquarters level;
- (2) Plans, develops, implements, and monitors the National training and exercise program to include:
  - (a) Creating and maintaining orientation materials and exercise scenarios;
  - (b) Conducting individual orientation; and
  - (c) Analyzing training needs, evaluating effectiveness, and improving existing program.
- (3) May tailor orientation requirements for a specific individual, based upon that person’s experience.

#### b. ICT Manager

- (1) Tailors training and exercise objectives for SA;
- (2) May tailor orientation requirements for a specific individual, based upon that person’s experience;
- (3) Plans, develops, implements, and monitors SA and Field ICT training and exercise program, including:
  - (a) Creating and maintaining orientation materials and exercise scenarios;
  - (b) Conducting and monitoring individual training; and
  - (c) Analyzing training needs, evaluating effectiveness, and improving existing program.

## 5. SA FIR Training Outline.

a. Initial. An initial orientation program shall be developed and delivered that includes a review of the following suggested topics:

- (1) FAA Emergency Management, Contingency, and FIR policy;
- (2) Core NAS Policy Compliance;
- (3) Headquarters and SA organization and leadership;
- (4) Familiarization of the following FIR tools:

(a) Web-based information sites, such as TechNet, Weather.gov, National Hurricane Center, Central Pacific Hurricane Center, USGS Volcano Hazards Program, USGS Earthquake Hazards Program, Space Weather Prediction Center, Forest Service Active Fire Mapping Program, California Fire (CAL FIRE), relevant FAA Knowledge Services Network (KSN) sites, Shakecast, and HURREVAC;

(b) Facility, systems, and service status tools, such as RMLS, Facility Service and Equipment Profile (FSEP), Contingency Requirements Resiliency Tool (CRRT), and Mobile Asset eXchange;

(c) FAA situational awareness sites, such as Emergency Operations Network (EON), ATO Crisis Management System (ACIMS)/Web EOC, FAA Telecommunications Infrastructure (<sup>3</sup>FTI), and ATCSCC Operational Information System (OIS);

(d) Geospatial tools, such as Geospatial Event Mapping System (GEMS), NAS Integrated Status Insight System (NISIS), Unstaffed Infrastructure Geospatial Decision Support Tool (UIS GIS), NAS Infrastructure Services (NIS), Awareness Operational Impact monitor (AOI), and CREO dashboards;

(e) National FIR Volunteer Database

(f) Report building tools, such as Peabody, Adobe , and Microsoft Office;

(g) Communication options, such as bridges, Government Emergency Telephone Service (GETS), Wireless Priority Service (WPS), Event Notification System (ENS), FAA Administrative Voice Enterprise Services (FAVES), and Microsoft Teams (Teams).

(5) Site visits:

(a) Air Traffic Control System Command Center

(b) ATO Emergency Operations' Center or equivalent

(c) Washington Operations Center

(d) Primary Alternate Facility

(e) SA Incident Command Centers

(6) JATOC/J-CAT Functional Review;

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<sup>3</sup> FAA Enterprise Network Services (FENS) will replace FAA Telecommunications Infrastructure (FTI) in the near future. Implementation planning has begun.

(7) FEMA's Emergency Management Institute offers an extensive catalog of recommended in-resident and Independent Study (IS) courses that may be used, as needed, to bridge any knowledge gap between AJW and Federal emergency management.

- (a) IS-100.c, Introduction to Incident Command
- (b) IS-120.c, An Introduction to Exercises
- (c) IS-130.a, How to be an Exercise Evaluator
- (d) IS-139.a, Exercise Design and Development
- (e) IS-200.c, Basic Incident Command System for Initial Response, ICS-200
- (f) IS-230.e, Fundamentals of Emergency Management
- (g) IS-293, Mission Assignment Overview
- (h) IS-325, Earthquake Basics: Science, Risk, and Mitigation
- (i) IS-319, Tornadoes Mitigation Basics for Mitigation Staff
- (j) IS-320, Wildfire Mitigation Basics for Mitigation Staff
- (k) IS-322, Flood Mitigation Basics for Mitigation Staff
- (l) IS-324.a, Community Hurricane Preparedness
- (m) IS-700.b, An Introduction to the National Incident
- (n) National Emergency Management Basic Academy

**b.** Recurrent. Recurrent training may be satisfied by active participation in annual AJW exercises.

#### **6. FIR Liaison and Field Incident Command Team Training Outline.**

**a.** Initial. An initial orientation program shall be developed and delivered that includes a review of the following suggested topics:

- (1) FAA Emergency Management, Contingency, and FIR policy;
- (2) All ICT members will receive initial, position-specific functional orientation tailored to their SA, before being assigned to perform those duties;
- (3) Familiarization of the following programs, as needed, for position:
  - (a) Web-based information sites such as: TechNet, Weather.gov, National Hurricane Center, Central Pacific Hurricane Center, USGS Volcano Hazards Program, USGS Earthquake Hazards Program, Space Weather Prediction Center, Forest Service Active Fire Mapping Program, CAL FIRE, relevant FAA KSN sites, Shakecast, and HURREVAC;
  - (b) Facility, systems and service status tools, such as RMLS, FSEP and CRRT, and Mobile Asset eXchange;
  - (c) FAA situational awareness sites, such as EON, ACIMS/Web EOC, FTI, and OIS;
  - (d) Geospatial tools, such as CREO dashboards, GEMS, NISIS, UIS GIS, NIS, and

AOI;

- (e) National FIR Volunteer Database
- (f) Report building tools such as Peabody, Adobe , and Microsoft Office;
- (g) Communication options, such as bridges, GETS, WPS, ENS, Teams, and FAVES.

**b.** Recurrent. Recurrent training may be satisfied by active participation in annual FIR exercises.

## **7. Exercise Development**

**a.** Planning Team. The Nat-CREO and SA ICT Managers constitute the exercise planning team. This team will determine exercise objectives, create scenarios, develop exercise documentation, and conduct pre-exercise briefing and training sessions.

**b.** FIR Exercises may be discussion- or operationally-based.

### **(1) Discussion-Based**

(a) Seminar. An informal, discussion-based exercise, led by a facilitator, used to teach or orient participants to new or existing plans, policies, or procedures.

(b) Workshop. A formal, discussion-based exercise, led by a facilitator, used to develop new ideas, processes, or procedures and obtain consensus. Often, products that are produced from a workshop include Emergency Operations Plans, Mutual Aid Agreements, and SOPs.

(c) Tabletop exercise. An informal group discussion, centered on a hypothetical scenario, used to test existing plans, policies, or procedures without incurring costs associated with deploying resources. Tabletop exercises identify strengths and shortfalls, enhance understanding of new concepts, and seek to change existing attitudes and perspectives.

### **(2) Operationally-Based Exercises**

(a) Drill. This is a supervised activity to test a specific operation or single function.

(b) Functional Exercises. These allow personnel to validate plans and readiness by performing their duties in a simulated operational environment. Activities for functional exercises are scenario-driven. Functional exercises are designed to train specific team members on procedures and resources.

(c) Full-scale exercises. These exercises are as close to the “real thing” as possible. They are lengthy and take place on location using, as much as possible, equipment and personnel that would be utilized in a real event.

## Appendix B. FIR Post-Incident Review

**1. Purpose.** Technical Operation's ability to identify and act on lessons learned from actual response efforts, as well as exercises, is integral to AJW's and ATO's overarching preparedness for significant incidents. Evaluation and improvement of mission performance is the final step of the Preparedness Cycle, as defined by the National Incident Management System (NIMS). This step informs AJW's continuous strengthening of its response capabilities, enabling us to ensure that the NAS is sustained and that the Agency's Air Navigation Services (ANS) supports broader response efforts.

The National and SA ICT Managers will conduct post-incident reviews internally, as needed, to identify strengths, weakness, and areas for improvement. Through this process, areas for improvement will be highlighted and actions taken to improve the FIR program.

### 2. Responsibilities.

**a. Nat-CREO Manager.** For major incidents with National scope, Nat-CREO will facilitate the post-incident review and document findings.

**b. ICT Managers.** For incidents confined within an SA, ICT will determine invitees and facilitate the post-incident review and document findings.

**c. National level reviews will consist of the following participants, at a minimum:**

- (1) VP
- (2) Deputy VP
- (3) Director, NASEO
- (4) Group Manager, Operational Programs
- (5) Group Manager, National Operations
- (6) Manager, Tactical Operations Programs
- (7) Risk Area AJW District Manager
- (8) ICT Manager
- (9) Manager, NAS Resiliency
- (10) Professional Aviation Safety Specialists (PASS) National Safety Representative

### 3. Post-Incident Review Process.

- a.** Coordinate date, time, and location and disseminate the invitation.
- b.** Assemble review team who will gather information.
- c.** Analyze information and documentation.
- d.** Identify corrective actions and assign responsibility.
- e.** Document findings.
- f.** Follow-up on corrective actions until closed.

## Appendix C. FIR Tropical Cyclone Preparedness

**1. Purpose.** Establish a framework from which SA will base its response to tropical systems. The ability to quickly build and maintain shared situational awareness (SSA) is critical to our response effectiveness for a tropical system or inbound hurricane. As soon as FAA identifies a tropical system that may threaten the NAS, System Operations Services, NAS Security (AJR-2) shifts focus to employ ATO capabilities to deliver a unified and effective response, in concert with other FAA and interagency partners.

### 2. Objectives.

- a. Preparation of personnel and facilities prior to Tropical Cyclone impacts
- b. Plan and execute a coordinated Hurricane Response
- c. Quickly and safely restore and recover the NAS following an impact.

**3. Preparations.** Preparing for hurricane season begins early in the year. We leverage lessons learned from previous, real-world incidents and exercises to correct and/or strengthen policies, plans, and procedures.

a. The Nat-CREO Manager is responsible for coordinating processes, procedures, and documents at the National level that will impact AJW SAs and field elements. In addition, (s)he validates available mobile assets with the Mobile Assets Sustainment Program (MASP) manager;

b. The SA ICT Managers are responsible for resupplying and preparing their District's logistics, equipment, documents, and employees;

c. The CREO Program Managers will make every effort to lead development and execution of response and recovery exercises to validate SOP and processes.

**4. FIR Preparations.** The FIR apparatus is essential to our orchestrated effort to mitigate the effects of a tropical system on the NAS and all associated equipment. The District FIR teams also will begin to prepare early in the year. Preparation activities may include, but are not limited to:

- a. Validate/update policies, plans, and procedures
- b. Revalidate District volunteer lists
- c. Identify pre- and post-hurricane resource requirements
- d. Complete logistical resupply
- e. Validate/update contact lists
- f. Ensure employees update emergency contact information
- g. Update inventory lists
- h. Train on and exercise hurricane plans

**5. Protective Shutdown Procedures.** The purpose of a shutdown is to protect the physical equipment during inclement weather and natural disasters, in accordance with FAA Order

6000.15. If a storm strength prediction reaches Strong Tropical Storm Force winds of 50kts/58mph<sup>4</sup> or greater, coordinate through respective Control Center to place facilities in a protective posture. Allow time for proper coordination to take place with all stakeholders. If a facility needs to be shutdown locally, ensure personnel comply with the “two-person” rule and 34kts/39mph winds rule (see Appendix G).

a. Facilities with tilt down towers and other vulnerable facilities shall be placed into a protective posture. Facilities such as Runway Visual Range, Stand Alone Weather Sensors, Medium Intensity Approach Lighting System with Runway Alignment, and Approach Lighting System are scheduled properly and protected accordingly. Poles are tilted and strapped. Facilities known to flood will be evaluated on a case-by-case basis.

b. RADAR – including Airport Surface Detection Equipment (ASDE) and Terminal Doppler Weather Radar (TDWR). Based on design specifications, “freewheeling” of the antenna pedestal is required by manufacturers to avoid severe stresses to the antenna reflector during extreme weather events that could result in loss of contour. Freewheeling of these antennas minimizes effects of sustained high velocity, straight-line winds, and variable wind direction. To minimize damage, the antenna pedestal shall be placed in a “freewheel” condition when sustained winds of 50kts/58mph are predicted. Normally, protective shutdowns of RADAR facilities only relate to the freewheeling of the antenna.

c. Continuity of Service (CoS) Instrument Landing System (ILS) Protective Status. Because ILS facilities are subject to CoS criteria, as outlined in FAA Order JO 6750.57xx, Instrument Landing System Continuity of Services Requirements and Procedures any ILS category downgrades are undesirable. Facilities should be Notice to Air Missions (NOTAM) out of service protectively to avoid countable outages when they are not required for safe operation of the NAS. An example of this would be inclement weather closing an airport. Additionally, during such weather events, facilities not being used due to traffic direction should be NOTAM protectively. These facilities should be NOTAM, not turned off, to facilitate quick recall to service in case conditions change and the facilities are needed.

d. Communications Facilities. Communications facilities do not get shutdown. They remain operational throughout the incident.

**6. Pre-Incident Coordination.** Once an area of low pressure with the potential to develop into some type of tropical system has been identified, the Nat-CREO and Significant Incident Management Operations Team (AJR-221) will begin to monitor and maintain situational awareness. Usually, this occurs approximately four to five days prior to landfall, following development of the tropical system.

AJW follows a set of preparatory actions, per FAA Readiness Levels (RL), as described in FAA Order 1900.1. In addition, AJW follows its own set of specific preparedness actions, per FIR Preparedness Checklist, as outlined in this order.

In addition to preparatory actions previously mentioned, AJW also addresses significant events in coordination with System Operations Services, Strategic Operations Security (AJR-22).

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<sup>4</sup>NOTE\*\* This wind rule was mutually agreed upon by all Service Areas and supersedes all other verbal or documented wind rules.

a. Pre-landfall deployment of liaisons to key interagency crisis management nodes to support aviation response operations, including Joint Air Traffic Operations Command (JATOC) Crisis Action Team (J-CAT), Joint Field Offices (JFO), and National Response Coordination Center, among others.

**Note:** Damage Assessment Teams and Mobile Assets will not be pre-positioned unless approved by senior leadership or designee.

b. Establish and manage specialized response measures with key stakeholders.

c. Plan and implement ANS restoration and recovery operations with stakeholders.

(1) Initial planning will begin with a “Sync/Ops Call” consisting of affected SA ICT Manager, Regional partners, AJR-22, and Nat-CREO.

(2) Incident Watch Area (IWA) – During the Sync/Ops Call, an IWA will be introduced if the storm has formed enough and a path is predictable. Once the IWA is established, baseline information can be established.

(3) As storm formation progresses and the storm track or “Cone of Uncertainty” becomes more refined, preparation and response operations will accelerate.

(a) SA ICT Team activation

(b) J-CAT activation

(c) Ops tempo identified

(d) Emergency Reporting implemented

(4) Baseline Information – It is essential to establish baseline information to ensure all aspects of the threat are covered. Restoration of systems and services to pre-incident conditions becomes more definable when baseline information is collected prior to an incident.

(a) Number of facilities and their categories within the IWA

(b) Number of ATC facilities

(c) Baseline employee accountability numbers (i.e., assigned, detailed, leave) for the Readiness Zones and Districts within the IWA.

**7. Hurricane Response.** After landfall, the response and recovery phase begins. No FAA response team will deploy until the “all-clear” has been given by the Field Incident Commander (FIC) or the local emergency response incident commander has designated the area as safe. The FIC team will identify a facility safety screener and task him/her with completing the Facility Safety Screening (FSS). Once complete, the screener will send the FSS to the FIC team, who will take necessary action to coordinate mitigation of known hazards.

a. Employee Accountability. To the extent possible and reasonably permitted by emergency and safety conditions, and available infrastructure, make a good faith effort to determine the status of AJW personnel and dependents. Report employee accountability, by District/Group, through operational chain of command: SSC Manager, District Facility Manager (DFM), DM, and FIC. Refer to paragraph 3-10 of this order for detailed criteria of reporting personnel accountability.

**b. Returning to Service** – No facilities will be brought out of protective shutdown until verified by AJW; they will inspect the facility, and/or in their expert/trained opinions, deem the facility safe for Air Traffic operation. Restore NAS services to the pre-incident state or to where routine NAS operations can assume control of recovery efforts.

**Note:** Many of the actions in the Preparedness Checklist, once started, persist throughout the response effort. See Table C-1.

**c. Landfall** – Typically, the period immediately following landfall is quiet, as field personnel take protective postures, and damage assessments cannot start. Some impact information can be produced by automation systems.

**d. Post Landfall** – As conditions allow safe movement, AJW personnel will begin assessment of facilities and establishing work priorities.

(1) **Damage Assessment/Data Collection.** As soon as conditions permit, damage assessments begin to collect and fuse into a coherent picture of storm impact. Refer to Appendix H for detailed Damage Assessment during response phase. Impact information includes effects on the NAS, facilities, and employees.

(2) **Service restoration priorities** will be set by the FIC, in close coordination with Air Traffic. Those priorities will be documented in Incident Action Plan (IAP) and summarized in the FIR Report (FIRREP). In general terms of discipline, and barring any external input from Air Traffic, restoration of services will be in the following order: Communication, Surveillance, Navigation, Weather, Automation, and Environmental. Once a service is restored, its redundant/backup channel/path/service will be prioritized against the remaining interruptions. The establishment of priorities does not prevent the ICT from restoring other services concurrently, particularly when the necessary resources may remain available to restore higher priority services. In addition, the J-CAT may direct priorities based on National requirements established by FEMA for life sustainment operations.

(3) **Reporting** ensures situational awareness is maintained and executives/decision makers have access to critical information. The AJW VP/Deputy VP will dictate reporting criteria and termination of emergency reporting. Incident Reporting formats and criteria is referenced in paragraph 3-10 for this order.

Table C-1. FIR Preparedness Checklist

FIR Advisory Checklist/ (H-72 Hours)	Primary Responsibility
<input type="checkbox"/> <b>FIR-A1</b>	<b>FIR Command, Control, Communication - Established (IC)</b>
	Activate and scale the FIR apparatus to adequately manage the situation.
	<b>Note: The National CREO Manager will advise the PASS National Safety Representative that the FIR apparatus will be activated in response to a named incident and identify the risk area and known potential hazards.</b>
	<input type="radio"/> Communicate among SA ICT the location, name of Service Area Incident Commander (IC), Field Incident Commander(s) (FIC), and bridge number of the Incident Command Center (ICC) and each Emergency Operations Center (EOC).
	<input type="radio"/> Establish and communicate with SA ICT the TELCON schedule and dial-in number.
	<input type="radio"/> Establish and communicate with SA ICT the Incident Watch Area (IWA) and mandated Readiness Levels.
	<input type="radio"/> Coordinate with the appropriate Control Center(s) to open an incident summary ticket.
	<input type="radio"/> Notify the Mobile Asset Program Manager of the developing situation.
	<input type="radio"/> Respond to requests for information through the appropriate operational chain of command: SSC Manager (SSCM), DFM, District Manager (DM), Control Center, Field Incident Commander, and Incident Commander.
<input type="checkbox"/> <b>FIR-A2</b>	<b>FAA Emergency Related Policy and Guidance - Reviewed (ALL)</b>
	<input type="radio"/> 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, FAA Emergency Operations Plan
	FAA Order JO1920.5, Technical Operations Services Field Incident Response (FIR)
	FAA Order 1600.69, Facility Security Management Program
	FAA Order JO1900.47, Air Traffic Control Operational Contingency Plans
	Human Resources Policy Manual Vol 11: Guidance on Emergency Situations EMS-11.4

- Service Area/District/Locality-specific emergency-related Supplements, SOPs, Handbooks
- Facility Security Plans and Contingency Plans
- FIR-A3      **Communication Equipment/Services - Checked (ALL)****
  - Test government-issued communication devices, such as cell phones, satellite phones, National Radio Communications System, vehicle transceivers, GETS card connectivity, WPS-enabled cell phones, and paging systems.
  - Request communication support, if needed, through the Incident Command Team (ICT), to include the AXE's Communication Support Team (CST).
- FIR-A4      **Emergency Equipment and Supplies - Verified and Secured (DFM, DM)****
  - Verify locations, quantities, and status of the appropriate resources required for facility, system, and service protection and restoration. Determine shortfalls and take appropriate action.  
  
Reference FAA Order JO 1920.5 for a list of recommended equipment and supplies.
  - Verify location of all mobile generators within your jurisdiction.
  - Identify and arrange a secure location for repositioning mobile equipment, supplies, FAA vehicles, and trailers, as needed.
- FIR-A5      **Fuel Levels - Verified (DFM)****
  - Verify fuel levels for back-up power equipment and government vehicles.  
  
Coordinate refueling (as needed) to maintain, at a minimum, the amount of fuel necessary to run the engine generator for 72 hours, at normal load capacity. If refueling is required (FIR-B3), coordinate fuel top-off to maximum allowed capacity. Reference Order 6980.34.
- FIR-A6      **Emergency Response Personnel - Confirmed (DM)****
  - Identify availability and status of FIR volunteers within your jurisdiction. Direct employees to update their volunteer status on the Technical Operations' National FIR Volunteer Site.
  - Initiate request for FIR volunteers through Incident Command Team.
- FIR-A7      **Local Emergency Warning and Evacuation Information - Disseminated (DFM)****
  - Verify your employees and contractors within IWA are receiving all local warning and evacuation information. If not, take measures to correct or relay information.

**FIR-A8 Facility, Systems, and Service Damage Mitigation Plan - Developed and Initiated (SSCM, DFM, TSM, ESM, DM)**

- Evaluate threat to FAA facilities, systems, and services within your jurisdiction and develop a plan to keep employees safe while mitigating those threats.
- Communicate with employees that no one should be outdoors when the steady-state winds will be greater than or equal to 34kts or 39mph.
- Coordinate with Control Centers and ATC to develop an Equipment Protective Measures Plan, if warranted. Communicate those plans to the Incident Command Team.
- Review FIR B1. Initiate steps to ensure completion 48 hours prior.
- Technical Services Manager and Engineering Services Manager: Review projects in or near the affected area; prepare to stop projects and mitigate impacts.

**Note: It is recommended that the following items be accomplished prior to the start of the annual hurricane season and then updated, as needed.**

- Remove all loose, nonessential material/debris from all sites to include material that may hinder normal drainage.
- Check the mounting of all above-ground tanks. Add permanent reinforcement strapping where needed.
- Check the tie-downs or VHF Omnidirectional Range/Tactical Air Navigation (VORTAC) teepee and teepee doors; replace and/or adjust, as necessary.

**FIR-A9 Emergency-Related Expenses - Initiate Tracking (SSCM, DFM, DM, FIC, IC)**

- Request accounting string from Service Center.
- Review and update necessary contracts. {e.g., Snow removal, tree removal, refueling, mold mitigation, water damage remediation, commercial power, telco}.
- Initiate tracking of emergency-related expenses.

- FIR-A10 Employee Accounting - Initiated (SSCM, DFM, TSM, ESM, DM)**
  - Determine the total number of permanently and temporarily assigned employees whose duty locations (location of the employee's official worksite) are in IWA. Report the total number through the operational chain of command.
  - Ascertain the leave and travel status and evacuation intentions of each employee included in the total above. Maintain this information throughout the incident.
  - Review and update personnel roster.
- FIR-A11 Essential/Vital Records – Backed-Up Off Site (DFM, DM)**
  - Review vital/essential records and back-up off site, out of the hazard area, as needed.
- FIR-A12 Contingency Plans - Reviewed (DFM, DM, FIC, IC)**
  - Review contingency plans for establishing Incident Command Center and Emergency Operation Centers at alternate facilities.
- FIR-A13 Succession Plans/Delegations of Authority - Reviewed and Updated (DFM, DM)**
  - Directors, managers, and supervisors will review, update, and communicate with their subordinates to assign the person who will act on their behalf if they become incapacitated or cannot communicate.
- FIR-A14 Communicate FIR Advisory Check - Complete (SSCM, DFM, DM)**
  - Communicate FIR Advisory Check Completion via normal operating chain of command to the Service Area Incident Command Team. State reason for non-completions. Include total number of employees, determined from step FIR-A10, assigned to duty location(s) within IWA.

**Table C-1. FIR Preparedness Checklist (Continued)**

<b>FIR Watch Checklist (H-48 Hours)</b>	<b>Primary Responsibility</b>
<input type="checkbox"/> <b>FIR-B1</b>	<p><b>Facility and Equipment Damage Mitigation Plan - Implemented (SSCM, DFM, DM, FIC)</b></p> <ul style="list-style-type: none"> <li>○ Fully implement employee protection and damage mitigation plan.</li> <li>○ Test engine generators under full load and ensure transfer switch is operational.</li> <li>○ Load test engine generator starter batteries.</li> <li>○ If the pending threat warrants: <ul style="list-style-type: none"> <li>● Wrap VOR teepees in shipping plastic.</li> <li>● Drive wooden stakes in ground against ventilator hoods to help hold them in place, where appropriate.</li> <li>● Place wooden blocks between air intake louvers of engine generators.</li> <li>● Close and secure doors of unmanned buildings by tying or locking.</li> <li>● Once coordinated with Air Traffic, secure Visual Approach Slope Indicator (VASI) and Precision Approach Path Indicator (PAPI) light housing assembly with appropriate strapping material.</li> <li>● Sandbag facilities and equipment.</li> <li>● Board and tape windows.</li> <li>● Close water control gates and other mechanisms (e.g., pumps).</li> <li>● Coordinate with ATC to “freewheel” radar antennas and/or power down as soon as practical.</li> <li>● Cover vulnerable equipment racks and items with heavy plastic, as needed.</li> <li>● Where possible, elevate loose items indoors to protect from water damage.</li> <li>● Lower and secure any tilt-down towers and poles.</li> <li>● Relocate test equipment and spares susceptible to humidity or moisture damage.</li> <li>● If a facility is susceptible to water intrusion or flooding, as part of the protective shutdown, remove all power to the facility.</li> <li>● Tie down Airport Traffic Control Tower (ATCT) hatch doors to prevent from opening during high winds.</li> </ul> </li> </ul>

- Place cargo straps around heating, ventilation, and air conditioning (HVAC) package units to prevent door from opening during high winds.

 **FIR-B2****Emergency Equipment and Supplies - Repositioned (SSCM, DFM)**

Reposition FAA vehicles, repair parts, materials, and equipment to a safe location, if warranted.

 **FIR-B3****Fuel Tanks - Refueled (SSCM, DFM)**

If fuel tanks do not contain a minimum of 72 hours of fuel, at actual engine generator loading, refuel back-up generator tanks to maximum allowed capacity. Reference Order 6980.34.



Coordinate additional refueling, as needed, to maintain a minimum of 72 hours of fuel, at actual engine generator loading. When refueling, top-off at maximum allowable capacity.

 **FIR-B4****Employee Deployment/Sustainability Schedule - Established (SSCM, DFM, DM)**

Develop employee schedule to ensure appropriate discipline coverage for the duration of the incident.

 **FIR-B5****Daily FIR TELCONs - Participate (DFM, TSM, DM)**

Prepare for and participate in daily FIR TELCON.

 **FIR-B6****Local Emergency Warning and Evacuation Information - Disseminate (DFM)**

Continue to verify your employees and contractors within IWA are receiving all local warning and evacuation information. If not, take measures to correct or relay information.

 **FIR-B7****Communicate FIR Watch Check - Complete (SSCM, DFM, DM)**

Communicate FIR Watch Check Completion via normal operating chain of command to the Service Area Incident Command Team (SA ICT). State reason for non-completions.

FIR Warning Checklist (H-24 Hours)	Primary Responsibility
------------------------------------	------------------------

- |  |   |
|--|---|
| <input type="checkbox"/> <b>FIR-C1</b> | <b>FIR Emergency Response Teams – Pre-Positioned (DM, IC)</b>   |
| <input type="radio"/>                  | In coordination with the FIC and IC, pre-position emergency response teams, as necessary, to expedite response efforts.   |
| <input type="radio"/>                  | Verify response teams have the necessary instructions, Personal Protective Equipment (PPE), suitable food, water and shelter, and serviceable communication devices.  |
| <input type="radio"/>                  | Report emergency response teams' locations to ICC.  |
| <input type="checkbox"/> <b>FIR-C2</b> | <b>Local Emergency Warning and Evacuation Information - Disseminate (DFM)</b>   |
| <input type="radio"/>                  | Continue to verify your employees and contractors within IWA are receiving all local warning and evacuation information. If not, take measures to correct or relay information.   |
| <input type="checkbox"/> <b>FIR-C3</b> | <b>Employee Relocation Assistance - Coordinate (SSCM, DFM, DM)</b>  |
| <input type="radio"/>                  | Coordinate assistance for those employees who may need help complying with evacuation orders.   |
| <input type="checkbox"/> <b>FIR-C4</b> | <b>Mitigation Efforts - Brief (SSCM, DFM, TSM, DM)</b>  |
| <input type="radio"/>                  | Brief Incident Command Team on the mitigation efforts taken to protect employees, facilities, and equipment.  |
| <input type="checkbox"/> <b>FIR-C5</b> | <b>FIR Watch List - Confirm (SSCM, DFM, DM, FIC, IC)</b>  |
| <input type="radio"/>                  | Confirm with Air Traffic and the Incident Command Team what NAS facilities, systems, and services within your jurisdiction require higher than normal restoration priority because of circumstances unique to the incident. For instance, Federal Emergency Management Agency/Department of Defense (FEMA/DoD) may have identified a reliever airport within your jurisdiction that they intend to use for humanitarian relief. Or, Air Traffic may have identified a specific NAVAID that is critical to managing traffic. |
| <input type="radio"/>                  | Initiate necessary actions to prioritize those facilities, systems, and services.   |
| <input type="checkbox"/> <b>FIR-C6</b> | <b>Scheduled Maintenance - Postpone (SSCM, DFM)</b>   |
| <input type="radio"/>                  | Curtail or postpone scheduled maintenance activities within IWA. Consider whether a local maintenance moratorium is needed.   |

- FIR-C7      Employees - Brief (SSCM, DFM, TSM, ESM, DM)**
  - Brief employees on expectations for:
    - Reporting their and their dependent's status once released.
    - Monitoring and adhering to local emergency officials and their evacuation orders.
    - Responding to work post-incident.
  
- FIR-C8      Non-Essential Employees - Release (SSCM, DFM, DM)**
  - Reconfirm and document employee leave and travel status.
  - Reconfirm and document employees' evacuation plans, their location during the incident, and how to contact them.
  
- FIR-C9      Essential Employees - Brief (SSCM, DFM, DM)**
  - Develop, document, and communicate a work schedule for essential personnel.
  - Communicate schedule with DFM, IC, and CC.
  
- FIR-C10      Communicate FIR Warning Check - Complete (SSCM, DFM, DM)**
  - Communicate FIR Warning Check Completion via normal operating chain of command to the Service Area Incident Command Team. State reason for non-completions.

**H-HOUR - Time and date Districts were directed to have the FIR Warning Checklist complete. Typically, this time and date will be before the winds are forecasted to exceed 34kts/39mph sustained or evacuation order given.**

**Table C-1. FIR Preparedness Checklist (Continued)**

<b>FIR Post Incident Check</b>	<b>Primary Responsibility</b>
<input type="checkbox"/> <b>FIR-D1</b>	<p data-bbox="422 304 1474 346"><b>Employee Accountability - Complete (SSCM, DFM, DM)</b></p> <p data-bbox="422 367 1474 493">To the extent possible and reasonably permitted by emergency, safety conditions and available infrastructure, make a good faith effort to determine the status of personnel and dependents. Ascertain the following:</p> <ul data-bbox="422 504 1474 829" style="list-style-type: none"> <li data-bbox="422 504 1474 546">● Can the employee report for duty? If not, why?</li> <li data-bbox="422 556 1474 598">● When might the employee reasonably be able to report for duty?</li> <li data-bbox="422 609 1474 651">● Employee's current location?</li> <li data-bbox="422 661 1474 829">● Any necessary information about the employee's situation (e.g., dependents' welfare, personal property damage) to determine what emergency-related services and benefits might be needed and/or made available.</li> </ul> <p data-bbox="422 850 1474 934">Report employee accountability by District/Group through operational chain of command: SSCM, DFM, TSM, Incident Commander.</p> <ul data-bbox="422 955 1474 1218" style="list-style-type: none"> <li data-bbox="422 955 1474 997">● Ratio of employees accounted for, organized by District/Group.</li> <li data-bbox="422 1008 1474 1050">● Number of employees negatively affected.</li> <li data-bbox="422 1060 1474 1144">● Effects: List injuries/out-patient care/in-patient care/dwellings/displaced/dependents. Do not associate names.</li> <li data-bbox="422 1155 1474 1218">● Special Employee Requests.</li> </ul>
<input type="checkbox"/> <b>FIR-D2</b>	<p data-bbox="422 1228 1474 1270"><b>Non-Essential Employees - Recall (SSCM, DFM, DM)</b></p> <p data-bbox="422 1281 1474 1333">Once it is safe, direct employees to return to work.</p>
<input type="checkbox"/> <b>FIR-D3</b>	<p data-bbox="422 1344 1474 1386"><b>NAS Status - Check (SSCM, DFM, DM)</b></p> <p data-bbox="422 1396 1474 1480">Identify NAS service outages and capabilities and report through the appropriate Control Center.</p>
<input type="checkbox"/> <b>FIR-D4</b>	<p data-bbox="422 1491 1474 1533"><b>Damage Assessment - Initiate (SSM, DFM, DM)</b></p> <p data-bbox="422 1543 1474 1627">With coordination from the Field Incident Command Team, initiate damage assessment, when it is safe to do so.</p>
<input type="checkbox"/> <b>FIR-D5</b>	<p data-bbox="422 1638 1474 1680"><b>FIR Incident Command - Brief (FIC, DM)</b></p> <p data-bbox="422 1690 1474 1753">Participate in District, SA FIR TELCONs to discuss:</p> <ul data-bbox="422 1764 1474 1854" style="list-style-type: none"> <li data-bbox="422 1764 1474 1806">● Employee status</li> <li data-bbox="422 1816 1474 1854">● Facility, system, and service status</li> </ul>

- Damage assessments results
- Resource requests: personnel, communication, parts, and supplies

**FIR-D6      Communicate FIR Post Incident Check - Complete (FIC, DM)**

- Communicate Check Completion via normal operating chain of command to the Service Area Incident Command Team. State reason for non-completions.

**Checklist Acronyms**

SSCM	System Support Center Manager	DM	District Manager
DFM	District Facility Manager	FIC	Field Incident Commander
TSM	Technical Service Manager	IC	Incident Commander
ESM	Engineering Service Manager		

**8. Deactivation.** As the service interruptions that resulted from the incident are restored to the point where routine NAS operations can assume control of the restoration and recovery efforts, FIR-related efforts will cease, and the remaining post-incident efforts will be managed through routine NAS operations. Deactivation of the FIR apparatus will come from the AJW VP, Deputy VP, SA Director(s), SA ICT Manager and Tactical Operations Programs (AJW-B620). Nat-CREO will coordinate deactivation with all supporting agencies.

Restoration and Recovery Teams still could be supporting efforts and will be managed by the ICT, even after deactivation.

## Appendix D. Pandemic Response and Recovery

### 1. Introduction

**a.** A global pandemic outbreak has the potential to significantly impact FAA's workforce and ability to ensure continued performance of essential functions. Pandemic outbreaks are caused by novel viruses. Because few (if any) employees have any immunity to a novel virus, pandemic outbreaks present a serious risk of long-term and widespread absenteeism. This risk requires that FAA conduct appropriate workforce preparedness and protection activities to protect employees, ensuring essential functions continue without disruption. This plan provides guidance and recommendations designed to:

- (1) Mitigate the impacts of a pandemic to FAA's workforce.
- (2) Ensure FAA's ability to sustain essential functions in the face of services, employee health, and economic impacts caused by a pandemic.

**b.** This Appendix is a living document with its foundation based on a worst-case scenario of a severe pandemic yet is flexible and scalable to address a mild or moderate pandemic.

**c.** The DOT has broad responsibilities for stewardship of the Nation's transportation systems, not only during routine operations, but also in times of crisis and emergencies. DOT's Primary Mission Essential Functions (PMEFs) are to ensure critical transportation systems remain operational and available. FAA has the essential function of maintaining the NAS, ensuring a coordinated National response. Reference FAA Order 1910.1x, FAA Continuity Program, for detailed listing of PMEFs and MEFs.

**2. Purpose.** Detail processes and procedures to support sustainment of FAA's essential services during a pandemic.

### 3. Situation and Assumptions

**a.** Each outbreak is unique and will have different characteristics and impacts. This guidance is based on comprehensive strategies that should be implemented for seasonal influenza outbreaks and adapted for use in outbreak scenarios in which the following general assumptions apply:

- (1) The outbreak response requires AJW's leadership, recommendations, and support to maintain the Nation's transportation system.
- (2) The outbreak has potential to cause significant health effects to FAA employees, contractors, and their families.
- (3) The outbreak could impact FAA's ability to continue its essential functions by triggering significant absenteeism or supply chain disruptions.
- (4) The outbreak has potential to be an extended event (e.g., longer than 30 days or multiple outbreaks).

**b.** Based on these assumptions, AJW's response to an outbreak will:

- (1) Be flexible and scalable, by tailoring actions to the specific risks presented.

(2) Be implemented in phases that are dependent on unique characteristics of the outbreak.

(3) Include protective measures that maintain the health and safety of employees and contractors, subject to available resources and official guidance from lead Federal agencies (e.g., Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services (HHS), and DHS).

c. Perhaps the most urgent concern posed by pandemic outbreak is the potential threat to the air traffic controllers, AJW technicians, and other critical operational personnel who operate and maintain the NAS. For the most part, these duties cannot be accomplished by telecommuting. The primary intent of this guidance is to ensure that if the pandemic degrades the Agency's ability to provide air navigation and related services, then these impacts will be mitigated, predictable, and controlled to the extent practicable.

d. Planning for any incident involves three tiers: strategic, operational, and tactical.

(1) Strategic plans provide a framework for guiding emergency management and homeland security activities. This level of planning allows stakeholders to focus on the longer term and articulate, monitor, and evaluate efforts to prevent, protect against, mitigate, respond to, and recover from all threats and hazards that might affect a jurisdiction or an organization.

(2) Operational plans describe roles and responsibilities, tasks, integration requirements, actions, and other expectations of an organization or jurisdiction during actual or potential incidents. These plans also may address delivery of capabilities in support of steady-state activities. They may include coordinating and integrating activities and resources from other departments, agencies, and organizations within a jurisdiction and across the whole community. Operational plans can apply to all threats and hazards and contain both the governing authorities and actions expected by organizations. Operational-level planning products should be flexible, adaptable, integrated with other plans, and based on the best available risk assessments.

(3) Tactical plans focus on managing resources, such as personnel and equipment that play a direct role in an incident. Pre-incident tactical planning, based on existing operational plans, provides the opportunity to pre-identify personnel, equipment, and other execution needs. Often, tactical plans outline actions necessary to accomplish goals identified in an operational plan.

e. CoVID-19 showed that a pandemic may cause damage to infrastructure. Therefore, no single plan may be enough for a pandemic which may require a combination of plans to ensure continued performance of essential functions.

f. Cleaning and disinfecting of FAA facilities and equipment was accomplished in accordance with CDC guidelines. However, exposed electronics, air traffic control NAS keyboards and displays – including touchscreens, mice and trackballs, processors and/or fans associated with equipment – did show affects from disinfecting and cleaning agents. Very specific cleaning agents, as specified by the U.S. Environmental Protection Agency (EPA),

ESOG and Safety and Environmental Compliance Managers (SECM), and on-site AJW personnel should be considered and used.

**g.** A pandemic may result in an increase or decrease in demand for FAA services. While overall travel may decrease, emergency response activities, requests for waivers and exemptions from current regulations, and support to State and local governments may increase. Consequently, FAA may need to rearrange its priorities while working with reduced staff.

#### **4. AJW-Specific Assumptions**

**a.** The following assumptions should be considered:

(1) FAA buildings and facilities may be operational during a pandemic outbreak, as much as possible.

(2) All FAA Lines of Business (LOB) and Staff Offices (SO) have actionable Continuity of Operations Program (COOP) plans and capabilities, in accordance with Federal Continuity Directives, as appropriate.

(3) A separate, simultaneous incident, such as a terrorist attack or a natural or man-made disaster in the U.S., may require the use of alternate facilities during a pandemic and utilize mobile assets.

(4) Temporarily pausing most construction projects at Agency facilities to ensure the safety of employees, contractors, and the public. Projects in critical phases that would affect operations or safety, if not completed, may be allowed to continue. New projects may be delayed. Design work on future projects could continue. All work hinges on direction from the agency in charge, CDC.

(5) Essential functions, FAA operations, and support requirements will continue to be people-dependent. These activities require human interactions to be carried out; however, many interactions may not require face-to-face contact or can be conducted with precautionary measures.

(6) Travel restrictions, such as limitations on mass transit, implemented at State, local, and/or tribal levels, may affect the ability of employees to get to work. However, generally, the Federal government has not recommended restrictions on local travel.

(7) Based on current manufacturing technologies and capabilities and CoVID-19 lessons learned, a vaccine that is matched to the pandemic strain may not be available for FAA employees for some time; this includes the first pandemic wave, and possibly, the second wave.

(8) Depending on how the pandemic spreads across the U.S., not all FAA facilities may be affected at the same time, particularly in the first weeks of a pandemic. This proved true during CoVID-19 and the first wave of the 2009 H1N1 pandemic. New York City and Chicago were hit very hard, whereas Washington, D.C., was not.

(9) There are too many factors associated with international air travel to accurately predict which areas of the U.S. will be affected first, as evidenced by the 2009 H1N1 pandemic.

#### **5. General Concept of Pandemic Planning**

Preparedness and response efforts articulated in this plan are focused on slowing or limiting the spread of a pandemic illness among employees, while maintaining services, based on employee

availability. While no one intervention will completely remove the threat of illness or guarantee that it does not spread, a combination of interventions or approaches, when layered on top of each other, are likely to have a significant impact. Infectious disease prevention techniques are appropriate in many different situations; deciding which ones to implement will depend on the characteristics of the disease at hand and direction from the CDC.

## **6. Phased Implementation**

**a.** AJW's pandemic response is risk-based and must be flexible enough to accommodate a wide range of potential scenarios and varying local or regional conditions. Since a pandemic outbreak may take place over an extended period, impacts may vary across different regions or may present different risks to workers and operations, based on their individual roles. Risk assessments are designed to determine of each worker the threat and vulnerability to acquiring a disease, as well as the consequences to mission accomplishment, if that individual becomes ill and is not available to perform his/her duties. A phased and decentralized approach to implementation allows Technical Operations to scale its activities appropriately to the level of perceived risk or local disease. Activities can be escalated and de-escalated, as appropriate, to protect workers and maintain performance of essential functions.

**b.** The following phases are general descriptions only that may assist decision makers in identifying types and timing of recommended actions. They should not be seen as rigid categories that replace the need for ongoing risk management and situational assessments by FAA, ATO, and AJW.

## **7. Preparedness Phase**

**a.** Preparedness is the "steady-state" in the absence of a specific threat. This phase includes the period outside of the annual influenza season where ongoing surveillance indicates that there is no identified threat from any specific disease, influenza strain, or any influenza cases being detected.

**b.** During this phase, Technical Operations should be conducting risk assessments to develop appropriate procedures and identify and obtain necessary resources (e.g., hand sanitizer, disinfectants, additional PPE, etc.).

**c.** Plans should be reviewed and refined to reflect the latest guidance regarding strain severity and projected vulnerabilities and impacts. These refinements should be supported by updated policies and procedures, with employee training provided on the same.

**d.** AJW's preparedness activities will increase and include specific messaging when there is general concern or expectation of a pandemic outbreak. This could include the annual onset of influenza season, identification of a few isolated novel influenza cases, or laboratory detection of a specific, threatening, pandemic influenza strain. With knowledge of an elevated threat, priorities shift from building capabilities to the actual implementation of measures designed to prevent or delay onset of a pandemic in the workplace. This shift should trigger collection, analysis, and dissemination of pertinent information, such as workforce absenteeism rates, to ensure full situational awareness and anticipate future requirements for workforce protection actions.

e. A special note about employees and families. Just as a natural disaster (hurricane, earthquake, etc.) individuals must be prepared and educated about their personal responsibilities before a pandemic strikes to limit or mitigate the spread of infection. Individuals also must understand the potential for long-term disruptions caused by a pandemic, including impacts to their families. An individual's actions may be one of the most important elements for response to a pandemic by engaging in appropriate personal hygiene practices to help limit spread of the disease at work and at home. This plan recognizes the need to prepare and educate AJW's workforce and its family members. It is suggested every employee complete a family preparedness plan. In addition to basic personal hygiene concepts, AJW employees and contractors also should be educated on leave policies and their responsibility for performance of essential functions.

## **8. Incident and Incident Response Phase (Alternate Facilities)**

### Headquarters

a. Although the activation of COOP procedures may not be appropriate for a pandemic situation, FAA Headquarters Primary Alternate Facility (PAF) can provide a protected environment for a limited group of occupants. In addition, an event or incident requiring use of the PAF may occur during a pandemic. The facility is fully self-contained with its own food, water, and electricity supplies. The PAF is not a publicly-accessible building; however, additional precautions may be implemented including:

(1) Limiting movement of individuals to an area that can be cleaned periodically with disinfectant by facility staff.

(2) Providing hygiene briefings. Alcohol-based gels will be available for waterless hand cleansing; tissues and no-touch waste containers will be available at every work station, and public areas will be sanitized periodically with a recommended cleaning solution.

(3) Following CDC and U.S. Office of Personnel Management (OPM) guidance regarding management of ill or suspected ill employees.

(4) Adhering to Federal Occupational Health and CDC recommendations concerning the use of PPE.

### Service Area/Field Facilities

b. Within the SAs, facility emergency preparedness consists of several contingency plans or tactical plans such as Facility Security Plans, Operational Contingency Plans, and COOP Plans. These plans lay out actions necessary to accomplish goals identified in an operational plan. Additionally, they identify alternate facilities, alternate work spaces, and rally points. FAA does have Letters of Agreement (LOA) for use of those facilities not owned by the Agency. Unfortunately, during CoVID-19, a number of those LOAs were nullified due to the severity and impacts of CoVID-19. This shortfall put some of our ATC facilities at extreme risk, specifically the Airport Traffic Control Towers (ATCT). Therefore, alternate workspace or facilities may not be accessible, regardless of agreements in place.

## Response Actions

c. If early interventions are unable to prevent onset of a pandemic within the workplace, and there is increased absenteeism associated with the outbreaks, FAA will need to review protective action decisions and determine if additional actions are required to limit the spread of the disease among employees and any public visitors. FAA also will need to implement appropriate strategies for continuing essential functions if increasing rates of absenteeism begin to affect operations. Examples of these strategies include dispersing staff, implementing shift work, or adjusting workflow processes to minimize need for face-to-face interaction. The potential for long-term disruptions and repeated “waves” of infection will require ongoing assessment and adjustment of response strategies. AJW may be required to track operating status and which interventions are being implemented currently. Furthermore, there may be ongoing data calls and coordination regarding rates of absenteeism, functional capabilities, and status of the NAS.

d. Other activities may include:

- (1) (All) Review and update Succession Plans/Delegation of Authority.
- (2) (SAs) Account for employees during a pandemic.
- (3) Service Area and/or senior leadership shall limit access to operational facilities and areas only to those individuals who are conducting official business (i.e., restricting informational tours or similar activities).
- (4) (Headquarters [HQ]) Explore the possibility of implementing temporary changes to policies during a pandemic relating to overtime, compensatory time, core duty hours, telework, or remote work to provide increased flexibility to managers in the efficient use of existing staff.
- (5) (HQ) Request FAA Logistics Center (FAALC) distribute cleaning and disinfecting agents, once identified by governing agencies, and include additional PPE.
- (6) (SA) Initiate tracking of related expenses.
- (7) (HQ) Consider limiting travel only to mission-critical travel; perform essential duties related to protection of life and property. For systems or equipment inspections, if those systems or equipment are integral to security, safety, or proper functioning of the mission, and for training, to meet certification or licensing requirements or maintain critical functional or occupational competencies.
- (8) (SA) Ensure major facilities that have alternate work sites inspect those sites to continue operations from those locations, if need be.
- (9) Service Area leadership shall encourage employees to create a family preparedness plan.
- (10) Service Area leadership shall establish a plan to continue operations from an alternate location within the facility, if possible, so that deep cleaning, maintenance, or other operational work may be performed with minimal disruption to operations (i.e., Standard Terminal Automation Replacement System (STARS) facilities moving operations to the training and support facility to accommodate COVID deep cleaning).

## **9. Post-Incident (Recovery and Mitigation) Phase**

**a.** As absenteeism rates begin to return to normal, LOB/SO will begin to scale back workforce protective actions and return to normal operating conditions. Since influenza outbreaks may produce several waves of infection over a long period, it is very important for LOB/SO to continue to monitor absenteeism rates and adjust response strategies, as necessary.

**b.** Once normal operations have been restored, each SA should conduct an After Action Review (AAR) to determine which response actions were effective and identify opportunities for improved response in future outbreaks. These AARs will generate a list of action items that shall be addressed prior to the next outbreak.

## **10. References, Authorities, Definitions, and Acronyms**

DOT and FAA Documents

Department of Transportation Pandemic Influenza Plan

DOT Order 1100.62B, Department of Transportation Organization Manual – Federal Aviation Administration

FAA Order 1100.1B, FAA Organization – Policies and Procedures

FAA Order 1900.1, FAA Emergency Operations Plan (as amended)

Crisis Management Handbook for Significant Events (as amended)

FAA Order 1910.1, Continuity of Operations Plan for Washington Headquarters (as amended)

FAA Order 1990.1, FAA National Command and Control System (as amended)

Human Resource Policy Manual (HRPM) Volume #12: Work Life and Benefits (Telework)  
WLB-12.3

## Appendix E. Earthquake Response

**1. Purpose.** Establish a framework from which the SAs will base their response to earthquakes. The ability to quickly build and maintain shared situational awareness (SSA) is absolutely critical for effectiveness of response to earthquakes. AJW CREO Manager's focus shifts to employing ATO's capabilities to deliver a unified and decisively effective response, in concert with the rest of FAA and interagency partners.

**2. Objectives.** It is imperative to understand all aspects of earthquake response operations;

a. Earthquake Facts

b. Planning – Identifying:

(1) <sup>5</sup>National Critical Infrastructure & Key Resources (CIKR)

(2) Risk to FAA Infrastructure

(3) Facility Hazards

c. Response Operations

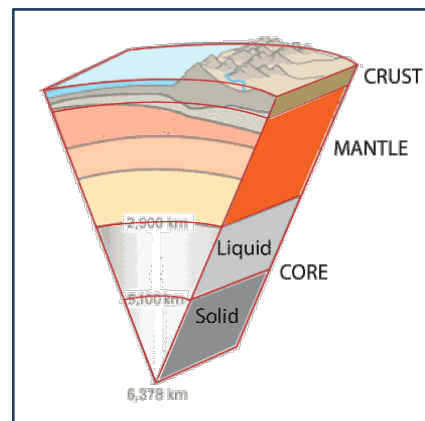
**3. Earthquake Facts.** An earthquake is ground shaking caused by a sudden slip on a fault or fault zone, releasing energy waves traveling through the earth's crust causing the shaking that we feel.

Faults are caused by tectonic plates grinding and scraping against each other as they continuously and slowly move. In California, for example, there are two plates – the Pacific Plate, which extends from western California to Japan, including much of the Pacific Ocean floor – and the North American Plate, which is most of the North American continent and parts of the Atlantic Ocean. The Pacific Plate moves northwestward past the North American Plate along the San Andreas Fault at a rate of about two inches per year.

Parts of the San Andreas Fault system adapt to this movement by constant "creep," resulting in many tiny shocks and a few moderate earth tremors. In other parts, strain can build up for hundreds of years, producing great earthquakes when it finally releases. Large and small earthquakes also can occur on faults not recognized previously.

The magnitude of an earthquake is related to the area of the fault on which it occurs; the larger the fault area, the larger the earthquake. The San Andreas Fault is 800 miles long and only about 10-12 miles deep, so that earthquakes larger than magnitude 8.3 are extremely unlikely.

Figure E-1 Earth's Crust



<sup>5</sup> The CIKR is an umbrella term referring to the assets of the United States essential to the Nation's security, public health and safety, economic vitality, and way of life.

Magnitude scales, like the moment magnitude, measure the size of the earthquake at its source. An earthquake has one magnitude. The magnitude does not depend on where the measurement is made. Often, several slightly different magnitudes are reported for an earthquake. This happens because the relation between the seismic measurements and the magnitude is complex and different procedures often will give slightly different magnitudes for the same earthquake.

Intensity scales, like the Modified Mercalli Scale and the Rossi-Forel scale, measure the amount of shaking at a particular location. An earthquake causes many different intensities of shaking in the area of the epicenter where it occurs. So the intensity of an earthquake will vary depending on where you are. Sometimes earthquakes are referred to by the maximum intensity they produce.

The “size” of earthquakes is commonly expressed in two ways – magnitude and intensity. Magnitude is a measure of the total energy released during an earthquake. It is determined from a seismogram, which plots the ground motion produced by seismic waves.

Because magnitude does not describe the extent of the damage, its usefulness is limited to an approximation of whether the earthquake is large, medium, or small in size.

The destructiveness of an earthquake is a complex matter, related to the geology, population density, and cultural features of a specific area, at a specific distance from the epicenter.

Seismologists and geologists also describe earthquakes by their intensity. Measured on a numerical scale, intensity is the degree of damage or observable effects caused by an earthquake at a particular location. An earthquake of a particular magnitude will produce different intensities at different places, according to geology, population density, cultural features, and distance from the epicenter.

The most widely used intensity scale, the Modified Mercalli Scale, is divided into 12 degrees, each identified by a Roman numeral.

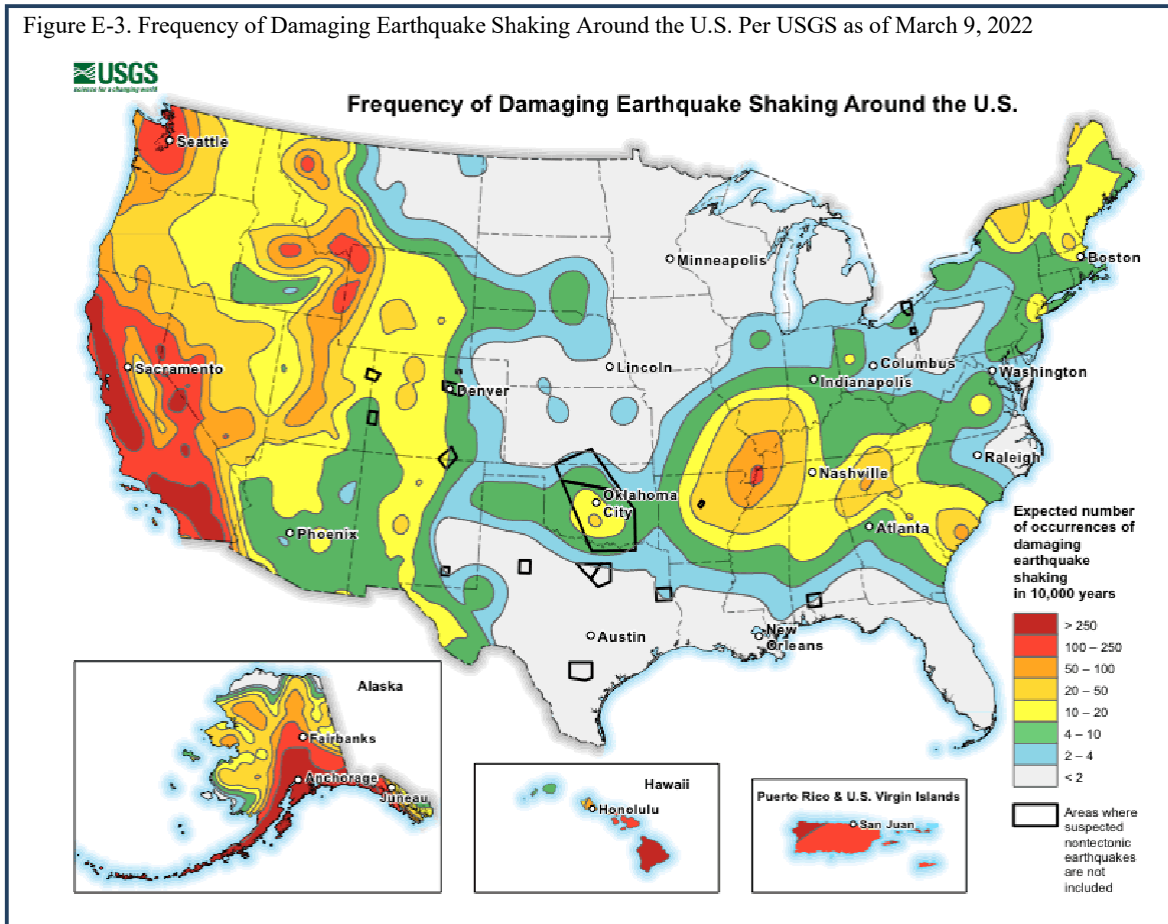
**4. National Critical Infrastructure & Key Resources.** Past incidents have clearly demonstrated that proper planning, management, and implementation are essential for successful response, restoration, and recovery operations. Before the incident, this includes developing appropriate emergency management plans, training and exercising plans, training local

Figure E-2 Modified Mercalli Scale

Modified Mercalli Scale		Richter Magnitude Scale
I	Detected only by sensitive instruments	1.5
II	Felt by few persons at rest, especially on upper floors; delicately suspended objects may swing	2
III	Felt noticeably indoors, but not always recognized as earthquake; standing autos rock slightly, vibration like passing truck	2.5
IV	Felt indoors by many, outdoors by few, at night some may awaken; dishes, windows, doors disturbed; autos rock noticeably	3
V	Felt by most people; some breakage of dishes, windows, and plaster; disturbance of tall objects	3.5
VI	Felt by all, many frightened and run outdoors; falling plaster and chimneys, damage small	4
VII	Everybody runs outdoors; damage to buildings varies depending on quality of construction; noticed by drivers of autos	4.5
VIII	Panel walls thrown out of frames; fall of walls, monuments, chimneys; sand and mud ejected; drivers of autos disturbed	5
IX	Buildings shifted off foundations, cracked, thrown out of plumb; ground cracked; underground pipes broken	5.5
X	Most masonry and frame structures destroyed; ground cracked, rails bent, landslides	6
XI	Few structures remain standing; bridges destroyed, fissures in ground, pipes broken, landslides, rails bent	6.5
XII	Damage total; waves seen on ground surface, lines of sight and level distorted, objects thrown up in air	7
		7.5
		8

responders, and continuous updating of documents and training plans. Planning, training, and clearly defined roles are important. The FIR apparatus is built to quickly activate a response to any incident to mitigate the impact to the NAS and all associated equipment and services.

a. Earthquake Risk in SA. There are many places in the U.S., called “fault zones,” that are at risk for serious earthquakes. These include states along the west coast, in the south, and central U.S. While very strong or intense earthquakes are rare, less powerful earthquakes also can be dangerous. The key to surviving an earthquake and reducing the risk of injury lies in planning, preparing, and practicing. It is important to know your area of responsibility, including critical infrastructure.



b. <sup>6</sup> CIKR. Our Nation's well-being relies upon secure and resilient critical infrastructure – the assets, systems, and networks that underpin American society. The National Infrastructure Protection Plan outlines how government and private sector participants in the critical

<sup>6</sup> Per Homeland Security, CIKR stands for “Critical Infrastructure and Key Resources” – an umbrella term referring to the assets of the United States essential to the nation’s security, public health and safety, economic vitality, and way of life.

infrastructure community work together to manage risks and achieve security and resilience outcomes.

c. As part of the National Infrastructure Protection Plan, public and private sector partners in each of the 16 critical infrastructure sectors and State, local, tribal, and territorial government communities have developed a Sector-Specific Plan that focuses on the unique operating conditions and risk landscape within that sector.

d. Aviation lies within the Transportation Systems Sector-Specific Plan, which guides and integrates efforts to secure and strengthen the resilience of transportation infrastructure and describe how the Transportation Systems Sector contributes to the overall security and resilience of the Nation's critical infrastructure, as set forth in Presidential Policy Directive 21 (PPD-21), Critical Infrastructure Security and Resilience.

e. When a disaster strikes, natural or man-made, it is important for the CREO Program Managers, DFMs, SSCs, and all frontline managers to be familiar with the critical infrastructure within their SA. Critical infrastructure is vital to the economic welfare of the U.S.; however, when damaged, it can pose a huge risk to the public. Critical infrastructure to be familiar with includes:

- (1) Dams
- (2) Mass Transit
- (3) Pipeline Systems
- (4) Nuclear Reactors
- (5) Rail Tunnels and Bridges
- (6) Electrical Grid

f. The Transportation Services Sector Specific Plan, dated 2015, lists the following as transportation critical infrastructure:

- (1) Airports, heliports, seaplane bases,
- (2) Support services,
- (3) Air Traffic Control,
- (4) Navigation facilities.

**5. Significant Risk to FAA Infrastructure.** Earthquakes are, perhaps, the most destructive disasters for airports and aviation facilities. This “no-notice” event means earthquakes can cause more injuries to people in the facilities and major damage to structures that aren't built to standards. Also, earthquakes quickly emphasize the lack of sufficient emergency plans, procedures, and policies.

Earthquake hazards include any physical phenomenon associated with an earthquake that may produce adverse effects on human activities. While they are used often as synonyms, it is useful to distinguish between "hazards" and "risk." Hazards are natural phenomena that might impact a region, regardless of whether there is anyone around to experience them or not. Risk refers to

what we stand to lose when the hazard occurs; it is what we have built that's threatened. Usually, risk can be measured in dollars or fatalities. Generally, hazard is measured in more physical units, such as energy, shaking strength, and depth of water inundation.

**a. Primary earthquake hazards are:**

(1) Ground Shaking - The Earth shakes with the passage of earthquake waves, which radiate energy that had been "stored" in stressed rocks and were released when a fault broke and the rocks slipped to relieve pent-up stress.

(2) Landslides - The term landslide includes a wide range of ground movement, such as rock falls, deep failure of slopes, and shallow debris flows. Gravity acting on a steep slope is the primary reason for all landslides, but there are other contributing factors.

(3) Liquefaction - Soil liquefaction is a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading.

(4) Surface Rupture - Surface rupture is an offset of the ground surface when fault rupture extends to the Earth's surface. Any structure built across the fault is at risk of being torn apart as the two sides of the fault slip past each other.

**b. Secondary earthquake hazards are those that are caused by the primary hazards and often may be more catastrophic:**

(1) Tsunami - A tsunami (pronounced tsoo-nah-mee) is a wave train, or series of waves, generated in a body of water by a disturbance that moves the whole water column.

(2) Seiche - A seiche (pronounced: saysh) is a standing wave in an enclosed or partially-enclosed body of water. Triggered by earthquake waves, seiches and seiche-related phenomena have been observed on lakes, reservoirs, swimming pools, bays, harbors, and seas.

(3) Flooding

(4) Fire

**6. Facility Hazards.** The threat doesn't end once the earthquake is over. Aftershocks, landslides, and other earth movement can cause items to shift, fires to start, tsunamis to form, and more. Even a minor earthquake can cause pipes to snap and objects inside a facility to shift. In some cases, earthquakes can cause tsunamis in areas along the coast. These can happen minutes to hours after a strong earthquake, and their average number per day decreases rapidly as time passes.

The following critical considerations and assumptions outline the challenges disaster response operations will face.

**a. Assumptions**

(1) Assume all buildings are unsafe to enter and do not enter an area immediately after any earthquake. AJW technicians, EOSH, and engineering personnel will assess damage and dictate what buildings and facilities are safe to enter. Local and State emergency response officials will dictate when it is safe to move about the area.

(2) In the event an earthquake magnitude 5.0Mw or greater, it should be assumed, until reports prove otherwise, that significant infrastructure damage may have occurred.

(3) Earthquake impacts > 6.0Mw will be accompanied by large scale critical infrastructure and service sector disruption.

(4) With impact magnitude of 6.2Mw and greater, the process of liquefaction begins to occur in geographical areas.

**b. Considerations.** When approaching a facility, consider the following risks:

(1) Site Access

- (a) Accessible by Emergency Service vehicles
- (b) Secured; security features are functioning
- (c) Clear of obstructions (e.g., debris, fallen wires, water, fuel)
- (d) Smell of fumes, odor, or visible chemical stains

(2) Building Exterior

- (a) Building appears plumb
- (b) Segments or sections appear aligned top to bottom
- (c) Reinforcing steel is not visible
- (d) Exterior doors open easily
- (e) Glass is not cracked or broken
- (f) Attachments appear secure:
  - Catwalks
  - Louvers
  - Lights
  - Wires

(3) Screening of Equipment

- (a) Water and sewer services are available
- (b) Commercial power is available
- (c) Engine generator is functional
- (d) Fire pumps are functional
- (e) Electrical panels are functional
- (f) Elevators out of service (OTS)
- (g) Battery Racks and batteries are secure in mounts
- (h) HVAC is functional

**7. Response Operations.** Response operations could take a significant amount of time, based on the intensity of the earthquake. Restoration of services is priority, and recovery of facilities to pre-incident condition is secondary.

**a.** There are many factors that contribute to an earthquake response operation. Safety of employees is paramount and should be thought of first. Assessment and restoration teams must – at all times – be conscious of their own safety and the safety of their team members.

**Note:** Federal, State and local resources will be prioritized, first for life saving, and then for life sustaining, in all FEMA mission areas that are mobilized to prepare for, protect against, respond to, recover from, and mitigate hazards identified prior to, during, and after an event.

(1) Safety Considerations

- (a) Adhere to Two-Person Rule, always
- (b) Identify and wear Proper Personal Protective Equipment (PPE)
- (c) Track Assessment Team movements
- (d) Be cautious of falling debris from buildings
- (e) Be cognizant of earthquakes/aftershocks; if you are outside, move away from buildings or other falling hazards. If you are inside, do not run out of the building until the shaking has stopped.
- (f) (Consideration) Designate a “safety” person, if you work in a team of three or more, who will remain outside the building to raise the alarm, if necessary.

**b.** Response Planning. Like any significant incident, baseline information will be collected to better prepare for a response to this “no-notice” event.

(1) Identify the provoking incident

- (a) Determine Magnitude (Mw) and Modified Mercalli Intensity
- (b) Determine Latitude/Longitude
- (c) Determine earthquake depth
- (d) Determine location, city(s) and population affected (Incident Watch Area)

(2) Begin employee accountability. Start with baseline numbers (i.e., assigned, leave, detail) It is understood that this will take some time due to potential outages (e.g., power, cellular).

(3) Assessments. The following list is not all inclusive.

- (a) Condition of Access to a Facility – Roads, ground cover, debris on ground.
- (b) Structure (Exterior) – Centered on foundation, antennas, power feed cables, junction boxes, fuel tanks and associated equipment.
- (c) Power – Condition of transformers and exterior power sources.
- (d) Condition of Facility – Exterior walls, roof, foundation.
- (e) Noticeable fumes, smoke, odor
- (f) (If Applicable) Security Feature Status

- (g) Exterior Doors Open Easily
  - (h) Glass Condition
  - (i) Interior of Facility – Exit and entry paths, overhead items secured, buckled or cracked floor, interior doors open properly, equipment status (alarms).
  - (j) Facility Operating on Commercial Power, Stand-by, or Batteries
  - (k) Assess Electrical Shock Hazard
  - (l) Equipment Screening. Water and sewer services, engine generator status, fire pumps status, electrical panels, battery racks, HVAC system.
- (4) Based on assessments, what requires immediate mitigation?
- (a) What requires further assessments with specialized, skilled technicians?
  - (b) What facilities are inhabitable? Are not?

**c. Proposed Solutions**

(1) Critical ANS systems and other infrastructure will be prioritized to restore critical services, including:

- (a) Communication
- (b) Surveillance
- (c) Navigation
- (d) Automation
- (e) Power

**8. Response Deactivation.** De-escalation from an earthquake response operation could take longer than usual. In the past, CREO responsibility was terminated once services were restored, whether temporarily or permanently. Depending on the size and intensity of the earthquake, CREO teams may be required to assist in recovery operations longer than usual. Things to consider for deactivation are:

- a.** Employee accountability has been completed
- b.** Majority of deployed AJW employees have returned to home station
- c.** Local technicians can sustain operations without additional assistance
- d.** Steady-state reporting is sufficient
- e.** AJW VP has authorized deactivation

## Appendix F. FIR Risk Kits

**1. Purpose.** To ensure our response teams have access to a cache of tools, equipment, and supplies before and after an incident so they can mitigate the impact an incident may have on Air Traffic Services. This appendix establishes the requirement for SAs to fund, develop, and maintain a risk kit program within their jurisdiction and formalize that program in their FIR supplement, FIR SOP, handbook, or manual.

**2. General.** Immediately before and after an incident, local communities may experience shortages of supplies and equipment such that technicians may need to harden a facility or restore services. Risk kits provide our first responders with tools, equipment, and supplies that may not be available locally.

**3. Responsibilities.** SA ICT Managers will tailor the content and distribution of their risk kits to meet the needs of their jurisdiction. Additionally, they will develop and formalize a process for keeping risk kit inventory serviceable so resources will perform as expected and perishable items are not out of date. SAs will determine where best to locate each risk kit.

**4. Suggest Risk Kit Contents.** The following is a list of suggested emergency equipment, tools, and supplies. This list is not all encompassing, nor is it all required.

**Table F-1. FIR Risk Kits**

<b>FIR RISK KIT</b>	
Storage trailer to contain staging material	Meals Ready to Eat (or equivalent); Rule of Thumb – Two meals, per person, per day
Storage box – 48”x 24” – Lockable	Potable water; Rule of Thumb – One gallon, per person, per day
Portable generators – Assorted sizes	First Aid Kit
Satellite Phone	Electrical Safety Kit
A 25' fuel hose and 12 VDC fuel pump for two (100-gallon) portable tanks	Nonflammable Jump Suit
A 25' fuel hose (Diesel) and 12 VDC fuel pump for one (300 gallon) portable tank	Coolers – Assorted sizes
A 25' fuel hose and 12 VDC fuel pump for one (500 gallon) portable tank	Pitcher – 2-Quart
50' fuel hose	Sleeping Cots
5-gallon gas cans	PPE Kits (Duffel Bags)
Two-cycle engine oil	Raincoats
Propane fuel	Rain suits
Spotlight – Battery-operated	Ponchos
Flashlights	Boots
Batteries – Assorted	Foul weather gear
1000 Watt light	FAA caps
500 Watt light	FAA t-shirts
Buckets – 5-gallon with snap lids	Blankets
Barrels – 55-gallon steel with lids for hazardous material	Sleeping bags
Tape – Duct	Pillows
Tape – Stucco	Sheet set – Queen
Tape – Foil/Air-conditioning	Hand pump (for air mattress)
Extension cords – Assorted	Air mattress
Bungee cords – Assorted	Towels
Ladders – Assorted	Snake chaps
Plastic sheeting – Assorted thicknesses	BBQ grill
Plastic wrap – Assorted widths	Air freshener
Oil absorbent granules	Vinyl gloves
Tarps – Assorted	Portable toilet
Absorbent pads	Portable toilet sanitizer
Rope – 500' (3/8" Polyester)	Stove propane
Rope – 100' (Nylon)	Toiletries kits
Rope – 15' (Tow - emergency recovery rope)	Toilet paper
Drum – Funnel & cover	

**Table F-1 FIR Risk Kits (Continued)**

<b>FIR RISK KIT (Continued)</b>	
Fastener – Assorted (Screws, nails)	Safety glasses
Plylox™ clips box	Cups – Assorted
Saw blade	Bowls
Trash bags – Assorted sizes and weights	Plates
Meggers	Flatware - Plastic
Vacuum cleaner (Wet/Dry)	Paper towels
Padlocks	Coveralls – Vinyl
Wiping cloths – Assorted	Foil – Aluminum
Tie downs – Ratcheting	Matches – Waterproof
Digital camera	Insect repellent
Global Positioning System – Handheld	Hand sanitizer
Work horse/Work bench	Face shield
Work lights – LED/Halogen (spare bulbs)	Sunscreen
Hammers – Assorted	Gloves
Staple gun – Assorted staples	Tyvek® Suit or similar
2' Inline GFCI cord	Dust masks
Chain saws with spare chains	Hard hats
Power Tools – Drill, circular saw, reciprocating saw	All required chain saw PPE
Fuel Pump – Manual	Water collection container with hose bib
Roofing paper	30' sections of hose – sized to fit tarps with drains
Caulking	Pump-up sprayer
Fuses	Spray bottles
Shovels – Assorted	Roof patch
Flashing	Putty knives
Lumber & Sheet goods	Shovels – Snow
Paintbrushes & Rollers	Garden rakes
Squeegees – Floor	Disinfectant/Bleach
Pry bars	Water – Distilled
Air Blowers/High Volume Fan	Alcohol – Isopropyl
Tools – Assorted (Hand)	De-icing salt
Tarps – Heavy duty/ Flame-retardant/ Drain	Solvents

## Appendix G. FIR Safety

**1. Purpose.** Significant incidents pose unique risks to incident responders. Focus should be on the safety of our Response Teams, ensuring that they clearly understand risks involved in their activities to eliminate or reduce as many of those risks as possible. Additionally, we should recognize any risks that cannot be fully controlled and weigh the need for responders to carry out their duties against the dangers involved. This appendix establishes additional safety protocols that the Incident Commander (IC) may use to ensure that response teams accept no unnecessary risk, making decisions to guarantee clear accountability, and managing risk by planning. These protocols do not replace, but rather, supplement procedures required by FAA's Occupational Safety Health Policy.

### 2. Safety Protocols.

**a. Incident Response Management Zones.** Incident Response Management Zones (IRMZ) divide/stratify the area encompassing an incident site into distinct zones with recognizable boundaries. The IC may establish IRMZs as a tool to control Response Team access to hazardous sites. Each zone employs enhanced security and safety measures to limit team exposure to unnecessary risks while responding to a significant incident. This concept is modeled after the USGS ShakeCast software. ShakeCast is the source for our earthquake related IRMZs. These zones may be established for other incident types, as well. In general terms, any area deemed as mandatory evacuation by the local Emergency Management Authorities always will be a Red Zone.

#### (1) Purpose

- (a) Establish definitive protocol for approving/authorizing entry and work assignments;
- (b) Establish a requirement for maintaining positive contact with personnel and equipment authorized to enter and exit a specific zone;
- (c) Establish a requirement for filing an ingress and egress route with the appropriate Field ICT.

#### (2) Responsibilities

- (a) Incident Commander
  - (i) Oversees development of, and is final authority for, establishing and communicating IRMZs.
  - (ii) Authorizes Response Team access to Red Zones, on a case-by-case basis, once approved by the ESOG manager.
- (b) ESOG Manager
  - (i) Coordinates with the Field EOSH personnel in gathering information that will aid in defining IRMZ boundaries;
  - (ii) Reviews work assignments within Red Zones; approves, when appropriate, and forwards to IC for authorization.

(c) Field Incident Commander. Authorizes Response Team access to Orange and Yellow Zones, on a case-by-case basis, once approved by the Field EOSH.

(d) Field EOSH Manager

(i) Reviews work assignments; approves, when appropriate, and forwards to the FIC for authorization;

(ii) Coordinates with the ICT ESOG Manager;

(iii) Reviews ingress and egress routes for hazards and works with Team Leads to mitigate those risks;

(iv) Coordinates and reviews Safety and Environmental Compliance Manager (SECM) assessment reports and coordinates EOSH abatement activities;

(v) Reviews and assesses employee PPE;

(vi) Coordinates with ICT to establish zones when required;

(e) Technical Management. Will take measures to follow restrictions associated with each zone when developing Incident Action Plans, plan-of-the-day, and work assignments.

(3) Establishment. The IC, in conjunction with ESOG Management and ICT manager, will develop IRMZs, based on data from USGS, National Weather Service, and U.S. DHS. When possible, zones should mimic those developed by the lead Federal Agency for the incident.

(4) Red Hazard Zone

(a) Characteristics. Red Zones have little or no chance to recover NAS operations until they are stabilized by local, State, and Federal first responders. Red Zones are characterized by considerable damage to specially-designed structures with walls thrown out of plumb, buildings shifted off of foundations, partial collapses, widespread power and telecommunications losses, inability of law enforcement to maintain law and order, or nuclear, biological, or chemical contamination;

(b) Activities and Guidelines

(i) Employees caught in a Red Zone will follow the guidance of local emergency management authorities, stabilize their personal situation, render aid, as able, and contact their supervisor/manager.

(ii) If the Red Zone was established due to an earthquake, employees will not re-enter an FAA structure unless directed to do so by the ICT.

(iii) Permission to enter a Red Zone requires a work assignment reviewed by the ESOG and authorized by the IC.

(iv) Response Teams should not remain overnight in a Red Zone unless the risks associated with that zone have been mitigated.

(v) The “Two-Person” and “Daylight” Rules apply.

(5) Orange Hazard Zone

(a) Characteristics. Orange Zones are characterized by moderate damage to specially-designed structures, considerable damage in ordinary structures with partial collapse, limited power and telecommunications losses;

(b) Activities and Guidelines

(i) If you are caught in an Orange Zone, contact your manager and wait for further instructions;

(ii) The “Two-Person” and “Daylight” Rules apply.

(iii) Permission to enter an Orange Zone requires a work assignment approved by the Field EOSH and authorized by the FIC.

(6) Yellow Hazard Area

(a) Characteristics. Minimal damage in buildings of good design and construction;

(b) Activities and Guidelines

(i) If you are in a Yellow Zone, contact your manager and wait for further instructions.

(ii) Permission to enter a Yellow Zone requires a work assignment approved by the Field EOSH and authorized by the FIC.

**b. FIR Work Assignments.** Are written work orders an ICT creates to manage field teams. Assignments originate in Technical Management and are a product of the plan-of-the-day development process. They define the Team Lead and contact number, team members, destination(s) and site objective(s), travel route to and from destination(s), and a communication plan. The communication plan will define when the Field ICT can expect an update on the team’s status. See Table G-1

(1) Work Assignment Number. Enter a numbering routine to track each work assignment. Example: Three-letter identifier for EOC, followed by six-digit, year month date, of beginning work period and two-digit sequence number for that date (e.g., JAX 180915-01).

(2) Incident Name. Enter the name of incident. Example: Hurricane Maria.

(3) Work Period. Enter the date and time range for this work assignment. Example: Sept 15, 2019 0600EDT to Sept 17, 2019 1800EDT.

(4) Assigned EOC. Enter the EOC that will be supporting and monitoring the team’s progress. Example: Jacksonville EOC.

(5) Assignment Scope

(a) SITE. Enter the destination airfield or facility. Example: Wilmington Int’l Airport (ILM) or QBE Air Route Surveillance Radar in Bedford, VA.

(b) To Conduct. Check the appropriate function the team will be performing. You may check more than one.

(c) On the following facility, system, equipment, and/or service. Enter the team’s specific objectives. For example: ILM ATCT, ILM Airport Surveillance Radar, ILM Remote Center Air/Ground Communications Facility, ILM Localizer.

(6) Ingress/Egress Route. Documenting the team's planned travel route provides the ICT an opportunity to identify any potential hazards or road closures along the route and provides the EOC a starting point for sending help if a team breaks down or encounters an issue that requires assistance.

(a) Destination #1. Enter the first destination under "Destination #1." Example: Wilmington Int'l.

(b) Incident Response Management Zones. If the destination is within a Red, Orange, or Yellow management zone, check the appropriate box.

(c) Planned travel route. Describe your planned travel route. For example: From Columbia SC, I-20 East, I-95 North, I-74 East, N 23<sup>rd</sup> St.

(d) End of Day. Identify each location where you will be remaining overnight.

(7) Communication Plan.

(a) Purpose. Maintaining the ability to communicate with emergency responders (e.g., law enforcement, fire, medical) and the ICT is critical to the safety and well-being of our teams in the field. Documenting a communication plan will ensure that the Response Team and command team are working with the same expectations.

(b) Example. 911 will be the first call for immediate health and public safety issues. The Team Lead will make positive contact with the EOC at the beginning and end of the duty day and on arrival and departure from each site. For sites in a Red Zone, the Team Lead will make positive contact with the EOC to provide a status/welfare update at the top of every EVEN hour. If the EOC does not receive positive contact from the team within 15 minutes of the expected time, they will attempt positive contact with any member of the team. After 30 minutes of no positive contact, the team will relocate to an area with cell service or attempt to relay a message through other first responders with communication capability.

(8) Response Team Roster. Enter the name, discipline/specialty (e.g., Civil Engineer/SECM/FMP/Comm Technician), and contact information for each member of the team.

(9) Coordination.

(a) Approval and Authorization. The IRMZ encompassing the site(s) to be visited determines the level of approval and authorization required. Red Zone sites require approval and authorization by ESOG and IC. All others can be approved and authorized by the appropriate Field EOSH and FIC.

(b) Remarks. This field is available for the approving SO and authorizing IC to annotate any special instructions to the team in the field and FIC team.

**c. Two-Person Rule.** The "Two-Person" Rule, in context of the Response Program, is a safety mechanism designed to prevent employees from responding to a hazardous site alone. When applied, this rule requires the presence of at least two people when tasked with a work assignment at high-risk site or IRMZ.

**d. "Daylight" Rule.** This rule is designed to enhance Response Team members' safety by restricting access to sites to daylight hours only.

e. 34kts/39mph Wind Rule (Tropical-Storm-Force). Flying debris is a significant safety hazard to our team. This rule restricts team members from being exposed to forecasted winds associated with a hurricane/typhoon equal to or greater than 39mph sustained. All storm preparations must be made prior to the forecasted winds meeting or exceeding 39mph sustained. Similarly, Response Team members will remain in a shelter until the forecasted winds are expected to remain below 39mph sustained. The ICT uses National Weather Service products to forecast storm tracking, wind, surge, and rainfall probabilities.

f. Facility Evacuation. The FAA ATCTs are built in accordance with the American National Standards Institute and Uniform Building Code, or local building codes appropriate to the facility. However, compliance with codes does not assure facilities will survive continuing threats, such as severe storms, flooding, and landslides, hurricanes, wildfire activity, and anticipated dangers like catastrophic earthquakes in the New Madrid Seismic Zone.

g. In the interest of personnel safety, ATCT cabs shall be evacuated when wind *gusts* are forecast to reach 75mph (65 knots). The ATCT Manager may evacuate personnel at any lesser wind speed if, in their judgement, conditions warrant this action.

h. Phased Response. Each facility, system, and service will transition, in sequence, through the following phases: Damage Assessment, Stabilization, Restoration, and Recovery. This protocol is designed to identify hazards that cause a threat to employees' health and safety in the Damage Assessment phase. Then, we develop and execute plans to mitigate those hazards during the Stabilization phase, and before we begin the Restoration and Recovery efforts.

i. Placards. Placards are tools the IC can use, in coordination with the management entity that holds jurisdiction over the facility/building/structure (e.g., Air Traffic Facility Manager/Facility Manager, or equivalent), to control access to facilities or sites exposed to earthquakes, extreme winds, or flooding.

(1) Placards are a product of the damage assessment process. Air Traffic Facilities that have been subjected to earthquakes, extreme winds, or flooding will be assessed by a Damage Assessment Team; a general overview of the findings will be provided to the appropriate management entity, and a placard will be posted at the entry point(s) to the facility. The Damage Assessment Team will update placards as hazards are mitigated and new hazards are identified. Once all of the hazards are mitigated, or responsibility for recovery has been transferred back to routine NAS operations, the placards can be removed, after coordination through the appropriate EOC, and with approval of the DM, District Facility Manager, or local civil authority with jurisdiction over the facility. The three categories of placards are:

(2) FAA INSPECTED (Green): The building exterior/interior has been inspected and no restrictions on use or occupancy have been observed. Events after the inspection, such as severe weather or aftershocks, could require more inspections and a change of the placard. The FAA INSPECTED placard does not imply that NO damage was found or that repairs are not necessary. See Table H-5.

(a) Major Faults: None.

(b) Minor Faults: Allowable, but must be mitigated or in a mitigation plan.

(3) FAA RESTRICTED USE (Yellow): The building has been inspected and found to be damaged, as described on the placard. This placard can be used as a "catch-all" to cover a wide

range of hazards that may limit use of the building, or portions of the building, but not make it completely unsafe. This placard may allow for limited use of the building for removal of property, but restrict continuous use. See Table H-6.

(a) Major Faults: Allowable, but must be in a mitigation plan.

(b) Minor Faults: Allowable, but must be mitigated or in a mitigation plan.

(4) FAA UNSAFE (Red): The building has been inspected and is damaged and unsafe. No entry is allowed, except as specifically authorized by the IC, District Facility Manager, or management entity with jurisdiction over the facility. A red placard does not imply that the structure is condemned. Repairs can be made to mitigate the hazard. See Table H-7.

(a) Major Faults: Cannot be mitigated.

(5) The placement and removal of placards need to be performed under authority of the IC or appropriate Engineering Services Group.

**j.** Alternative Lodging. When standard hotel lodging and conveniences are not available, the following factors should be considered when selecting alternative lodging:

- (1) Secure, safe, and patrolled by law enforcement;
- (2) Power for heat and air conditioning;
- (3) Showers and lavatories;
- (4) Sleeping quarters;
- (5) Kitchen area or means to refrigerate, store, heat, and prepare food; and
- (6) Telephone, Internet, or other means for members to communicate.

**Table G-1. Example FIR Work Assignment**

FIR Work Assignment Number: \_\_\_\_\_



**Technical Operations' FIR Work Assignment**

**AUTHORITY:**

*The Federal Aviation Administration's emergency response team listed below are conducting damage assessment, stabilization and restoration of FAA facilities, systems and services following a major disaster. Please contact the FAA Incident Commander identified below with any questions or concerns.*

Incident Name: \_\_\_\_\_ Work Period: \_\_\_\_\_ to \_\_\_\_\_

Assigned EOC: \_\_\_\_\_ Bridge #: \_\_\_\_\_

**ASSIGNMENT SCOPE**

Travel to: \_\_\_\_\_ To Conduct: On the following facility, system, equipment, and/or service:

SITE	Damage Assessment	Stabilization	Restoration	
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**INGRESS/EGRESS ROUTE**

	Incident Response Management Zone			Describe your planned travel route to each site listed above. If deviation is required once work assignment is authorized, contact the EOC with update.
	Red	Orange	Yellow	
Destination #1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Destination #2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
End of Day #1	N/A	<input type="checkbox"/>	<input type="checkbox"/>	_____
Destination #3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Destination #4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
End of Day #2	N/A	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Table G-1. Example FIR Work Assignment (Continued)**

FIR Work Assignment Number: \_\_\_\_\_

**COMMUNICATION PLAN**

Establish a time(s) when the team is expected to contact the assigned EOC. At a minimum, the team should make contact upon arrival and departure from each site and at the beginning and end of the duty day.

**FIR TEAM ROSTER**

	Name	Discipline/Specialty	Cell Phone/Freq
TEAM LEAD:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____
TEAM MEMBER:	_____	_____	_____

**COORDINATION**

APPROVING SAFETY OFFICER

*Sign* \_\_\_\_\_

*Print* \_\_\_\_\_ *Date* \_\_\_\_\_ *Tel* \_\_\_\_\_

AUTHORIZING INCIDENT COMMANDER

*Sign* \_\_\_\_\_

*Print* \_\_\_\_\_ *Date* \_\_\_\_\_ *Tel* \_\_\_\_\_

Approving/Authorizing Official's Remarks:

## Appendix H. Damage Assessment

**1. Purpose.** Establish a framework from which the Service Areas (SA) will base their damage assessment processes. The FIR program exists to standardize incident response among the three SAs. Standardization enables first responders to deploy from anywhere in the Nation, to any SA, and conduct damage assessment in a consistent manner. After an incident has occurred, the first step towards restoring NAS services is to conduct damage assessment.

### 2. Objectives.

- a. Identify and document site-specific hazards to the health and safety of incident response teams;
- b. Assess and document physical damage to NAS equipment;
- c. Communicate those hazards and equipment damage to the ICT; and
- d. Develop initial strategies for mitigating hazards, stabilizing structures, and repairing NAS equipment.

**3. Safety Screening/Damage Assessment Safety Checklist.** This checklist is provided to each team tasked with conducting a Facility Safety Screening (FSS) or damage assessment and referenced by each team member prior to deploying to a site. See Table H-1.

**4. FIR Facility Safety Screening.** The Field ICT will identify a facility safety screener and task him/her with completing the FSS. Once complete, the screener will send the report to the Field ICT, who will take the necessary actions to coordinate mitigation of known hazards.

a. Questionnaire. The questionnaire is designed so that anyone assigned by the ICT can visually inspect a facility and answer the questions without needing an engineering background. See Table H-3.

b. Instructions. Instructions are included with each questionnaire for reference in the field. See Table H-3.

**5. Engineer's Assessment.** An Engineer's Assessment is required if a "NO" response is annotated on the FSS. This assessment will follow industry standards and be conducted by a qualified FAA engineer. Once complete, the Engineer's Assessment will be provided to the ICT and included with the respective FSS.

**6. Placards.** Placards are provided in each FSS package. Their use is described in Appendix G.

- a. Instructions. See Table H-4
- b. Examples. See Table H-5 through H-7

**Table H-1. Safety Screening/Damage Assessment Safety Checklist**

- ✓ DO NOT perform inspections during severe weather or if earthquake aftershock is imminent.
- ✓ Perform initial evaluations from a distance, using binoculars.
- ✓ Perform inspections from the outside-in.
- ✓ Make a complete external check before entering a building.
- ✓ Do not enter or climb unstable structures.
- ✓ Pause at the doorway before entering any room.
- ✓ Be fully-observant and conscious of your surroundings at all times.
- ✓ Watch out for low hanging debris, wires, and protruding nails.
- ✓ Always look up and down before moving forward.
- ✓ Work in teams of two and stay far enough apart so that one person will be able to summon help.
- ✓ Carry at least one cellular telephone or handheld radio per team.
- ✓ Carry adequate flashlights for indoor work.
- ✓ Perform inspections during daylight hours.
- ✓ Be alert for downed power lines and exposed wires, and broken light bulbs.
- ✓ Be alert for gas leaks.
- ✓ Be alert for any spills of solids or liquids, unless they have been positively identified as safe materials; always approach potential spill sites from up wind.
- ✓ Be alert for unique odors.
- ✓ Be alert for physical reactions, such as nausea, dizziness, eye/skin irritation, or presence of dead animals in the area. Have an adequate supply of safe drinking water.
- ✓ Use sunscreen; reapply per the instructions.
- ✓ Wear proper Personal Protective Equipment, including hard hat, steel-toed safety boots, eye protection, hearing protection, and leather work gloves, as necessary.
- ✓ Wear proper clothing (e.g., long pants, shirts/jackets).
- ✓ Have an up-to-date tetanus shot.
- ✓ Assume electrical lines/equipment are live.
- ✓ Stay away from power lines or electrical wires that are in water.
- ✓ Realize that electrical drops may have been weakened by storm or earthquake and may collapse.
- ✓ Avoid contact with chemicals, compressed gas cylinders, and fuel containers.
- ✓ Report suspect materials to the ICT.
- ✓ Presume all thermal insulation on pipes/boilers, flooring tile, roofing, and building shingles contain asbestos and avoid disturbing.
- ✓ Ensure adequate lighting is available.
- ✓ Do not enter confined spaces.
- ✓ Do not enter elevators until inspected and certified safe. Use stairs instead.

**Table H-2. Example Technical Operations FIR Facility Safety Screening**



## Technical Operations FIR Facility Safety Screening

**Screeners' Posting**

- Inspected
- Restricted Use
- Unsafe

**Screener:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
*First Last Tel.*

**Site Description**

Facility Name: \_\_\_\_\_ LOC ID: \_\_\_\_\_ FAC TYPE: \_\_\_\_\_

Address: \_\_\_\_\_  
*Street Address*

\_\_\_\_\_ *City State ZIP Code*

Lat/Long: \_\_\_\_\_ District: \_\_\_\_\_

Number of Floors Above Ground: \_\_\_\_\_ Number of Floors Below Ground: \_\_\_\_\_ Approx Footprint (square feet): \_\_\_\_\_

District Manager: \_\_\_\_\_  
*First Last Tel.*

**PHOTOS ATTACHED**

	YES	NO
Grounds/Surroundings:	<input type="checkbox"/>	<input type="checkbox"/>
	YES	NO
Exterior Structure:	<input type="checkbox"/>	<input type="checkbox"/>
	YES	NO
Interior Structure:	<input type="checkbox"/>	<input type="checkbox"/>
	YES	NO
NAS Equipment:	<input type="checkbox"/>	<input type="checkbox"/>

**REQUESTED ENGINEERING ASSESSMENTS**

Civil

Mechanical

Electrical

Electronics

EOSH

**Table H-2. Example Technical Operations FIR Facility Safety Screening (Continued)**

Grounds/Surroundings	
<b>Observed Conditions:</b>	
Is the site accessible by emergency and service vehicles?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks: <input style="width: 100%;" type="text"/>	
Are the security features functioning? (Gates, lighting, fencing, cypher locks, cameras, local law enforcement...)	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks: <input style="width: 100%;" type="text"/>	
Is the site clear of obstructions (debris, fallen trees, fallen power lines, fuel spills, ruptured gas lines, dead animals...)?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks: <input style="width: 100%;" type="text"/>	
Is the site free from noticeable fumes, smoke, odors, and chemical stains?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks: <input style="width: 100%;" type="text"/>	
If exposed, are any fuel/chemical storage tanks free from leaks and evidence of leaks?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks: <input style="width: 100%;" type="text"/>	
<p><i>Any "NO" response above will require an Engineer's Assessment to mitigate prior to occupancy. Briefly describe your recommendation for mitigating each hazard in the field below. Please attempt to categorize each mitigation effort as Minor Repair, Major Repair, or Replacement. Also provide a time estimate for mitigating the hazard once resources are on site.</i></p>	
Mitigation Recommendation:	<input style="width: 100%;" type="text"/>
Photos:	<input style="width: 100%;" type="text"/>

**Table H-2. Example Technical Operations FIR Facility Safety Screening (Continued)**

Building Exterior Structure		
<b>Observed Conditions:</b>		
Does the building appear plumb [not leaning]?	YES	NO
Remarks:	<input type="checkbox"/>	<input type="checkbox"/>
<input style="width: 100%; height: 15px;" type="text"/>		
Do the sections of stacked modular structures appear aligned top to bottom?	YES	NO
Remarks:	<input type="checkbox"/>	<input type="checkbox"/>
<input style="width: 100%; height: 15px;" type="text"/>		
Is all the steel reinforcing the concrete NOT visible?	YES	NO
Remarks:	<input type="checkbox"/>	<input type="checkbox"/>
<input style="width: 100%; height: 15px;" type="text"/>		
Do all exterior doors open and close easily?	YES	NO
Remarks:	<input type="checkbox"/>	<input type="checkbox"/>
<input style="width: 100%; height: 15px;" type="text"/>		
Is all the glass in the windows and doors free from cracks and intact?	YES	NO
Remarks:	<input type="checkbox"/>	<input type="checkbox"/>
<input style="width: 100%; height: 15px;" type="text"/>		
Are the following attachments secure (not a falling hazard)?		
Catwalks	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>
Louvers	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>
Canopies	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>
Light Fixtures	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>
Guy & Electrical Wires	YES	NO
	<input type="checkbox"/>	<input type="checkbox"/>
Remarks:	<input style="width: 100%; height: 15px;" type="text"/>	
<p><i>Any "NO" response above will require an Engineer's Assessment to mitigate prior to occupancy. Briefly describe your recommendation for mitigating each hazard in the field below. Please attempt to categorize each mitigation effort as Minor Repair, Major Repair, or Replacement. Also provide a time estimate for mitigating the hazard once resources are on site.</i></p>		
Mitigation Recommendation	<input style="width: 100%; height: 25px;" type="text"/>	
Photos:	<input style="width: 100%; height: 15px;" type="text"/>	

**Table H-2. Example Technical Operations FIR Facility Safety Screening (Continued)**

**Building Interior**

**Observed Conditions:**

Are the building's entry and exit paths, to include stairwells free from obstructions? YES NO  
   
 Remarks:

Are ceiling fixtures and overhead items secured [not a falling hazard]? YES NO  
   
 Remarks:

Are the floors free from buckles or cracks? YES NO  
   
 Remarks:

Are the interior walls plumb and free from buckles, cracks, and splits? YES NO  
   
 Remarks:

Do the interior doors open and close freely? YES NO  
   
 Remarks:

Is the interior of the building free from water and evidence of water such as stains, dampness, and condensation? YES NO  
   
 Remarks:

Is the interior of the building free from other fluids/fluid stains that may have spilled or leaked from their container? YES NO  
   
 Remarks:

*Any "NO" response above will require an Engineer's Assessment to mitigate prior to occupancy. Briefly describe your recommendation for mitigating each hazard in the field below. Please attempt to categorize each mitigation effort as Minor Repair, Major Repair, or Replacement. Also provide a time estimate for mitigating the hazard once resources are on site.*

Mitigation Recommendation

Photos:

**Table H-2. Example Technical Operations FIR Facility Safety Screening (Continued)**

Mechanical Equipment	
<b>Observed Conditions:</b>	
Is the building's potable water and sewer service operational? If "NO" provide in remarks local authorities return to service estimate if known.	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Is the building's commercial power service operational? If "NO" provide in remarks local authorities return to service estimate if known.	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Is the building's back up power system functional and are all battery racks and batteries properly secured?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Is the building's fire detection and suppression system functional?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Are the building's electrical power panels functional?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Is the building's HVAC system functional?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
Assuming commercial power or standby power is available, are the building's elevators functional?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
If available, are the building's communication's lines, voice and IT services functional?	YES NO <input type="checkbox"/> <input type="checkbox"/>
Remarks:	<input style="width: 100%;" type="text"/>
<i>Any "NO" response above will require an Engineer's Assessment to mitigate prior to occupancy. Briefly describe your recommendation for mitigating each hazard in the field below. Please attempt to categorize each mitigation effort as Minor Repair, Major Repair, or Replacement. Also provide a time estimate for mitigating the hazard once resources are on site.</i>	
Mitigation Recommendation	<input style="width: 100%; height: 30px;" type="text"/>
Photos:	<input style="width: 100%; height: 20px;" type="text"/>

**Table H-2. Example Technical Operations FIR Facility Safety Screening (Continued)**

NAS Equipment						
Observed Conditions:						
Floor #	Room #	Room Name/Description	Facility Type/Name	Description of Damage (Water, Fire, Electrical Arching, Falling/Flying Object/Debris)	Electrical Shock Hazard?	
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>
					YES <input type="checkbox"/>	NO <input type="checkbox"/>

*Any "YES" response in NAS Equipment listing above will require an Engineer's Assessment to mitigate prior to occupancy. Briefly describe your recommendation for mitigating each hazard in the field below. Please attempt to categorize each mitigation effort as Minor Repair, Major Repair, or Replacement. Also provide a time estimate for mitigating the hazard once resources are on site.*

Mitigation Recommendation

Photos:

**Table H-3. Example Screening Questionnaire Instructions**

### Screening Questionnaire Instructions

If during the screening process a hazard is identified that can be mitigated quickly by a damage assessment team member with the appropriate FAA training and PPE, then the hazard can be addressed while on site after the screening assessment is complete.

**Screener's Posting:** Check the appropriate category of placard posted to the building/structure after the questionnaire is complete.

**Screener:** Enter the FIR Screener's name, telephone number and date.

**Facility Name:** Enter the name of the facility. Example "Dulles Tower"

**LOC ID:** Enter the Location Identifier if known. Example "IAD".

**FAC TYPE:** Enter the facility type. Example "ATCT"

**Address:** Self-explanatory

**Lat/Long:** Enter latitude & longitude of the facility if known. Example: N 38.947440 W 77.45994

**District:** Enter the Technical Operations' District under which this facility resides.

**Number of Floors Above and Below Ground:** Self-explanatory

**Approx Footprint (square feet):** Provide an estimate on the approximate square footage of the structure's footprint.

**District Manager:** Self-explanatory.

**Photos Attached:** Check the appropriate check box if you have attached photos for each area. You can attach photos in the field provided under each section.

**Requested Engineering Assessments:** Check the engineering discipline best suited to address your findings. All "NO" responses require an engineer's assessment.

**Table H-3. Example Screening Questionnaire Instructions (Continued)**

### Screening Questionnaire Instructions Con't

The screening questionnaire provides findings that are used to rate the initial occupancy of the facility. The check boxes determines these findings.

Read the question. Check the appropriate check box. Make the necessary remarks to describe the reasoning for your response.

- a. If the ALL of the "YES" check boxes are checked:
  - 1) The facility can be occupied and posted "FAA INSPECTED".
  - 2) Minor clean up issues are addressed while the facility is operating.
- b. If ANY of the "No" check boxes are checked:
  - 1) An Engineer's Assessment is required to mitigate the hazard.
  - 2) Briefly describe in the "Remarks" field a description of the hazard. To help quantify the risk to employees:
    - i. Include the **severity** of impact to employee health and safety as
      1. Catastrophic [1 or more death or permanent total disability],
      2. Critical [1 or more permanent partial disability or hospitalization of at least 3 personnel],
      3. Marginal [1 or more injury or illness resulting in loss time],
      4. Negligible [1 or more injuries or illnesses requiring first aid or medical treatment]
    - ii. Include the **probability** of impact to employee health and safety as
      1. Frequent
      2. Likely
      3. Occasional
      4. Seldom
  - 3) Describe in the "Mitigation Recommendation" field a proposed course of action to eliminate or mitigate each identified hazard, the extent of repair required [Minor/Major/Replacement], and a time estimate for mitigating that hazard once resources are on site. Some examples of mitigation include:
    - i. Elimination
    - ii. Substitution or less hazardous materials, processes, operations or equipment
    - iii. Engineering controls
    - iv. Warnings
    - v. Administrative controls
    - vi. PPE

**Table H-3. Example Screening Questionnaire Instructions (Continued)****SAFETY SCREENING/DAMAGE ASSESSMENT SAFETY CHECKLIST**

- ✓ *DO NOT perform inspections during severe weather or if earthquake aftershock is imminent.*
- ✓ *Perform initial evaluations from a distance, using binoculars.*
- ✓ *Perform inspections from the outside in.*
- ✓ *Make a complete external check before entering a building.*
- ✓ *Do not enter or climb unstable structures.*
- ✓ *Pause at the doorway before entering any room.*
- ✓ *Be fully observant and conscious of your surroundings at all times.*
- ✓ *Watch out for low hanging debris, wires, protruding nails, ets. And downed electrical lines.*
- ✓ *Always look up and down before moving forward.*
- ✓ *Work in teams of two, and stay far enough apart that one person will be able to summon help.*
- ✓ *Carry at least one cellular telephone or handheld radio per team.*
- ✓ *Carry adequate flashlights for indoor work.*
- ✓ *Perform inspections during daylight hours.*
- ✓ *Be alert for downed power lines and for exposed wires, broken light bulbs, etc.*
- ✓ *Be alert for gas leaks.*
- ✓ *Be alert to any spills of solids or liquids, unless they have been positively identified as safe materials Always approach potential spill sites from up wind.*
- ✓ *Be alert for unique odors.*
- ✓ *Be alert for physical reactions, such as nausea, dizziness, eye/skin irritation, or the presence of dead animals in the area.*
- ✓ *Have an adequate supply of safe drinking water.*
- ✓ *Use sunscreen; reapply it per the instructions.*
- ✓ *Wear proper personal protective equipment (PPE), to include hard hat, steel-toed safety boots, eye protection, hearing protection, leather work gloves as necessary.*
- ✓ *Proper clothing, long pants, shirts/jackets.*
- ✓ *Up-to-date tetanus shot.*
- ✓ *Assume electrical lines/equipment is energized.*
- ✓ *Stay away from power lines or electrical wires that are lying in water.*
- ✓ *Realize that electrical drops may have been weakened by storm or earthquake and may collapse.*
- ✓ *Avoid contact with chemicals, compressed gas cylinders, and fuel containers.*
- ✓ *Report suspect materials to incident command team.*
- ✓ *Presume all thermal insulation on pipes/boilers, flooring tile, roofing and building shingles contain asbestos and avoid disturbing. Report suspect materials to incident command team.*
- ✓ *Ensure adequate lighting is available*
- ✓ *Do not enter confined spaces.*

**Table H-4. Example Placard Posting Instructions****PLACARD POSTING INSTRUCTIONS**

Post applicable placard at each entry point of the building or structure. Choose a posting based on the evaluation and team judgement. Severe conditions endangering the overall building are grounds for an **FAA UNSAFE** posting. Localized SEVERE and overall MODERATE conditions may allow a **FAA RESTRICTED USE** posting. If the building or structure is placarded **FAA RESTRICTED USE** with certain areas within the building or structure **FAA UNSAFE**, post the **FAA UNSAFE** placards at the point of entry for each of those **FAA UNSAFE** areas.

1. **FAA INSPECTED [GREEN]**: Light or no damage. Low risk. No apparent structural hazard has been found.
  - a. Major Hazards: None
  - b. Minor Hazards: Allowable but must be mitigated or in the mitigation plan.
2. **FAA RESTRICTED USE [YELLOW]**: Moderate damage. Medium risk. Posted to any building or structure that has been damaged wherein the damage has resulted in some form of restriction to the continued occupancy. The placard will describe the type of damage and clearly and concisely note the restriction on continued occupancy. There are two categories for access. No access to part(s) of the building. Restricted access for brief entry to access contents. Those areas within the structure where entry is prohibited should be posted with the **FAA UNSAFE [RED]** placard.
  - a. Major hazards: Allowable but must be in a mitigation plan.
  - b. Minor Hazards: Allowable but must be mitigated or in a mitigation plan.
3. **FAA UNSAFE [RED]**: Heavy damage. High risk. Will be posted on any building or structure that has been damaged such that continued occupancy poses a threat to life or safety. Buildings or structures posted with this placard shall not be entered under any circumstances except as authorized by the Incident Commander, Technical Operations Manager, or Local Civilian Authority with jurisdiction over the facility. The placard will describe the type of damage.
  - a. Major Hazards: Cannot be mitigate.

**Table H-5. Example FAA Inspected**

# FAA INSPECTED

## FAA OCCUPANCY PERMITTED

INSPECTION DATE & TIME

\_\_\_\_\_  
*Date* *Time*

FAA INITIAL SCREENER / ENGINEER:

\_\_\_\_\_  
*First* *Last* *Tel.*

DISTRICT MANAGER or AIR TRAFFIC  
FACILITY MANAGER:

\_\_\_\_\_  
*First* *Last* *Tel.*

EMERGENCY OPERATIONS CENTER

\_\_\_\_\_  
*Bridge Tel. (###) ###-#### Passcode #####*

FACILITY NAME: \_\_\_\_\_

ADDRESS

\_\_\_\_\_  
*Street Address*

\_\_\_\_\_  
*City* *State* *Zip Code*

This structure has been inspected and  
no apparent structural hazard has been  
found.

- Inspected Exterior Only
- Inspected Exterior & Interior

Report any unsafe condition to Emergency Operations Center; re-inspection may be required.

Screener Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DO NOT REMOVE, ALTER, OR COVER THIS PLACARD WITHOUT COORDINATION  
THROUGH THE EOC AND AUTHORIZED BY THE TECHNICAL OPERATIONS MANAGER

Table H-6. Example FAA Restricted Use Placard

# FAA RESTRICTED USE LIMITED ACCESS FOR FAA ONLY

INSPECTION DATE & TIME

\_\_\_\_\_  
*Date* *Time*

FAA INITIAL SCREENER / ENGINEER:

\_\_\_\_\_  
*First* *Last* *Tel.*

DISTRICT MANAGER / AIR TRAFFIC  
FACILITY MANAGER:

\_\_\_\_\_  
*First* *Last* *Tel.*

EMERGENCY OPERATIONS CENTER

\_\_\_\_\_  
*Bridge Tel. (###) ###-#### Passcode #####*

FACILITY NAME: \_\_\_\_\_

ADDRESS

\_\_\_\_\_  
*Street Address*

\_\_\_\_\_  
*City*

\_\_\_\_\_  
*State*

\_\_\_\_\_  
*Zip Code*

**CAUTION: THERE HAS BEEN A QUICK VISUAL SCREENING OF THIS  
STRUCTURE/SITE. IT IS DAMAGED AND ITS SAFETY IS QUESTIONABLE.  
ENTRY, OCCUPANCY, AND USE ARE RESTRICTED AS INDICATED BELOW:**

<input type="checkbox"/> <u>DO NOT enter the following areas:</u>	<input type="checkbox"/> <u>Areas allowed brief entry to access contents:</u>

Other restrictions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PPE Required to access restricted areas:

\_\_\_\_\_

DO NOT REMOVE, ALTER, OR COVER THIS PLACARD WITHOUT COORDINATION  
THROUGH THE EOC AND AUTHORIZED BY THE TECHNICAL OPERATIONS MANAGER

Table H-7. Example FAA Unsafe Placard

# FAA UNSAFE DO NOT ENTER OR OCCUPY

INSPECTION DATE & TIME

*Date* \_\_\_\_\_ *Time* \_\_\_\_\_

FAA INITIAL SCREENER / ENGINEER:

*First* \_\_\_\_\_ *Last* \_\_\_\_\_ *Tel.* \_\_\_\_\_

DISTRICT MANAGER / AIR TRAFFIC  
FACILITY MANAGER:

*First* \_\_\_\_\_ *Last* \_\_\_\_\_ *Tel.* \_\_\_\_\_

EMERGENCY OPERATIONS CENTER

*Bridge Tel. (###) ###-#### Passcode #####*

FACILITY NAME: \_\_\_\_\_

ADDRESS

*Street Address*

*City*

*State*

*Zip Code*

**WARNING: THERE HAS BEEN A RAPID VISUAL SCREENING OF THIS  
STRUCTURE/SITE. IT IS SERIOUSLY DAMAGED, HAS SERIOUS HEALTH OR  
OCCUPATIONAL RISKS, AND IS UNSAFE TO OCCUPY.**

DO NOT ENTER, EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY THE INCIDENT  
COMMANDER, TECHNICAL OPERATIONS MANAGER, OR LOCAL CIVILIAN AUTHORITY  
WITH JURISDICTION OVER THE FACILITY. ENTRY MAY RESULT IN DEATH OR INJURY.

FINDINGS SUMMARY THAT LED TO UNSAFE DETERMINATION:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DO NOT REMOVE, ALTER, OR COVER THIS PLACARD WITHOUT COORDINATION  
THROUGH THE EOC AND AUTHORIZED BY THE TECHNICAL OPERATIONS MANAGER

## Appendix I. National Volunteer Program

**1. Purpose.** To define the Technical Operations' National Volunteer Program. The program is centered around the National FIR Volunteer database maintained here: [National FIR Volunteer Database](#). The database is simply a list of volunteers who are willing and able to deploy to assist in restoring the NAS after a major incident.

**2. Objective.** Provide a systematic method for identifying a pool of volunteers with specific competencies, training, and skills who are prepared to deploy for 30 days or more, in support of FIR operations.

### 3. Duties and Responsibilities.

#### a. National CREO Manager.

(1) Will host the National Volunteer Database and ensure it remains current through annual purges and re-population of volunteers.

(2) Distribute an annual Request for Volunteers Memo to the SA FIR Managers for volunteer recruitment.

(3) Shall inform the PASS National Safety Representative when a deployment of AJW personnel is imminent. It is the PASS Safety Representative's responsibility to notify additional representatives, as required.

**Note:** Notifications may be delayed during "no-notice" events. The National CREO Manager shall notify the PASS National Safety Representative as soon as possible.

#### b. Service Area FIR Managers

(1) Identify, recruit, train, and manage volunteers within their respective SA;

(2) Ensure volunteers within the SA annually update their information in the database.

#### c. Incident Command Teams

(1) Coordinate with the volunteer's supervisor for release from their primary duties in response to a FIR activation;

(2) Ensure each activated volunteer is aware of his/her deployment assignment, including assigned Team Lead or IC, his/her phone number, reporting time and place, travel authorization code, PPE requirements, special training needs, and any unique personal items (s)he should bring related to the deployment environment;

(3) Facilitate lodging and transportation needs of each activated volunteer assigned to their jurisdiction;

(4) For incidents that are expected to last more than two weeks, the ICT will develop a volunteer rotation schedule so volunteers and their supervisors at their primary duty location can plan for their return; and

(5) Track the location of each volunteer deployed to their jurisdiction until (s)he returns to the primary duty location.

**d. Volunteers.**

- (1) Keep their registration data updated;
- (2) Conduct an annual review of their registration every May; and
- (3) Discuss their desire and intent to volunteer with their supervisor.

**f. Supervisors/Front Line Managers**

- (1) When notified that a subordinate has volunteered, discuss with the subordinate your expectations for being able to support his/her request, if/when their name is requested by ICT;
- (2) When contacted by a member of ICT to coordinate a volunteer's temporary release from their primary duty, understand that the decision to release is yours, and you are responsible for your current staffing situation, workload, and ability to backfill temporarily.

## **Appendix J. ANS Divestment of Airspace Services & Infrastructure SOP**

**1. Purpose** This Standard Operating Procedure (SOP) details the processes and procedures to support the divestment of airspace infrastructure and/or services should an Air Traffic Control (ATC) facility experience a significant event or catastrophic failure of equipment that prevents the facility from safely separating aircraft. It outlines the coordination of the divestment of infrastructure and/or services to restore Air Navigation Services (ANS) as identified in the impacted facility's Operational Contingency Plan (OCP). This SOP outlines the appropriate response to significant incidents that could jeopardize the National Airspace System (NAS). The OCP documents processes to support critical applications if they are interrupted or destroyed. Contingency actions are implemented and considered a temporary measure to restore ANS services. Restoration of ANS services remains the top priority, whether by temporary or permanent means. Reinstatement of the impacted facility to resume normal operations is the secondary priority and potentially could take a significant amount of time, depending on impacts of the incident.

**2. Where Can I Find This Order?** You can find an electronic copy of this order on the [Directives Management System \(DMS\) Web site](#). Or go to the [MyFAA Employee Web site](#); select "Tools and Resources;" then select "Order and Notices."

**3. Authority to Use This SOP** Order JO 1920.5A, Technical Operations (AJW) Field Incident Response (FIR) establishes the authority to use this SOP. There are no previous AJW SOPs to be superseded.

**Appendix K. Glossary of Acronyms and Special Terms**

<b>A4A</b>	Airlines for America
<b>AARC</b>	Airspace Access Response Cell
<b>ACIMS</b>	ATO Crisis Information Management System
<b>AID</b>	ATO Incident Director
<b>AIRMAC</b>	ATO Incident Response Management Center
<b>ANS</b>	Air Navigation Services
<b>ANS Systems</b>	Air Navigation Services Systems
<b>AOI</b>	Awareness Operational Impact
<b>APOE/D</b>	Aerial Port of Embarkation / Debarkation
<b>ATC</b>	Air Traffic Control
<b>ATCT</b>	Airport Traffic Control Tower
<b>ATCSCC</b>	Air Traffic Control System Command Center
<b>ATM</b>	Air Traffic Management
<b>AWO</b>	ATO Watch Officer
<b>CALFIRE</b>	California Fire
<b>CDC</b>	Centers for Disease Control
<b>CI</b>	Critical Infrastructure
<b>CCIR</b>	Command's Critical Information Requirements
<b>CIKR</b>	Critical Infrastructure & Key Resources
<b>COO</b>	Chief Operating Officer
<b>COOP</b>	Continuity of Operations Program
<b>CoS</b>	Continuity of Services
<b>CoVID-19</b>	Coronavirus Disease of 2019
<b>CREO</b>	Crisis Response Emergency Operations
<b>CRSG</b>	Crisis Response Working Group
<b>CRT</b>	Crisis Response Team
<b>CRRT</b>	Contingency Requirements Resiliency Tool
<b>CRWG</b>	Crisis Response Working Group
<b>CST</b>	Communication Support Team

<b>CWP</b>	Corporate Work Plan
<b>DFM</b>	District Facility Manager
<b>DM</b>	District Manager
<b>DMS</b>	Directives Management System
<b>DoD</b>	Department of Defense
<b>DOT</b>	Department of Transportation
<b>EA</b>	Engineer Assessment
<b>EEI</b>	Essential Elements of Information
<b>EMA</b>	Emergency Management Agency
<b>EMC</b>	Emergency Management Center
<b>ENS</b>	Event Notification System
<b>EON</b>	Emergency Operations Network
<b>EOSH</b>	Environmental, Occupational, Safety, and Health
<b>EP</b>	Emergency Planner
<b>EPA</b>	Environmental Protection Agency
<b>ESM</b>	Engineering Services Manager
<b>ESOG</b>	EOSH Support Operations Group
<b>FAA</b>	Federal Aviation Administration
<b>FAALC</b>	FAA Logistics Center
<b>FAID</b>	Forward ATO Incident Director
<b>FAVES</b>	FAA Administrative Voice Enterprise Services
<b>FEMA</b>	Federal Emergency Management Administration
<b>FIC</b>	Field Incident Command
<b>FIR</b>	Field Incident Response
<b>FIRREP</b>	FIR Report
<b>FLM</b>	Front Line Manager
<b>FSS</b>	Facility Safety Screening
<b>FTI</b>	FAA Telecommunications Infrastructure
<b>GEMS</b>	Geospatial Event Mapping System
<b>GETS</b>	Government Emergency Telephone Service
<b>H1N1</b>	H(aemagglutinin type)1 and N(euraminidase type) 1

<b>HHS</b>	Department of Health and Human Services
<b>HQ</b>	Headquarters
<b>HRPM</b>	Human Resource Policy Manual
<b>HVAC</b>	Heating, Ventilation, and Air Conditioning
<b>IC</b>	Incident Command or Incident Commander
<b>ICC</b>	Technical Operations Incident Command Center
<b>ICP</b>	Incident Command Post
<b>ICT</b>	Incident Command Team
<b>ICTM</b>	Incident Command Team Manager (Service Area)
<b>ILS</b>	Instrument Landing System
<b>IM</b>	Incident Manager
<b>IMD</b>	Incident Manager (Deputy)
<b>IMWO</b>	Incident Management Watch Officer
<b>IMSWO</b>	Incident Management Senior Watch Officer
<b>IOF</b>	Initial Operating Facility
<b>IS</b>	Independent Study
<b>ISB</b>	Incident Supply Base
<b>IRMZ</b>	Incident Response Management Zones
<b>IWA</b>	Incident Watch Area
<b>IWL</b>	Incident Watch List
<b>J-CAT</b>	Joint Air Traffic Operations Command (JATOC) Crisis Action Team
<b>JATOC</b>	Joint Air Traffic Operations Command
<b>JFO</b>	Joint Field Office
<b>J-FORT</b>	Joint-Forward Operations Response Team
<b>KSN</b>	FAA Knowledge Services Network
<b>LOB/SO</b>	Line of Business/Staff Office
<b>MASP</b>	Mobile Asset Sustainment Program
<b>MEF</b>	Mission Essential Function
<b>NAS</b>	National Airspace System
<b>NASEO</b>	NAS Security and Enterprise Operations

<b>NAS Facilities</b>	National Airspace System Facilities
<b>NEF</b>	National Essential Functions
<b>NIS</b>	NAS Infrastructure Services
<b>NISIS</b>	NAS Integrated Status Insight System
<b>NOCC</b>	National Operations Control Center
<b>NOTAM</b>	Notice to Air Missions
<b>NRCC</b>	National Response Coordination Center
<b>OCC</b>	Operations Control Center
<b>OIS</b>	Operational Information System
<b>OTS</b>	Out of Service
<b>PAF</b>	Primary Alternate Facility
<b>PASS</b>	Professional Aviation Safety Specialists
<b>PAPI</b>	Precision Approach Path Indicator
<b>PMEF</b>	Primary Mission Essential Function
<b>PPE</b>	Personal Protective Equipment
<b>RL</b>	Readiness Level
<b>RMLS</b>	Remote Maintenance Logging System
<b>RZ</b>	Readiness Zone
<b>SA</b>	Service Area
<b>SECM</b>	Safety and Environmental Compliance Manager
<b>SITCON</b>	Significant Incident Teleconference
<b>SITCON-Initial</b>	Significant Incident Teleconference - Initial
<b>SITREP</b>	Situation Report
<b>SOC</b>	Service Operations Center
<b>SPOTREP</b>	Spot Report
<b>SSA</b>	Shared Situational Awareness
<b>SSC</b>	System Support Center
<b>SSCM</b>	SSC Manager
<b>STARS</b>	Standard Terminal Automation Replacement System
<b>STOWO</b>	Senior Technical Operations Watch Officer
<b>TDWR</b>	Terminal Doppler Weather Radar

<b>TELCON</b>	Telephone Conference
<b>TONC</b>	Technical Operations National Contingency
<b>UAS</b>	Unmanned Aerial System
<b>UIS/GIS</b>	Unstaffed Infrastructure Geospatial Decision Support Tool
<b>UC</b>	Unified Command
<b>USGS</b>	U.S. Geological Survey
<b>VASI</b>	Visual Approach Slope Indicator
<b>VOR</b>	VHF Omnidirectional Range
<b>WLB</b>	Work Life and Benefits
<b>WPS</b>	Wireless Priority Service