U.S. Fire Administration/National Fire Academy

Field Operations Guide

ICS 420-1

June 2016

FEMA

TEN STANDARD FIRE ORDERS

FIRE BEHAVIOR

1. Keep informed on fire weather conditions and forecasts.
2. Know what your fire is doing at all times.
3. Base all actions on current and expected behavior of the fire.

FIRELINE SAFETY

4. Identify Escape Routes and Safety Zones and make them known.
5. Post Lookouts when there is possible danger.
6. Be alert. Keep calm. Think clearly. Act decisively.

ORGANIZATIONAL CONTROL

7. Maintain prompt communication with your forces, your supervisor, and adjoining forces.
8. Give clear instructions and ensure they are understood.
9. Maintain control of your forces at all times.

IF YOU CONSIDERED 1 THROUGH 9, THEN

10. Fight fire aggressively, having provided for safety first.

Common Denominators of Fire Behavior on Tragedy Fires

- Most incidents happen on the smaller fires or on isolated portions of larger fires.
- Most fires are innocent in appearance before the “flare-ups” or “blow-ups.” In some cases, tragedies occur in the mop-up stage.
- Flare-ups generally occur in deceptively light fuels.
- Fires run uphill surprisingly fast in chimneys, gullies, and on steep slopes.
- Some suppression tools, such as helicopters or air tankers, can adversely affect fire behavior. The blasts of air from low flying helicopters and air tankers have been known to cause flare-ups.

U.S. Fire Administration

Mission Statement

We provide National leadership to foster a solid foundation for our fire and emergency services stakeholders in prevention, preparedness, and response.

FEMA

ACKNOWLEDGEMENT

The National Fire Academy would like to thank FIRESCOPE for the use of the Field Operations Guide (ICS 420-1) as a template for this document.

STATEMENT OF INTENT

The content of the Field Operations Guide (FOG) is intended to provide guidance for the application of the Incident Command System (ICS) to any planned or unplanned event. Position descriptions, checklists, and diagrams are provided to facilitate that guidance. The information contained in this document is intended to enhance the user's experience, training, and knowledge in the application of the Incident Command System. All users must obtain proper ICS training at the level necessary to effectively utilize the System.

For more information regarding FIRESCOPE, visit www.firescope.org.

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CHAPTER 1

COMMON RESPONSIBILITIES

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COMMON RESPONSIBILITIES

The following is a checklist applicable to all ICS personnel:

a. Receive assignment from your agency, including:
    1. Job assignment, e.g., Strike Team designation, overhead position, etc.
    2. Resource order number and request number
    3. Reporting location
    4. Reporting time
    5. Travel instructions
    6. Any special communications instructions, e.g., travel frequency
b. Upon arrival at the incident, check in at designated Check-in location. Check-in may be found at:
    1. Incident Command Post
    2. Base or Camps
    3. Staging Areas
    4. Helibases
    5. If you are instructed to report directly to a line assignment, check in with the Division/Group Supervisor.
c. Receive briefing from immediate supervisor.
d. Acquire work materials.
e. Conduct all tasks in a manner that ensures safety and welfare of you and your co-workers utilizing accepted risk analysis methods.
f. Organize and brief subordinates.
g. Know the assigned frequency (ies) for your area of responsibility and ensure that communication equipment is operating properly.
h. Use clear text and ICS terminology (no codes) in all radio communications. All radio communications to the Incident Communications Center will be addressed:

"(Incident Name) Communications," e.g., "Webb Communications".

i. Complete forms and reports required of the assigned position and send through supervisor to Documentation Unit.
j. Respond to demobilization orders and brief subordinates regarding demobilization.

UNIT LEADER RESPONSIBILITIES

A number of the Unit Leader responsibilities are common to all units in all parts of the organization. Common responsibilities of Unit Leaders are listed below. These will not be repeated in Unit Leader Position Checklists in subsequent chapters:

a. Participate in incident planning meetings as required.
b. Determine current status of unit activities.
c. Confirm dispatch and estimated time of arrival of staff and supplies.
d. Assign specific duties to staff and supervise staff.
e. Develop and implement accountability, safety, security, and risk management measures for personnel and resources.
f. Supervise demobilization of unit, including storage of supplies.
g. Provide Supply Unit Leader with a list of supplies to be replenished.
h. Maintain unit records, including Unit/Activity Log (ICS Form 214).

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MULTI-AGENCY COORDINATION SYSTEM (MACS)

A Multi-Agency Coordination System (MACS) is a combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordination of assisting agency resources and support to agency emergency operations.

MACS FUNCTIONS

a. Evaluate new incidents.
b. Prioritize incidents:
    - Life threatening situation
    - Real property threatened
    - High damage potential
    - Incident complexity
c. Ensure agency resource situation status is current.
d. Determine specific incident and agency resource requirements.
e. Determine agency resource availability for out-of-jurisdiction assignment at this time.
f. Determine need and designate regional mobilization centers.
g. Allocate resources to incidents based on priorities.
h. Anticipate future agency/regional resource needs.
i. Communicate MACS “decisions” back to agencies/incidents.
j. Review policies/agreements for regional resource allocations.
k. Review need for other agencies involvement in MACS.
l. Provide necessary liaison with other coordinating facilities and agencies as appropriate.

POSITION CHECKLIST

MAC GROUP COORDINATOR - The MAC Group Coordinator (MCCO) serves as a facilitator in organizing and accomplishing the mission, goals and direction of the MAC Group. The Coordinator will:

a. Facilitate the MAC Group decision process by obtaining, developing and displaying situation information.
b. Activate and supervise necessary unit and support positions within the MAC Group.
c. Acquire and manage facilities and equipment necessary to carry out the MAC Group functions.
d. Implement the decisions made by the MAC Group.

MAC GROUP AGENCY REPRESENTATIVES - The MAC Group is made up of top management personnel from responsible agencies/jurisdictions, those organizations heavily supporting the effort or those that are significantly impacted by use of local resources. MACS Agency Representatives involved in a MAC Group must be fully authorized to represent their agency. Their functions can include the following:

a. Ensure that current situation and resource status is provided by their agency.
b. Prioritize incidents by an agreed upon set of criteria.
c. Determine specific resource requirements by agency.
d. Determine resource availability for out-of-jurisdiction assignments and the need to provide resources in Mobilization Centers.
e. As needed, designate area or regional mobilization and demobilization centers within their jurisdictions.
f. Collectively allocate scarce, limited resources to incidents based on priorities.
g. Anticipate and identify future resource needs.
h. Review and coordinate policies, procedures and agreements as necessary.

i. Consider legal/fiscal implications.
j. Review need for participation by other agencies.
k. Provide liaison with other coordinating facilities and agencies as appropriate.
l. Critique and recommend improvements to MACS and MAC Group operations.
m. Provide personnel cadre and transition to emergency or disaster recovery as necessary.

SITUATION ASSESSMENT UNIT - The Situation Assessment Unit (this is also referred to in some agencies and EOC's as the Intelligence Unit) in a Multi-Agency Coordination Center is responsible for the collection and organization of incident status and situation information. They evaluate, analyze and display information for use by the MAC Group. Functions include the following:

a. Maintain incident situation status including locations, kinds and sizes of incidents, potential for damage, control problems, and any other significant information regarding each incident.
b. Maintain information on environmental issues, status of cultural and historic resources, and condition of sensitive populations and areas.
c. Maintain information on meteorological conditions and forecast conditions that may have an effect on incident operations.
d. Request/obtain resource status information from the Resources Unit or agency dispatch sources.
e. Combine, summarize and display data for all incidents according to established criteria.
f. Collect information on accidents, injuries, deaths and any other significant occurrences.
g. Develop projections of future incident activity.

RESOURCES UNIT - The Resources Unit, if activated in a Multi-Agency Coordination Center, maintains summary information by agency on critical equipment and personnel committed and available within the MACS area of responsibility. Status is kept on the overall numbers of critical resources rather than on individual units:

a. Maintain current information on the numbers of personnel and major items of equipment committed and/ or available for assignment.
b. Identify both essential and excess resources.
c. Provide resource summary information to the Situation Assessment Unit as requested.

INFORMATION UNIT - The Information Unit is designed to provide information regarding the MACS function. The unit will operate an information center to serve the print and broadcast media and other governmental agencies. It may provide summary information from agency/ incident information officers and identify local agency sources for additional information to the media and other government agencies. Functions include:

a. Prepare and release summary information to the news media and participating agencies.
b. Assist news media visiting the MACS facility and provide information on its function. Promote inter-agency involvement.
c. Assist in scheduling press conferences and media briefings.
d. Assist in preparing information, materials, etc., when requested by the MAC Group Coordinator.
e. Coordinate with Joint Information Center (JIC) if established.
f. Coordinate all matters related to public affairs (VIP tours, etc.).
g. Act as escort for facilitated agency tours of incident areas, as appropriate.

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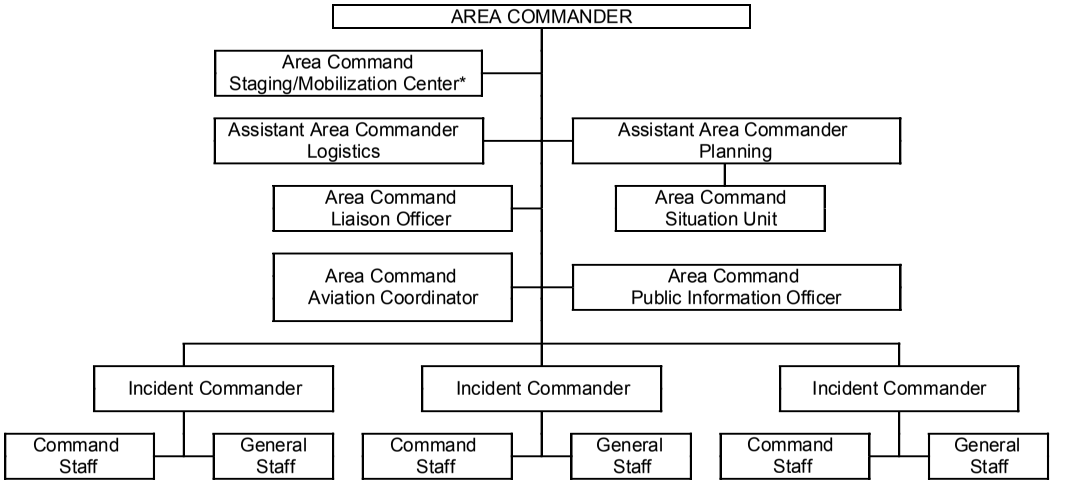
AREA COMMAND

Area Command is an expansion of the incident command function primarily designed to manage a complex or large incident/event or an area that has multiple incident management organizations assigned. An Area Command may be established at any time that incidents are close enough that oversight is required among incident management organizations to ensure conflicts do not arise.

The function of Area Command is to develop broad objectives for the impacted area and coordinate the development of individual incident objectives and strategies. Additionally, the Area Command will set priorities for the use of critical resources allocated to the incidents assigned.

The organization is normally small with personnel assigned to Command, Planning and Logistics functions. Depending on the complexity of the interface between the incidents, specialists in other areas such as aviation, hazardous materials, environment, and finance may also be assigned to Area Command.

AREA COMMAND ORGANIZATION FOR THREE INCIDENT MANAGEMENT TEAMS



*An Area Commander may have the need to pre-position resources prior to allocating them to individual incidents. This can be an Area Command Staging when it is desirable to have the resources ready for deployment within three minutes or a Mobilization Center when resources are being held prior to assignment, reassignment or demobilization.

POSITION CHECKLISTS

AREA COMMANDER (Single or Unified Area Command) – The Area Commander (ACDR) is responsible for the overall direction of incident management teams assigned to the same incident or to incidents in close proximity. This responsibility includes ensuring that conflicts are resolved, compatible incident objectives are established and strategies are selected for the use of critical resources.

Area Command also has the responsibility to coordinate with local, state, federal and volunteer organizations and agencies that are operating within the Area:

a. Obtain briefing from the agency executive(s) on agency expectations, concerns and constraints.
b. Obtain and carry out Delegation of Authority from the agency executive for overall management and direction of the incidents within the designated Area Command.
c. If operating as a Unified Area Command, develop working agreement for how Area Commanders will function together.
d. Delegate authority to Incident Commanders based on agency expectations, concerns and constraints.
e. Establish an Area Command schedule and timeline.
f. Resolve conflicts between incident “realities” and agency executive “wants.”
g. Establish appropriate location for the Area Command facilities.
h. Determine and implement an appropriate Area Command organization.
i. Determine need for an Area Command Staging/ Mobilization Center.
j. Determine need for Technical Specialists to support Area Command.

k. Obtain incident briefing and Incident Action Plans from Incident Commanders.
l. Assess incident situations prior to strategy meetings.
m. Conduct a joint meeting with all Incident Commanders.
n. Review objectives and strategies for each incident.
o. Periodically review critical resource needs.
p. Maintain a close coordination with the agency executive.
q. Establish priorities for use of critical resources.
r. Review procedures for interaction within the Area Command.
s. Approve Incident Commander requests for and release of critical resources.
t. Coordinate and approve Demobilization Plans.
u. Maintain log of major actions/decisions.

ASSISTANT AREA COMMANDER, PLANNING - The Assistant Area Commander, Planning (ACPC) is responsible for collecting information from incident management teams in order to assess and evaluate potential conflicts in establishing incident objectives, strategies and the priority use of critical resources:

a. Obtain briefing from Area Commander.
b. Assemble information on individual incident objectives and begin to identify potential conflicts and/or ways for incidents to develop compatible operations.
c. Recommend the priorities for allocation of critical resources to incidents.
d. Maintain status on critical resource totals (not detailed status).
e. Ensure that advance planning beyond the next operational period is being accomplished.
f. Prepare and distribute Area Commander's decisions or orders.

g. Prepare recommendations for the reassignment of critical resources as they become available.
h. Ensure Demobilization Plans are coordinated between incident management teams and agency dispatchers.
i. Schedule strategy meeting with Incident Commanders to conform to their planning processes.
j. Prepare Area Command briefings as requested or needed.
k. Maintain log of major actions/decisions.

ASSISTANT AREA COMMANDER, LOGISTICS - The Assistant Area Commander, Logistics (ACLC) is responsible for providing facilities, services and material at the Area Command level, and for ensuring effective use of critical resources and supplies among the incident management teams:

a. Obtain briefing from the Area Commander.
b. Provide facilities, services and materials for the Area Command organization.
c. In the absence of the Area Command Aviation Coordinator, ensure coordinated airspace temporary flight restrictions are in place and understood.
d. Ensure coordinated communication links and frequencies are in place.
e. Assist in the preparation of Area Command decisions.
f. Ensure the continued effective and priority use of critical resources among the incident management teams.
g. Maintain log of major actions/decisions.

AREA COMMAND AVIATION COORDINATOR – The Area Command Aviation Coordinator (ACAC) is a Technical Specialist responsible for ensuring effective use of critical aviation resources among multiple management teams:

a. Obtains briefing from Area Commander.
b. Coordinates with local unit(s) aviation managers, dispatch centers, and aviation facility managers.
c. Monitors incident(s) aviation cost, efficiency, and safety. Ensures agency rules, regulations, and safety procedures are followed.
d. Provide to incidents local initial attack forces and other interested parties with an area aviation plan that outlines Area Command aviation procedures and specifics of the area aviation operation.
e. Allocates air and ground based aviation resources according to Area Command priorities and objectives.
f. Ensures inter-incident movement of aircraft is planned and coordinated.
g. Coordinates with local and adjacent initial attack aircraft bases and local dispatch to ensure that procedures for transiting incident area and corridors are in place. Ensures flight following procedures, entry/exit routes and corridors, hazards, frequencies and incident air space are known to all affected.
h. Coordinates with Incident Air Operations Branch Directors, dispatch, FAA, DOD, and local aviation authorities and administrators to ensure that Temporary Flight Restrictions are in place, coordinated, and do not overlap. Ensures that potential risks of operating on, near, or within Military Training Routes and Special-Use Airspace have been mitigated.
i. Ensures that a process is in place for timely transmittal of incident reports and oversees the process to ensure corrective action is taken.
j. Coordinates with incident, dispatch, and coordination centers to determine availability and status of committed and uncommitted of aviation resources, gives status reports and situation appraisals for aviation resources.

k. Coordinate with Incident Air Operations Branch Directors, Communications Unit Leaders, frequency coordinators, coordination centers and initial attack dispatch to establish coordinated aviation communications plans to ensure aviation frequency management.
l. Coordinates and manages aviation program and operations if aviation assets are assigned to Area Command.
m. Coordinates the scheduling and movement of aviation safety assistance teams among incidents.
n. Assists incidents by coordinating with Contracting Officers, local aviation managers, and vendors concerning a variety of issues (fueling, contract modifications, contract extensions, etc.).
o. Coordinates with military officials and Agency Representatives concerning the assignments, utilization, status, and disposition of military aviation assets.
p. Maintain log of major actions/decisions.

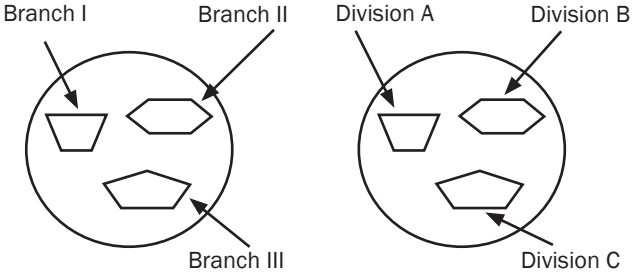
CHAPTER 4

COMPLEX

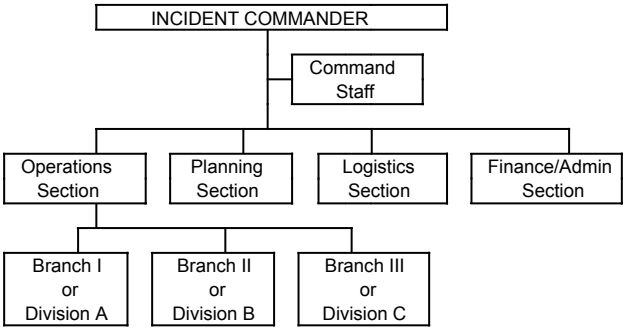
A complex is two or more individual incidents located in the same general proximity assigned to a single Incident Commander or Unified Command to facilitate management. These incidents are typically limited in scope and complexity and can be managed by a single entity.

The diagrams below illustrate a number of incidents in the same general proximity. These incidents may be identified as Branches or Divisions within the Operations Section.

Management responsibility for all of these incidents has been assigned to a single incident management team. A single incident may be complex, but it is not referred to as a "Complex." A complex may be in place with or without the use of Unified and/or Area Command.



A typical organization would be as follows:



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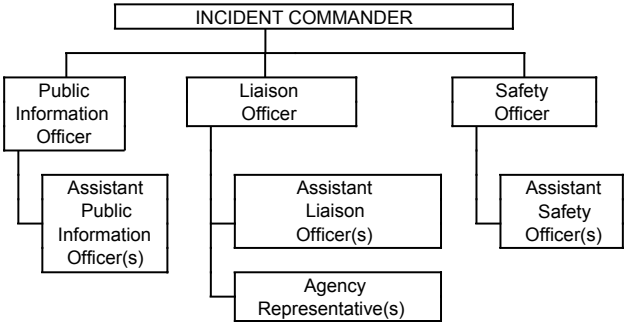
ORGANIZATION CHART



ESTABLISHMENT AND TRANSFER OF COMMAND

The highest-ranking official of the jurisdictional agency (ies) at the scene of the incident initially establishes Command. The Incident Commander is responsible for overall management of the incident. It is his/her responsibility to prepare the Incident Objectives that, in turn, will be the foundation upon which subsequent incident action planning will be based. Incident Objectives will be based on the requirements of the agency and the incident. They should be broad, measurable and follow an ordered sequence of events.

The Transfer of Command checklist below provides a basic guideline that can be used in almost any incident situation. This information may be captured on the Incident Briefing (ICS Form 201). However, agency policies and incident specific issues may require alterations to the Transfer of Command process.

When it is determined that a Transfer of Command (face-to-face) briefing needs to take place, the minimum essential information should include the following:

a. Situation Status
b. Objectives and Priorities
c. Current Organization
d. Resource Assignments
e. Resources En Route and/or Ordered
f. Facilities Established
g. Communications Plan
h. Prognosis, Concerns – Related Issues

As incidents grow in size or complexity, most agencies will transfer command one or more times. Whenever the Transfer of Command briefing takes place, the information conveyed should be recorded and displayed for easy retrieval and subsequent briefings.

POSITION CHECKLISTS

INCIDENT COMMANDER - The Incident Commander (ICT1. ICT2. ICT3. ICT4 or ICT5) is responsible for the overall management of the incident. On most incidents, a single Incident Commander carries out the command activity. However, Unified Command may be appropriate. The Incident Commander is selected by qualifications and experience.

The Incident Commander may have a Deputy (DPIC), who may be from the same agency, or from an assisting agency. Deputies may also be used at Section and Branch levels of the ICS organization. Deputies must have the same qualifications as the person for whom they work for, as they must be ready to take over that position at any time:

a. Review Common Responsibilities (Page 1-2).
b. Assess the situation and/or obtain a briefing from the prior Incident Commander.
c. Determine Incident Objectives and strategy.
d. Establish the immediate priorities.
e. Establish an Incident Command Post.
f. Consider the need for Unified Command.
g. Establish an appropriate organization.
h. Ensure planning meetings are scheduled as required.
i. Approve and authorize the implementation of an Incident Action Plan (IAP).
j. Ensure that adequate safety and personnel accountability measures are in place.
k. Coordinate activity for all Command and General Staff.
l. Coordinate with key people and officials.
m. Approve requests for additional resources or for the release of resources.
n. Keep Agency Administrator informed of incident status.
o. Approve the use of trainees, volunteers, and auxiliary personnel.
p. Authorize release of information to the news media.
q. Ensure Incident Status Summary (ICS Form 209) is completed and forwarded to appropriate higher authority.
r. Order the demobilization of the incident when appropriate.
s. Maintain Unit/Activity Log (ICS Form 214).

Delegation of Authority: A statement provided to the Incident Commander by the Agency Administrator delegating authority and assigning responsibility. The Delegation of Authority can include objectives, priorities, expectations, constraints, and other considerations or guidelines as needed. Many agencies require written Delegation of Authority to be given to Incident Commanders prior to their assuming command on larger incidents.

PUBLIC INFORMATION OFFICER - The Public Information Officer (PIO1, PIO2 or PIOF) is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations.

Only one Public Information Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The Public Information Officer may have Assistant Public Information Officers as necessary, and the Assistant Public Information Officers may also represent assisting agencies or jurisdictions.

Agencies have different policies and procedures relative to the handling of public information. The following are the major responsibilities of the Public Information Officer that would generally apply on any incident:

a. Review Common Responsibilities (Page 1-2).
b. Determine from the Incident Commander if there are any limits on information release.
c. Develop material for use in media briefings.
d. Obtain Incident Commander's approval of media releases.
e. Coordinate with Joint Information Center (JIC) if established.
f. Inform media and conduct media briefings.
g. Arrange for tours and other interviews or briefings that may be required.
h. Obtain media information that may be useful to incident planning.
i. Maintain current information summaries and/or displays on the incident and provide information on status of incident to assigned personnel.
j. Assign Assistant Public Information Officers as appropriate.
k. Maintain Unit/Activity Log (ICS Form 214).

LIAISON OFFICER - Incidents that are multi-jurisdictional, or have several agencies involved, may require the establishment of the Liaison Officer (LOFR) position on the Command Staff.

Only one Liaison Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The Liaison Officer may have Assistant Liaison Officers as necessary, and the Assistant Liaison Officers may also represent assisting agencies or jurisdictions. The Liaison Officer is the point of contact for the Agency Representatives assigned to the incident by assisting or cooperating agencies.

a. Review Common Responsibilities (Page 1-2).
b. Be a contact point for Agency Representatives.
c. Maintain a list of assisting and cooperating agencies and Agency Representatives.
d. Assist in establishing and coordinating interagency contacts.
e. Keep agencies supporting the incident aware of incident status.
f. Monitor incident operations to identify current or potential inter-organizational problems.
g. Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
h. Assign Assistant Liaison Officer(s) as appropriate.
i. Maintain Unit/Activity Log (ICS Form 214).

AGENCY REPRESENTATIVES - In many multi-jurisdiction incidents, an agency or jurisdiction will send a representative to assist in coordination efforts.

An Agency Representative (AREP) is an individual assigned to an incident from an assisting or cooperating agency who has

been delegated authority to make decisions on matters affecting that agency's participation at the incident.

Agency Representatives report to the Liaison Officer or to the Incident Commander in the absence of a Liaison Officer:

a. Review Common Responsibilities (Page 1-2).
b. Ensure that all agency resources are properly checked in at the incident.
c. Obtain briefing from the Liaison Officer or Incident Commander.
d. Inform assisting or cooperating agency personnel on the incident that the Agency Representative position for that agency has been filled.
e. Attend briefings and planning meetings as required.
f. Provide input on the use of agency resources unless resource technical specialists are assigned from the agency.
g. Cooperate fully with the Incident Commander and the General Staff on agency involvement at the incident.
h. Ensure the well being of agency personnel assigned to the incident.
i. Advise the Liaison Officer of any special agency needs or requirements.
j. Report to home agency dispatch or headquarters on a prearranged schedule.
k. Ensure that all agency personnel and equipment are properly accounted for and released prior to departure.
l. Ensure that all required agency forms, reports and documents are complete prior to departure.
m. Have a debriefing session with the Liaison Officer or Incident Commander prior to departure.
n. Maintain Unit/Activity Log (ICS Form 214).

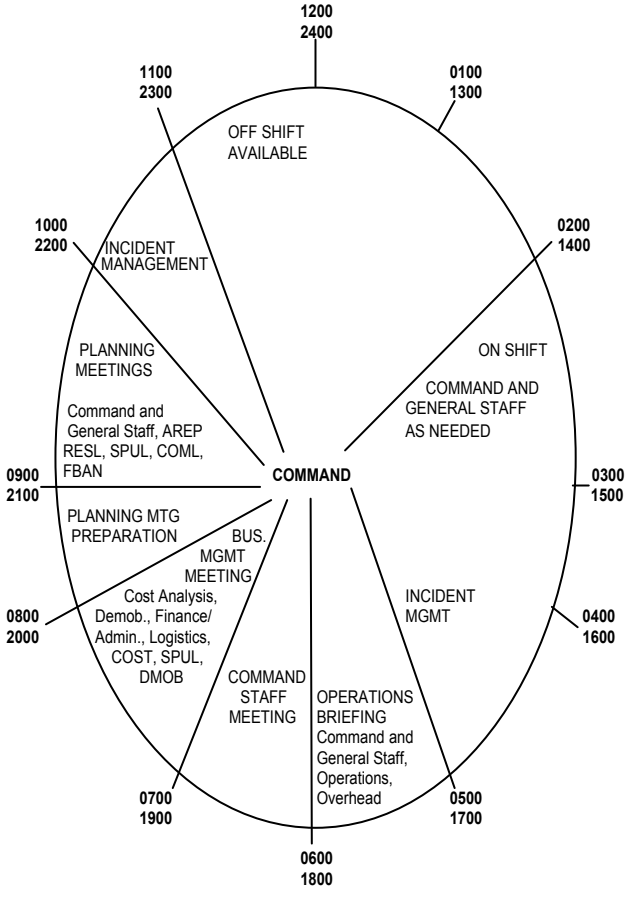
SAFETY OFFICER - The Safety Officer (SOF1, SOF2 or SOFR) function is to develop and recommend measures for assuring personnel safety, and to assess and/or anticipate hazardous and unsafe situations. Having full authority of the Incident Commander, the Safety Officer can exercise emergency authority to stop or prevent unsafe acts.

Only one Safety Officer will be assigned for each incident. The Safety Officer may have Assistant Safety Officers as necessary, and the Assistant Safety Officers may also come from assisting agencies or jurisdictions as appropriate. Assistant Safety Officers may have specific responsibilities such as air operations, urban search and rescue, hazardous materials, or for specific geographic or functional areas of the incident:

a. Review Common Responsibilities (Page 1-2).
b. Participate in planning meetings, and advocate effective risk management.
c. Identify hazardous situations associated with the incident.
d. Review the Incident Action Plan for safety implications.
e. Exercise emergency authority to stop or prevent unsafe acts and communicate such exercise of authority to the Incident Command.
f. Investigate accidents that have occurred within the incident area.
g. Assign Assistant Safety Officers as needed.
h. Conduct and prepare an Incident Safety Analysis (ICS Form 215-AG/AW) as appropriate.
i. Initiate appropriate mitigation measures, i.e., Personnel Accountability, Fireline EMT's, Rapid Intervention Crew/ Company, etc.
j. Develop and communicate an incident safety message as appropriate.
k. Review and approve the Medical Plan (ICS Form 206).

l. Review and approve the Site Safety and Control Plan (ICS Form 208) as required.
m. Maintain Unit/Activity Log (ICS Form 214).

COMMAND AND GENERAL STAFF PLANNING CYCLE GUIDE



Example Based on 12-Hour Operational Period

CHAPTER 6

UNIFIED COMMAND

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UNIFIED COMMAND

Experience has proven that at incidents involving multi-agencies, there is a critical need for integrating management of resources into one operational organization that is managed and supported by one command structure. This is best established through an integrated, multi-disciplined organization. In the ICS, employing what is known as Unified Command fills this critical need.

Unified Command is a team effort that allows all agencies with jurisdictional responsibility for an incident, either geographical or functional, to participate in the management of the incident. Developing and implementing a common set of incident objectives and strategies demonstrate this participation that all can subscribe to, without losing or abdicating agency authority, responsibility or accountability. Those organizations that participate in Unified Command should have statutory responsibility for some portion of the incident or event. Assisting and cooperating agencies with no statutory responsibility that nonetheless contribute resources to the incident should not function at the Unified Command level. These agencies should instead, assign Agency Representative to effectively represent their agencies and resources through the Liaison Officer. In these ways, the principles that define Unified Command provide all of the necessary mechanisms for organizational representation and interagency management within a multi-agency incident response.

At a local level, frequent training and realistic exercises involving those agencies that may be represented at actual incidents should be considered a prerequisite for successful management of multi-agency incidents. These activities serve to familiarize each participating agency of their respective

roles and responsibilities and clarify the capabilities and limitations of each agency. For example, a planned event such as a parade or air show may provide an opportunity for local, state and federal agencies to operate in a Unified Command structure.

A successfully managed multi-agency incident will occur only when the participating agencies' personnel have confidence in each other's competencies, authorities, responsibilities, and limitations as they relate to the incident. Beyond the associated processes, guidelines, and exercises, is the requirement for an attitude of cooperation. Coordinated strategy, tactics, and resource utilization to accomplish incident control must be the focus of all agencies at the scene.

Within a Unified Command, one person is selected as spokesperson for the groups. Typically, the person representing the agency with the highest resource commitment or most visible activity on the incident is selected. In some cases, this task may simply be assigned to the person with the most experience.

Unified Command incorporates the following principles:

a. One set of objectives is developed for the entire incident.
b. A collective approach to developing strategies to achieve incident goals.
c. Improved information flow and coordination between all jurisdictions and agencies involved in the incident.
d. All agencies with responsibility for the incident have an understanding of one another's priorities and restrictions.
e. No agency's authority or legal requirements will be compromised or neglected.
f. Each agency is fully aware of the plans, actions and constraints of all others.

g. The combined efforts of all agencies are optimized as they perform their respective assignments under a single Incident Action Plan.
h. Duplicative efforts are reduced or eliminated, thus reducing cost and chances for frustration and conflict.

INITIAL UNIFIED COMMAND MEETING CHECKLIST

It is essential to begin unified planning as early as possible. Initiate Unified Command as soon as two or more agencies having jurisdictional or functional responsibilities come together on an incident. It is especially important on those incidents where there may be competing priorities based on agency responsibilities.

All of the jurisdictional agencies' Incident Commanders need to get together before the first operational period planning meeting in an Initial Unified Command Meeting. This meeting provides the responsible agency officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The agenda for the command meeting should include the following:

a. State jurisdictional/agency priorities and objectives.
b. Present jurisdictional limitations, concerns, and restrictions.
c. Develop a collective set of incident objectives.
d. Establish and agree on acceptable priorities.
e. Adopt an overall strategy or strategies to accomplish objectives.
f. Agree on the basic organization structure.
g. Designate the most qualified and acceptable Operations Section Chief.
h. The Operations Section Chief will normally be from the jurisdiction or agency that has the greatest involvement in the incident, although that is not essential.

i. Agree on General Staff personnel designations and planning, logistical, and finance agreements and procedures.
j. Agree on the resource ordering process to be followed.
k. Agree on cost-sharing procedures.
l. Agree on informational matters.
m. Designate one agency official to act as the Unified Command spokesperson.

The members of the Unified Command must be authorized to perform certain activities and actions on behalf of the jurisdiction or agency they represent. Such activities include, ordering of additional resources in support of the Incident Action Plan, possible loaning or sharing of resources to other jurisdictions, and agree to financial cost-sharing arrangements with participating agencies.

UNIFIED COMMAND MEETING REQUIREMENTS

Unified Incident Commanders should meet prior to the Incident Planning Meeting to discuss a number of key items. This meeting will serve to clarify issues and provide direction to other incident personnel who will develop the formal Incident Action Plan.

The following checklist provides a series of items to be addressed during the meeting between Incident Commanders where the development of incident strategy and objectives is done:

a. The Command Meeting should include only agency Incident Commanders.
b. The meeting should be brief, and important points should be documented. The important points should include agency capabilities and limitations, functional and

jurisdictional responsibilities and the individual agency's objectives.

c. Prior to the meeting, the respective responsible officials should have reviewed the purposes and agenda items described above, and are prepared to discuss them.

The end result of the planning process will be a single Incident Action Plan that addresses multi-jurisdiction or multi-agency priorities and objectives, and provides an appropriate level of tactical direction and resource assignments for the unified effort.

CHAPTER 7

PLANNING PROCESS

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PLANNING PROCESS

The checklist below provides basic steps appropriate for use in almost any incident situation. However, not all incidents require written plans and the need for written plans and attachments may be based on incident requirements and the decision of the Incident Commander.

The Planning Checklist is to be used with the Operational Planning Worksheet (ICS Form 215-G/W). For more detailed instructions, see Planning Section Chief Position Manual (ICS 221-1). The Operations Section Chief should have a draft Operational Planning Worksheet (ICS Form 215-G/W) and the Safety Officer should have a draft Incident Safety Analysis (ICS Form 215-AG/AW) completed prior to the planning meeting.

Incident objectives and strategy should be established before the planning meeting. For this purpose it may be necessary to hold a strategy meeting prior to the planning meeting.

The Planning Process works best when the incident is divided into logical geographical and/or functional units. The tactics and resources are then determined for each of the planning units and then the planning units are combined into divisions/groups utilizing span-of-control guidelines.

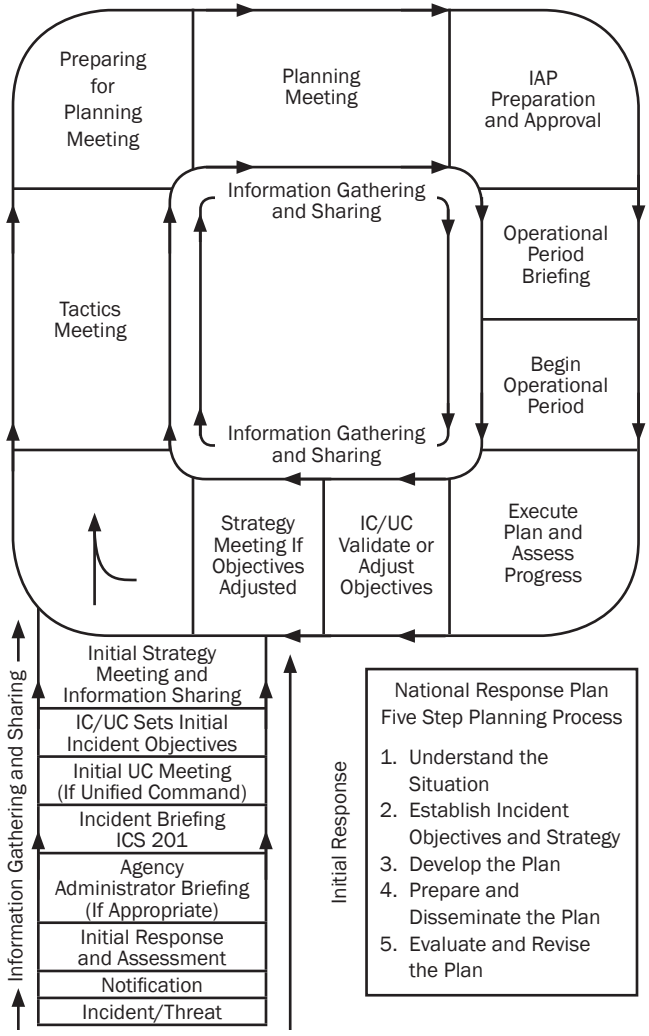
The Operational Planning Worksheet (ICS Form 215-GW) and the Incident Safety Analysis (ICS Form 215-AG/AW) are used to support the incident's planning process. They provide the Incident Commander, Command and General Staff with the means to identify Division or Group assignments, develop specific tactics, identify available and needed resources, and address safety considerations. During this process, safety

issues identified must be mitigated or new tactics developed which adequately address safety concerns.

CHECKLIST	PRIMARY RESPONSIBILITY
1. Briefing on situation and resource status	PSC
2. Set/review incident objectives	IC
3. Plot control lines, establish Branch/Division boundaries, identify Group assignments	OSC
4. Specify tactics for each Division/Group	OSC
5. Specify safety mitigation measures for identified hazards in Divisions/Groups	SOF
6. Specify resources needed by Division/Group	OSC, PSC
7. Specify Operations facilities and reporting locations – Plot on map	OSC, PSC, LSC
8. Develop resource and personnel order	LSC
9. Consider Communications, Medical, and Traffic Plan requirements	PSC, LSC
10. Finalize, approve and implement Incident Action Plan	PSC, IC, OSC

IC = Incident Commander
PSC = Planning Section Chief
OSC = Operations Section Chief
LSC = Logistics Section Chief
SOF = Safety Officer

The Operational Planning "P"



CHAPTER 8

OPERATIONS SECTION

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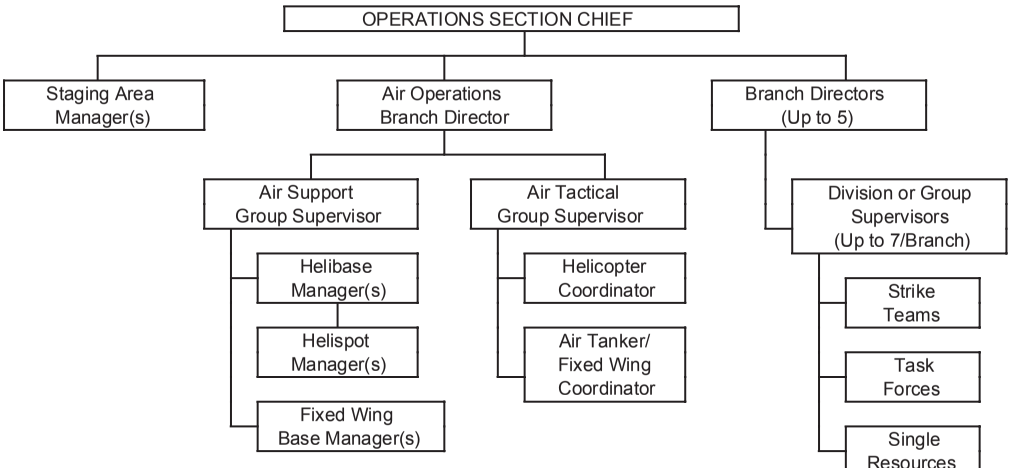
ORGANIZATION CHART



POSITION CHECKLISTS

OPERATIONS SECTION CHIEF - The Operations Section Chief (OSC1 or OSC2), a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission ensuring the overall safety and welfare of all Section personnel. The Operations Section Chief activates and supervises organization elements in accordance with the Incident Action Plan and directs its execution. The Operations Section Chief also directs the preparation of unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary, and reports such to the Incident Commander. The Deputy Operations Section Chief may be assigned for specific tasks, i.e., planning operations, day/night operations, evacuation or contingency planning, etc.:

a. Review Common Responsibilities (Page 1-2).
b. Develop the operations portion of the Incident Action Plan and complete the appropriate Operational Planning Worksheet (ICS Form 215 G/W) as appropriate.
c. Brief and assign Operations Section personnel in accordance with Incident Action Plan.
d. Supervise Operations Section ensuring safety and welfare of all personnel.
e. Determine need and request additional resources.
f. Review suggested list of resources to be released and initiate recommendation for release of resources.
g. Assemble and disassemble Strike Teams and Task Forces assigned to Operations Section.
h. Report information about special activities, events, and occurrences to Incident Commander.
i. Maintain Unit/Activity Log (ICS Form 214).

OPERATIONS BRANCH DIRECTOR – The Operations Branch Directors (OPBD) are under the direction of the Operations Section Chief, and are responsible for the implementation of the portion of the Incident Action Plan appropriate to the geographical and functional Branches:

a. Review Common Responsibilities (Page 1-2).
b. Develop with subordinates, alternatives for Branch control operations.
c. Attend planning meetings at the request of the Operations Section Chief.
d. Review Division/Group Assignment Lists (ICS Form 204) for Divisions or Groups within Branch. Modify lists based on effectiveness of current operations.
e. Assign specific work tasks to Division and Group Supervisors.
f. Supervise Branch operations.
g. Resolve any issues or logistical problems reported by subordinates.
h. Report to the Operations Section Chief when the Incident Action Plan needs to be modified, or additional resources are needed, or surplus resources are available, or when hazardous situations or significant events occur.
i. Approve accident and medical reports (home agency forms) originating within the Branch.
j. Maintain Unit/Activity Log (ICS Form 214).

DIVISION OR GROUP SUPERVISOR – Division or Group Supervisors (DIVS) report to the Operations Section Chief (or Operations Branch Director when activated). The Supervisor is responsible for the implementation of the assigned portion of the Incident Action Plan. They are also responsible for the assignment of resources within the Division or Group, reporting on the progress of control operations, and the status of resources within the Division or Group. Division Supervisors

are assigned to a specific geographical area of an incident. Group Supervisors are assigned to accomplish specific functions within the incident (i.e. Hazardous Material, Medical):

a. Review Common Responsibilities (Page 1-2).
b. Implement Incident Action Plan for Division or Group.
c. Provide Incident Action Plan to Strike Team Leaders, when available.
d. Identify increments assigned to the Division or Group.
e. Review assignments and incident activities with subordinates and assign tasks.
f. Ensure that Incident Communications and/or Resources Unit are advised of all changes in status of resources assigned to the Division or Group.
g. Coordinate activities with adjacent Divisions or Groups.
h. Determine need for assistance on assigned tasks.
i. Submit situation and resources status information to Operations Branch Directors or Operations Section Chief.
j. Report hazardous situations, special occurrences, or significant events (e.g., accidents, sickness) to immediate supervisor.
k. Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner.
l. Resolve logistics problems within the Division or Group.
m. Participate in the development of tactical plans for next operational period.
n. Maintain Unit/Activity Log (ICS Form 214).

STRIKE TEAM or TASK FORCE LEADER – The Strike Team Leader or Task Force Leader reports to a Division Supervisor or Group Supervisor and is responsible for performing tactical assignments assigned to the Strike Team or Task Force. The Leader reports work progress and status of resources, maintains work records on assigned personnel, and relays other important information to their supervisor:

a. Review Common Responsibilities (Page 1-2).
b. Review assignments with subordinates and assign tasks.
c. Monitor work progress and make changes when necessary.
d. Coordinate activities with adjacent strike teams, task forces and single resources.
e. Travel to and from active assignment area with assigned resources.
f. Retain control of assigned resources while in available or out-of-service status.
g. Submit situation and resource status information to Division/Group Supervisor.
h. Maintain Unit/Activity Log (ICS Form 214).

STRUCTURE PROTECTION SPECIALIST – The Structure Protection Specialist (STPS) is a technical advisor to the Operations Section Chief or the Planning Section Chief. The recommendations of the STPS will be based on the incident objectives outlined in the IAP and identify the major components required to complete a Structural Protection Plan for threatened structures due to wildfire. The STPS will organize and implement this plan utilizing the recommended resources:

a. Review Common Responsibilities (Page 1-2).
b. Obtain reporting criteria and briefing from Operations Section Chief or Planning Section Chief.
c. Identify structure threat based on expected fire behavior.
d. Identify needed components to prepare Structure Protection Plan.
e. Develop safety plans related to structure protection.
f. Identify resource needs to carry out the plan.
g. Coordinate with local law enforcement agencies to carry out evacuation plan.
h. Brief all resources assigned to Branch, Division or Groups.
i. Ensure personnel safety.
j. Maintain Unit/Activity Log (ICS Form 214).

SINGLE RESOURCE - The person in charge of a single tactical resource will carry the unit designation of the resource:

a. Review Common Responsibilities (Page 1-2).
b. Review assignments.
c. Obtain necessary equipment/supplies.
d. Review weather/environmental conditions for assignment area.
e. Brief subordinates on safety measures.
f. Monitor work progress.
g. Ensure adequate communications with supervisor and subordinates.
h. Keep supervisor informed of progress and any changes.
i. Inform supervisor of problems with assigned resources.
j. Brief relief personnel, and advise them of any change in conditions.
k. Return equipment and supplies to appropriate unit.
l. Complete and turn in all time and use records on personnel and equipment.
m. Maintain Unit/Activity Log (ICS Form 214).

STAGING AREA MANAGER - The Staging Area Manager (STAM) is responsible for managing all activities within a Staging Area:

a. Review Common Responsibilities (Page 1-2).
b. Proceed to Staging Area.
c. Establish Staging Area layout.
d. Determine any support needs for equipment, feeding, sanitation and security.
e. Establish check-in function as appropriate.
f. Post areas for identification and traffic control.
g. Request maintenance service for equipment at Staging Area as appropriate.

h. Respond to request for resource assignments. (Note: This may be direct from Operations Section or via the Incident Communications Center).
i. Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
j. Determine required resource levels from the Operations Section Chief.
k. Advise the Operations Section Chief when reserve levels reach minimums.
l. Maintain and provide status to Resources Unit of all resources in Staging Area.
m. Maintain Staging Area in orderly condition.
n. Demobilize Staging Area in accordance with Incident Demobilization Plan.
o. Maintain Unit/Activity Log (ICS Form 214).

AIR OPERATIONS BRANCH DIRECTOR - The Air Operations Branch Director (AOBD), who is ground based, is primarily responsible for preparing the air operations portion of the Incident Action Plan. The plan will reflect agency restrictions that have an impact on the operational capability or utilization of resources (e.g., night flying, hours per pilot). After the plan is approved, AOBD is responsible for implementing its strategic objectives that relate to the overall incident strategy as opposed to those that pertain to tactical operations (specific target selection).

Additionally, the Air Operations Branch Director is responsible for providing logistical support to helicopters operating on the incident. The Air Tactical Group Supervisor (ATGS) working with ground and air resources normally performs specific tactical activities (such as target selection and suggested modifications to specific tactical actions in the Incident Action Plan):

a. Review Common Responsibilities (Page 1-2).
b. Organize preliminary air operations.
c. Request declaration (or cancellation) of restricted air space area, (FAA Regulation 91.137).
d. Participate in preparation of the Incident Action Plan through Operations Section Chief. Ensure that the Air Operations portion of the Incident Action Plan takes into consideration the Air Traffic Control requirements of assigned aircraft.
e. Perform operational planning for air operations.
f. Prepare and provide Air Operations Summary (ICS Form 220) to the Air Support Group and Fixed-Wing Bases.
g. Determine coordination procedures for use by air organization with ground Branches, Divisions or Groups.
h. Coordinate with appropriate Operations Section personnel.
i. Supervise all Air Operations activities associated with the incident.
j. Evaluate Helibase locations.
k. Establish procedures for emergency reassignment of aircraft.
l. Schedule approved flights of non-incident aircraft in the restricted air space area.
m. Coordinate and schedule infrared aircraft flights.
n. Coordinate with Operations Coordination Center (OCC) through normal channels on incident air operations activities.
o. Inform the Air Tactical Group Supervisor of the air traffic situation external to the incident.
p. Consider requests for non-tactical use of incident aircraft.
q. Resolve conflicts concerning non-incident aircraft.
r. Coordinate with Federal Aviation Administration (FAA).
s. Update air operations plans.
t. Report to the Operations Section Chief on air operations activities.
u. Report special incidents/accidents.

v. Arrange for an accident investigation team when warranted.
w. Maintain Unit/Activity Log (ICS Form 214).

AIR TACTICAL GROUP SUPERVISOR - The Air Tactical Group Supervisor (ATGS) is primarily responsible for the coordination of aircraft operations when fixed and/or rotary-wing aircraft are operating on an incident. The ATGS performs these coordination activities while airborne. The ATGS reports to the Air Operations Branch Director:

a. Review Common Responsibilities (Page 1-2).
b. Determine what aircraft (air tankers and helicopters) are operating within area of assignment.
c. Manage air tactical activities based upon Incident Action Plan.
d. Establish and maintain communications and Air Traffic Control with pilots, Air Operations, Helicopter Coordinator, Air Tanker/Fixed Wing Coordinator, Air Support Group (usually Helibase Manager), and fixed wing support bases.
e. Coordinate approved flights of non-incident aircraft or non-tactical flights in restricted air space area.
f. Obtain information about air traffic external to the incident.
g. Receive reports of non-incident aircraft violating restricted air space area.
h. Make tactical recommendations to approved ground contact (Operations Section Chief, Operations Branch Director, or Division/Group Supervisor).
i. Inform Air Operations Branch Director of tactical recommendations affecting the air operations portion of the Incident Action Plan.
j. Report on Air Operations activities to the Air Operations Branch Director. Advise Air Operations immediately if aircraft mission assignments are causing conflicts in the Air Traffic Control System.
k. Report on incidents/accidents.
l. Maintain Unit/Activity Log (ICS Form 214).

HELICOPTER COORDINATOR - The Helicopter Coordinator (HLCO) is primarily responsible for coordinating tactical or logistical helicopter mission(s) at the incident. The HLCO can be airborne or on the ground operating from a high vantage point. The HLCO reports to the Air Tactical Group Supervisor. Activation of this position is contingent upon the complexity of the incident and the number of helicopters assigned. There may be more than one HLCO assigned to an incident:

a. Review Common Responsibilities (Page 1-2).
b. Determine what aircraft (air tankers and helicopters) are operating within incident area of assignment.
c. Survey incident area to determine situation, aircraft hazards and other potential problems.
d. Coordinate Air Traffic Control with pilots, Air Operations Branch Director, Air Tactical Group Supervisor, Air Tanker/Fixed Wing Coordinator and the Air Support Group (usually Helibase Manager) as the situation dictates.
e. Coordinate the use of assigned ground-to-air and air-to-air communications frequencies with the Air Tactical Group Supervisor, Communications Unit, or local agency dispatch center.
f. Ensure that all assigned helicopters know appropriate operating frequencies.
g. Coordinate geographical areas for helicopter operations with Air Tactical Group Supervisor and make assignments.
h. Determine and implement air safety requirements and procedures.
i. Ensure that approved night flying procedures are in operation.
j. Receive assignments, brief pilots, assign missions, and supervise helicopter activities.
k. Coordinate activities with Air Tactical Group Supervisor, Air Tanker/Fixed Wing Coordinator, Air Support Group and ground personnel.

l. Maintain continuous observation of assigned helicopter-operating area and inform Air Tactical Group Supervisor of incident conditions including any aircraft malfunction or maintenance difficulties, and anything that may affect the incident.
m. Inform Air Tactical Group Supervisor when mission is completed and reassign helicopter as directed.
n. Request assistance or equipment as required.
o. Report incidents or accidents to Air Operations Branch Director and Air Tactical Group Supervisor immediately.
p. Maintain Unit/Activity Log (ICS Form 214).

AIR TANKER/FIXED WING COORDINATOR - The Air Tanker/Fixed Wing Coordinator (ATCO) is primarily responsible for coordinating assigned air tanker operations at the incident. The Air Tanker/Fixed Wing Coordinator, who is always airborne, reports to the Air Tactical Group Supervisor. Activation of this position is contingent upon the need or upon complexity of the incident:

a. Review Common Responsibilities (Page 1-2).
b. Determine all aircraft including air tankers and helicopters operating within incident area of assignment.
c. Survey incident area to determine situation, aircraft hazards and other potential problems.
d. Coordinate the use of assigned ground-to-air and air-to-air communication frequencies with Air Tactical Group Supervisor, Communications Unit or local agency dispatch center and establish air tanker air-to-air radio frequencies.
e. Ensure air tankers know appropriate operating frequencies.
f. Determine incident air tanker capabilities and limitations for specific assignments.
g. Coordinate Air Traffic Control with pilots, Air Operations Branch Director, Air Tactical Group Supervisor, Helicopter Coordinator, and Air Support Group (usually Helibase Manager) as the situation dictates.

h. Determine and implement air safety requirement procedures.
i. Receive assignments, brief pilots, assign missions, and supervise fixed-wing activities.
j. Coordinate activities with Air Tactical Group Supervisor, Helicopter Coordinator and ground operations personnel.
k. Maintain continuous observation of air tanker operating areas.
l. Provide information to ground resources, if necessary.
m. Inform Air Tactical Group Supervisor of overall incident conditions including aircraft malfunction or maintenance difficulties.
n. Inform Air Tactical Group Supervisor when mission is completed and reassign air tankers as directed.
o. Request assistance or equipment as necessary.
p. Report incidents or accidents to Air Operations Branch Director and Air Tactical Group Supervisor immediately.
q. Maintain Unit/Activity Log (ICS Form 214).

AIR SUPPORT GROUP SUPERVISOR - The Air Support Group Supervisor (ASGS) is primarily responsible for supporting and managing Helibase and Helispot operations and maintaining liaison with fixed-wing air bases. This includes providing: 1) fuel and other supplies, 2) maintenance and repair of helicopters, 3) retardant mixing and loading, 4) keeping records of helicopter activity, and 5) providing enforcement of safety regulations. These major functions are performed at Helibases and Helispots. Helicopters during landing and take-off and while on the ground are under the control of the Air Support Group's Helibase Manager or Helispot Manager. The ASGS reports to the Air Operations Branch Director

a. Review Common Responsibilities (Page 1-2).
b. Obtain copy of the Incident Action Plan from the Air Operations Branch Director including Air Operations Summary (ICS Form 220).
c. Participate in Air Operations Branch Director planning activities.
d. Inform Air Operations Branch Director of group activities.
e. Identify resources/supplies dispatched for Air Support Group.
f. Request special air support items from appropriate sources through Logistics Section.
g. Identify Helibase and Helispot locations (from Incident Action Plan) or from Air Operations Branch Director.
h. Determine need for assignment of personnel and equipment at each Helibase and Helispot.
i. Coordinate special requests for air logistics.
j. Maintain coordination with airbases supporting the incident.
k. Coordinate activities with Air Operations Branch Director.
l. Obtain assigned ground-to-air frequency for Helibase operations from Communications Unit Leader or Incident Radio Communications Plan (ICS Form 205).
m. Inform Air Operations Branch Director of capability to provide night-flying service.
n. Ensure compliance with each agency's operations checklist for day and night operations.
o. Ensure dust abatement procedures are implemented at Helibase and Helispots.
p. Provide aircraft rescue firefighting service for Helibases and Helispots.
q. Ensure that Air Traffic Control procedures are established between Helibase and Helispots and the Air Tactical Group Supervisor, Helicopter Coordinator or Air Tanker/ Fixed Wing Coordinator.
r. Maintain Unit/Activity Log (ICS Form 214).

HELIBASE MANAGER - The Helibase Manager (HEB1 or HEB2) has primary responsibility for managing all activities at the assigned Helibase:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Incident Action Plan including Air Operations Summary (ICS Form 220).
c. Participate in Air Support Group planning activities.
d. Inform Air Support Supervisor of Helibase activities.
e. Report to assigned Helibase. Brief pilots and other assigned personnel.
f. Manage resources/supplies dispatched to Helibase.
g. Ensure Helibase is posted and cordoned.
h. Coordinate Helibase Air Traffic control with pilots, Air Support Group Supervisor, Air Tactical Group Supervisor, Helicopter Coordinator and the Takeoff and Landing Controller.
i. Manage retardant mixing and loading operations.
j. Ensure helicopter fueling, maintenance and repair services are provided.
k. Supervise manifesting and loading of personnel and cargo.
l. Ensure dust abatement techniques are provided and used at Helibases and Helispots.
m. Ensure security is provided at each Helibase and Helispot.
n. Ensure aircraft rescue firefighting services are provided for the Helibase.
o. Request special air support items from the Air Support Group Supervisor.
p. Receive and respond to special requests for air logistics.
q. Supervise personnel responsible to maintain agency records, reports of helicopter activities, and Check-In List (ICS Form 211).
r. Coordinate activities with Air Support Group Supervisor.

s. Display organization and work schedule at each Helibase, including Helispot organization and assigned radio frequencies.
t. Solicit pilot input concerning selection and adequacy of Helispots, communications, Air Traffic Control, operational difficulties, and safety problems.
u. Maintain Unit/Activity Log (ICS Form 214).

HELISPOT MANAGER – The Helispot Manager (HESM) is supervised by the Helibase Manager and is responsible for providing safe and efficient management of all activities at the assigned Helispot:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Incident Action Plan including Air Operations Summary (ICS Form 220).
c. Report to assigned Helispot.
d. Coordinate activities with Helibase Manager.
e. Inform Helibase Manager of Helispot activities.
f. Manage resources/supplies dispatched to Helispot.
g. Request special air support items from Helibase Manager.
h. Coordinate Air Traffic Control with pilots, Helibase Manager, Helicopter Coordinator, Air Tanker/Fixed Wing Coordinator and Air Tactical Group Supervisor when appropriate.
i. Ensure aircraft rescue firefighting services are available.
j. Ensure that dust control is adequate, debris cannot blow into rotor system, touchdown zone slope is not excessive and rotor clearance is sufficient.
k. Supervise or perform retardant loading at Helispot.
l. Perform manifesting and loading of personnel and cargo.
m. Coordinate with pilots for proper loading and unloading and safety problems.
n. Maintain agency records and reports of helicopter activities.
o. Maintain Unit/Activity Log (ICS Form 214).

MIXMASTER - The Mixmaster (MXMS) is responsible for providing water or fire retardant to helicopters at the rate specified and for the expected duration of job. The MXMS reports to the Helibase Manager:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Air Operations Summary (ICS Form 220).
c. Check accessory equipment, such as valves, hoses and storage tanks.
d. Take immediate steps to get any items and personnel to do the job.
e. Plan the specific layout to conduct operations.
f. Determine if water or retardant is to be used and which helicopters may have load restrictions.
g. Maintain communication with Helibase Manager.
h. Supervise the crew in setting up operations.
i. Supervise crew in loading water or retardant into helicopters.
j. Make sure supply of retardants is kept ahead of demand.
k. Attend to the safety and welfare of crew.
l. See that the base is cleaned up before leaving.
m. Keep necessary agency records.
n. Maintain Unit/Activity Log (ICS Form 214).

DECK COORDINATOR - The Deck Coordinator (DECK) is responsible for providing coordination of a Helibase landing area for personnel and cargo movement. The DECK reports to the Helibase Manager:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Air Operations Summary (ICS Form 220).
c. Establish emergency landing areas.
d. Ensure deck personnel understand aircraft rescue firefighting procedures.
e. Establish and mark landing pads.

f. Ensure sufficient personnel are available to load and unload personnel and cargo safely.
g. Ensure deck area is properly posted.
h. Provide for vehicle control.
i. Supervise deck management personnel (Loadmasters and Parking Tenders).
j. Ensure dust abatement measures are met.
k. Ensure that all assigned personnel are posted to the daily organization chart.
l. Ensure proper manifesting and load calculations are done.
m. Ensure Air Traffic Control operation is coordinated with Takeoff and Landing Coordinator.
n. Maintain agency records.
o. Maintain Unit/Activity Log (ICS Form 214).

LOADMASTER (PERSONNEL/CARGO) - The Loadmaster (LOAD) is responsible for the safe operation of loading and unloading of cargo and personnel at a Helibase. The LOAD reports to the Deck Coordinator:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Air Operations Summary (ICS Form 220).
c. Ensure proper posting of loading and unloading areas.
d. Perform manifesting and loading of personnel and cargo.
e. Ensure sling load equipment is safe.
f. Know aircraft rescue firefighting procedures.
g. Supervise loading and unloading crews.
h. Coordinate with Take Off and Landing Coordinator.
i. Maintain Unit/Activity Log (ICS Form 214).

PARKING TENDER - The Parking Tender (PARK) is responsible for the takeoff and landing of helicopters at an assigned helicopter pad. The PARK reports to the DECK. A PARK should be assigned for each helicopter pad:

a. Review Common Responsibilities (Page 1-2).
b. Supervise activities at the landing pad (personnel and helicopter movement, vehicle traffic, etc.).
c. Know and understand the aircraft rescue firefighting procedures.
d. Ensure agency checklist is followed.
e. Ensure helicopter pilot needs are met at the landing pad.
f. Ensure landing pad is properly maintained (dust abatement, marking, etc.).
g. Ensure landing pad is properly marked.
h. Check personnel seatbelts, cargo restraints and helicopter doors.
i. Maintain Unit/Activity Log (ICS Form 214).

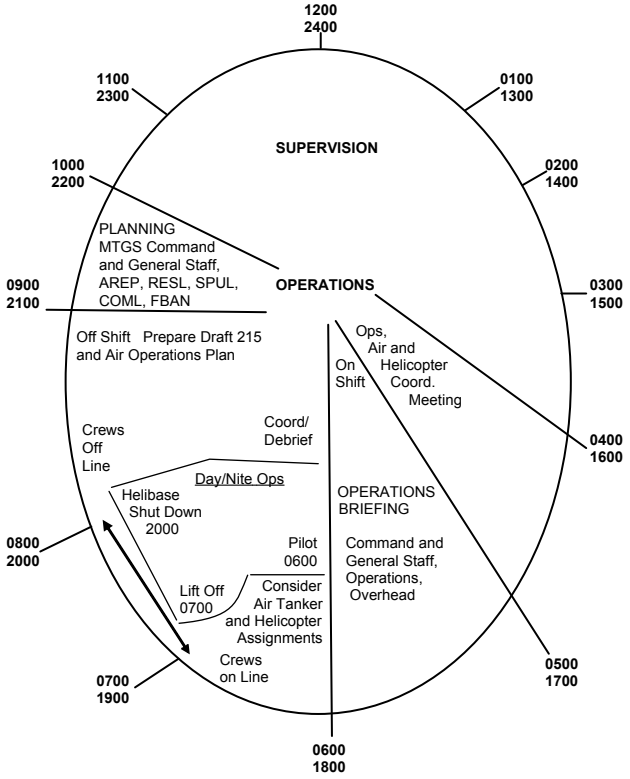
TAKEOFF AND LANDING COORDINATOR - The Takeoff and Landing Coordinator (TOLC) is responsible for providing coordination of arriving and departing helicopters at a Helibase and all helicopter movement on and around the Helibase. The TOLC reports to the Helibase Manager:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Air Operations Summary (ICS Form 220).
c. Check radio system before commencing operation.
d. Coordinate with Radio Operator on helicopter flight routes and patterns.
e. Maintain communications with all incoming and outgoing helicopters.
f. Maintain constant communications with Radio Operator.
g. Coordinate with Deck Coordinator and Parking Tender before commencing operation and during operation.
h. Maintain Unit/Activity Log (ICS Form 214).

HELICOPTER TIMEKEEPER - The Helicopter Timekeeper (HETM) is responsible for keeping time on all helicopters assigned to the Helibase. HETM reports to the Radio Operator:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Air Operations Summary (ICS Form 220).
c. Determine number of helicopters by agency.
d. Determine helicopter time needed by agency.
e. Record operation time of helicopters.
f. Fill out necessary agency time reports.
g. Obtain necessary timekeeping forms.
h. Maintain Unit/Activity Log (ICS Form 214).

OPERATIONS SECTION PLANNING CYCLE GUIDE



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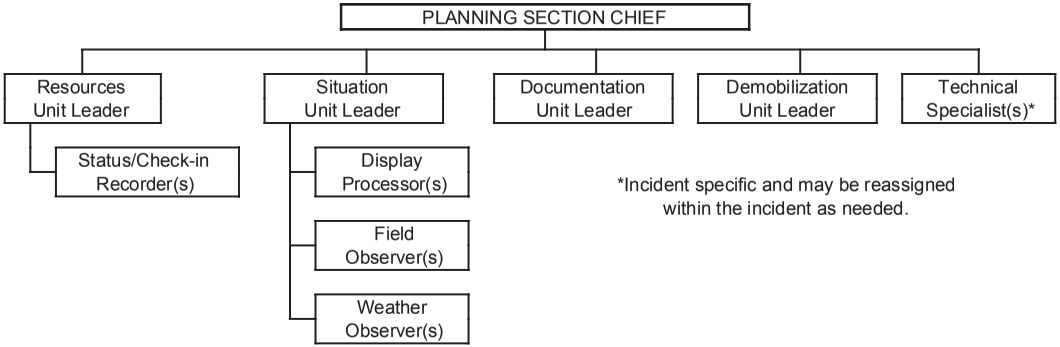
ORGANIZATION CHART



POSITION CHECKLISTS

PLANNING SECTION CHIEF - The Planning Section Chief (PSC1 or PSC2), a member of the Incident Commander's General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. The Planning Section Chief is responsible for facilitating the Planning Process as described in Chapter 7. The Planning Section Chief is also responsible for ensuring the safety and welfare of all Section personnel. Information is needed to: 1) understand the current situation, 2) predict probable course of incident events, and 3) prepare alternative strategies and control operations for the incident:

a. Review Common Responsibilities (Page 1-2).
b. Collect and process situation information about the incident.
c. Supervise preparation of the Incident Action Plan.
d. Provide input to the Incident Commander and Operations Section Chief in preparing the Incident Action Plan.
e. Reassign out-of-service personnel already on-site to ICS organizational positions as appropriate.
f. Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources Unit and Situation Unit).
g. Determine need for any specialized resources in support of the incident.
h. If requested, assemble and disassemble Strike Teams and Task Forces not assigned to Operations.
i. Establish special information collection activities as necessary, e.g., weather, environmental, toxics, etc.
j. Assemble information on alternative strategies.
k. Provide periodic predictions on incident potential.
l. Report any significant changes in incident status.
m. Compile and display incident status information.

n. Oversee preparation and implementation of Incident Demobilization Plan.
o. Incorporate plans, (e.g., Traffic, Medical, Communications, Site Safety) into the Incident Action Plan.
p. Maintain Unit/Activity Log (ICS Form 214).

RESOURCES UNIT LEADER - The Resources Unit Leader (RESL) is responsible for maintaining the status of all assigned resources at an incident. This is achieved by overseeing the check-in of all resources, maintaining a status-keeping system indicating current location and status of all resources, and maintenance of a master list of all resources, e.g., key supervisory personnel, primary and support resources, etc.:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Establish check-in function at incident locations.
d. Prepare Organization Assignment List (ICS Form 203) and Organization Chart (ICS Form 207).
e. Prepare appropriate parts of Assignment Lists (ICS Form 204).
f. Prepare and maintain the Command Post display (to include organization chart and resource allocation and deployment).
g. Maintain and post the current status and location of all resources.
h. Maintain master roster of all resources checked in at the incident.
i. A Status/Check-In Recorder reports to the Resources Unit Leader and assists with the accounting of all incident-assigned resources.
j. Maintain Unit/Activity Log (ICS Form 214).

STATUS/CHECK-IN RECORDER – A Status/Check-In Recorder (SCKN) is needed at each check-in location to ensure that all resources assigned to an incident are accounted for:

a. Review Common Responsibilities (Page 1-2).
b. Obtain required work materials, including Check-in Lists (ICS Form 211), Resource Status Cards (ICS Form 219), and status display boards.
c. Establish communications with the Communication Center and Ground Support Unit.
d. Post signs so that arriving resources can easily find incident check-in location(s).
e. Record check-in information on Check-in Lists (ICS Form 211).
f. Transmit check-in information to Resources Unit on regular prearranged schedule or as needed.
g. Forward completed Check-in Lists (ICS Form 211) to the Resources Unit.
h. Receive, record, and maintain resource status information on Resource Status Cards (ICS Form 219) for incident assigned Single Resources, Strike Teams, Task Forces, and Overhead personnel.
i. Maintain files of Check-in Lists (ICS Form 211).

SITUATION UNIT LEADER – The Situation Unit Leader (SITL) is responsible for the collection, processing and organizing of all incident information takes place within the Situation Unit. The Situation Unit may prepare future projections of incident growth, maps and intelligence information:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Begin collection and analysis of incident data as soon as possible.

d. Prepare, post, or disseminate resource and situation status information as required, including special requests.
e. Prepare periodic predictions or as requested.
f. Prepare the Incident Status Summary (ICS Form 209).
g. Provide photographic services and maps if required.
h. Maintain Unit/Activity Log (ICS Form 214).

DISPLAY PROCESSOR – The Display Processor (DPRO) is responsible for the display of incident status information obtained from Field Observers, resource status reports, aerial and orthography photographs and infrared data:

a. Review Common Responsibilities (Page 1-2).
b. Determine location of work assignment.
c. Determine numbers, types and locations of displays required.
d. Determine map requirements for Incident Action Plans.
e. Determine time limits for completion.
f. Obtain information from Situation Unit.
g. Obtain necessary equipment and supplies.
h. Obtain copy of Incident Action Plan for each operational period.
i. Assist Situation Unit Leader in analyzing and evaluating field reports.
j. Develop required displays in accordance with time limits for completion.
k. Maintain Unit/Activity Log (ICS Form 214).

FIELD OBSERVER - The Field Observer (FOBS) is responsible to collect situation information from personal observations at the incident and provide this information to the Situation Unit Leader:

a. Review Common Responsibilities (Page 1-2).
b. Obtain copy of Incident Action Plan for the Operational Period.
c. Obtain necessary equipment and supplies.
d. Identify all facility locations (e.g., Helispots, Division and Branch boundaries).
e. Report information to Situation Unit by established procedure.
f. Report immediately any condition observed that may cause danger and safety hazard to personnel.
g. Gather intelligence that will lead to accurate predictions.
h. Maintain Unit/Activity Log (ICS Form 214).

WEATHER OBSERVER - The Weather Observer (WOBS) is responsible to collect current incident weather information and provide the information to an assigned meteorologist, Fire Behavior Analyst or Situation Unit Leader:

a. Review Common Responsibilities (Page 1-2).
b. Obtain weather data collection equipment.
c. Obtain appropriate transportation to collection site(s).
d. Record and report weather observations at assigned locations on schedule.
e. Turn in equipment at completion of assignment.
f. Demobilize according to Incident Demobilization Plan.
g. Demobilize incident displays in accordance with Incident Demobilization Plan.
h. Maintain Unit/Activity Log (ICS Form 214).

DOCUMENTATION UNIT LEADER - The Documentation Unit Leader (DOCL) is responsible for the maintenance of accurate, up-to-date incident files. The Documentation Unit will also provide duplication services. Incident files will be stored for legal, analytical, and historical purposes:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Set up work area and begin organization of incident files.
d. Establish duplication service; respond to requests.
e. File all official forms and reports.
f. Review records for accuracy and completeness; inform appropriate units of errors or omissions.
g. Provide incident documentation as requested.
h. Store files for post-incident use.
i. Maintain Unit/Activity Log (ICS Form 214).

DEMOBILIZATION UNIT LEADER - The Demobilization Unit Leader (DMOB) is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Note that not all agencies require specific demobilization instructions:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Review incident resource records to determine the likely size and extent of demobilization effort.
d. Based on above analysis, add additional personnel, workspace and supplies as needed.
e. Coordinate demobilization with Agency Representatives.
f. Monitor ongoing Operations Section resource needs.
g. Identify surplus resources and probable release time.
h. Develop incident checkout function for all units.
i. Evaluate logistics and transportation capabilities to support demobilization.
j. Establish communications with off-incident facilities, as necessary.
k. Develop an Incident Demobilization Plan detailing specific responsibilities and release priorities and procedures.
l. Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the Demobilization Plan.

m. Distribute Demobilization Plan (on and off-site).
n. Ensure that all Sections/Units understand their specific demobilization responsibilities.
o. Supervise execution of the Incident Demobilization Plan.
p. Brief Planning Section Chief on demobilization progress.
q. Maintain Unit/Activity Log (ICS Form 214).

TECHNICAL SPECIALISTS - Certain incidents or events may require the use of a Technical Specialist (THSP) who has specialized knowledge and expertise. The THSP may function within the Planning Section, or be assigned wherever their services are required. Specific THSP have been identified (i.e. weather, fire behavior, etc.) and specific checklists are listed below or in the specific Operational System Description (i.e. US&R). For all other THSP not otherwise specified, use the checklist below:

a. Review Common Responsibilities (page 1-2).
b. Check in with the Status/Check-In Recorder.
c. Obtain briefing from supervisor.
d. Obtain personal protective equipment as appropriate.
e. Determine coordination procedures with other sections, units, and local agencies.
f. Establish work area and acquire work materials.
g. Participate in the development of the Incident Action Plan and review the general control objectives including alternative strategies as appropriate.
h. Obtain appropriate transportation and communications.
i. Keep supervisor informed.
j. Maintain Unit/Activity Log (ICS Form 214).

DAMAGE INSPECTION SPECIALIST – The Damage Inspection Specialist (DINS) is primarily responsible for inspecting damage and/or potential "at-risk" property, and natural resources. The DINS usually function within the Planning Section and may be assigned to the Situation Unit or

can be reassigned wherever their services are required. Damage inspection includes loss of environmental resources, infrastructure, transportation, structures, and other real/personal property:

a. Review Common Responsibilities (Page 1-2).
b. Establish communications with local government representatives of affected jurisdictions.
c. Determine and order resources.
d. Determine coordination procedures with other sections, units and local agencies.
e. Establish work area, and obtain necessary supplies.
f. Collect information pertaining to incident caused losses.
g. Participate in Planning Section activities.
h. Prepare documentation as required.
i. Respond to requests for information from approved sources.
j. Prepare final Situation Status Field Inspection Report (SSFIR), and forward to the Documentation Unit Leader.
k. Maintain Unit/Activity Log (ICS Form 214).

ENVIRONMENTAL SPECIALIST – The Environmental Specialist (ENSP) is primarily responsible for accessing the potential impacts of an incident on the environment, determining environmental restrictions, recommending alternative strategies and priorities for addressing environmental concerns. The ENSP functions within the Planning Section as part of the Situation Unit:

a. Review Common Responsibilities (Page 1-2).
b. Participate in the development of the Incident Action Plan and review the general control objectives including alternative strategies.

c. Collect and validate environmental information within the incident area by reviewing pre-attack, land use and management plans.
d. Determine environmental restrictions within the incident area.
e. Develop suggested priorities for preservation of the environment.
f. Provide environmental analysis information, as requested.
g. Collect and transmit required records and logs to Documentation Unit at the end of each operational period.
h. Maintain Unit/Activity Log (ICS Form 214).

FIRE BEHAVIOR ANALYST - The Fire Behavior Analyst (FBAN) is primarily responsible for establishing a weather data collection system, and to develop required fire behavior predictions based on fire history, fuel, weather, and topography information:

a. Review Common Responsibilities (Page 1-2).
b. Establish weather data requirements.
c. Verify dispatch of meteorologist.
d. Confirm that mobile weather station has arrived and is operational.
e. Inform meteorologist of weather data requirements.
f. Forward weather data to Planning Section Chief.
g. Collect, review and compile fire history data.
h. Collect, review and compile exposed fuel data.
i. Collect, review and compile information about topography and fire barriers.
j. Provide weather information and other pertinent information to Situation Unit Leader for inclusion in Incident Status Summary (ICS Form 209).
k. Review completed Incident Status Summary report and Incident Action Plan.

l. Prepare fire behavior prediction information at periodic intervals or upon request and forward to Planning Section Chief.
m. Maintain Unit/Activity Log (ICS Form 214).

GEOGRAPHICAL INFORMATION SYSTEM SPECIALIST -
A Geographical Information System Specialist (GISS) is responsible for spatial information collection, display, analysis, and dissemination. The GISS will provide Global Positioning System (GPS) support, integrate infrared data, and incorporate all relevant data to produce map products, statistical data for reports, and/or analyses. GISS usually functions within the Planning Section, or assigned wherever their services are required within the incident organization:

a. Review Common Responsibilities (Page 1-2).
b. Check in with the Status/Check-In Recorder.
c. Obtain briefing from appropriate supervisor.
d. Establish communication with local government representatives, of all affected jurisdictions, through the incident Liaison Officer.
e. Determine and order resources needed.
f. Determine coordination procedures with other sections, units, and local agencies.
g. Establish work area, and acquire work materials.
h. Obtain appropriate transportation and communications.
i. Determine the availability of needed GIS support products.
j. Participate in Planning Section activities.
k. Prepare GIS products as determined by supervisor.
l. Keep supervisor informed.
m. Respond to requests from approved sources for additional GIS products.
n. Prepare final GIS summary report consisting of all incident GIS products and forward to Documentation Unit Leader.
o. Maintain Unit/Activity Log (ICS Form 214).

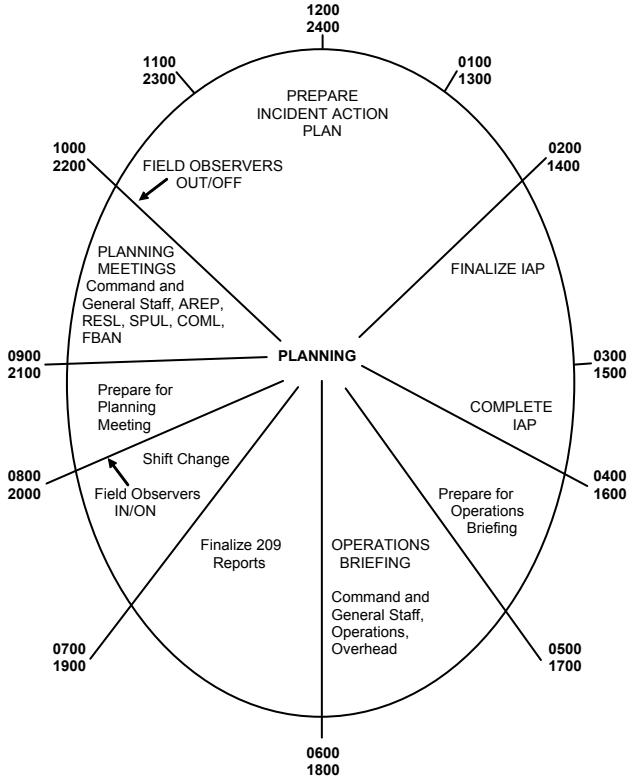
TRAINING SPECIALIST - The Training Specialist (TNSP) coordinates incident training opportunities and activities, ensuring the quality of the training assignments and completing documentation of the incident training. The TNSP organizes and implements the incident-training program and analyzes and facilitates training assignments to fulfill individual development needs of trainees:

a. Review Common Responsibilities (Page 1-2).
b. Inform Planning Section Chief of planned use of trainees.
c. Review trainee assignments and modify if appropriate.
d. Coordinate the assignments of trainees to incident positions with Resources Unit.
e. Brief trainees and trainers on training assignments and objectives.
f. Coordinate use of unassigned trainees.
g. Make follow-up contacts on the job to provide assistance and advice for trainees to meet training objectives as appropriate and with approval of unit leaders.
h. Ensure trainees receive performance evaluation.
i. Monitor operational procedures and evaluate training needs.
j. Respond to requests for information concerning training activities.
k. Give Training Specialist records and logs to Documentation Unit at the end of each operational period.
l. Maintain Unit/Activity Log (ICS Form 214).

WATER HANDLING SPECIALIST - The Water Handling Specialist (WHSP) is primarily responsible to advise incident personnel on the sources of fire suppression water, the capabilities of the water sources, and to assist in the development of additional systems or system capability to meet incident demands:

a. Review Common Responsibilities (Page 1-2).
b. Participate in the development of the Incident Action Plan and review general control objectives, including alternative strategies presently in effect.
c. Collect and validate water resource information within the incident area.
d. Prepare information on available water resources.
e. Establish water requirements needed to support fire suppression actions.
f. Compare Incident Control Objectives as stated in the Plan, with available water resources and report inadequacies or problems to Planning Section Chief.
g. Participate in the preparation of Incident Action Plan when requested.
h. Respond to requests for water information.
i. Collect and transmit records and logs to Documentation Unit at the end of each operational period.
j. Maintain Unit/Activity Log (ICS Form 214).

PLANNING SECTION PLANNING CYCLE GUIDE



Example Based on 12-Hour Operational Period

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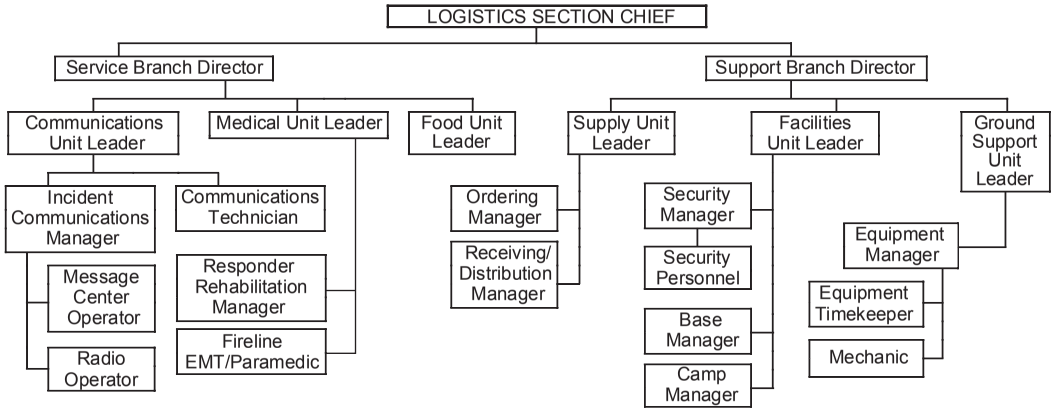
ORGANIZATION CHART



POSITION CHECKLISTS

LOGISTICS SECTION CHIEF - The Logistics Section Chief (LSC1 or LSC2), a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The Logistics Section Chief participates in development and implementation of the Incident Action Plan, activates and supervises assigned Branches/Units, and is responsible for the safety and welfare of Logistics Section personnel:

a. Review Common Responsibilities (Page 1-2).
b. Plan organization of Logistics Section.
c. Assign work locations and preliminary work tasks to Section personnel.
d. Notify Unit of Logistics Section Units activated including names and locations of assigned personnel.
e. Assemble and brief Branch Directors and Unit Leaders.
f. Participate in preparation of Incident Action Plan.
g. Identify service and support requirements for planned and expected operations.
h. Provide input to and review Communications Plan, Medical Plan and Traffic Plan.
i. Coordinate and process requests for additional resources.
j. Review Incident Action Plan and estimate Section needs for next operational period.
k. Advise on current service and support capabilities.
l. Prepare service and support elements of the Incident Action Plan.
m. Estimate future service and support requirements.
n. Receive Demobilization Plan from Planning Section.
o. Recommend release of unit resources in conformity with Demobilization Plan.
p. Ensure general welfare and safety of Logistics Section personnel.
q. Maintain Unit/Activity Log (ICS Form 214).

SERVICE BRANCH DIRECTOR - The Service Branch Director (SVBD), when activated, is under the supervision of the Logistics Section Chief, and is responsible for the management of all service activities at the incident. The SVBD supervises the operations of the Communications, Medical and Food Units:

a. Review Common Responsibilities (Page 1-2).
b. Obtain working materials.
c. Determine level of service required to support operations.
d. Confirm dispatch of Branch personnel.
e. Participate in planning meetings of Logistics Section personnel.
f. Review Incident Action Plan.
g. Organize and prepare assignments for Service Branch personnel.
h. Coordinate activities of Branch Units.
i. Inform Logistics Section Chief of Branch activities.
j. Resolve Service Branch problems.
k. Maintain Unit/Activity Log (ICS Form 214).

COMMUNICATIONS UNIT LEADER - The Communications Unit Leader (COML), under the direction of the Service Branch Director or Logistics Section Chief, is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the Incident Communications Center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Determine unit personnel needs.

d. Prepare and implement the Incident Radio Communications Plan (ICS Form 205).
e. Ensure the Incident Communications Center and Message Center are established.
f. Establish appropriate communications distribution/ maintenance locations within Base/Camp(s).
g. Ensure communications systems components are installed, tested and maintained.
h. Ensure an equipment accountability system is established.
i. Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan (ICS Form 205).
j. Provide technical information as required.
k. Supervise Communications Unit activities.
l. Maintain records on all communications equipment as appropriate.
m. Recover equipment from relieved or released units.
n. Maintain Unit/Activity Log (ICS Form 214).

INCIDENT COMMUNICATIONS MANAGER - The Incident Communications Manager (INCM) is responsible to receive and transmit radio and telephone messages among and between personnel and to provide dispatch services at the incident:

a. Review Common Responsibilities (Page 1-2).
b. Ensure adequate staffing.
c. Obtain and review Incident Action Plan to determine incident organization and Incident Radio Communications Plan (ICS Form 205).
d. Set up Incident Radio Communications Center - check out equipment.
e. Request service on any inoperable or marginal equipment.
f. Set up Message Center location as required.

g. Receive and transmit messages within and external to incident.
h. Maintain General Messages files.
i. Maintain a record of unusual incident occurrences.
j. Provide briefing to relief on current activities, equipment status, and any unusual communications situations.
k. Turn in appropriate documents to incident Communications Unit Leader.
l. Demobilize Communications Center in accordance with Incident Demobilization Plan.
m. Maintain Unit/Activity Log (ICS Form 214).

MEDICAL UNIT LEADER - The Medical Unit Leader (MEDL), under the direction of the Service Branch Director or Logistics Section Chief, is primarily responsible for the development of the Medical Plan (ICS Form 206), obtaining medical aid and transportation for injured and ill incident personnel, establishment of responder rehabilitation and preparation of reports and records:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Participate in Logistics Section/Service Branch planning activities.
d. Establish and staff Medical Unit.
e. Establish Responder Rehabilitation.
f. Prepare the Medical Plan (ICS Form 206).
g. Prepare procedures for major medical emergency.
h. Declare major medical emergency as appropriate.
i. Respond to requests for medical aid, medical transportation, and medical supplies.
j. Prepare and submit necessary documentation.
k. Maintain Unit/Activity Log (ICS Form 214).

RESPONDER REHABILITATION MANAGER - The Responder Rehabilitation Manager reports to the Medical Unit Leader and is responsible for the rehabilitation of incident personnel who are suffering from the effects of strenuous work and/or extreme conditions:

a. Review Common Responsibilities (Page 1-2).
b. Designate responder rehabilitation location and have location announced on radio with radio designation "Rehab."
c. Request necessary medical personnel to evaluate medical condition of personnel being rehabilitated.
d. Request necessary resources for rehabilitation of personnel, e.g., water, juice, personnel.
e. Request through Food Unit or Logistics Section Chief feeding as necessary for personnel being rehabilitated.
f. Release rehabilitated personnel to Operations Section or Planning Section for reassignment.
g. Maintain appropriate records and documentation.
h. Maintain Unit/Activity Log (ICS Form 214).

FIRELINE EMERGENCY MEDICAL TECHNICIAN - The Fireline Emergency Medical Technician (FEMT) provides basic life support and emergency medical care to personnel operating on the fireline. The FEMT initially reports to the Medical Unit Leader, if established, or the Logistics Section Chief. The FEMT must establish and maintain liaison with, and respond to requests from the Operations Section personnel to whom they are subsequently assigned.

The checklist presented below should be considered as a minimum requirement for the position. Users of this manual may augment these lists as necessary. Note that some of the activities are one-time actions while others are ongoing for the duration of an incident:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Logistics Section Chief, or the Medical Unit Leader if established. Briefing will include current incident situation, anticipated medical needs, and local emergency medical system orientation.
c. Receive assignment and assess current situation.
d. Anticipate needs and ensure medical inventory as necessary.
e. Secure/clone portable radio with all incident frequencies consistent with the current Incident Radio Communications Plan (ICS Form 205). Identify appropriate radio designator for use on incident.
f. Obtain and review the current Incident Action Plan (IAP) emphasizing the Medical Plan (ICS Form 206).
g. Identify the appropriate route to establish online medical control if such a consultation is desired and communication channels are available as outlined in the Medical Plan (ICS Form 206).
h. Identify fireline supervisor and confirm your travel route, transportation and ETA prior to leaving check-in location.
i. Meet with your assigned fireline supervisor and obtain briefing.
j. Obtain briefing from the FEMT or Fireline Paramedic (FEMP) you are relieving if applicable.
k. Upon arrival at assigned location, perform a radio check with assigned fireline supervisor, Incident Communications Center and the Medical Unit, if established.
l. Establish and maintain contact with personnel on assignment to assess medical needs and provide assistance.
m. Make requests for transportation of ill and injured personnel through channels as outlined in the Medical Plan (ICS Form 206).

n. Make notifications of incident related illnesses and injuries as outlined in the Medical Plan (ICS Form 206).
o. At the conclusion of each operational period, advise your fireline supervisor when departing and report to the Medical Unit Leader for debriefing and submission of patient care documentation.
p. Resupply expended materials prior to next operational period.
q. Secure operations and demobilize as outlined in the Demobilization Plan.
r. Maintain Unit/Activity Log (ICS Form 214).

FIRELINE PARAMEDIC – The Fireline Paramedic (FEMP) provides advanced life support and emergency medical care to personnel operating on the fireline. The FEMP initially reports to the Medical Unit Leader, if established, or the Logistics Section Chief. The FEMP must establish and maintain liaison with and respond to requests from the Operations Section personnel to whom they are subsequently assigned.

The checklist presented below should be considered as a minimum requirement for the position. User of this manual may augment these lists as necessary. Note that some of the activities are one-time actions while others are ongoing for the duration of an incident:

a. Review Command Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Logistics Section Chief, or the Medical Unit Leader if established. Briefing will include current incident situation, anticipated medical needs, and local emergency medical system orientation.
c. Receive assignment and assess current situation.
d. Anticipate needs and ensure medical inventory as necessary.

e. Secure/clone portable radio with all incident frequencies consistent with the current Incident Radio Communications Plan (ICS Form 205). Identify appropriate radio designator for use on incident.
f. Obtain and review the current Incident Action Plan (IAP) emphasizing the Medical Plan (ICS Form 206).
g. Identify the appropriate route to establish online medical control if such a consultation is desired and communication channels are available as outlined in the Medical Plan (ICS Form 206).
h. Identify fireline supervisor and confirm travel route, transportation and ETA prior to leaving check-in location.
i. Meet with your assigned fireline supervisor and obtain briefing.
j. Obtain briefing from the Fireline Paramedic (FEMP) you are relieving if applicable
k. Upon arrival at assigned location, perform a radio check with assigned fireline supervisor, Incident Communications Center and the Medical Unit, if established.
l. Establish and maintain contact with personnel on assignment to assess medical needs and provide assistance.
m. Make requests for transportation of ill and injured personnel through channels as outlined in the Medical Plan (ICS Form 206).
n. Make notifications of incident related illnesses and injuries as outlined in the Medical Plan (ICS Form 206).
o. At the conclusion of each operational period, advise your fireline supervisor when departing and report to the Medical Unit Leader for debriefing and submission of patient care documentation.
p. Resupply expended materials prior to next operational period.

q. Secure operations and demobilize as outlined in the Demobilization Plan.
r. Maintain Unit/Activity Log (ICS Form 214).

FOOD UNIT LEADER – The Food Unit Leader (FDUL) is responsible for supplying the food needs for the entire incident, including all remote locations (e.g., Camps, Staging Areas), as well as providing food for personnel unable to leave tactical field assignments:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Determine food and water requirements.
d. Determine method of feeding to best fit each facility or situation.
e. Obtain necessary equipment and supplies and establish cooking facilities.
f. Ensure that well-balanced menus are provided.
g. Order sufficient food and potable water from the Supply Unit.
h. Maintain an inventory of food and water.
i. Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
j. Supervise caterers, cooks, and other Food Unit personnel as appropriate.
k. Maintain Unit/Activity Log (ICS Form 214).

SUPPORT BRANCH DIRECTOR – The Support Branch Director (SUBD), when activated, is under the direction of the Logistics Section Chief, and is responsible for development and implementation of logistics plans in support of the Incident Action Plan. The SUBD supervises the operations of the Supply, Facilities and Ground Support Units:

a. Review Common Responsibilities (Page 1-2).
b. Obtain work materials.

c. Identify Support Branch personnel dispatched to the incident.
d. Determine initial support operations in coordination with Logistics Section Chief.
e. Prepare initial organization and assignments for support operations.
f. Assemble and brief Support Branch personnel.
g. Determine if assigned Branch resources are sufficient.
h. Monitor assigned units' work progress and inform Logistics Section Chief of activities.
i. Resolve problems associated with requests from Operations Section.
j. Maintain Unit/Activity Log (ICS Form 214).

SUPPLY UNIT LEADER – The Supply Unit Leader (SPUL) is primarily responsible for ordering personnel, equipment and supplies; receiving and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Participate in Logistics Section/Support Branch planning activities.
d. Determine the type and amount of supplies en route.
e. Review Incident Action Plan for information on operations of the Supply Unit.
f. Develop and implement safety and security requirements.
g. Order, receive, distribute, and store supplies and equipment.
h. Receive and respond to requests for personnel, supplies and equipment.
i. Maintain inventory of supplies and equipment.
j. Service reusable equipment.
k. Submit reports to the Support Branch Director.
l. Maintain Unit/Activity Log (ICS Form 214).

ORDERING MANAGER – The Ordering Manager (ODRM) is responsible for placing all orders for resources, supplies, and equipment for the incident. The ODRM reports to the Supply Unit Leader:

a. Review Common Responsibilities (Page 1-2).
b. Obtain necessary agency (ies) order forms.
c. Establish ordering procedures.
d. Establish name and telephone numbers of agency personnel receiving orders.
e. Set up filing system.
f. Get names of incident personnel who have ordering authority.
g. Check on what has already been ordered.
h. Ensure order forms are filled out correctly.
i. Place orders in a timely manner.
j. Consolidate orders when possible.
k. Identify times and locations for delivery of supplies and equipment.
l. Keep Receiving and Distribution Manager informed of orders placed.
m. Submit all ordering documents to Documentation Control Unit through Supply Unit Leader before demobilization.
n. Maintain Unit/Activity Log (ICS Form 214).

RECEIVING AND DISTRIBUTION MANAGER – The Receiving and Distributing Manager (RCDM) is responsible for receiving and distribution of all supplies and equipment (other than primary resources) and the service and repair of tools and equipment. The RCDM reports to the Supply Unit Leader:

a. Review Common Responsibilities (Page 1-2).
b. Order required personnel to operate supply area.
c. Organize physical layout of supply area.
d. Establish procedures for operating supply area.

e. Set up filing system for receiving and distribution of supplies and equipment.
f. Maintain inventory of supplies and equipment.
g. Develop security requirement for supply area.
h. Establish procedures for receiving supplies and equipment
i. Submit necessary reports to Supply Unit Leader.
j. Notify Ordering Manager of supplies and equipment received.
k. Provide necessary supply records to Supply Unit Leader.
l. Maintain Unit/Activity Log (ICS Form 214).

FACILITIES UNIT LEADER – The Facilities Unit Leader (FACL) is primarily responsible for the layout and activation of incident facilities, e.g., Base, Camp(s) and Incident Command Post. The Unit provides sleeping and sanitation facilities for incident personnel and manages Base and Camp(s) operations. The FACL reports to the Support Branch Director:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Receive a copy of the Incident Action Plan.
d. Participate in Logistics Section/Support Branch planning activities.
e. Determine requirements for each facility.
f. Prepare layouts of incident facilities.
g. Notify Unit Leaders of facility layout.
h. Activate incident facilities.
i. Provide Base/Camp Managers.
j. Provide sleeping facilities.
k. Provide security services.
l. Provide facility maintenance services-sanitation, lighting, and cleanup.
m. Maintain Unit/Activity Log (ICS Form 214).

FACILITY MAINTENANCE SPECIALIST – The Facility Maintenance Specialist (FMNT) is responsible to ensure that proper sleeping and sanitation facilities are maintained, provide shower facilities, maintain lights and other electrical equipment, and maintain the Base, Camp(s) and Incident Command Post facilities in a clean and orderly manner:

a. Review Common Responsibilities (Page 1-2).
b. Request required maintenance support personnel and assign duties.
c. Obtain supplies, tools, and equipment.
d. Supervise/perform assigned work activities.
e. Ensure that all facilities are maintained in a safe condition.
f. Disassemble temporary facilities when no longer required.
g. Restore area to pre-incident condition.
h. Maintain Unit/Activity Log (ICS Form 214).

SECURITY MANAGER – The Security Manager (SECM) is responsible to provide safeguards needed to protect personnel and property from loss or damage:

a. Review Common Responsibilities (Page 1-2).
b. Establish contacts with local law enforcement agencies as required.
c. Contact the Agency Representatives to discuss any special custodial requirements that may affect operations.
d. Request required personnel support to accomplish work assignments.
e. Ensure that support personnel are qualified to manage security problems.
f. Develop Security Plan for incident facilities.
g. Adjust Security Plan for personnel and equipment changes and releases.
h. Coordinate security activities with appropriate incident personnel.

i. Keep the peace, prevent assaults, and settle disputes through coordination with Agency Representatives.
j. Prevent theft of all government and personal property
k. Document all complaints and suspicious occurrences.
l. Maintain Unit/Activity Log (ICS Form 214).

BASE CAMP MANAGER – The Base Camp Manager (BCMG) is responsible to ensure that appropriate sanitation, security, and facility management services are conducted at all incident facilities. Each facility (Base, Camp) is assigned a manager who reports to the FACL and is responsible for managing the operation of the facility.

On large incidents, a Base and one or more Camps may be established by the General Staff to provide better support to operations. Base is the location where the primary logistics functions are coordinated and administered. Camps are typically smaller in nature and more remote. Camps may be in place several days or may be moved depending upon the nature of the incident. Functional unit activities performed at the Base may be performed at the Camp(s). These activities could include Supply Unit, Medical Unit, Ground Support Unit, Food Unit, Communications Unit, as well as the Facilities Unit functions of facility maintenance and security.

Camp Managers are responsible to provide non-technical coordination for all units operating within the Camp. The General Staff will determine units assigned to Camps. Personnel requirements for units at Camps will be determined by the parent unit, based on kind and size of incident and expected duration of Camp operations. The Base Camp Manager duties include:

a. Review Common Responsibilities (Page 1-2).
b. Determine personnel support requirements.

c. Obtain necessary equipment and supplies.
d. Ensure that all sanitation, shower and sleeping facilities are set up and properly functioning.
e. Make sleeping arrangements.
f. Provide direct supervision for all facility maintenance and security services at Base/ Camp(s).
g. Ensure that strict compliance is made with all applicable safety regulations.
h. Ensure that all Base-to-Camp communications are centrally coordinated.
i. Ensure that all Base-to-Camp transportation scheduling is centrally coordinated.
j. Provide overall coordination of all Base/Camp activities to ensure that all assigned units operate effectively and cooperatively in meeting incident objectives.
k. Maintain Unit/Activity Log (ICS Form 214).

GROUND SUPPORT UNIT LEADER – The Ground Support Unit Leader (GSUL) is primarily responsible for support of out-of-service resources; transportation of personnel, supplies, food, and equipment; fueling, service, maintenance, and repair of vehicles and other ground support equipment; and development and implementation of the Incident Traffic Plan:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Participate in Support Branch/Logistics Section planning activities.
d. Develop and implement Traffic Plan.
e. Support out-of-service resources.
f. Notify Resources Unit of all status changes on support and transportation vehicles.
g. Arrange for and activate fueling, maintenance, and repair of ground resources.

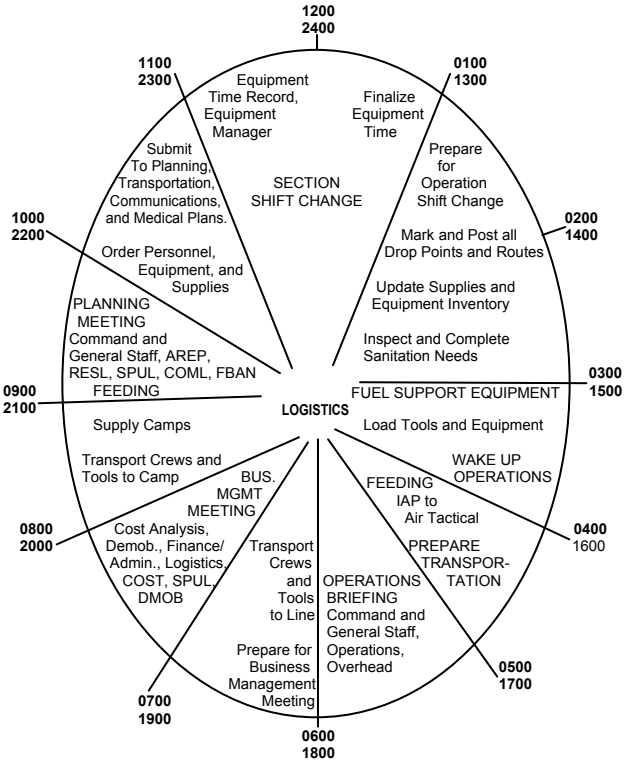
h. Maintain inventory of support and transportation vehicles (Support Vehicle Inventory ICS Form 218).
i. Provide transportation services.
j. Collect use information on rented equipment.
k. Requisition maintenance and repair supplies (e.g., fuel, spare parts).
l. Maintain incident roads.
m. Submit reports to Support Branch Director as directed.
n. Maintain Unit/Activity Log (ICS Form 214).

EQUIPMENT MANAGER – The Equipment Manager (EQPM) provides service, repair and fuel for all apparatus and equipment; provides transportation and support vehicle services; and maintains records of equipment use and service provided:

a. Review Common Responsibilities (Page 1-2).
b. Obtain Incident Action Plan to determine locations for assigned resources, Staging Area locations, and fueling and service requirements for all resources.
c. Obtain necessary equipment and supplies.
d. Provide maintenance and fueling according to schedule.
e. Prepare schedules to maximize use of available transportation.
f. Provide transportation and support vehicles for incident use.
g. Coordinate with Agency Representatives on service and repair policies as required.
h. Inspect equipment condition and ensure coverage by equipment agreement.
i. Determine supplies (e.g., gasoline, diesel, oil and parts needed to maintain equipment in efficient operating condition), and place orders with Supply Unit.
j. Maintain Support Vehicle Inventory (ICS Form 218).
k. Maintain equipment rental records.

l. Maintain equipment service and use records.
m. Check all service repair areas to ensure that all appropriate safety measures are being taken.
n. Maintain Unit/Activity Log (ICS Form 214).

LOGISTICS SECTION PLANNING CYCLE GUIDE



Example Based on 12-Hour Operational Period

CHAPTER 11

FINANCE/ADMINISTRATION SECTION

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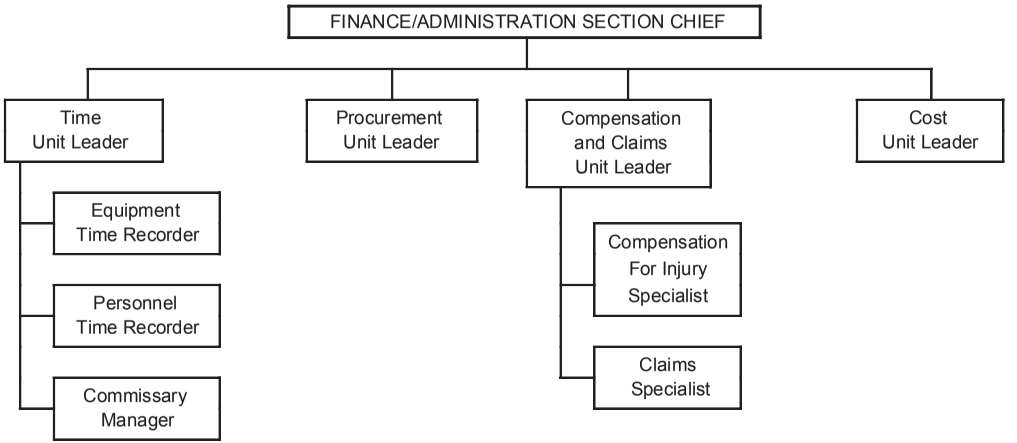
ORGANIZATION CHART



POSITION CHECKLISTS

FINANCE/ADMINISTRATION SECTION CHIEF – The Finance/ Administration Section Chief (FSC1 or FSC2) is responsible for all financial, administrative, and cost analysis aspects of the incident and for supervising members of the Finance/ Administration Section:

a. Review Common Responsibilities (Page 1-2).
b. Manage all financial aspects of an incident.
c. Provide financial and cost analysis information as requested.
d. Provide Cost Apportionment/Cost Share methodology and agreements as necessary.
e. Gather pertinent information from briefings with responsible agencies.
f. Develop an operating plan for the Finance/Administration Section; fill supply and support needs.
g. Determine need to set up and operate an incident commissary.
h. Meet with assisting and cooperating Agency Representatives as needed.
i. Maintain daily contact with agency (ies) administrative headquarters on Finance/ Administration matters.
j. Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
k. Provide financial input to demobilization planning.
l. Ensure that all obligation documents initiated at the incident are properly prepared and completed.
m. Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
n. Maintain Unit/Activity Log (ICS Form 214).

TIME UNIT LEADER – The Time Unit Leader (TIME) is responsible for equipment and personnel time recording and for managing the commissary operations:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Determine incident requirements for time recording function.
d. Contact appropriate agency personnel/representatives.
e. Ensure that daily personnel time recording documents are prepared and in compliance with agency policy.
f. Maintain separate logs for overtime hours.
g. Establish commissary operation on larger or long-term incidents as needed.
h. Submit cost estimate data forms to Cost Unit as required.
i. Maintain records security.
j. Ensure that all records are current and complete prior to demobilization.
k. Release time reports from assisting agency personnel to the respective Agency Representatives prior to demobilization.
l. Brief Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.
m. Maintain Unit/Activity Log (ICS Form 214).

EQUIPMENT TIME RECORDER – Under supervision of the Time Unit Leader, the Equipment Time Recorder (EQTR) is responsible for overseeing the recording of time for all equipment assigned to an incident:

a. Review Common Responsibilities (Page 1-2).
b. Set up Equipment Time Recorder function in location designated by Time Unit Leader.

c. Advise Ground Support Unit, Facilities Unit, and Air Support Group of the requirement to establish and maintain a file for maintaining a daily record of equipment time.
d. Assist units in establishing a system for collecting equipment time reports.
e. Post all equipment time tickets within four hours after the end of each operational period.
f. Prepare a use and summary invoice for equipment (as required) within twelve (12) hours after equipment arrival at incident.
g. Submit data to Time Unit Leader for cost effectiveness analysis.
h. Maintain current posting on all charges or credits for fuel, parts, services and commissary.
i. Verify all time data and deductions with owner/operator of equipment.
j. Complete all forms according to agency specifications.
k. Close out forms prior to demobilization.
l. Distribute copies per agency and incident policy.
m. Maintain Unit/Activity Log (ICS Form 214).

PERSONNEL TIME RECORDER - Under supervision of the Time Unit Leader, the Personnel Time Recorder (PTRC) is responsible for overseeing the recording of time for all personnel assigned to an incident:

a. Review Common Responsibilities (Page 1-2).
b. Establish and maintain a file for employee time reports within the first operational period.
c. Initiate, gather, or update a time report from all applicable personnel assigned to the incident for each operational period.
d. Ensure that all employee identification information is verified to be correct on the time report.

e. Post personnel travel and work hours, transfers, promotions, specific pay provisions and terminations to personnel time documents.
f. Post all commissary issues to personnel time documents.
g. Ensure that time reports are signed.
h. Close out time documents prior to personnel leaving the incident.
i. Distribute all time documents according to agency policy.
j. Maintain a log of excessive hours worked and give to Time Unit Leader daily.
k. Maintain Unit/Activity Log (ICS Form 214).

COMMISSARY MANAGER – Under the supervision of the Time Unit Leader, the Commissary Manager (CMSY) is responsible for commissary operations and security:

a. Review Common Responsibilities (Page 1-2).
b. Set up and provide commissary operation to meet incident needs.
c. Establish and maintain adequate security for commissary.
d. Request commissary stock through Supply Unit Leader.
e. Maintain complete record of commissary stock including invoices for material received, issuance records, transfer records and closing inventories.
f. Maintain commissary issue record by crews and submit records to Time Recorder during or at the end of each operational period.
g. Use proper agency forms for all record keeping.
h. Complete forms according to agency specification.
i. Ensure that all records are closed out and commissary stock is inventoried and returned to Supply Unit prior to demobilization.
j. Maintain Unit/Activity Log (ICS Form 214).

PROCUREMENT UNIT LEADER – The Procurement Unit Leader (PROC) is responsible for administering all financial matters pertaining to vendor contracts, leases, and fiscal agreements:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Review incident needs and any special procedures with Unit Leaders, as needed.
d. Coordinate with local jurisdiction on plans and supply sources.
e. Obtain Incident Procurement Plan.
f. Prepare and authorize contracts and land use agreements.
g. Draft Memorandum of Understanding.
h. Establish contracts and agreements with supply vendors.
i. Provide for coordination between the Ordering Manager, agency dispatch, and all other procurement organizations supporting the incident.
j. Ensure that a system is in place that meets agency property management requirements. Ensure proper accounting for all new property.
k. Interpret contracts and agreements; resolve disputes within delegated authority.
l. Coordinate with Compensation/Claims Unit for processing claims.
m. Coordinate use of impress funds as required.
n. Complete final processing of contracts and send documents for payment.
o. Coordinate cost data in contracts with Cost Unit Leader.
p. Brief Finance/Administration Section Chief on current problems and recommendations, outstanding issues, and follow-up requirements.
q. Maintain Unit/Activity Log (ICS Form 214).

COMPENSATION/CLAIMS UNIT LEADER - The Compensation Claims Unit Leader (COMP) is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims-related activities (other than injury) for an incident:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Establish contact with incident Safety Officer and Liaison Officer, or Agency Representatives if no Liaison Officer is assigned.
d. Determine the need for Compensation for Injury Specialists and Claims Specialists and order personnel as needed.
e. Establish a Compensation for Injury work area within or as close as possible to the Medical Unit.
f. Review incident Medical Plan (ICS Form 206).
g. Review procedures for handling claims with Procurement Unit.
h. Periodically review logs and forms produced by Compensation/Claims Specialists to ensure compliance with agency requirements and policies.
i. Ensure that all Compensation for Injury and Claims logs and forms are complete and routed to the appropriate agency for post-incident processing prior to demobilization.
j. Maintain Unit/Activity Log (ICS Form 214).

COMPENSATION FOR INJURY SPECIALIST – Under the supervision of the Compensation/Claims Unit Leader, the Compensation For Injury Specialist (INJR) is responsible for administering financial matters resulting from serious injuries and fatalities occurring on an incident. Close coordination is required with the Medical Unit:

a. Review Common Responsibilities (Page 1-2).
b. Co-locate Compensation for Injury operations with those of the Medical Unit when possible.
c. Establish procedure with Medical Unit Leader on prompt notification of injuries or fatalities.
d. Obtain copy of incident Medical Plan (ICS Form 206).
e. Provide written authority for persons requiring medical treatment.
f. Ensure that correct agency forms are being used.
g. Provide correct billing forms for transmittal to doctor and/or hospital.
h. Monitors and reports on status of hospitalized personnel.
i. Obtain all witness statements from Safety Officer and/or Medical Unit and review for completeness.
j. Maintain log of all injuries occurring on incident.
k. Coordinate/handle all administrative paperwork on serious injuries or fatalities.
l. Coordinate with appropriate agency (ies) to assume responsibility for injured personnel in local hospitals prior to demobilization.
m. Maintain Unit/Activity Log (ICS Form 214).

CLAIMS SPECIALIST - Under the supervision of the Compensation/Claims Unit Leader, the Claims Specialist (CLMS) is responsible for managing all claims-related activities (other than injury) for an incident:

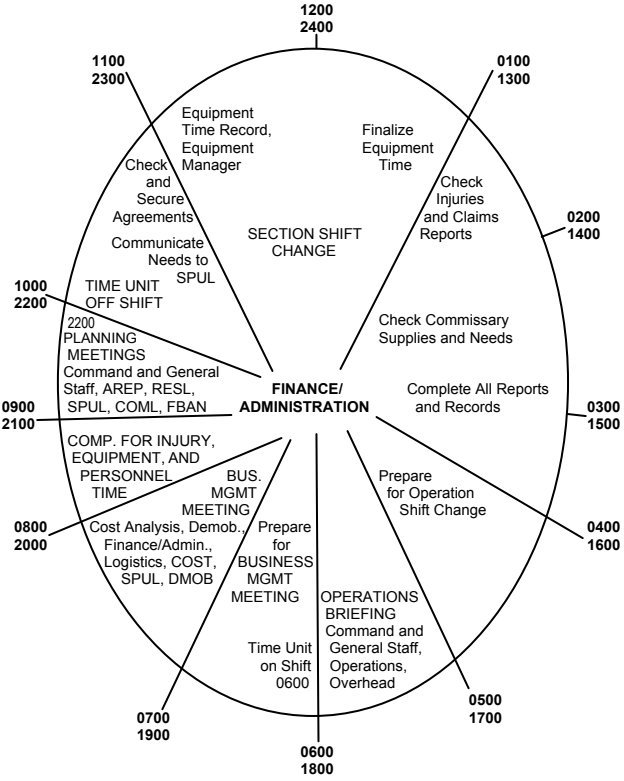
a. Review Common Responsibilities (Page 1-2).
b. Develop and maintain a log of potential claims.
c. Coordinate claims prevention plan with applicable incident functions.
d. Initiate investigation on all claims other than personnel injury.
e. Ensure that site and property involved in investigation are protected.

f. Coordinate with investigation team as necessary.
g. Obtain witness statements pertaining to claims other than personnel injury.
h. Document any incomplete investigations.
i. Document follow-up action needs by local agency.
j. Keep the Compensation/Claims Unit Leader advised on nature and status of all existing and potential claims.
k. Ensure use of correct agency forms.
l. Maintain Unit/Activity Log (ICS Form 214).

COST UNIT LEADER – The Cost Unit Leader (COST) is responsible for collecting all cost data, performing cost effectiveness, analyses, and providing cost estimates and cost saving recommendations for the incident:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Coordinate with agency headquarters on cost reporting procedures.
d. Collect and record all cost data.
e. Develop incident cost summaries.
f. Prepare resources-use cost estimates for the Planning Section.
g. Make cost-saving recommendations to the Finance/ Administration Section Chief.
h. Complete all records prior to demobilization.
i. Maintain Unit/Activity Log (ICS Form 214).

FINANCE/ADMINISTRATION SECTION PLANNING CYCLE GUIDE



Example Based on 12-Hour Operational Period

Notes

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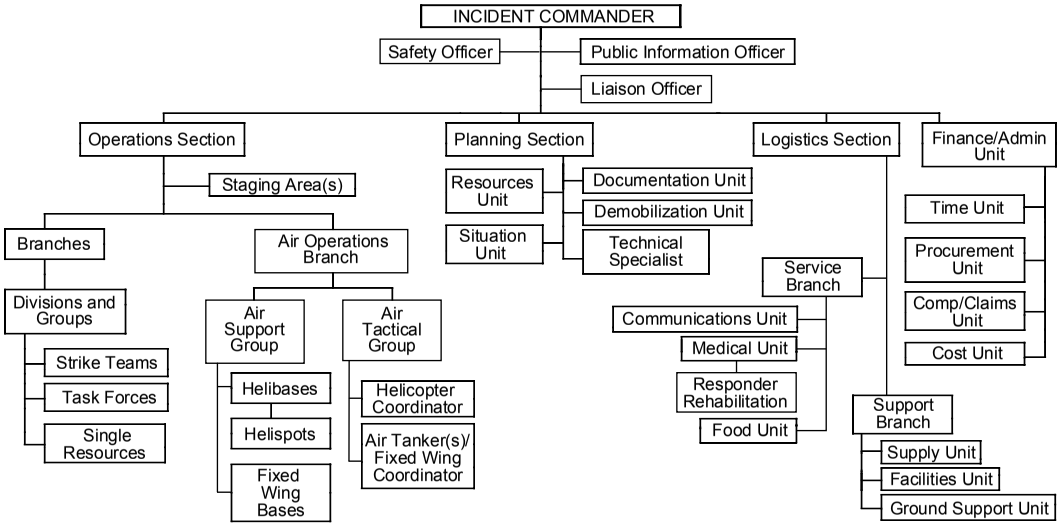
FULLY ACTIVATED INCIDENT COMMAND SYSTEM ORGANIZATION CHART



WILDLAND FIRE ORGANIZATIONAL DEVELOPMENT

INTRODUCTION

The following series of organizational charts depict examples of how the Incident Command System can be used on fires involving wildland (grass, brush, timber fuels). The charts show examples of ICS organizations for initial attack fires through incidents that grow to such size as to require very large organizational structures to manage the personnel and equipment assigned to these incidents.

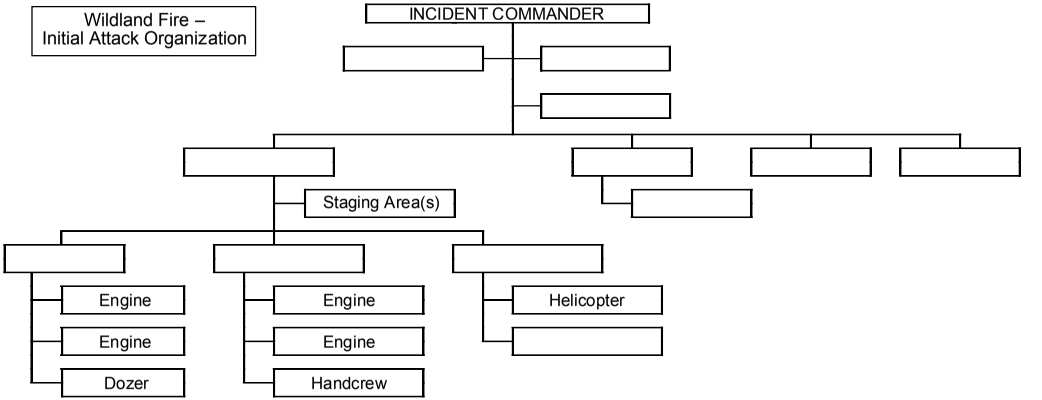
Certain terms are used to identify the level of resource commitment or organizations structure. The terms associated with these levels are:

Initial Attack Organization – This example depicts an agency's initial response level (four engines, a bulldozer, a wildland firefighting handcrew, one helicopter and one Command Officer) to a reported wildland fire and how those resources might be organized to handle the situation. At the same time, the organization is designed to rapidly expand if necessitated by fire growth.

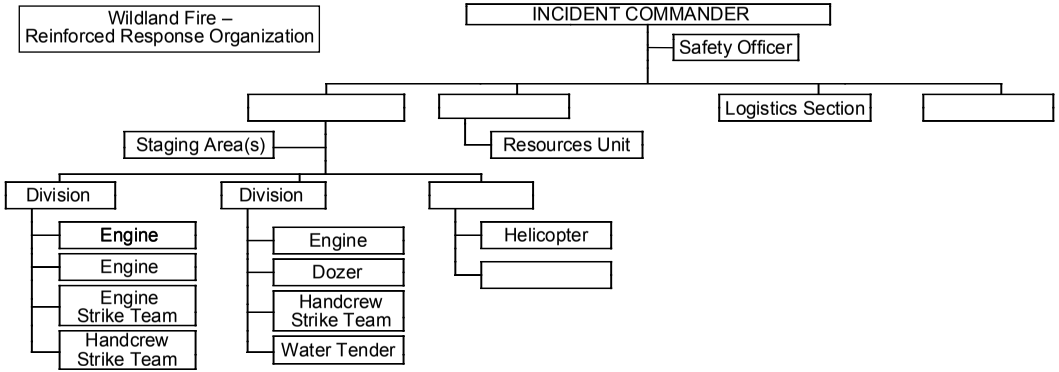
Reinforced Response Organization – This example depicts an expansion of the organizational structure to accommodate additional resources.

Extended Attack Organization – This example depicts an organization that may be appropriate for incidents that may require even more resources and an extended period of time to control. The time frames for these incidents may run into multiple operational periods covering many days with enhanced logistics and planning requirements.

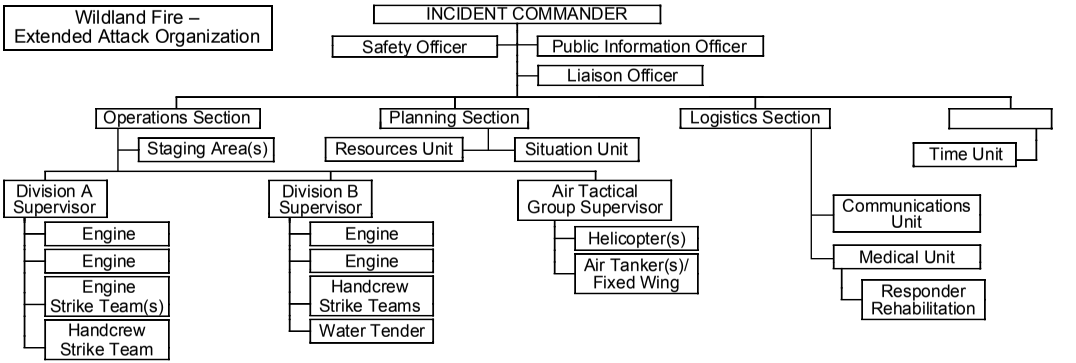
Multi-Branch Response Organization – This example depicts an organization that may be used for wildland incidents that have grown in area to require multiple levels of management to accommodate span of control concerns and increased support for the number of personnel assigned to the incident.



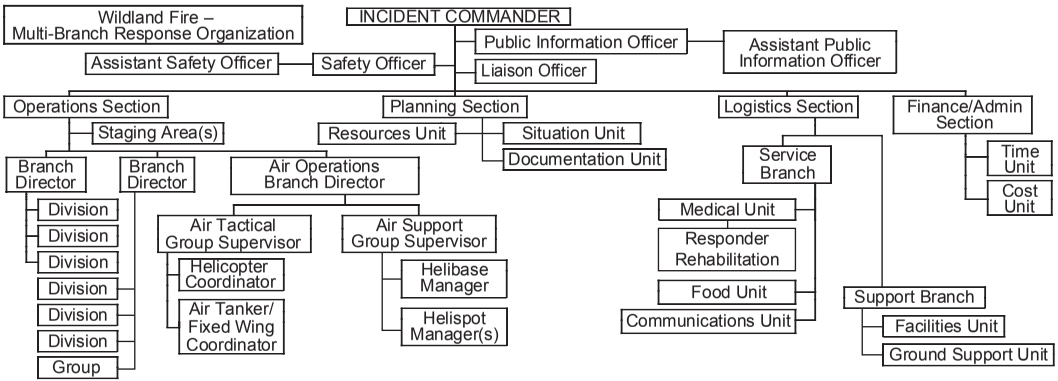
Wildland Fire Initial Attack Organization – Initial response resources are managed by the Initial Response Incident Commander (first arriving Company Officer or Command Officer) who will perform all Command and General Staff functions. Many small initial attack fires are controlled and extinguished with resource commitments at or slightly above this level. The span of control for this organization is at six to one, which is within safe guidelines of three-seven to one. Units are deployed to attack the fire with a single helicopter supporting the effort as directed by the Incident Commander. The Incident Commander has identified a Staging Area for use in the event additional resources arrive before tactical assignments for these resources are determined.



Wildland Fire Reinforced Response Organization – Additional resources have arrived. Span of control concerns as well as the need for tactical supervision have necessitated that the Incident Commander establish two Divisions with qualified Supervisors assigned. A Safety Officer is assigned to monitor incident operations for safety issues and to ensure corrective steps are taken. The Resources Unit is established to assist the Incident Commander with tracking resources, and a Logistics Section Chief is assigned to begin planning and implementing logistical support for the assigned resources and to plan for the support of additional resources should they be ordered.



Wildland Fire Extended Attack Organization – The Incident Commander has requested additional resources. Due to the complexity of the incident and the dynamic nature of the suppression activities, the Incident Commander has established the Operations Section Chief position. Additional aviation resources have arrived and are supervised by the Air Tactical Group Supervisor. The Incident Commander has established a Situation Unit to begin collecting incident data (mapping, weather, fire behavior predictions, etc.) to aid in the strategic and tactical planning as the incident progresses. Logistical needs have required upgraded communications support and a Medical Unit to handle responder injuries and rehabilitation.



Wildland Fire Multi-Branch Response Organization – This incident required multiple Divisions covering a large geographic area so Branches were established within the Operations Section. A full Air Operations Branch with Branch Director has been established. The Planning Section is further expanded to begin production of Incident Action Plans for multiple Operational Periods. To ensure that adequate safety measures are taken within the expansive incident, Assistant Safety Officers have been assigned to the Safety Officer. These Assistants can be assigned to individual Branch or Divisions as well as to monitoring activities at the Base. The Command Staff is now complete to assist the Incident Commander with incident information handling and to interface with assisting and cooperating agencies.

STRUCTURE FIRE ORGANIZATION DEVELOPMENT

INTRODUCTION

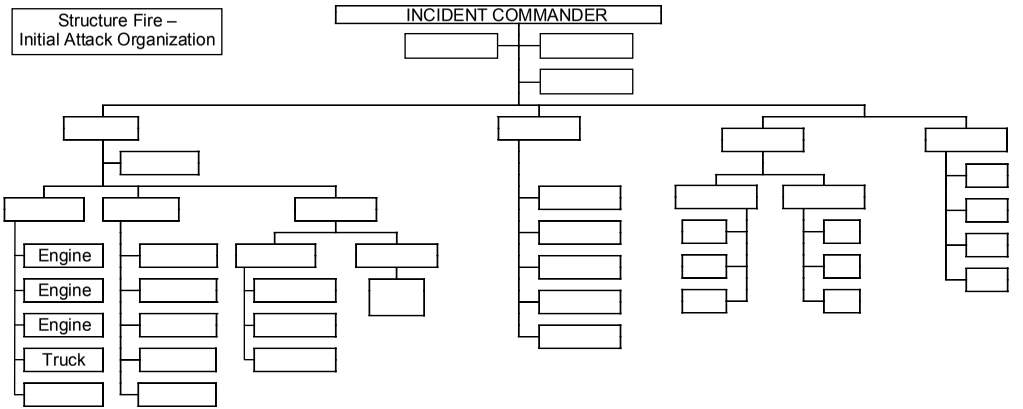
The following series of organizational charts depict examples of how the incident Command System can be used on fires involving structures. The charts show examples of ICS organizations for initial attack fires through incidents that grow to such size as to require very large organizational structures to manage the personnel and equipment assigned to these incidents.

Certain terms are used to identify the level of resource commitment or organizations structure. The terms associated with these levels are:

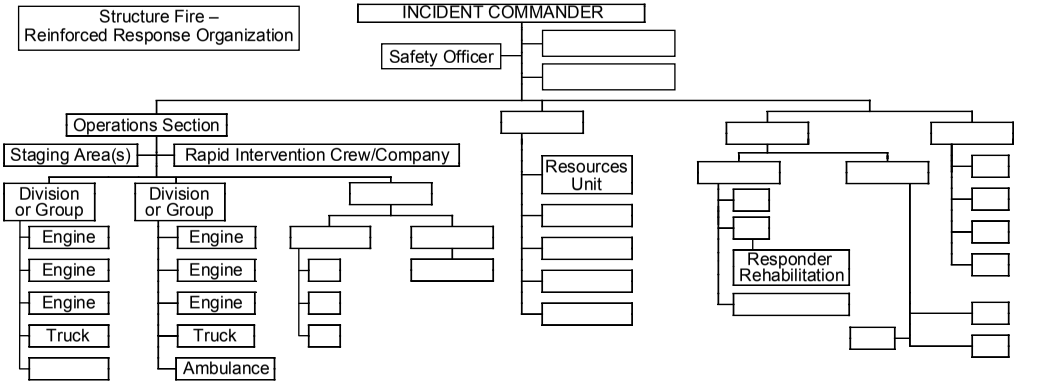
Initial Attack Organization – This example depicts an agency's initial response level (three Engines, one Truck Company, and a Command Officer) to a reported fire involving a building and how those resources might be organized to handle the situation. At the same time, the organization is designed to rapidly expand if necessitated by fire growth.

Reinforced Response Organization – This example depicts an expansion of the organizational structure to accommodate additional resources. In this case, a second alarm has been ordered and received along with resources to assist the Incident Commander and support the personnel on scene.

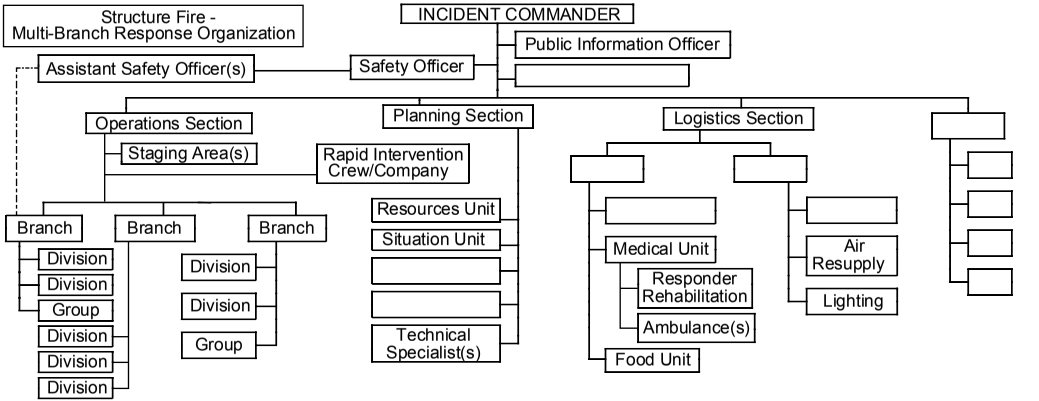
Multi-Branch Response Organization – This example depicts an organization that may be used for incidents that have grown in area to require multiple levels of management to accommodate span of control concerns and increased support for the number of personnel assigned to the incident.



Structure Fire Initial Attack Organization – This example depicts the assignment of three Engines, a single Truck Company and a Command Officer on a structural fire. The Incident Commander manages all elements of the response. The only formal ICS position identified is that of Incident Commander. If these resources can handle the incident and no escalation is anticipated, no further ICS development is advised.



Structure Fire Reinforced Response Organization – Additional suppression resources have arrived and are deployed. An Operations Section Chief is activated to manage the dynamic suppression efforts. Further development of the Operations Section could include either Divisions (Division A, B, C, and D, or Division 1, 2, and Roof for multi-story buildings) or Groups (Attack, Support, Rescue or Ventilation) or a combination of both (Division 1, 2 and 3 and a Salvage Group may be established). The Incident Commander has activated the Safety Officer position to monitor all incident activities for safety issues and to ensure corrective actions are taken. In addition, the IC has established a Staging Area and a Rapid Intervention capability. The Resources Unit will assist in resource tracking and a Responder Rehabilitation Unit is established.



Structure Fire Multi-Branch Response Organization – In this case, the incident is large enough that Branches have been developed and Assistant Safety Officers are established to either specific Branches or in individual Divisions. More elements of the Planning Section are activated as well as the Section Chief, the Situation Unit and Technical Specialists as needed. The Logistics Section is staffed with a Section Chief and elements necessary to support a long-term incident. A Public Information Officer is assigned to deal with inquiries from the media and local citizens.

ICS ORGANIZATION GUIDE

COMMAND

1. Incident Commander - one per incident, unless incident is multi-jurisdictional.
2. Multi-jurisdictional incidents establish Unified Command with each jurisdiction supplying an individual to represent agency in Unified Command Structure.
3. Incident Commander may have Deputy.
4. Command Staff Officer - one per function per incident.
5. Command Staff may have Assistants as needed or as required by statute or standard.
6. Agency Representatives report to Liaison Officer on Command Staff.

INCIDENT BASE RECOMMENDED MINIMUM PERSONNEL REQUIREMENTS

(PER TWELVE-HOUR OPERATIONAL PERIOD)

(If camps are established, the minimum personnel requirements for the Base may be modified or additional personnel may be added to support camps.)

	UNIT POSITION	SIZE OF INCIDENT (NUMBER OF DIVISIONS)				
		2	5	10	15	25
OPERATIONS	Operations Section Chief (OSC*)	One Per Operational Period				
	Branch Director (OPBD)		2	3	4	6
	Division/Group Supervisor (DIVS)	2	5	10	15	25
	Strike Team Leaders	As Needed				
	Task Force Leaders	As Needed				
	Air Operations Branch Director (AOBD)		1	1	1	1
	Air Tactical Group Supervisor (ATGS)	1	1	1	1	1
	Air Tanker/Fixed Wing Coordinator (ATCO)	As Needed				
	Helicopter Coordinator (HLCO)	As Needed				
	Air Support Group Supervisor (ASGS)	1	1	1	1	1
	Helibase Manager (HEB*)	One Per Helibase				
	Helispot Manager (HESM)	One Per Helispot				
	Staging Area Manager (STAM)	One Per Staging Area				
	Technical Specialist (THSP)	As Needed				
PLANNING	Planning Section Chief (PSC*)	One Per Incident				
	Resources Unit Leader (RESL)	1	1	1	1	1
	Status Recorders (SCKN)	1	2	3	3	3
	Check-In Recorders (SCKN)	As Needed				
	Technical Specialists (THSP)	As Needed				
	Situation Unit Leader (SITL)	1	1	1	1	1
	Field Observer (FOBS)		1	2	2	3
	Weather Observer (WOBS)	As Needed				
	GIS Technical Specialist (GISS)	As Needed				
	Damage Inspection Specialist (DINS)	As Needed				
	Aerial/Ortho Photo Analyst (ORPA)	As Needed				
	Display/Report Processor (DPRO)		1	1	1	2
	IR Equipment Operators	Two If Needed				
	Computer Terminal Operator		1	1	1	1
	Photographer (FOTO)			1	1	1
	Documentation Unit Leader (DOCL)		1	1	1	1
	Demobilization Unit Leader (DMOB)			1	1	1
	(Demobilization Recorders from Resources)	As Needed				

	UNIT POSITION	SIZE OF INCIDENT (NUMBER OF DIVISIONS)				
		2	5	10	15	25
LOGISTICS	Logistics Section Chief (LSC*)	One Per Incident				
	Service Branch Director (SVBD)	As Needed				
	Communications Unit Leader (COML)	1	1	1	1	1
	Incident Communications Manager (INCM)	1	1	1	1	1
	Message Center Operator (MCOP)		1	1	2	2
	Messenger		1	2	2	2
	Communications Technician (COMT)		1	2	4	4
	Medical Unit Leader (MEDL)	1	1	1	1	1
	Medical Unit Assistant(s)	As Needed				
	Fireline EMT/Paramedic (FEMT/FEMP)	As Needed				
	Responder Rehabilitation Manager	As Needed				
	Food Unit Leader (FDUL)		1	1	1	1
	Food Unit Assistant (each camp)	As Needed				
	Mobile Food Service		1	1	1	1
	Support Branch Director (SUBD)	As Needed				
	Supply Unit Leader (SPUL)		1	1	1	1
	Supply Unit Assistant (each camp)	As Needed				
	Ordering Manager (ODRM)			1	1	1
	Receiving/Distribution Manager (RCDM)		1	1	1	1
	Helpers		2	2	2	2
	Facility Unit Leader (FACL)		1	1	1	1
	Base Manager (BCMG)		1	1	1	1
	Camp Manager (each camp) (BCMG)	As Needed				
	Facility Maintenance Specialist (FMNT)		1	1	1	1
	Security Manager (SECM)		1	1	1	1
	Helpers		6	6	12	12
	Ground Support Unit Leader (GSUL)	1	1	1	1	1
	Equipment Manager (EQPM)		1	1	1	1
	Ground Support Assistant(s)	As Needed				
	Equipment Time Recorder (EQTR)		1	1	1	1
	Mechanic(s)	1	1	3	5	7
	Driver(s)	As Needed				
	Operator(s)	As Needed				
FIN–ADMIN	Finance/Administration Section Chief (FSC*)	One Per Incident				
	Time Unit Leader (TIME)		1	1	1	1
	Personnel Time Recorder (PTRC)		1	3	3	5
	Equipment Time Recorder (EQTR)		1	2	2	3
	Procurement Unit Leader (PROC)		1	1	1	1
	Compensation/Claims Unit Leader (COMP)		1	1	1	1
	Compensation For Injury Specialist (INJR)	As Needed				
	Claims Specialist (CLMS)	As Needed				
	Cost Unit Leader (COST)		1	1	1	1
	Cost Analyst			1	1	1
	Technical Specialist (THSP)	As Needed				

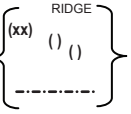
*Type 1 or 2 as appropriate

T-CARD COLORS AND USES		
Ten different color resource cards (T-cards) are used to denote kind of resources. The card colors and resources they represent are:		
KIND RESOURCE	CARD COLOR	FORM NUMBER
Engines	Rose	219-3
Handcrews	Green	219-2
Dozers	Yellow	219-7
Aircraft	Orange	219-6
Helicopter	Blue	219-4
Misc. Equip/Task Forces	Tan	219-8
Personnel	White	219-5
Location Labels	Gray	219-1
Property Record	White/Red	219-9
Transfer Tag	White Tag	219-9A

INCIDENT COMMAND SYSTEM FORMS		
Forms and records that are routinely used in the ICS are listed below. Those marked with an (*) are commonly used in written Incident Action Plans.		
	Incident Briefing	ICS Form 201
*	Incident Objectives	ICS Form 202
*	Organization Assignment List	ICS Form 203
*	Organization Assignment List Unified Command	ICS Form 203UC
*	Assignment List	ICS Form 204
*	Incident Radio Communications Plan	ICS Form 205
*	Medical Plan	ICS Form 206
	Incident Organization Chart	ICS Form 207
	Site Safety and Control Plan	ICS Form 208
	Check-In List	ICS Form 211
	Incident Demobilization Vehicle Safety Inspection	ICS Form 212
	Unit/Activity Log	ICS Form 214
	Incident Action Plan Safety Analysis – Generic/Wildland	ICS Form 215-AG or AW
	Operational Planning Worksheet – Generic/Wildland	ICS Form 215-G or W
	Incident Resource Projection Matrix	ICS Form 215-M
	Radio Requirements Worksheet	ICS Form 216
	Communications Resource Availability Worksheet	ICS Form 217A
	Support Vehicle Inventory	ICS Form 218
	Air Operations Summary	ICS Form 220
	Demobilization Checkout	ICS Form 221
	Tentative Release List	ICS Form 223
	Crew Performance Rating	ICS Form 224
	Incident Personnel Performance Rating	ICS Form 225
	Compensation for Injury Log	ICS Form 226
	Claims Log	ICS Form 227
	Contractor/Vendor Performance Evaluation	ICS Form 230
	WUI Placard	ICS Form 231

ICS MAP DISPLAY SYMBOLOGY

SUGGESTED FOR PLACEMENT ON BASE CAMP
MINIMUM RECOMMENDED

BLACK 

Highlighted Geographic
or
Manmade Features

BLACK
Completed Dozer Line

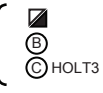
*Completed Line

Line Break Completed

RED

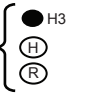
Fire Origin

*Hazard (Identify Type of Hazard, e.g., Power Lines)

BLUE 

*Incident Command Post
*Incident Base

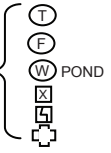
*Camp (Identify by Name)

BLUE 

*Helispot (Location and Number)
*Helibase

*Repeater/Mobile Relay

3 Stripes
You're Out
Life Hazard (red octagon [Stop Sign] with three white horizontal lines and a description of the hazard noted underneath)

BLUE 

Telephone

Fire Station

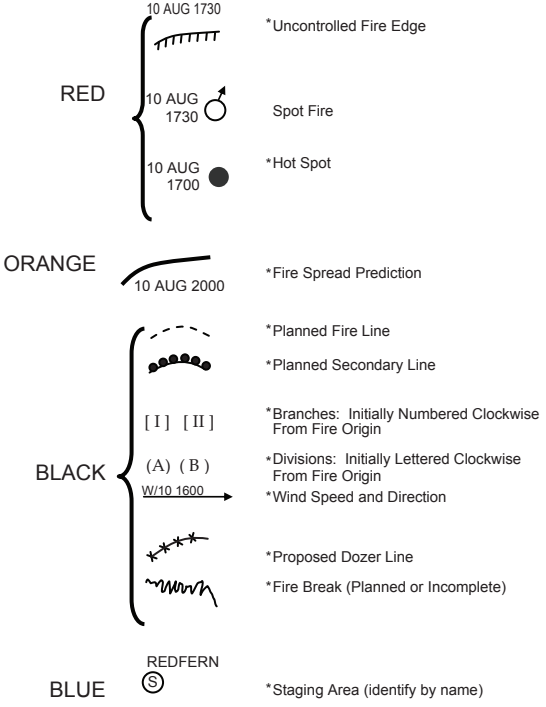
Water Source (Identify Type, i.e., Pond, Cistern, Hydrant)
or e.g., IR Ground Link
Mobile Weather Unit

*First Aid Station

* = To Be Used On Incident Briefing And Action Plan Maps (No Color)

ICS MAP DISPLAY SYMBOLOGY (Continued)

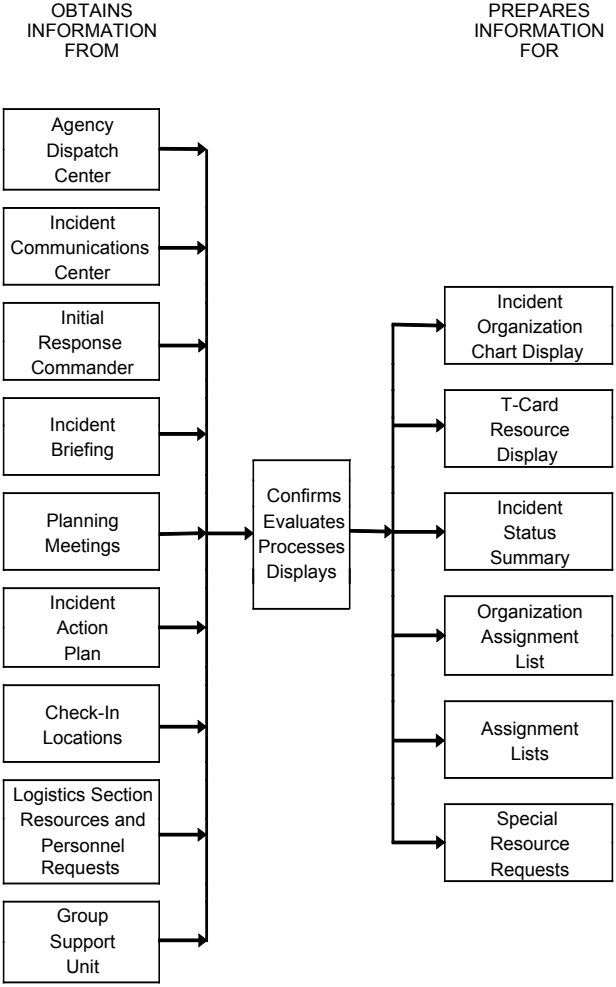
SUGGESTED FOR PLACEMENT ON OVERLAYS



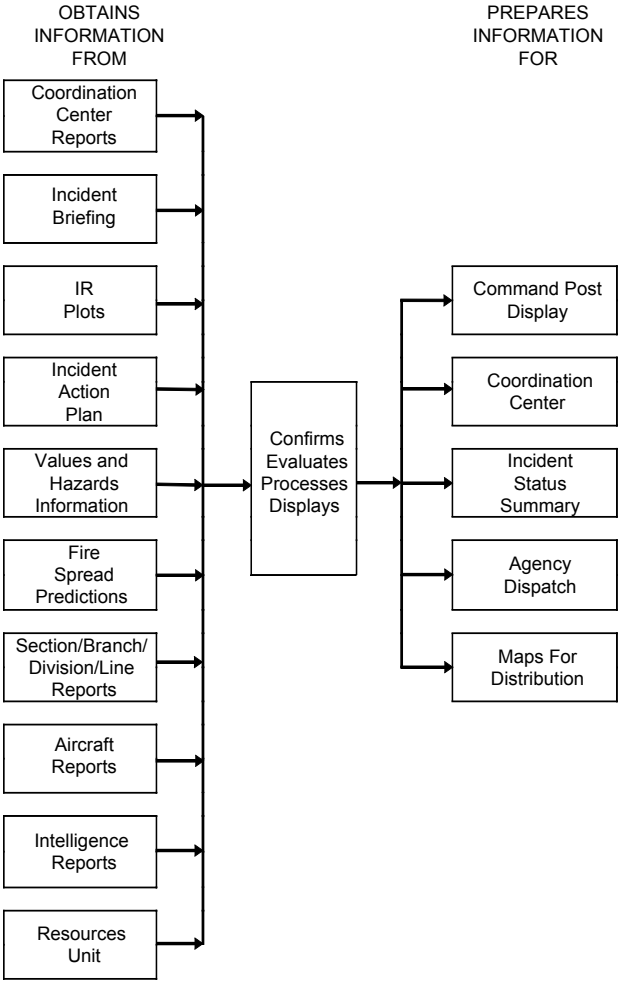
All overlays must contain registration marks. These may consist of identified road intersections, township/range coordinates, map corners, etc.

* = To Be Used On Incident Briefing And Action Plan Maps (No Color)

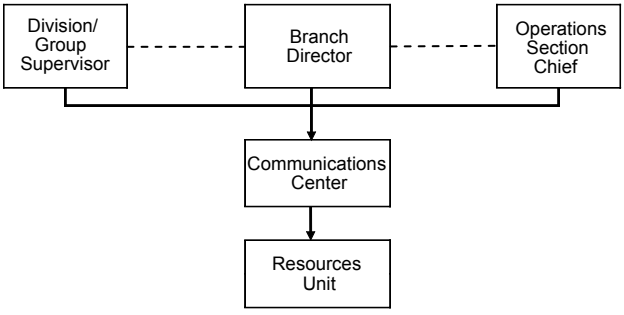
RESOURCES UNIT FUNCTIONS AND INTERACTIONS



SITUATION UNIT FUNCTIONS AND INTERACTIONS



RESOURCE STATUS CHANGE REPORTING



——— Status Reporting

- - - - - - Coordination

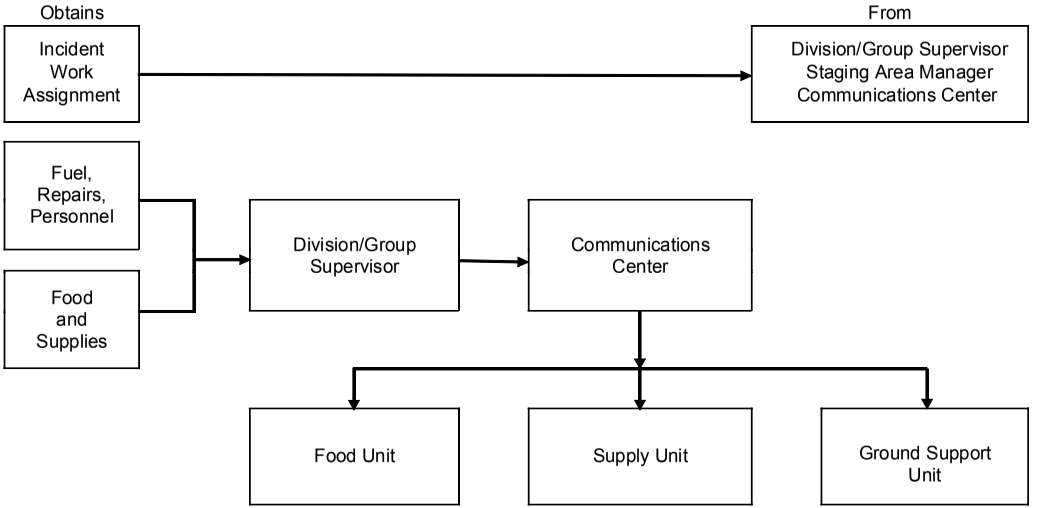
Report:

a. Resource changing status (assigned, available, out of service)

b. Resource moving between Divisions

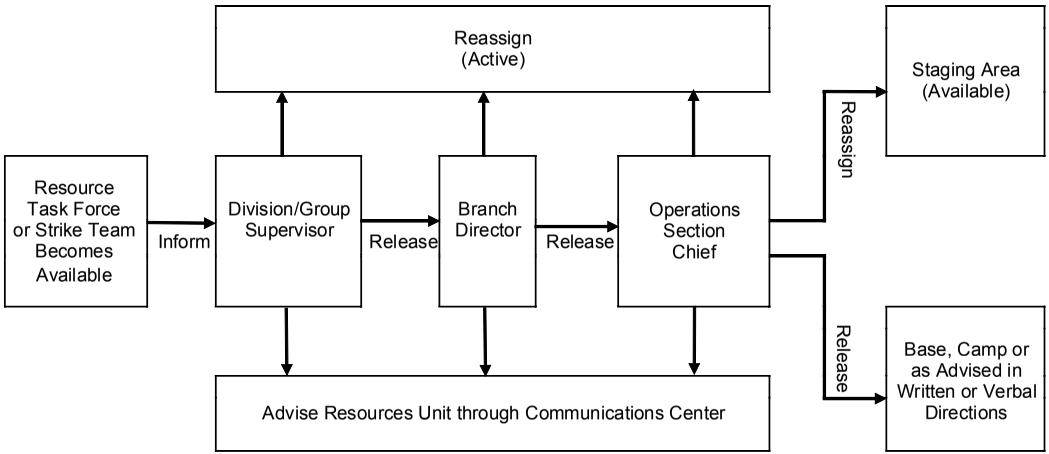
NOTE: Authority who approves the status change is responsible for reporting it to Resources Unit

STRIKE TEAM LEADER INTERACTIONS



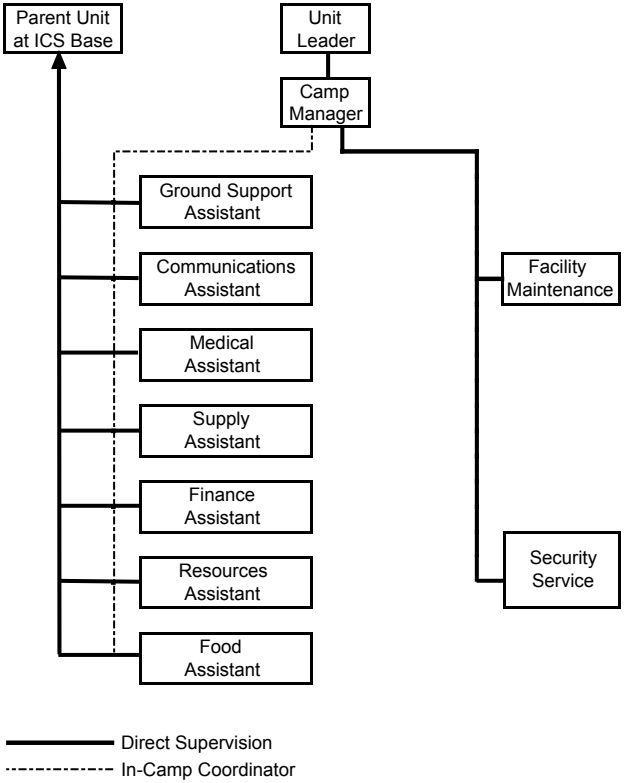
Note: Out-of-service resources interact directly with appropriate units for service and support

REASSIGN/RELEASE OF RESOURCES



NOTE: Authority who approves the status change is responsible for reporting it to Resources Unit.

CAMP ORGANIZATION AND REPORTING RELATIONSHIPS



The Camp Manager will provide direct supervision for all facility maintenance and security services at the Camp. Several of the functional unit activities that are performed at the Base may also be performed at the Camp(s). These functional units assigned to the Camp(s) will receive their direct supervision from their Unit Leaders at the Base. During the time that a Camp is established, the Camp Manager will be responsible to provide non-technical coordination for all Units operating within the Camp in order to ensure orderly and harmonious operation of the Camp and efficient use of all resources and personnel assigned to the Camp.

Notes

CHAPTER 13

RESOURCE TYPES AND MINIMUM STANDARDS

Contents 13-1
Primary Mobile Suppression Resources.....13-2
Support Resources 13-6
Strike Team Types and Minimum Standards.....13-7

PRIMARY MOBILE SUPPRESSION RESOURCES (Minimum ICS Standards)									
RESOURCE	RADIO CALL	COMPONENTS	TYPES 1	2	3	4	5	6	7
Engine Company	Engine Telesquirt*	Pump minimum flow GPM	1,000	500	150	50	50	50	10
		Tank minimum capacity Gallons	300	300	500	750	400	150	50
		at rated pressure (psi)	150	150	250	100	100	100	100
		Hose 2.5" Feet	1,200	1,000	-	-	-	-	-
		Hose 1.5" Feet	500	500	1,000	300	300	300	-
		Hose 1" Feet	-	-	500	300	300	300	200
		Ladder per NFPA 1901	Yes	Yes	-	-	-	-	-
		Master Stream 500 minimum GPM	Yes	-	-	-	-	-	-
		Pump and Roll	-	-	Yes	Yes	Yes	Yes	Yes
		Maximum GVWR (lbs)	-	-	-	-	26,000	19,500	14,000
		Personnel minimum	4	3	3	2	2	2	2
*Engine with elevated stream capability, specify when requested.									
Truck Company	Truck	Aerial Feet (specify platform or ladder)	75	50					
		Elevated Stream GPM	500	500					
		Ground Ladders Feet	115	115					
		Personnel	4	4					
Tactical Water Tender	Water Tender*	Pump GPM	250	250					
		Water Tank Gallons	2,000	1,000					
		Personnel	2	2					
*Pump and roll capability/foam proportioner must be special ordered.									

PRIMARY MOBILE SUPPRESSION RESOURCES (Minimum ICS Standards) Continued									
RESOURCE	RADIO CALL	COMPONENTS	TYPES 1	2	3	4	5	6	7
Medical/Non Transport	Rescue, Squad, Medic Engine	Non Transport, capability and personnel determined by local EMS authority	ALS	BLS					
Medical/ Transport	Ambulance, Medic	Transport, capability and personnel determined by local EMS authority	ALS	BLS					
Bulldozer	Dozer	Size Horse Power Operator Example(s)	Heavy 200 1 D-7, D-8	Medium 100 1 D-5, D-6	Light 50 1 D-4				
Bulldozer Tender	Dozer Tender	Fuel – 100 Gallons							

PRIMARY MOBILE SUPPRESSION RESOURCES (continued)

RESOURCE	RADIO CALL	COMPONENTS	TYPE 1	TYPE 2
Hand Crew	Crew #	*Personnel, Equipment, and Transportation	• Highest training level • No use restriction • Fully mobilized • Highest experience level • Fully equipped • Permanently assigned supervision State CAL FIRE (13) Fly Crew (8) Federal Hotshot (18) Regular (18) Fly Crew (10) Local Government Inmate (12) Fly Crew (8) Paid (10) Hotshot (18)	• Minimum training or • Some use restriction or • Not fully mobilized or • Moderate experience or • Minimum equipment or • No assigned supervision Federal (Blue Card) (18) State (12)

*Indicates minimum number of crew personnel including supervision.

PRIMARY MOBILE SUPPRESSION RESOURCES (continued)

RESOURCE	RADIO CALL	COMPONENTS	TYPES 1	2	3	4
Fire Boat	Boat	Pumping Capability GPM	5,000	1,000	250	
Foam Tender	Foam	Class B Foam Gallons Specify % Concentrate (1%, 3%, etc.)	500	250		
Air Tanker	Tanker	Gallons Examples	3,000 C-130, P-3	1,800 SP2H, P2V	800 S-2T	200 SEAT
Helicopters	Copter	Seats, including pilot Card weight capacity lbs. Gallons Examples	16 5,000 700 Bell 214	10 2,500 300 Bell 204, 205, 212	5 1,200 100 Bell 206	3 600 75 Hiller 12E3T
Helitanker	Helitanker	- Fixed Tank - Air tanker Board Certified - 1,000 Minimum Gallon Capacity				
Helicopter Tender	Helitender	Fuel Equipment				
Helitack Crew	Helitack	Personnel (3) Equipment Transportation				
Aircraft Rescue Firefighting (ARFF)	ARFF	Class B Foam w/proportioner and pump				

SUPPORT RESOURCES

RESOURCE	RADIO CALL	COMPONENTS	TYPES 1	2	3
Breathing Apparatus Support	Breathing Support	Filling Capability	Compressor	Cascade	
Crew Transport	Crew Transport	Passengers	30	20	10
Field Mobile Mechanic	Repair	Repair Capability	Heavy Equipment	Light Equipment	
Food Dispenser Unit	Food Dispenser	Servings/Meal	150	50	
Mobile Kitchen Unit	Mobile Kitchen	Servings/Meal	1,000	300	
Fuel Tender	Fuel Tender	Fuel Gallons: Specify Gas, Jet Fuel, Diesel, Etc.	1,000	100	
Heavy Equipment Transport	Transport	Capacity Examples:	Heavy D-7, D-8	Medium D-6	Light D-4
Support Water Tender	Water Tender	Pump GPM Water Tank Gallons Personnel	300 4,000 1	200 2,500 1	200 1,000 1
Illumination Unit	Light	Lighting Units (500 watts each) Extension Cord Feet Specify: Mounted or Portable	6 1,000	3 500	
Mobile Communication	Comm	• Consoles/ Workstations • Frequency Capability • Power Source • Telephone Systems • Personnel	2 Multi Range*, Programmable Internal 6 Trunk/16 Extension Lines 2	2 Multi Range*, Programmable Internal 2	1 Single Range**, Programmable External 1
* Multi Range: 150-174 MHz, 450-470 MHz, 800 MHz (Simplex and Repeated) **Single Range: 150-174 MHz only					
Portable Pump	-	Pumping Capacity GPM	500	250	50
Portable Repeater	-	Frequency Capability*			
*When requesting resource, need to specify frequency requirements.					
Power Generator	-	Wattage Capacity Specify: Mounted or Portable	10,000	3,000	
Refrigeration Unit	Refer	Box Length Feet	24	12	
Utility Transport	Utility		Over 1 Ton	1 Ton and Under	

STRIKE TEAM TYPES AND MINIMUM STANDARDS

Kind	Strike Team Types	Number/Type	Minimum Equipment Standards										Minimum Personnel		
			Pump Capacity GPM	Tank Capacity Gallons	PSI	2.5" Hose Feet	1.5" Hose Feet	1" Hose Feet	Ladder NFPA 1901	Master Stream 500 GPM	Max. GVWR Lbs.	Pump and Roll	Strike Team Leader	Per Single Resource	Total Personnel
ENGINES	A	5 – Type 1	1,000	300	150	1,200	500	-	Yes	Yes	-	-	1	4	21
	B	5 – Type 2	500	300	150	1,000	500	-	Yes	-	-	-	1	3	16
	C	5 – Type 3	150	500	250	-	1,000	500	-	-	-	Yes	1	3	16
	D	5 – Type 4	50	750	100	-	300	300	-	-	-	Yes	1	2	11
	E	5 – Type 5	50	400	100	-	300	300	-	-	26,000	Yes	1	2	11
	F	5 – Type 6	50	150	100	-	300	300	-	-	19,500	Yes	1	2	11
	FF	5 – Type 7	10	50	100	-	-	200	-	-	14,000	Yes	1	2	11
CREWS	G	Handcrew Combinations consisting of a minimum of 26 persons (Do not mix Type 1 and Type 2 crews)	Type 1 Handcrews have no restrictions on use										1	-	27
	H		Type 2 Handcrews may have use restrictions										1	-	27
DOZERS	K	2 – Type 1 1 – Dozer Tender	Heavy Dozer Minimum 200 HP (D-7, D-8 or equivalent)										1	1 1	4
	L	2 – Type 2 1 – Dozer Tender	Medium Dozer Minimum 100 HP (D-5, D-6 or equivalent)										1	1 1	4
	M	2 – Type 3 1 – Dozer Tender	Light Dozer Minimum 50 HP (D-4 or equivalent)										1	1 1	4

Notes

CHAPTER 14

WILDLAND URBAN INTERFACE (WUI) STRUCTURE PROTECTION

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INTRODUCTION

Wildland firefighting by itself is very challenging and adding structures and other improvements into the equation greatly increases the complexity. Over the last several decades an expansion of communities, homes and other improvements into wildland areas has created a significant challenge for the fire service agencies responsible for providing fire protection in those areas.

WUI fires often overtax the local fire agency resulting in the activation of mutual aid and automatic aid agreements to augment jurisdictional resources. Nearly every WUI fire includes responses from a variety of wildland and municipal fire agencies resulting in the need for clear text and common terminology among emergency responders. This chapter on WUI operations and structure protection is designed to provide common terminology and operating principles for statewide responders. It also includes guidelines and checklists to complement and enhance first responders differing levels of training and experience.

This document describes tactical actions that emphasize firefighter safety during structure protection assignments. Successful WUI firefighting operations are accomplished by selecting sound strategies supported by effective tactical actions that keep firefighters safe, protect the public, and minimize property loss.

Firefighters can prepare themselves for structure protection activities by developing a sound understanding of the wildland structure environment, fire behavior and forecasting, the Risk Management process, tactical terms and associated tactical actions. An understanding of all these components will allow firefighters to safely mitigate the fire's impact upon the values they are charged with protecting.

MODULAR DEVELOPMENT

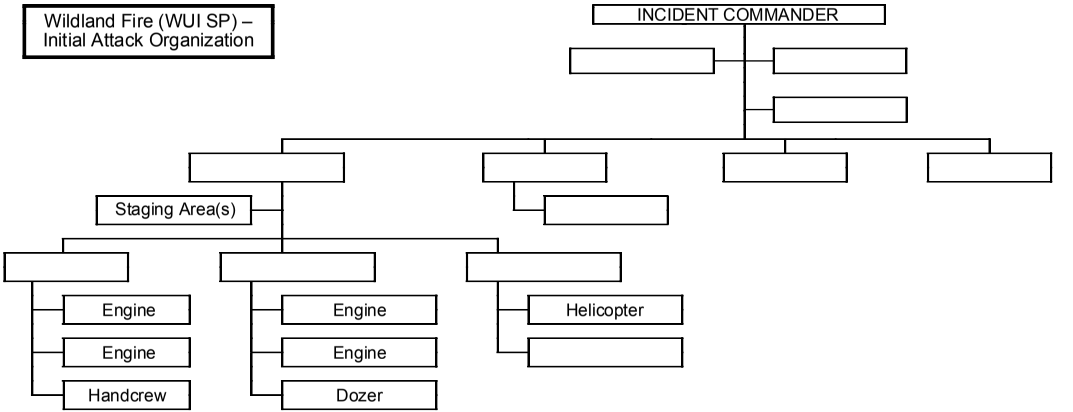
A series of examples of modular development are included to illustrate one method of expanding the incident organization.

Initial Attack Organization: Initial response resources are managed by the Incident Commander (first arriving Company Officer or Command Officer) who will perform all Command and General Staff functions. The span of control for the organization is within safe guidelines of three-seven to one. Resources are deployed to attack the fire and protect structures with a single helicopter supporting the effort as directed by the Incident Commander. The Incident Commander has identified a Staging Area for use in the event additional resources arrive before tactical assignments for these resources are determined.

Reinforced Response Organization: Additional resources have arrived. Span of control concerns as well as the need for tactical supervision have necessitated that the Incident Commander establish two Divisions with qualified Supervisors assigned. Division Supervisors are responsible for all objectives within their geographic area, including perimeter control and structure protection. A Safety Officer is assigned to monitor incident operations for safety issues and to ensure corrective steps are taken. The Resources Unit is established to assist the Incident Commander with tracking resources, and a Logistics Section Chief is assigned to begin planning and implementing logistical support for the assigned resources and to plan for the support of additional resources should they be ordered.

Extended Attack Organization: The Incident Commander has requested and received additional resources. Due to the complexity of the incident and the dynamic nature of the suppression activities, the Incident Commander has established a Structure Protection Group and an Operations Section Chief. As the Structure Protection Group conducts activities within a specific geographic area, the Structure Protection Group Supervisor must coordinate with the respective Divisions. Additional aviation resources have arrived and are supervised by the Air Tactical Group Supervisor. The Incident Commander has established a Situation Unit to begin collecting incident data (mapping, weather, fire behavior predictions, etc.) to aid in the strategic and tactical planning as the incident progresses. Incident complexity has required consideration for establishing the Communications Unit and Medical Unit.

Multi-Branch Response Organization: This incident requires multiple Divisions covering a large geographic area so Branches are established within the Operations Section. One Branch Director has established a Structure Protection Group, while the other Branch Director is handling structure protection with assigned Division resources. A full Air Operations Branch has been established. The Planning Section is further expanded to begin production of Incident Action Plans for multiple Operational Periods. The Command Staff is now complete to assist the Incident Commander with needed information handling and to interface with assisting and cooperating agencies.



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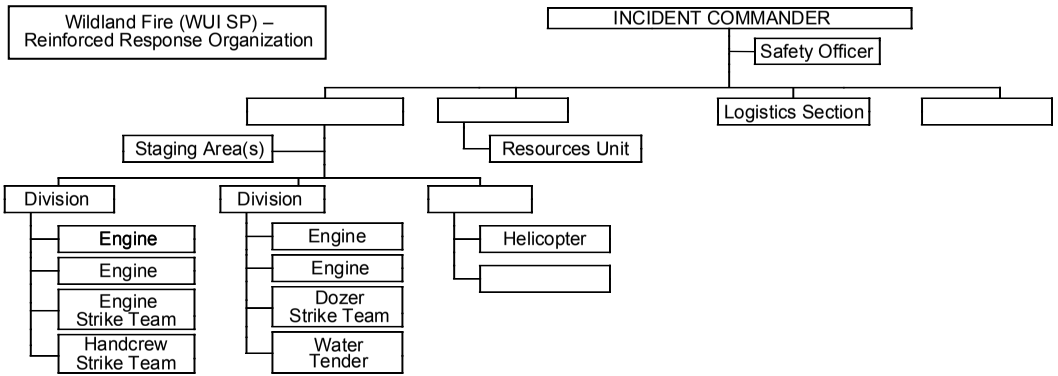
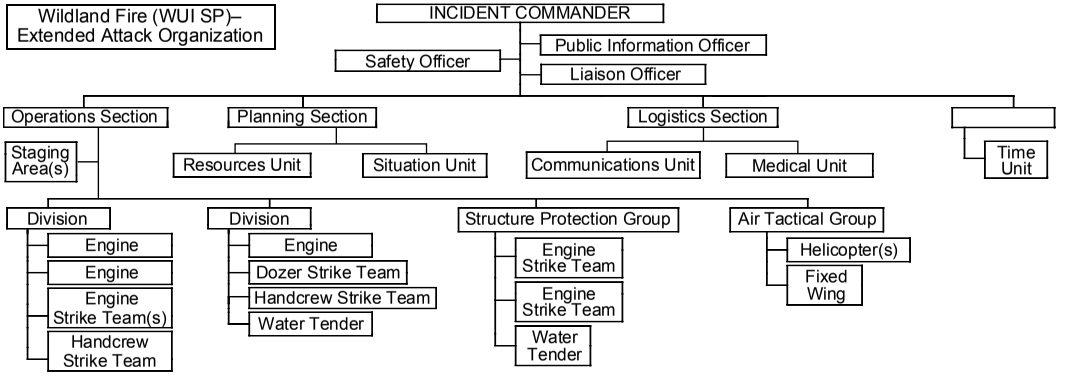


WUI-SP Reinforced Response Organization: Additional resources have arrived. Span of control concerns as well as the need for tactical supervision have necessitated that the Incident Commander establish two Divisions with qualified Supervisors assigned. Division Supervisors are responsible for all objectives within their geographic area, including perimeter control and structure protection. A Safety Officer is assigned to monitor incident operations for safety issues and to ensure corrective steps are taken. The Resources Unit is established to assist the Incident Commander with tracking resources, and a Logistics Section Chief is assigned to begin planning and implementing logistical support for the assigned resources and to plan for the support of additional resources should they be ordered.



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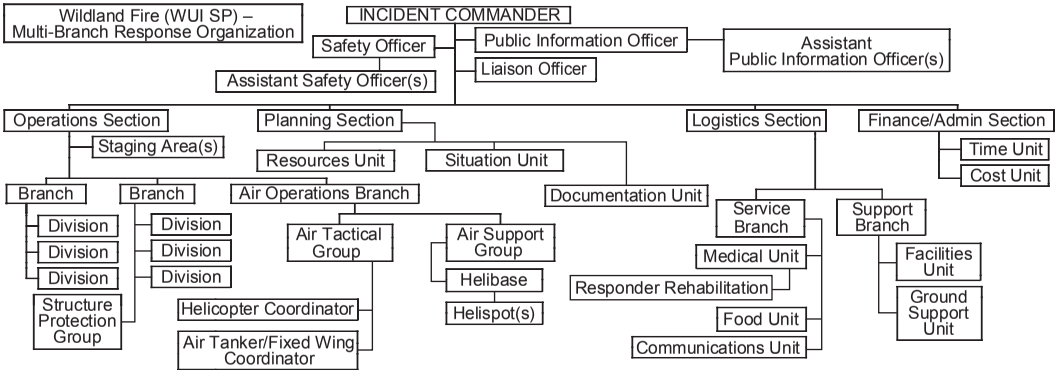

WUI SP - Multi-Branch Response Organization: This incident requires multiple Divisions covering a large geographic area, so Branches are established within the Operations Section. One Branch Director has established a Structure Protection Group while the other Branch Director is handling structure protection with assigned Division resources. A full Air Operations Branch has been established. The Planning Section is further expanded to begin production of Incident Action Plans for multiple Operational Periods. The Command Staff is now complete to assist the Incident Commander with needed information handling and to interface with assisting and cooperating agencies.

LEADERS INTENT

The first and foremost intent during structure protection is to keep firefighters and the public safe. Secondly, once that safety can be ensured, then we can aggressively work towards keeping the wildand fire away from structures and communities.

The development of all strategies and tactics should utilize the Risk Management process to ensure firefighter safety. Protecting structures from a wildland fire will not be possible in every situation. Risk to firefighters, fire behavior and availability of resources will dictate the strategies that will be used.

When there is a need to engage in structure protection, firefighters will ensure that they are taking safe, appropriate, and reasonable tactical actions for which they are trained and equipped.

WILDLAND STRUCTURE ENVIRONMENT

When making decisions on structure protection, you must consider the overall environment where the structures are located. There are two basic structure environments in the wildland.

Interface – a condition where structures abut the wildland:

- There is a clear line of demarcation between the structures and the wildland fuels along roads or back fences.
- Usually identified as housing tracts or developments adjacent to a wildland area.
- There is a greater potential for house-to-house ignition.

Intermix – a condition where structures are scattered throughout a wildland area:

- There is no clear line of demarcation; the wildland fuels are continuous outside of and within the developed area.
- Each structure must be assessed independently.
- Usually more complex triage than an interface condition.
- Usually more complex to defend than an interface condition.
- Usually requires a higher ratio of engines to structures than an interface condition.

DEFINITIONS

Safety Zone – a preplanned area of sufficient size and suitable location that is expected to protect fire personnel from known hazards without using fire shelters.

Temporary Refuge Area (TRA) – a preplanned area where firefighters can immediately take refuge for temporary shelter and short-term relief without using a fire shelter in the event that emergency egress to an established Safety Zone is compromised. Examples: lee side of structure, inside of structure, large lawn or parking area, cab of apparatus.

Note: Although Safety Zones and viable Escape Routes shall always be identified in the WUI environment, they may not be immediately available should the fire behavior increase unexpectedly, Often a Temporary Refuge Area (TRA) is more accessible in the WUI environment. A TRA will provide temporary shelter and short-term relief from an approaching fire without the use of a fire shelter and allow the responders to develop an alternate plan to safely survive the increase in fire behavior.

Always have an exit strategy:

- Employ tactical maneuver to avoid heat injury, move away from the fire.
- Move to a Temporary Refuge Area.
- Withdraw along an Escape Route.
- Move into a Safety Zone.

FIRE BEHAVIOR FORECASTING

Firefighter and public safety is the first priority in every fire management activity. Using the Standard Firefighting Orders, firefighters are guided to make a fire behavior forecast that considers the fire's potential at the time of contact with the structure. If at any time the risk to firefighters is determined to be too great, an alternative action should be selected.

It is important to remember that fire conditions can change very quickly, so constant observation and reassessment is necessary; the tactic selected may need to change. Tactical maneuver or agility is essential to ensure firefighter safety.

Use standardized references to validate your fire behavior forecast:

- Incident Response Pocket Guide (IRPG)
- Look Up, Look Down, Look Around indicators
- Extreme Fire Behavior indicators (spotting, crowning, rate of spread)
- Campbell Prediction System (CPS)
- Know what the fire is doing at all times in order to maintain an accurate fire behavior forecast.
- Know current weather conditions and forecasts. Consider wind speed, direction, relative humidity, temperatures.

- Observe current burning activity in order to predict flame length and intensity.
- Consider local weather factors and fire history.
- Evaluate for wind shifts, micro-climates, weather indicators and hazards.
- Evaluate surrounding fuels for type, height, continuity and conditions.

STRUCTURE PROTECTION SIZE-UP

Evaluate the location of the structures and surrounding area with the forecasted fire behavior in mind:

- Is wind and slope in alignment with topography leading to the structure?
- Where is the location of the structure on the slope, canyon bottom, mid-slope or ridge top?
- Is the structure in or near a chute, chimney, saddle, or other topographic hazard?

STRUCTURE TRIAGE CATEGORIES

Select the appropriate structure triage category based on the forecasted fire behavior, the surrounding area terrain and any defensible space:

1. **Not Threatened:** Safety Zone and TRA are present and construction features or defensible space make it unlikely that the structure will ignite during initial fire front contact.

2. **Threatened Defensible:** Safety Zone and TRA are present and construction features, lack of defensible

space, or other challenges requires firefighters to implement structure protection tactics during fire front contact.

3. **Threatened Non-Defensible:** Either there is no Safety Zone or TRA present and/or the structure has challenges that do not allow firefighters to safely commit to stay and protect the structure during fire front contact.

STRUCTURE TRIAGE GUIDELINES

Consider the following factors during structure triage:

- Forecasted fire behavior and intensity – the greater the intensity, the greater the defensible space required.
- Safety Zones should be identified and designated based upon forecasted fire behavior.
- Temporary Refuge Areas (TRA) should be preplanned and identified in the event that an emergency egress to an established Safety Zone is compromised.
- Is there adequate space to park your apparatus safely based upon forecasted fire behavior?
- Do you have adequate lookout and communication capability?
- Evaluate the proximity of the fuels and forecasted flame lengths in relation to the structure; is there defensible space?
    - What is the position of the structure on the slope relative to fire spread?
    - Avoid narrow canyon bottoms, mid-slopes with fire below, or narrow ridges near chimneys and saddles.

- Are there narrow roads, unknown bridge limits and septic tank hazards?
- Are there ornamental plants and combustible debris next to the structure?
- Does the structure have open vents, eaves, decks, and other ember traps?
- Are there power lines adjacent to the structure?
- Is there an adequate water supply to support the necessary flow rates and GPM output?
- Did the property owners remain onsite?
- Does the structure have a flammable roof and/or siding (Wood roof and siding and/or vinyl siding, along with inadequate defensible space, may make the structure impossible to protect.)?
- Is there adequate time and available resources to protect the structure (If you do not have time to position resources or there are a lack of resources, then is may be impractical to protect the structure.)?

STRUCTURE PROTECTION GUIDELINES

Personal Protective Equipment (PPE):

- Structure protection tactics can be undertaken utilizing standard wildland PPE.
- If the structure becomes involved in fire, and a decision is made to extinguish the fire, utilize the appropriate Structure Fire PPE including SCBA's as required.
- **DO NOT** enter a structure to extinguish a fire inside the structure unless you are trained, equipped, and authorized.
- **DO NOT** base your decision to remain at a structure and/or the safety of your personnel on the use of SCBA's.

Equipment Placement:

- Identify Escape Routes, Safety Zones and TRA's and make them known to all personnel.
- STAY MOBILE and wear all of your PPE.
- Back equipment in for a quick escape.
- Park in a cleared area (watch for overhead hazards).
- Protect your equipment (park behind the structure, placing the structure between equipment and fire front, be aware of spot fires occurring behind you).
- Watch for hazards (drop-offs, pot holes, above-ground fuel storage, chemicals, and septic tanks).
- Keep egress routes clear.
- Have an engine/personnel protection line charged and readily available.
- Avoid long hose lays.
- Try to keep sight contact with all personnel.

Water Use Guidelines:

- Keep at least 100 gallons of water reserve in your tank.
- Top off your tank at every opportunity, use a garden hose.
- Draft from a swimming pool, hot tub, or fishpond.
- Stay mobile. Be aware that hydrants may not always work if the system is electrically powered and power is lost in the area.
- Conserve water, avoid wetting down an area.
- Apply water only if it controls fire spread or significantly reduces the heating of the structure being protected.
- Keep fire out of the heavier fuels.
- Extinguish fire at its lowest intensity, not when it is flaring up.
- Knock down fire in the lighter fuels.
- Have enough water to last for the duration of the main heat wave and to protect personnel.

Class A Foam/Gel Use Guidelines:

- Direct Attack with a Class A Foam – apply to the base of flame.
- Apply Class A Foam to structure (roof and siding) ten to fifteen minutes before fire arrives.
- Foam or gel the structure and the vegetation immediacy surrounding the structure.

Preparing the Structure:

- Determine if residents are home. If so, advise them to leave.
- For roof access, place the owner's ladder at a corner of the structure on the side with the least fire threat and away from the power drop.
- Clear the area around above-ground fuel tanks, shutting off tanks.
- Place combustible outside furniture inside the structure.
- Close windows and doors, including garage, leaving unlocked.
- Remove combustibles immediately next to the structure and scatter firewood.
- Construct a fire line around out-buildings, power poles and fuel tanks.
- Remove vegetation from the immediate area of the structure.
- Have garden hose(s) charged and placed strategically around the structure for immediate use.
- MAY USE THE STRUCTURE AS A TEMPORARY REFUGE AREA (TRA)

STRUCTURE PROTECTION STRATEGIES

The Incident Commander or Operations Section Chief (when assigned) is responsible for establishing the strategy. The strategy should reflect a "general" plan that is broad in scope and provides direction for accomplishing the incident objectives. For example, the strategy for protecting structures on the right flank of a wildland urban interface fire (WUI) may be to keep the fire away from homes using a coordinated direct attack with aircraft, dozers and crews. At the same time, the strategy for controlling the left flank on the same fire may be to develop an indirect attack, utilizing a small Task Force to burn out along a series of small dirt roads and create a line that will stop the fire from spreading. The strategy must reflect a realistic approach for meeting the objectives for all portions of the fire.

The strategy must take into consideration the numbers and types of resources necessary to accomplish the incident objectives and the reflex time it will take to have them in position. A strategy that requires a large number of resources to execute the plan will fail if the needed resource cannot arrive in a timely fashion.

The strategy is also subject to change due to changes in weather, fire behavior, resource availability and any change with the objectives. For example, firefighters planning to burn out from a road system a mile from the fire front may be forced to change to a direct suppression strategy if a forecast calling for cool weather with accompanying moisture is predicted to arrive before the burnout can be executed.

STRUCTURE PROTECTION TACTICS

Where the strategy gives firefighters a general plan, tactics are the specific actions firefighters will take to accomplish the incident objectives. The choice of which tactic to use can come in the form of direction from the Incident Commander or the Operations Section Chief, or it may be a decision made by the unit or resource supervisor.

The chosen tactical action must be capable of stopping the advance of the fire or preventing the fire from damaging property and doing so without incurring injuries to firefighting personnel. This means that when choosing a tactical action or when making a tactical plan, it is very important to know what the fire behavior will be at the time firefighters engage the fire.

Making an accurate fire behavior forecast in advance of the fire's arrival is the wildland firefighter's greatest challenge. An accurate fire behavior forecast is difficult to make with absolute certainty, but it serves as the basis for determining if a tactical action will be effective and safe.

Recognizing that there is always the potential for error in our fire behavior forecast means that we must compensate for the uncertainties by having alternative actions (tactical maneuver) built into the plan. The key point here is to never get locked into a single plan of action.

TACTICAL MANEUVER

Tactical maneuver implies movement or purposeful reaction to change. Tactical maneuver builds *agility* into a tactical plan by allowing resources to work and move around in a hazardous

environment without injury, while remaining effective. Tactical maneuver is most effective when potential changes to the primary plan have been identified and firefighter's reactions to those changes are planned out.

Firefighters must be prepared to utilize tactical maneuver when changing from structure protection mode (defensive) to suppression mode (offensive) when fire behavior allows. It is imperative to take advantage of situations that allow for firefighters to take perimeter control actions and suppress the fire.

Tactical planning must be developed in conjunction with anticipated changes in the fire environment or fire behavior. Tactical maneuver (*agility*) is essential to ensure firefighter safety since legitimate Safety Zones are not always immediately present in the WUI. Firefighters should focus on *agile tactical solutions* to unanticipated changes as opposed to a rigid and inflexible siege approach. It is imperative that contingency planning be a part of every tactical plan. The tactic selected may need to change to compensate for a change in the fire's behavior. Always have a way out!

Tactical maneuver can be an offensive or defensive action. Be prepared to move decisively during lulls in fire activity or take shelter in Temporary Refuge Areas or Safety Zones when the fire is active. Examples of tactical maneuver would be an engine crew going from one structure to another, moving with the fire, or staying behind a house when the fire is hitting hard and moving into full suppression mode when the fire subsides. This requires a continuous assessment of the fire and it's potential. Crews must continually identify Temporary Refuge Areas and Escape Routes to Safety Zones.

STRUCTURE PROTECTION TACTICAL ACTIONS

After making a fire behavior forecast and triaging the assigned structures, responders must now implement the necessary tactics to defend the structure from the advancing fire front. Supervisors must keep in close communication with those they supervise and adjoining forces in the area. The following are the seven tactical actions available to structure protection resources:

- **CHECK AND GO**
- **PREP AND GO**
- **PREP AND DEFEND**
- **FIRE FRONT FOLLOWING**
- **BUMP AND RUN**
- **ANCHOR AND HOLD**
- **TACTICAL PATROL**

CHECK AND GO

"Check and Go" is a rapid evaluation to check for occupants requiring removal or rescue:

- Structure Triage Category – Threatened Non-Defensible
- The tactic is most appropriate when there is no Safety Zone or TRA present and the forecasted fire spread, intensity, and the projected impact time of the fire front prohibit resources from taking preparation action to protect the structure.
- Complete a rapid evaluation to check for occupants at a structure, evaluate life threat and assist in evacuation.
- Used when fire spread, intensity, lack of time or inadequate defensible space prohibit firefighting resources

from safely taking action to protect the home when the fire front arrives.
- Evaluate the structure for follow-up action when additional resources become available, the fire front passes or fire behavior intensity is reduced.

PREP AND GO

"Prep and Go" implies that some preparation of the structure may be safely completed prior to resources leaving the area:
- Structure Triage Category – Threatened Non-Defensible
- A tactic used when a Safety Zone and TRA are not present and/or when fire spread and intensity are too dangerous to stay in the area when the fire front arrives, but there is adequate time to prepare a structure for defense ahead of the fire front.
- Utilized for structures where potential fire intensity makes it too dangerous for fire resources to stay when the fire front arrives.
- There is some time to prepare a structure ahead of the fire; resources should engage in rapid, prioritization fire protection preparations and foam the structure prior to leaving.
- Resources should leave with adequate time to avoid the loss of Escape Routes.
- Advise residents to leave and notify supervisors of any residents who choose to stay so that you can follow up on their welfare after the fire front passes.
- As with Check and Go, Prep and Go is well suited for engine strike teams and task forces.

PREP AND DEFEND

"Prep and Defend" is a tactic used when a Safety Zone and TRA are present and adequate time exists to safely prepare a structure for defense prior to the arrival of the fire front:

- Structure Triage Category – Threatened Defensible
- An ideal multiple resource tactic especially in common neighborhoods where efforts may be coordinated over a wide area. A tactic used when it is possible for fire resources to stay when the fire front arrives. Fire behavior MUST be such that it is safe for firefighters to remain and engage the fire.
- Adequate Escape Routes to a Safety Zone must be identified. A Safety Zone or **TRA** must exist on site.
- Firefighters must be vigilant to sudden changes in fire intensity and be prepared to move to the TRA or withdraw along the Escape Routes to the Safety Zone.
- Adequate time must exist to safely prepare the structure for defense prior to the arrival of the fire front.

FIRE FRONT FOLLOWING

"Fire Front Following" is a follow-up tactic employed when Check and Go, Prep and Go, or Bump and Run tactics are initially used:

- A tactic used to come in behind the fire front.
- This action is taken when there is insufficient time to safely set up ahead of the fire or the intensity of the fire would likely cause injury to personnel located in front of the fire.
- The goal of "Fire Front Following" is to search for victims, effect perimeter control, extinguish spot fires around structures, control hot spots and reduce ember production.

BUMP AND RUN

"Bump and Run" is a tactic where resources typically move ahead of the fire front in the spotting zone to extinguish spot fires and hot spots, and to defend as many structures as possible:

- Bump and Run may be effective in the early stages of an incident when the resource commitment is light and structure protection is the priority.
- Bump and Run may also be used on fast moving incidents when there are adequate resources available, but where an effort must be made to control or steer the head and shoulders of the fire to a desired end point.
- Perimeter control and structure protection preparation are secondary considerations with the Bump and Run tactic.
- Resources must remain mobile during Bump and Run and must constantly identify Escape Routes to Safety Zones and Temporary Refuge Areas as they move with the fire front.
- Bump and Run is a defensive tactic when fire front impact in the WUI is imminent and there are not enough resources to effectively take perimeter control action. It is an offensive tactic when resources are steering the head of the fire to a desirable end point.
- The tactic is useful when terrain and fuels are suitable for mobile attack.
- Fire line supervisors and Strike Team/Task Force Leaders must realize that Bump and Run places resources in front of the advancing fire front and that extreme caution should be exercised.
- Control lines in front of the fire should be identified and prepared with dozers and fire crews enabling the Bump and Run resources to direct the fire to logical end point.

This is a frontal attack strategy and a watch out situation. Control lines in front of the main fire must be reinforced with retardant drops, coordinated firing operations and engine support.

ANCHOR AND HOLD

- "Anchor and Hold" is a tactic utilizing control lines and large water streams from fixed water supplies in an attempt to stop fire spread. The goal is to extinguish structure fires, protect exposures, and reduce ember production.
- Anchor and Hold can be referred to as taking a stand to stop the progression of the fire.
- Anchor and Hold tactics are more effective in urban neighborhoods where the fire is spreading from house to house.
- Establishing an Anchor and Hold line requires considerable planning and effort and utilizes both fixed and mobile resources:
    - Fixed engines should be spotted in safe areas where they can safely withstand any fire situation.
    - Mobile engines or task forces can engage in individual structure defense actions or perimeter control and re-supply from fixed water source.
    - Mobile engines should be prepared to re-deploy to other areas should the fire escape the Anchor and Hold line.
- Ground resources, such as engine crews and hand crews should staff hose lines and be prepared to extinguish hot spots, fire perimeter, and structures:
    - Hand crew strike teams should be deployed to construct fire control lines wherever needed and conduct firing operations.

TACTICAL PATROL

"Tactical Patrol" is a tactic where the key element is mobility and continuous monitoring of an assigned area:

- Tactical Patrol can either be initiated:
  - After the main fire front has passed and flames have subsided but when the threat to structures still remains.
    - Patrol areas where the fire has passed but the risk to structures remains from fire brands smoldering in void spaces, on roofs, in rain gutters and stored material near buildings.
  - In neighborhoods away from the interface where there is predicted to be significant ember cast and accumulated ornamental vegetation.
    - The goal is to patrol areas downwind of potential ember showers.
    - This tactic should be used to extinguish hot spots or secondary structure ignitions, and address safety issues such as power lines, weakened trees, and other hazards:
  - Vigilance, situational awareness and active suppression actions are a must.

APPENDIX A

WILDLAND FIRE MANAGEMENT GUIDING PRINCIPLES

1. The first priority for all-risk decisions is human survival, both firefighters and the public.

2. Incident containment strategies specifically address and integrate protection of defendable improved property and wildland values.

3. Direct protection of improved property is undertaken when it is safe to do so, where there are sufficient time and appropriate resources available, and when the action directly contributes to achieving the overall incident objectives.

4. The firefighter's decision to accept direction to engage in structure protection actions is based on the determination that the property is defendable and the risk to firefighters can be safely mitigated under the current or potential fire conditions.

5. A decision to delay or withdraw from structure protection operations is the appropriate course of action when made in consideration of firefighter safety, current or potential fire behavior, or lack of defensibility of the structure or groups of structures.

6. Firefighters at all levels are responsible for making risk decisions appropriate to their individual knowledge, experience, training and situational awareness.

7. Every firefighter is responsible for awareness of the factors that affect their judgment and the decision-making process, including a realistic perception of their own knowledge, skills, and abilities, the presence of life threat or structures, fire behavior, availability of resources, social/political pressures, mission focus, and personal distractions such as home, work, health, and fatigue.

8. An individual's ability to assimilate all available factors affecting situational awareness is limited in a dynamic wildland and urban interface environment.

9. It is the responsibility of every firefighter to participate in the flow of information with supervisors, subordinates and peers. Clear and concise communication is essential to overcome limitations in situational awareness.

APPENDIX B
RISK MANAGEMENT PROCESS

Step 1 Situational Awareness

Gather information
Objective(s) Previous Fire Behavior
Communication
Weather Forecast
Who's in Charge?
Local Factors
Scout the Fire

Step 2 Hazard Assessment

Estimate Potential Fire Behavior Hazards
Look Up/Look Down/Around Indicators
Identify Tactical Hazards
Watch Outs
What other safety hazards exist?
Consider severity vs. probability

Step 3 Hazard Control

Firefighting Orders
LCES Checklist – MANDATORY
Anchor Point
Downhill Checklist (if applicable)
What other controls are necessary?

Step 4 Decision Point

Are controls in place for identified hazards?
NO – Reassess situation
YES – Next question

Are selected tactics based on expected fire behavior?
NO – Reassess situation
YES – Next question

Have instructions been given and understood?
NO – Reassess situation
YES – Initiate action

Step 5 Evaluate

Personnel: Low experience level with local factors
Distracted from primary tasks
Fatigue or stress reaction
Hazardous attitude
The Situation: What is changing?
Are strategy and tactics working?

APPENDIX C
LCES CHECKLIST

LCES must be established and known to all firefighters before it is needed

LOOKOUT(S)

- Experienced/Competent/Trusted
- Enough Lookouts at good vantage points
- Knowledge of crew locations
- Knowledge of escape and safety locations
- Knowledge of trigger points
- Map/Weather Kit/Watch/IAP

COMMUNCIATIONS

- Radio frequencies confirmed
- Backup procedures and check-in times established
- Provide updates on any situation change
- Sound alarm early, not late

ESCAPE ROUTE(S)

- More than one Escape Route
- Avoid sleep uphill Escape Routes
- Scouted: Loose Soils/Rocks/Vegetation
- Times: Slowest person/Fatigue and Temperature Factors
- Marked: Flagged for day or night
- Evaluate: Escape Time vs. Rate of Spread
- Vehicles parked for escape

SAFETY ZONE(S)

- Survivable without a fire shelter
- Back into clean burn
- Natural Features: Rock Areas/Water/Meadows
- Constructed Sites: Clear Cuts/Roads/Helispots
- Scouted for size and hazards
- Upslope?
- Downwind?
- Heavy Fuels?
- Escape time and Safety Zone size requirements
- Will change as fire behavior changes
- More heat impact = Larger Safety Zone

APPENDIX D
TACTICAL ENGAGEMENT PROCESS – PACE

Structure defense firefighting in the Wildland Urban Interface (WUI) is inherently dangerous because it is primarily associated with *indirect* firefighting. An approaching fire is a dynamic event and subject to sudden changes that can be very difficult to anticipate. Structure protection should start with a determination of the exit strategy.

Indirect firefighting safety mitigations depend on fire behavior forecasts made in advance of the fire's arrival. Accurate fire behavior forecasts are difficult to make with absolute certainty and, at the same time, these forecasts are the crux for determining effective safety mitigations (Temporary Refuge Areas, Escape Routes and Safety Zones).

With firefighter safety hanging in the balance of accurate fire behavior estimates that cannot be assured, it is imperative that a multi-step safety plan be established to compensate for the uncertainties.

Firefighters must anticipate the unexpected and build agility (Tactical Maneuver) into their plan with *contingency planning*. The lexicon for contingency planning is PACE:

P – Primary Plan [Offense]
Is focused on firefighter safety
Is focused on mission objectives
Yields the most desirable results
(Staffing hose lines to suppress the fire around a structure)

A – Alternate Plan [Offense]
A fall-back plan that closely supports the Primary Plan
The results may be less desirable but still supports the Primary Plan
(Retreating into or behind the structure until fire intensity diminishes)

C – Contingency Pan [Defense]
A plan totally focused on the firefighter's safety
Move to a Temporary Refuge Area (an area that provides short-term relief) or withdraw along the Escape Route
Move into a Safety Zone

E – Emergency Plan [Defense]
A plan totally focused on individual firefighter survival
When threatened by fire, firefighters should get into their fire shelter

ALWAYS HAVE A DEPLOYMENT SITE IDENTIFIED!

Implement PACE prior to engaging in any structure protection action:

P – Primary
A – Alternate
C – Contingency
E – Emergency

APPENDIX E
LEVELS OF ENGAGEMENT – DRAW-D

As with military operations, there are FIVE Levels of Engagement in firefighting – DRAW-D. These actions apply to all aspects of wildland firefighting from the incident strategy to the individual line assignments and structure protection. They identify a thoughtful and mindful approach to choosing the appropriate tactical action. Use of DRAW-D as Levels of Engagement incorporates a "can do" attitude in every Level of Engagement and every Level of Engagement is equal in value to the overall effort as the other:

D – Defend – Holding actions, protecting priority areas
Protect the structures
Hold and improve the line

R – Reinforce – Bring more resources to bear.
Add resources necessary to advance or defend.

A – Advance – Anchor and Flank
Direct or indirect attack
Active burnout operations

W – Withdraw – Cease current activities until conditions modify.
Abandon an established position or constructed line in response to an increase in fire intensity.
Not a stigma, but a decision to move away from a threat.

D – Delay – Wait until the situation has modified sufficiently to allow a different Level of Engagement.
Waiting for conditions to meet pre-identified triggers necessary to advance or defend.

APPENDIX F
STRUCTURE ASSESSMENT CHECKLIST

Address/Property Name

- Numerical street address, ranch name, etc.
- Number of residents on site

Road Access

- Road surface (paved, gravel, unimproved, dirt)
- Adequate width, vegetation clearance and Safety Zones along road
- Undercarriage problems (4x4 access only)
- Turnouts and turnarounds
- Bridges (load limits)
- Stream crossings (approach angle, crossing depth and surface)
- Terrain(road slop, location on slope, near chimneys, saddles, canyon bottom)
- Grade (greater than 15%)

Structure/Building

- Single residence or multi-complex, out building (barn, storage)
- Does building have unknown or hazardous materials?
- Exterior walls (stucco or other noncombustible, wood frame, vinyl, wood shake)
- Large unprotected windows facing heat source – Proximity of any aboveground fuel tanks (LPG, propane, etc.)
- Roof material (wood shake, asphalt, noncombustible)

- Eves (covered with little overhang, exposed with large overhang)
- Other features (wood deck, wood patio cover and furniture, wood fencing)

Clearances/Exposures/Defensible Space

- Structure location (narrow ridge, canyon, mid-slope, chimney)
- Adequate clearance around structure, minimum of 100 feet (steeper the slope, the more clearance required)
- Surrounding fuels (larger, denser the fuels, the more clearance required)
- Flammable fuels (trees, ladder fuel, shrubs) adjacent to structure (is there time for removing these fuels?)
- Other combustibles near structure (wood piles, furniture, fuel tanks)
- Is there adequate clearance around fuel tank?
- Power lines of transformers (DO NOT park under power lines)

Hazardous Materials

- Chemicals (Look for DOT/NFPA/UN symbols)
- Pesticides and herbicides
- Petroleum products
- Paint products

Water Sources

- Hydrant/standpipe (When connecting with hydrant, be aware of low rate and GPM output, size and venting capability of engine or water tender may not be able to handle hydrants with high flow and GPM rates.)
- Storage tank
- Swimming pool
- Hot tub
- Fish pond
- Irrigation ditch

Evacuation

- Is safe evacuation possible? (Identify safe refuge for those who cannot be evacuated.)
- Coordinate with on-scene law enforcement and emergency services personnel.

Estimated Resources for Protection

- Number(s) and type(s) of engines, water tenders, crews, dozers (General Guidelines: one engine per structure, one additional engine for every four structures to be used as “backup” and for patrol. For structures that are close together (50 feet or less), one engine may be adequate to protect two structures).
- Type and number of aircraft available.

APPENDIX G
POWERLINE SAFETY

- If there is a downed conductor on the vehicle, stay in vehicle until the power company arrives. If the vehicle is on fire or fire is near, jump clear, keep feet together and don't hang on.
- Smoke, water, and retardant are all good conductors and can cause power line-to-ground arc.
- Do not operate heavy equipment under power lines.
- Do not use right-of-ways as a jump or cargo drop spot.
- Do not drive with long antennas under power lines.
- Do not fuel vehicles under power lines.
- Do not stand near power lines during retardant drops.
- Do not park under power lines.
- Do not apply straight stream to power lines.
- Maintain a 35 foot distance from transmission lines.
- Spot fires or low ground fires can be fought with hose lines if heavy smoke or flame is not within 100 feet of the power lines.
- If safe, extinguish wood poles burning at the base to prevent downed wire hazards later.

CHAPTER 15

MULTI-CASUALTY

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DEFINITION

The Medical Branch structure is designed to provide the Incident Commander with a basic, expandable system to manage a large number of patients during an incident. If incident conditions warrant, Medical Groups may be established under the Medical Branch Director. The degree of implementation will depend upon the complexity of the incident.

MODULAR DEVELOPMENT

A series of examples for the modular development of the Medical Branch within an incident involving mass casualties are included to illustrate one possible method of expanding the incident organization:

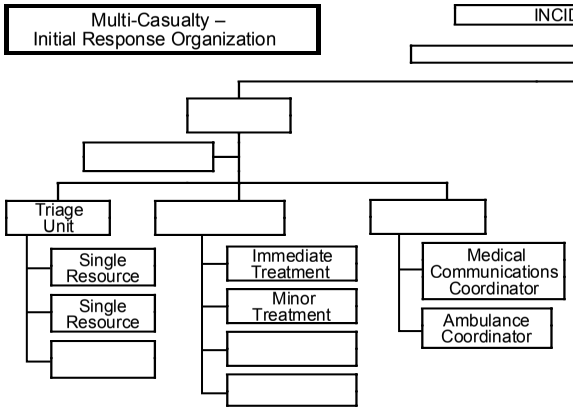
Initial Response Organization: The Incident Commander manages initial response resources as well as all Command and General Staff responsibilities. The Incident Commander assigns a resource with the appropriate communications capability as the Medical Communications Coordinator to establish communications with the appropriate hospital or other coordinating facility. In addition, the incident Commander assigns a Triage unit Leader, establishes treatment areas, and assigns an Ambulance Coordinator.

Reinforced Response Organization: In addition to the initial response, the Incident Commander establishes a Safety Officer, a Treatment Unit Leader, Patient Transport Unit Leader, and a Patient Transportation Unit Leader. Immediate, Delayed and Minor Treatment Areas are established and staffed. Ambulance Strike Teams may be requested to support local resources.

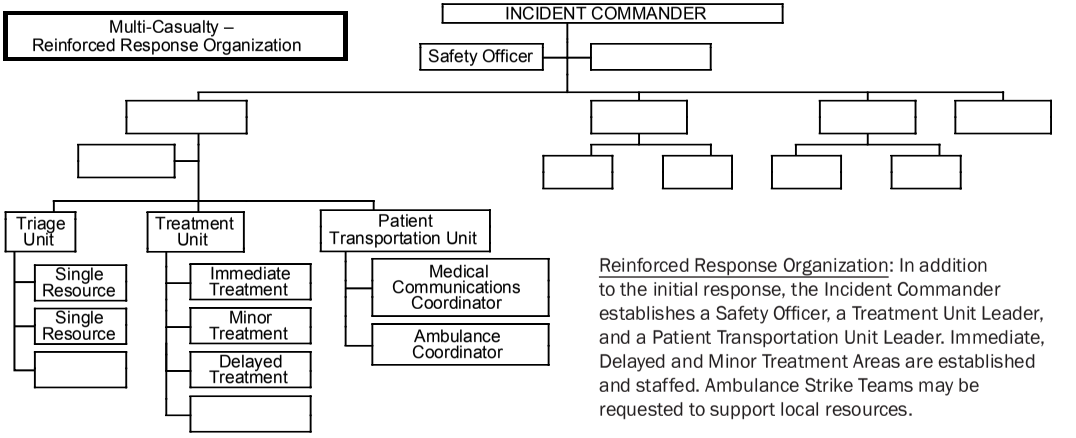
Multi-Division/Group Response Organization: All positions within the Medical Group are now filled. The Air Operations Branch is shown to illustrate the coordination between the Patient Transportation Unit and the Air Operations Branch. A Rescue Group is established to free entrapped victims.

Multi-Branch Response Organization: The complete incident organization shows the Medical Branch and other Branches. The Medical Branch has multiple Medical Groups due to incident complexity, but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals or other medical facilities.

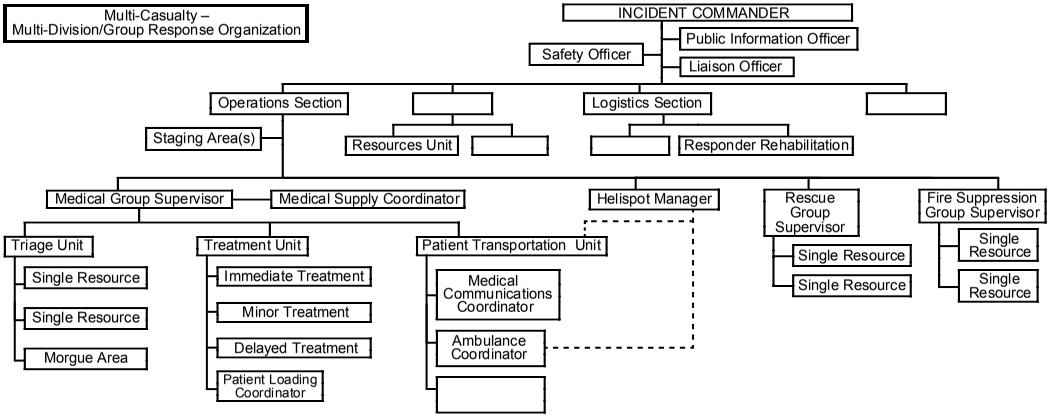
As the complexity of an incident exceeds the capacity of the local medical health resources, additional response capabilities may be provided through provisions of the Public Health and Medical Emergency Operations Manual (EOM) through the Medical Health Operational Area Coordinator (MHOAC).



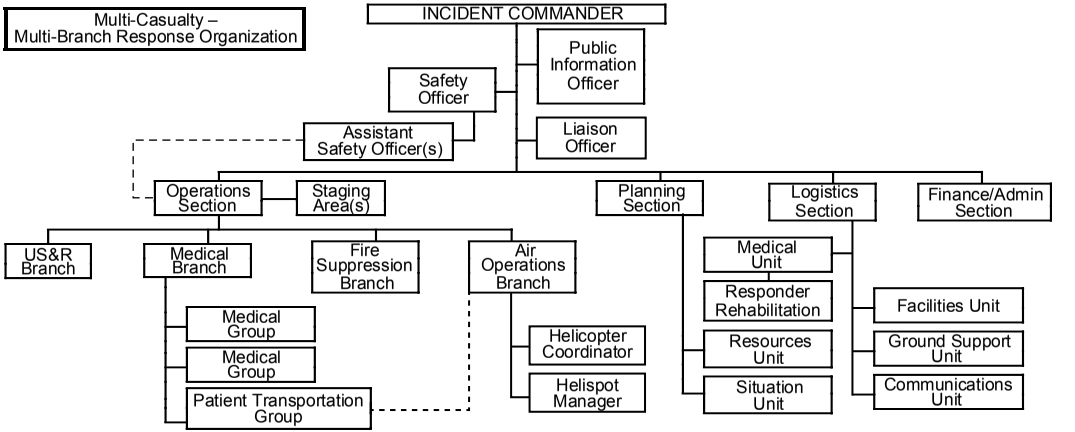
Initial Response Organization: The Incident Commander manages initial response resources as well as all Command and General Staff responsibilities. The Incident Commander assigns a resource with the appropriate communications capability as the Medical Communications Coordinator to establish communications with the appropriate hospital or other coordinating facility. In addition, the Incident Commander assigns a Triage Unit Leader, establishes treatment areas, and assigns an Ambulance Coordinator.



Reinforced Response Organization: In addition to the initial response, the Incident Commander establishes a Safety Officer, a Treatment Unit Leader, and a Patient Transportation Unit Leader. Immediate, Delayed and Minor Treatment Areas are established and staffed. Ambulance Strike Teams may be requested to support local resources.



Multi-Division/Group Response Organization: All positions within Medical Group are now filled. The Air Operations Branch is shown to illustrate the coordination between the Patient Transportation Unit and the Air Operations Branch. A Rescue Group is established to free entrapped victims. *May consult with MHOA/LEMSA for additional hospital and ambulance resources such as Ambulance Strike Teams.



Multi-Branch Response Organization: The complete incident organization shows the Medical Branch and other Branches. The Medical Branch has multiple Medical Groups due to incident complexity, but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals or other medical facilities.

MEDICAL BRANCH DIRECTOR - The Medical Branch Director is responsible for the implementation of the Incident Action Plan within the Medical Branch. The Branch Director reports to the Operations Section Chief and supervises the Medical Group(s) and the Patient Transportation function (Unit or Group). Patient Transportation may be upgraded from a Unit to a Group based on the size and complexity of the incident:

a. Review Common Responsibilities (Page 1-2).
b. Review Group Assignments for effectiveness of current operations and modify as needed.
c. Provide input to Operations Section Chief for the Incident Action Plan.
d. Supervise Branch activities and confer with Safety Officer to assure safety of all personnel using effective risk analysis and management techniques.
e. Report to Operations Section Chief on Branch activities.
f. Maintain Unit/Activity Log (ICS Form 214).

MEDICAL GROUP SUPERVISOR - The Medical Group Supervisor reports to the Medical Branch Director and supervises the Triage Unit Leader, Treatment Unit Leader, Patient Transportation Unit Leader and Medical Supply Coordinator. The Medical Group Supervisor establishes command and controls the activities within a Medical Group:

a. Review Common Responsibilities (Page 1-2).
b. Participate in Medical Branch/Operations Section planning activities.
c. Establish Medical Group with assigned personnel, request additional personnel and resources sufficient to handle the magnitude of the incident.

d. Designate Unit Leaders and Treatment Area locations as appropriate.
e. Isolate Morgue and Minor Treatment Area from Immediate and Delayed Treatment Areas.
f. Request law enforcement for security, traffic control and access for the Medical Group areas.
g. Determine amount and types of additional medical resources and supplies needed to handle the magnitude of the incident (medical caches, backboards, litters, and cots).
h. Ensure activation or notification of appropriate hospital or other coordinating facility/agency.
i. Coordinate with assisting agencies such as law enforcement, Coroner, Public Health, and private ambulance companies. Law enforcement/Coroner shall have responsibility for crime scene and decedent management.
j. Coordinate with agencies such as Red Cross and utilities.
k. Ensure adequate patient decontamination and proper notifications are made (if applicable).
l. Consider responder rehabilitation.
m. Maintain Unit/Activity Log (ICS Form 214).

TRIAGE UNIT LEADER - The Triage Unit Leader (MCTL) reports to the Medical Group Supervisor and supervises triage personnel/litter bearers and the Morgue Manager. The Triage Unit Leader assumes responsibility for providing triage management and movement of patients from the Triage Area. When triage has been completed and all patients have been moved to the treatment areas, the Triage Unit Leader may be reassigned as needed:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).

c. Develop organization sufficient to handle assignment.
d. Inform Medical Group Supervisor of resource needs.
e. Implement triage process.
f. Coordinate movement of patients from the Triage Area to the appropriate Treatment Area.
g. Ensure adequate patient decontamination and proper notifications are made (if applicable).
h. Assign resources as triage person/litter bearers.
i. Give periodic status reports to Medical Group Supervisor.
j. Maintain security and control of the Triage Area.
k. Establish a temporary morgue area in coordination with law enforcement/Coroner if necessary.
l. Maintain Unit/Activity Log (ICS Form 214).

MORGUE MANAGER - The Morgue Manager (MCMM) reports to the Triage Unit Leader and assumes responsibility for Morgue Area. Coordinates the handling of decedents with law enforcement and Coroner:

a. Review Common Responsibilities (Page 1-2).
b. Assess resource/supply needs and order as needed.
c. Coordinate all Morgue Area activities with investigative authorities.
d. Keep area off limits to all but authorized personnel.
e. Keep identity of deceased persons confidential.
f. Maintain appropriate records.

TREATMENT UNIT LEADER - The Treatment Unit Leader (MCUL) reports to the Medical Group Supervisor and supervises Treatment Managers and the Patient Loading Coordinator. The Treatment Unit Leader assumes responsibility for treatment, preparation for transport, and the movement of patients to loading location(s):

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Develop organization sufficient to handle assignment.
d. Direct and supervise Immediate, Delayed, and Minor Treatment Areas and Patient Loading Coordinator.
e. Ensure adequate patient decontamination and that proper notifications are made if applicable.
f. Ensure continued assessment of patients and re-triage/ re-locate as necessary throughout Treatment Areas.
g. Coordinate movement of patients from Triage Areas to Treatment Areas with Triage Unit Leader.
h. Assign incident personnel to be treatment personnel/ litter bearers.
i. Request sufficient medical caches and supplies including DMSU or support trailers.
j. Establish communications and coordination with Patient Transportation Unit Leader.
k. Responsible for movement of patients to ambulance loading area(s).
l. Give periodic status reports to Medical Group Supervisor.
m. Request specialized medical resources through the MHOAC (i.e., DMAT, DMORT, MRC).
n. Maintain Unit/Activity Log (ICS Form 214).

PATIENT LOADING COORDINATOR - The Patient Loading Coordinator reports to the Treatment Unit Leader and is responsible for coordinating with the Patient Transportation Unit Leader (or Group Supervisor if established), the transportation of patients out of the Treatment Areas:

a. Review Common Responsibilities (Page 1-2).
b. Establish communications with the Immediate, Delayed, and Minor Treatment Managers.

c. Establish communications with the Patient Transportation Unit Leader.
d. Verify that patients are prioritized for transportation.
e. Advise Medical Communications Coordinator of patient readiness and priority for transport.
f. Coordinate transportation of patients with Medical Communications Coordinator.
g. Ensure that appropriate patient tracking information is recorded.
h. Coordinate ambulance loading with the Treatment Managers and ambulance personnel.
i. Maintain Unit/Activity Log (ICS Form 214).

IMMEDIATE TREATMENT AREA MANAGER - The Immediate Treatment Area Manager (MCIM) reports to the Treatment Unit Leader and is responsible for treatment and re-triage of patients assigned to Immediate Treatment Area:

a. Review Common Responsibilities (Page 1-2).
b. Assign treatment personnel to patients.
c. Provide assessment of patients and re-triage/re-locate as necessary.
d. Ensure appropriate level of treatment is provided to patients.
e. Ensure that patients are prioritized for transportation.
f. Coordinate transportation of patients with Patient Loading Coordinator.
g. Notify Patient Loading Coordinator of patient readiness and priority for transportation.
h. Ensure that appropriate patient information is recorded.
i. Maintain Unit/Activity Log (ICS Form 214).

DELAYED TREATMENT AREA MANAGER - The Delayed Treatment Area Manager (MCDM) reports to the Treatment Unit Leader and is responsible for treatment and re-triage of patients assigned to Delayed Treatment Area:

a. Review Common Responsibilities (Page 1-2).
b. Assign treatment personnel to patients.
c. Provide assessment of patients and re-triage/re-locate as necessary.
d. Ensure appropriate level of treatment is provided to patients.
e. Ensure that patients are prioritized for transportation.
f. Coordinate transportation of patients with Patient Loading Coordinator.
g. Notify Patient Loading Coordinator of patient readiness and priority for transportation.
h. Ensure that appropriate patient information is recorded.
i. Maintain Unit/Activity Log (ICS Form 214).

MINOR TREATMENT AREA MANAGER - The Minor Treatment Area Manager (MCMT) reports to the Treatment Unit Leader and is responsible for treatment and re-triage of patients assigned to Minor Treatment Area:

a. Review Common Responsibilities (Page 1-2).
b. Assign treatment personnel to patients.
c. Provide assessment of patients and re-triage/re-locate as necessary.
d. Ensure appropriate level of treatment is provided to patients.
e. Ensure that patients are prioritized for transportation.
f. Coordinate transportation of patients with Patient Loading Coordinator.

g. Notify Patient Loading Coordinator of patient readiness and priority for transportation.
h. Ensure that appropriate patient information is recorded.
i. Maintain Unit/Activity Log (ICS Form 214).

PATIENT TRANSPORTATION UNIT LEADER - The Patient Transportation Unit Leader reports to the Medical Group Supervisor and supervises the Medical Communications Coordinator, and the Ambulance Coordinator. The Patient Transportation Unit Leader is responsible for the coordination of patient transportation and maintenance of records relating to the patient's identification, condition, and destination. The Patient Transportation function may be initially established as a Unit and upgraded to a Group based on incident size or complexity:

a. Review Common Responsibilities (Page 1-2).
b. Review Unit Leader Responsibilities (Page 1-3).
c. Ensure the establishment of communications with the appropriate hospital or other coordinating facility/agency.
d. Designate Ambulance Staging Area(s).
e. Direct the off-incident transportation of patients as determined by The Medical Communications Coordinator.
f. Ensure that patient information and destination are recorded.
g. Establish communications with Ambulance Coordinator and Helispot Manager.
h. Request additional medical transportation resources (air/ground) as required.
i. Notify Ambulance Coordinator of ambulance requests.
j. Coordinate the establishment of Helispot(s) with the Medical Group Supervisor and the Helispot Manager.
k. Maintain Unit/Activity Log (ICS Form 214).

MEDICAL COMMUNICATIONS COORDINATOR - The Medical Communications Coordinator (MCCC) reports to the Patient Transportation Unit Leader and establishes communications with the appropriate hospital or other coordinating facility/ agency to maintain status of available hospital beds to ensure proper patient destination:

a. Review Common Responsibilities (Page 1-2).
b. Establish communications with the appropriate hospital or other coordinating facility/agency. Provide pertinent incident information and periodic updates.
c. Determine and maintain current status of hospital/ medical facility availability and capability.
d. Receive basic patient information and condition from Treatment Area Managers and/or Patient Loading Coordinator.
e. Coordinate patient destination with the appropriate hospital or other coordinating facility/agency.
f. Communicate patient transportation needs to Ambulance Coordinators based upon requests from the Treatment Area Managers and/or Patient Loading Coordinator.
g. Communicate patient air transportation needs to the Ambulance Coordinator based on requests from the Treatment Area Managers and/or Patient Loading Coordinator.
h. Maintain appropriate records and Unit/Activity Log (ICS Form 214).

AMBULANCE COORDINATOR - The Ambulance Coordinator reports to the Patient Transportation Unit Leader, manages the Ambulance Staging Area(s), and dispatches ambulances as requested:

a. Review Common Responsibilities (Page 1-2).
b. Establish appropriate Staging Area for ambulances.
c. Establish routes of travel for ambulances for incident operations.
d. Establish and maintain communications with the Helispot Manager regarding air transportation assignments.
e. Establish and maintain communications with the Medical Communications Coordinator and Patient Loading Coordinator.
f. Provide ambulances upon request from the Medical Communications Coordinator.
g. Ensure that necessary equipment is available in the ambulance for patient needs during transportation.
h. Establish contact with ambulance providers at the scene.
i. Request additional transportation resources as appropriate.
j. Consider the use of alternate transportation resources such as buses or vans based on local policy.
k. Provide an inventory of medical supplies available at ambulance Staging Area for use at the scene.
l. Maintain records as required and Unit/Activity Log (ICS Form 214).

MEDICAL SUPPLY COORDINATOR -The Medical Supply Coordinator reports to the Medical Group Supervisor and acquires and maintains control of appropriate medical equipment and supplies from units assigned to the Medical Group:

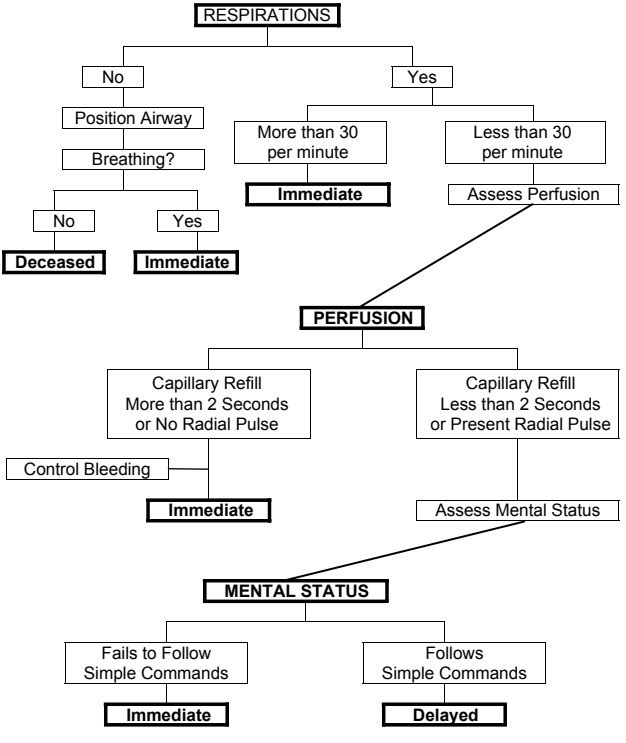
a. Review Common Responsibilities (Page 1-2).
b. Acquire, distribute and maintain status of medical equipment and supplies within the Medical Group.*
c. Request additional medical supplies.*

d. Distribute medical supplies to Treatment and Triage Units.
e. Consider the utilization of a Disaster Medical Support Unit (DMSU) or incident support trailers.
f. Maintain Unit/Activity Log (ICS Form 214).

* If the Logistics Section were established, this position would coordinate with the Logistics Section Chief or Supply Unit Leader.

SIMPLE TRIAGE AND RAPID TREATMENT (START) SYSTEM FLOWCHART

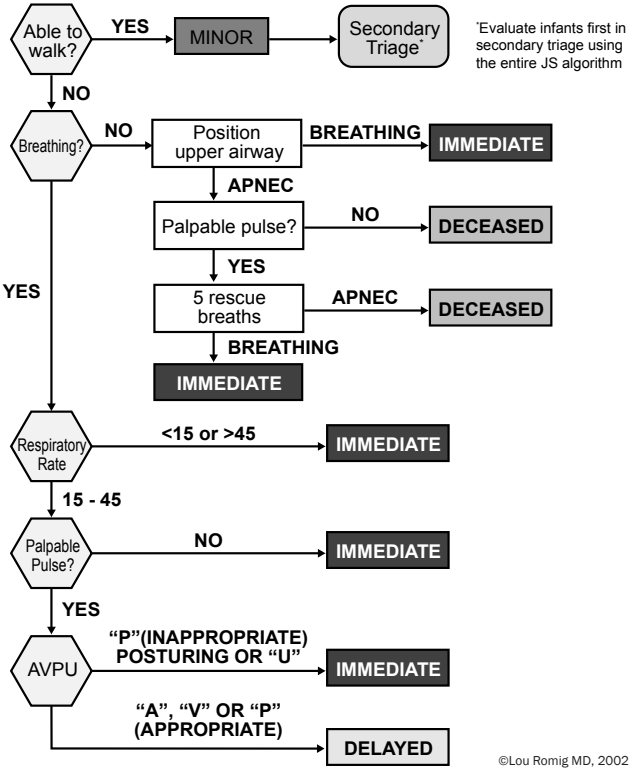
Initial Response



NOTE: Once a patient reaches a triage level indicator in the algorithm (i.e., IMMEDIATE box), triage of this patient should stop and the patient should be tagged accordingly.

At the completion of START Triage, patients must be re-triaged as time and resources permit using chief complaint, vital signs and other diagnostic information.

JumpSTART Pediatric MCI Triage©



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CHAPTER 16

URBAN SEARCH AND RESCUE

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INTRODUCTION

The Urban Search and Rescue (US&R) organizational module is designed to provide supervision and control of essential functions at incidents where technical rescue expertise and equipment are required for safe and effective rescue operations. US&R operations are unique in that specialized training and equipment are required to mitigate the incident in the safest and most efficient manner possible.

Initial US&R operations will be directed by the first arriving public safety officer who will assume command as the Incident Commander. Subsequent changes in the incident command structure will be based on the resource and management needs of the incident following established ICS procedures.

Additional resources may include US&R Companies and US&R Crews or modular components of other US&R assets specifically trained and equipped for urban search and rescue operations. The US&R Company is capable of conducting search and rescue operations at incidents where technical expertise and equipment are required. US&R Crews are trained urban search and rescue personnel dispatched to the incident without rescue equipment. US&R Companies and Crews can be assigned as a single resource, grouped to form US&R Strike Teams or added to other resources to form a Task Force. US&R Single Resources, Strike Teams, and Task Forces are managed the same as other incident resources.

Due to the unique hazards and complexity of urban search and rescue incidents, the Incident Commander may need to request a wide variety and amount of multi-disciplinary resources.

US&R Companies and Crews are “typed” based on an identified operational capability. Four levels of US&R operational capability have been identified to assist the

Incident Commander in requesting appropriate resources for the incident. These levels are based on five general construction categories and an increasing capability of conducting a rescue at specified emergency situations with an identified minimum amount of training and equipment.

The US&R Type-4 (Basic) Operational Level represents the minimum capability to conduct safe and effective search and rescue operations at incidents involving non-structural entrapment in non-collapsed structures.

The US&R Type-3 (Light) Operational Level represents the minimum capability to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of Light Frame Construction and low angle or one-person load rope rescue.

The US&R Type-2 (Medium) Operational Level represents the minimum capability to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of Heavy Wall Construction, high angle rope rescue (not including highline systems), confined space rescue (no permit required), and trench and excavation rescue.

The US&R Type-1 (Heavy) Operational Level represents the minimum capability to conduct safe and effective search and rescue operations at structure collapse incidents involving the collapse or failure of Heavy Floor, Pre-cast Concrete and Steel Frame Construction, high angle rope rescue (including highline systems), confined space rescue (permit required), and mass transportation rescue.

The Regional US&R Task Force Level is comprised of 29 people specially trained and equipped for large or complex US&R operations. The multi-disciplinary organization provides five functional elements that include Supervision, Search, Rescue, Medical, and Logistics. The Regional US&R Task

Force is totally self-sufficient for the first 24 hours. Transportation and logistical support is provided by the sponsoring agency and may be supported by the requesting agency.

State/National US&R Task Force is comprised of 70 people, when configured as a Type 1 Task Force, specially trained and equipped for large or complex US&R operations. The multi-disciplinary organization provides seven functional elements that include Supervision, Search, Rescue, Haz-Mat, Medical, Logistics and Planning. The State/National US&R Task Force is designed to be used as a "single resource." However, each element of the Task Force is modularized into functional components and can be independently requested and utilized. The State/National US&R Task Force may also be configured as a Type III Task Force with 28 members.

ICS MODULAR DEVELOPMENT

US&R incidents may occur that will require rescue operations that exceed a resource's identified capability. When the magnitude or type of incident is not commensurate with a capability level, the Incident Commander will have the flexibility to conduct rescue operations in a safe and appropriate manner using existing resources within the scope of their training and equipment until adequate resources can be obtained or the incident is terminated.

The flexibility and modular expansion capabilities of the Incident Command System provide various ways US&R resources can be arranged and managed. A series of modular development examples are included to illustrate several possible methods of expanding the incident organization based on existing emergency conditions, available resources, and incident objectives.

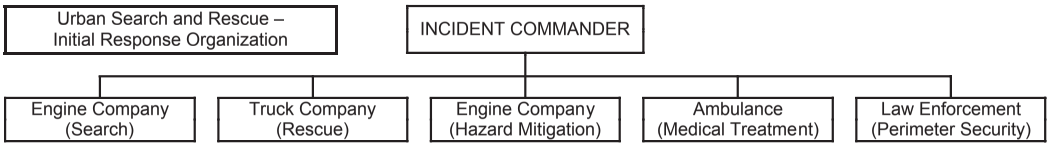
The ICS Modular Development examples shown are not meant to be restrictive, nor imply these are the only ways to build an ICS organizational structure to manage US&R resources at an incident. To the contrary, the ICS Modular Development examples are provided only to show conceptually how one can arrange and manage resources at an US&R incident that builds from an initial response to a Multi-Branch organization.

Initial Response Organization: The first arriving Public Safety Officer will assume command of the incident as the Incident Commander. The Incident Commander will assume all Command and General Staff functions and responsibilities and manage initial response resources. If the potential for escalation is low, then no specific ICS functional positions are established. If the incident requires an upgraded response, the Incident Commander should consider the early establishment of ICS positions. The following examples illustrate this modular growth of the ICS structure to keep pace with increased resource response.

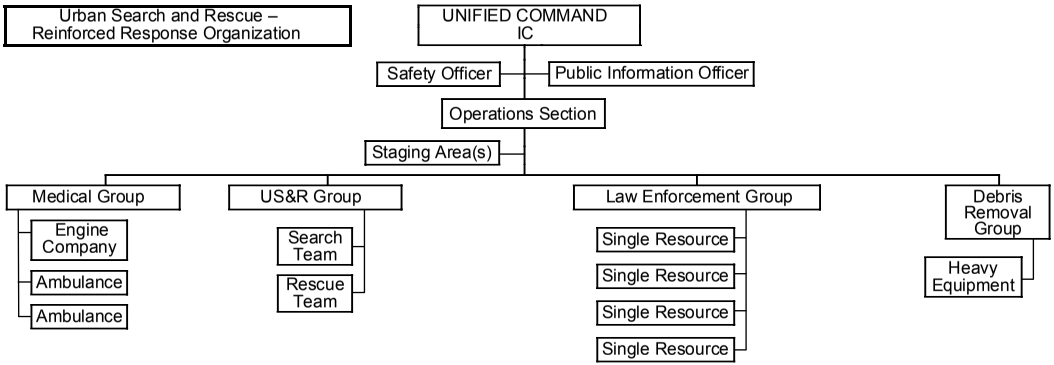
Reinforced Response Organization: In addition to the initial response, more Law Enforcement, local Engine and Truck Companies and Mutual Aid resources have arrived. The Incident Commander forms a Unified Command with the senior officials of other agencies having jurisdiction and has established a Safety Officer to assure personnel safety. A Public Information Officer has been assigned to manage the large media presence. An Operations Section has been assigned to manage the tactical assignments and responsibilities. A Staging Area is established to check in arriving resources. A US&R Group has been established to better coordinate the search and rescue efforts. Public Works is removing debris from the street to improve access and egress routes.

Multi-Group/Division Response Organization: The Incident Commander has added a Liaison Officer to the Command Staff to coordinate assisting agencies participation and assigned a Planning and Logistics Section. One US&R Technical Specialist who understands the unique complexities and resource requirements at US&R incidents is assigned to the Planning Section. The Operations Section has established several Groups to better coordinate the large volume of diverse resources at the incident. A Law Group and Medical Group have been formed. A Regional US&R Task Force, a State/national US&R Task Force, and a Structural Engineer Technical Specialist from the Planning Section have been assigned to the US&R Group. A Handcrew Strike Team is assisting with debris removal.

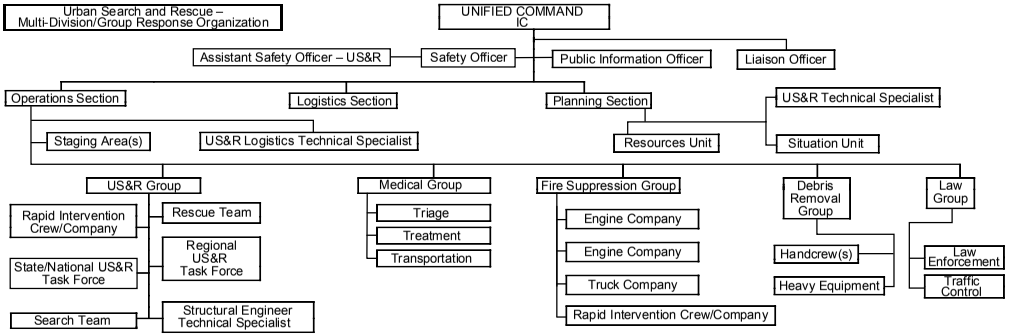
Multi-Branch Response Organization: The Incident Commander has assigned a Finance/ Administration Section. The Operations Section has established five Branches with similar functions to better coordinate and manage resources. The Planning, Logistics, and Finance/Administration Section have several Units operational to support the large amount of resources at the incident.



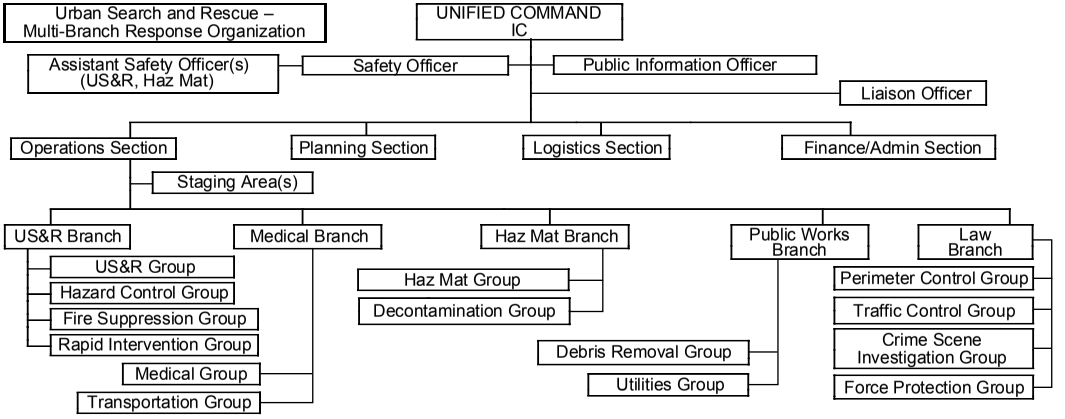
Initial Response Organization: The first arriving Public Safety Officer will assume command of the incident as the Incident Commander. The Incident Commander will assume all Command and General Staff functions and responsibilities and manage initial response resources. If the potential for escalation is low, then no specific ICS functional positions are established. If the incident requires an upgraded response, the Incident Commander should consider the early establishment of ICS positions. The following examples illustrate this modular growth of the ICS structure to keep pace with increased resource response.



Reinforced Response Organization: In addition to the initial response, more Law Enforcement, local Engine and Truck Companies and Mutual Aid resources have arrived. The Incident Commander forms a Unified Command with the senior ranking officials of other agencies having jurisdiction and has established a Safety Officer to assure personnel safety. A Public Information Officer has been assigned to manage the large media presence. An Operations Section has been assigned to manage the tactical assignments and responsibilities. A Staging Area is established to check in arriving resources. A US&R Group has been established to better coordinate the search and rescue efforts. Public Works is removing debris from the street to improve access and egress routes.



Multi-Division/Group Response Organization: The Incident Commander has added a Liaison Officer to the Command Staff to coordinate assisting agencies participation and assigned a Planning and Logistics Section. One US&R Technical Specialist who understands the unique complexities and resource requirements at US&R incidents is assigned to the Planning Section. The Operations Section has established several Groups to better coordinate the large volume of diverse resources at the incident. A Law Group and Medical Group have been formed. A Regional US&R Task Force, a State/National US&R Task Force, and a Structural Engineer Technical Specialist from the Planning Section have been assigned to the US&R Group. A Handcrew Strike Team is assisting with debris removal.



Multi-Branch Response Organization: The Incident Commander has assigned a Finance/Administration Section. The Operations Section has established five Branches with similar functions to better coordinate and manage resources. The Planning, Logistics, and Finance/Administration Section have several Units operational to support the large amount of resources at the incident.

POSITION CHECKLISTS

US&R BRANCH DIRECTOR – The US&R Branch Director is under the direction of the Operations Section Chief. US&R Branch Director's may have a variety of organized resources under their command to include US&R, Hazard Control, Fire Suppression, and Rapid Intervention Groups/Divisions. US&R Branch Director's are responsible for the implementation of the portion of the Incident Action Plan appropriate to the geographical and functional US&R Branches:

a. Review Command Responsibilities (Page 1-2).
b. Develop with subordinates alternatives for US&R Branch control operations.
c. Attend planning meetings at the request of the Operations Section Chief.
d. Review Division/Group Assignment Lists (ICS Form 204) for Divisions/Groups within the US&R Branch. Modify lists based on effectiveness of current operations.
e. Assign specific work tasks to Division and Group Supervisors.
f. Supervise Branch operations.
g. Resolve logistical problems reported by subordinates.
h. Report to the Operations Section Chief when the Incident Action Plan is to be modified, additional resources are needed, surplus resources are available, or when hazardous situations or significant events occur.
i. Approve accident and medical reports (home agency forms), originating within the US&R Branch.
j. Maintain Unit/Activity Log (ICs Form 214).

US&R GROUP SUPERVISOR – US&R Group Supervisor reports to the Operations Section Chief (or Branch Director when activated). The US&R Group Supervisor is responsible for the Implementation of the assigned portion of the Incident

Action Plan addressing US&R operations. The US&R Group Supervisor may have a variety of organized resources under their command to include Engine Companies, Truck Companies, US&R Crews, US&R Companies, US&R Strike Teams, US&R Regional Task Forces, and State/National US&R Task Forces. They are responsible for the assignment of US&R resources within the US&R Group, reporting on the progress of control operations, and the status of US&R resources within the Group. The US&R Group Supervisor is responsible for performing the following functions at an incident:

a. Review Common Responsibilities (Page1-2).
b. Implement Incident Action Plan for the US&R Group.
c. Provide Incident Action Plan to Task Force/Strike Team Leaders when available.
d. Identify resources assigned to the US&R Group.
e. Review assignments and incident activities with subordinates and assign tasks.
f. Establish personnel accountability for resources within the US&R Group.
g. Brief subordinates on appropriate provisions of the incident Site Safety and Control Plan (ICS Form 208) and deployment/activation plans for the Rapid intervention Crew/Company.
h. Ensure that Incident Communications and/or Resource Unit are advised of all changes in status of resources assigned to the US&R Group.
i. Coordinate activities with adjacent Divisions or Groups.
j. Determine need for assistance on assigned tasks.
k. Submit situation and resource status information to Operations Branch Director or Operations Section Chief.
l. Report hazardous situations, special occurrences, or significant events (e.g., accidents, sickness) to immediate supervisor.

m. Ensure that assigned personnel and equipment get to and from assignments in a timely manner.
n. Resolve logistical problems within the US&R Group.
o. Participate in the development of tactical plans for the next operational period.
p. Maintain Unit/Activity Log (ICS Form 214).

RESCUE TEAM LEADER – Reports directly to the US&R Group Supervisor. Is responsible for managing US&R Rescue Operations and supervising assigned resources:

a. Review Common Responsibilities (Page 1-2).
b. Coordinate, manage, and supervise assigned rescue activities.
c. Adhere to all safety procedures including accountability of personnel.
d. Determine rescue logistical needs.
e. Receive briefings and situation reports and ensure that all rescue personnel are kept informed of mission objectives and status changes.
f. Provide situation updates and maintain records and reports.
g. Perform additional tasks or duties as assigned during a mission.
h. Provide accountability, maintenance, and minor repairs for all issued equipment.
i. Maintain unit records, including Unit/Activity Log (ICS Form 214).

SEARCH TEAM LEADER – Reports directly to the US&R Group Supervisor. Is responsible for managing US&R Search Operations and supervising assigned resources:

a. Review Common Responsibilities (Page 1-2).
b. Coordinate, manage, and supervise all assigned search activities.
c. Adhere to all safety procedures including accountability of personnel.
d. Determine search logistical needs.
e. Receive briefings and situation reports and ensure that all search personnel are kept informed of mission objectives and status changes.
f. Provide situation updates and maintain records and reports.
g. Perform additional tasks or duties as assigned during a mission.
h. Provide accountability, maintenance, and minor repairs for all issued equipment.
i. Maintain unit records, including Unit/Activity Log (ICS Form 214).

ASSISTANT SAFETY OFFICER-US&R – Reports to the Incident Safety Officer as an Assistant Safety Officer-US&R, and coordinates with the appropriate supervisor. The Assistant Safety Officer-US&R must possess the appropriate training to coordinate safety related activities for US&R operations. This position advises the appropriate supervisor on all aspects of health and safety and has the authority to stop or prevent unsafe acts:

a. Review Common Responsibilities (Page 1-2).
b. Obtain briefing from the appropriate supervisor.
c. Participate in the preparation of and implement the incident Site Safety and Control Plan (ICS Form 208) and Incident Action Plan Safety Analysis-Generic/Wildland (ICS Form 215AG/AW) to include appropriate mitigation measures, such as personnel accountability and Rapid Intervention Crew/Company.

d. Advise the appropriate supervisor of deviations from the incident Site Safety and Control Plan (ICS Form 208) or any dangerous situations.
e. Has authority to alter, suspend, or terminate any activity that may be judged to be unsafe.
f. Work with appropriate supervisor to establish acceptable entry conditions and appropriate personnel protective equipment to be worn by personnel entering the hazard zone.
g. Ensure the protection of personnel from physical, environmental, and chemical hazards/exposures.
h. Conduct incident/accident investigations with appropriate personnel under the direction of the Incident Safety officer and appropriate supervisor.
i. Ensure the provision of required emergency medical services for assigned personnel and coordinate with medical personnel.
j. Maintain unit records, including Unit/Activity Log (ICS Form 214).

US&R CANINE SEARCH SPECIALIST – Reports directly to the Search Team Leader or US&R Task Force Search Team Manager. The US&R Canine Search Specialist is responsible for performing the canine search function of the incident. Responsibilities include searching collapsed structures, water, debris piles, land and mudslides, or fire areas as assigned, using appropriate search techniques and dog handler skills. The US&R Canine Search Specialist is responsible for documenting locations of alerts and estimating the status of victims, and cooperating with and assisting other search and rescue resources:

a. Review Common Responsibilities (Page 1-2).
b. Obtain briefing from appropriate supervisor.
c. Accountable for all issued equipment.

d. Care and welfare of their canine, including assisting medical personnel with the canine's care.
e. Perform additional tasks or duties as assigned during the incident.
f. Maintain unit records, including Unit/Activity Log (ICS Form 214).

US&R TECHNICAL SEARCH SPECIALIST – Reports directly to the Search Team Leader or US&R Task Force Search Team Manager. The US&R Technical Search Specialist is responsible for performing the technical search function of the incident:

a. Review Common Responsibilities (Page 1-2).
b. Search areas as assigned using appropriate electronic search equipment and techniques.
c. Document locations of possible finds and, if possible, estimate the status of the victim(s).
d. Cooperate with and assist other US&R resources.
e. Provide accountability for all issued equipment.
f. Perform additional tasks or duties as assigned during an incident.
g. Maintain unit records, including Unit/Activity Log (ICS Form 214).

HEAVY EQUIPMENT AND RIGGING SPECIALIST – Initially reports to the Rescue Team Leader or US&R Task Force Rescue Team Manager and may be assigned where their technical services are required. Responsible for performing construction related liaison to the rescue resources, and for assessing capabilities and the need for various heavy equipment:

a. Review Common Responsibilities (Page 1-2).
b. Participate in the planning of rescue activities.
c. Adhere to all safety procedures.

d. Receive initial briefing from supervisor.
e. Carry out tactical assignments as directed.
f. Conduct an assessment of immediately available cranes and heavy equipment.
g. Inspect equipment condition for safe operation and insure coverage by equipment agreement.
h. Develop a contact list of equipment providers and establish a point of contact.
i. Evaluate and advise on heavy equipment staging area requirements.
j. Brief heavy equipment operators and construction officials regarding rescue operations.
k. Ensure that heavy equipment operators are briefed on rescue site safety considerations and emergency signaling procedures.
l. Identify various rigging techniques to assist in the rescue of victims or stabilization of collapsed buildings, including the development of rigging plans and procedures.
m. Coordinate rigging and heavy equipment utilization for rescue operations with equipment operators and rescue personnel.
n. Keep your immediate supervisor apprised of any tactical accomplishments or conflicts.
o. Participate in operational briefings.
p. Collect and transmit records and logs to Equipment Time Recorder and/or immediate supervisor at the end of each operational period.
q. Provide vendor evaluation to Documentation Unit.
r. Maintain unit records, including Unit/Activity Log (ICS Form 214).

US&R MEDICAL SPECIALIST – Reports directly to the Medical Unit Leader or US&R Task Force Medical Team Manager. The US&R Medical Specialist is responsible for

providing advanced life support medical care to responders and victims in environments that require special US&R training:

a. Review Common Responsibilities (Page 1-2).
b. Provide emergency medical care to all incident personnel and victims in environments requiring specialized US&R training.
c. Develop and implement a Medical Action Plan as specified by the US&R Task Force Leader.
d. Adhere to all safety procedures.
e. Provide accountability, maintenance and minor repairs of assigned medical equipment.
f. Perform additional tasks or duties as assigned during an incident.
g. Maintain unit records, including Unit/Activity Log (ICS Form 214).

US&R STRUCTURES SPECIALIST – Reports directly to their immediate supervisor as determined by the incident organization. The US&R Structures Specialist is responsible for performing the various structure assessments during incident operations:

a. Review Common Responsibilities (Page 1-2).
b. Assess the structural condition within the area of US&R operations. This includes identification of structure types, specific damage and structural hazards.
c. Recommend the appropriate type and amount of structural hazard mitigation required to minimize the risks to task force personnel.
d. Adhere to all safety procedures.
e. Cooperate with and assist other US&R resources.
f. Provide accountability, maintenance, and minor repairs for all issued equipment.

g. Perform additional tasks or duties as assigned during an incident.
h. Monitor assigned structures for changes in condition during incident operations.
i. Actively participate in implementation of approved structure hazard mitigation as a designer and/or supervisor.
j. Coordinate and communicate structure hazard mitigation measures with the Search Team Leader or US&R Task Force Search Team Manager.
k. Maintain unit records, including Unit/Activity Log (ICS Form 214).

URBAN SEARCH AND RESCUE RESOURCE TYPES

Always use the prefix US&R for Urban Search and Rescue (US&R) Resources. Order Single Resource or Strike Team by Type (Capability – HEAVY, MEDIUM, LIGHT, or BASIC)				
	Type 1 (Heavy)	Type 2 (Medium)	Type 3 (Light)	Type 4 (Basic)
Type	• Heavy Floor Construction • Pre-cast Concrete Construction • Steel Frame Construction • High Angle Rope Rescue (including highline systems) • Confined Space Rescue (permit required) • Mass Transportation Rescue	• Heavy Wall Construction • High Angle Rope Rescue (not including highline systems) • Confined Space Rescue (no permit required) • Trench and Excavation Rescue	• Light Frame Construction • Low Angle Rope Rescue • Single Person Load Rope Rescue	• Surface Rescue • Non-Structural Entrapment in Non-Collapsed Structures

URBAN SEARCH AND RESCUE RESOURCE TYPES (Continued)

RESOURCE	RADIO	COMPONENT	TYPES			
			1	2	3	4
US&R Company	Agency Identifier US&R (phonetic) Number Identifier *(VNC US&R 54)*	Equipment Personnel Transportation	Heavy Inventory 6 *	Medium Inventory 6 *	Light Inventory 3 *	Basic Inventory 3 *
US&R Crew **	Agency Identifier Type Identifier Number Identifier *(KRN-US&R Crew 2)*	Personnel Trained To Appropriate Level Supervision Transportation	6	6	3	3
Regional US&R Task Force	Task Force Number Identifier *(RTF-3)*	Equipment Personnel Transportation	A Regional US&R Task Force is comprised of 29 persons specially trained and equipped for extended US&R Operations. Regional US&R Task Forces are self sufficient for 24 hours.			
State/National US&R Task Force	State ID Task Force Number Identifier *(CATF-2)*	Equipment Personnel Transportation	A State/National US&R Task Force (Type I or III) is comprised of personnel specially trained and equipped for large or complex US&R Operations. State/National US&R Task Forces are self sufficient for 24-72 hours.			

* Requests should include vehicle capabilities when necessary (i.e., four-wheel drive, off-road truck, etc.)
** The agency/department sending the US&R Crew will identify the Supervisor.

URBAN SEARCH AND RESCUE STRIKE TEAM TYPES AND MINIMUM STANDARDS

	Strike Team Types	Number/ Type	Minimum Task Capabilities	Strike Team Leader	Per Single Resource	Total Personnel
Kind U S & R C O M P A N Y	AR	2 – Type 1	Vehicle(s) equipped for Heavy Floor Construction, Pre-Cast Concrete Construction, Steel Frame Construction, high angle rope rescue (including highline systems), confined space rescue (permit required), and mass transportation rescue	1	6	13
	BR	2- Type 2	Vehicle(s) equipped for Heavy Wall Construction, high angle rope rescue (not including highline systems), confined space (no permit required), and trench and excavation rescue	1	6	13
	CR	5 – Type 3	Vehicle(s) equipped for Light Frame Construction, low angle rope rescue, and single person load rope rescue	1	3	16
	DR	5 – Type 4	Vehicle(s) equipped for surface rescue and non-structural entrapment in non-collapsed structure	1	3	16

URBAN SEARCH AND RESCUE STRIKE TEAM TYPES AND MINIMUM STANDARDS (cont.)

	Strike Team Types	Number/ Type	Minimum Task Capabilities	Strike Team Leader	Per Single Resource	Total Personnel
Kind U S & R C R E W	GR	2 – Type 1	Trained for Heavy Floor Construction, Pre-Cast Concrete Construction, Steel Frame Construction, high angle rope rescue (including highline systems), confined space rescue (permit required), and mass transportation rescue	1	6	13
	HR	2 – Type 2	Trained for Heavy Wall Construction, high angle rope rescue (not including highline systems), confined space (no permit required) and trench and excavation rescue	1	6	13
	IR	5 – Type 3	Trained for Light Frame Construction, low angle rope rescue, and single person load rope rescue	1	3	16
	JR	5 – Type 4	Trained for surface rescue and non-structural entrapment in non-collapsed structures	1	3	16

R = Urban Search and Rescue Resource

US&R SEARCH TEAM

Resource	Radio Designation	Component	Capabilities	Total Personnel
Search Team	Search Team	1 – Search Team Leader 1 – Technical Search Specialist 2 – Canine Search Specialist	Detection of victims entombed in collapsed or failed structures and environmental mishap with canines and Technical Search equipment.	4

US&R CANINE SEARCH TEAMS

Resource	Radio Designation	Components	Capabilities	Total Personnel
Canine Search Team	Canine Search Team	1 – Search Team Leader 2 – Canine Search Specialist	Detection of victims entombed in collapsed or failed structures and environmental mishap with canines.	3

OES FIRE AND RESCUE US&R CANINE SEARCH SPECIALIST

Canine is able to conduct large and complex search quickly to locate live victims that are entrapped or injured in an US&R incident. A second canine should be used whenever possible to confirm victim locations.	
Resource	Usage and Capabilities
US&R Canine (Type 1)	• Detection in largest search areas • Work in major damage and confined spaces • Detection ability amidst numerous distractions • Detection of victims entombed in collapsed or failed structures and environmental mishap
US&R Canine (Type 2)	• Detection in limited search areas • All general construction categories • Extensive obstacle agility

OES LAW ENFORCEMENT US&R CANINE SEARCH HANDLER*

Resource best used in area searches with minor damage and rubble.	
Resource	Usage and Capabilities
US&R Canine (Type 3)	• Area search • Non-structural entrapment in non-collapsed structures • US&R Awareness
US&R Canine (Type 4)	• Area search with light to minor structural entrapment exposure • US&R Awareness

*Canine US&R Search Handler is the law enforcement equivalent to the Fire and Rescue term US&R Canine Search Specialist.

OES LAW ENFORCEMENT CANINE RECOVERY TEAMS

Search element qualifications and equipment are equivalent on all Canine Types. The differentiating factor is based on the training and certification levels of the canine component. Canine Search Teams will have met all of the capabilities of the preceding types.			
Resource	Type 1 Cadaver Basic	Type 2 Live or Deceased	Type 3 Water
Law Enforcement Canine	• Body above ground • Sub-surface disarticulated • Hanging • Simple structure	• Body above ground • Hanging • Live person, must be area certified • Status of subject unknown	• Submerged • Floating • Shoreline

US&R SEARCH TYPES

Reconnaissance Search – Recon is the preliminary survey for the purpose of determining the scope and magnitude of the incident and identifying the resources needed to manage the incident. Other consideration for Recon include:

- Initial visual check of damaged area and/or assigned area of operation
- May be conducted on foot, by vehicle, by watercraft, or by air
- For isolated structure collapse incidents, the primary purpose of this action is structural assessment and hazardous materials assessment.
- Known locations of live or deceased victims will be recorded and appropriate rescue or recovery resources will be requested.
- Size and make up of recon teams are incident driven and flexible.
- Recon teams should not engage in rescue operations.
- Timely reporting of recon information is critical to the health and safety of responders, survivability of victims, and effective management of the incident.

Rapid Search (Hasty Search) – is a fast paced and methodical search in attempt to locate victims that are in immediate need of rescue. Other considerations for Rapid Search include:

- May be conducted on foot, by vehicle, by watercraft, or by air
- Size and make up of Rapid Search teams are incident driven and flexible.
- If live victims are located and can be easily evacuated, they will be immediately removed and moved to the identified casualty collection point.

- Known locations of live or deceased victims will be recorded and appropriate rescue or recovery resources will be requested.
- Documentation of areas searched must be recorded and reported.
- Rapid Search may be accomplished simultaneously with Recon.

Primary Search – is a quick search of structures likely to contain survivors. Primary searches are ground or waterborne operations conducted by walking or boating around every structure looking for victims. This is accomplished by looking into every window/opening, knocking on doors, and hailing for live victims. If there are signs of victims (dead or alive) appropriate action will be taken based on the incident objectives. Other considerations for Primary Search are:

- Fast paced, quick scan of surface debris in and around structures and selected voids.
- Size and makeup of the search team is incident driven and flexible.
- Detection resources may include physical, canine and technical.
- Known locations of live or deceased victims will be recorded and appropriate rescue or recovery resources will be requested.
- Actions necessary to immediately correct life threatening injuries may be performed by this team.
- Searched structures will be marked utilizing Search Marking System (Pages 16-38 through 16-41).
- Victim locations will be marked utilizing the Victim Marking System (Page 16-42).

Secondary Search – is the systematic search of every room of every structure in the assigned area of operation. Forced entry of structures may need to occur in order to accomplish this objective but will only be done with the authority of the Incident Commander. This may involve extensive debris removal of building materials depending on the desired level of coverage and thoroughness:

- Slow and methodical search of structures, debris, and voids
- Size and makeup of the search team is incident driven and flexible.
- Detection resources may include physical, canine and technical.
- Known locations of live or deceased victims will be recorded and appropriate rescue or recovery resources will be requested.
- Actions necessary to immediately correct life threatening injuries may be performed by this team.
- Searched structures will be marked utilizing the Search Marking System (Page 16-38 through 16-41).
- Victim locations will be marked utilizing the Victim Marking System (Page 16-42).

Special Response Search – SRS is a search implemented to gather information regarding the need for evacuation or rescue of pre-identified special needs populations. SRS may be conducted pre or post incident at these pre-identified locations.

Search Modes

DETECTION MODE – A search mode to determine if victims are present

LOCATION MODE – Following detection, a search mode to confirm victim's location and pinpoint for rescue.

HEAVY EQUIPMENT RESOURCE TYPING

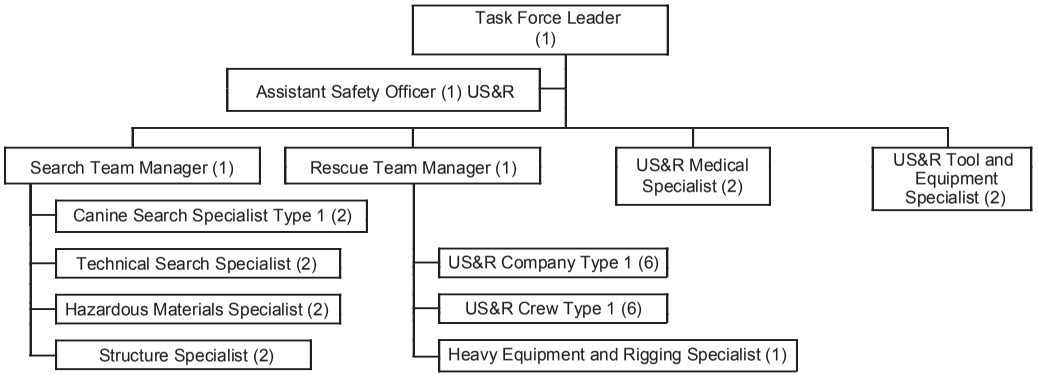
RESOURCE	COMPONENT	TYPE			
		Type 1	Type 2	Type 3	Type 4
Hydraulic Truck Crane	Rating (Tons) Radius (Feet)	100+ Up to 275	50-100 Up to 200	Up to 50 Up to 150	–
Hydraulic Rough Terrain Crane	Rating (Tons) Radius (Feet)	Up to 50 Up to 100	–	–	–
Conventional Truck Crane	Rating (Tons) Radius (Feet)	150+ Up to 300	75-150 Up to 250	Up to 75 Up to 150	–
Conventional Crawler Crane	Rating (Tons) Radius (Feet)	350+ Up to 350+	100-350 Up to 275	Up to 100 Up to 160	–
Excavator Crawler	Rating (Lbs.) Reach	80k+ Up to 70	40-80k. Up to 50	Up to 40k. Up to 40	Mini
Loader Rubber Tire	Rating (Cubic Yards)	5	3-5	1-3	Backhoe Skid Steer Mini
Forklift Conventional	Rating (Tons)	25+	10-25	5-10	–
Forklift All-Terrain Extendable	Rating (Lbs.)	3-6 tons (6-12k)	–	–	–

REGIONAL US&R TASK FORCE (RTF)

The Regional US&R Task Force Level is comprised of 29 people specially trained and equipped for large or complex US&R operations. The multi-disciplinary organization provides five functional elements that include Supervision, Search, Rescue, Medical, and Tool/Equipment Support. The Regional US&R Task Force is totally self-sufficient for the first 24 hours. Transportation is provided by the sponsoring agency and logistical support will normally be provided by the requesting agency.

A Task Force Leader supervises the Regional US&R Task Force. An Assistant Safety Officer is attached to the Task Force, and upon arrival at the incident, will be supervised by the incident's Safety Officer. The Assistant Safety Officer will work directly with the Task Force Leader and will be assigned to the RTF's area of operation. The RTF Search element includes Canine and Technical Search capabilities. The RTF Rescue element includes a Type 1 US&R Company (personnel and equipment), a Type 1 US&R Crew (personnel), and a Heavy Equipment and Rigging Specialist. This element can conduct rescue operations in all types of structures. The RTF Medical element is responsible for the care and treatment of injured Task Force members or victims if such care must occur in the hazard area. The Medical element will work directly for the RTF and/or as appropriate within the Incident Medical Unit. The Tool and Equipment support element works within the RTF for tool and equipment repair and maintenance, and will coordinate with the incident Logistics Section for acquisition of tools, materials, and equipment from off-incident locations.

REGIONAL US&R TASK FORCE ORGANIZATION CHART



29 POSITIONS

STATE/NATIONAL US&R TASK FORCE

The Federal Government, through the Federal Emergency Management Agency (FEMA), under the Department of Homeland Security (DHS), has established several State/National Urban Search and Rescue (US&R) Task Forces throughout the nation. All US&R Task Force activities are coordinated through the Governor's Office of Emergency Services (OES) who serves as the primary point of contact for FEMA/DHS. A US&R Task Force is also a State resource that can be acquired without a request for Federal assistance. All requests for a US&R Task Force must go through normal Mutual Aid request procedures. A full, 70-person, Type I, National US&R Task Force is able to deploy within six hours of activation.

Each State/National US&R Task Force is comprised of 70 persons specifically trained and equipped for large or complex US&R Operations. The multi-disciplinary organization provides seven functional elements that include Supervision, Search, Rescue, Haz Mat, Medical, Logistics and Planning. The State/National US&R Task Force can provide round-the-clock US&R Operations (two 12-hour shifts). The US&R Task Force is totally self-sufficient for the first 72 hours and has a full equipment cache to support its operation. Either State or Federal resources provide transportation and logistical support.

A State/National US&R Task Force may also be configured as a Type III Task Force with 28 members.

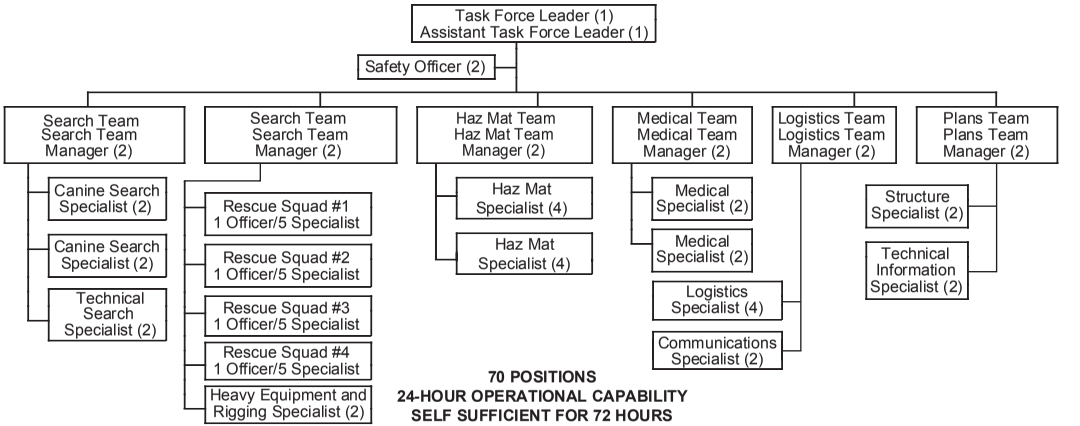
A Task Force Leader supervises the State/National US&R Task Force. The US&R Task Force Search element includes physical, canine and electronic capabilities. The Rescue element can conduct rescue operations in all types of structures. The Haz Mat element is primarily responsible for

the detection and decontamination of Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) substances for Task Force members and entrapped victims. The Medical element is primarily responsible for the care and treatment of Task Force members and entrapped victims during extrication. The Logistics element provides the Task Force with logistical support and communications. The Planning element provides personnel competent in structural integrity assessments and documentation of Task Force activities.

The State/National US&R Task Force is designed to be used as a Single Resource, but is modularized into functional elements that can be independently requested and utilized. However, once mobilized as a State/National US&R Task Force, the elements shall remain under the supervision of the US&R Task Force Leader.

A Federal US&R Incident Support Team (IST) coordinates the arrival of a State/National US&R Task Force. The IST is capable of providing overhead management and logistical support to the US&R Task Force while on deployment if an ICS organization is not in place. If an ICS organization is in place, the IST will integrate into that organization. State/National US&R Task Forces will work within the local incident command organization.

STATE/NATIONAL US&R TASK FORCE ORGANIZATION CHART



STRUCTURE/HAZARDS MARKING SYSTEM

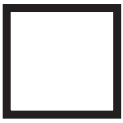
At incidents involving several structures or large areas of damage, the identity and location of individual structures is crucial. The use of existing street names and addresses should always be considered first. If due to damage this is not possible, use the existing hundred block and place all even numbers on one side of the street and all odd numbers on the other side. Mark the new numbers on the front of the structure with orange spray paint. If due to damage the name of the street is not identifiable start with the letter “A” using the phonetic alphabet “Alpha”, “Bravo”, Charlie, etc.

Structure hazards identified during initial size-up activities and throughout the incident should be noted. This Structure/Hazards Mark should be made on the outside of all normal entry points. Orange spray paint seems to be the most easily seen color on most backgrounds and line marking or downward spray cans apply the best paint marks. Lumber chalk or lumber crayons should be used to mark additional information inside the search mark itself because they are easier to write with than spray paint.

A large square box (approximately two feet) is outlined at any entrance accessible for entry into any compromised structure. Use orange paint for this marking. Specific markings will be clearly made adjacent to the box to indicate the condition of the structure and any hazards found at the time of this assessment. Normally the square box marking would be made immediately adjacent to the entry point identified as safe. An arrow will be placed next to the box indicating the direction of the safe entrance if the Structure/Hazards marking must be made somewhat remote from the safe entrance.

STRUCTURE/HAZARDS MARKINGS

Make a large (2' x 2') square box with orange spray paint on the outside of the main entrance to the structure. Put the date, time, hazardous material conditions and team or company identifier outside the box on the right-hand side. This information can be made with a lumber-marking device.



9/12/93
1310 hrs.
HM – nat. gas
SMA – E-1

Structure is accessible and safe for search and rescue operations. Damage is minor with little danger of further collapse.

9/12/93
1310 hrs.
HM – none
SMA – E-1

Structure is significantly damaged. Some areas are relatively safe, but other areas may need shoring, bracing, or removal of falling and collapse hazards.

9/12/93
1310 hrs.
HM – nat. gas
SMA – E-1

Structure is not safe for search or rescue operations. May be subject to sudden additional collapse. Remote search operations may proceed at significant risk. If rescue operations are undertaken, safe haven areas and rapid evacuation routes should be created.

9/12/93
1310 hrs.
HM – nat. gas
SMA – E-1

Arrow located next to a marking box indicates the direction to a safe entrance into the structure, should the marking box need to be made remote from the indicated entrance.

SEARCH MARKING SYSTEM

Search Markings must be easy to make, easy to read and easy to understand. To be easily seen the search mark must be large and of a contrasting color to the background surface. Orange spray paint seems to be the most easily seen color on most backgrounds and line marking or downward spray cans apply the best paint marks. A lumber marking device may be used to write additional information inside the search mark itself when it would be difficult to write the additional information with spray paint.

A large distinct marking will be made outside the main entrance of each building, structure or area to be searched. This “Main Entrance” search marking will be completed in two steps. First, a large, single slash (approximately two feet) shall be made starting at the upper left moving to the lower right near the main entrance at the start of the search. The Search Team identifier and time that the structure was entered shall be marked to the left of the mid-point of the slash and the date shall be marked near the top of the slash on the opposite side.

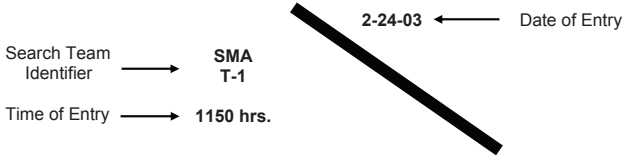
When the search of the entire structure is complete and the Search Team exits the building, a second large slash shall be made in the opposite direction forming an “X” on the Main Entrance search marking. Additional information summarizing the entire search of the structure will be placed in three quadrants of the “X”. The left quadrant will already contain the Search Team identifier and time when the Search Team first entered the structure. In the top quadrant enter the time the Search Team exited the structure under the date. Change the date if different from date the structure was entered. The right quadrant is for any significant hazards located inside the structure. The bottom quadrant is for the number of live “V” or dead “¥” victims still inside the structure. Use a small “X” in the bottom quadrant if no victims are inside the structure.

If the search of the entire structure is incomplete, make a circle (approximately 1' diameter) in the middle of the single slash. The left side will already contain the Search Team identifier and time when the Search Team first entered the structure. At the top end of the slash, enter the time the Search Team exited the structure under the date. Change the date if different from date the structure was entered. On the right side, mid-point of the slash, is for any significant hazards located inside the structure. The bottom end of the slash is for the number of live "V" or dead "Ⱶ" victims still inside the structure. Use a small "X" at the bottom if no victims are inside the structure.

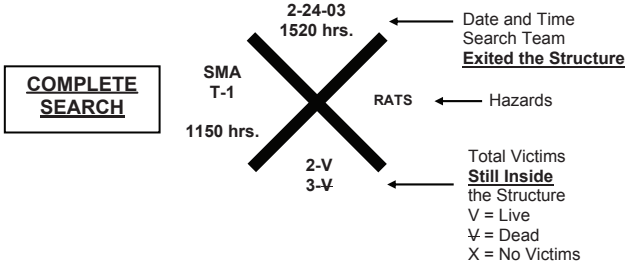
During the search function, while inside the structure, a large single slash shall be made upon entry of each room, area or floor. After the search of the room or area has been completed, a second large slash shall be drawn in the opposite direction forming an "X". The only additional information placed in any of the "X" quadrants while inside the structure shall be that pertaining to any significant hazards and the number of live "V" or dead "Ⱶ" victims, as indicated by "V" for live and "Ⱶ" for dead.

SEARCH MARKINGS

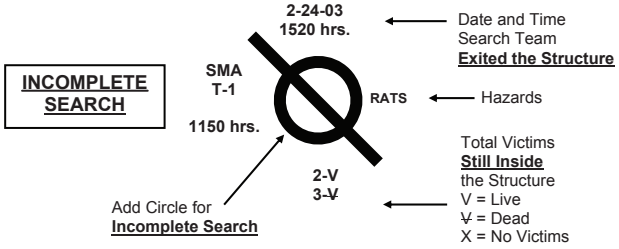
Main Entrance Search Marking- WHEN YOU ENTER



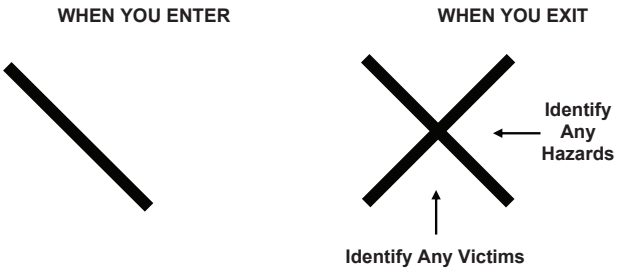
Main Entrance Search Marking- WHEN YOU EXIT



Main Entrance Search Marking- WHEN YOU EXIT



Interior Search Markings- Each Room, Area or Floor



VICTIM MARKING SYSTEM

Make a large (2' x 2') "V" with orange spray paint near the location of a **potential** victim. Mark the name of the Search Team or Crew identifier in the top part of the "V" with paint or a lumber marker type device.

Paint a circle around the "V" when a potential victim is **confirmed** to be **alive** either visually, vocally, or hearing specific sounds that would indicate a high probability of a live victim. If more than one confirmed live victim, mark the total number of victims under the "V".

Paint a horizontal line through the middle of the "V" when a **confirmed** victim is determined to be **deceased**. If more than one confirmed deceased victim, mark the total number of victims under the "V". Use both the live and deceased victim-marking symbols when a combination of live and deceased victims is determined to be in the same location.

Paint an "X" through the confirmed victim symbol after **all** victim(s) have been removed from the specific location identified by the marking.

An arrow may need to be painted next to the "V" pointing towards the victim when the victim's location is not immediately near where the "V" is painted.

Chemical Light and Flagging Tape Plan

Chemical light marking for night operations should include flagging tape of the same color as the light stick.

WHITE	MARKER-NEUTRAL
RED	NO GO, HAZARD
YELLOW	CAUTION
GREEN	ENTRY LOCATION
BLUE	VICTIM

Each lighted location should be accompanied by the appropriate building search or victim marking as referenced on Pages 16-36 through 16-42 as necessary.

EMERGENCY SIGNALING SYSTEM

Because of the high potential of secondary collapse, dangerous conditions, and the need to communicate other important information, an emergency signaling system should be adopted and in use by all personnel at the incident site. Emergency signals must be a loud and identifiable and sounded when conditions require immediate attention. Emergency signals can be made using devices such as a whistle, air horn, vehicle horn, or bell. Each structure or larger area of operations may need to have its own distinct emergency signal device when multiple rescue operations are taking place in the same area to reduce confusion.

Supervisors should identify and inform assigned personnel of a designated place of assembly and/or safe zone for a Personal Accountability Report (PAR) to be conducted should an evacuation signal be sounded. A place of assembly is usually a safe location outside the evacuation area. A safe zone is usually a safe location within a building or disaster site that can be entered within the evacuation area. When an evacuation signal is sounded, all supervisors must conduct a roll call of their assigned personnel and communicate the results of the PAR to their supervisor.

Evacuate the area	**Short signals repeated for 10 seconds, pause for 10 seconds, and repeat for 3 repetitions. Total signal time – 50 seconds.**
Cease Operations/All quiet	**One long signal (8 to 10 seconds).**
Resume Operations	**One long and one short signal.**

CHAPTER 17

HAZARDOUS MATERIALS AND MASS DECONTAMINATION

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INTRODUCTION

The Hazardous Materials organizational module is designed to provide an organizational structure that will provide necessary supervision and control for the essential functions required at virtually all Hazardous Materials incidents. This is based on the premise that controlling the tactical operations of companies and movement of personnel and equipment will provide a greater degree of safety and also reduce the probability of spreading of contaminants. The Hazardous Materials Group Supervisor or the Hazardous Materials Branch Director (if activated) will direct primary functions, and all resources that have a direct involvement with the hazardous materials operations.

MODULAR DEVELOPMENT

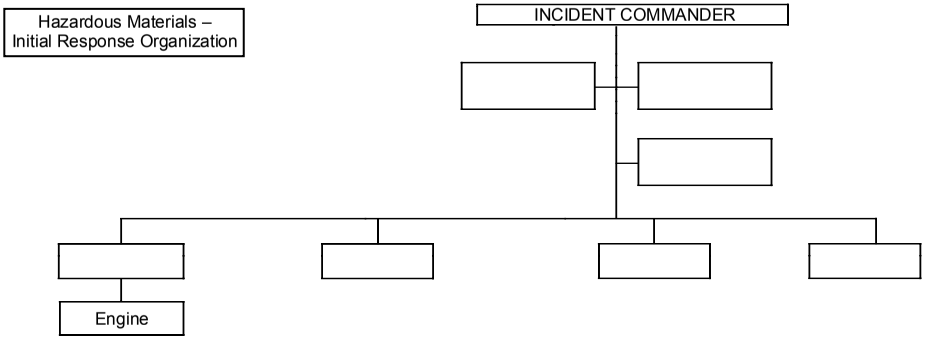
A series of examples of modular development are included to illustrate one method of expanding the incident organization:

Initial Response Organization - The Incident Commander manages all initial response resources as well as all Command and General Staff responsibilities.

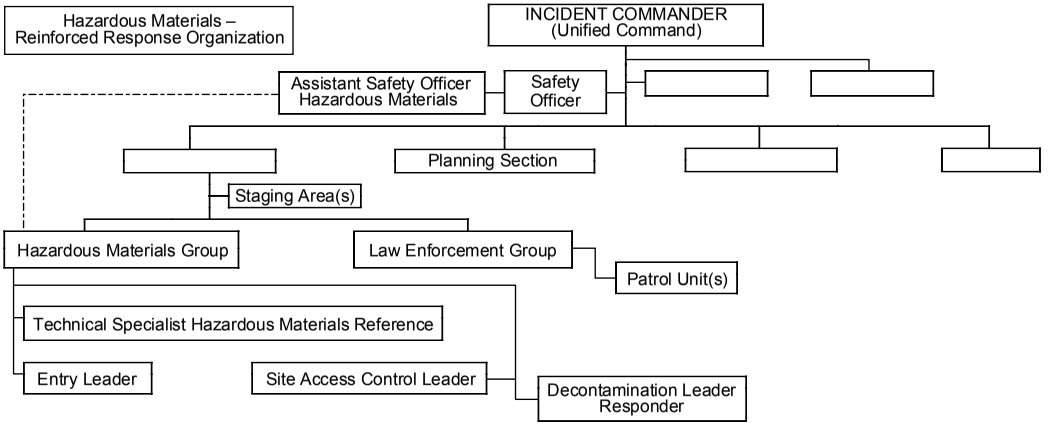
Reinforced Response Organization - In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities around the Control Zones and have organized a Law Enforcement Group to isolate the operational area. The Unified Command has established a Planning Section, a Staging Area, and an Assistant Safety Officer-Hazardous Materials.

Multi-Division/Group Response Organization – The Incident Commanders have activated most Command and General Staff positions and have established multiple groups.

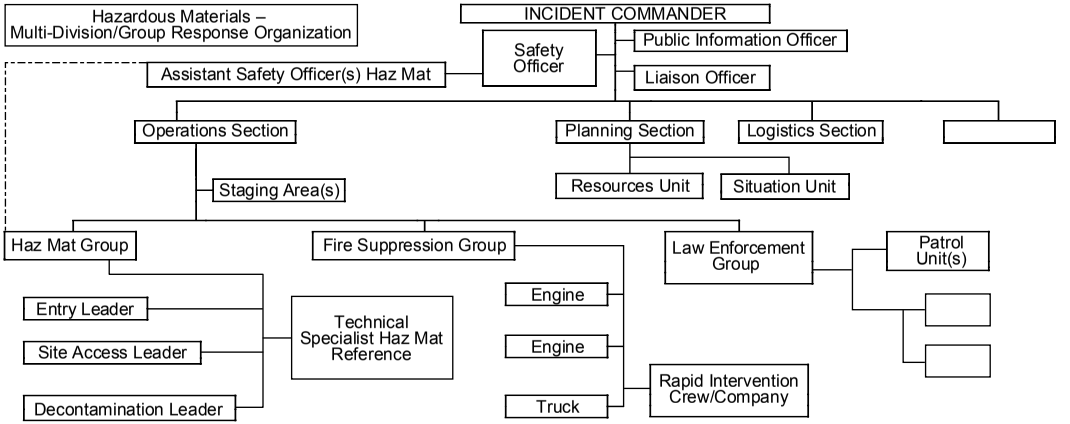
Multi-Branch Response Organization – The Incident Commanders have activated all Command and General Staff positions, and have established four branches in the Operations Section.



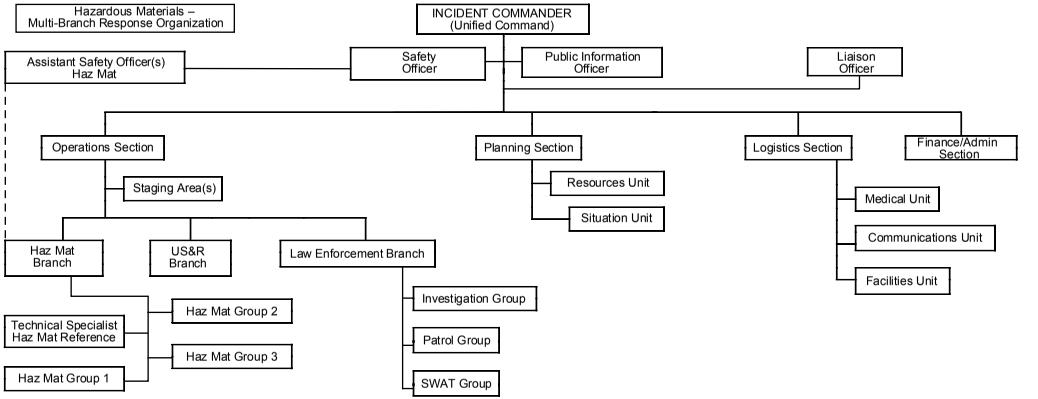
Initial Response Organization – The Incident Commander manages all initial response resources as well as all Command and General Staff responsibilities.



Reinforced Response Organization – In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities around the Control Zones and have organized a Law Enforcement Group to isolate and contain the operational area. The Unified Command has established a Planning Section, a Staging Area, and an Assistant Safety Officer-Hazardous Materials.



Multi-Division/Group Response Organization – The Incident Commanders have activated most Command and General Staff positions and have established multiple groups.



Multi-Branch Response Organization – The Incident Commanders have activated all Command and General Staff positions within the Operations Section.

HAZARDOUS MATERIALS GROUP SUPERVISOR - The Hazardous Materials Group Supervisor (HMGS) or Hazardous Materials Branch Director reports to the Operations Section Chief. The Hazardous Materials Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the Hazardous Materials Group operations. The Hazardous Materials Group Supervisor is responsible for the assignment of resources within the Hazardous Materials Group, reporting on the progress of control operations and the status of resources within the group. The Hazardous Materials Group Supervisor directs the overall operations of the Hazardous Materials Group:

a. Review Common Responsibilities (Page 1-2).
b. Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines.
c. Evaluate and recommend public protection action options to the Operations Chief or Branch Director (if activated).
d. Ensure that current weather data and future weather predictions are obtained.
e. Establish environmental monitoring of the hazard site for contaminants.
f. Ensure that a Site Safety and Control Plan (ICS Form 208) is developed and implemented.
g. Conduct safety meetings with the Hazardous Materials Group.
h. Participate, when requested, in the development of the Incident Action Plan.
i. Ensure that recommended safe operational procedures are followed.

j. Ensure that the proper Personal Protective Equipment is selected and used.
k. Ensure that the appropriate agencies are notified through the Incident Commander.
l. Conduct Post Incident Debriefing related to Hazardous activities.
m. Maintain Unit/Activity Log (ICS Form 214).

ASSISTANT SAFETY OFFICER-HAZARDOUS MATERIALS – Reports to the incident Commander or Safety Officer (if activated) and coordinates with the Hazardous Materials Group Supervisor or Hazardous Materials Branch Director (if activated). The Assistant Safety Officer-Hazardous Materials coordinates safety related activities directly relating to the Hazardous Materials Group operations as mandated by 29 CFR Part 1910.120 and applicable state and local laws. This position advises the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) on all aspects of health and safety, continuously monitors for modifying conditions and has the authority to stop or prevent unsafe acts. It is mandatory that an Assistant Safety Officer-Hazardous Materials be appointed at all hazardous materials incidents. The Assistant Safety Officer-Hazardous Materials does not act as the Safety Officer for the overall incident:

a. Review Common Responsibilities (page 1-2).
b. Obtain briefing from the Hazardous Materials Group Supervisor.
c. Participate in the preparation of, and implement the Site Safety and Control Plan (ICs Form 208).
d. Advise the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) of deviations from the Site Safety and Control Plan (ICS Form 208) or any dangerous situations.

e. Has authority to alter, suspend, or terminate any activity that may be judged to be unsafe.
f. Ensure the protection of the Hazardous Materials Group personnel from physical, environmental, and chemical hazards/exposures.
g. Ensure the provision of required emergency medical services for assigned personnel and coordinate with the Medical Unit Leader.
h. Ensure that medical related records for the Hazardous Materials Group personnel are maintained.
i. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS ENTRY LEADER - Reports to the Hazardous Materials Group Supervisor. The Hazardous Materials Entry Leader (ELDR) is responsible for the overall entry operations of assigned personnel within the Exclusion Zone:

a. Review Common Responsibilities (Page 1-2).
b. Supervise entry operations.
c. Recommend actions to mitigate the situation within the Exclusion Zone.
d. Carry out actions, as directed by the Hazardous Materials Group Supervisor, to mitigate the hazardous materials release or threatened release.
e. Maintain communications and coordinate operations with the Decontamination Leader.
f. Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).
g. Maintain communications and coordinate operations with Technical Specialist-Hazardous Materials Reference.
h. Maintain control of the movement of people and equipment within the Exclusion Zone, including contaminated victims.

i. Direct rescue operations, as needed, in the Exclusion Zone.
j. Participate in the preparation of and implement the Site Safety and Control Plan (ICS form 208).
k. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS DECONTAMINATION LEADER -
Reports to the Hazardous Materials Group Supervisor. The Hazardous Materials Decontamination Leader (DLDR) is responsible for the operations of the decontamination element, providing decontamination as required by the Incident Action Plan:

a. Review Common Responsibilities (Page 1-2).
b. Establish the Contamination Reduction Corridor(s).
c. Identify contaminated people and equipment.
d. Supervise the operations of the decontamination element in the process of decontaminating people and equipment.
e. Control the movement of people and equipment within the Contamination Reduction Zone.
f. Maintain communications and coordinate operations with the Entry Leader.
g. Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).
h. Coordinate the transfer of contaminated patients requiring medical attention (after decontamination) to the Medical Group.
i. Coordinate handling, storage, and transfer of contaminants within the Contamination Reduction Zone.
j. Participate in the preparation of and implement the Site Safety and Control Plan (ICS Form 208).
k. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS SITE ACCESS CONTROL LEADER - Reports to the Hazardous Materials Group Supervisor. The Hazardous Materials Site Access Control Leader (SACL) is responsible for the control of the movement of all people and equipment through appropriate access routes at the hazard site and ensures that contaminants are controlled and records are maintained:

a. Review Common Responsibilities (Page 1-2).
b. Organize and supervise assigned personnel to control access to the hazard site.
c. Oversee the placement of the Exclusion Control Line and the Contamination Control Line.
d. Ensure that appropriate action is taken to prevent the spread of contamination.
e. Establish the Safe Refuge Area within the Contamination Reduction Zone. Appoint a Safe Refuge Area Manager (as needed).
f. Ensure that injured or exposed individuals are decontaminated prior to departure from the hazard site.
g. Track the movement of persons passing through the Contamination Control Line to ensure that long-term observations are provided.
h. Coordinate with the Medical Group for proper separation and tracking of potentially contaminated individuals needing medical attention.
i. Maintain observations of any changes in climatic conditions or other circumstances external to the hazard site.
j. Maintain communications and coordinate operations with the Entry Leader.
k. Maintain communications and coordinate operations with the Decontamination Leader.
l. Participate in the preparation of and implement the Site Safety and Control Plan (ICS Form 208).
m. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS SAFE REFUGE AREA MANAGER - The Hazardous Materials Safe Refuge Area Manager (SRAM) reports to the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Leader. The Safe Refuge Area Manager is responsible for evaluating and prioritizing the need for treatment, collecting information, and preventing the potential spread of contamination by any potential victims. If there is a need for the Safe Refuge Area Manager to enter the Contamination Reduction Zone in order to fulfill assigned responsibilities, then the appropriate Personal Protective Equipment shall be worn (see pages 17-18 through 17-21):

a. Review Common Responsibilities (Page 1-2).
b. Establish the Safe Refuge Area within the Contamination Reduction Zone, adjacent to the Contamination Reduction Corridor and the Exclusion Zone Control Line.
c. Monitor the hazardous materials release to ensure that the Safe Refuge Area is not subject to exposure.
d. Assist the Site Access Control Leader by ensuring the potential victims are evaluated for contamination.
e. Manage the Safe Refuge Area for the holding and evaluation of potential victims who may have information about the incident, or if suspected of having contamination.
f. Maintain communication with the Entry Leader to coordinate the movement of potential victims from the Exclusion Zone to the Safe Refuge Area.
g. Maintain communication with the Decontamination Leader to coordinate the movement of potential victims from the Safe Refuge Area into the Contamination Reduction Corridor, if needed.
h. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS REFUGE AREA MANAGER -
The Hazardous Materials Refuge Area Manager reports to the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Leader. The Hazardous Materials Refuge Area Manager is responsible for evaluating and prioritizing victims with a high possibility for contamination, decontamination and treatment. This area should be separate from the Safe Refuge Area to prevent the spread of contamination by these victims. If there is a need for the Refuge Area Manager to enter the Contamination Reduction Zone in order to fulfill assigned responsibilities, then the appropriate Personal Protective Equipment shall be worn (see Pages 17-18 through 17-21):

a. Review Common Responsibilities (Page 1-2).
b. Establish the Refuge Area adjacent to the Contamination Reduction Zone, adjacent to the Contamination Reduction Corridor and within the Exclusion Zone Control Line.
c. Monitor the hazardous materials release to ensure that the Refuge Area is not subject to exposure.
d. Assist the Site Access Control Leader by ensuring the victims are evaluated for contamination.
e. Manage the Refuge Area for the holding and evaluation of victims who are likely contaminated.
f. Maintain communication with the Entry Leader to coordinate the movement of victims from the Refuge Area(s) in the Exclusion Zone to the Safe Refuge Area.
g. Maintain communication with the Decontamination Leader to coordinate the movement of victims from the Refuge Area into the Contamination Reduction Corridor, if needed.
h. Maintain Unit/Activity Log (ICS Form 214).

TECHNICAL SPECIALIST-HAZARDOUS MATERIALS REFERENCE - Reports to the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director if activated). This position provides continuous technical information and assistance to the Hazardous Materials Group using various reference sources such as computer databases, technical journals, CHEMTREC, and phone contact with facility representatives. The Technical Specialist-Hazardous Materials Reference (TSHM) may provide product identification using hazardous categorization tests and/or any other means of identifying unknown materials:

a. Review Common Responsibilities (Page 1-2).
b. Obtain briefing from the Planning Section Chief or assigned supervisor.
c. Provide technical support to the Hazardous Materials Group Supervisor or Hazardous Materials Branch Director (if activated).
d. Maintain communications and coordinate operations with the Entry Leader.
e. Continuously provide and interpret environmental monitoring and modify the monitoring plan as necessary as incident conditions change.
f. Provide analysis of hazardous material sample.
g. Determine Personal Protective Equipment compatibility to hazardous material.
h. Provide technical information of the incident for documentation.
i. Provide technical information management with public and private agencies i.e.: Poison Control Center, Toxicology Center, CHEMTREC, State Department of Food and Agriculture, National Response Team.
j. Assist Planning Section with projecting the potential environmental effects of the release.
k. Participate in the preparation of and implement the Site Safety and Control Plan (ICS Form 208).
l. Maintain Unit/Activity Log (ICS Form 214).

UNIFIED COMMAND PARTNERS AND/OR ASSISTING AGENCIES

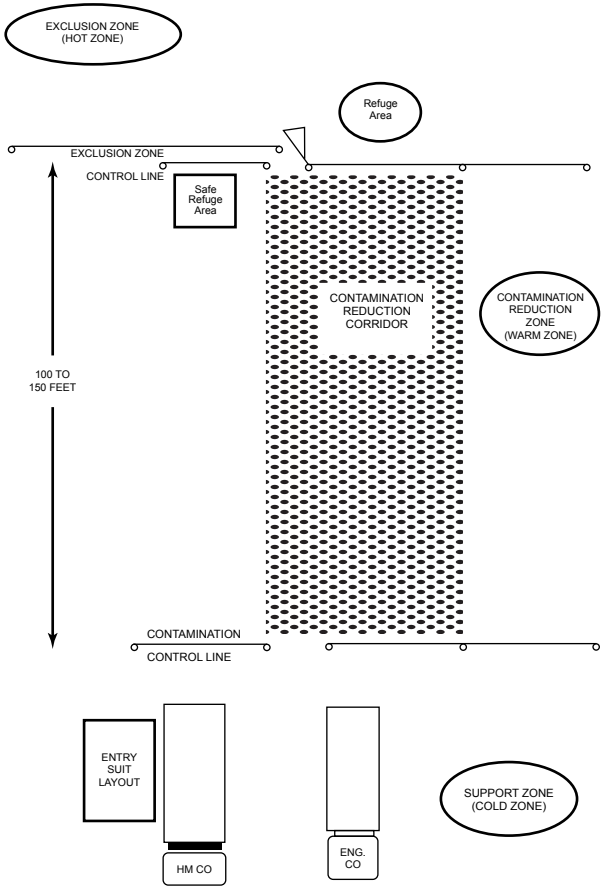
LAW ENFORCEMENT - Local, State, and Federal law enforcement agencies may respond to Hazardous Materials incidents. Depending on incident factors, law enforcement may be a partner in Unified Command or may participate as an assisting agency. Some functional responsibilities that may be handled by law enforcement are:

a. Isolate the incident area.
b. Manage crowd control.
c. Manage traffic control.
d. Manage public protective action.
e. Provide scene management for on-highway incidents.
f. Manage criminal investigations.
g. Evidence collection.

ENVIRONMENTAL HEALTH AGENCIES - In most cases the local or State environmental health agency will be at the scene as a partner in Unified Command. Some functional responsibilities that may be handled by environmental health agencies are:

a. Determine the identity and nature of the Hazardous Materials.
b. Establish the criteria for clean-up and disposal of the Hazardous Materials.
c. Declare the site safe for re-entry by the public.
d. Provide the medical history of exposed individuals.
e. Monitor the environment.
f. Supervise the clean up of the site.
g. Enforce various laws and acts.
h. Determine legal responsibility.
i. Provide technical advice.
j. Approve funding for the cleanup.

CONTROL ZONE LAYOUT



HAZARDOUS MATERIALS COMPANY TYPES
COMPANY TYPING AND MINIMUM STANDARDS

Components	Type 1	Type 2	Type 3
Field Testing	**Known Chemicals**	**Known Chemicals**	**Known Chemicals**
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem. / Bio		
Air Monitoring	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide
	Specialty Gases Hydrocarbon Liquid Vapors	Specialty Gases Hydrocarbon Liquid Vapors	
	WMD Chem. / Bio		
Sampling: Capturing Labeling Evidence Collection	Known Chemicals	Known Chemicals	Known Chemicals
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem. / Bio		
Radiation Monitoring And Detection	Gamma	Gamma	Gamma
	Beta	Beta	Beta
	Alpha Radionuclide		
Chemical Protective Clothing:	Liquid-Splash Protective	Liquid-Splash Protective	Liquid-Splash Protective
	Vapor Protective	Vapor Protective	
	Flash Fire Vapor Protective (Optional rev. 2007)	Flash Fire Vapor Protective (Optional rev. 2007)	
	WMD Chem. / Bio Vapor Protective		
	WMD Chem. / Bio Liquid Splash Protective		

Components	Type 1	Type 2	Type 3
Chemical Protective Clothing: Gloves - Boots	NFPA Compliant Replacement	NFPA Compliant Replacement	NFPA Compliant Replacement
	Hi-Temp. Protective Gloves Cryogenic Protective Gloves	Hi-Temp. Protective Gloves Cryogenic Protective Gloves	
	Radiation Protection Gloves		
Technical Reference	Printed and Electronic	Printed and Electronic	Printed and Electronic
	Plume Air Modeling, Map Overlays	Plume Air Modeling, Map Overlays	
	WMD Chem. / Bio Sources		
Special Capabilities	Heat Sensing	Heat Sensing	
	Night Vision	Night Vision	
	Digital Photo	Digital Photo	
	Digital Video		
Intervention	Diking, Damming, Absorption	Diking, Damming, Absorption	Diking, Damming, Absorption
	Liquid, Solid Leak Intervention	Liquid, Solid Leak Intervention	Liquid, Solid Leak Intervention
	Vapor Leak Intervention	Vapor Leak Intervention	
	Neutralization, Plugging, Patching	Neutralization, Plugging, Patching	
	WMD Chem. / Bio Spill Containment		

Components	Type 1	Type 2	Type 3
Decontamination	Known Chemicals	Known Chemicals	Known Chemicals
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem. / Bio		
Communications	In-Suit	In-Suit	In-Suit
	Cell Phone	Cell Phone	Cell Phone
	Wireless Fax, Copy, Web Access	Wireless Fax, Copy, Web Access	
Respiratory Protection	SCBA	SCBA	SCBA
	Umbilical Air Support (Changed to Optional 2006)		
	APR or PAPR, WMD Chem. / Bio Compliant		
Personnel: Staffing Levels	Haz Mat Specialist (b) WMD Chem. / Bio (c) 7 (d)	Haz Mat Specialist (b) 5 (d)	Haz Mat Technician (a) 5 (d)

a. All company personnel must meet the hazardous materials training requirements for Technical in CCR Title 19 Section 2520.

b. All company personnel must meet the hazardous materials training requirements for Specialist in CCR Title 19 Section 2520.

c. All company personnel must meet the hazardous materials training requirements for Hazardous Materials Weapons of Mass Destruction Terrorism for Technical Specialist. Training shall, at a minimum, meet or be equivalent to the requirements found in Title 19 CCR 2520 (ff).

d. One company member trained to a minimum level of Assistant Safety Officer Haz Mat (ICS-HM-222-5) and shall meet or be equivalent to the requirements found in Title 19 CCR 2520 (r).

MASS DECONTAMINATION

INTRODUCTION

The Mass Decontamination organizational module is designed as an organizational structure that will provide necessary supervision and control for the essential functions required at virtually all Mass Decontamination incidents. This is based on the premise that controlling the tactical operations of companies and movement of personnel and equipment will provide a greater degree of safety and also reduce the probability of spreading of contaminants. The Hazardous Materials Group Supervisor or the Hazardous Materials Branch Director (if activated) will direct primary functions, and all resources that have a direct involvement with the mass decontamination will be supervised by one the functional leaders or the Hazardous Materials Group Supervisor.

MODULAR DEVELOPMENT

A series of examples of modular development are included to illustrate one method expanding the incident organization:

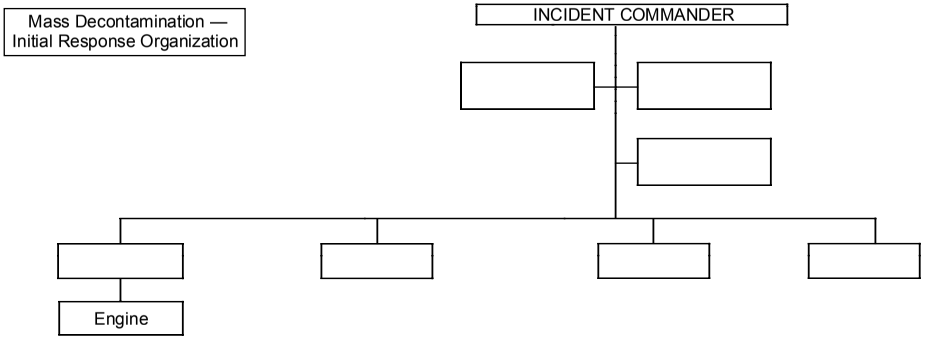
Initial Response Organization: The Incident Commander manages all initial response resources as well as all Command General Staff responsibilities.

Reinforced Response Organization: In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities around the Control Zones and have coordinated with Law Enforcement to isolate and contain the operational area. Mass Decontamination has

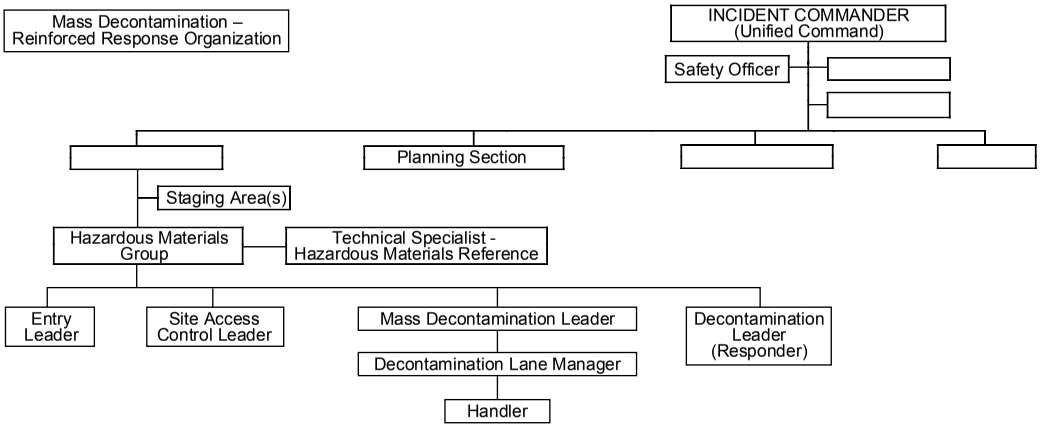
been established to handle multiple contaminated victims. The Unified Command has decided to establish a Planning Section, a Staging Area, and a Safety Officer.

Multi-Division/Group Response Organization: The Unified Command has activated most Command and General Staff positions and has established a Mass Decontamination Group. The Mass Decontamination Unit Leader has set up lanes to handle both ambulatory and non-ambulatory patients.

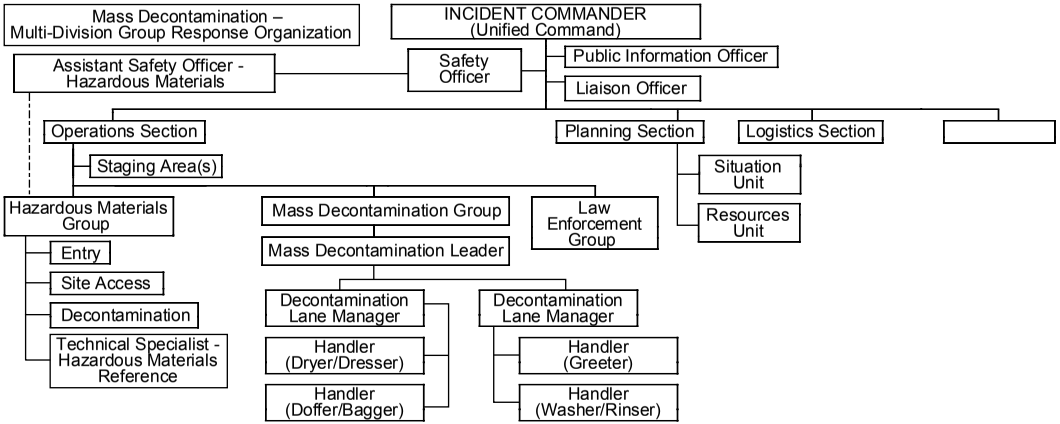
Multi-Branch Response Organization: The Unified Command has activated all Command and General Staff positions, and has established three branches in the Operations Section. A Mass Decontamination Branch has been established with two Mass Decontamination Groups.



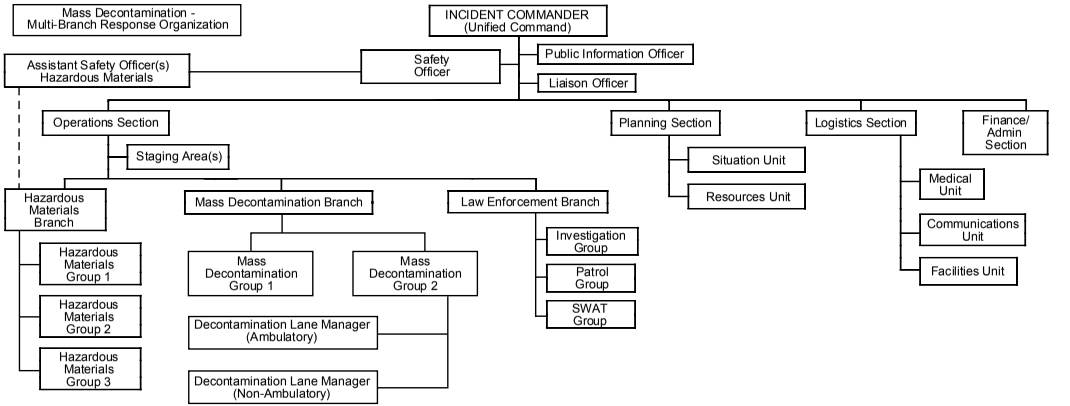
Initial Response Organization: The Incident Commander manages all initial response resources as well as all Command and General Staff responsibilities.



Reinforced Response Organization: In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities around the Control Zones and have coordinated with Law Enforcement to isolate and contain the operational area. Mass Decontamination has been established to handle multiple contaminated victims. The Unified Command has decided to establish a Planning Section, a Staging Area, and a Safety Officer.



Multi-Division/Group Response Organization: The Unified Command has activated most Command and General Staff positions and has established a Mass Decontamination Group. The Mass Decontamination Unit Leader has set up lanes to handle both ambulatory and non-ambulatory patients.



Multi-Branch Response Organization: The Unified Command has activated all Command and General Staff positions, and has established three branches in the Operations Section. A Mass Decontamination Branch has been established with two Mass Decontamination Groups.

MASS DECONTAMINATION GROUP SUPERVISOR – The Mass Decontamination Group Supervisor reports to the Operations Section Chief, the Hazardous Materials Branch Director or the Mass Decontamination Branch Director (if activated). The Mass Decontamination Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the Mass Decontamination Group operations. The Mass Decontamination Group Supervisor is responsible for the assignment of resources within the Mass Decontamination Group, reporting on the progress of control operations and the status of resources within the Mass Decontamination Group. The Mass Decontamination Group Supervisor directs the overall operations of the Mass Decontamination Group:

a. Review Command Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Operations Section Chief or Branch Director (if activated).
c. Ensure coordination of activities with Hazardous Materials Group Supervisor.
d. Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines.
e. Ensure that mass decontamination components of the Site Safety and Control Plan (ICS Form 208) are implemented.
f. Conduct safety meetings with the Mass Decontamination Group.
g. Coordinate with the Assistant Safety Officer(s) to ensure safe operational procedures are followed.
h. Participate, when requested, in the development of the Incident Action Plan.
i. Ensure that the proper Personal Protective Equipment is selected and used.

j. Ensure that the appropriate agencies are notified thought the Incident Commander.
k. Coordinate with the handling of weapons, contraband, evidence or other unusual articles with Law Enforcement.
l. Ensure procedures for proper handling of personal effects.
m. Ensure provisions for modesty for all victims (Families, Male and Female Lanes, etc.) have been put in place.
n. Ensure proper setup, demobilization of Contamination Reduction Zone, and proper disposal of any contaminants.
o. Coordinate with Medical Group Supervisor (if activated).
p. Ensure effectiveness of the decontamination process as determined by technical reference.
q. Maintain Unit/Activity Log (ICS Form 214).

MASS DECONTAMINATION UNIT LEADER – The Mass Decontamination Unit Leader reports to the Hazardous Materials Group Supervisor or Mass Decontamination Group Supervisor (if activated). The Mass Decontamination Unit Leader is responsible for the operations of the mass decontamination element, providing decontamination as required by the Incident Action Plan:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Hazardous Materials Group Supervisor or Mass Decontamination Group Supervisor (if activated).
c. Establish the Contamination Reduction Corridor(s).
d. Identify contaminated people and equipment.
e. Supervise the operations of the decontamination element in the process of decontaminating people and equipment.
f. Maintain control of movement of people and equipment within the contamination Reduction Zone.
g. Maintain communications and coordinate operations with the Entry Leader as necessary.

h. Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area manager (if activated).
i. Coordinate the transfer of contaminated victims requiring medical attention (after decontamination) to the Medical Group.
j. Ensure procedures are in place for proper handling of personal effects.
k. Coordinate handling, storage, and transfer of contaminants within the Contamination Reduction Zone.
l. Maintain Unit/Activity Log (ICS Form 214).

DECONTAMINATION LANE MANAGER – The Decontamination Lane Manager reports to the Mass Decontamination Leader. The Decontamination Lane Manager is responsible for the operations of the decontamination element providing decontamination as required by the Incident Action Plan:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Mass Decontamination Leader.
c. Establish the ambulatory/non-ambulatory decontamination lane(s) within the Contamination Reduction Zone as needed.
d. Identify contaminated people and equipment.
e. Supervise the operations of the decontamination element in the process of decontaminating victims and equipment.
f. Maintain control of movement of people and equipment within the decontamination lane(s).
g. Maintain communications and coordinate operations with the Decontamination Leader.
h. Coordinate the transfer of contaminated victims requiring medical attention (after decontamination) to the Medical Group.

i. Coordinate handling, storage and transfer of contaminants and person effects within the Communication Reduction Zone.
j. Maintain Unit/Activity Log (ICS Form 214).

HANDLER – The Handler reports to the Decontamination Lane Manager. The Handler is responsible for the movement of ambulatory/non-ambulatory victims through the Contamination Reduction Corridor. The Handler assists with the movement of victims within the Contamination Reduction Zone from receipt of victim through the decontamination process. Handlers will deliver decontaminated ambulatory/non-ambulatory victims to triage personnel. Handlers will go through the appropriate decontamination measures as outlined in the Site Safety and Control Plan (ICS Form 208) prior to exiting the Contamination Reduction Zone (CRZ). Handlers may be assigned to the following functions:

- Greeter – responsible for directing the movement of ambulatory victims though the Contamination Reduction Corridor.
- Duffer/Bagger – responsible for the removal of clothing and personal belongings of non-ambulatory victims upon entrance to the decontamination process.
- Washer/Rinser – responsible for removal of contaminants of the non-ambulatory victims through the decontamination process. The Washer/Rinser will transfer the non-ambulatory victim to the Dryer/Dresser.
- Dryer/Dresser – responsible for drying and covering the non-ambulatory victims for modesty.
- Victim Transporter – responsible for moving the non-ambulatory victim from the decontamination lane and delivering to Triage Unit.
- Decontamination Support Personnel – assists in the setup and support of the decontamination lanes.

a. Review Common Responsibilities (page 1-2).
b. Check in and obtain briefing from the Decontamination Lane Manager.
c. Identify and obtain necessary equipment for assigned functions.
d. Don appropriate PPE as outlined by the Site Safety and Control Plan (ICS Form 208).
e. Maintain communications and coordinate operations with victim extraction/triage teams.
f. Maintain Unit/Activity Log (ICS Form 214).

CHAPTER 18

TERRORISM/WEAPONS OF MASS DESTRUCTION (WMD)

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INTRODUCTION

The Terrorism/Weapons of Mass Destruction (WMD) Section will provide an organizational structure designed to provide the necessary supervision, coordination, management, and control of a complex, escalating and multi-discipline event. The purpose of the guide is to identify the key organizational positions that will best coordinate the various agencies involved within a Unified Command.

Unique hazards will be presented in Terrorism/WMD events that include intentional acts and attacks that may occur in stages or waves at several locations at the same time. Early recognition and requests for specialized resources is vital to the successful management and mitigation of the incident while ensuring responder safety. Type I Hazardous Materials Teams are trained and equipped to respond to a Terrorism/WMD incident.

Responsibilities of scene security, hazardous device disposal investigation, and crowd and traffic control will be assessed and handled by the appropriate Units/Groups.

UNIFIED COMMAND

Unified Command shall be implemented at all Terrorism/WMD incidents when multiple agencies or jurisdictions with statutory or political authority and financial responsibilities are involved. Unified Commanders shall be collocated. A single Command Post is the best method to ensure effective communications, coordination of resources and overall operational management of the incident(s).

ICS MODULAR DEVELOPMENT

The flexibility and modular expansion design of the Incident Command System provides a number of ways that public safety and contract resources can be arranged and managed. A series of modular development examples are included to illustrate several possible methods of expanding the incident organization based on existing emergency conditions, available resources and incident objectives.

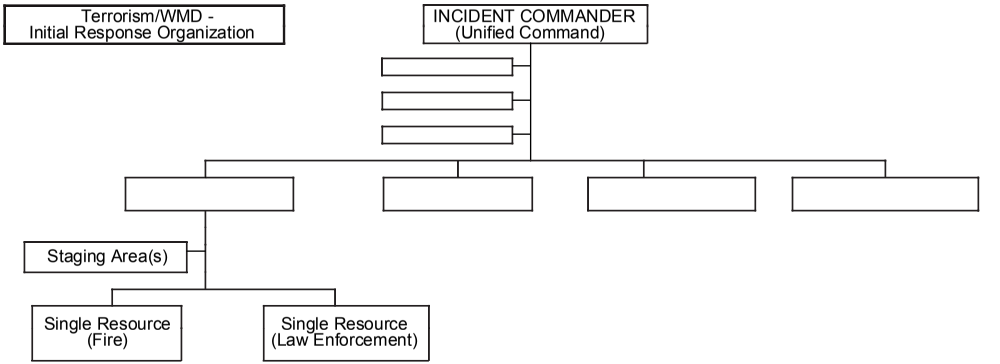
The ICS Modular Development examples shown are not meant to be restrictive, nor imply these are the only ways to build an ICS organizational structure to manage resources at a Terrorism/WMD incident. To the contrary, the ICS Modular Development examples are provided only to show conceptually how one can arrange and manage resources at the incident that builds from an initial response to a multi-branch organization:

Initial Response Organization: The first arriving Public Safety Officer initiates immediate actions to isolate, contain, and deny entry. The Public Safety Officer has assumed Incident Command and has requested the agency (ies) having jurisdiction to respond and establish Unified Command. The Incident Commander manages all initial response resources as well as all Command and General Staff responsibilities.

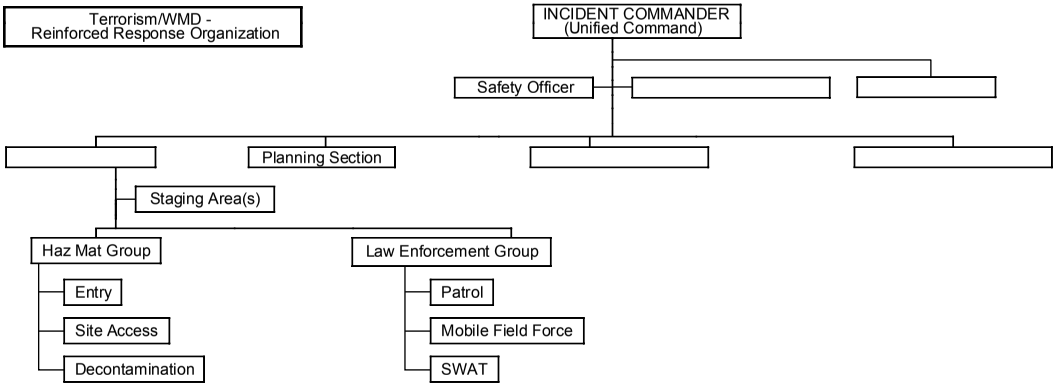
Reinforced Response Organization: In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities within the Control Zones and have organized Law Enforcement units into a Law Enforcement Group to isolate and contain the operational area. Unified Command has established a Planning Section, a Staging Area and a Safety Officer.

Multi-Division/Group Resource Organization: The Incident Commanders have activated most Command and General Staff positions and have established a combination of divisions and multiple groups. Based on the incident needs, the intelligence function may be activated as a fifth section, as an element within the Operations or Planning Sections, or as part of the Command Staff.

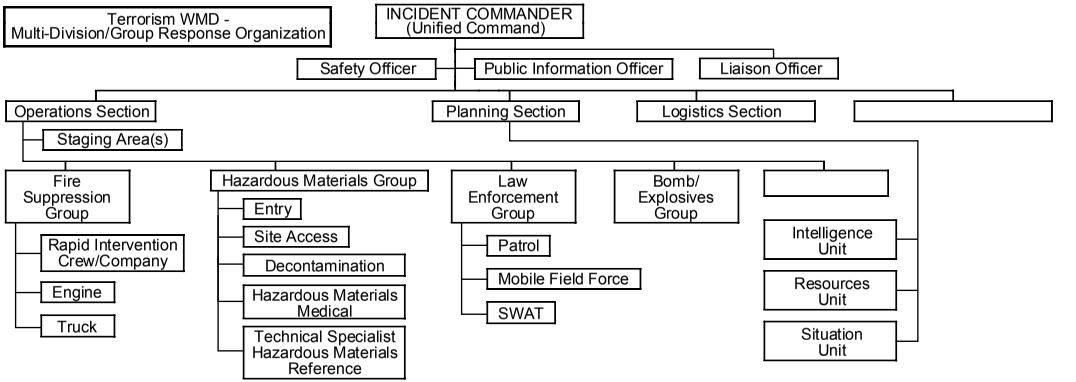
Multi-Branch Response Organization: The Unified Command is joined by additional responsible agencies as the incident grows. As the incident becomes more complex, the Unified Command creates a Law Enforcement Branch and potentially a US&R Branch to address the risks of the incident. The Operations Section Chief and Deputy Operations Section Chief may switch roles based upon the current objectives of the incident as well as the individual's discipline; i.e., Law Enforcement, Fire or EMS.



Initial Response Organization: The first arriving Public Safety Officer initiates immediate actions to isolate, contain, and deny entry. The Public Safety Officer has assumed Incident Command and has requested the agency (ies) having jurisdiction to respond and establish Unified Command. The Incident Commander manages all initial response resources as well as all Command and General Staff responsibilities.



Reinforced Response Organization: In addition to the initial response, the responsible agencies have met and established Unified Command. They have established a Hazardous Materials Group to manage all activities within the Control Zones and have organized Law Enforcement units into a Law Enforcement Group to isolate and contain the operational area. Unified Command has established a Planning Section, a Staging Area and a Safety Officer.



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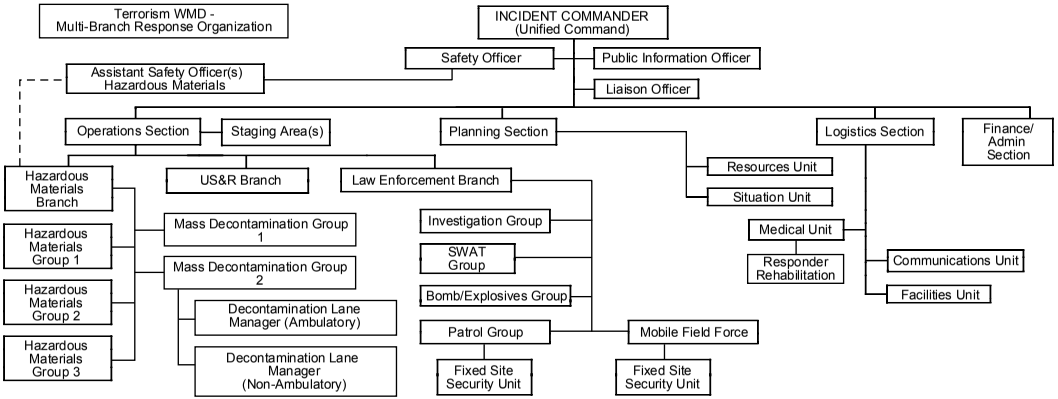

Multi-Branch Response Organization: The Unified Command is joined by additional responsible agencies as the incident grows. As the incident becomes more complex, the Unified Command creates a Law Enforcement Branch and potentially a US&R Branch to address the risks of the incident. The Operations Section Chief and a Deputy Operations Section Chief may switch roles based upon the current objectives of the incident as well as the individual's discipline; i.e., Law Enforcement, Fire or EMS.

POSITION DESCRIPTIONS

OPERATIONS SECTION CHIEF (OSC1 OR OSC2) – Reports to the Incident Commander. The OSC, a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission ensuring the overall safety and welfare of all Section personnel. The OSC activates and supervises organization elements in accordance with the Incident Action Plan and directs its execution. The OSC also directs the preparation of unit operational plans, requests or releases resources, makes expedient changes to the Incident Action Plan as necessary, and reports such to the Incident Commander. The Deputy Operations Section Chief may be assigned for specific tasks. The Operations Section Chief and Deputy Operations Section Chief may switch roles based upon the current objectives of the incident as well as the individual's discipline; i.e., Law Enforcement, Fire, or EMS.

a. Review Command Responsibilities (Page 1-2).
b. Develop the operations portion of the Incident Action Plan and complete the appropriate Operational Planning Worksheet-Generic or Wildland (ICS Form 215-G/W).
c. Brief and assign Operations Section personnel in accordance with the Incident Action Plan.
d. Supervise the Operations Section ensuring the safety and welfare of all personnel.
e. Determine the need for and request additional resources.
f. Review suggested list of resources to be released and initiate recommendations for release of resources.
g. Assemble and disassemble Strike Teams and Task Forces assigned to the Operations Section.
h. Report information about special activities, events, and occurrences to the Incident Commander.
i. Maintain Unit/Activity Log (ICS Form 214).

HAZARDOUS MATERIALS GROUP SUPERVISOR – The Hazardous Materials Group Supervisor (HMGS) or Hazardous Materials Branch Director reports to the Operations Section Chief. The Hazardous Materials Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the Hazardous Materials Group operations. The Hazardous Materials Group Supervisor is responsible for the assignment of resources within the Hazardous Materials Group, reporting on the progress of control operations and the status of resources within the group. The Hazardous Materials Group Supervisor directs the overall operations of the Hazardous Materials Group:

a. Review Common Responsibilities (Page 1-2).
b. Ensure the development of Control Zones and Access Control Points and the placement of appropriate control lines.
c. Evaluate and recommend public protection action options to the Operations Chief or Branch Director (if activated).
d. Ensure that current weather data and future weather predictions are obtained.
e. Establish environmental monitoring of the hazard site for containments.
f. Ensure that a Site Safety and Control Plan (ICS Form 208) is developed and implemented.
g. Conduct safety meetings with the Hazardous Materials Group.
h. Participate, when requested, in the development of the Incident Action Plan.
i. Ensure that recommended safe operational procedures are followed.
j. Ensure that proper Personal Protective Equipment is selected and used.

k. Ensure that the appropriate agencies are notified through the Incident Commander.
l. Conduct Post Incident Debriefing related to Hazardous Materials activities.
m. Maintain Unit/Activity Log (ICS Form 214).

INTELLIGENCE GROUP SUPERVISOR – Initially reports to the Incident Commander, Planning Section Chief or the Operations Section Chief. In a large or complex incident, Intelligence may report to the Law Enforcement Group Supervisor or Branch Director. Based on the needs of the incident, intelligence may be assigned as a Unit under Planning or a Group under Operations/Branch:

a. Review Command Responsibilities (Page 1-2).
b. Coordinates with Investigation Unit Leader/Group Supervisor.
c. Collect and process situational information.
d. Focus on identification and gathering information from potential suspects and victims.
e. Develop and maintain a working relationship with local, state and federal law enforcement agencies.
f. Obtain, compile and provide intelligence with Operations/ Planning Section Chiefs.
g. Review method of operation of suspect(s).
h. Participate, when requested, in the development of the Incident Action Plan.
i. Assist in the preparation of public information statement.
j. Consider other additional support needs.
k. Maintain Unit/Activity Log (ICS Form 214).

INVESTIGATION UNIT LEADER/GROUP SUPERVISOR – Initially reports to the Incident Commander, Planning Section Chief or the Operations Section Chief. In a large or complex incident, Investigation may report to the Law Enforcement Group Supervisor or Branch Director. Based on the needs of the incident, Investigation may be assigned as a Unit under Planning or a Group under Operations/Branch:

a. Review Common Responsibilities (Page 1-2).
b. Determine mission and projected length.
c. Determine work location and support requirements.
d. Coordinate the collection and presentation of evidence.
e. Coordinate with the Medical Group and Coroner as needed.
f. Coordinate with other law enforcement and emergency response agencies.
g. Coordinate with Intelligence Group Supervisor.
h. Participate, when requested, in the development of the Incident Action Plan.
i. Report mission status with the chain of command.
j. Maintain Unit/Activity Log (ICS Form 214).

PATROL GROUP SUPERVISOR – The Patrol Group Supervisor reports to Operations Section Chief or Law Branch Director, if activated. The Patrol Group Supervisor is responsible for general law enforcement activities such as perimeter control, assisting in evacuation and shelter in place, traffic control, and liaison with the public. They can be used in multiple configurations and for varying tasks. The Patrol Group Supervisor is responsible for assigning resources within the Patrol Group:

a. Review Common Responsibilities (page 1-2).
b. Check in and obtain briefing from Law Branch (if activated).
c. Review Incident Action Plan (Operational Orders).

d. Ensure proper Personal Protective Equipment is selected and used.
e. Coordinate activities with adjacent Divisions or Groups.
f. Evaluate and recommend public protection options to Operations Section Chief or Branch Director, if activated.
g. Report situation status to appropriate supervisor.
h. Participate, when requested, in the development of the Incident Action Plan.
i. Conduct safety briefing with Patrol Group.
j. Assign resources to Fixed Site Security or as security escorts for personnel as needed.
k. May assign resources to limit access to protect crime scene/evidence.
l. May assign resources to persons in custody.
m. Maintain Unit/Activity Log (ICS Form 214).

SPECIAL WEAPONS AND TACTICS (SWAT) GROUP SUPERVISOR – The SWAT Group Supervisor reports to Operations Section Chief or Law Branch Director, if activated. The SWAT Group Supervisor is responsible for law enforcement incidents such as hostage situations, barricaded suspects, armed suspects, and victim rescues. The SWAT Group Supervisor may coordinate Force Protection for responders or dignitaries. The SWAT Group Supervisor is responsible for assigning resources within the SWAT Group:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Law Branch (if activated).
c. Review Incident Action Plan (Operational Orders).
d. Participate, when requested, in the development of the Incident Action Plan.
e. Ensure proper Personal Protective Equipment is selected and used.

f. Coordinate activities with adjacent Divisions or Groups.
g. Evaluate and recommend public protection options to the Operations Section Chief or the Branch Director, if activated.
h. Report situation status to appropriate supervisor.
i. Conduct safety briefing with the SWAT Group.
j. Maintain Unit/Activity Log (ICS Form 214).

BOMB/EXPLOSIVES GROUP SUPERVISOR – The Bomb/Explosives Group Supervisor reports to the Operations Section Chief or Law Branch Director, if activated. The Bomb/Explosives Group Supervisor is responsible for investigating suspicious packages, explosive devices, rendering them safe, and conducting criminal investigations at the scene of an explosive device or explosion:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Law Branch (if activated).
c. Participate, when requested, in the development of the Incident Action Plan.
d. Ensure proper Personal Protective Equipment is selected and used.
e. Coordinate activities with adjacent Divisions or Groups.
f. Coordinate activities with local, state and federal agencies.
g. Identify the types, number, and locations of suspicious packages, hazardous devices at the incident.
h. Ensure the development of Control Zones, access control points and the placement of appropriate control lines.
i. Coordinate with the Hazardous Materials Group Supervisor.
j. Evaluate and recommend public protection options to the Operations Section Chief or the Branch Director (if activated).
k. Report situation status to appropriate supervisor.

l. Conduct safety briefing with the Bomb/Explosives Group.
m. Ensure safe operational procedures are followed.
n. Maintain Unit/Activity Log (ICS Form 214).

MOBILE FIELD FORCE GROUP SUPERVISOR – The Mobile Field Force Supervisor reports to the Operations Section Chief or Law Branch Director, if activated. The Mobile Field Force Group Supervisor is responsible for managing operations that may exceed the capabilities of the Patrol Group. The Mobile Field Force Group is trained and equipped to deal with large crowds, acts of civil disobedience, maintaining order and preserving the peace. They can be used in multiple configurations and for varying tasks. The Mobile Field Force Group Supervisor is responsible for assigning resources within the Mobile Field Force Group:

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Law Branch (if activated).
c. Review Incident Action Plan (Operational Orders).
d. Participate, when requested, in the development of the Incident Action Plan.
e. Ensure proper Personnel Protective Equipment is selected and used.
f. Coordinate activities with adjacent Divisions or Groups.
g. Enforce required protective actions (evacuation/shelter in place).
h. Evaluate and recommend crowd control options to the Operations Section Chief or the Branch Director (if activated).
i. Report situation status to appropriate supervisor.
j. Conduct safety briefing with the Mobile Field Force Group.
k. Assign resources to Fixed Site Security or as security escorts for personnel as needed.

l. May assign resources to limit access to protect crime scene/evidence.
m. May assign resources to maintain security of persons in custody.
n. Maintain Unit/Activity Log (ICS Form 214).

FIXED SITE SECURITY UNIT LEADER – The Fixed Site Security Unit Leader(s) reports to the Mobile Field Force Group Supervisor and/or the Patrol Group Supervisor. The Fixed Site Security Unit Leader is responsible for the continuous physical security focused on the protection of people, property, and the sites for named place(s) or facility(ies), including providing for access control for these sites, place(s) or facility(ies). This could include incident facilities such as Incident Command Post and Staging Area(s):

a. Review Common Responsibilities (Page 1-2).
b. Check in and obtain briefing from the Law Branch (if activated).
c. Review Incident Action Plan (Operational Orders).
d. Develop a Site Security Plan for the assignment.
e. Ensure proper Personal Protective Equipment is selected and used.
f. Report situation status to appropriate supervisor.
g. Coordinate with Intelligence or the Investigation Unit Leader.
h. Conduct safety briefing with the Fixed Site Security Unit.
i. Responsible for security of incident facilities, resources, and personnel.
j. Responsible for security of critical infrastructure/key resources.
k. Maintain Unit/Activity Log (ICS Form 214).

UNIFIED COMMAND PARTNERS AND/OR ASSISTING AGENCIES

LAW ENFORCEMENT – Local, State, and Federal law enforcement agencies may respond to Hazardous Materials incidents. Depending on incident factors, law enforcement may be a partner in Unified Command or may participate as an assisting agency. Some functional responsibilities that may be handled by law enforcement are:

a. Isolate the incident area.
b. Manage crowd control.
c. Manage traffic control.
d. Manage public protective action.
e. Provide scene management for on-highway incidents.
f. Manage criminal investigations.
g. Evidence collection.

ENVIRONMENTAL HEALTH AGENCIES – In most cases the local or State environmental health agency will be at the scene as a partner in Unified Command. Some functional responsibilities that may be handled by environmental health agencies are:

a. Determine the identity and nature of the Hazardous Materials.
b. Establish the criteria for clean-up and disposal of the Hazardous Materials.
c. Declare the site safe for re-entry by the public.
d. Provide the medical history of exposed individuals.
e. Monitor the environment.
f. Supervise the cleanup of the site.
g. Enforce various laws and acts.
h. Determine legal responsibility.
i. Provide technical advice.
j. Approve funding for the cleanup.

CIVIL SUPPORT TEAM – The California National Guard (CNG) Weapons of Mass Destruction Civil Support Teams (CST) are designed to support local incident commanders and local emergency first responders twenty-four (24) hours per day, seven days per week for any Weapons of Mass Destruction (WMD) terrorist event. In most cases the CST would participate as an assisting agency.

CHAPTER 19

SWIFTWATER/FLOOD SEARCH AND RESCUE

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SWIFTWATER/FLOOD SEARCH AND RESCUE OPERATIONAL SYSTEM DESCRIPTION ICS US&R 120-2 AND LAW ENFORCEMENT MUTUAL AID PLAN (S&R) ANNEX

INTRODUCTION

Local and widespread swiftwater and flood emergencies often occur. Many of these incidents strain local resources creating a need for mutual aid resources. This document focuses on the development and identification of specific SF/S&R resources.

This document is intended to provide guidance and develop recommendations for California's SF/S&R resources. This includes but is not limited to:

- Organizational Development
- Resource Typing
- Training and Equipment
- Procedures and Guidelines for Incident Operations

These recommended procedures and guidelines are consistent with both the Standardized Emergency Management System (SEMS) and FIRESCOPE Incident Command System.

It is the responsibility of agencies responding to Mutual Aid, SF/S&R requests, to provide qualified personnel and equipment that meet or exceed the recommended level of skills and capabilities stipulated in this document.

The recommended training, skills, and equipment lists are contained in the Law Enforcement Mutual Aid Plan (S&R) Annex, and the FIRESCOPE Document, ICS-SF-S&R 020-1.

INITIAL RESPONSE

The first arriving public safety officer will direct initial swiftwater/flood search and rescue (SF/S&R) operations. This officer will assume initial command of the operation as the Incident Commander. Subsequent changes in the incident command structure will be based on the needs of the incident, with consideration of jurisdictional responsibilities, established agreements, state and local statutes and shall be accomplished by following established ICS procedures.

Additional resources, specifically trained and equipped for SF/S&R operations may be required. These SF/S&R resources may be assigned as a single resource or grouped together to form Task Forces.

Due to the unique hazards and complexity of SF/S&R incidents, the Incident Commander may require a variety of different multi-disciplinary resources to accomplish the SF/S&R mission (APPENDIX E. Additional SF/S&R Resources).

SF/S&R resources have been categorized or "typed" (APPENDIX A. Swiftwater/Flood Search and Rescue Resource Typing and APPENDIX B. Flood Evacuation Boat Typing). Typing reflects identified operational capabilities, based on specialized training, skills and equipment (ICS SF/S&R 020-1). This typing is based on team qualifications, available equipment and training, as needed for safe and efficient rescue operations for identified SF/S&R tasks.

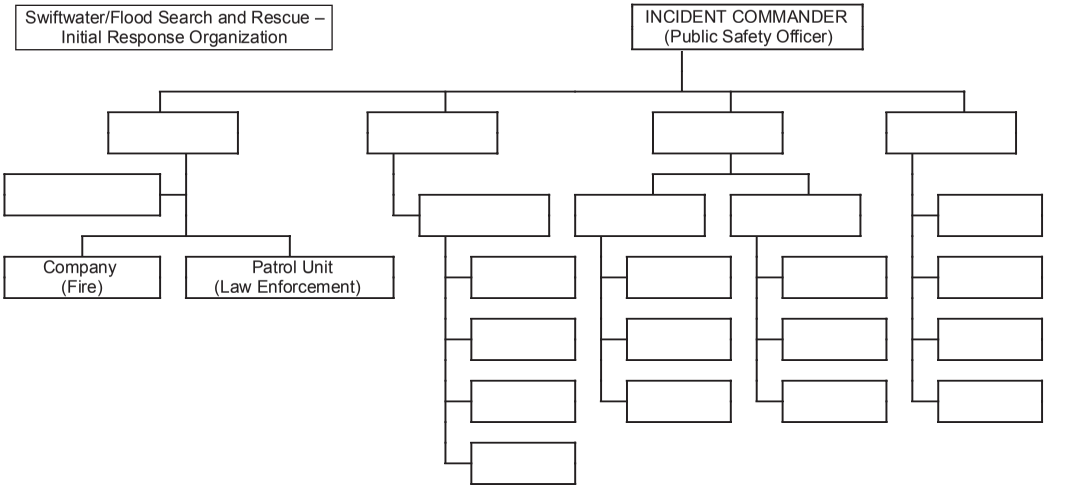
SF/S&R incidents may occur that will require rescue operations that exceed on-scene personnel capabilities. When the magnitude or type of incident exceeds that capability level, the Incident Commander will have the flexibility to conduct search and rescue operations in a safe and appropriate manner until adequate resources can be obtained or the incident is terminated.

UNIFIED COMMAND

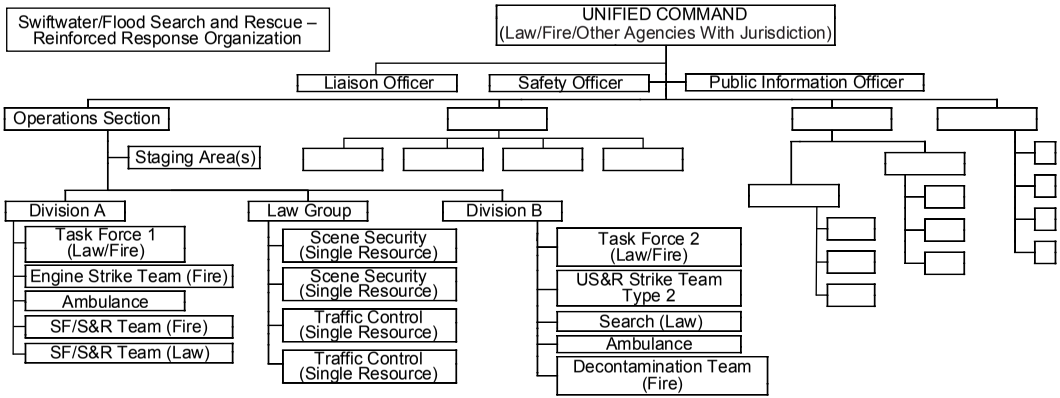
A Unified Command should be implemented at SF/S&R incidents when multiple agencies or jurisdictions with statutory or political authority and financial responsibility are involved. Unified Commanders involved in a Unified Command shall be co-located. A single Command Post is the best method to ensure effective communications, coordination of resources, and overall operational management of the incident.

ICS MODULAR DEVELOPMENT

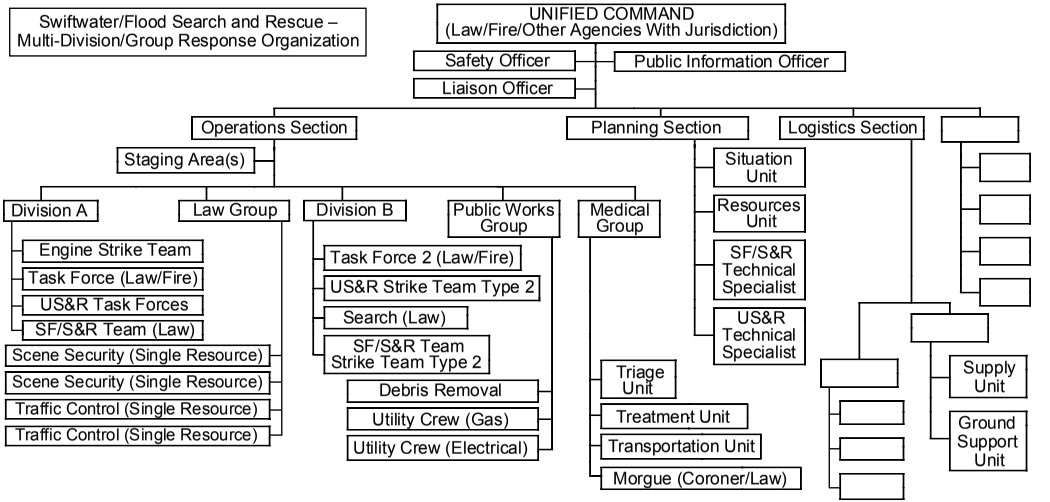
The flexibility and modular expansion design of the Incident Command System provides an almost infinite number of ways SF/S&R resources can be arranged and managed. Refer to the Law Enforcement Guide for Emergency Operations or the FIRESCOPE Field Operations Guide (ICS-420-1).



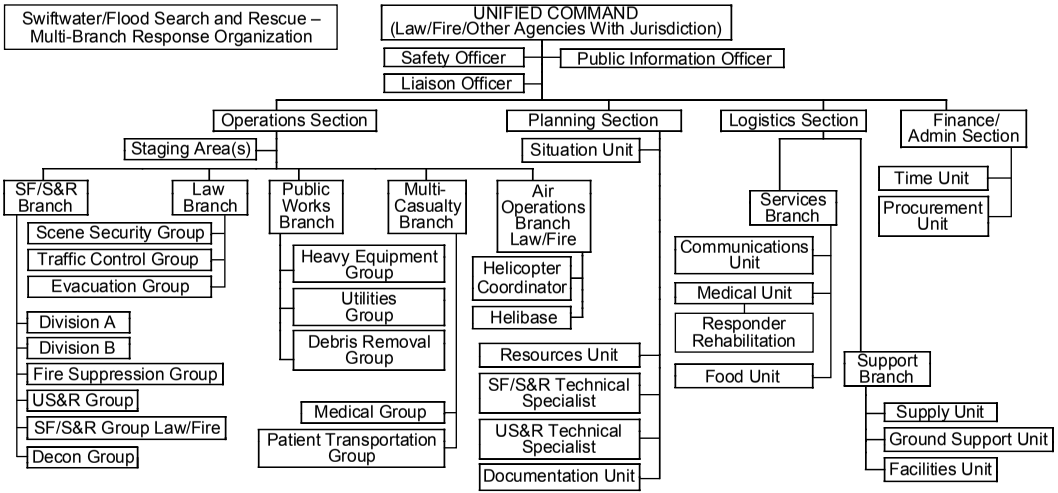
Swiftwater/Flood Search and Rescue – Initial Response Organization: The initial Public Safety Officer on scene will assume command of the incident as the Incident Commander. This officer will manage the initial response resources.



Swiftwater/Flood Search and Rescue – Reinforced Response Organization: Additional Law Enforcement, local Fire Department Engine and Truck Companies, and Mutual Aid resources have arrived. The Incident Commander forms a Unified Command with the designated public safety officials on scene with a Safety Officer, Public Information Officer, and Liaison Officer assignment. A Staging Area has been established for arriving resources. The incident is geographically divided into Divisions under an Operations Section. The initial Fire Department resources and/or Law Enforcement S&R Teams are formed into Task Forces. Additional Law Enforcement resources form the Law Group.



Swiftwater/Flood Search and Rescue – Multi-Division/Group Response Organization: Planning/Intel and Logistics Sections have been established. Multiple Groups and Divisions have been formed to better manage the incident.



Swiftwater/Flood Search and Rescue - Multi-Branch Response Organization: The Incident Commander has assigned Logistics and Finance/Administration Sections.

APPENDIX A - Swiftwater/Flood Search and Rescue Resource Typing

	Type 1	Type 2	Type 3	Type 4
Type **(Capabilities)**	Manage search ops Power vessel ops In-water contact rescues Helicopter operational Technical rope systems Haz Mat Animal rescue EMS-ALS Communications Logistics Capable of 24hr ops	Manage search ops Power vessel ops In-water contact rescues Helicopter operational Technical rope systems Haz Mat Animal rescue EMS-BLS Capable of 24hr ops	In-water contact rescues Assist in search ops Non-power water craft Haz Mat Animal rescue EMS-BLS Capable of 24hr ops	Low Risk Land Based Haz Mat EMS-BLS Capable of 24hr ops

Resource	Component	Type 1	Type 2	Type 3	Type 4
Swiftwater/Flood Search and Rescue Team	Equipment	Type 1 Inventory	Type 2 Inventory	Type 3 Inventory	Type 4 Inventory
	Personnel	14 Member Team: *2 Managers* *2 Squad leader* *10 Personnel*	6 Member Team: *1 Squad leader* *5 Personnel*	4 Member Team: *1 Squad leader* *3 Personnel*	3 Member Team: *1 Squad leader* *2 Personnel*
	Transportation	Equipment trailer Personnel transport vehicles	*	*	*

*Requests should include vehicle capabilities when necessary (i.e., four-wheel drive).

APPENDIX B - Flood Evacuation Boat Typing

Order these resources by type, quantity, hull design and power type if critical.

Type	Type 1	Type 2	Type 3	Type 4	Type 5
Minimum Victim Transport per Trip	• 5+	• 3 - 5	• 3	• 2	• 2
Special Needs and Notes	• May need launch ramp Power Boat	• May need launch ramp Power Boat	• Hand Launch Power Boat	• Hand Launch • 2 Personal Water Craft (PWC)	• Hand Launch • No Motor • Rafts, skiffs, johnboat, etc.

Resource	Component	Types				
		1	2	3	4	5
Flood Evacuation Boat	Equipment	FEB Inventory	FEB Inventory	FEB Inventory	FEB Inventory	FEB Inventory
	Minimum Personnel	2	2	2	2	2
	Transportation	*	*	*	*	*

*Requests should include vehicle capabilities when necessary (i.e., four-wheel drive).

APPENDIX C - AIR RESOURCE TYPING

Helicopters staffed by personnel trained in search and rescue operations can be ordered through normal Mutual Aid Request procedures. Specify need such as search platform with lights and infrared detectors, hoist capability, swiftwater capability, etc.

Resource	Component	Types			
		1 (Heavy)	2 (Medium)	3 (Light)	4
Helicopter	Seats w/pilot	– 16	– 10	– 5	– 3
	Useful Load Lbs	– 5,000	– 2,500	– 1,200	– 600
	Examples	– UH-60	– Bell 205, 412	– Bell 205, MD 500E, BO 105	– Bell 47 Does not meet mission requirements for external live load.

HELICOPTER Capability/Mission Selection Sheet

*Communications - VHF Programmable Radios

*Over Water Survival Equipment - PFD's for *air* crew and passengers

□ Live Load *External Load Capable - with rescue equipment

- □ Hoist
- □ Short Haul

□ Sling Load
□ Medical: BLS
□ Medical: ALS
□ Personnel Transportable (number of people)
□ Usable Time (mission duration)
□ Search/Observation

*Mandatory for aircraft

Mission Equipment Selection Sheet

□ ALS
□ BLS
□ Basket (i.e. Stokes type litter)
□ Cinch Collar
□ Cinch Strap
□ FLIR
□ Night Illumination (1 million candle power +)
□ PA
□ Rescue Capture Ball
□ Rescue Ring
□ Short Haul System
□ Sling Load Capability (in lbs.)
□ Hoist Load Capability (in lbs.)

See next page for Pilot and Flight Crew Capabilities

APPENDIX D - AIR RESOURCE TYPING (PILOT AND CREW)

Pilot Capability

External Load Capable

- □ Victim Location in Static Water
- □ Victim Location in Dynamic Water

- Must be a public service operator, who meets their respective agency's requirement or possesses a USFS, CDF, or OAS (Office of Aircraft Service) valid card.

- Pilot must have a minimum of swiftwater/flood rescue awareness or operational training along with training and experience in helicopter water rescue evolutions.

Flight Crew Capability

External Load Capable

- □ Victim Location in Static Water
- □ Victim Location in Dynamic Water

- Flight Crew should have a minimum of swiftwater/ flood rescue awareness or operational training along with training and experience in helicopter water rescue evolutions. Aircrew performing water rescue operations must complete annual helicopter water rescue training.

- Areas to include helicopter orientation and safety, hand signals and communications, water rescue device orientation and operations and any additional individual agency specific or type specific requirements.

APPENDIX E - ADDITIONAL SWIFTWATER/FLOOD SEARCH AND RESCUE RESOURCES

American Red Cross (ARC). The American Red Cross provides disaster victims assistance such as food, clothing, shelter, and supplemental medical. The ARC provides the emergency mass care to congregate groups and also provides individual/family assistance. Upon the request of government, resources permitting, the ARC may assist with warning, rescue, or evacuations.

Animal Rescue Team. A specialized resource having extensive experience and appropriate equipment required to support the rescue of small domestic pets and large animals' commonly encountered in rural settings. This resource may be available through the Mutual Aid request procedures.

California Conservation Corps (CCC). A State agency that provides personnel for specific non-technical assignments during flood alerts or actual incidents. CCC personnel may be stationed near locations of anticipated problems, due to storm activity, high river tides, or heavy reservoir releases. This resource can be obtained through Mutual Aid request channels.

CAL FIRE (CDF). A State fire agency capable of supplying ICS overhead teams, air assets, fire engines, crews, bulldozers, equipment, camp kitchens, trained personnel for technical or non-technical rescue, containment operations, and storm/flood watch patrols during emergency situations. This resource is available through Mutual Aid request procedures.

California National Guard (CNA). A State agency capable of providing heavy vehicle (2.5 and 5 ton) transportation needs, air assets, boats, bridging equipment, sheltering operations, and other equipment and personnel. They must be ordered through the Mutual Aid request procedure.

California Department of Fish and Game, U.S. Department of Fish and Wildlife. State and Federal resources capable of supplying boats with trained operators that include airboats. Orders for specialized equipment must be specific when requesting from this resource through the Mutual Aid request procedure.

Department of Water Resources Flood "Fight" Teams. The Department of Water Resources (DWR) is responsible for coordinating local, state, and federal flood operations. DWR can offer advice to local agencies about how to establish levee patrol, floodwater, place river flood staff gauges, and how to receive flood information from their department. The department can generally assist flood fighting in any area of the state with personnel and flood fighting materials for local agencies. Requests for Flood Fight crews shall be made through the DWR.

Heavy Equipment. Heavy equipment such as cranes, front loaders, and dump trucks are often needed in large quantities during regional water emergencies. They are normally available through local public works departments and private contractors (a pre-signed MOU is recommended). If additional heavy equipment resources are needed, they can be ordered through Mutual Aid request procedure.

Swiftwater/Flood Search and Rescue Technical Specialist. A SF/S&R Technical Specialist may be requested to assist the incident management team with technical expertise in SF/S&R. The specialist is normally assigned to the Planning Section. This resource is ordered through the Mutual Aid request procedure.

Search and Rescue Water Dogs. Dogs specifically scent certified in water, trained to search for and find drowning victims. Search and Rescue Water Dogs are ordered through the Mutual Aid request procedures.

Search Manager. A person qualified and capable of managing the specific search and rescue mission.

Salvation Army. During an emergency, the Salvation Army may be called upon to provide food, clothing, furniture, housing, emergency communication, mobile canteen services, and spiritual ministry for disaster victims. This is generally a local resource, however, it may be requested through the Mutual Aid request procedure.

Structural/Soils Engineers. In most cases, responding resources will have access to local structural and soils engineers through their local agencies. Additional engineers may be ordered through the Mutual Aid request procedure.

SWIFTWATER/FLOOD SEARCH AND RESCUE INCIDENT COMMANDER CHECKLIST

This list is intended to assist responding public safety personnel with management decisions:

a. Review Common Responsibilities (Page 1-2).
b. Evaluate incident needs.
c. Initiate pre-planned response as appropriate:
    - law enforcement, fire, EMS resources
    - specialized SF/S&R resources
d. Utilize SF/S&R personal protective equipment.
e. Determine additional resource needs.
f. Establish ICS (consider Unified Command).
g. Establish Communication Plan:
    - assign tactical and command channels
    - identify interagency coordination channel(s)
h. Establish resource tracking (personnel accountability) system.
i. Establish search/incident boundaries:
    - identify incident hazards
    - establish operational area
    - manage entry to operational area:
        - limit risk to untrained resources
    - interview reporting party
    - determine victim(s) last known location
j. Consider Evacuation Plan.
k. Consider Traffic Plan/Staging Area(s).
l. Establish down and up stream safety.
m. Implement search and rescue operations:
    - determine rescue vs. recovery
    - evaluate low to high risk options
    - develop contingency plans
n. Establish Medical/Multi-Casualty Plan:
    - consider decontamination of victims
o. Establish logistics support.

SWIFTWATER/FLOOD SEARCH AND RESCUE RECOMMENDED TRAINING, SKILLS AND EQUIPMENT LIST ICS-SF-S&R 020-1

SF/S&R DECONTAMINATION

Decontamination of Equipment and Personnel:

The following are the recommended decontamination procedures for resources assigned to SF/S&R operations. Any resources exposed to flood waters during their operations should complete the appropriate level of decontamination. Consult with qualified Hazardous Materials personnel when available.

Basic Decontamination:

Personnel: After completing assignments in floodwaters, hands and face should be washed with clean water and soap. All members should be required to wash hands before entering vehicles and eating areas. Hand washing is essential to reduce secondary contamination.

Equipment: When the team's operational assignment is completed; equipment should be rinsed with clean water. Visible contaminates, mud and light oils, should be removed with soap.

Level 1 Decontamination:

Level 1 decontamination procedures should be used in areas where there is potential for exposure to general contaminates and the water is standing or moving slowly. Examples of areas where the use of this level of decon is needed would be residential and agricultural areas where there is no evidence of large releases of hazardous materials.

Personnel: After completing assignment in floodwaters, hands and face should be washed with clean water and anti-microbial soap (i.e., Vionex or Phisohex). All members should wash their hands before entering vehicles and eating areas. On completion of the day's operations, all members exposed to suspected or known contaminated water should shower and change into clean clothes.

Equipment: When the team's operational assignment is completed, equipment should be washed with soap and clean water. This decon should be completed as soon as possible following the operations. Dry suits should also be washed before entering vehicles for trips from one work site to another.

Level 2 Decontamination:

Level 2 decontamination procedures should be used any time hazardous materials are identified or likely to be present. These include areas of sewage contamination as well as agricultural and chemical contamination. These areas should not be entered, if possible. Limiting the number of personnel exposed to the water should be the top priority of the Team Leader. Support for decontamination should be arranged before units are committed to the contaminated area. **Water samples should be taken for testing from areas entered by the team.** The Medical Unit should be notified if any personnel require this level of decontamination. All personnel exposed to the contaminates should have a one hour, twelve hour, and twenty-four hour medical check following their exposure.

Personnel: After exiting the water, even for short periods during the operational period, members should go through a scrub gross decon* wash with soap and clean water. Remove gloves and wash hands and face with clean water and anti-microbial soap. At the end of the duty period, members should go through a gross decon scrub wash with soap and clean

water before any safety gear is removed. Wash hands and face with clean water and anti-microbial soap after removing all safety gear. Shower, using anti-microbial soap before leaving the scene if possible, or as soon as possible thereafter and change into clean clothes.

Equipment: All equipment should be sprayed with bleach solution** or other agents as recommended by on-scene Hazardous Materials personnel and allowed to stand a minimum of fifteen minutes. Thoroughly rinse all treated equipment with clean water and allow to dry before storing with other equipment. Bag any equipment that cannot be dried for the return trip to the base. Wipe with bleach solution** any surfaces inside vehicles that might have come in contact with wet safety equipment during the duty period. Units requiring Level 2 Decontamination should be taken out of service until all equipment has been cleaned and dried.

* Gross Decon Wash: This is a two-stage process that is set up along a decontamination corridor. All run-off solutions are retained for proper disposal. Persons implementing the corridor should be protected by splash gear. It is recommended that qualified Hazardous Materials personnel be requested to implement this procedure.

Stage 1: Rescuer in safety gear is scrubbed with brushes using a clean water and soap solution. Any contaminated tools are left behind here for cleaning.

Stage 2: Rescuer is rinsed with clean water.

** Bleach Solution: Bleach solution should be made using 30cc of Sodium Hypochlorite 5% (household bleach) for every one gallon of clean water. This will yield a 20,000 ppm solution of bleach.

Notes

CHAPTER 20

HIGH RISE

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INTRODUCTION

The High Rise module describes an all-hazard organization designed to provide effective management and control of essential functions at incidents occurring in large, multi-story buildings. These incidents may present significant management, logistical and safety challenges to emergency personnel.

The size and complexity of the interior spaces; limited, sometimes arduous access; with extended travel and response times all contribute to the problems faced by emergency responders.

Additionally, most high-rise structures are equipped with various environmental, fire protection, and life safety systems that require support and control. Successful emergency operations in these types of buildings also require preplanning and technical competence on the part of emergency responders.

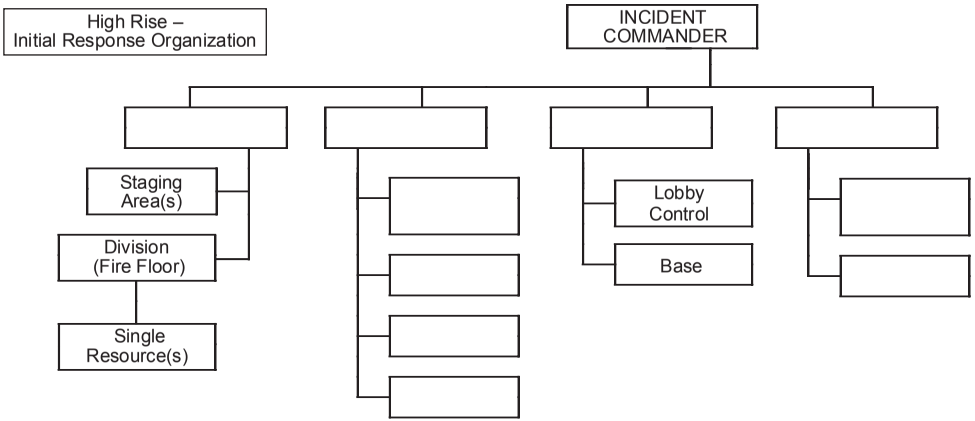
MODULAR ORGANIZATION DEVELOPMENT

The order in which the ICS organizational structure develops may vary with the type and scope of the incident. Following are examples of modular development of the ICS that serve to illustrate typical methods of expanding the management organization at a high-rise incident. These examples reflect the size and complexity of the incident and the available resources at a given time in the incident:

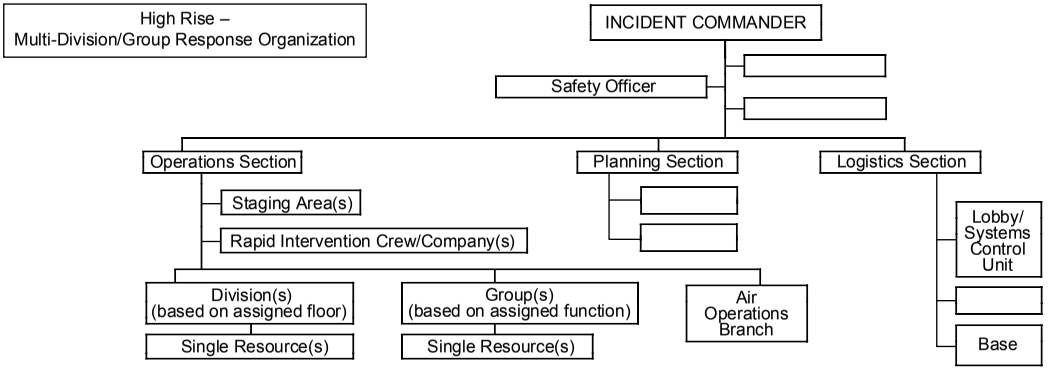
Initial Response Organization: The Incident Commander manages the initial response resources as well as all Command and General Staff responsibilities.

Multi-Division/Group Response Organization: The Incident Commander has established most Command and General Staff positions and has established a combination of divisions and groups to reflect the location and nature of the incident.

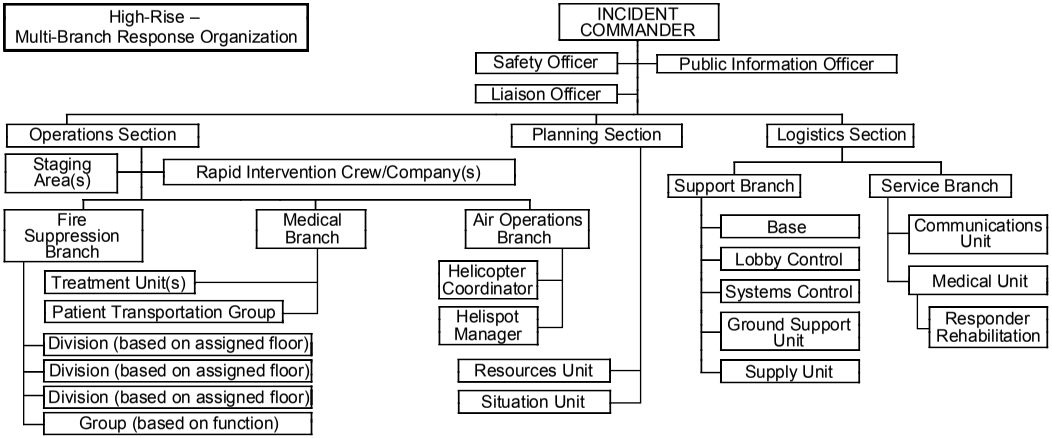
Multi-Branch Response Organization: The Incident Commander has identified a number of actual or potential incident challenges and has established all Command and General Staff positions. The Incident Commander has also established several branches to effectively manage the problems and the resources required for mitigation.



High Rise – Initial Response Organization: This chart depicts the initial assignment including a Command Officer on a fire involving a single floor of a high rise building. The Incident Commander has deployed resources to Fire Attack, Lobby Control, Staging and Base (ALS BASE).



High Rise - Multi-Division/Group Response Organization: As additional resources arrive, the Incident Commander has activated the Operations Section Chief along with multiple Divisions to supervise action on each involved or threatened floor. Rapid Intervention Crews/Companies are assigned as determined most effective by Operations. Groups may be assigned certain functions such as medical care for victims, or stairwell pressurization/ventilation. Air Operations Branch will coordinate helicopters used for evacuations or reconnaissance. The Planning Section is activated with selected units. Logistics is assigned to manage Lobby Control, Systems Control, Ground Support, and the Incident Base.



High Rise - Multi-Branch Response Organization: The fire has involved multiple floors with various Divisions and Groups assigned. This complexity has led the Operations Section to create a Fire Suppression Branch to manage these Divisions and Groups. A Medical Branch is established and the Air Operations Branch is expanded. The Planning Section has expanded to include the Resources Unit and Situation Unit. Logistics Section has activated the Support and Service Branches as well as various Units within each Branch to accommodate the extensive logistical requirements for this size incident.

DESIGNATED INCIDENT FACILITIES

Base and Staging have modified functions and locations in high rise incidents:

Staging Area: The challenging nature of high rise incidents requires modification to the standard ICS concept of a Staging Area. The limited access and vertical travel distance of large high rise buildings require establishment of a resource Staging Area within the building. The high rise Staging Area must also serve multiple functions. The Staging Area is generally located a minimum of two floors below the emergency, as long as the atmosphere is tenable. The specific changes are described in the Staging Area Manager's Position Description.

Base: The Base at a high rise incident resembles a ground level Staging Area. The main difference between Base and a typical Staging Area is that Base must be expanded to perform the functions inherent to supporting large numbers of personnel and equipment. Base should be located away from away from the incident building to provide for the safety of personnel and equipment.

ORGANIZATION AND OPERATIONS

Modified ICS Positions: Certain existing ICS positions and functional units within the high rise incident organization have modified responsibilities that require full descriptions. These positions include: Staging Area Manager, Rapid Intervention Group Supervisor, Base Manager, Ground Support Unit Leader, Safety Officer, and Evacuation Group Supervisor.

Specialized High Rise ICS Positions: Lobby Control and Systems Control Unit Leaders are specialized functional positions specific to a high-rise incident.

Lobby Control Unit is established to provide access control, accountability, and routing inside the building. As the incident escalates, a separate Systems Control Unit may be established to operate, supervise, and coordinate the vital operation of specialized systems incorporated into modern high-rise buildings. These systems may include electrical supply and smoke removal systems. Systems Control Unit coordinates the efforts of various Technical Specialists who might be required to assist in the operation and/or repair of the various systems. During the initial period of an incident, or in a less complex building, the Lobby Control Unit may assume the functions of the Systems Control Unit as shown in the basic organization chart.

The positions and modifications are described in the position checklists that follow. The major responsibilities and procedures for each are further explained in the position manuals.

POSITION CHECKLISTS

HIGH RISE LOBBY CONTROL UNIT LEADER - The High Rise Lobby Control Unit Leader's primary responsibilities are as follows: maintain an accountability system, control all building access points and direct personnel to correct routes, control and operate elevator cars, and direct building occupants and exiting personnel to proper ground level safe areas. As directed by the Incident Commander or agency policy, this unit may be assigned the responsibilities of the Systems Control Unit. The High Rise Lobby Control Unit Leader reports to the Support Branch Director (if established) or

to the Logistics Section Chief. The High Rise Lobby Control Unit Leader should be prepared to provide the Incident Commander or Planning Section with current information from the personnel accountability process.

The safest method of ascending to upper floors is the use of stairways. The use of elevators for emergency operations should be determined by department policy. This determination is the ultimate responsibility of the Incident Commander; however, the High Rise Lobby Control Unit Leader coordinates the actual use of elevators:

a. Check in and obtain briefing from Support Branch Director, Logistics Section Chief or Incident Commander.
b. Make entry, assess situation, and establish Lobby Control position.
c. Request needed resources.
d. Obtain building access keys.
e. Establish entry/exit control at all building access points.
f. Maintain accountability for personnel entering/exiting the building.
g. Assure personnel are directed to the appropriate stairways/elevator for assignment.
h. Control the elevators and provide operators if approved for use by the Incident Commander.
i. Provide briefings and information to Support Branch/ Logistics Section or the Incident Commander.
j. Perform the functions of the Systems Control Unit when directed by the Incident Commander or agency policy.
k. Secure operations and release personnel as determined by the Demobilization Plan.
l. Maintain a Unit/Activity Log (ICS Form 214).

HIGH RISE SYSTEMS CONTROL UNIT LEADER - The High Rise Systems Control Unit Leader is responsible for evaluating and monitoring the functions of all built-in fire protection, life safety, and environmental control, communications and elevator systems. The High Rise Systems Control Unit Leader may operate, support or augment the systems as required to support the incident plan. The High Rise Systems Control Unit Leader reports to the Support Branch Director (if established) or to the Logistics Section Chief. Working with the building's engineering staff, the High Rise System Control Unit Leader may respond directly to requests from the Operations Section Chief by using the manual operation modes of the various built-in systems. The High Rise Systems Control Unit Leader must establish and maintain a close liaison with building's engineering staff, utility company representatives, and other appropriate technical specialists:

a. Check in and obtain briefing from the Lobby Control Unit, Support Branch Director, Logistic Section Chief or Incident Commander:
    - Briefing must include the type and performance of built-in systems.
    - Introductions to building's engineering staff should occur at briefing.
b. Evaluate current situation and request needed personnel and resources.
c. Establish communication with the building engineer, utility company representatives, elevator service personnel or others to coordinate the operation of selected systems.
d. Assign personnel to monitor all building fire protection/ life safety systems.
e. Evaluate the status and operation of the building's fire and domestic water pumps and water supply (support as needed).

f. Evaluate the operational effectiveness of the heating, ventilation, and air-conditioning system (HVAC); the smoke removal system; and stairwell protection system (support as needed).
g. Evaluate the building's electrical system, emergency power systems, and security systems (support as needed).
h. Evaluate the public address, telephone, emergency phone, and other building communications systems (support as needed).
i. Secure operations and release personnel as determined by the Demobilization Plan.
j. Maintain Unit/Activity Log (ICS Form 214).

HIGH RISE STAGING AREA MANAGER - The High Rise Staging Area Manager is responsible for the management of all functions at the Staging Area, and reports to the Operations Section Chief:

a. Obtain briefing from Operations Section Chief or Incident Commander.
b. Proceed to selected location and evaluate suitability:
    - Make recommendations regarding relocation, if appropriate.
c. Request necessary resources and personnel.
d. Establish Staging Area layout and identify/post each functional area i.e., Crew-Ready Area, Air Cylinder Exchange, Equipment Pool, and Medical Unit if collocated within the Staging Area.
e. Determine, establish, or request needed facility services i.e., drinking water and lighting.
f. Coordinate with Logistics Section or Systems Control Unit to maintain fresh air.
g. Maintain a personnel accountability system for arriving and departing crews.

h. Request required resource levels from the Operations Section Chief:
    - Maintain levels and advise the Operations Section Chief when reserve levels are reached.
i. Coordinate with the High Rise Rapid Intervention Group Supervisor to designate area(s) for Rapid Intervention Crew (RIC) to standby if collocated within the Staging Area.
j. Direct crews and equipment to designated locations as requested by the Operations Section Chief or Incident Commander.
k. Secure operations and release personnel as determined by the Demobilization Plan.
l. Maintain Unit/Activity Log (ICS Form 214).

HIGH RISE RAPID INTERVENTION GROUP SUPERVISOR – The High Rise Rapid Intervention Group Supervisor is responsible for the management of Rapid Intervention Crew(s). The High Rise Rapid Intervention Group Supervisor's organizational responsibilities vary from the standard ICS position due to the potential for above ground operations, extended response times, and RIC(s) operating on different floors/stairwells. This position reports to the Operations Section Chief and requires close coordination with the Division/Group Supervisors and the Staging Area Manager:

a. Obtain briefing from the Operations Section Chief or Incident Commander.
b. Participate in Operations Section planning activities.
c. Determine Rapid Intervention Group needs (personnel, equipment, supplies and additional support).
d. Evaluate tactical operations in progress.
e. Evaluate floor plans, above and below emergency operations.
f. Assign and brief Rapid Intervention Crews based on number of stairwells and floors used for emergency operations.

g. Verify potential victims and hazard locations and insure that Rapid Intervention Crew(s) are prepared for possible deployment.
h. Notify Operations Section Chief or Incident Commander when Rapid Intervention Crew(s) are operational or deployed.
i. Develop Rapid Intervention Crew(s) contingency plans.
j. Secure operations and release personnel as determined by the Demobilization Plan.
k. Maintain Unit/Activity Log (ICS Form 214).

HIGH RISE BASE MANAGER - The High Rise Base Manager is responsible for the management of all functions at the Base location. This position within the organization differs from the standard ICS in that a Facilities Unit is not appropriate for this type of incident and the High Rise Base Manager reports directly to the Support Branch Director (if established) or Logistics Section Chief:

a. Obtain briefing from Support Branch Director, Logistics Section Chief, or Incident Commander.
b. Participate in Support Branch/Logistics Section planning activities.
c. Determine Base needs (personnel, equipment, supplies and additional support).
d. Evaluate layout and suitability of the selected Base location:
    - Make recommendations regarding relocation, if appropriate.
e. Establish Base layout and identify functional areas to support the incident; i.e., Apparatus Parking, Crew Ready Area, Equipment Pool, Rehabilitation Area, Command Post, Sanitation.
f. Provide for safety, security and traffic control at Base and Command Post.
g. Provide facility services at Base and Command Post; i.e., sanitation, lighting and clean up.

h. Maintain accounting of resources in Base. Periodically update Logistics Section, Planning Section or Incident Command.
i. Direct personnel and equipment to designated locations as requested.
j. Provide an auxiliary water supply to the building, if required.
k. Update Support Branch, Logistics Section or Incident Commander as directed.
l. Secure operations and release personnel as determined by the Demobilization Plan.
m. Maintain Unit/Activity Log (ICS Form 214).

HIGH RISE GROUND SUPPORT UNIT LEADER - The High Rise Ground Support Unit Leader is responsible for providing transportation for personnel, equipment, and supplies, refilling of SCBA air cylinders, providing fueling, service and maintenance of vehicles and portable power equipment and tools, and implementing the ground level Traffic/Movement Plan at the incident including marking safe access routes and zones. The High Rise Ground Support Unit Leader reports to the Support Branch Director (if established) or the Logistics Section Chief:

a. Obtain briefing from Support Branch Director, Logistics Section Chief, or Incident Commander.
b. Participate in Support Branch/Logistics Section planning activities.
c. Identify, establish, and implement safe movement routes and exterior Safe Refuge Areas identified in the Traffic and Personnel Movement Plans.
d. Assign personnel to fueling, maintenance and support of apparatus and portable power equipment and emergency power systems as appropriate.
e. Assign personnel to SCBA air cylinder refilling, maintenance and support.

f. Maintain inventory of support and transportation vehicles, maintenance and fuel supplies.
g. Update Support Branch, Logistics Section, or Incident Commander as directed.
h. Secure operations and release personnel as determined by the Demobilization Plan.
i. Maintain Unit/Activity Log (ICS Form 214).

HIGH RISE EVACUATION GROUP SUPERVISOR - The High Rise Evacuation Group Supervisor is responsible for managing the movement of building occupants through designated evacuation route(s) to a safe location. This position reports to the Operations Section Chief or Branch Director if established:

a. Obtain briefing from the Branch Director, Operations Section Chief or Incident Commander.
b. Participate in Operations Section planning activities.
c. Determine Evacuation Group requirements (personnel, equipment, supplies).
d. Ensure the evacuation in progress is to a safe location.
e. Confirm evacuation stairwell(s) with the Operations Section and Ground Support.
f. Ensure ventilation of evacuation stairwell(s) and Safe Refuge Areas.
g. Coordinate evacuation message with Systems Control Unit utilizing the building's Public Address System.
h. Assign personnel in the evacuation stairwell(s) to assist/direct building occupants to a safe location.
i. Secure operations and release personnel as determined by the Demobilization Plan.
j. Maintain Unit/Activity Log (ICS Form 214).

For more detailed information read:
High-Rise structure Fire Operations System Description
ICS-HR-120-1

Notes

CHAPTER 21

PROTECTIVE ACTION GUIDELINES

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INTRODUCTION

This section provides guidelines and procedures for protective actions when hazardous conditions develop to the degree that emergency responders must take action to protect the public at risk. Threatened or hazardous areas may be created by, but are not limited to: fires, hazardous materials, transportation accidents, floods, WMD incidents, civil disturbances, etc. Ideally, protective actions are progressive, usually initiated by alerting the public in the affected area, controlling access, sheltering in-place and finally by evacuation. However, these actions may be implemented simultaneously based on the hazard, complexity of the emergency, and the type and size of the affected area. The key to successfully conducting protective action operations is sound planning.

AUTHORITY

The decision to alert the public of a hazardous incident, restriction or closed access corridors and/or to evacuate an affected area is often made by the fire department Incident Commander. However, the authority necessary to carry out these actions usually rest with law enforcement. For example, the California Penal Code 409.5 provides law enforcement and health officers the legal authority to “close and/or evacuate” an area. Other states, counties or city jurisdictions may vary.

California 409.5 P.C. states:

1. “Whenever a menace to the public health or safety is created by a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disasters, police officers, lifeguards, publicly employed full-time marine

safety officers or local health officers may close the area where the menace exists for the duration thereof by means of ropes, markers or guards to any and all persons not authorized by the lifeguard or officers to enter or remain within the enclosed area."

2. "Law enforcement may close the immediate area surrounding any emergency field command post activated for the purpose of abating any calamity enumerated in this section or any riot or other civil disturbance to any and all unauthorized persons pursuant to the conditions which are set forth in this section whether or not the field command post or other command post is located near to the actual calamity or riot or other civil disturbance."

3. "Any unauthorized person who willfully and knowingly enters an area closed pursuant to subdivision (a) or (b) and who willfully remains within the area after receiving notice to evacuate or leave shall be guilty of a misdemeanor."

4. "Nothing in this section shall prevent a duly authorized representative of any news service, newspaper or radio or television station or network from entering the areas closed pursuant to this section."

Simply stated, whenever law enforcement/health officials feel that an area must be closed and/or evacuated to protect the public, 409.5 P.C. provides the legal authority to do so. If residents refuse to comply, that refusal should be noted and the Incident Commander advised of a non-compliance of the evacuation order.

ORGANIZATION

In emergency operations, there may be several lead and support agencies involved. In an incident where one agency has a preponderance of responsibility for abating the problem, a single Incident Commander from that agency shall be appointed.

On an incident where law enforcement and the fire department both have substantial responsibilities, a Unified Command organizational structure should be formed. Establishing a Unified Incident Command structure better integrates incident objectives and the development of Incident Action Plans. This results in a more efficient coordination process of incident operations thereby enhancing the safety of responders and the public.

Incident Commanders should consider establishing an organization element to manage evacuation planning and implementation. For extensive, complex evacuations, an Evacuation Branch may be established. For less complex actions, an Evacuation Group may be more appropriate. Staffing of the Evacuation Branch or Group should be unified to ensure coordination of actions. Re-entry planning and implementation can be accomplished with a similar organizations structure to safely facilitate managing requirements prior to and during the re-entry of evacuees.

Initial Assessment and Notifications:

1. Identify the hazard and risk to the public; determine the affected area.

2. Identify the next potentially affected areas and plot them on a map utilizing an alpha-numeric grid system. Many commercially available map books utilize a one-half mile wide grid. This style map can be quickly utilized to plat an affected area.

3. Ensure that the jurisdictional law enforcement agency is notified of the emergency situation and recommend protective action(s).

4. Ensure the appropriate cooperating and/or assisting agencies are notified with regard to recommended protective action(s). If evacuations are planned, ensure that evacuation centers are identified in safe areas. The management of Evacuation Centers is often delegated to the local Red Cross or other non-government organizations (NGP):

Protective Action Terms

1. **Evacuation Warning –** The alerting of people in an affected area(s) of potential threat to life and property. An Evacuation Warning considers the probability that an area will be affected within a given timeframe and prepares people for a potential evacuation order. Evacuation Warnings are particularly necessary when dealing with a variety of issues such as special needs populations and large animals.

2. **Evacuation Order –** Requires the immediate movement of people out of an affected area due to imminent threat to life.

3. **Shelter-In-Place –** Advises people to stay secure at their current location. This tactic shall only be used if

evacuation will cause a higher potential for loss of life. Consideration should be given to assigning incident personnel to monitor the safety of citizens remaining in place.

The concept of Sheltering in Place is an available option in those instances where physical evacuation is impractical. This procedure may be effective for residential dwelling in the immediately impacted areas, or for large facilities that house a high percentage of non-ambulatory persons; i.e., hospitals and convalescent homes. Sheltering in Place attempts to provide a safe haven within the impacted area.

When using structures, this involves closing all doors and windows, shutting off outside air supply to the facility and waiting for the hazard to pass. Although the decision to Shelter-in-Place ultimately rests with the Incident Commander, situations may arise where incident personnel must take immediate action to protect civilians.

4. **Rescue –** Emergency actions taken within the affected area to recover and remove injured or trapped citizens. Responders have specific training and personal protective equipment necessary to accomplish the mission; i.e., hazardous material spill, swiftwater rescue, etc. Boundaries of the areas where rescue is planned should be identified on the incident map with notation that entry is restricted to rescue workers only.

5. **Community Refuge Area –** A designated location that is considered to provide a greater level of survivability than Shelter-In-Place. If unable to make it to a designated Evacuation Shelter, civilians should be directed to seek shelter at a Community Refuge Area.

Note: Depending on the size, type and complexity of the emergency, all of the above protection actions could be employed on the same incident.

Immediate Evacuation Checklist:

1. Establish and collocate the Incident Command Post in a safe location with the capability to include all cooperating agencies, i.e., law enforcement, fire, health department, local emergency management agency to include any NGO's.

2. Establish Unified Command when appropriate. Unified Incident Commanders should jointly assess and report incident potential and request adequate resources to accomplish agreed upon objectives.

3. Consider establishing an Evacuation Branch or Group as appropriate depending on complexity to plan and implement evacuation actions and/or re-entry of evacuees.

4. Jointly develop the incident Evacuation Plan; ensure that the planning process is conducted under the Unified Command process with input from lead and support agencies as required. Keep in mind that many local jurisdictions have developed emergency evacuation plans for high hazard areas which should be incorporated in evacuation planning.

5. Clearly identify on a map the area(s) that are under an imminent threat and/or a potential threat. Maps should utilize a grid system for easy identification of the impacted area.

6. Identify evacuation routes to nearest safe location. This information will be critical for determining shelter locations and should be shared with the local emergency services agency, Red Cross or NGO's responsible for shelter identification and management.

7. For planning purposes, approximately 2,500 autos per lane, per hour can be accommodated on most roads with an average occupancy of four persons per vehicle.

8. Planning evacuations for special facilities and populations will require additional time and attention to detail. These may include hospitals, elder care facilities, etc.

9. Evacuation planning should also consider timelines, transportation needs and contacts required for large animal evacuations.

10. Identify on an incident map locations where people are sheltered-in-place. These areas may require verification by the Operations Section Chief and concurrence from the Incident Commander(s).

11. Determine traffic control points. Control points should be located on all sides of the incident and outside the threat area. The perimeter established for traffic control will depend on both the affected population and traffic density.

12. Traffic closure levels – Display on incident and public information maps:

    - Level 4 or color code Red – closed to all traffic, potential life hazard
    - Level 3 or color code Orange – closed to all traffic except emergency responders
    - Level 2 or color code Yellow – closed to all traffic except emergency responders and critical resources, i.e., public works, electrical service, animal rescue
    - Level 1 or color code Green – open to above resources and residents only

    NOTE: Level 1 or color code Green is often referred to as a "soft closure" while Level 2 through 4 is referred to as "hard closures."

13. The Incident Evacuation Plan should be distributed to all Command and General Staff members and their subordinates. Additionally, copies should be distributed to all lead and support agencies, local elected officials and the respective county or city emergency operations centers.

Re-Entry Planning Checklist:

1. Identify re-entry date and time
2. Identify area(s) to be re-entered
3. Type of re-entry, homeowner/landowner only with identification or general public
4. Considerations:

- Is the threat mitigated?
- Are power lines secured?
- Are transportation systems hazards mitigated, i.e., roads cleared, bridges inspected, hazard trees removed, etc.?
- Is Incident Commanders' approval granted?
- Is local law enforcement agencies' approval granted?
- Have other local emergency service agencies' approved re-entry (911 Service)?
- Are utility agencies informed and support the re-entry decision?
- Have local EOC's been notified and approvals received?

CHAPTER 22

FIREFIGHTER INCIDENT SAFETY AND ACCOUNTABILITY GUIDELINES

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INTRODUCTION

One of the most important issues facing the Incident Commander (IC) is accountability at the scene of emergencies. These Incident Safety and Accountability Guidelines incorporate additional safety measures and accountability that are best practices in accordance with local, state and federal regulations and pertinent to the Incident Command System (ICS).

An accountability system shall be adopted and routinely used to track, collect, and maintain the status and location of the resources at the incident. All members operating at an incident are responsible for understanding and participating in this system. The IC shall be responsible for the overall accountability for the incident. The IC may delegate other command members to facilitate the accountability for those resources to meet those goals, objectives, and tasks as needed.

Accountability Levels

The accountability levels are to provide a clear idea of what each term means and how they are to be used while at an event or incident. These are:

Personal Accountability
Single Resource Accountability
Supervisor Accountability
Scene Accountability
Functional Accountability

Specific Accountability Definitions and Recommendations – These more specific accountability definitions and recommendations are to assist a responder with how to maintain accountability while at an event or incident.

Personal Accountability:

a. It is the duty of every individual to understand one's role, limitations, and responsibility in accountability.
b. Every individual is to remain under supervision at all times and is to refrain from "freelancing."
c. To be constantly aware of the status and location of fellow crew members and other workers near their area of responsibility.

Single Resource Accountability

a. During an incident, all single resource(s) personnel will check in with the supervisor to which they are assigned.
b. Any department member responding directly to the scene in their own vehicle must first check in as required.
c. The single resource shall provide constant awareness of their status, location, and function throughout the duration of the incident.
d. It is the duty of every resource to understand its role, limitations, and responsibility in accountability.
e. Every single resource is to remain under supervision at all times and is to refrain from "freelancing". ***"Freelancing" is strictly prohibited.*** All on-scene personnel must be under supervision at all times.
f. To be constantly aware of the status of surrounding resources.
g. Shall be in constant communications and maintain status of adjoining forces.

Supervisor Accountability

a. During an incident, all supervisory personnel will check in with the manager to which they are assigned.

b. The supervisor shall maintain constant awareness of the status, locations, and functions of his crew throughout the duration of the incident.
c. The supervisor shall include a proactive reporting of accountability, through the chain of command.
d. The supervisor shall ensure crew cohesion, continuity, and communication.
e. ***"Freelancing" is strictly prohibited.*** All on-scene personnel must be under supervision at all times.
f. An accountability check (i.e., PAR, IAP Forms 204 or 241) shall be completed and documented at the end of each operational period or when an operational benchmark has been achieved through the proper chain of command.

"Freelancing" – An uncommitted responder operating independently, or in a group, at the incident scene without notifying Incident Command and/or without being assigned or delegated a task or function.

Scene Accountability

a. The IC shall maintain constant awareness of the status, location and function of each resource at the scene throughout the duration of the incident. This will assist in developing and documenting after-action reports.
b. Upon arrival on scene, each resource shall check in for assignment.
c. All personnel on the scene will be tracked through the Command Post with the member's name, ICS position, and assignment.
d. As the incident increases in complexity, the accountability system shall increase accordingly.

Functional Accountability

a. Functional accountability shall be used for complex incidents. This requires enhanced scene accountability whereby an IC and/or a designee formally tracks the status, location, and assignment of all resources/ personnel. Functional accountability shall be documented using a tracking system such as: recording assignments (i.e., IAP), tactical deployments, and/or Personnel Accountability Reports (PAR).
b. Accountability process shall be scalable so it may expand or contract with the complexity of the incident.
c. As complexity increases, improved communications should also be attempted (i.e., face-to-face communication, visual contact of crews if possible).

Accountability Checklist

Who - Who is the resource? **This could be a responder or equipment.** Identifies the responder by including name, position/assignment, department/organization, order and request number, assignment and qualifications. Identifies equipment by type and kind.

What - What is the resource doing> Identifies the tasks and assignments of the resource.

When - When did the person or unit arrive on scene, last check-in (i.e., PAR), become reassigned, or demobilize.

Where - Where is the resource located/assigned (Division, Group, Staging, ICP)?

Why - Why was the resource requested? Identifies the need for the resource.

How - How is the accountability process documented/ reported/recorded?

Accountability Considerations

Pre-Incident Accountability Considerations

a. Training on the policies, procedures and tactics of the accountability system should be a priority to a successful system.
b. A written rescue/recovery plan completed before the incident/event, that addresses missing or downed firefighters, is an integral part of an accountability system.
c. The organization's culture must encompass the understanding that a firefighter's failure to adhere to standard accountability practices places them, and all on-scene personnel, in increased danger.

Incident Accountability Considerations

a. There must be an Incident Management Accountability System in place. The task can be accomplished by the officer in charge or delegated to an individual in more complex incidents.
b. Accountability procedures must be followed and must track individuals regardless of their location or assignment on the incident (i.e., hazard zone, Camp, Incident Base).
c. The supervisor must continually maintain crew integrity at all times to avoid "freelancing". ***"Freelancing" is strictly prohibited.***
d. By maintaining company supervision and crew integrity, initiative and resourcefulness can be closely monitored.

e. All personnel must have the ability to communicate with assigned supervisors.
f. It is essential that the supervisor or manager be able to account for different crews by means of an “identifier”.
g. Access to event/incident shall be maintained and monitored. Resources engaged, staged or released from functional assignments must do so through the chain of command.
h. An accounting of all personnel must be conducted at certain points during the incident/event, when conditions change, or assignments are complete.

Post-Incident Accountability Considerations

a. Provide post incident summary of the event for review.
b. Discuss and review relevant situations where accountability was a factor during the incident/event.
c. Provide actions taken and lessons learned that would encourage or possibly prevent the same issue(s) from occurring again.
d. Upon release from an incident, assigned resource will contact the home unit or base to inform of release status and travel time, then again upon arrival.

Firefighter Emergencies

When Firefighters or incident personnel are faced with life threatening emergencies, they may call for help using a variety of terms that may include the use of “Mayday”, “Help”, or “Firefighter Down”. Incident Commanders shall acknowledge the person in trouble and use the term “EMERGENCY TRAFFIC” to clear radio traffic. Clear text shall be used to identify the type of emergency “FIREFIGHTER DOWN,” “FIREFIGHTER MISSING,” or “FIREFIGHTER TRAPPED,” to all incident personnel.

Other guidelines for “EMERGENCY TRAFFIC” include the Dispatch Center transmitting a distinctive “EMERGENCY TRAFFIC” tone on designated channel(s) followed by clear text verbal message that identifies the type of emergency; i.e., “FIREFIGHTER DOWN,” “FIREFIGHTER MISSING,” or “FIREFIGHTER TRAPPED.”

Rapid Intervention Crew/Company (RIC) Members

Rapid Intervention personnel have two very important duties. These are:

- Monitor designated radio channel(s) while standing by and during rescue operations.
- Initiate rescue plan assigned by the Incident Commander or Operations Section Chief.

In the initial stages of an incident where only one team is operating in the hazardous area at a working structural fire, a minimum of four individuals is required, consisting of two individuals working as a team in the hazard area and two individuals present outside this hazard area for assistance or rescue at emergency operations where entry into the danger area is required. The standby members shall be responsible for maintaining a constant awareness of the number and identity of members operating in the hazardous area, their location and function, and time of entry. The standby members shall remain in radio, visual, voice or signal-line communications with the team (NFPA 1500 6-4.4).

Members that arrive on the scene of a working structural fire prior to the assembling of four persons can initiate exterior actions in preparation for an interior attack.

Initial attack operations shall be organized to ensure that, if upon arrival at the emergency scene, initial attack personnel find an imminent life-threatening situation which immediate action could prevent the loss of life or serious injury, such action shall be permitted with less than four personnel when conducted in accordance with NFPA 1500 Section 6-2. No exception shall be permitted when there is no possibility to save lives. Any such actions taken in accordance with this section shall be thoroughly investigated by the fire department with a written report submitted to the Fire Chief (NFPA 1500 6-4.4.5).

In the initial stages of an incident, the IC supervises the RIC. As the incident grows in complexity, this supervision can be assigned to the Operations Section Chief or even to individual Divisions to ensure the most rapid and effective deployment on a rescue.

When sufficient personnel are on-scene, the rapid intervention capability for the incident should be raised from the two-in, two-out minimum to include an entire crew or company. In some instances, such as multiple and/or remote entrance points, multiple RIC elements should be assigned and a Rapid Intervention Group Supervisor activated to supervise positioning and deployment of these Crews/ Companies.

In high-rise fire incidents, the RIC should typically be located at Staging. This will allow for RIC's to be deployed in a timely manner. Consider multiple RIC's if multiple floors are involved with positioning based on the assigned floor.

If a RIC is deployed to provide a rescue of a firefighter, the Incident Commander shall assign an additional RIC as a backup for the RIC that was deployed. Members working in the immediate area should be notified by the Incident

Commander to assist in the rescue if at all possible. The Incident Commander must remember to continue to keep sufficient forces engaged in controlling the spread of the fire if threatening the trapped, lost, or injured firefighter.

Additional Rapid Intervention Considerations

When preparing for a firefighter rescue, consider the worst-case scenario. Rapid Intervention Crew/Company (RIC) standard operating guidelines are incident driven.

Officers or members assigned the task of RIC shall not get involved in routine firefighting activities, but remain in a state of readiness keeping company members together and ready for deployment.

Operational Retreat Guidelines

In addition to radio traffic requiring evacuation, the following standardized audible signal can be used to indicate evacuation.

The **EVACUATION SIGNAL** will consist of repeated short blasts of the air horn for approximately ten seconds, followed by ten seconds of silence. This sequence of air horn blasts for ten seconds followed by a ten-second period of silence will be done three times; total air horn evacuation signal including periods of silence will last fifty seconds. This should be done in conjunction with the radio announcement of "EMERGENCY TRAFFIC," with direction for emergency scene personnel to evacuate the hazard area.

The Dispatch Center should continue to advise the Incident Commander of the elapsed time at each additional fifteen-minute interval, or until canceled by the Incident Commander, or until the incident is declared under control, i.e., knockdown.

PROCEDURES FOR THE IDENTIFICATION AND MANAGEMENT OF LIFE HAZARD ZONES

INTRODUCTION

Incident Commanders are responsible for the safety of all incident personnel and may have to take action to protect personnel from life threatening conditions that on-scene fire personnel and other responders do not have the capabilities, tools, or training to immediately mitigate. These actions may include:

- Immediate notification of personnel
- Notification for ongoing or long-term life hazards
- Methods to isolate and clearly identify the life hazard with three strands of barrier tape
- Assignment of Lookouts or Assistant Safety Officers when needed
- Identification methods for remote or large area life hazards

The clearly identifiable method to assure that fire personnel and other responders do not enter Life Hazard Zones includes the use of a minimum of three (3) horizontal strands of barrier tape that states "**Do Not Enter**" or "**Do Not Cross**," to prevent entry to the hazardous area. Three horizontal strands of any Fireline tape or flagging tape between one inch and three inches with the words "Do Not Enter" or "Do Not Cross," securely fixed to stationary supports, and in sufficient locations to isolate the hazard, will meet the requirement of identifying a Life Hazard Zone.

DEFINITIONS

Life Hazard: The existence of a process or condition that would likely cause serious injury or death to exposed persons.

Life Hazard Zones: A system of barriers surrounding designated areas at the incident scene that is intended to **STOP** fire personnel and other responders from entering a potentially Life Threatening, Hazardous Area.

Life Hazard Lookout: A qualified person in a location where they can safely observe a Life Hazard, monitor resources and personnel in the area, and communicate with resources keeping them a safe distance away. The Lookout will also isolate and deny entry to any responders or resources until the life hazard is mitigated and the Incident Commander approves the release of the Life Hazard Zone.

INFORMATION AND GUIDELINES

Whenever a life hazard is present, or an immediate threat to the health and safety of incident personnel is present at an incident, any person who recognized the potential life hazard shall immediately contact the Incident Commander using "**EMERGENCY TRAFFIC**" to advise of the situation. Included in the Emergency Traffic notification:

- Type/Nature of the hazardous condition (i.e., downed electrical wires, imminent building collapse, etc.)
- Specific location
- Resource needs
- Any immediate exposure needs or issues

Incident Commander shall request the appropriate resource or agency to respond to the incident to evaluate and mitigate the life hazard (i.e., Utility Company, Structural Engineer, etc.) and assign a Lookout or Assistant Safety Officer until Life Hazard Zone(s) are established.

The Incident Commander shall assign a Life Hazard Lookout to prevent any incident personnel from entering the area until such time as the procedures below have been completed.

Identification of Life Hazard Zones

a. The Standard for identification of a LIFE HAZARD ZONE:

   1. Deploy barrier tape in the following manner to prevent entry and identify the hazard zone. The optimal tape would be red and white striped or chevron barrier tape that states "**Life Hazard – Do Not Enter**," however, existing Fireline or Police perimeter tape that includes the words "Do Not Enter" or "Do Not Cross" will meet this standard.

   2. The tape shall be configured in **three horizontal strands** approximately 18 to 24 inches apart and securely fixed to stationary supports to establish the LIFE HAZARD ZONE. The LIFE HAZARD ZONE barrier shall be of sufficient size to provide complete isolation, distance and protection from the hazard, and supports shall be capable of supporting the barrier tape throughout the incident.

   3. The use of illumination is recommended to enhance nighttime visibility to further identify the LIFE HAZARD ZONE. Examples include orange cones with a flashing strobe light on the ground, or glow sticks securely attached to the barrier tape.

b. The Established Life Hazard Zone:

1. **THE THREE HORIZONTAL STRAND CONFIGURATION OF RED AND WHITE STRIPED OR CHEVRON BARRIER TAPE SHALL ONLY BE USED FOR LIFE HAZARD IDENTIFICATION. WHEN INCIDENT PERSONNEL SEE THE THREE- STRAND CONFIGURATION OR BARRIER TAPE, IT SHALL BE RECOGNIZED AS THE STANDARD FOR ISOLATING A LIFE HAZARD, AND INCIDENT PERSONNEL SHALL NOT ENTER THE LIFE HAZARD ZONE.**

2. Ensure the LIFE HAZARD ZONE measures provide visibility to approaching personnel to prevent entry into the area throughout the duration of the incident.

3. Maintain the LIFE HAZARD ZONE for the duration of the incident or hazard. Approval from the Incident Commander is required prior to the removal of the Life Hazard Zone barriers.

4. The LIFE HAZARD ZONE identification measures are intended to provide a visual cue to all incident personnel. Life Hazard Lookout(s) or Assistant Safety Officers shall be considered to ensure a physical barrier between personnel and the LIFE HAZARD ZONE through effective communications and notifications.

5. The Incident Commander shall be responsible for ensuring that all incident personnel are notified of the Life Hazard Zone. This may be accomplished through any approved method such as face-to-face, Emergency Traffic radio messages or the Incident Action Plan.

c. Remote Locations: In cases where the extent of the hazard zone is so large that is not practical to completely isolate the area, such as on large incidents in remote locations, the following will be the minimum standard for these situations:

1. The Incident Commander must approve the use of these minimum standards for each Life Hazard:

   The Incident Commander shall assign a Life Hazard Lookout at appropriate access points to prevent any incident personnel from entering the area until such time as the procedures below have been completed.

   Three horizontal stripes of red and white Life Hazard tape or barrier tape (as described above) will be affixed to two vertical uprights at appropriate locations along the access route to the Life Hazard area. A description of the hazard, location of the hazard, and distance from the Life Hazard indicator tape to the hazard shall be attached at each location.

2. All personnel working in the area or Division shall be notified of the Life Hazard immediately. Incident personnel may be notified through the routine briefings, emergency traffic radio messages, the Incident Action Plan, and/or the Incident Map.

3. The location(s) of the Life Hazard(s) and Placard(s) shall be marked on the Incident Map using standardized symbols. The symbol to mark the Life Hazard Zone on the incident map is a red octagon (Stop Sign) with three white horizontal lines with a description of the hazard noted underneath.

wires

- Personnel shall not breach, alter, or remove any LIFE HAZARD ZONE identification measures until the hazard has been abated and approval granted by the Incident Commander.
- All personnel have a personal responsibility to be aware of LIFE HAZARDS and make proper notifications when they are encountered at an incident.
- Remember the slogan:

THREE STRIPES, YOU'RE OUT!

For More Detailed Information Read:
Firefighter Incident Safety and Accountability Guidelines
ICS 910

CHAPTER 23
GLOSSARY OF TERMS

This glossary contains definitions of terms frequently used in ICS documentation that are, for the most part, not defined elsewhere in this guide.

29 CFR Part 1910.120. Item 29 of the Code of Federal Regulations, Part 1910.120 in the Hazardous Waste Operations and Emergency Response reference document as required by SARA. This document covers employees involved in certain hazardous waste operations and any emergency response to incidents involving hazardous situations. Federal OSHA enforces this code.

Access Control Point. The point of entry and exit from control zones that regulate the traffic to and from the work areas and control zones.

Agency Executive or Administrator. A chief executive officer (or designee) of an agency or jurisdiction that has responsibility for the incident.

Agency Representative. An individual assigned to an incident from an assisting or cooperating agency that has been delegated authority to make decisions on matters affecting that agency's participation at the incident. Agency Representatives report to the Incident Liaison Officer.

Air Monitoring. The use of devices to detect the presence of known or unknown gases or vapors.

Air Transportable Mobile Weather Unit (ATMWU). A portable weather data collection and forecasting system used by a National Weather Service Fire Weather Forecaster.

All Risk. Any incident or event, natural or human-caused that warrants action to protect life, property, environment, public health or safety, and minimize disruption of government, social or economic activities.

ALS (Advanced Life Support). Allowable procedures and techniques utilized by EMT-P and EMT-II personnel to stabilize critically sick and injured patient(s) that exceed Basic Life Support procedures.

ALS Responder. Certified EMT-P or EMT-II.

Anchor and Hold. A tactic utilizing control lines and large water streams from fixed water supplies to stop fire spread in neighborhoods where the fire is spreading from house to house. The goal is to extinguish structure fires, protect exposures and reduce ember production in neighborhoods where the fire is spreading from house to house.

Area Command. Area Command is an expansion of the incident command function primarily designed to manage a very large incident that has multiple incident management teams assigned. However, an Area Command can be established at any time that incidents are close enough that oversight direction is required among incident management teams to ensure conflicts do not arise.

Assigned Resources. Resources checked in and assigned work tasks on an incident.

Assistant. Title for subordinates of Command Staff positions. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions. Assistants may also be used to supervise unit activities at camps.

Assisting Agency. An agency directly contributing suppression, rescue, support, or service resources to another agency.

Available Resources. Resources assigned to an incident and available for an assignment.

Base. That location where the primary logistics functions are coordinated and administered (incident name or other designator will be added to the term "Base"). The Incident Command Post may be co-located with the base. There is only one base per incident.

Basic Rope Rescue. Rescue operations of a non-complex nature employing the use of ropes and accessory equipment.

BLS (Basic Life Support). Basic non-invasive first-aid procedures and techniques utilized by EMT-P, EMT-II, EMT-I, EMT-D and First Responder personnel to stabilize sick and injured patient(s).

BLS Responder. Certified EMT-I or First Responder.

Boat drive-air. A boat with a propulsion system using an aviation propeller or a ducted fan to generate thrust from the engine having an on-plane draft of zero to twelve inches. The typical boats of this category are the "Florida Swamp" boats and surface effect boats.

Boat drive-jet. A boat with a propulsion system using a water pump to generate thrust having an on-plane draft of six to twelve inches. They can be susceptible to damage from floating debris.

Boat drive-propeller. A boat with a propulsion system using a propeller to generate thrust having an on-plane draft of eighteen to twenty-four inches.

Boat, non-powered. A non-motorized vessel capable of safely transporting rescuers or victims (e.g., raft, skiff, johnboat, etc.).

Boat, powered. A motorized vessel capable of safely transporting rescuers or victims, (e.g. IRB: "Inflatable Rescue Boat", RHIB: "Rigid Hull Inflatable Rescue Boat", Rigid Hull Boat, PWC: "Personal Water Craft," "Airboat", etc.).

Bomb/Explosives Group Supervisor. The Bomb/Explosives Group Supervisor reports to the Operations Section Chief or Law Branch Director (if activated). The Bomb/Explosives Group Supervisor is responsible for investigating suspicious packages, explosive devices, rendering them safe, and conducting criminal investigations at the scene of an explosive device or explosion.

Branch. That organizational level having functional, geographical, or jurisdictional responsibility for major parts of the incident operations. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section. Branches are identified by the use of Roman Numerals, by function, or jurisdictional name.

Bump and Run. Resources maneuver at or near the fire front in an effort to defend as many structures as possible. Suppression efforts should be limited to extinguishing spot fires, hot spots and fire perimeter around structures before moving on to the next structure.

California Code of Regulations (CCR) Title 8, Section 5192, Subsection (q). This section provides hazardous waste handling guidelines that are enforced by Cal-OSHA. Subsection (q) specifically deals with emergency response to a hazardous substance release.

Camp. A geographical site, within the general incident area, separate from the base, equipped and staffed to provide food, water, and sanitary services to incident personnel.

Campbell Prediction System (CPS). Trade name for a simplified fire ground method used to forecast fire behavior.

Check and Go. A tactical action used during WUI fire operations when firefighters quickly check for occupants at threatened structure and then withdraw. Used when high intensity, lack of time or inadequate defensible space prohibit firefighting resources from safely taking action to protect the home.

Chemical Protective Clothing. Includes complete NFPA compliant ensembles (garment, gloves and boots) of individual replaceable elements (boots, gloves) designed and certified to provide protection for the wearer against the physical and chemical effects of hazardous materials.

CHEMTREC. Chemical Transportation Emergency Center operated as a public service of the Chemical Manufacturers Association.

Clear-Text. Use of plain English and common terminology understandable by all.

Command. The act of directing, ordering and/or controlling resources by virtue of explicit legal, agency, or delegated authority.

Command Refuge Area. A protective action term used for a designated location that is considered to provide a greater level of survivability than Shelter-in-Place.

Command Staff. The Command Staff consists of the Public Information Officer, Safety Officer, and Liaison Officer who report directly to the Incident Commander.

Company Unity. A term to indicate that a fire company or unit shall remain together in a cohesive and identifiable working group, to ensure personnel accountability and the safety of all members. A company officer or unit leader shall be responsible for the adequate supervision, control, communication and safety of members of the company or unit.

Compatibility. The matching of personal protective equipment (PPE) to the hazards involved providing the best protection for the worker.

Complex. A complex is two or more individual incidents located in the same general proximity that is assigned to a single Incident Commander or Unified Command to facilitate management.

Confined Space Rescue. Rescue operations in an enclosed area, with limited access/egress, not designed for human occupancy and has the potential for physical, chemical or atmospheric injury.

Contamination Control Line (CCL). The established line that separates the Contamination Reduction Zone from the Support Zone.

Contamination Reduction Corridor (CRC). A corridor within the Contamination Reduction Zone where decontamination procedures are conducted.

Contamination Reduction Zone (CRZ). The area between the Exclusion Zone and the Support Zone that acts as a buffer to separate the contaminated area from the clean area.

Control Zones. The geographical areas within the control lines set up at a hazardous materials incident. Includes the Exclusion Zone, Contamination Reduction Zone and Support Zone.

Cooperating Agency. An agency supplying assistance other than direct suppression, rescue, support, or service functions to the incident control effort (e.g., Red Cross, telephone company, etc.).

Coordination Center. A facility that is used for the coordination of agency or jurisdictional resources in support of one or more incidents.

Cost Sharing Agreements. Agreements between agencies or jurisdictions to share designated costs related to incidents.

Decontamination (DECON). The physical and/or chemical process of removing or reducing contamination from personnel or equipment, or in some other way preventing the spread of contamination by persons and equipment.

Decontamination Lane Manager. The Decontamination Lane Manager reports to the Mass Decontamination Leader. The Decontamination Lane Manager is responsible for the operations of the decontamination element providing decontamination as required by the Incident Action Plan.

Delayed Treatment. Second priority in patient treatment. These people require aid, but injuries are less severe.

Delegation of Authority: A statement provided to the Incident Commander by the Agency Executive delegating authority and assigning responsibility. The Delegation of Authority can include objectives, priorities, expectations, constraints, and other considerations or guidelines as needed. Many agencies require written Delegation of Authority to be given to Incident Commanders prior to their assuming command on larger incidents.

Deputy. An individual assigned to the Incident Commander, General Staff, or Branch Directors with equal qualifications and delegated authority when acting in their absence.

Division. That organization level having responsibility for operations within a defined geographic area. The Division level is organizationally between the Strike Team and the Branch (See also "Group").

Emergency Traffic. The term used to clear designated channels used at an incident to make way for important radio traffic for a firefighter emergency situation or an immediate change in tactical operations.

EMT-I (Emergency Medical Technician-I). An individual trained in Basic Life Support procedures and techniques and who has a valid EMT-I certificate.

EMT-II (Emergency Medical Technician-II). An individual with additional training in limited Advanced Life Support procedures and techniques according to prescribed standards and who has a valid EMT-II certificate.

EMT-D (Emergency Medical Technician-Defibrillator). An Emergency Medical Technician I with training and certification in automatic and semi-automatic external defibrillation.

EMT-P (Emergency Medical Technician-Paramedic). An EMT-I or EMT-II who has received additional training in Advanced Life Support procedures and techniques and who has a valid EMT-P certificate or license.

Environmental. Atmospheric, Hydrologic and Geologic media (air, water and soil).

Evacuation: Organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Exclusion Zone (EZ). The innermost area immediately surrounding a hazardous materials incident that corresponds with the highest degree of known or potential hazard, and where entry may require special protection.

Expanded Medical Emergency. Any medical emergency that exceeds normal first response capabilities.

Field Testing. The identification of chemical substances using a variety of sources and testing kits that assist in identifying associated chemical and physical properties of those tested chemicals.

Fire Front Following. A tactic used during WUI structure defense activities where resources take a position in a safe area and advance after the passage of the fire front to engage in perimeter control structure fire control, and conduct a primary search for victims. This action is taken when there is insufficient time to safely set up ahead of the fire or the intensity of the fire would likely cause injury to personnel located in front of the fire.

Fireline Emergency Medical Technician (FEMT). The FEMT provides basic life support (BLS) emergency medical care to personnel operating on the fireline.

Fireline Paramedic (FEMP). The FEMP provides advanced life support (ALS) emergency medical care to personnel operating on the fireline.

Fixed Site Security Unit Leader. The Fixed Site Security Unit Leader(s) report to the Mobile Field Force Group Supervisor and/or Patrol Group Supervisor. The Fixed Site Security Unit Leader is responsible for the continuous physical security focused on the protection of people, property and the sites for a named place(s) or facility(ies), including providing or access control for these sites, place(s) or facility(ies). This could include incident facilities such as Incident Command Post and Staging Area(s).

Flood Evacuation Boat (FEB). Resource with personnel trained to operate in floodwaters with the specific task of evacuating persons or small domestic animals from isolated areas.

General Staff. The group of incident management personnel comprised of the Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

Group. Groups are established to divide the incident into functional areas of operation. Groups are located between Branches (when activated) and Resources in the Operations Section. (See Division).

Handler. The Handler reports to the Decontamination Lane Manager. The Handler is responsible for the movement of ambulatory/non-ambulatory victims through the Contamination Reduction Corridor. The Handler assists with the movement of victims within the Contamination Reduction Zone from receipt of victim through the decontamination process. Handlers will go through the appropriate decontamination measures as outlined in the Site Safety and Control Plan Haz Mat (ICS Form 208HM) prior to exiting the Contamination Reduction Zone (CRZ).

Hazardous Material. Any solid, liquid, gas, or mixture thereof that can potentially cause harm to the human body through respiration, ingestion, skin absorption or contact and may pose a substantial threat to life, the environment, or to property.

Hazardous Materials Categorization. A process to determine hazardous materials classification, and chemical and physical properties of unknown substances.

Hazardous Materials Categorization Test (HAZ CAT). A field analysis to determine the hazardous characteristics of an unknown material.

Hazardous Materials Company. Any piece(s) of equipment having the capabilities, PPE, equipment, and complement of personnel as specified in the Hazardous Materials Company Types and Minimum Standards found in the Field Operations Guide (ICS 420-1).

Hazardous Materials Incident. The uncontrolled release or threat of release of a hazardous material that may impact life, the environment, or property.

Hazardous Materials Incident Contingency Plan (HMICP). Hazardous Materials Incident Contingency Plan (HMICP) Section 8574.16-8574.18 of the California Government Code. California State Toxic Disaster Plan that would provide for an integrated and effective state procedure to respond to the occurrence of toxic disasters within the state.

Heavy Floor Construction. Structures of this type are built utilizing cast-in-place concrete construction consisting of flat slab panel, waffle or two-way concrete slab assemblies. Pre-tensioned or post-tensioned reinforcing steel rebar or cable systems are common components for structural integrity. The vertical structural supports include integrated concrete columns, concrete enclosed or steel frame, that carry the load of all floor and roof assemblies. This type includes heavy timber construction that may use steel rods for reinforcing. Examples of this type of construction include offices, schools, apartments, hospitals, parking structures and multi-purpose facilities. Common heights vary from single-story to high-rise structures.

Heavy Wall Construction. Materials used for construction are generally heavy and utilize an interdependent structural or monolithic system. These types of materials and their assemblies tend to make the structural system inherently rigid. This construction type is usually built without a skeletal structural frame. It utilizes a heavy wall support and assembly system to provide support for the floors and roof assemblies. Occupancies utilizing tilt-up concrete construction are typically one to three stories in height and consist of multiple monolithic concrete wall panel assemblies. They also use an interdependent girder, column and beam system for providing lateral wall support of floor and roof assemblies. Occupancies typically include commercial, mercantile and industrial. Other examples of this type of construction include reinforced and un-reinforced masonry (URM) buildings typically of low-rise construction, one to six stories in height, and of any type of occupancy.

Helibase. A location within the general incident area for parking, fueling, maintenance, and loading of helicopters.

Helicopter Rescue Operational. Personnel trained and equipped to work with helicopters and crew, for hoist, short haul-line victim extraction, rappel, or low-level insertions.

Helispot. A location where a helicopter can take off and land.

Helitanker. A helicopter equipped with a fixed tank, Air Tanker Board Certified, capable of delivering a minimum of 1,000 gallons of water, retardant, or foam.

Hospital Alert System. A communications system between medical facilities and on-incident medical personnel that provides available hospital patient receiving capability and/or medical control.

Immediate Treatment. A patient who requires rapid assessment and medical intervention for survival.

Incident Action Plan (IAP). A plan that contains objectives that reflects the incident strategy and specific control actions for the current or next operational period.

Incident Command Post (ICP). That location at which the primary command functions are executed and usually collocated with the incident base.

Incident Command System (ICS). The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

Incident Objectives. Statements of guidance and direction that are achievable, measurable, and necessary for the selection of appropriate strategy (ies), and the tactical direction of resources.

Infrared (IR). A heat detection system used for fire detection, mapping and hot spot identification.

Infrared (IR) Groundlink. A capability through the use of a special mobile ground station to receive air-to-ground infrared imagery for interpretation.

Initial Response. Resources initially committed to an incident.

Intelligence Group Supervisor. Initially reports to the Incident Commander, Planning Section Chief or the Operations Section Chief. In a large or complex incident, Intelligence may report to the Law Enforcement Group Supervisor or Branch Director. Based on the needs of the incident, Intelligence may be assigned as a Unit under Planning or a Group under Operations Branch.

Investigation Unit Leader/Group Supervisor. Initially reports to the incident Commander, Planning Section Chief or the Operations Section Chief. In a large or complex incident, Investigation may report to the Law Enforcement Group Supervisor or Branch Director. Based on the needs of the incident, Investigation may be assigned as a Unit under Planning or Group under Operations Branch.

IRB. Inflatable rescue boat.

Joint Information System (JIS): Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations. The mission of the JIS is to provide a structure and system for developing and delivering coordinated inter-agency messages; developing, recommending, and executing public information plans and strategies on behalf of the IC; advising the IC concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Jurisdictional Agency. The agency having responsibility for a specific geographical area or function as designated by statute or contract.

Light Frame Construction. Materials used for construction are generally lightweight and provide a high degree of structural flexibility to applied forces, such as earthquakes, hurricanes, tornadoes, etc. These structures are typically constructed with a skeletal structural frame system of wood or light gauge steel components, which provide support to the floor or roof assemblies. Examples of this construction type are wood frame structures used for residential, multiple low-rise occupancies and light commercial occupancies up to four stories in height. Light gauge steel frame buildings include commercial business and light manufacturing occupancies and facilities.

Mass Decontamination Group Supervisor. The mass Decontamination Group Supervisor reports to the Operations Section Chief, the Hazardous Materials Branch Director or the Mass Decontamination Branch Director (if activated). The Mass Decontamination Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the Mass Decontamination Group operations. The Mass Decontamination Group Supervisor is responsible for the assignment of resources within the Mass Decontamination Group, reporting on the progress of control operations and the status of resources within the Mass Decontamination Group. The Mass Decontamination Group Supervisor directs the overall operations of the Mass Decontamination Group.

Mass Decontamination Unit Leader. The Mass Decontamination Unit Leader reports to the Hazardous Materials Group Supervisor or Mass Decontamination Group Supervisor (if activated). The Mass Decontamination Unit Leader is responsible for the operations of the mass decontamination element providing decontamination as required by the Incident Action Plan.

Medical Supply Cache. A cache consists of standardized medical supplies and equipment stored in a predetermined location for dispatch to incidents.

Message Center. The Message Center receives, records, and routes information about resources reporting to the incident, resource status, and administration and tactical traffic.

MICU (Mobile Intensive Care Unit). Refers to a vehicle equipped to support paramedic functions. It would include drugs, medications, cardiac monitors and telemetry, and other specialized emergency medical equipment.

Minor Treatment. These patients' injuries require simple rudimentary first-aid.

Mobile Field Force Group Supervisor. The Mobile Field Force Group Supervisor reports to the Operations Section Chief or Law Branch Director (if activated). The Mobile Field Force Group Supervisor is responsible for managing operations that may exceed the capabilities of the Patrol Group. The Mobile Field Force Group is trained and equipped to deal with large crowds, acts of civil disobedience, maintaining order and preserving the peace. They can be used in multiple configurations and/or varying tasks. The Mobile Field Force Group Supervisor is responsible for assigning resources within the Mobile Field Force Group.

Mobilization Center. An off-incident location at which emergency service personnel and equipment are temporarily located pending assignment, release, or reassignment.

Morgue (Temporary On-Incident). Area designated for temporary placement of the dead.

Multi-Agency Coordination (MAC). The coordination of assisting agency resources and support to emergency operations.

Multi-Agency Coordination System (MACS). The combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordination of assisting agency resources and support to agency emergency operations.

Multi-Casualty. The combination of numbers of injured personnel and type of injuries that exceed the capability of an agency's normal first response.

Not Threatened. A term used to describe a structure that, based on forecasted fire behavior, has constructed features and/or defensible space making it unlikely that the structure will ignite during the initial wildland fire front contact.

Operational Period. The period of time scheduled for execution of a given set of tactical actions as specified in the Incident Action Plan.

Operations Coordination Center (OCC). The primary facility of the Multi-Agency Coordination System. It houses the staff and equipment necessary to perform the MACS functions.

Orthophoto Maps. Aerial photographs corrected to scale so that geographic measurements may be taken directly from the prints.

Out-of-Service Resources. Resources assigned to an incident but unable to respond for mechanical, rest, or personnel reasons.

PACE. A military acronym adopted by the fire service that promotes contingency planning during fire ground activities. **P**rimary **A**lternate **C**ontingency **E**mergency

Patient Transportation Recorder. Responsible for recording pertinent information regarding off-incident transportation of patients.

Patrol Group Supervisor. The Patrol Group Supervisor reports to the Operations Section Chief or Law Branch Director (if activated). The Patrol Group Supervisor is responsible for general law enforcement activities such as perimeter control, assisting in evacuation and shelter-in-place, traffic control, and liaison with the public. They can be used in multiple configurations and for varying tasks. The Patrol Group Supervisor is responsible for assigning resources within the Patrol Group.

Personal Protective Equipment (PPE). That equipment and clothing required to shield and/or isolate personnel from thermal, chemical, radiological, physical, or biological hazards.

Personnel Accountability. The ability to account for the location and status of personnel.

Personnel Accountability Reports (PAR). Periodic reports verifying the status of responders assigned to an incident.

PFD. Personal flotation device with a minimum U.S. Coast Guard rating of Type III or V.

Planning Meeting. A meeting, held as needed throughout the duration of an incident, to select specific strategies and tactics for incident control operations and for service and support planning.

Pre-Cast Construction. Structures of this type are built utilizing modular pre-cast concrete components that include floors, walls, columns and other sub-components that are field connected upon placement on site. Individual concrete components utilize imbedded steel reinforcing rods and welded wire mesh for structural integrity and may have either steel beam or column or concrete framing systems utilized for the overall structural assembly and building enclosure. These structures rely on single or multi-point connections for floor and wall enclosure assembly and are a safety and operational concern during collapse operations. Examples of this type of construction include commercial, mercantile, office and multi-use or multi-function structures including parking structures and large occupancy facilities.

Prep and Defend. A tactic used to identify WUI structure defense activities where resources will remain and defend a structure when the fire front arrives. This tactic would be used when the conditions are such that it is safe for firefighters to remain. A Safety Zone or TRA must exist on site.

Prep and Go. A tactic used to identify WUI structure defense activities where there is some time to prepare a structure for defense ahead of the fire front arriving, but resources withdraw prior to fire contact. There may be some time to prepare a structure for defense ahead of the fire front, foams, gels, combustible materials removed, but potentially fire intensity make it too dangerous for fire resources to stay.

Protective Actions. The actions taken to preserve the health and safety of emergency responders and the public during an incident involving releases of hazardous materials. Examples would include evacuations or in-place protection techniques.

PWC. Personal watercraft (water bike, jet ski).

Qualified. A person meeting a recognized level of training, experience and certification for the assigned position.

Radiation Monitoring and Detection. The use of specialized devices to determine the presence, type and intensity of ionizing radiation, and to determine dosage over time.

Radio Cache. A cache may consist of a number of portable radios, a base station and, in some cases, a repeater stored in a predetermined location for dispatch to incidents.

Rapid Intervention Crew/Company (RIC). A crew or company designated to standby in a state of readiness to rescue emergency personnel.

Refuge Area. An area identified within the incident for the assembly of individuals in order to reduce the risk of further contamination or injury.

Refuge Area Manager. The Refuge Area Manager reports to the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Leader. The Refuge Area Manager is responsible for evaluating and prioritizing victims with a high possibility for contamination for decontamination and treatment. This area should be separate from the Safe Refuge Area to prevent the spread of contamination by these victims. If there is a need for the Refuge Area Manager to enter the Contamination Reduction Zone in order to fulfill assigned responsibilities, then the appropriate Personal Protective Equipment shall be worn.

Reinforced Response. Those resources requested in addition to the initial response.

Reporting Locations. Any one of six facilities/locations where incident assigned resources may check in.

Resources. All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Respiratory Protection. The provision of a NIOSH approved breathing system to protect the respiratory system of the wearer from hazardous atmospheres.

Responder Rehabilitation. The rest and treatment of incident personnel who are suffering from the effects of strenuous work and/or extreme conditions.

RHIB. Rigid hull inflatable boat.

Rigid Hull. A boat constructed of wood, fiberglass, or aluminum with no inflated components.

Safe Refuge Area (SRA). A safe area within the Contamination Reduction Zone (CRZ) for the assembly of individuals who were on site at the time of the spill. Separation of any potentially contaminated or exposed persons from non-exposed persons should be accomplished in the SRA.

Search Marking System. A standardized marking system employed during and after the search of a structure for potential victims.

SEAT. Single Engine Airtanker.

Section. The organization level having functional responsibility for primary segments of incident management (Operations, Planning, Logistics, Finance/Administration). The Section level is organizationally between Branch and Incident Commander.

SEMS (Standardized Emergency Management System). California's Emergency Management System that facilitates priority setting, interagency cooperation, and the efficient flow of resources and information utilizing ICS principles including the five elements of Command, Operations, Planning, Logistics, and Finance/Administration. SEMS is used in California at five levels: Field Response, Local Government, Operational Areas, Regions, and State. SEMS incorporates the Incident Command System, Multi/Inter-Agency Coordination, Mutual Aid, and the Operational Area Concept.

Shelter-in-Place. A protective action term used to advise people to stay secure at their current location.

Single Resource. An individual piece of equipment and its personnel complement, or an established crew or team of individuals with an identified work supervisor that can be used on an incident.

Site. That area within the Contamination Reduction Control Line at a hazardous materials incident.

Site Safety and Control Plan Haz Mat (ICS 208HM). An emergency response plan describing the general safety procedures to be followed at an incident involving hazardous materials, and prepared in accordance with CCR Title 8, Section 5192, and 29 CFR 1910.120.

Special Weapons and Tactics (SWAT) Group Supervisor. The SWAT Group Supervisor reports to Operations Section Chief or Law Branch Director (if activated). The SWAT Group Supervisor is responsible for law enforcement incidents such as hostage situations, barricaded suspects, armed suspects, and victim rescues. The SWAT Group Supervisor may coordinate Force protection for responders or dignitaries. The SWAT Group Supervisor is responsible for assigning resources within the SWAT Group.

Staging Area. That location where incident personnel and equipment are assigned on a three-minute available status.

Standby Members (two-in, two-out). Two personnel who remain outside the hazard area during the initial stages of an incident to rescue responders and who are responsible for maintaining a constant awareness of the number and identity of members operating in the hazardous area, their location and function, and time of entry.

START. Acronym for **S**imple **T**riage **A**nd **R**apid **T**reatment.

Strategy. The general plan or direction selected to accomplish incident objectives.

Strike Team. Specified combinations of the same kind and type of resources, with common communications and a leader.

Structure/Hazards Marking System. A standardized marking system to identify structures in a specific area and any hazards found within or near the structure.

Support Zone. The area outside of the Contamination Control Line where equipment and personnel are assembled in support of incident operations, wherein such personnel and equipment are not expected to become contaminated.

Swiftwater. Water that is moving fast enough to produce sufficient force to present a significant life and safety hazard to a person entering the water.

Training Levels:

Awareness: Knowledge based course of instruction, emphasizing hazards and personnel safety. Generally lecture only.

Operational: Participation based course of instruction; emphasizing personal safety, team safety and limited low risk victim rescue. The course generally includes objective evaluation and testing.

Technician: Performance based course of instruction emphasizing personnel safety, team safety, and mid to high-risk victim rescue. The course generally includes objective evaluation and testing.

Tactical Maneuver. Actions that imply movement and purposeful reaction to change. Reacting to changes in fire behavior with agile tactical solutions as opposed to rigid defending and inflexible plans.

Tactical Patrol. A WUI tactic focused on resource mobility and the continuous monitoring of an assigned area. Situational awareness, active suppression actions and vigilance are key elements of tactical patrol.

Tactics. Deploying and directing resources on an incident to accomplish the objectives designated by current incident strategy.

Task Force. A group of resources with common communications and a leader that may be pre-established and sent to an incident, or formed at an incident.

Technical Reference. Access to, use of, and interpretation of various technical databases, chemical substance data depositories, response guidelines, regulatory documents, and other sources both in print and electronic format.

Technical Specialists. Personnel with special skills who are activated only when needed.

Technical Specialist-Hazardous Materials Reference. Reports to the Hazardous Materials Group Supervisor or Hazardous Materials Branch Director (if activated). This position provides continuous technical information and assistance to the Hazardous Materials Group using various reference sources such as computer databases, technical journals, CHEMTREC, and phone contact with facility representatives. The Technical Specialist-Hazardous Materials Reference may provide product identification using hazardous categorization tests and/or any other means of identifying unknown materials.

Temporary Refuge Area (TRA). A fire ground location intended to provide firefighters with limited short-term relief or refuge from an unexpected increase in fire intensity without the immediate need of a fire shelter. A TRA should provide time enough for responders to assess their situation and execute a plan to safely survive the increase in fire behavior.

Threatened-Defensible. A term used to describe a structure that based on forecasted fire behavior has a Safety Zone or TRA available on site based and firefighters can safely remain at the structure when the fire front arrives.

Threatened - Non-Defensible. A term used to describe a structure that based on forecasted fire behavior does not have a Safety Zone or TRA available on site.

Triage. Screening and classification to determine priority needs in order to ensure the efficient use of personnel, equipment and facilities.

Triage Tag (medical). A tag used by triage personnel to identify and document the patient's medical condition.

Unified Command. Unified Command is a team effort that allows all agencies with jurisdictional responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility or accountability.

Unit. An organizational element having responsibility for a specific function within the Operations, Plans, Logistics, or Finance Sections.

Urban Search and Rescue (US&R) Company. Any ground vehicle(s) providing a specified level of US&R operational capability, rescue equipment, and personnel.

Urban Search and Rescue (US&R) Crew. A pre-determined number of individuals who are supervised, organized and trained principally for a specified level of US&R operational capability. They respond without equipment and are used to relieve or increase the number of US&R personnel at the incident.

Watershed Rehabilitation. Restoration of watershed to, as near as possible, its pre-incident condition, or to a condition where it can recover on its own. Also known as "rehab".

Weapons of Mass Destruction (WMD). Reference to those substances that can be weaponized and are developed for the purpose of creating widespread injury, illness and death. Agents are produced in quantity and/or filled into munitions in a specialized formulation with enhanced shelf life or dissemination properties.

WATCH OUT SITUATIONS

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed on strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communication link with crew members or supervisor.
8. Constructing line without safe anchor point.
9. Building fire line downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and fire.
12. Cannot see main fire, not in contact with someone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather becoming hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking nap near fireline.