IS-809: ESF #9 – Search and Rescue Instructor Guide

February 2009

Course Overview

Display Visual 1



Instructor Notes: Present the following key points.

Purpose: The purpose of this course is to familiarize participants with the function and composition of ESF #9 – Search and Rescue.

Approximate Time: 1 hour

Content Outline: This module includes the following major topics:

- ESF Overview
- ESF #9 Purpose and Scope
- ESF #9 Coordinator and Primary Agencies
- ESF #9 Support Agencies
- ESF #9 Concept of Operations
- ESF #9 Actions
- Structural Collapse (Urban) Search and Rescue
- Waterborne Search and Rescue
- Inland/Wilderness Search and Rescue
- Aeronautical Search and Rescue
- Summary

Materials:

- Instructor Guide
- Student Manual (including the ESF #9 Search and Rescue Annex)

Course Overview

Display Visual 2



Instructor Notes: Present the following key points.

At the end of this course, participants will be able to:

- Describe the overall purpose and scope of ESF #9.
- Identify the supplemental assistance ESF #9 provides to State, tribal, and local governments.
- Identify typical activities accomplished by ESF #9 resources.
- Describe the types of partnerships formed between ESF #9 and other response agencies and organizations.

Course Overview

Display Visual 3



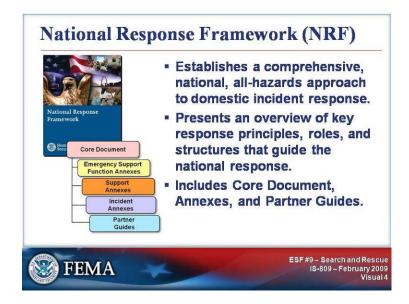
Instructor Notes: Present the following key points.

Welcome the participants and introduce yourself. Then ask the participants to introduce themselves to the members of their table groups. Ask for:

- Their names.
- Their roles in emergency management.
- What they hope to gain from this course.

ESF Overview

Display Visual 4



Instructor Notes: Present the following key points.

The National Response Framework (NRF):

- Is a guide to how the Nation conducts all-hazards response.
- Builds upon the National Incident Management System (NIMS) coordinating structures
 to align key roles and responsibilities across the Nation, linking all levels of government,
 nongovernmental organizations, and the private sector.

The NRF is comprised of:

- The Core Document, which describes the doctrine that guides our national response, roles and responsibilities, response actions, response organizations, and planning requirements to achieve an effective national response to any incident that occurs.
- Emergency Support Function Annexes, which identify Federal resources and capabilities that are most frequently needed in a national response (e.g., transportation, firefighting, mass care).
- Support Annexes, which describe essential supporting aspects that are common to all incidents (e.g., financial management, volunteer and donations management, privatesector coordination).
- Incident Annexes, which address the unique aspects of how we respond to seven broad categories or types of incidents (e.g., biological, nuclear/radiological, cyber, mass evacuation).
- Partner Guides, which provide ready references describing key roles and actions for local, tribal, State, Federal, and private-sector response partners.

ESF Overview

Display Visual 5



Instructor Notes: Present the following key points.

The Federal Government and many State governments organize many of their resources and capabilities—as well as those of certain private-sector and nongovernmental organizations—under Emergency Support Functions (ESFs).

The ESFs:

- Are coordinated by the Federal Emergency Management Agency (FEMA) through the National Response Coordination Center (NRCC), Regional Response Coordination Centers (RRCCs), and Joint Field Offices (JFOs).
- Are a critical mechanism to coordinate functional capabilities and resources provided by Federal departments and agencies, along with certain private-sector and nongovernmental organizations.

Note that some States also have organized an ESF structure along this approach.

ESF Overview

Display Visual 6



Instructor Notes: Present the following key points.

Review the general ESF duties listed on the visual.

Why is it important that ESFs have the authority to commit agency assets?

ESF Overview

Display Visual 7



Instructor Notes: Present the following key points.

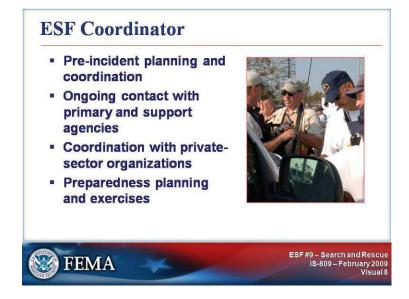
The ESF structure includes:

- ESF Coordinator. The entity assigned to manage oversight for a particular ESF.
- Primary Agencies. ESF primary agencies are Federal agencies with significant authorities, resources, or capabilities for a particular function within an ESF. A Federal agency designated as an ESF primary agency serves as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
- Support Agencies. Support agencies are those entities with specific capabilities or resources that support the primary agencies in executing the mission of the ESF.

ESFs provide support to other ESFs. For example: ESF #3 – Public Works and Engineering may support rural ESF #5 – Emergency Management forces to obtain heavy equipment and/or demolition services as needed to suppress incident-related fires.

ESF Overview

Display Visual 8



Instructor Notes: Present the following key points.

The ESF coordinator has management oversight for that particular ESF.

Note that, as described on the visual, the ESF coordinator has a role throughout the incident management cycle.

ESF Overview

Display Visual 9



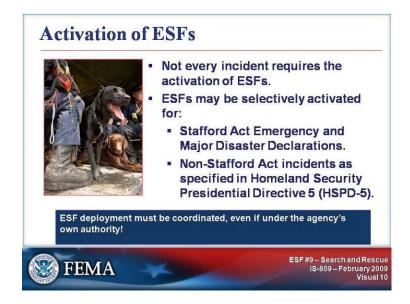
Instructor Notes: Present the following key points.

When an ESF is activated in response to an incident:

- The primary agency is responsible for:
 - Serving as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
 - Orchestrating Federal support within its functional area for an affected State.
 - Providing staff for the operations functions at fixed and field facilities.
 - Notifying and requesting assistance from support agencies.
 - Managing mission assignments and coordinating with support agencies and appropriate State agencies.
 - Working with appropriate private-sector organizations to maximize use of all available resources.
 - Supporting and keeping other ESFs and organizational elements informed of ESF operational priorities and activities.
 - Maintaining trained personnel to support interagency emergency response and support teams.
- Support agencies are responsible for:
 - Conducting operations, when requested by the Department of Homeland Security (DHS) or the designated ESF primary agency, using their own authorities, subject-matter experts, capabilities, or resources.
 - Participating in planning for short- and long-term incident management and recovery operations and the development of supporting operational plans, standard operating procedures (SOPs), checklists, or other job aids, in concert with existing first-responder standards.
 - Assisting in the conduct of situational assessments.
 - Furnishing available personnel or other resource support as requested by DHS or the ESF primary agency.
 - Providing input to periodic readiness assessments.
 - Participating in training and exercises aimed at continuous improvement of response and recovery capabilities.
 - Identifying new equipment or capabilities required to prevent or respond to new or emerging threats and hazards, or to improve the ability to address existing threats.

ESF Overview

Display Visual 10



Instructor Notes: Present the following key points.

ESFs may be selectively activated for both Stafford Act and non-Stafford Act incidents under circumstances as defined in Homeland Security Presidential Directive 5 (HSPD-5). Not all incidents requiring Federal support result in the activation of ESFs.

FEMA can deploy assets and capabilities through ESFs into an area in anticipation of an approaching storm or event that is expected to cause a significant impact and result. This coordination through ESFs allows FEMA to position Federal support for a quick response, though actual assistance cannot normally be provided until the Governor requests and receives a Presidential major disaster or emergency declaration.

ESF Overview

Display Visual 11



Instructor Notes: Present the following key points.

The 15 ESFs are listed on the visual. The complete ESF Annexes are available at the NRF Resource Center at www.fema.gov/nrf.

This course focuses on ESF #9 - Search and Rescue.

Describe your roles or associations with ESF #9.

ESF Overview

Display Visual 12



Instructor Notes: Present the following key points.

What role does environment play in search and rescue?

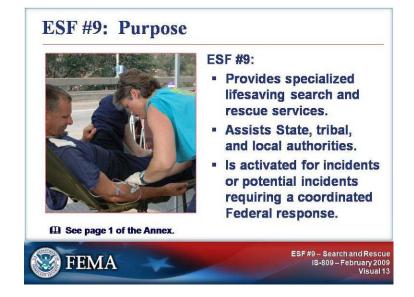
Facilitate a discussion. If not mentioned by participants, explain that environment determines not only how the response operation will be conducted, but also by whom. Whether trapped by rising floodwaters in a hurricane, pinned under rubble after a building collapse, or stranded on a mountainside in a winter storm, victims' lives depend upon the courageous and skilled work of search and rescue personnel.

Search and rescue teams, whether operating on land or sea, in urban areas or wilderness, share training in search techniques, emergency medical treatment, and extrication of victims from dangerous situations. But different agencies are better equipped to handle different response environments.

This course covers the specific capabilities of each of the ESF #9 response partners.

ESF #9 Purpose and Scope

Display Visual 13



Instructor Notes: Present the following key points.

ESF #9 – Search and Rescue (SAR) provides specialized lifesaving assistance to State, tribal, and local authorities when activated for incidents or potential incidents requiring a coordinated Federal response.

Refer to page 1 of the ESF #9 – Search and Rescue Annex.

ESF #9 Purpose and Scope

Display Visual 14



Instructor Notes: Present the following key points.

The Federal SAR Response System is composed of the primary agencies that provide specialized SAR operations during incidents or potential incidents requiring a coordinated Federal response. This includes:

- Structural Collapse (Urban) Search and Rescue (US&R)
- Waterborne Search and Rescue
- Inland/Wilderness Search and Rescue
- Aeronautical Search and Rescue

SAR services include the performance of distress monitoring, communications, location of distressed personnel, coordination, and execution of rescue operations including extrication or evacuation along with the provisioning of medical assistance and civilian services through the use of public and private resources to assist persons and property in potential or actual distress.

The scope information can be found on page 1 of the ESF #9 – Search and Rescue Annex.

ESF #9 Coordinator and Primary Agencies

Display Visual 15



Instructor Notes: Present the following key points.

The Federal Emergency Management Agency (DHS/FEMA) is the ESF #9 coordinator.

Primary agencies for ESF #9 are:

- DHS/FEMA
- DHS/U.S. Coast Guard (USCG)
- Department of the Interior/National Park Service (NPS)
- Department of Defense/U.S. Air Force (USAF)

More information can be found on pages 4-6 of the ESF #9 – Search and Rescue Annex.

ESF #9 Support Agencies

Display Visual 16



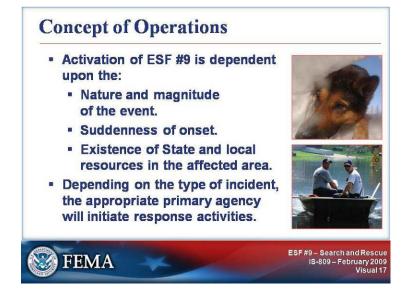
Instructor Notes: Present the following key points.

In addition to its four primary agencies, ESF #9 is served by a number of support agencies. This support includes:

- Customs and Border Protection provides specialized response.
- National Aeronautics and Space Administration provides emerging technologies.
- Army Corps of Engineers provides engineering and expertise.
- Forest Service provides equipment and supplies.
- Department of Health and Human Services provides medical expertise.

ESF #9 Concept of Operations

Display Visual 17



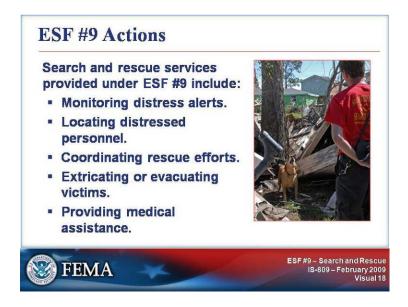
Instructor Notes: Present the following key points.

Activation of ESF #9 is dependent upon the nature and magnitude of the event, the suddenness of onset, and the existence of State and local resources in the affected area.

Depending on the type of incident, the appropriate primary agency will initiate response activities. For example, in a maritime distress situation, the U.S. Coast Guard will initiate Federal waterborne search and rescue response activities.

ESF #9 Actions

Display Visual 18



Instructor Notes: Present the following key points.

Search and rescue services provided under ESF #9 include:

- Monitoring distress alerts.
- Locating distressed personnel.
- Coordinating rescue efforts.
- Extricating or evacuating victims.
- Providing medical assistance.

ESF #9 Actions

Display Visual 19



Instructor Notes: Present the following key points.

What are some examples of the types of search and rescue operations each primary agency performs?

Facilitate a discussion. If necessary, stimulate the discussion by adding the following examples:

- Rescue of cruise ship passengers from a liner damaged by a tropical storm.
- Search for survivors of an airliner downed by an apparent terrorist attack.
- Rescue of residents of a rural area trapped by a sudden severe ice storm.
- Search of Federal building damaged by a car bomb.

Structural Collapse (Urban) Search and Rescue

Display Visual 20



Instructor Notes: Present the following key points.

FEMA serves as the primary agency in US&R missions.

FEMA follows the National US&R Response System to deploy US&R task forces, Incident Support Teams, and technical specialists.

FEMA's National Urban Search and Rescue Response System has been deployed for searches of collapsed or damaged buildings in incidents nationwide, including the Oklahoma City bombing, the collapse of the World Trade Center, and rescue efforts after Hurricane Katrina. Also during Hurricane Katrina, 28 National US&R task forces were mobilized. The teams rescued more than 6,000 individuals.

Structural Collapse (Urban) Search and Rescue

Display Visual 21



Instructor Notes: Present the following key points.

FEMA's National US&R Response System organizes local emergency personnel into integrated disaster response task forces. These task forces, complete with necessary tools and equipment, and specialized training and skills, are deployed by FEMA in times of catastrophic structural collapse.

There are 28 national task forces situated across the country. The entire US&R Response System is comprised of more than 5,000 individuals.

US&R teams include specially trained canines that can help locate survivors in an incident.

Approximately 80 FEMA canines were active in rescue efforts at the World Trade Center attack site. They and their handlers were members of the 20 FEMA US&R teams deployed to support the City of New York.

Structural Collapse (Urban) Search and Rescue

Display Visual 22



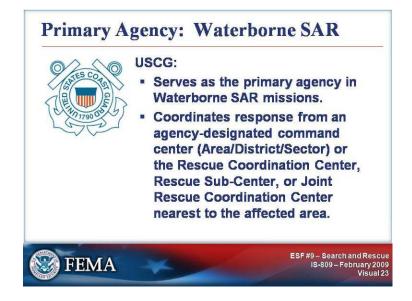
Instructor Notes: Present the following key points.

Each task force has five main components:

- Search: Locating victims of a disaster.
- **Rescue:** Removing a victim from the location where he or she is trapped, which often involves removing debris from around the victim.
- **Medical:** Providing confined-space medical treatment for victims before, during, and after rescue.
- **Technical:** Providing technical support for the rescuers, such as structural engineers, hazmat specialists, and communications specialists.
- **Logistical:** Providing logistics specialists responsible for the transportation, maintenance, tracking, and rehabilitation of task force equipment.

Waterborne Search and Rescue

Display Visual 23



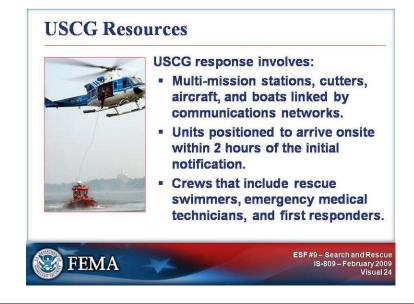
Instructor Notes: Present the following key points.

USCG serves as the primary agency in Waterborne SAR missions.

USCG coordinates response from an agency-designated command center (Area/District/Sector) or the Rescue Coordination Center, Rescue Sub-Center, or Joint Rescue Coordination Center nearest to the affected area.

Waterborne Search and Rescue

Display Visual 24



Instructor Notes: Present the following key points.

USCG SAR response involves multi-mission stations, cutters, aircraft, and boats linked by communications networks.

The Coast Guard maintains SAR facilities on the east, west, and gulf coasts; in Alaska, Hawaii, Guam, and Puerto Rico; and on the Great Lakes and inland U.S. waterways. USCG SAR units are positioned to arrive onsite within 2 hours of the initial notification.

The Coast Guard search and rescue crews include rescue swimmers, emergency medical technicians, and first responders.

Inland/Wilderness Search and Rescue

Display Visual 25



Instructor Notes: Present the following key points.

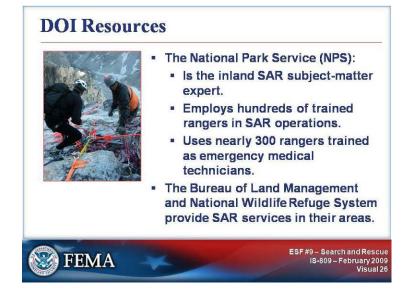
DOI serves as the primary agency for Inland/Wilderness SAR missions.

DOI coordinates response from a regional office.

Search and rescue efforts in DOI areas range from searching for lost hikers to performing complex technical rescues in high altitude, mountainous environments.

Inland/Wilderness Search and Rescue

Display Visual 26



Instructor Notes: Present the following key points.

The National Park Service (NPS) is the inland SAR subject-matter expert and has hundreds of trained rangers in SAR operations from cliff rescues to helicopter evacuations in all park environments. In addition, the NPS has nearly 300 rangers trained as emergency medical technicians.

Note that Bureau of Land Management rangers and National Wildlife Refuge System law enforcement officers also provide search and rescue services in their areas.

Aeronautical Search and Rescue

Display Visual 27



Instructor Notes: Present the following key points.

USAF serves as the primary agency for Aeronautical SAR missions.

USAF coordinates initial actions from its Rescue Coordination Center. If significant DOD resources are required, a Joint Task Force is activated.

Aeronautical Search and Rescue

Display Visual 28



Instructor Notes: Present the following key points.

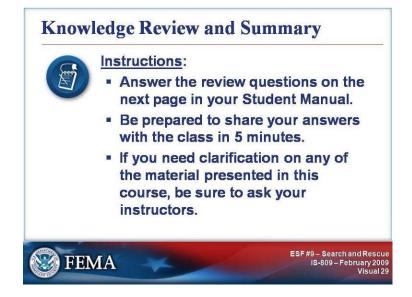
For aerial searches, the Air Force calls on the Civil Air Patrol, the official auxiliary of the Air Force. The Patrol conducts the majority of all aerial search activity in the inland area. Aerial search activities are coordinated through the Air Force Rescue Coordination Center at Langley Air Force Base.

The Civil Air Patrol (CAP) is a congressionally chartered, nonprofit organization of volunteers. As the official auxiliary of the U.S. Air Force, CAP conducts approximately 95 percent of all aerial search activity in the inland area.

In addition to the world's largest fleet of single-engine, piston aircraft; the Nation's most extensive communications network; and more than 1,000 emergency services vehicles, the CAP provides SAR mission coordinators, ground teams, and additional personnel on alert status.

Summary

Display Visual 29



Instructor Notes: Present the following key points.

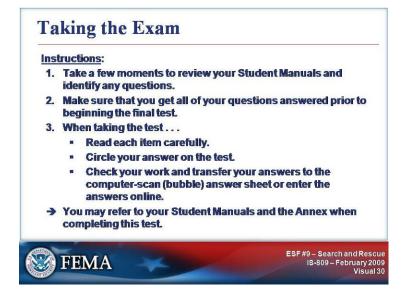
Conduct the review as follows:

- Direct the participants to the Knowledge Review located at the end of their Student Manuals.
- Allow 5 minutes for the participants to answer the questions.
- Monitor the time. When 5 minutes have passed, ask for volunteers to provide their answers.
- If not mentioned by participants, provide the correct responses from the answer key on the next page.
- Ask the participants if they have any questions on the material covered in this course.
 Be sure to answer all questions before moving on to the exam.

Additional information about the National Response Framework and Emergency Support Functions may be obtained at the NRF Resource Center at www.fema.gov/nrf.

Summary

Display Visual 30



Instructor Notes: Present the following key points.

Present the following instructions:

- 1. Take a few moments to review your Student Manuals and identify any questions.
- 2. Make sure that you get all of your questions answered prior to beginning the final test.
- 3. When taking the test . . .
 - 1. Read each item carefully.
 - 2. Circle your answer on the test.
 - 3. Check your work and transfer your answers to the computer-scan (bubble) answer sheet or enter the answers online.

Tell the participants that they may refer to their Student Manuals and the annex when completing this test.

Important Instructor Note: It is important that you allow the participants enough time for them to review the course materials prior to taking the exam. If time permits, you can facilitate a structured review of the materials using the following techniques:

- Assign each team a lesson and have them summarize and present the key points to remember.
- Select five to seven of the most critical points from each lesson. Present a brief review of these points. Ask questions to ensure that the participants remember the most important information.

When the review is completed, distribute the exams. Remain in the room to monitor the exam and to be available for questions. Collect the completed exams.

Instructor Note: To receive a certificate of completion, students must take the 10-question multiple-choice posttest, submit an answer sheet (to EMI's Independent Study Office), and score 75% on the test. Explain that students may submit their tests online, and receive a certificate in the mail. Direct them to:

- Go to http://training.fema.gov/EMIWeb/IS/ and click on the link for IS-801.
- Click on "Download Final Exam Questions" (found at the bottom of the page). You may want to print the test.
- Click on "Take Final Exam" (found at the bottom of the page).

Summary

Display Visual 31



Instructor Notes: Present the following key points.

Ask the participants to complete any course evaluation/feedback forms. Use standard course evaluation forms from your agency or jurisdiction.

ESF #9 - Knowledge Review

1. Who serves as the coordinator for ESF #9?

<u>Answer</u>: Department of Homeland Security/Federal Emergency Management Agency (FEMA)

2. Which agency would most likely act as the primary agency if ESF #9 were activated to rescue of cruise ship passengers from a liner damaged by a tropical storm?

Answer: U.S. Coast Guard

3. Which agency would most likely act as the primary agency if ESF #9 were activated to search for survivors of an airliner downed by an apparent terrorist attack?

Answer: U.S. Air Force

4. Which agency would most likely act as the primary agency if ESF #9 were activated to rescue of residents of a rural area trapped by a sudden severe ice storm?

Answer: Department of the Interior

5. Which resource consists of highly trained and well-equipped local fire and emergency personnel?

Task forces

Incident support teams

Technical specialists

6. Fill in the blank: The _____ conducts approximately 95 percent of all aerial search activity in the inland area.

Answer: Civil Air Patrol (CAP)

7. Match the activities with the ESF #9 support agencies that perform them.

	Activities		Support Agencies
A .	Supplies equipment for searches in wilderness and forested areas	A.	USDA/Forest Service
D.	Provides test-bed facilities for proof-of- concept and beta testing of new SAR technologies.	B.	Department of Health and Human Services
C.	Conducts specialized search and rescue operations along the U.SMexico border.	C.	DHS/Customs and Border Protection
<u>E.</u>	Offers engineering expertise in searches of collapsed buildings.	D.	National Aeronautics and Space Administration
В.	Provides support to Emergency Medical Technicians working in a Coast Guard search and rescue team.	E.	DOD/U.S. Army Corps of Engineers

8. Use the space below to make note of any questions you have about the material covered in this course.

Your Notes