North Carolina State and Local Aviation Planning Guide

State Emergency Response Team All Hazards Aviation Operations and Airspace Coordination

September 1, 2013

FEMA

NCEM

North Carolina State and Local Aviation Planning Guide Coordination Signature Page

The information contained in this document addresses military air operations within a designated airspace control area for conducting actual or anticipated civil support assistance and homeland defense operations. Any details required to particularize this plan will not be known until immediately before support operations commence. This plan will be amended or particularized as necessary once agreed upon by the affected parties and the NC State Emergency Response Team (SERT) Air Operations Branch will advise the FAA of the changes. Although information contained in this document has been developed in coordination with the agencies listed, their signature indicates a coordinated effort but not necessarily a recommendation or endorsement. The following agencies participated in the development of this plan to promote the integration of military aviation assets into a natural or manmade catastrophic response.

_____	_____
Mr. Michael Sprayberry	MG Gregory A. Lusk
NC Division of Emergency Management	NC National Guard
Director	Adjutant General

Table of Contents

This page intentionally left blank.

Introduction

The North Carolina State and Local Aviation Plan (NC SLAP) is designed to guide State, local and tribal government's air operations. This will, in turn, facilitate the coordination of certain aspects of air operations planning and execution before, during, and following an event. This plan was created to encompass all hazards. This plan is designed to be used as an aid; it is not directive in nature, nor does it encompass every contingency associated with air operations.

Purpose

The purpose of the NC SLAP is to provide the Governor, North Carolina Department of Public Safety (NCDPS), North Carolina Emergency Management (NCEM), and the State Emergency Response Team (SERT) with a means to access and use a broad range of aviation resources within the State when needed to support response operations.

Background

Aviation assets are a highly specialized resource that are both limited in availability and extremely valuable during a disaster response. Aviation resources have the distinct advantages of speed, an aerial perspective, and an ability to fly over impassable surface transportation infrastructure. These advantages must be weighed against the high cost and increased risk exposure inherent in aircraft use.

The most effective use of aviation resources in disaster response is to integrate local, State, Federal, and possibly commercial aviation assets through a common entity, which when activated is the NC SERT Air Branch. Until the NC SERT Air Branch is activated, all aviation assets and resources requests will be coordinated through the State Emergency Operations Center (SEOC). The NC SERT Air Branch reports to the NC SERT Operations Section and receives assignments requesting aviation assets determines the best aviation resource for the mission tasked. The NC SERT Air Branch does not serve as a Command and Control (C^2) organization but, instead, primarily serves to coordinate and deconflict all available aviation assets and resources.

Authorities and References

Authorities

- Federal
  - Federal Civil Defense Act of 1950.
  - Federal Aviation Act of 1958.
  - Homeland Security Presidential Directive 5, Management of Domestic Incidents, February 28, 2003.
  - Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA), Public Law 109-295.

- Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, 42 U.S.C. 5121, *et seq*., as amended.

- State
  - North Carolina General Statute 166A, which was amended by S.L. 2012-12 (HB843) and S.L. 2012-90 (SB798), establishes the authority and responsibilities of the Governor, state agencies, and local government for emergency management in North Carolina. The Secretary of Public Safety is responsible to the Governor for all State emergency management activities. The Division of Emergency Management (NCEM) fulfills this role for the Secretary.

References

- Federal
  - Air Forces Northern (AFNORTH) Instruction 10-202A, *Joint Concept of Operations (J-CONOPS) Air Mobility Coordination for Crisis Response*. March 2, 2009.
  - *Aviation Concept of Operations.* Department of Homeland Security (DHS) Management Directive System MD Number: 0021. April 18, 2005.
  - *Aviation Management and Safety*. DHS Management Directive System MD Number: 0020.1. February 22, 2005.
  - Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3710.01 DoD, *Counterdrug Support*. January 28, 2008.
  - *Defense Support to Civil Authorities (DSCA) Handbook: Air Support Handbook.* AFD-070808-022. August 1, 2007.
  - DoD Directive 3025.1, *Defense Support of Civil Authorities*. January 15, 1993.
  - DoD Directive 3025.1-M, *DoD Manual for Civil Emergencies.* June 2, 1994.
  - DoD Directive 5525.5, *Military Support of Civilian Law Enforcement Officials*. December 20, 1989.
  - Federal Aviation Regulation (FAR) Part 91.137, *General Operating and Flight Rules*. October 11, 2001.
  - FAR Part 99.7, *Security Control of Air Traffic*. March 30, 2004.
  - *Federal Support Plan for Air Evacuation Template*. FEMA. September 2009.
  - *Interagency Airspace Coordination Guide*. U.S. Forest Service (USFS), Bureau of Land Management (BLM). July 29, 2003.
  - *Joint Field Office Aviation Branch Operations Manual.* FEMA. September 2009.
  - *National Incident Management System* (NIMS). DHS. December 2008.
  - *National Interoperability Field Operations Guide*, v1.2. DHS, Office of Emergency Communications. March 2008.
  - *National Response Framework.* DHS. Washington, D.C. 2008.

- PMS 311-83, *National Wildfire Coordinating Group Task Book for the Position of: Area Command Aviation Coordinator* (ACAC). May 2008.
- *State and Local Aviation Planning Guide.* FEMA. December 2009.
- *U.S. National SAR Supplement* (NSS). May 2000.

- State References in accordance with the NC Emergency Operations Plan, August 31, 2012. NC Emergency Operations Plan.

Hazards

Hazards to the State of North Carolina are listed in detail in the NC EOP. In general, hazards to the State of North Carolina include the following:

- Hurricane
- Earthquake
- Flooding
- Wildfire
- Human Pandemic
- Drought
- Landslides
- Severe Thunderstorms
- Tornado
- Winter/Ice Storm
- Hazardous Material Release
- Civil Unrest
- Fixed Nuclear Facility Accident
- National Special Security Event (NSSE)

Critical Assumptions

- Disasters will result in the need for aviation assets to support operations in the impact areas.
- Adequate aviation assets (e.g., aircraft, crews, airports, servicing facilities) may not be available within a single agency or jurisdiction to support catastrophic disaster response operations, and statewide or regional assets may need to be coordinated for a response.
- The SERT is responsible for planning, organizing, directing, managing, and controlling aviation operations within North Carolina upon activation.
- The State uses the Incident Command System (ICS) for disaster response operations. This system includes an organizational position for air operations. The provisions in

this plan are intended to incorporate aviation assets into existing plans or into new plans as they are being developed. In jurisdictions that use ICS, the Incident Commander (IC) is the individual in charge of implementing the Incident Action Plan (IAP).

- Aviation resources may include aircraft and resources owned, chartered, or leased by the Federal, State, or local governments, and commercial and volunteer organizations.
- Aviation assets used to support disaster operations in the state will be coordinated through the NC SERT Air Branch, but will remain under the command and control of their parent agency, owner, or operator.
- The NC SERT Air Branch is the appropriate entity through which State leadership acts to initiate, coordinate, and direct response operations that exceed the capability of the local governments.
- Airspace control and management rests solely with the Federal Aviation Administration (FAA).

Mission Essential Task List

- Plan and integrate aviation operations.
- Coordinate and synchronize aviation operations with the SERT and FEMA Region IV Regional Response Coordination Center (RRCC) or Joint Field Office (JFO).
- Coordinate and deconflict aviation operations.
- Plan and request airspace coordination measures.
- Mobilize aviation assets.
- Coordinate and synchronize the use of civil airports within the state.

Mission

Aviation Mission Set Priorities

- Life saving
- Life sustaining
- Protection of critical infrastructure
- Protection of property
- Logistical support

Aviation Mission Sets

- Critical needs assessment.
- Search and Rescue (SAR)
- Aero-medical evacuation (AE)

- Movement of disaster response personnel (e.g., public safety personnel, police, firefighters, emergency medical services (EMS), emergency management personnel, and other emergency workers)
- Transportation of medical teams and supplies
- Airborne firefighting
- Emergency evacuation support
- Communications relay/airborne repeaters
- Airborne C^2
- Aerial radiological and environmental monitoring flights
- Transportation of critical data, material, and reports
- Air support for essential priority commercial, corporate, industrial, health and welfare, and agricultural requirements in emergency response and recovery operations
- Critical infrastructure patrol
- Monitoring of temporary flight restrictions (TFRs) and other notices to airmen (NOTAMs) put in place by the FAA and requesting of issuance or modification of TFR through the FAA, as required

Execution

Senior Leader's Intent

- For aviation operations, NCEM will activate the NC SERT Air Branch. All aviation operations will be coordinated through the NC SERT Air Branch.
- The NC SERT Air Branch consists of the following participants:
  - State Agencies:
    - North Carolina Army & Air National Guard
    - NC State Highway Patrol (SHP)
    - State Wing Civil Air Patrol (CAP)
    - Department of Transportation, Aviation Division
    - Department of Agriculture and Consumer Services (DA&CS), NC Forest Service
  - Federal Agencies:[1]
    - Federal Emergency Management Agency
    - U.S. Department of Homeland Security (DHS)

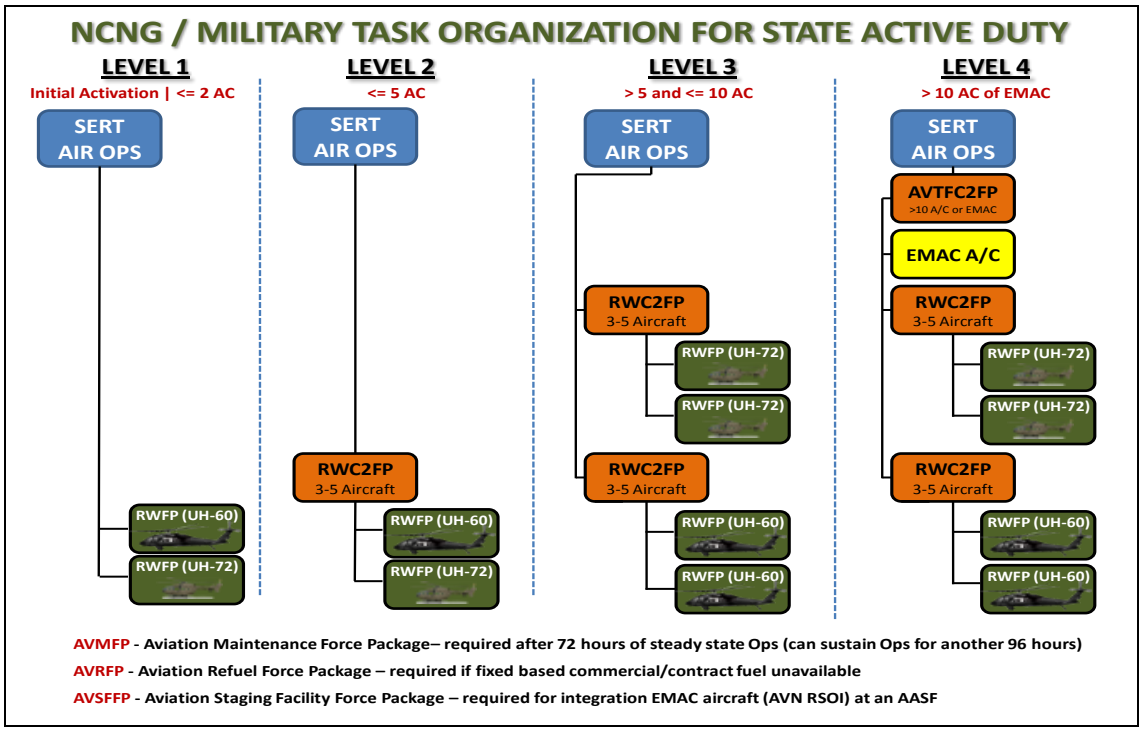
[1] Note: not all of these agencies may have representation within a specified state, but their participation may still be coordinated through FEMA.

        - Customs Border Protection Air and Marine
        - Transportation Security Administration (TSA)
    - U.S. Coast Guard (USCG)
    - U.S. Department of Transportation (DOT)
    - U.S. Department of Energy
        - Nuclear Regulatory Commission (NRC)
    - Federal Aviation Administration (FAA)
    - U.S. Marshals Service (USMS)
    - U.S. Public Health Service (USPHS)
    - Department of Defense (DoD) Transportation Command (TRANSCOM)
    - FEMA Region IV Defense Coordinating Element (DCE)
    - U.S. Department of Agriculture (USDA)
    - U.S. Department of Interior (DOI)
- Business and Industry
    - Duke Energy
    - Emergency Management Assistance Compact (EMAC) Aviation Example: Southeast Airport Disaster Operations Group
    - NC Airports Association (NCAA)
    - Aircraft Owners and Pilots Association (AOPA)
    - Various hospital aviation programs (Air Ambulance)

Concept of Operations

- The NCEM EOP establishes policies and provides for coordinating State, Federal, and volunteer organizations' response to disasters or emergencies.
- The goal of a combined aviation response plan is to be as simple and concise as possible while operating in a safe and efficient manner. This plan establishes parameters for the effective integration of aviation assets into disaster response and support of other events.
- When aviation resources are required to support a multi-agency response, the NC SERT Air Branch will be established as the centralized point of contact for the coordination of all aviation operations involved in the disaster response effort. The NC SERT Air Operations Coordinator (Air Boss) is typically the State Aviation Officer of the North Carolina Army National Guard and is responsible for aviation coordination within the state.
    - Military Aircraft:

- In the event a disaster response requires three or more aircraft, the NC SERT Air Branch provides resource allocation and mission assignment through the following NCNG Force Packages (FPs):
  - Three to five aircraft - One Rotary Wing C2 Force Package (RWC2FP)
  - Five to ten aircraft – Two Rotary Wing C2 Force Packages (RWC2FP)
  - More than ten aircraft – Aviation Task Force C2 Force Package (AVTFC2FP) and Two Rotary Wing C2 Force Packages (RWC2FP)



  - Civil Air Patrol, NC State Highway Patrol, and US Coast Guard: In the event a disaster response requires aviation assets from non-military agencies, the NC SERT Air Branch will provide mission assignment and coordination efforts to those agencies. However, all aircraft and personnel will remain under the direction and control of the agency. Mission status and completion reports are submitted by the NC SERT Air Branch to the NC SERT. The NC SERT Air Branch will make effort to provide any additional requested support to non-military agencies.

- In coordination with the FAA, the NC SERT Air Branch will produce an Airspace Coordination Plan that identifies TFRs and transition corridors to, from, and inside the disaster airspace. Only the FAA has the authority to designate areas of TFR in a disaster and the responsibility to license and manage civilian pilots and aircraft. Therefore, they are a critical participant in the operations of the NC SERT Air Branch.

- The NC SERT Air Branch will develop products that are best suited for the scope of the incident. Some examples may include an Airspace Coordination Plan with Daily Special Instructions (in accordance with FAA guidelines and regulations) and a daily Aviation Coordination Plan. The products developed by the NC SERT Air Branch should identify the following:
  - Areas of operation with assigned frequencies and TFRs.
  - Points of contact for aviation mission requests and flight following.
  - Emergency procedures and coordination.

Roles and Responsibilities

Aviation Branch

The NC SERT Air Branch is a State-level management asset that coordinates the use of fixed- and rotary-wing aircraft during response efforts supporting Federal, State, local, and tribal governmental entities and non-governmental organizations (NGOs) requiring or providing aviation assistance during a disaster, emergency, or other designated event.

The primary responsibility of the NC SERT Air Branch will be to coordinate integration of aviation assets requested by the SERT Operations Chief in response to a disaster or emergency. The NC SERT Air Branch is not designed to provide direct C^2 of aviation resources but rather, it coordinates aviation specific missions and resources between Federal, State, and local agencies for centralized planning with decentralized execution.

Additionally, the NC SERT Air Branch provides point of contact information for aviation coordination into and from the disaster area. This is accomplished by working with the FEMA RRCC, JFO, or other coordination agencies. This role is enabled by a number of key functions, including the following:

- Support of air mission requests.
- Prioritization of aviation missions.
- Mission assignment (MA) of available aviation assets.
- Air mission planning and coordination, including deconfliction.
- Situational awareness of aviation operations in the incident area.
- Coordination of ground support services.

The NC SERT Air Branch serves as the principal operational interface with the FAA for the incident area. The FAA is the final authority on air traffic control (ATC) matters, including the establishment and management of Temporary Flight Restrictions (TFRs); development and implementation of incident response aviation operations coordination plans; coordination with active ATC facilities; and the mitigation of impacts on the National Airspace System (NAS).

The NC SERT Air Branch also helps to identify and resolve flight safety issues, especially those involving multiple departments and agencies. The NC SERT Air Branch coordinates these efforts with the FAA, who retains ultimate aviation safety oversight authority.

Incident Command Posts

Multiple incident command posts (ICPs) may be established at county and regional levels, in coordination with the RWC2FPs, and will be responsible for the management of air missions and associated support activities in their area of operational responsibility. These RWC2FPs will coordinate closely with the NC SERT Air Branch and directly coordinate with their assigned ICPs.

SERT Aviation Partners

NC SERT Air Operations Coordinator (Air Boss)

The NC SERT Air Branch is responsible for providing direction and assistance in the managed movement of people and goods and in the use of special-purpose–type aircraft in support of national, regional, State, and local essential operations.

North Carolina Army National Guard and Air National Guard

The NCNG has dual missions: 1) to support the governor by providing trained personnel and unit equipment capable of deploying to protect life and property and maintaining peace, order, and public safety and 2) to support U.S. military objectives.

The NCNG represents the governor's first line of military response to support domestic emergencies. They provide an organized and trained force that provides the governor with a diverse response capability. As per AFD-070808-022, *Defense Support to Civil Authorities (DSCA) Handbook: Air Support Handbook*, "DoD planning recognizes Army and Air National Guard forces, acting under State orders (i.e., not in Federal service), have primary responsibility for providing military assistance to State and local government agencies in civil emergencies.

NC Highway Patrol

The mission of the North Carolina State Highway Patrol is to ensure safe, efficient transportation on our streets and highways, reduce crime, protect against terrorism, and respond to natural and manmade disasters. This mission will be accomplished in partnership with all levels of government and the public, through quality law enforcement services and education based upon high ethical, professional, and legal standards.

NC Civil Air Patrol

CAP can assist State and local governments in performing various missions. In a USAF Auxiliary status, CAP can support Federal agencies, which includes assistance to State and local governments requested by a Lead Federal Agency (LFA).

Department of Transportation, Aviation Division

The Division is responsible for all aviation functions regarding state system planning, airport and aviation system development, and provides funding to communities for constructing and improving airports throughout the state.

Department of Agriculture and Consumer Services (DA&CS), NC Forest Service

The Service mission is to develop, protect, and manage the multiple resources of North Carolina's forests through professional stewardship, enhancing the quality of life for our citizens while ensuring the continuity of these vital resources.

Federal Organization and Agency Participants

Federal Emergency Management Agency

FEMA's Response and Recovery Directorate is primarily responsible for providing advisory planning guidance for disaster and emergency response at State, regional, and national levels for the use of aviation resources during an emergency. FEMA Region IV provides this guidance within the Southeastern United States and provides a representative to the NC SERT during activation.

During an incident, the State would request resource support for Federal aviation directly to the Federal Coordinating Officer (FCO) who would relay the request to the FEMA Region IV or JFO Aviation Branch.

National Response Coordination Center

The National Response Coordination Center (NRCC) maintains overall national situational awareness and bears the responsibility for the mobilization of aviation assets nationally. Additionally, the NRCC is tasked with the prioritization between FEMA regions when multiple regions have incidents.

The NRCC may issue MAs and tasks that require additional coordination. These requests are usually generated by senior leadership, contain limited timetables, and require immediate response.

Joint Field Office/Initial Operating Facility

Upon commencement of the Federal response, the FCO may establish an Aviation Branch to coordinate Federal aviation resources in support of State requirements. This organization could be located at the JFO/Initial Operating Facility (IOF) or co-located with the NC SERT Air Branch. Normally, there will be a FEMA LNO assigned to the NC SERT upon activation.

Customs Border Protection Air and Marine

- Customs Border Protection (CBP) operates the world's largest law enforcement air and marine fleet with 270 fixed- and rotary-wing aircraft and 180 marine vessels from 45 locations throughout the United States.

U.S. Coast Guard

- The USCG operates a fleet of 211 fixed- and rotary-wing aircraft.

- The USCG is the lead Federal agency for airborne SAR over water.
- In order to render aid to distressed people, vessels, and aircraft on and under the high seas and on and under the waters over which the United States has jurisdiction and in order to render aid to people and property imperiled by flood, the USCG may perform any and all acts necessary to rescue and aid people and protect and save property.
- The USCG, upon request, may use its personnel and facilities to assist any Federal agency, state, territory, possession, or political subdivision to perform activities for which the USCG is "especially qualified." This includes the USCG's expertise in and resources for the following:
  - SAR operations, particularly in maritime regions, including inland rivers.
  - Providing qualified personnel and deployable and mobile equipment support to establish or enhance C^2 capabilities.
  - Law enforcement technical support, including bomb and drug detection equipment, such as canine teams.
  - Augmenting and assisting air operations with surveillance, transportation, airlift, and other logistic support.
- The mission requirements are met by continual coordination with local and State officials facilitated by representation at their county and SEOCs.

Transportation Security Administration

- TSA has the responsibility for the security of all modes of transportation, including aviation, rail, bus, and maritime operations. TSA is capable of providing security and law enforcement assistance during a mass evacuation. As needed, during a disaster, TSA may provide an LNO to the NC SERT Air Branch. This LNO may assist in obtaining and deploying resources and coordinating safety and security operations at air evacuation operations.
- TSA provides security officers and Federal Air Marshals (FAMS) who can assist in securing airports and aircraft.
- TSA can provide passenger screening services for non-ticketed passengers during emergency air evacuation operations.

U.S. Department of Transportation

- The DOT serves as the ESF-1 liaison to aviation operations.
- DOT provides support to DHS in prevention, preparedness, response, recovery, and mitigation activities among transportation infrastructure stakeholders at the regional, State, and local levels within the authorities and resource limitations of ESF-1 agencies.
- DOT works with primary and support agencies, State and local transportation departments, and industry partners, along with input from the National Infrastructure Coordination Center (NICC) and Transportation Security Operations Center (TSOC),

to assess and report the damage to the transportation infrastructure and to analyze the impact of the incident on transportation operations, both nationally and regionally.

- DOT coordinates and implements, as required, emergency-related response and recovery functions performed under DOT statutory authorities. This includes management of the airspace within and surrounding the disaster area.

Federal Aviation Administration

- The FAA is responsible for the safe and efficient movement of air traffic in the NAS and for the operation of the NAS, as well as for civil aviation safety oversight during both emergency and non-emergency situations.
- If the FAA determines that an emergency exists related to safety in air commerce that requires immediate action, the FAA may prescribe regulations and issue orders immediately to meet that emergency (49 USC 46105(c)). The FAA interprets this provision to provide authority for the FAA to close airspace or redirect a flight if it is determined that safety and the public interest requires such action. The FAA may also issue TFRs under 14 CFR Part 91.
- The FAA, under 49 USC 40103, has the exclusive responsibility for developing plans and policies for the use of the navigable airspace and assigning, by regulation or order, the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. Under this statutory provision, the FAA would have the authority to control or restrict all air traffic at a particular airport. While this technically does not "close" the airport, the effect is the same while the restriction is in effect.
- Although all significant U.S. airports receive Federal airport grant funds, the grant assurances that airports are required to provide pursuant to statute generally pertain to keeping the airports open for aeronautical access.
    - For example, in a grant, a Federally funded airport agrees to the following:
        - Make the airport available for public use on reasonable terms and without unjust discrimination, 49 USC 47107(a) (1).
        - Make the airport available without charge for use by government aircraft, 49 USC 47107(a) (11).
        - Obtain the DOT Secretary's approval to close the airport temporarily for a non-aeronautical purpose 49 USC 47107(a) (8).
    - Certain operations are permitted within 14 CFR Part 91.137 TFRs, depending on the operational circumstances of the disaster. These operations are determined in the language of the TFR. Operators wishing to fly in TFR airspace should contact the appropriate point of contact, as specified by NOTAM, as issued by the FAA.

U.S. Marshals Service

- The USMS operates a fleet of 6 MD-80 passenger aircraft capable of transporting 140 passengers.

- Each aircraft is dispatched with a security team, airframe and power plant (A&P) mechanic, and a nurse.
- USMS aircraft will rapidly respond through a FEMA MA.

U.S. Public Health Service

- The USPHS directs the National Disaster Medical System (NDMS), a federally coordinated system that augments the nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated national medical response capability for assisting State and local authorities in dealing with the medical impact of major peacetime disasters.
- USPHS provides oversight and management of hospital patient transfers for AE.

Department of Defense

- DoD can provide a large variety of military fixed- and rotary-wing aircraft, as well as commercial contract aircraft.
- Military installations within the State may provide other possible resources. DoD resources are generally only used when State and local assets are overwhelmed. Military commanders have authority to take immediate action to save lives, prevent human suffering, and mitigate great property damage.
- Once there is a presidential declaration of an emergency and the NRF is implemented, all Federal support, including DoD installation support, will be coordinated through the lead Federal agency, normally FEMA. State officials will need to coordinate through the FEMA FCO to obtain DoD assistance after a presidential disaster declaration is made.
- The FEMA Region IV Defense Coordinating Officer (DCO) at the JFO responds to the FCO and serves to interface between military and other Federal, State, local, tribal, and territorial agencies.
- The Air Force Rescue Coordination Center (AFRCC) coordinates requests for SAR assets for the U.S. Inland Search and Rescue Region (continental United States) but normally does not directly conduct the actual responses themselves. In most situations, the actual SAR is carried out by CAP, USCG, or State or local rescue services.

Business and Industry Participants

Duke Energy-Progress

- Duke Energy and Progress Energy have merged to create the new Duke Energy, the nation's largest utility. The aviation unit has multiple fixed and rotary-wing aircraft utilized for assessment of infrastructure and relocation of personnel.

Emergency Management Assistance Compact (EMAC) Aviation Example: Southeast Airport Disaster Operations Group

- The Southeast Airport Disaster Operations Group (SEADOG) is a partnership of participating airports that assist each other in coping with and recovering from major disasters. SEADOG is a system that sets up a coordinated emergency response, including a procedure for participating airports to activate a call center up to 72 hours in advance of a possible disruption to operations.[2] SEADOG is a growing organization with participating airports throughout the Central and South Central regions of the United States.

- When activated, an assessment team is deployed to the affected airport for the purpose of assessing manpower, resources, and needs associated with the resumption of airfield operations. Pre-staged recovery teams are advised of airfield operational needs and are mobilized to the affected airport. Acquisition of supplies or equipment associated with the airport are supplied through various airports and channeled to the affected airport through logistical methods. Daily briefings and support to the affected airports are managed through daily conference calls about ground status information and planning and coordination efforts.

NC Airports Association

- The mission of the NC Airports Association is to promote aviation and airport management in North Carolina through networking and professional development opportunities.

Policy

The NC SERT Air Branch, in coordination with the FAA, will provide the aviation community with information regarding disaster operations. This notification will be done through the FAA DEN and NOTAMS.

The NC SERT Air Branch will produce an Aviation Procedures Guide (APG) for each specific event. The plan identifies points of contact for air mission requests (AMR), flight-following procedures and emergency procedures, TFRs, and communications requirements. The NC SERT Air Branch will serve as a collection and dissemination point for crucial aviation coordination information. Specific operational area tactical information will be addressed as a component of local IAPs.

NC SERT Air Branch Preplanning

- Establish contacts, develop a directory, and conduct coordination with state emergency aviation operations participants, including a review of the state aviation plans and protocols.
- Identify and catalog all available aviation assets and facilities (e.g., airports and air navigation services facilities, such as air traffic control towers (ATCTs) in coordination with the FAA, NCDOT Aviation Division, and other key stakeholders.

[2] *SEADOG to the rescue.* Houston Airport System. July 13, 2007. Online: http://www.fly2houston.com/0/337725/0/1906D1934/.

- Develop a directory of personnel who will support aviation operations during activation and determine resource and personnel requirements to support the NC SERT Air Branch.
- Safety is the paramount consideration in all operations. Each agency or organization involved in the operation will continue to adhere to its own safety standards, as well as FARs. The NC SERT Air Branch may also implement additional safety practices in coordination with the FAA.
- As agencies are tasked with tactical aviation missions in the disaster area, consideration should be given to defining geographical areas of operation to ensure adequate safety and C^2 to address constraints between the various agencies.
- Participating agencies will ensure that appropriate procedures, which comply with FARs, are in place for overdue aircraft. Overdue aircraft, which are suspected to have been lost, are to be reported to the NC SERT Air Branch and to the FAA immediately.
- Initial reporting of all incidents should be in accordance with each agency guidelines. Each agency will follow its own aviation mishap and investigation procedures. However, all aircraft mishaps, near midair collisions, and/or violations of TFRs will be reported to the NC SERT Air Branch and to the FAA immediately.
- NC SERT Air Branch responsibilities also include coordinating with the FAA to define the altitudes to be used by different airframes and mission types.

Aviation Resource Management

- The NC SERT Air Branch will maintain a listing of aviation MAs and mission closeouts. They will also coordinate and report mission status to the NC SERT.
- The NC SERT Air Branch will compile a list of participating aircraft and other pertinent information to be generated on the Aircraft Assignment List and maintained by the NC SERT Air Branch on Incident Command System (ICS) Form 220 (Air Operations Summary) to be included as part of the daily Mission Tracking Slides.
    - The Resources Unit of the Planning Section will use the ICS Form 220 prepared by the NC SERT Air Branch to track the status of the air assets assigned.
- The NC SERT Air Branch will track the status of current response aircraft, actual vs. scheduled sorties flown, actual vs. scheduled hours flown, actual vs. scheduled passengers moved, and actual vs. scheduled freight tons moved. This information will be reported to the NC SERT Operations Section.

Air Mission Management

- Based on mission requests, the NC SERT Air Branch will coordinate with the appropriate agency air mission C^2 unit (e.g., an operations cell responsible for dispatch functions).

Flight Following & Traffic Advisories for Aircraft Involved in Disaster Response

- Aircraft will maintain positive communications, including flight following with the controlling agency (e.g., ATC facilities, airborne C^2 platforms).
- As requested and as practicable, the FAA may assist with flight following. The FAA may also provide flight advisory services; however, the FAA has historically not provided flight advisory services in the operations area during disaster incidents.
- The complexity of the operations may require the establishment of geographically separate zones. The State has pre-established aviation regions and identified primary airports. Note: The geographically separate zones are established at the discretion of each state based on the requirements of the State.
- Airborne C^2 platforms (e.g., CBP P-3, E-3 Airborne Warning and Control System (AWACS)) should be considered when regular air traffic services are disrupted or if the majority of operations are conducted below or outside FAA radar coverage. As practicable, the FAA or, as requested by the FAA, other involved departments and agencies with assets, such as radar aircraft, may provide visual flight rules flight advisories.
- If response aircraft have to operate from airports, airfields, heliports, or other facilities where normal ATC services are temporarily unavailable, the FAA may use portable ATCTs or request assistance from DoD/National Guard for expeditionary airfield equipment.

Airspace Control Plan

- Global Area Reference System (GARS) Control Plan: GARS Control Plan will be used to manage Airspace during an event or after a major disaster which affects a large area. This plan requires coordination, equipment, aircraft, personnel, and planning support from several federal agencies. These agencies include the FAA, Department of Home Security, NORTHCOM, and other DoD military organizations. The asset deployment factors will be based on the size of the impacted area, level of destruction, size of affected population, and life threatening conditions. Based on the asset deployment factors, other states or locations may require available assets. The Air Boss will only implement the GARS Control Plan when the required assets are available to effectively and safely execute the total plan.
- GARS is the standardized battlespace area reference system across DoD which will impact the entire spectrum of battlespace deconfliction. It is based on lines of longitude (LONG) and latitude (LAT), to provide an integrated common frame of reference for joint force situational awareness to facilitate air-to-ground coordination, deconfliction, integration, and synchronization. This area reference system provides a common language between the components and simplifies communications. It is important to note that GARS is primarily designed as a battlespace management tool and not to be used for navigation.

Reporting Requirements

- The NC SERT Air Branch reports to the SERT Operations Section to provide input to the IAP. Use *Incident Objectives (ICS) Form 202.*
- The NC SERT Air Branch works with the Operations Section Chief to provide input to the branch personnel assignments.
- The NC SERT Air Branch works with the Operations Section Chief to provide input to the IAP by providing a summary of the previous day's air operations. Use *Air Operations Summary, ICS Form 220.*

State-Specific Aviation Group Organization

NC SERT Air Branch

The NC SERT Air Branch is responsible for coordinating the aviation portion of disaster response efforts. The makeup of the NC SERT Air Branch is situation-dependent and could include representatives from State, local, and Federal agencies and nongovernmental organizations (NGOs). The NC SERT Air Branch is depicted in Figure 1, below.

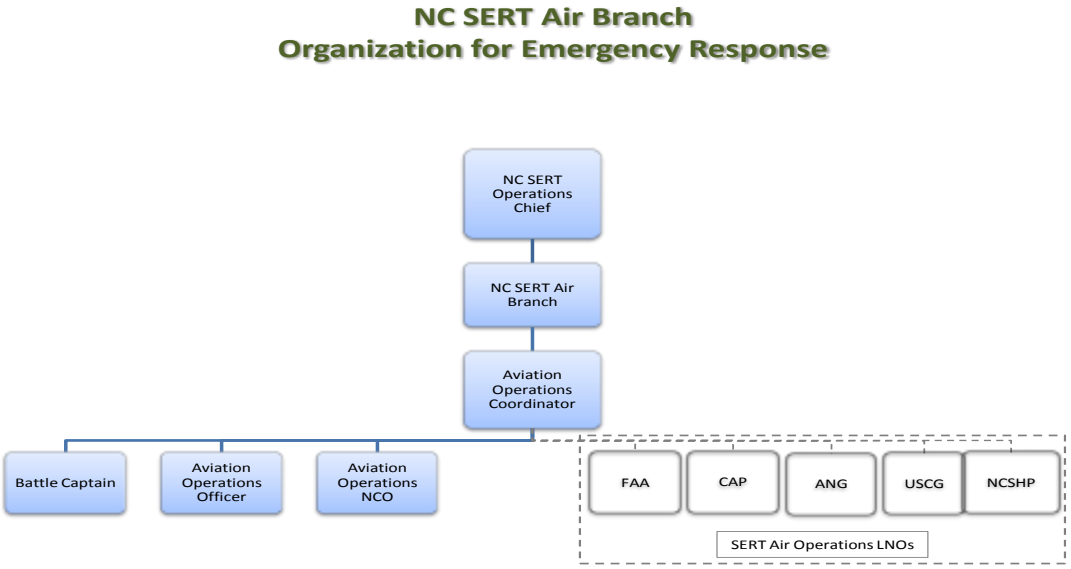


Figure 1: NC SERT Air Branch Organization

NC SERT Air Operations Coordinator (Air Boss)

The NC SERT Air Operations Coordinator will develop priorities in accordance with the SERT's priorities, assign strategic and operational missions, allocate aircraft and other resources, track mission results, provide appropriate briefings, collect cost information, and identify and coordinate the resolution of flight safety issues, particularly between agencies. The NC SERT Air Operations Coordinator should have an understanding of State and Federal processes and procedures and interagency roles and responsibilities.

The NC SERT Air Operations Coordinator coordinates air activities and aviation information flow between all agencies with aviation assets in the incident area to accomplish the following:

- Coordinate air mission tasks and schedules.
- Coordinate aviation frequencies and communication protocol with the FAA and air operators performing response air missions.
- Coordinate with the FAA on mission needs for airspace restrictions and for the identification and resolution of aviation safety issues.
- Resolve aviation issues.
- Identify air traffic and/or airspace management issues and coordinate with the FAA.
- Coordinate air mission and ground support operations.
- Track aviation assets and missions and provide closeout reports to NCEM.

Aviation Battle Captain

The Battle Captain (BC) is responsible for mission tracking and maintaining situational awareness on all ongoing aviation missions in support of North Carolina Emergency Management (NCEM). The BC is responsible for coordinating with partner agencies: NC Highway Patrol, Civil Air Patrol, Coast Guard, and EMAC personnel.

Aviation Operations Officer

The Aviation Operations Officer (AOO) employs aviation assets that perform response air operations. The AOO is responsible for conducting an initial review of requested air missions and assigning them to either the appropriate supporting SERT partner operations section for processing, depending on available asset configurations and the magnitude or scope of the mission request. The AOO, as an experienced airman, is also designated to concentrate on safety issues, such as impending weather conditions, crew duty limitations, and any hazardous conditions that exist in the operation.

Aviation Operations NCO

The Aviation Operations NCO maintains the Daily Staff Journal (DA Form 1594) and the Air Operations Summary (ICS Form 220). The Operations NCO also assists the Battle Captain and Operations Officer in tracking and maintaining situational awareness of all mission requests and ongoing missions.

Airspace Coordinator (FAA LNO)

The Airspace Coordinator establishes and coordinates TFRs to ensure flight safety and provides guidance and briefings to pilots operating within the Joint Operations Area (JOA) or TFR, as well as internal staff. This position may be filled by an FAA representative upon SERT activation.

Communication Procedures

The Interagency Aviation Communications Plan

The Interagency Aviation Communications Plan is provided as a part of the Aviation Procedures Guide along with an event-tailored Communications Card. This plan identifies basic guidelines for effective communications for aviation operations during a disaster. In developing this plan, the following concepts should be kept in mind:

- Keep the plan as simple and concise as possible.
- Augment the local and State communications plans currently in effect.
- Identify additional frequency resource support that can be used.
- All communications should be in "clear text." This includes radio, briefings, and all command functions.
- A current copy of the Incident Radio Communication Plan, ICS Form 205, should be in the IAP.
- Conserve radio frequency resources in the event of area or geographic separation of aviation operations.
- All aircraft should have compatible communications capabilities.

Aviation Mission Request and Assignment Process

The aviation request and assignment process uses ICS concepts and principles at all levels. The supported agency will identify the specific parameters of the request (e.g., cargo, timeline, origination location pickup, and destination). The supporting agency will be responsible for sourcing and tasking the appropriate air assets to accomplish this request. Figure 2 depicts the aviation mission request and assignment process.

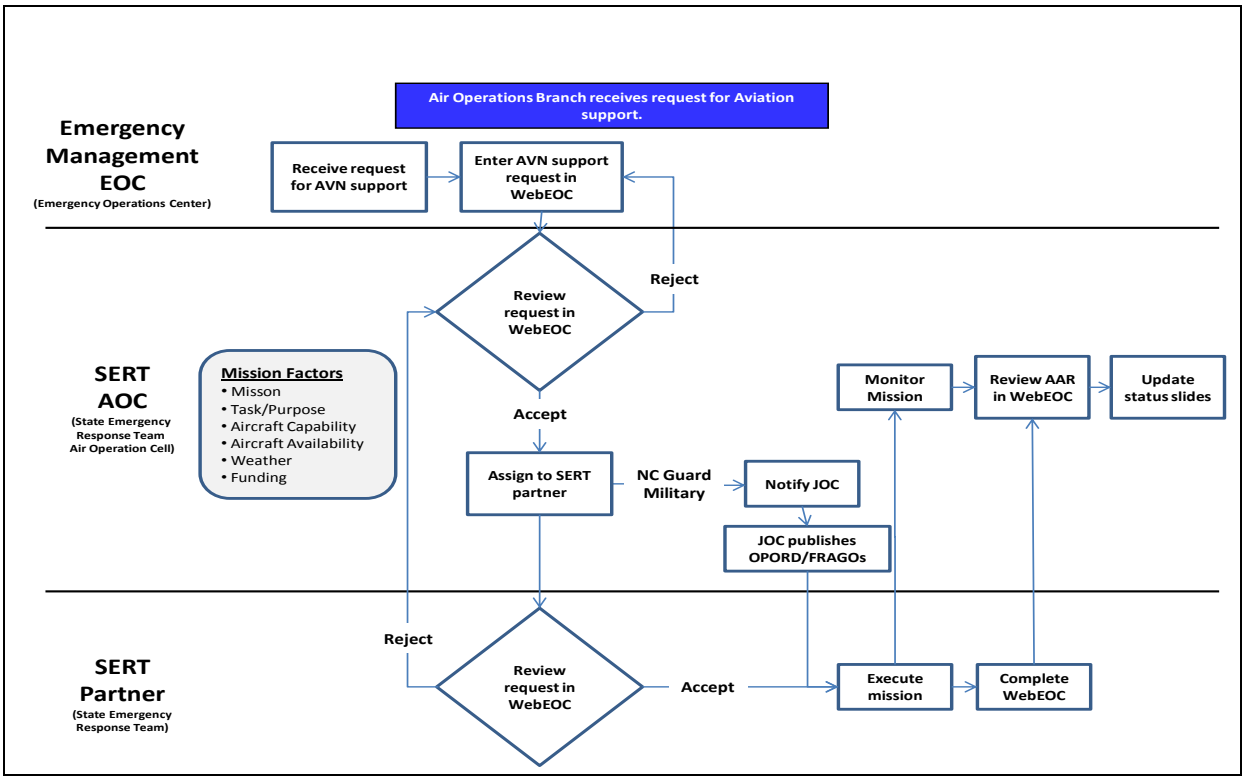


Figure 2: Aviation Mission Request and Assignment Process

NC SERT Air Branch

- Receive and validate the aviation mission request from any agency.
- Identify and offer agency-owned air assets and assign missions. Coordinate the aviation request with the SEOC.
- Advise the SEOC of the scheduled mission.
- Create a daily IAP highlighting the following day's planned aviation activity.

SERT

- Receive and validate an aviation request (the original request or shortfall from an ICP).
- Coordinate with the NC SERT Air Branch to secure the State air asset to accomplish the mission or direct the NC SERT Air Branch to submit the aviation request via an Action Request Form (ARF) to the Region RRCC/JFO for action and communicate the status of the request to the requestor. For disapproved requests, coordinate this information with the requestor only.
- Create a daily IAP highlighting the following day's planned aviation activity.

RRCC/JFO

- Receive and validate an aviation request from the NC SERT Air Branch.
- Depending on the size and scope of an incident, the FEMA Region IV RRCC or JFO may initiate a request (from a regional perspective) to coordinate and direct aviation assets down to the impact areas (i.e., to conduct in-state evacuation missions).
- Coordinate the aviation request with the FEMA Region IV Aviation Branch Director, Logistics, FCO, ESFs, and Air Operations Coordination Center (AOCC) to determine whether internal FEMA resources or Federal assets at the regional level are available to meet the request.
- Fill the aviation request with either internal FEMA resources, a Federal asset from within the affected region (via mission assignment), or with a contract through a civilian organization (via interagency agreement).
- If the resources are unavailable within the region, forward the aviation request to the AOCC, which is located within the Movement Coordination Center (MCC) at the NRCC, for action and communicate the status with the requestor.

NRCC—AOCC

- Receive and validate the aviation request (shortfall from the Region IV RRCC/JFO).
- Depending on the size and scope of an incident, the NRCC may initiate a request (from a national perspective) to coordinate and direct aviation assets down to the impact areas (i.e., to conduct intra-state evacuation missions or imagery/streaming video requests).
- Fill the aviation request with a Federal asset (via a mission assignment) or contract with a civilian organization (via an MOU) and communicate the status to the requestor.

Aviation Safety Guidance

Recognizing the high-risk nature of disaster relief missions, North Carolina strives to promote and coordinate aviation safety. Aviation safety considerations are paramount and are the responsibility of everyone at every ICS level, and they must be carefully addressed during every phase of each mission.

Aviation safety will be the paramount consideration in all operations. Aircraft separation is the single largest concern with multiple missions operating in the same area. Each agency/organization involved in the operation should continue to adhere to its own safety standards, as well as FAA-required safety regulations. The NC SERT Air Branch may also mandate additional safety practices based on the specific situation.

All mishaps and unsafe conditions or actions will be reported to the chain of command immediately. It is the responsibility of the chain of command to correct the situation in order to prevent loss of life and damage to equipment and property. All mishaps will be reported to the FAA and the NC SERT Air Operations Coordinator immediately. Initial reporting of all incidents should be reported in accordance with each specific

agency/branch guidelines, as well as the FARs. Each agency and/or military branch will follow its own aviation mishap/investigation procedures. Copies of any mishap/investigation reports should be forwarded to the FAA and the NC SERT Air Operations Coordinator.

The focal point for safety during a response to a disaster is at the SEOC/JFO Command Staff Safety Office and resides with the Aviation Operations Officer. As a qualified aviator normally assigned as a liaison to the NC SERT Air Branch, this individual has the responsibility of maintaining an unbiased view of the overall aviation operation and making recommendations to the NC SERT Air Operations Coordinator, as appropriate. Additionally, the NC SERT Air Operations Coordinator may unilaterally implement specific safety practices based upon operational requirements or situations.

Safety issues that must be constantly addressed include but are not limited to ground operations, flight operations, weather, airspace deconfliction, aircraft status, and specific operational mission procedures. Each flying organization is responsible for enforcing its own safety standards and practices to include crew rest and crew duty day regulations, as well as complying with disaster specific FAA procedures.

When a safety issue arises, it is the responsibility of the people detecting the problem to either stop associated flight operations and/or immediately bring the situation to the attention of supervisory personnel. Flight operations should be discontinued until the situation in question has been resolved. Safety issues should be reported at the earliest possible time so that fast and effective "cross tell" of the incident can be initiated if required. Safety does not occur without diligent effort, constant attention to detail, and good common sense at every level. It is everyone's responsibility.

Airspace Guidance

- Refer to the Interagency Airspace Coordination Guide, dated July 29, 2003. Refer to Appendix 15: Light Aircraft Commodity Airlift.

Appendix 1: Glossary of Terms

Aero-Medical Evacuation (AE)

The movement of patients under medical supervision to and between medical treatment facilities by air transportation.[3]

Air Traffic Control Service

A service provided for to prevent collisions between aircraft and on the maneuvering area between aircraft and obstructions and to expedite and maintain an orderly flow of air traffic.[4]

Command and Control (C^2)

The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.[5]

Contingency Response Air Support Schedule (CRASS)

The Contingency Response Air Support Schedule (CRASS) is used for the benefit of all agencies flying in support of civil authority operations. The CRASS is a visibility document for all participating aircraft operating in the airspace control area, to include both Joint Forces Commander (JFC) and non-JFC assets. The CRASS will include all unclassified Department of Defense (DoD)/interagency missions, as well as planned flying by other agencies (e.g., local enforcement agencies, Title 32 ANG, etc). The fidelity of this product is highly dependent on the information provided by non-DoD agencies/organizations. It will be published using a common application (Microsoft Excel), ensuring the ability to manipulate data, and requires increased coordination with state emergency operations centers/law enforcement agencies/other agencies to ensure accuracy. The CRASS can be accessed online at https://1afnorth.region1.ang.af.mil/default.aspx.

Coordinate

To systematically advance an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.[6]

[3] Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, April 15, 2013
[4] Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009
[5] Joint Publication 1, *Joint Doctrine for the Armed Forces of the United States*, March 25, 2013
[6] *National Response Framework*, January 2008

Defense Coordinating Officer (DCO)

Individual who serves as the Department of Defense's (DoD's) single point of contact at the Joint Field Office (JFO) for requesting assistance from DoD. With few exceptions, requests for Defense Support of Civil Authorities originating at the JFO are coordinated with and processed through the DCO. The DCO may have a Defense Coordinating Element (DCE) consisting of a staff and military liaison officers (LNOs) to facilitate coordination and support to activated emergency support functions (ESFs).[7]

Defense Support of Civil Authorities (DSCA)

Support provided by U.S. military forces (Regular, Reserve, and National Guard), Department of Defense (DoD) civilians, DoD contract personnel, and DoD agency and component assets in response to requests for assistance from civilian Federal, State, local, and tribal authorities for domestic emergencies, designated law enforcement support, and other domestic activities.[8]

Emergency Management Assistance Compact (EMAC)

A congressionally ratified organization that provides form and structure to interstate mutual aid. Through the EMAC, a disaster-affected state can request and receive assistance from other member states quickly and efficiently, resolving two key issues up front: liability and reimbursement.[9]

Federal Coordinating Officer (FCO)

The official appointed by the President to execute Stafford Act authorities, including the commitment of Federal Emergency Management Agency (FEMA) resources and mission assignment of other Federal departments or agencies. In all cases, the FCO represents the FEMA Administrator in the field to discharge all FEMA responsibilities for the response and recovery efforts underway. For Stafford Act events, the FCO is the primary Federal representative with whom the State Coordinating Officer and other State, tribal, and local response officials interface to determine the most urgent needs and set objectives for an effective response in collaboration with the Unified Coordination Group.[10]

First Air Force (AFNORTH, CONR, 1AF)

Headquartered at Tyndall Air Force Base near Panama City, Florida, 1st Air Force (1AF) is assigned to Air Combat Command (ACC). It has the responsibility of ensuring the air sovereignty and air defense of the continental United States. As the continental United States geographical component of the bi-national North American Aerospace Defense Command, it provides airspace surveillance and control and directs all air sovereignty activities for the continental United States.

Flight Following

See Traffic Advisories.[11]

---

[7] *National Response Framework*, January 2008
[8] *National Response Framework*, January 2008
[9] *National Response Framework*, January 2008
[10] *National Response Framework*, January 2008
[11] Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009

Incident Command System (ICS)

A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is a management system designed to enable effective incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.[12]

Joint Field Office (JFO)

The primary Federal incident management field structure. The JFO is a temporary Federal facility that provides a central location for the coordination of Federal, State, tribal, and local governments and private-sector and nongovernmental organizations with primary responsibility for response and recovery. The JFO structure is organized, staffed, and managed in a manner consistent with National Incident Management System principles and is led by the Unified Coordination Group. Although the JFO uses an Incident Command System structure, the JFO does not manage on-scene operations. Instead, the JFO focuses on providing support to on-scene efforts and conducting broader support operations that may extend beyond the incident site.[13]

Maximum on Ground (MOG)

Maximum number of aircraft an airfield can have on the ground. [14]

Movement Coordination Center (MCC)

Coordinates acquisition of transportation capacity and maintains visibility over validated transportation requests for assistance from inception through delivery to a mobilization center.

Multiagency Coordination (MAC) Group

Administrators/Executives, or their appointed representatives, who are authorized to commit agency resources and funds are typically brought together and form MAC groups. MAC groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the system. A MAC group can provide coordinated decision making and resource allocation among cooperating agencies and may establish the priorities among incidents, harmonize agency policies, and provide strategic guidance and direction to support incident management activities.[15]

[12] *National Response Framework*, January 2008
[13] *National Response Framework*, January 2008
[14] Joint Deployment Training Center, *Frequently Asked Questions*, No Date
[15] *National Response Framework*, January 2008

Multiagency Coordination System(s) (MACS)

MACSs provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The elements of MACSs include facilities, equipment, personnel, procedures, and communications. Two of the most commonly used elements are emergency operations centers and Multiagency Coordination (MAC) groups. These systems assist agencies and organizations responding to an incident.[16]

Multijurisdictional Incident

An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of the incident. In the Incident Command System, these incidents will be managed under Unified Command.[17]

Mutual Aid and Assistance Agreement

Written or oral agreement between and among agencies/organizations and/or jurisdictions that provides a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and/or after an incident.[18]

National Airspace System (NAS)

The common network of United States airspace; air navigation facilities, equipment, and services; airport or landing areas; aeronautical charts, information, and services; rules, regulations and procedures, technical information, and manpower; and material. Included are system components shared jointly with the military.[19]

National Response Framework (NRF)

Guides how the nation conducts all-hazards response. The NRF documents the key response principles, roles, and structures that organize national response. It describes how communities, states, the Federal government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. It describes special circumstances where the Federal government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. It allows first responders, decision makers, and supporting entities to provide a unified national response.[20]

Nongovernmental Organization (NGO)

An entity with an association that is based on interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross. NGOs,

[16] *National Response Framework*, January 2008
[17] *National Response Framework*, January 2008
[18] *National Response Framework*, January 2008
[19] Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009
[20] *National Response Framework*, January 2008

including voluntary and faith-based groups, provide relief services to sustain life, reduce physical and emotional distress, and promote the recovery of disaster victims. Often these groups provide specialized services that help individuals with disabilities. NGOs and voluntary organizations play a major role in assisting emergency managers before, during, and after an emergency.[21]

Operational Control (OPCON)

Functions of common authoritative direction involving the composition of subordinate forces, the assignment of tasks, and the designation of objectives necessary to accomplish the mission. It does not include administrative, discipline, internal organization, and unit training except when a subordinate commander requests assistance. Inherent in operational control is the authority to assign tactical control.[22]

Operational Control

With respect to a particular flight, the exercise of authority over initiating, conducting, or terminating that flight.

Private Aircraft

Aircraft owned by an individual, or group of individuals, that is not engaged in commercial aviation activities or for hire to the general public.[23]

Private Sector

Organizations and entities that are not part of any governmental structure. The private sector includes for-profit and not-for-profit organizations, formal and informal structures, commerce, and industry.[24]

Southeast Airport Disaster Operations Group (SEADOG)

This non-profit, all-volunteer group of airports provides assistance following a disaster to airports located in the southeastern United States.

Special Needs Population

Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.[25]

---

[21] *National Response Framework*, January 2008

[22] Department of Homeland Security Management Directive System MD Number: 0021, *Aviation Concept of Operations*, April 18, 2005

[23] Department of Homeland Security Management Directive System MD Number: 0020.1, *Aviation Management and Safety*, February 22, 2005

[24] *National Response Framework*, January 2008

[25] *National Response Framework*, January 2008

Staging Area

Any location in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment.[26]

Strategic Airlift

Long-haul, large aircraft originating outside the event area. After pickup or drop off of their cargo inside the event area, they depart the event area.

Tactical Airlift

Short-haul smaller aircraft operating entirely within the event area.

Tactical Control (TACON)

Used in the execution of operations and defined as the detailed and usually local direction and control of movement or maneuvers necessary to accomplish missions or tasks assigned. TACON is subordinate to OPCON.[27]

Temporary Flight Restrictions (TFR)

A restriction requested by an agency and put into effect by the FAA in the vicinity of an incident restricting the operation of nonessential aircraft in the airspace around that incident.

Traffic Advisories

Advisories issued to alert pilots about other known or observed air traffic that may be in such proximity to the position or intended route of flight of their aircraft to warrant their attention. Such advisories may be based on visual observation (i.e., observation of radar-identified and non-identified aircraft targets on an Air Traffic Control (ATC) radar display) or verbal reports from pilots or other facilities.[28]

Urban Search and Rescue (US&R) Task Forces

A framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces, complete with the necessary tools, equipment, skills, and techniques, can be deployed by the Federal Emergency Management Agency to assist State and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions.[29]

[26] *National Response Framework*, January 2008
[27] Department of Homeland Security Management Directive System MD Number: 0021, *Aviation Concept of Operations*, April 18, 2005
[28] Federal Aviation Administration, *Pilot/Controller Glossary*, March 12, 2009
[29] *National Response Framework*, January 2008

Appendix 2: Acronyms and Abbreviations

1st AF	First Air Force
AE	Aero-Medical Evacuation
AFRCC	Air Force Rescue Coordination Center
AFSS	Automated Flight Service Station
AGL	Above Ground Level
AMC	Air Mobility Command
AMLO	Air Mobility Liaison Officer
AMR	Air Mission Request
ANG	Air National Guard
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
AOB	Air Operations Branch
AOC	Air Operations Center
AOR	Area of Responsibility
ARF	Action Request Form
ARTCC	Air Route Traffic Control Center
ATA	Airline Transport Association
ATA	Actual Time of Arrival
ATC	Air Traffic Control
ATCT	Airport Traffic Control Tower
ATD	Actual Time of Departure
ATM	Air Traffic Management
ATO	Air Tasking Order
C^2	Command and Control
C^3	Command, Control, and Communications
CAP	Civil Air Patrol
CBP	Customs and Border Protection
COA	Certificate of Waiver or Authorization
COA	Course of Action
CONR	Continental United States North American Aerospace Defense Command Region
CONUS	Continental United States
CRASS	Contingency Response Air Support Schedule
CRG	Contingency Response Group
CRE	Contingency Response Element
CWN	Call When Needed (helicopter services)
DAD	Disaster Assistance Directorate
DHS	Department of Homeland Security
DME	Distance Measuring Equipment
DOA	Department of Agriculture

DOC	Disaster Operations Center
DoD	Department of Defense
DoD	Disaster Operations Directorate (FEMA)
DOI	Department of the Interior
DOJ	Department of Justice
DOT	Department of Transportation
DSCA	Defense Support of Civil Authorities
DV	Distinguished Visitor
EATPL	ESCAT Air Traffic Priority List
EMAC	Emergency Management Assistance Compact
EMS	Emergency Medical Service
EOC	Emergency Operations Center
EPLO	Emergency Preparedness Liaison Officer
ESCAT	Emergency Security Control of Air Traffic
ESF	Emergency Support Function
ETA	Estimated Time of Arrival
ETB	Estimated Time Aircraft Will be on Blocks
ETD	Estimated Time of Departure
ETE	Estimated Time En Route
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed-Based Operators
FCC	Federal Communications Commission
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FM	Frequency Modulated
FRD	Federal Aviation Administration Recovery Desk
FS	Forest Service
FSDO	Flight Standards District Office
FSS	Flight Service Station
F/W	Fixed-Wing
GARS	Global Area Reference System
GMT	Greenwich Mean Time
GSA	General Services Administration
HAZMAT	Hazardous Materials
HF	High Frequency
IAA	Interagency Airspace Agreement(s)
IAA	Incident Awareness and Assessment
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post

ICS	Incident Command System
ID	Identifier
IFO	Incident Field Office
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
IMAT	Incident Management Assessment Team (FEMA)
JFO	Joint Field Office
JIC	Joint Information Center
LE	Law Enforcement
LEA	Local Enforcement Agency
LNO	Liaison Officer
MA	Mission Assignment
MAP	Mutual Aid Plan
MOA	Memorandum of Agreement
MOG	Maximum on Ground
MOU	Memorandum of Understanding
MSL	Mean Sea Level
NAS	National Airspace System
NAVAIDS	Air Navigation Aids
NDB	Non-Directional Beacon
NGO	Non-Governmental Organization
NICC	National Infrastructure Coordination Center
NIMS	National Incident Management System
NORAD	North American Aerospace Defense Command
NOTAM	Notice to Airmen
NORTHCOM	United States Northern Command
NRF	National Response Framework
OPLAN	Operating Plan
PKEMRA	Post-Katrina Emergency Management Reform Act
RFA	Request for Assignment
ROC	Regional Operations Center
RRCC	Regional Response Coordination Center
R/W	Rotary-Wing
SAR	Search and Rescue
SARDA	State and Regional Disaster Airlift
SCA	Security Control Authorization
SCATANA	Security Control of Air Traffic and Navigation Aids
SEADOG	South East Airport Disaster Organization Group

SEOC	State Emergency Operations Center
SLAP	State and Local Aviation Planning
SUA	Special Use Airspace
TACAN	Tactical Air Navigation Aid
TALCE	Tanker-Airlift Control Element. (Now known as the CRE, see CRE above.)
TC	Transportation Command
TFR	Temporary Flight Restrictions
TRANSCOM	Transportation Command
TRSA	Terminal Radar Service Area
UAS	Unmanned Aircraft System
UC	Unified Commander
UHF	Ultra High Frequency
USA	United States Army
USAF	United States Air Force
USCG	United States Coast Guard
USFS	United States Forest Service
USN	United States Navy
USNG	United States National Grid
USTRANSCOM	United States Transportation Command
UTC	Universal Time Converted
UTM	Universal Transverse Mercator
VFR	Visual Flight Rules
VHF	Very High Frequency
VMC	Visual Meteorological Conditions
VOR	Very High Frequency Omni-directional Radio-range
VORTAC	Very High Frequency Omni-directional Radio-range- Tactical Air Navigation Aid
WASP	War Air Service Program
WATPL	Wartime Air Traffic Priority List
WESTDOG	Western Airports Disaster Operations Group
WGS-84	World Geodetic System of 1984

Appendix 3: NC SERT Air Branch Directory

NC SERT Air Branch email is ng.nc.ncarng.mbx.sert-air-ops@mail.mil.

Position	Location	Phone
Air Operations Coordinator (Air Boss)	JFHQ-NC	(919) 825-2526
Aviation Battle Captain	JFHQ-NC	(919) 825-2521
Air Operations Officer	JFHQ-NC	(919) 825-2522
Civil Air Patrol	JFHQ-NC	(919) 825-2523
US Coast Guard	JFHQ-NC	(919) 825-2524
FAA LNO	JFHQ-NC	(919) 825-2525
NCNG Joint Operations Center	JFHQ-NC	(919) 664-6349
449th Theater Aviation Brigade	Morrisville, NC	(919) 804-5300 ext. 16309
Army Aviation Support Facility #1	Morrisville, NC	(919) 804-5300 ext. 16200
Army Aviation Support Facility #2	Salisbury, NC	(704) 639-7750 ext. 16506
NC Air National Guard	Charlotte, NC	(704) 391-4100

This page intentionally left blank.

Appendix 4: NC Aviation Resources

Government Aircraft Operations

Agency	Aircraft	Phone
NC Civil Air Patrol	Cessna 172 /182 (4)	(336) 570-6894
NC Department of Agriculture, Forest Service	UH-1 (4) EC-350 (2) OH-58 (3)	(919) 857-4801
NC Department of Transportation, Division of Aviation	Cessna Citation (1) King Air 200 (2) Sikorsky S-76C (1)	(919) 814-0550
NC Highway Patrol	Bell 407 (1) Bell 206B (1) OH-58A+ (7)	(919) 661-4841
NCNG (Army)	UH-72A (4) (AASF 1) C-26 (1) (AASF 1)	AASF 1: (919) 804-5300 ext. 16200
	UH-60L (10) (AASF 2)	AASF 2: (704) 639-7750 ext. 16506
NCNG (Air)	C-130 (8)	(704) 391-4100

Private Sector Aircraft Operations

Company	Aircraft	Type	Phone
Air Methods - NC	See Below	Air Ambulance	(303) 792-7400
Duke Energy (Merged with Progress Energy)	(up to 4) Bell 407	Utility	(704) 648-7948

Air Ambulance Services

City	Name/ Hospital	Aircraft	Phone
Asheville	Mountain Area Medical Lift (MAMA)/ Mission + St. Joseph Health System	EC-135P1 (1) BK-117B1 (1)	(800) 972-4354
Chapel Hill	UNC Air Care/ UNC Hospitals	EC-135 (2)	(919) 966-3044
Charlotte	MedCenter Air/ Carolinas Medical Center	EC-135 P2 (4) King Air 200 (2) Cessna Citation (2)	(704) 355-3888
Dare County	Dare County EMS	BK-117 (1)	(252) 475-5710
Durham	LifeFlight/ Duke University Hospital	EC-145 (2)	(919) 681-5433
Greenville	East Care/ Vidante	BK-117 (3)	(252) 847-5285
Raleigh	Air Mobile/ Wakemed	EC-135 (1)	(919) 350-8000
Wilmington	Airlink/ New Hanover Regional Medical Center	EC-135 (1)	(800) 828-5465
Winston-Salem	Air Care/ NC Baptist Hospital	EC-135 (2) EC-130 (1)	(800) 336-6224

This page intentionally left blank.

Appendix 5: Aviation Organizations in NC

Organization	Aircraft	Website	Phone	Fax
North Carolina Airports Association	N/A	http://www.ncairports.org/	(828) 808-5502	(888) 819-6951
Aircraft Operators and Pilots Association (AOPA)	N/A	http://www.aopa.org/	(800) 872-2672 (301) 695-2000	(301) 695-2375

This page intentionally left blank.

Appendix 6: North Carolina Aviation Regions

Figure 3: North Carolina Air Transportation System

This page intentionally left blank.

Appendix 7: Primary and Secondary Airports

Primary Airports			
City	**ID**	**Name**	**Runway**
Charlotte	KCLT	Charlotte/Douglas International Airport	18C/36C: 10000 x 150, 18R/36L: 9000 x 150, 18L/36R: 8676 x 150, 05/23: 7502 x 150.
Greensboro	KGSO	Piedmont Triad International Airport	05R/23L: 10001 x 150, 05L/23R: 9000 x 150, 14/32: 6380 x 150.
Raleigh/Durham	KRDU	Raleigh-Durham International Airport	05L/23R: 10000 x 150, 05R/23L: 7500 x 150, 14/32: 3570 x 100.
Wilmington	KILM	Wilmington International Airport	06/24: 8016 x 150, 17/35: 7004 x 150.
Secondary Airports			
City	**ID**	**Name**	**Runway**
Ahoskie	KASJ	Tri-County Airport	01/19: 4501 x 75.
Albemarle	KVUJ	Stanly County Airport	04R/22L: 5500 x 100, 04L/22R: 3500 x 75.
Andrews	KRHP	Western Carolina Regional Airport	08/26: 5500 x 100.
Asheboro	KHBI	Asheboro Regional Airport	03/21: 5501 x 150.
Asheville	KAVL	Asheville Regional Airport	16/34: 8001 x 150.
Beaufort	KMRH	Michael J. Smith Field Airport	08/26: 5003 x 100, 03/21: 4191 x 147, 14/32: 4001 x 100.
Bladenboro	3W6	Bladenboro Airport	02/20: 2850 x 135.
Burlington	KBUY	Burlington-Alamance Regional Airport	06/24: 4999 x 99.
Chapel Hill	KIGX	Horace Williams Airport	09/27: 4005 x 75.
Charlotte	8A6	Wilgrove Air Park	17/35: 2835 x 40.
Clinton	KCTZ	Clinton-Sampson County Airport	06/24: 5002 x 74.
Concord	KJQF	Concord Regional Airport	02/20: 7400 x 100.
Currituck	KONX	Currituck County Regional Airport	05/23: 5500 x 150.
Edenton	KEDE	Northeastern Regional Airport	01/19: 6000 x 100.
Elizabeth City	KECG	Elizabeth City Coast Guard Air Station/Regional Airport	10/28: 7219 x 150, 01/19: 4518 x 150.
Elizabethtown	KEYF	Curtis L Brown Jr. Field Airport	15/33: 4998 x 75.
Elkin	KZEF	Elkin Municipal Airport	07/25: 4001 x 75.
Engelhard	7W6	Hyde County Airport	11/29: 4700 x 100.
Erwin	KHRJ	Harnett Regional Jetport Airport	05/23: 5000 x 75.

Farmville	N08	Flanagan Field Airport	03/21: 2500 x 100.
Fayetteville	KFAY	Fayetteville Regional Airport/Grannis Field	04/22: 7709 x 150, 10/28: 4801 x 150.
Fayetteville	2GC	Grays Creek Airport	17/35: 3500 x 30.
Franklin	1A5	Macon County Airport	07/25: 5000 x 75.
Gastonia	KAKH	Gastonia Municipal Airport	03/21: 3770 x 100.
Goldsboro	KGWW	Wayne Executive Jetport Airport	05/23: 5500 x 100.
Greensboro	W88	Air Harbor Airport	09/27: 2460 x 65.
Greensboro	3A4	Southeast Greensboro Airport	17/35: 3063 x 30.
Greenville	KPGV	Pitt-Greenville Airport	02/20: 6505 x 150, 08/26: 4997 x 150, 15/33: 2687 x 150.
Hatteras	KHSE	Billy Mitchell Airport	07/25: 3000 x 75.
Hendersonville	0A7	Hendersonville Airport	15/33: 3075 x 40.
Hickory	KHKY	Hickory Regional Airport	06/24: 6400 x 150, 01/19: 4400 x 150.
Hickory	E40	Wilson's Airport	17/35: 2175 x 70.
Holly Ridge	N21	Holly Ridge/Topsail Island Airport	14/32: 3600 x 88.
Hurdle Mills	4W4	Whitfield Farms Airport	03/21: 1950 x 70.
Indian Trail	28A	Goose Creek Airport	04/22: 2350 x 35.
Jacksonville	KOAJ	Albert J Ellis Airport	05/23: 7100 x 150.
Jacksonville	N22	Sky Manor Airport	08/26: 3610 x 85.
Jefferson	KGEV	Ashe County Airport	10/28: 4296 x 75.
Jonesville	78A	Swan Creek Airport	10/28: 2600 x 200, 02/20: 1650 x 200.
Julian	N88	Kecks Airport	05/23: 1400 x 75.
Kenansville	KDPL	Duplin County Airport	05/23: 6002 x 75.
Kill Devil Hills	KFFA	First Flight Airport	02/20: 3000 x 60.
Kinston	KISO	Kinston Regional Jetport at Stallings Field	05/23: 11500 x 150.
Knightdale	W17	Raleigh East Airport	01/19: 3000 x 36.
Lexington	KEXX	Davidson County Airport	06/24: 5004 x 100.
Liberty	2A5	Causey Airport	02/20: 3800 x 40.
Liberty	N61	Hinshaw (Greenacres) Airport	03/21: 1400 x 100.
Lincolnton	KIPJ	Lincolnton-Lincoln County Regional Airport	05/23: 5504 x 100.
Louisburg	KLHZ	Triangle North Executive Airport	05/23: 5498 x 100.
Lumberton	KLBT	Lumberton Municipal Airport	05/23: 5502 x 150, 13/31: 5003 x 150.
Maiden	N92	Laneys Airport	13/31: 2400 x 75, 05/23: 2000 x 100.
Manteo	KMQI	Dare County Regional Airport	05/23: 4305 x 100, 17/35: 3301 x 73.
Marion	9A9	Shiflet Field Airport	10/28: 3340 x 180.

Maxton	KMEB	Laurinburg-Maxton Airport	05/23: 6503 x 100, 13/31: 3534 x 75.
Mebane	4W7	Hurdle Field Airport	03/21: 2200 x 150.
Mocksville	8A7	Twin Lakes Airport	09/27: 2943 x 50.
Monroe	KEQY	Charlotte-Monroe Executive Airport	05/23: 6998 x 100.
Mooresville	14A	Lake Norman Airpark	14/32: 3147 x 40.
Morganton	KMRN	Foothills Regional Airport	03/21: 5500 x 75.
Mount Airy	KMWK	Mount Airy/Surry County Airport	18/36: 4301 x 75.
Mount Olive	W40	Mount Olive Municipal Airport	05/23: 5255 x 75.
New Bern	KEWN	Coastal Carolina Regional Airport	04/22: 6455 x 150, 14/32: 4000 x 150.
North Wilkesboro	KUKF	Wilkes County Airport	01/19: 6200 x 100.
Oak Island	KSUT	Cape Fear Regional Jetport/Howie Franklin Field Airport	05/23: 5505 x 100.
Oak Ridge	N83	DS Butler Farm and Airfield	01/19: 2000 x 60.
Ocean Isle Beach	60J	Odell Williamson Municipal Airport	06/24: 4000 x 75.
Ocracoke	W95	Ocracoke Island Airport	06/24: 2999 x 60.
Oxford	KHNZ	Henderson-Oxford Airport	06/24: 5002 x 97.
Pinehurst/Southern Pines	KSOP	Moore County Airport	05/23: 5902 x 150.
Pink Hill	4W9	Pink Hill Airport	01/19: 2800 x 85.
Plymouth	KPMZ	Plymouth Municipal Airport	03/21: 5500 x 75.
Plymouth	7NC	Donald's Air Park Inc	04/22: 4195 x 100.
Potters Hill	6N9	Eagles Nest Airport	13/31: 1850 x 75.
Raeford	5W4	P K Airpark	04/22: 3402 x 60.
Raleigh	5W5	Triple W Airport	16/34: 3004 x 40.
Reidsville	KSIF	Rockingham County NC Shiloh Airport	13/31: 5199 x 100.
Reidsville	6A5	Warf Airport	17/35: 2550 x 150.
Roanoke Rapids	KIXA	Halifax-Northampton Regional Airport	02/20: 5500 x 101.
Rockingham	KRCZ	Richmond County Airport	14/32: 5001 x 98, 04/22: 3009 x 488.
Rocky Mount	KRWI	Rocky Mount-Wilson Regional Airport	04/22: 7099 x 150.
Roxboro	KTDF	Person County Airport	06/24: 6005 x 100.
Rutherfordton	KFQD	Rutherford County Airport-Marchman Field	01/19: 5000 x 100.
Salisbury	KRUQ	Rowan County Airport	02/20: 5501 x 100.
Sanford	KTTA	Raleigh Executive Jetport at Sanford-Lee County Airport	03/21: 6500 x 100.
Shelby	KEHO	Shelby-Cleveland County Regional Airport	05/23: 5001 x 100.
Siler City	5W8	Siler City Municipal Airport	04/22: 5000 x 75.
Smithfield	KJNX	Johnston County Airport	03/21: 5500 x 100.
Spruce Pine	7A8	Avery County Airport (Morrison Field)	17/35: 3000 x 60.
Star	43A	Montgomery County Airport	03/21: 4002 x 75.
Statesville	KSVH	Statesville Regional Airport	10/28: 7005 x 100.

Sylva	24A	Jackson County Airport	15/33: 3003 x 50.
Tarboro	KETC	Tarboro-Edgecombe Airport	09/27: 3999 x 60.
Taylorsville	NC2	Taylorsville Airport	08/26: 2400 x 60.
Thomasville	N97	Hiatt Airport	01/19: 2500 x 75, 09/27: 1160 x 50.
Wadesboro	KAFP	Anson County Airport - Jeff Cloud Field	16/34: 5498 x 100.
Wallace	KACZ	Henderson Field Airport	09/27: 4153 x 75.
Walnut Cove	N63	Meadow Brook Field Airport	16/34: 2725 x 32.
Washington	KOCW	Warren Field Airport	05/23: 5000 x 100, 17/35: 5000 x 150.
Waxhaw	N52	JAARS-Townsend Airport	04/22: 3309 x 40.
Whiteville	KCPC	Columbus County Municipal Airport	06/24: 5500 x 75.
Williamston	KMCZ	Martin County Airport	03/21: 5000 x 75.
Wilson	W03	Wilson Industrial Air Center Airport	03/21: 4500 x 150, 15/33: 4499 x 150, 09/27: 4498 x 150.
Winston Salem	KINT	Smith Reynolds Airport	15/33: 6655 x 150, 04/22: 3938 x 150.
Winterville	05N	South Oaks Aerodrome	07/25: 1850 x 75.
Yadkinville	80C	Lone Hickory Airport	16/34: 2000 x 60.
Yanceyville	6W4	Caswell Airport	04/22: 1735 x 150.

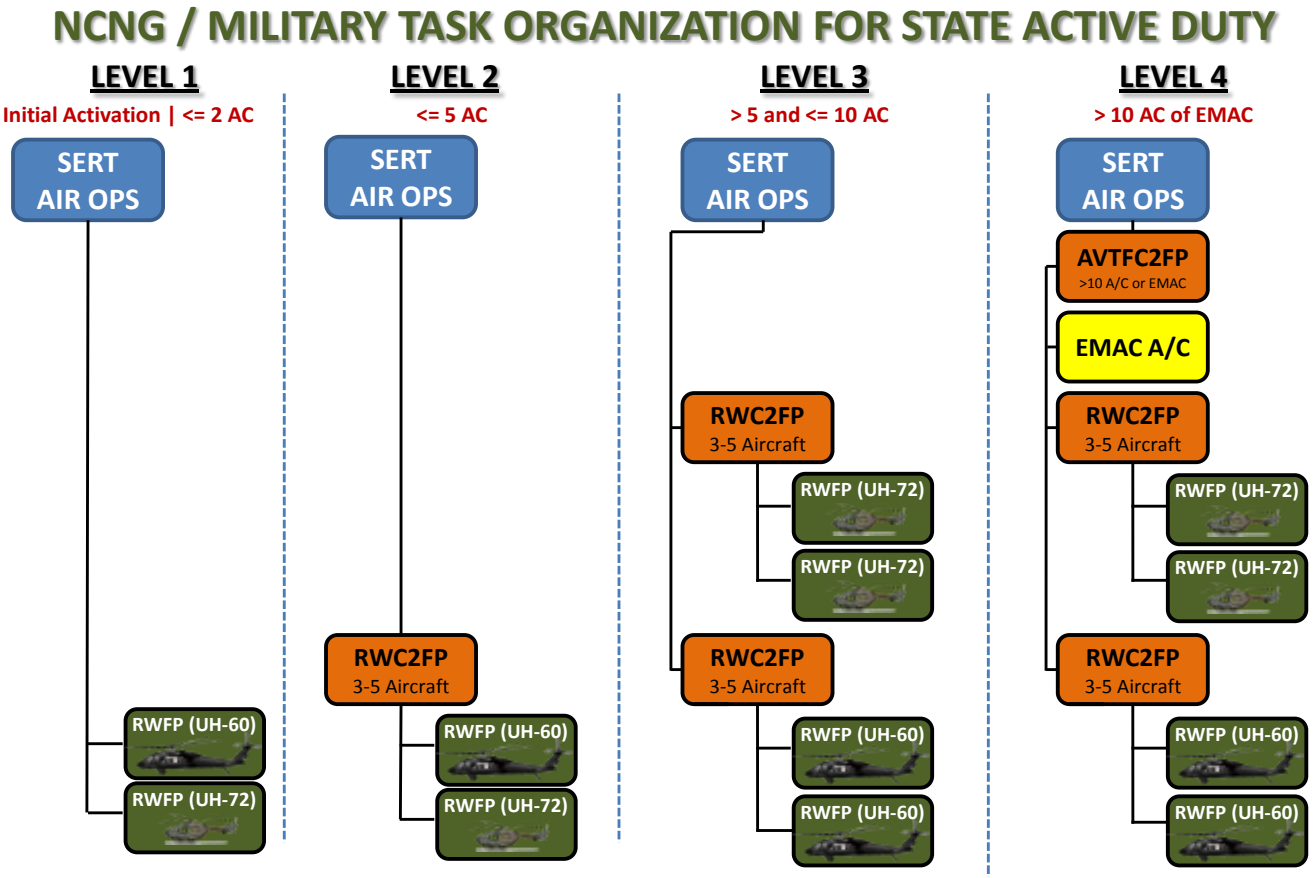
Military Use

City	ID	Name	Runway
Atlantic	12NC	Atlantic Field Marine Corps Outlying Field	05/23: 3678 x 150, 01/19: 3575 x 150, 10/28: 3500 x 150.
Camp Mackall	KHFF	Mackall Army Airfield	04/22: 4996 x 150, 16/34: 4916 x 150, 11/29: 4794 x 150.
Cherry Point	KNKT	Cherry Point Marine Corps Air Station (Cunningham Field)	14L/32R: 8984 x 200, 5L/23R: 8491 x 200, 14R/32L: 8399 x 200, 5R/23L: 8188 x 200.
Fayetteville	KPOB	Pope Army Airfield	05/23: 7501 x 150, 051/231: 3000 x 60.
Fort Bragg	KFBG	Simmons Army Airfield	09/27: 5011 x 110.
Goldsboro	KGSB	Seymour Johnson Air Force Base	08/26: 11760 x 300.
Holly Ridge	14NC	Camp Davis Marine Corps Outlying Field	05/23: 5000 x 150, 18/36: 5000 x 150.
Jacksonville	KNCA	New River Marine Corps Air Station (H) (McCutcheon Field)	05/23: 5114 x 150, 01/19: 4790 x 150.

Pollocksville	13NC	Oak Grove Marine Corps Outlying Field	05/23: 4200 x 150, 09/27: 4100 x 150, 01/19: 4000 x 150.
Swansboro	KNJM	Bogue Field Marine Corps Auxiliary Field	05/23: 3997 x 96.

This page intentionally left blank.

Appendix 8: NC National Guard Aviation Organization



AVMFP - Aviation Maintenance Force Package– required after 72 hours of steady state Ops (can sustain Ops for another 96 hours)

AVRFP - Aviation Refuel Force Package – required if fixed based commercial/contract fuel unavailable

AVSFFP - Aviation Staging Facility Force Package – required for integration EMAC aircraft (AVN RSOI) at an AASF

Figure 4: Example Aviation Asset Task Organization

<table>
<tr><td>4-2</td><td colspan="6">ROTARY WING FORCE PACKAGE UH-60 (RWFP 1xUH-60)</td></tr>
<tr><td>a.</td><td colspan="3">TASK & PURPOSE: Rapidly respond to events within the state of North Carolina and provide aviation support as directed by SERT/NCEM. Missions include aerial transport of PAX and equipment, Aerial Search and Rescue, and Helo-Aquatic Rescue.</td><td>b.</td><td colspan="2">MISSION: Perform aviation support operations to include Aerial Transport of PAX and equipment, Aerial Search and Rescue, and Helo-Aquatic Rescue Team.</td></tr>
<tr><td>c.</td><td colspan="3">SUPPORTED ESFs: 1 and 9</td><td>d.</td><td colspan="2">LIMITATIONS: This FP consists on one UH-60 with crew dependent upon mission configuration. Will require refuel from existing fixed based infratstructure; if this is unavailable a Aviaiton Refuel Force Package will be required. Crew endurance is generally a max duty day 12 hours. If 24/7 capability is required an additional RWFP must be activated.</td></tr>
<tr><td rowspan="12">e.</td><td colspan="3">PERSONNEL OPTIONS BASED ON MISSION</td><td rowspan="12">f.</td><td colspan="2">EQUIPMENT OPTIONS BASED IN MISSION</td></tr>
<tr><td>DUTY POSITION</td><td>RANK</td><td>QTY</td><td>NOTES</td><td>TYPE</td><td>QTY</td><td>NOTES</td></tr>
<tr><td>Pilot</td><td>CW4</td><td>1</td><td rowspan="4">Aerial Transport</td><td>UH-60</td><td>1</td><td rowspan="4">Aerial Transport</td></tr>
<tr><td>Co-Pilot</td><td>CW4</td><td>1</td><td>Cell Phone (J3)</td><td>1</td></tr>
<tr><td>Crew Chief</td><td>SFC</td><td>2</td><td>Rental Van</td><td>1</td></tr>
<tr><td colspan="2">Total</td><td>4</td><td></td><td></td></tr>
<tr><td>Pilot</td><td>CW4</td><td>1</td><td rowspan="5">Aerial SAR Action Team which includes 3 HART Techs</td><td>UH-60 w/hoist</td><td>1</td><td rowspan="5">Aerial SAR Action Team</td></tr>
<tr><td>Co-Pilot</td><td>CW4</td><td>1</td><td>Cell Phone (J3)</td><td>1</td></tr>
<tr><td>Crew Chief</td><td>SFC</td><td>2</td><td>Rental Van</td><td>1</td></tr>
<tr><td colspan="2">HART Techs</td><td>3</td><td></td><td></td></tr>
<tr><td colspan="2">Total</td><td>7</td><td></td><td></td></tr>
<tr><td>g.</td><td colspan="3">REQUIRED SUPPORT: Billeting; Meals; Avn Grade Fuel</td><td>h.</td><td colspan="2">WORKS WITH: RWFPs, RWC2FP, AVMFP, AVRFP</td></tr>
<tr><td>i.</td><td colspan="3">N-HOUR SEQUENCE:
N+24 hours notice for Day Operations
N+48 hours notice for Night operations (reverse cycle)</td><td>j.</td><td colspan="2">SPECIAL INSTRUCTIONS: Upon conclusion of missions, PC will notify C2 element with required mission information. Equipment cost per day based on estimated 6 hours of flight time per 12 hour duty period. Will require rental van to provide for transportation to lodging and meals unless these amenities are available at where the aircraft is staged.</td></tr>
<tr><td rowspan="3">k.</td><td colspan="3">PERSONNEL COST PER DAY:</td><td colspan="3">$988.68</td></tr>
<tr><td colspan="3">EQUIPMENT COST PER DAY: (based on 6 hrs flt time)</td><td colspan="3">$24,056.40</td></tr>
<tr><td colspan="3">TOTAL COST PER DAY:</td><td colspan="3">$25,045.08</td></tr>
</table>

Figure 7: NCNG Rotary Wing Force Package

Note: Force Packages undergo periodic updates, contact NC SERT Air Branch for most up-to-date packages.

Appendix 9: Disaster Airspace Management

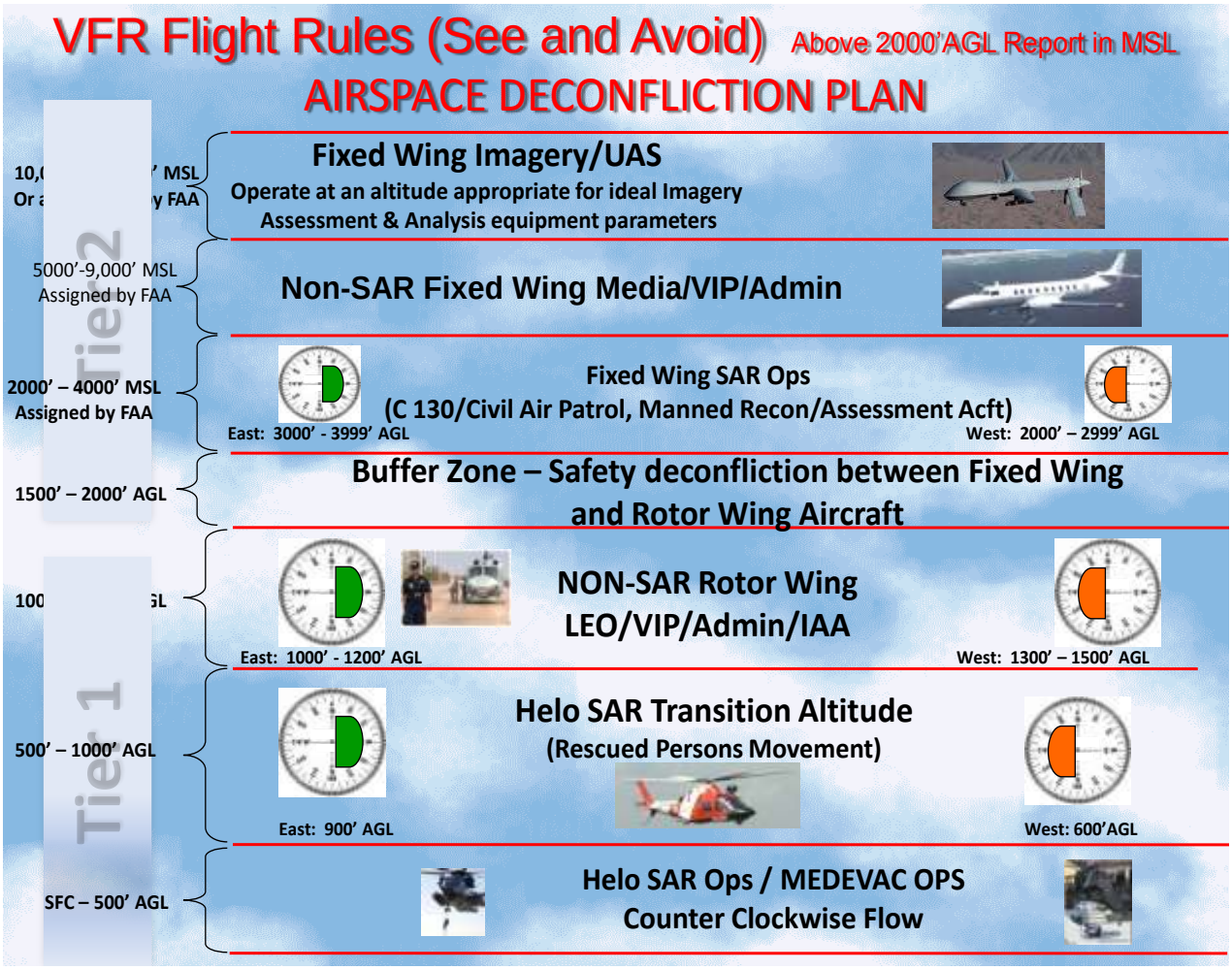


Figure 5: Example Airspace Deconfliction Plan

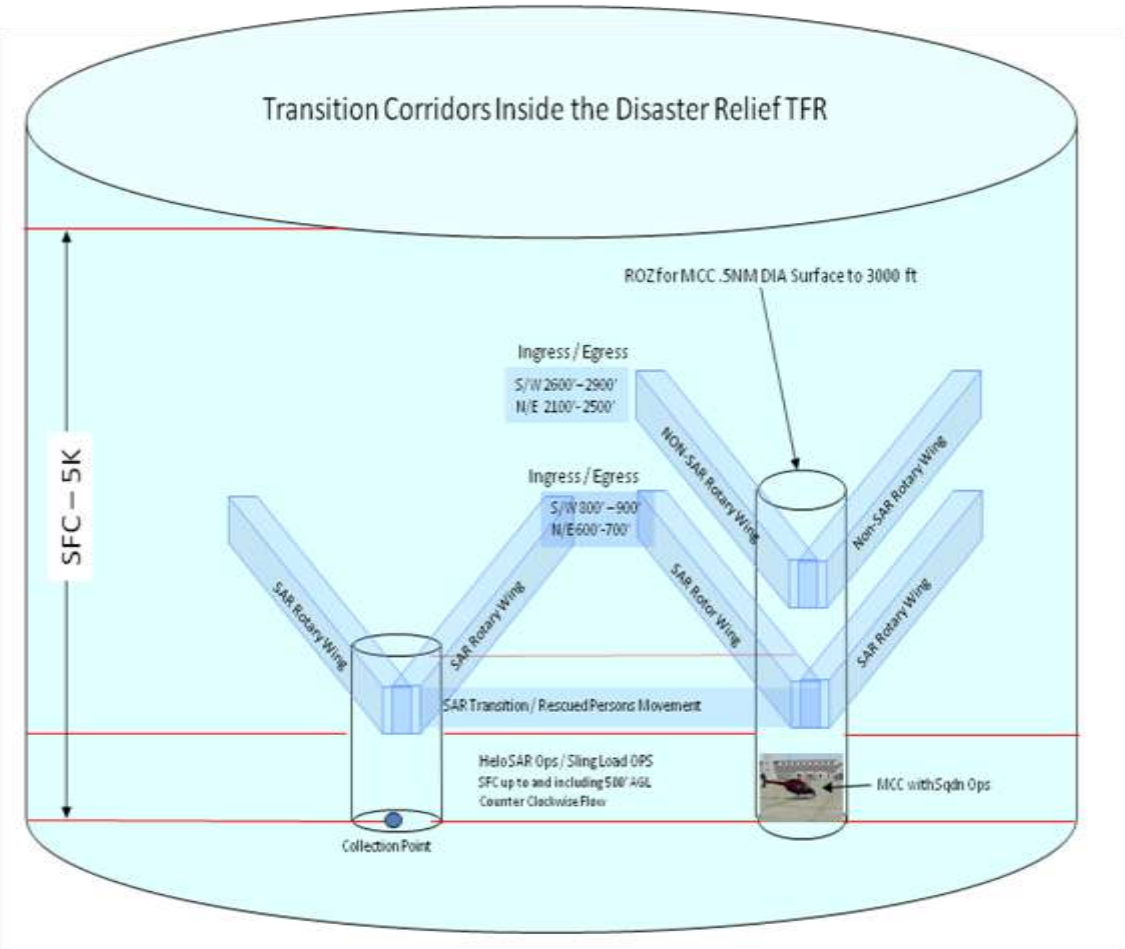


Figure 6: Example Temporary Flight Restriction Depiction

Appendix 10: Airfield Operations

Introduction

Efficient and safe airfield operations will present a unique challenge in the wake of a catastrophic earthquake incident. The airfield itself may only be partially capable. This appendix lists considerations that need to be addressed in order to safely and effectively conduct airfield operations.

Airfield Operations Considerations

- Material handling equipment capabilities on-site
  - Baggage loaders, air stairs, forklifts
- Maximum on Ground (MOG)
  - Parking (dependent on available ramp space)
  - Working (dependent on available services)
- Crash Fire Rescue (CFR) capabilities
- Storage facilities on-site (for cargo)
- ATC capabilities (controlled versus uncontrolled airfield)
- Parking diagrams (develop an aircraft parking plan)
- Nearby dining and lodging facilities

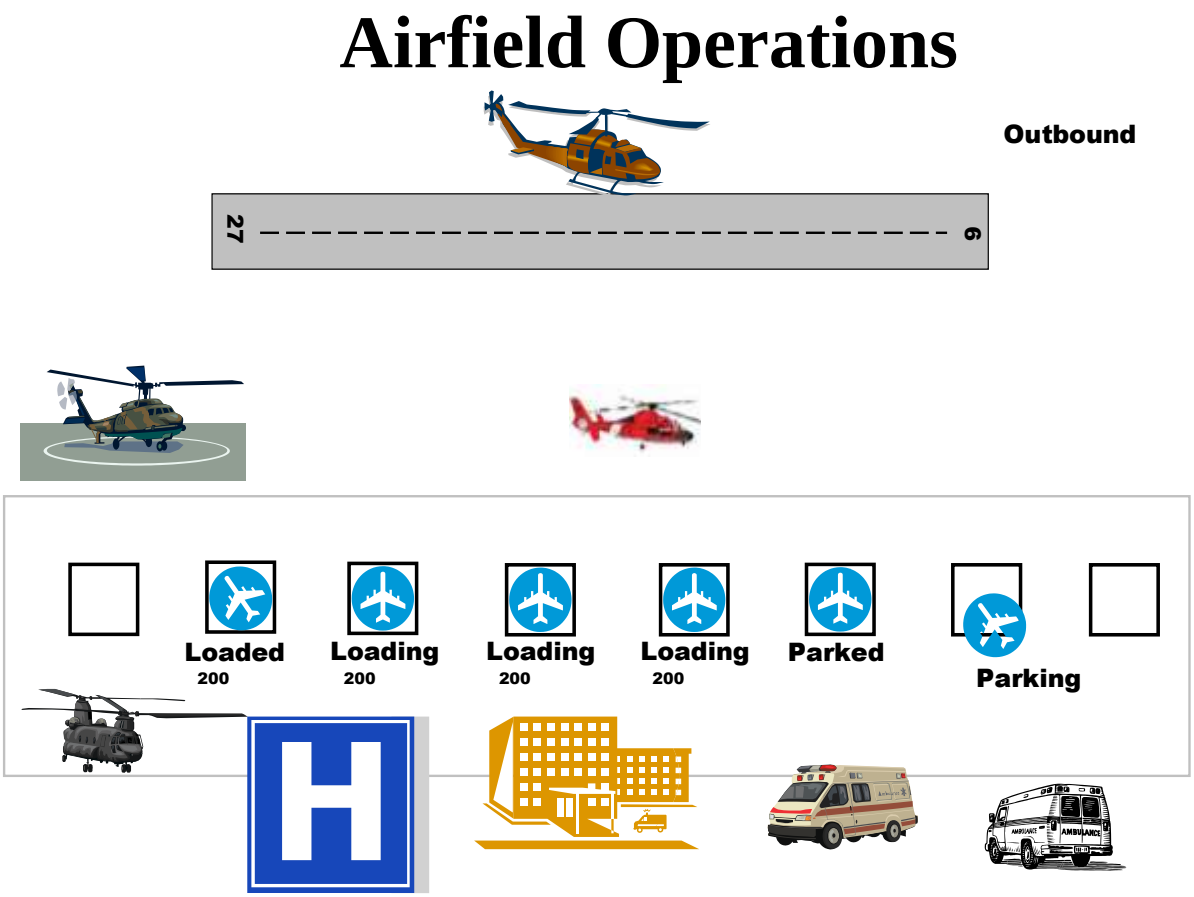


Figure 7: Example Airfield Operations Layout

Effective airfield operations require the coordination of aircraft services (e.g., fuels, baggage/cargo and passenger services, CFR). An effective parking plan, which takes into account the capabilities of the airfield to accommodate aircraft (i.e., balance available space on the ramp and available aircraft services) is also required.

Airfield operations are complex and require careful coordination. This coordination needs to take into account not only the capabilities of the airfield to handle different types of aircraft but should also account for the differing aviation mission sets that will be performed.

A robust communications plan is also necessary to ensure air and ground operations are safely coordinated and executed between participating agencies and aircraft.

Appendix 11: Airfield Assessment Checklist

Introduction

In the response and recovery operations for a catastrophic earthquake incident, an airfield assessment will be required before aviation operations can commence at affected airfields.

Damage sustained to the airfield and runway due to liquefaction will potentially affect:

- Communications
- Aircraft services
  - Fuels
  - Cargo, baggage, and passenger services
- Runway pavement strength
- Taxiway and parking apron pavement strength
- Airport facilities:
  - Control tower
  - Hangars
  - Aircraft service facilities (e.g., fuels, logistics, crash fire and rescue, security)
  - Passenger terminals
- Aircraft parked on the ground during the incident
- Airport Navigational Aids (e.g., very high frequency omni-directional radio-range (VOR), tactical air navigation aid (TACAN), Instrument Landing System (ILS)
- Runway lighting

An airfield assessment may be conducted utilizing the following resources (the following list is not all inclusive but provides some potential resources to the requester):

- Civil
  - SEADOG/WESTDOG (or equivalent)
  - Contractors and civil engineers
- Military
  - US Army Corp of Engineers (USACE)
  - US Air Force Contingency Response Group (CRG)
  - US Air Force Rapid Engineers Deployable Heavy Operational Repair Squadron Engineer (REDHORSE) (Air Force equivalent to USACE)
  - US Navy SEABEES (Navy equivalent to USACE)

Airfield Assessment Checklist	
1.	Identify the airport being assessed by: ▪ Name ▪ Designator ▪ Location ▪ Elevation
2.	Describe the current condition of facilities.
3.	Ascertain whether the airport is fully operational. Daylight hours only?
4.	Furnish information on usable runway lengths and locations.
5.	Determine whether taxiways, parking areas, and cargo handling areas are intact.
6.	Establish whether runway and approach lights are operating.
7.	Specify which navigational aids are operating.
8.	Describe available communications facilities.
9	Determine whether the terminal building is operating.
10.	Check the availability of aviation fuel.
11.	Find out if facilities exist for mandatory aircrew rest.
12.	Explore whether the cargo handling area can be lit for night cargo operations.
13.	Determine which cargo handling equipment is available: ▪ Fuel and operators ▪ Forklifts (number, capacity) ▪ Scissors lift (capacity) ▪ Cargo dollies (number) ▪ Trucks with drivers and laborers for hand unloading
14.	Determine which startup equipment is available, including fuel and operators.
15.	Describe maintenance operations (facilities, personnel, hours).
16.	Outline available storage: ▪ Covered? ▪ At the airport? Off airport? How far? ▪ Capacity and suitability for storage of foods or other perishables?

Aviation Logistics Assessment	
1.	Find out whether arrangements can be made for prompt over flight and landing clearances.
2.	Ascertain that the air controller service is functioning.
3.	Specify working hours for airport personnel.
4.	Describe security arrangements.
5.	Determine which repairs and/or auxiliary equipment would be needed to increase airport capacity. How soon can local authorities be expected to restore service?
6.	Identify any usable airports or suitable helicopter landing sites in the disaster zone.
7.	Determine the local availability and cost of helicopters and/or fixed-wing aircraft.
8.	Estimate their capacity.
9.	Identify the owners/agents.

This page intentionally left blank.

Appendix 12: Damaged Airfield Considerations

Introduction

The list below provides some considerations in the event that an airfield is partially mission capable.

Damaged Airfield Considerations

- The runway may be partially damaged but usable, thereby reducing effective runway length
- If the control tower sustains damage, tailor aircraft coordination accordingly (i.e., tailor communication and coordination plan accordingly to reflect whether or not the tower is operational; or if aircraft need to operate on a common frequency in the absence of ATC (Unicom frequency); ground operations may need to be coordinated through the ICP
- Damage to airport navigational aids and runway lighting and the effects on operations
- Damage to the parking apron and taxiways (i.e., effects on parking and working MOG)
- Damage affecting aircraft services (e.g. logistics (equipment and facilities), fuels, CFR)
- Damage to the passenger terminals, including the passengers at the airport during the incident
- Time of day of the incident

Note: Airports tend to be natural "rallying" points for survivors after a disaster, especially major airports. Airport personnel need to expect to be overwhelmed not only by the challenges presented by reduced airfield capabilities but by having to provide care for survivors as they arrive, as well as for those present at the airport during the incident (e.g., food, shelter, medical care)

This page intentionally left blank.

Appendix 13: Logistics Considerations

Introduction

This section identifies considerations for successful aviation logistics operations. When conducting logistical operations at an airfield, specifically the flow of cargo and equipment, there are several factors that are necessary to successfully conduct logistical operations.

Material Handling Equipment Requirements

Material Handling Equipment (MHE) refers to the equipment necessary to handle equipment and cargo. Considerations should include the following:

- Baggage Carts
- Air stairs (for passengers)
- Forklifts
- K-loaders (for military 463L pallets)
- Highline Docks for 463L pallets

This list is not all-inclusive but is designed to highlight that MHE is necessary in order to successfully conduct aviation logistics. If the necessary equipment is not present at the airfield or is damaged after the disaster, additional equipment may be required in order to ensure the flow of commodities and equipment from the flight line onward to its final destination.

Onward Distribution

The final destination of the cargo or equipment needs to be considered. If the airfield is identified as a hub, adequate storage facilities will be required to accommodate the inbound and outbound flow of cargo and equipment. An inbound and outbound cargo yard may be established (if not already established) if space allows. This will facilitate the efficient flow of commodities and equipment.

Inbound and outbound logistical considerations include the following:

- Available MHE onsite.
- Storage facilities on and offsite.
    - Highline docks for pallet unloading (military) or warehouse storage.
- Onward shipping considerations to final destination (if applicable):
    - Cargo distribution plan via shipping by truck, rail, ferry, or airlift (hub and spoke system) to Ports of Distribution (POD) or final destination.
    - Load planning for outbound cargo.

- Inspection and cargo manifesting requirements (e.g., weight and balance, HAZMAT requirements).

Appendix 14: Aircraft Use and Capability

Introduction

In the response and recovery operations for a catastrophic earthquake incident, aircraft will be needed to support disaster operations. Generally speaking, aircraft may initially come from the North Carolina National Guard and DoD, but commercial aviation assets may also be required to assist in the recovery efforts, such as the CAP and private freight carriers.

Points to Consider When Dealing with Aircraft

- Whenever possible, store all materials to be airlifted in containers (e.g., suitcases, backpacks, and metal and cardboard boxes) for rapid handling and stacking on pallets.
- Ensure all individual containers are small enough to fit through passenger doors of commercial aircraft in case cargo space is not available.
- Package personal gear (e.g., in a pack or suitcase) with the owner's name clearly marked for rapid customs processing.
- Mark packages containing hazardous materials or chemicals and separate them from all other cargo so they can be left behind if they are refused by the carrier.
- Ensure individual pieces of personal cargo do not weigh more than 200 pounds to enable them to be moved by two people.
- Each employee who may be flying is responsible for his or her personal luggage.
- Follow crew duty day and flight times. Aircraft at your disposal are not an unlimited resource.
    - Crew duty day refers to the maximum amount of time a flight crew can be engaged in standing by for a flight or actually flying in an aircraft. Crew duty day regulations are different for military aviators as compared to civilian aviators operating under the FARs. The normal crew duty day is limited to 15 hours of combined standby/flying time for civil operators per the FAA. Crew flight time refers to the maximum amount of time a flight crew can spend physically flying or maintaining an aircraft. Sometimes certain pre-flight and post-flight aircraft activities are included in crew flight time duty. Verify this with the flight crew in advance. For your planning purposes, find out the flight crew's duty day and flight times.

Aircraft Loading and Offloading Methods

Aircraft can be loaded in four ways:

- Bulk-loaded
    - Cargo is loaded on the floor and held in place by nets, straps, or ropes. Bulk loading may increase the usable cargo space on an aircraft, but securing cargo in

place may be more difficult than palletizing. Depending on the offloading equipment at the destination airport, bulk loading may be the best loading option.

- Palletized
  - Cargo is preloaded onto pallets; held in place by nets, straps, or ropes; and then loaded onto the aircraft. Palletizing cargo is a frequently used method of moving large amounts of emergency supplies. Military and commercial aircraft can use pallets.
- Containerized
  - Cargo is preloaded into closed containers and then loaded onto the aircraft. Containerizing cargo is a method used to load the belly of commercial aircraft, such as 747s and DC-10s. Cargo containers come in a variety of shapes and sizes, and the maximum loaded weights for containers used on aircraft can range from 200 to 10,000 lbs. Each type of container is designed to be loaded and offloaded with cargo in place using a mechanized loading system or a forklift. If a forklift will be used to load or offload containers or pallets, make sure the forklift can carry the largest pallet, has tines long enough to counterbalance the weight, and the highest point of the forklift is lower than that portion of the aircraft (e.g., wing, tail, or door in open position) where it must move to retrieve the container or pallet.
- External (helicopters only)
  - Cargo is placed in a net or suspended from a line, and then picked up and moved by the helicopter using a belly hook. External (sling) loading of cargo is performed with helicopters. Helicopters normally can lift and move less cargo externally than internally. The external cargo is loaded into specially made nets connected to a cargo hook on the belly of the helicopter. Cargo may also be suspended on cables (lead lines). Make sure lead lines and nets are approved for slinging cargo. Remember pallets, containers, nets, and lead lines are reusable and may also need to be returned quickly to their points of origin to be used for loading more cargo. Always think in terms of "backhauling" cargo equipment for reuse or when no longer needed.

Points to Consider When Planning to Receive Aircraft Cargo

- Ramp space for parking the aircraft. If no ramp space is available, the cargo will have to be unloaded on the active runway. Consider offloading time and the schedules of other aircraft arrivals.
- The weight of the loaded aircraft and the ability of the ramp to support parked aircraft.
- Availability of trucks and laborers if the aircraft will be manually offloaded. Remember, planes may arrive at all hours.
- Availability of correctly sized offloading equipment.
- Storage space near the ramp if the commodities will be stored close to the offloading point. Consider whether the location of the storage area will cause security problems.

The following tables list some of the fixed-wing and rotary-wing aircraft that could be used during a catastrophic earthquake incident. The purpose of these tables is to assist in planning for the movement of people and commodities.

Note: These figures represent approximate aircraft specifications. Specifications for each aircraft will vary based on individual aircraft configurations and ratings, operating range, runway conditions, temperature, altitude, wind speed, and direction. Always check with local aviation authorities about which types of aircraft can operate in and out of local airports.

Table 1: Capacities of Fixed-Wing Aircraft[30]

Aircraft Type	Maximum Seats (Troops)	Maximum ACL (s/t)	Pallets	Range with Maximum Troops (NM)	Range with Maximum ACL (NM)	Maximum ACL (s/t) per Leg Length (NM)				Maximum Troops per Leg Length (NM)				Ferry Range No Troops (NM)	Ferry Range No Cargo (NM)
						2,000	2,500	3,000	3,500	2,000	2,500	3,000	3,500		
A-300-600ER	138			3,200						138	138	138	120	4,260	
A-300-600F		56.6	15		1,800	54	52.5	46	40						4,450
B-757-200	127			2,300						127	120	103	85	4,400	
B-757-200ER	131			3,175						131	131	131	116	4,700	
B-757-200F		43	13		3,600	43	43	43	43						4,850
B-757-300ER	166			2,700						166	166	150	126	4,400	
DC-8-55F		43.8	13		2,400	43.8	42.5	37	31.5						4,700
DC-8-62F		44	14		3,500	44	44	44	44						5,600
DC-8-62 Combi		36	10		3,450	36	36	36	35.5						5,700
DC-8-63F		55	18		2,250	52.3	52.3	47.5	42.8						4,600
DC-8-71F		48.5	18		2,300	45	45	38.5	32.3						4,700
DC-8-73F		54.3	18		2,500	54.3	54.3	50.3	43.5						4,800
DC-10-10	222			2,300						222	201	150	100	4,000	
DC-10-30	235			3,900						235	235	235	235	5,800	
DC-10-40	222			2,750						222	222	203	160	4,875	
DC-10-40I	219			3,200						219	219	219	195	4,856	
DC/MD-10-10F		69.3	30		2,000	69.3	61.25	54.6	46.7						4,200
DC-10-30F		71.8	30		3,000	71.8	71.8	71.8	69.5						6,700
DC/MD-10-30F		83.1	30		3,600	83.1	83.1	83.1	83.1						6,700
MD-11	233			5,000						233	233	233	233	6,800	
MD-11CF		89	35		4,500	89	89	89	89						7,800
MD-11ER	338			4,500						338	338	338	338	6,800	
MD-11F		96	35		3,750	96	96	96	96						7,800
B-747-100	394			2,900						394	394	365	313	6,600	
B-747-100F		106.5	33		3,200	106.3	106.5	106.5	99.8						6,800
B-747-200	365			3,800						365	365	365	365	7,600	
B-747-200F		120	33		3,200	120	120	120	112						7,900
B-747-300F		116	33		3,100	116	116	116	113.5						7,900
B-747-400	295			6,250						295	295	295	295	5,650	
B-747-400F		129.7	33		3,800	129.7	129.71	29.71	29.7						8,650
B-767-200	149			2,450						149	145	120	98	7-500	
B-767-200ER	161			3,650						161	161	161	161	7,700	
B-767-300	186			3,375						186	186	186	167	6,800	
B-767-300ER	213			3,500						213	213	213	213	7,200	
B-767-300F		65.9	26		3,500	65.9	65	65.9	65.9						7,150
B-767-400ER	232			3,500						232	232	232	232	6,500	
B-777-200	250			4,200						250	250	250	250	9,200	
B-777-200ER	263			5,515						263	263	263	263	9,500	
L-1011-50	225			2,300						225	215	183	140	4,000	
L-1011-100/150	230			2,900						230	230	220	174	4,000	
L-1011-220F		63	26	2,600		63	63	55.5	48.5						3,750
L-1011-500	223			4,100						223	223	223	223	6 000	

[30] Air Mobility Command (AMC) 10-202 volume 4, Checklist 1, May 2006

Table 2: Capacities of Rotary Aircraft

Aircraft Type	Useful Load	Speed	Range
Bell 204/212	900-1,200 lbs	120 knots	300 nm
Bell 206	700-900 lbs	100 knots	385 nm
Bell 412	5,000 lbs	130 knots	400 nm
Boeing CH-47	26,900 lbs	130 knots	400 nm
Eurocopter Dauphin	5,800 lbs	150 knots	900 nm
Eurocopter EC-135	3,100 lbs	140 knots	474 nm
MD 500	1,400 lbs	125 knots	325 nm
MD 530	2,100 lbs	135 knots	232 nm
MD 520 N	2,200 lbs	135 knots	229 nm
MD 600	2,600 lbs	135 knots	380 nm
Sikorsky S-76	6,000 lbs	155 knots	400 nm
Sikorsky UH-60	3,000 lbs	145 knots	400 nm

Appendix 15: Light Aircraft Commodity Airlift

- Light aircraft airlift in to isolated or damaged airports.
- Estimated loads by commodities need to support 5,000 people.

Note: This information is based on typical weights of commodity and amounts established by FEMA for disaster response.

Item	Amount To Support 5,000 People	Estimated Weight
Emergency Meals (Heater Meals Plus)	10,000 meals (2 each serves 5,000 people per day)	3 lbs each
Emergency Meals (Heater Meals)	10,000 meals (2 each serves 5,000 people per day)	1.3 lbs each
Emergency Meals (Meals Ready to Eat (MREs))	10,000 meals (2 each serves 5,000 people per day)	1.1 lb each
Ice	5,000 8-pound bags (8 lbs per person supports 5,000 people per day)	8 lbs each
Water (Liters)	18,000 liters (3 liters per person per day supports 5,000 people per day)	2.2 lbs/L
Plastic Sheeting (20' x100')	616 rolls (1.5 per house supports 400 houses with roof damage)	71 lbs each
Tarps (20' x 25')	2,500 (1 per household)	12 lbs each
Tents	120–1,800 (6–8 person tents)	20 lbs each
Blankets	4,500 (2 each per person supports 2,250 people)	3.3 lbs each
Cots, Military	2,250 (1 each per person supports 2,250 people)	14.1 lbs each

This page intentionally left blank.

Appendix 16: Communications

Introduction

A solid communications plan is necessary to ensure aviation operations are conducted safely and efficiently. This includes the deconfliction of operational aircraft and the coordination of aviation ground support personnel at participating airfields.

Effective airfield communications are required between the parking aprons, ground support services, the tower, as applicable (i.e., controlled versus uncontrolled airfield), the ICP, and the participating aircraft.

Figure 8 lists standard communications frequencies from the National Interoperability Field Operations Guide (NIFOG), in conjunction with the national Search and Rescue Committee (NSARC). These frequencies have been coordinated for use during SAR operations and are available here as a reference.

Type of SAR	Frequencies Available
Land SAR	Typical Frequencies: 155.160, 155.175, 155.205, 155.220, 155.235, 155.265, 155.280 or 155.295 MHz. If Continuous Tone-Controlled Squelch Systems (CTCSS) is required, try 127.3 Hz (3A).
Water SAR	156.300 MHz (VHF Marine ch. 06) Safety and SAR; 156.450 (VHF Marine ch. 09) Non-commercial supplementary calling; 156.800 (VHF Marine ch. 16) Distress and calling; 156.800 (VHF Marine ch. 17) State control; 157.100 (VHF Marine ch. 22A) Coast Guard liaison.
Coast Guard Auxiliary	138.475, 142.825, 143.475, 149.200, 150.700 MHz (NB only).
Aeronautical SAR Coast Guard/DOD Joint SAR	3023, 5680, 8364 kHz (lifeboat/survival craft); 4125 kHz (distress/safety with ships and coast stations); 121.5 MHz emergency and distress; 122.9 MHz SAR secondary and training; and 123.1 MHz SAR primary. 345.0 MHz AM initial contact; 282.8 MHz AM working.
Military SAR	40.50 wideband FM U.S. Army/USN SAR; 138.450 AM, 138.750 AM USAF SAR
VHF Marine Channels	6, 9, 15, 16, 21A, 23A, 81A, 83A

Figure 8: Excerpt from the NSARC Search and Rescue Frequency Table

Aviation Communications are complex in nature and require careful coordination. Figure 9 depicts the expected flow of communications between the aircraft and the participating

agencies. While airspace control and management rests solely with the FAA, multiple agency coordination is essential to ensuring a successful mission.

In the example listed in Figure 9, the aircraft is tasked or coordinated through either their airline dispatch (if civil aircraft are used) or through their Federal agency. The Tanker Airlift Control Center (TACC) is a USAF organization, and functions as the Command and Control center for USAF airlift operations (if applicable).

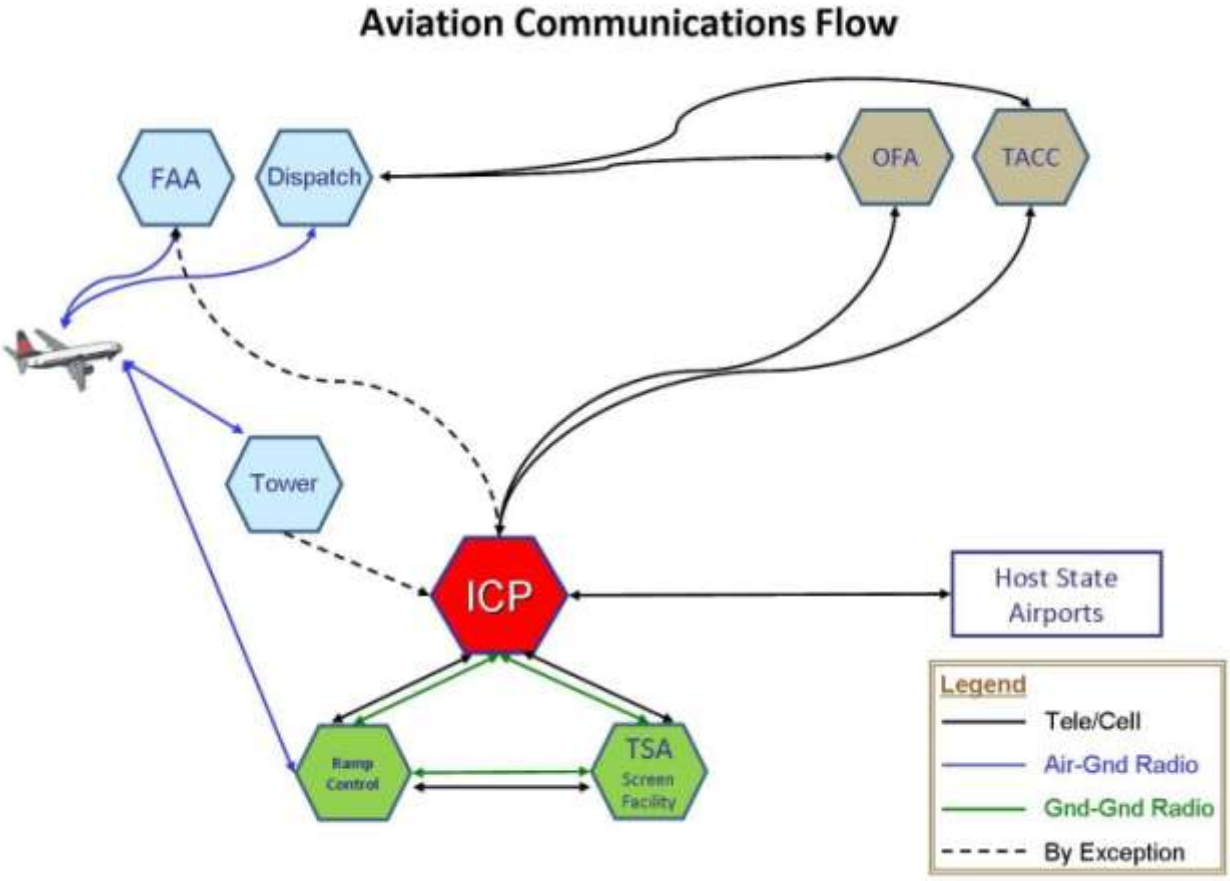


Figure 9: Aviation Communications Flow

Figure 10 depicts evacuation communications flow during aviation operations. This example was taken from a hurricane evacuation scenario, but the same principles would apply for the post-incident evacuation of displaced survivors or critical needs populations.

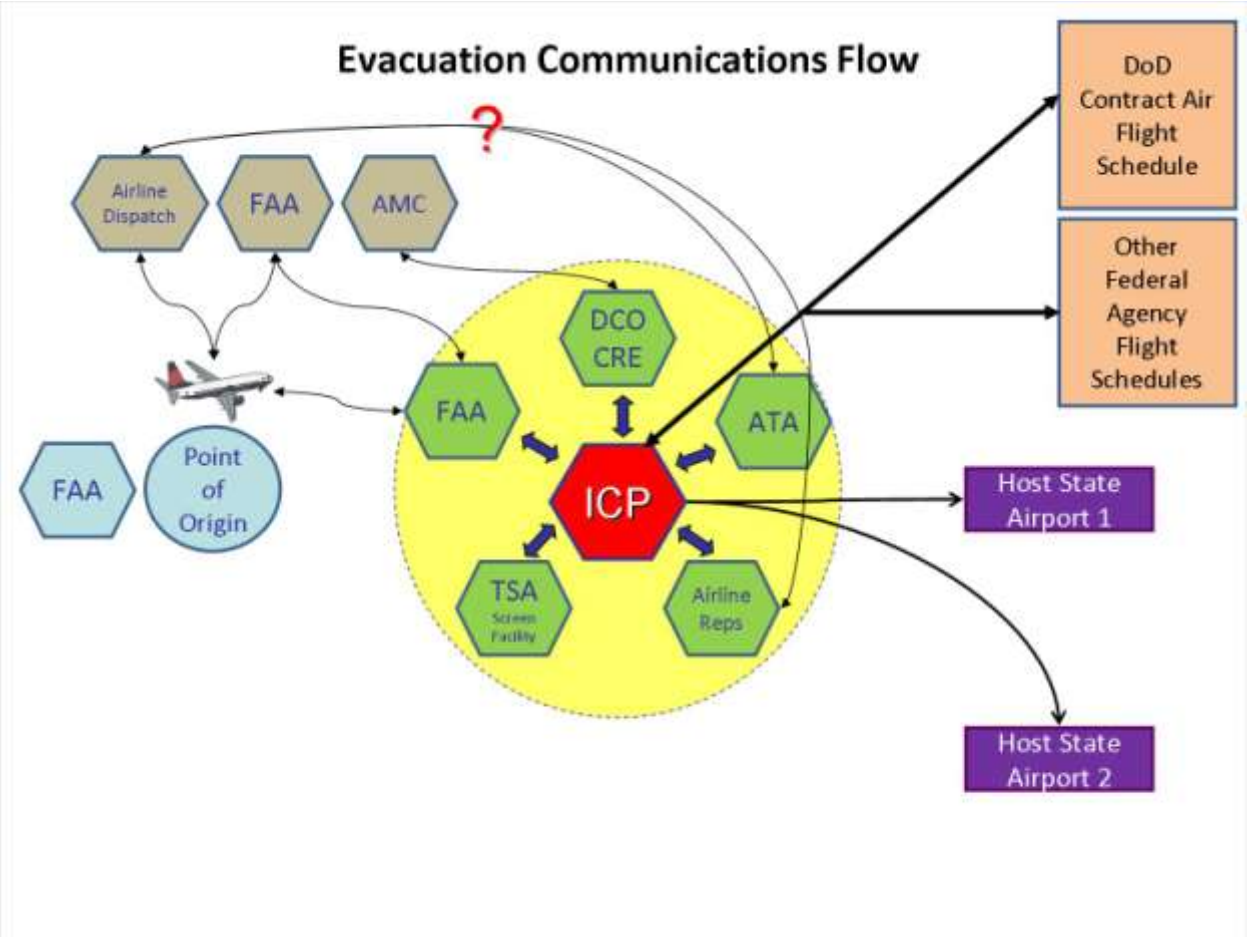


Figure 10: Evacuation Communications Flow

Figure 11 provides an example of how communications should flow between the aircraft and the agencies at the airfield. The MOG listed above is an example only. This will vary based on the specific capabilities (ramp space and services) at the designated airfields.

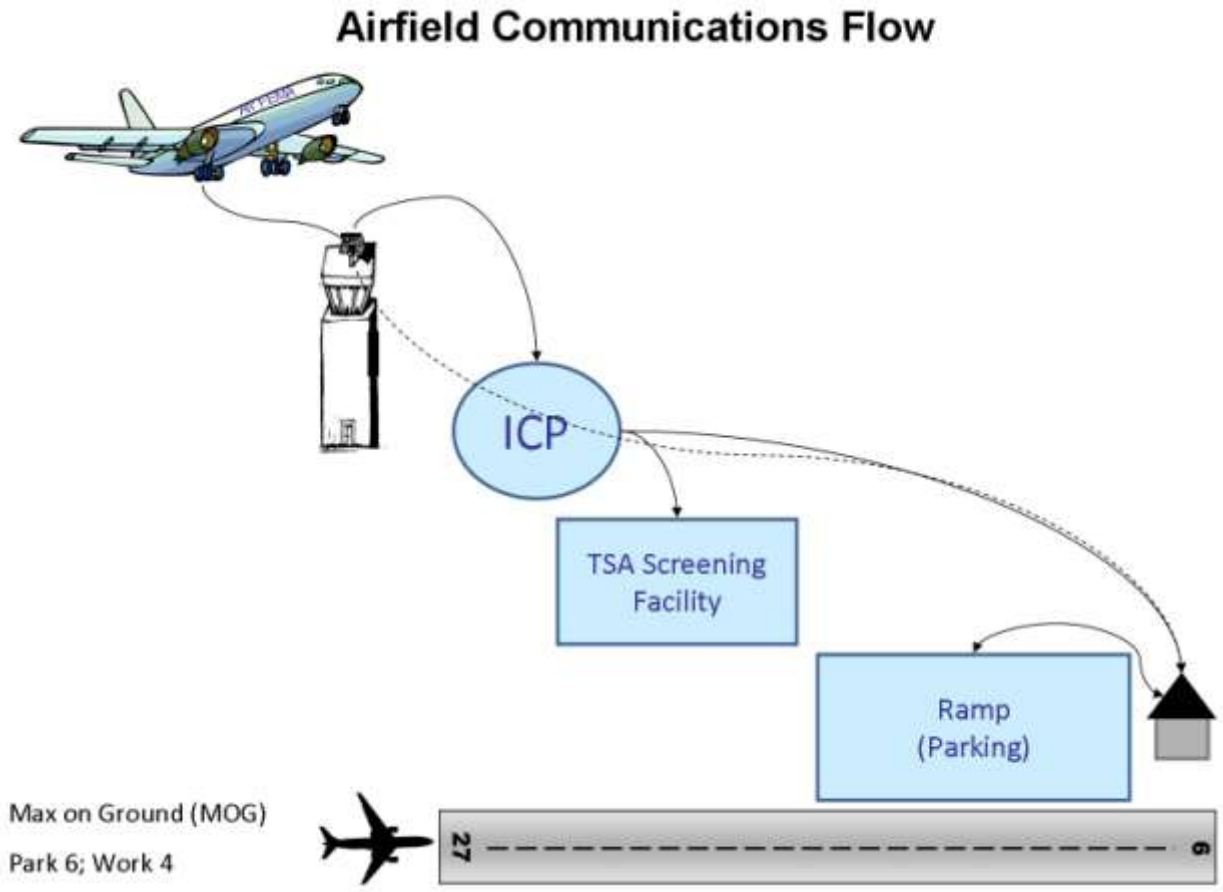


Figure 11: Airfield Communications Flow

Appendix 17: Passenger Operations

Introduction

This section identifies aviation planning considerations in order to successfully conduct passenger aviation operations. When conducting passenger operations at an airfield, the following considerations need to be taken into account:

- Tourist operations
- Evacuee operations
- Passenger transportation (to and from the airport)
- Passenger screening and manifesting
- Evacuation destination and host state agreements

Tourist Operations

Tourist operations are an important consideration during evacuation operations. Please note that situations may arise requiring the evacuation of tourists for both notice and no-notice events. The following information describes tourist evacuation considerations for a notice event (hurricane-type scenario). During this type of a scenario, the airlines will manage a large portion of the tourist evacuation as this fits in accordance with their business model. Airlines may take the following actions:

- Airlines will try to contact passengers to rebook them on a new flight or notify them of reduced schedules when a storm threatens to close flight operations at the airport to which they provide service. Airlines have a vested interest in accommodating their ticketed passengers or else the passengers may re-book their flights on another airline, causing the initial airline to lose a fare.
- Airlines may adjust aircraft gauge to accommodate passengers.
- Airlines may increase employee staffing for surge operations.
- Airlines will most likely evacuate passengers to one of their major hubs where passengers can book a follow-on flight to their final destination.
- Airlines most likely will not evacuate passengers from an airport that they do not service, unless doing so under a contract.
- Any ticketed passengers evacuated by DoD will be taken to a designated major airport. Ticketed passengers will likely be able to continue their journey from these major airports.

Note: Carriers will know how many ticketed passengers are in an evacuation city, as well as when and how many they have to take out. Contingency for use of Federally contracted commercial aircraft to augment scheduled commercial carriers will be implemented once airlines have exceeded their capacity to process all of their tourists. Once the airlines' capacities have been exceeded, they will direct their ticketed passengers, with their luggage, to the charter ticket counter in the terminal baggage claim

area. Passengers will be given a boarding pass with their gate number and will then turn over their luggage to the charter ticket counter for loading on the charter aircraft. The passengers will then proceed to their gate through the TSA security checkpoint as a normal ticketed passenger.

Evacuee Operations

Evacuee operations via airlift may include critical needs passengers who are not capable of evacuating, post-incident evacuations from a disaster zone, or medical evacuation operations. Some of the considerations will be the same as those listed in the tourist operations section. The following subsections describe considerations which are required for any successful evacuation via airlift.

Transportation

Aviation evacuation operations begin prior to the passengers arriving at the airport. Planners need to consider how evacuees are getting to and from the airport. The primary concerns include critical needs passengers who are not capable of evacuating themselves and may include medical evacuations. Some of the considerations will be the same as the previous section. These considerations may be applied to an all-hazards scenario.

Figure 12: Passenger Pickup Points Considerations

When arranging for transportation to and from the airport, local counties should consider the types of evacuees to be transported (e.g., special needs, disabled, pets, medical needs, families, children) and the loading areas required for these groups.

This should be accomplished in three distinct phases: aggregation, segregation, and transfer. Success is based on the ability to plan for the complexity of the transportation. Counties need to ensure they have enough resources and manpower to manage the transfer.

Screening and Manifesting

Federal requirements dictate that all passengers be processed through security and manifested prior to air travel.

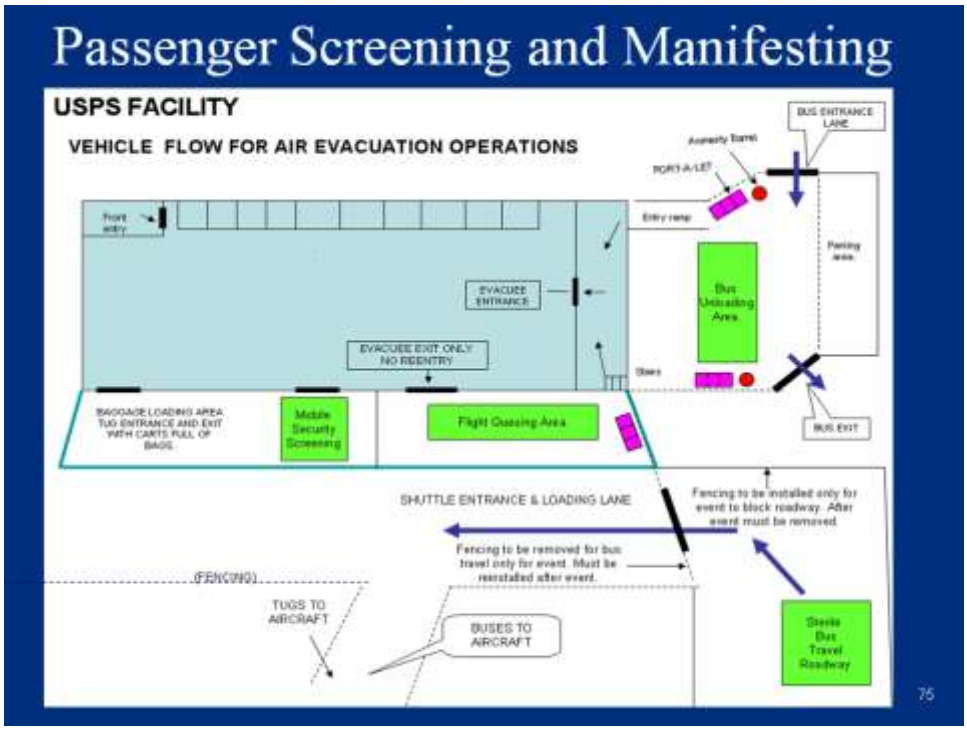


Figure 13: Passenger Screening and Manifesting

Figure 13 is an example taken from Louis Armstrong New Orleans International Airport (MSY). It illustrates the importance of having an effective screening and manifesting plan. This figure illustrates passenger screening and manifesting operations performed by TSA and FEMA in the United States Postal Service facility on-site at the airport in New Orleans.

The screening and manifesting plan needs to account for passenger transportation to the facility, transportation to the airplanes on the parking ramp, and the segregation of passengers who have already been screened from those who have not.

Other considerations include food, water, and lavatory support requirements for both evacuees and responders.

Evacuation Destination and Host State Agreements

Prior to conducting an evacuation, the State must have a viable plan for evacuee destinations. This may be accomplished interstate or intrastate depending on the situation. If the State is conducting an interstate evacuation, host state agreements with neighboring states may need to be accomplished. State and local governments should decide what approach they wish to take and plan accordingly.

When planning an evacuation, the evacuating State needs to take into account the capabilities of the destination airports. These considerations will be similar to the ones mentioned in the previous section (primary and secondary airports). Some of these considerations include:

- MOG capability
- Parking (dependent on available ramp space)
- Working (dependent on available services)
- Nearby dining and lodging facilities
- Shelter support for evacuees

If the destination airports belong to another state, then it will be the host state's responsibility to manage their airport operations accordingly. It is important to recognize that the role of the host state will be dependent on decision of governor at time of incident. When drafting the evacuation plan (pre- or post-incident), coordinate with the host state (if applicable) to ensure the host state will shelter the evacuees (this is normally a planning assumption) and that, on arriving at the host state airport, passengers will be transported to the supporting shelter as designated by host state.

The decision for a designated state to accept the role of host state is dependent on the executive authority (e.g., governor) at the time of the incident based upon the current situation. Residents would be transported by commercial charter aircraft and/ or military aircraft from the evacuation airport to the designated airport, where they would be transported via ground transport to the supporting shelter as designated by the host state and/or local jurisdiction.

When selecting airports for utilization as the evacuation support airports, it is recommended that these airfields be capable of sustaining 24 hour operations.

The evacuee reception area will be situation dependent, and the responsibility will ultimately rest with the host state. The FEMA Region, IMAT, and the State and local government will be responsible for coordinating ground transportation from airfield to reception center or shelters as required. Reception and onward movement will be performed by local government emergency management, airport, and National Guard. Surface transport conducted with local school buses to sheltering location.

Appendix 18: Forms

This appendix is intended to contain a current and standardized example of all forms necessary to support this operations manual. Use of these forms is intended facilitate the prompt, efficient, and effective employment of aviation assets.

The most current ICS forms can be found at the following link: http://training.fema.gov/EMIWeb/IS/ICSResource/icsforms.htm.

SAFECOM – Aviation Safety Communiqué

Reported By (Optional):	Name:		Tele #::
	Org.:		Date:
EVENT:			
Date: / /	Local Time:	Injuries: Yes No	Damage: Yes No
MM/DD/YYYY	24 Hour Clock	Circle	Circle
Location:	State:	Airport, City, Lat/Long, or Fire	
MISSION:			
Type:		Procurement:	
Pax, Cargo, Recon, Sling, Longline, Rappel, etc.		Contract, CWN, Rental, Fleet, Cooperator, etc.	
Number of People Onboard:		Special Use? Yes No	HazMat? Yes No
		Circle	Circle
AIRCRAFT:			
N#:	Mfr:	Model:	
Owner/Operator:		Pilot:	
NARRATIVE:			
CORRECTIVE ACTION:			

Temporary Flight Restriction Request Form

(TFR request must be phoned in as per FAA. This form may also be faxed to provide documentation.)

RESOURCE ORDER NUMBER: Request #: A -	DATE: TIME:
TO: FAA ARTCC_____ FAA PERSON CONTACTED: _____ FAA PHONE: _____ FAX: _____	FROM: DISPATCH OFFICE _____ PERSONE REQUESTING TFR: _____ 24-HOUR PHONE (NO TOLL-FREE #s): _____

☐ Check if this TFR is a replacement. If so, NOTAM # of TFR being replaced. _____

(Existing TFRs cannot be changed, only cancelled, only cancelled and replaced.)

Geographic Location of Incident (nearest town, state): _____

Location (Circular TFR) List nearest NAVAID (distance should be less than 50 NM) – do not use NDB or T-VOR.				
VOR ID	RADIAL (Degree)	DISTANCE (NM)	LAT/LONG of Center Point (use US NOTAM OFFICE FORMAT ddmmssN/dddmmssW)	RADIUS (NM) (5 NM is Standard)
			N/W	

Or (Polygon TFRs should be rare and only used if circular shape is not adequate.)

Location (Polygon TFR) (List perimeter pints in clockwise order List nearest NAVAID (distance < 50 NM) – do not use NDB or T-VCR.									
Point #	VOR ID (XXX)	Radial (Degrees)	Distance (NM)	Lat/Long ddmmssN/dddmmssW	Point #	VOR ID (XXX)	Radial (Degrees)	Distance (NM)	Lat/Long ddmmssN/dddmmssW
1				N/W	5				N/W
2				N/W	6				N/W
3				N/W	7				N/W
4				N/W	8				N/W

Altitude restrictions: _____ FEET MSL (do not use AGL – Standard is 2000' above highest terrain point)

The _____ / _____ at _____ , _____

Agency Name | Incident Name | 24Hr. Phone # (NO TOLL-FREE #s) | VHF-AM Air/Air Frequency

Is in charge of on scene emergency response activities. TFR to provide a safe environment for fire-fighting aircraft operations: effective immediately, until further notice, 24 hrs/day.

The requested TFR affects the following Special-Use Airspace:

The requested TFR affects the Military Training Routes listed below:

Route	Scheduling Activity	Segment(s)	Route	Scheduling Activity	Segment(s)

IMPORTANT NOTE TO FAA: If the TFR affects SUA and/or MTR(s), we request NOTAM distribution to all military bases involved, to the Coordinating Flight Service Station, and, for MTRs, to the Flight Station and Air Route Traffic Control Center with responsibility for the airspace at the route entry point(s).

NOTAM # _____ ISSUED AT _____ (Time) On _____ / _____ (Date)

Date/Time TFR Cancelled: _____

By: _____

Interagency Air Mission Request

Requestor Information (Extracted From The ARF)			
Approved by:			
Requestor:		Tele #::	Date:
Type Request:	Urgent:	Immediate:	Routine:
Schedule: Begin Date/Time:		Completion/Time:	
Description (Be as specific as possible)			
Mission Tasking Order (Information to be completed at the Aviation Branch)			
Msn Request Reference #		Date/time Received:	
Mission Priority:			
P1 Life Saving ☐	P2 Life Sustaining ☐	P3 Property Protection ☐	
P4 Rapid Needs Assess ☐	P5 Logistics Support ☐	P5 Other:	
Agency Tasked: ANG ☐ ARNG ☐ CAP ☐ CBP ☐ USCG ☐ USA ☐ USAF ☐ USN USFS ☐ ☐ Other:			
Aircraft Tasked:			
Fixed-Wing Type/#:		Rotary-Wing Type/#:	
Specific Aircraft Requirements/Capability:			
Mission Geographic Location:			
Navigation Aid Location (if available):			
TFR Controlling Agency Call Sign:			Freq:
Known Hazards:			
Other Aircraft in AOR:			
ATC Call Sign/Freq:		Air to Air Freq:	
Ground Controller/Mobile Tower Call Sign:			Freq:
P/U Location/time (Be Specific):			
D/0 Location/Time (Be Specific):			
Airfield/LZ/DZ Markings:			
Detailed Mission Description:			

Initial Aviation Mission Briefing Checklist

- Where to report and to whom
- Copy of Daily Air Operations Plan
  a. Communication procedures
  b. Flight following procedures
  c. Aircraft check-in procedures
  d. Airspace coordination procedures (Special airspace restrictions)
  e. Organization chart
  f. Aircraft priorities
  g. Current situation update
  h. Reporting of out of service aircraft
- Safety
  a. General safety issues
  b. Identified hazards or concerns
  c. Weather
  d. Overdue, missing, or crashed emergency procedures
  e. Mishap or SAFECOM reporting procedures
- Administrative procedures
  a. Personnel logistics
  b. Conference call schedule
  c. Daily reporting requirements
  d. Demobilization of aircraft or personnel
- Materials to distribute to incoming personnel
  a. Communications plan
  b. Sectional of assigned area
  c. Current Air Operations plan
  d. Required maps and charts
- Other local issues/logistics/information

Mission Status Tracking Form

Aircraft Assignment and Status													
S #	A/C Type	Tail #	Call Sign	Pilot	Assignment	PT of DEP	DEST	ETD	ATD	ETE	ETA	ATA	LCI

Incident Radio Communications Plan (ICS Form 205)

INCIDENT RADIO COMMUNICATIONS PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period Date/Time

4. Basic Radio Channel Utilization					
Radio Type/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks

5. Prepared by (Communications Unit)

Air Operations Summary (ICS Form 220)

AIR OPERATIONS SUMMARY		1. Incident Name		2. Operational Period (Date/Time)		3. Distribution □ Helibases _____ □ Fixed-wing Bases _____			
4. Personnel and Communications	Name	Air/Air Frequency		Air/Ground Frequency		5. Remarks (Spec. Instructions, Safety Notes, Hazards, Priorities)			
Air Operations Branch Director									
Air Mission Group Supervisor									
Air Support Group Supervisor									
6. Location/Function	7. Assignment	8. Fixed-wing		9. Helicopters		10. Time		11. Aircraft	12. Operating
		No.	Type	No.	Type	Available	Commence	Assigned	Base
13. Totals									
14. Air Operations Support Equipment					15. Prepared by *(include Date and Time)*				
ICS 220-FEMA									