

INTRODUCTION

Incident Command System for Fire Department Operations at High Rise Structure Fires

The High Rise Structure Fire module describes an organization designed to provide effective management and control of essential functions at fires occurring in larger multi-story buildings. Such fires present significant management, logistical and safety problems. The size and complexity of the interior spaces, the enclosed nature of the hazard area and the limited and sometimes arduous access to the fire area all contribute to the problems faced by suppression forces. The serious life hazard to occupants and firefighters, endangered by fire and smoke and presented with limited evacuation options, allows little room for error or disorganization. Additionally, most structures are equipped with various environmental, fire and life safety systems which require support and control. The organizational structure described in this module is consistent with the standardized all-risk Incident Command System (ICS) organizational elements and operating requirements. It varies in design, however, in providing specialized positions and modifications to regular position task descriptions. These variations are designed to address the unique problems of high rise fire incidents.

Components Of The ICS-High Rise Incident Command System

The Incident Command System components which provide the basis for effective ICS operation do not vary in any significant manner in application to the high rise incident. These components are:

- a. Common Terminology.
- b. Modular Organization.
- c. Integrated Communications.
- d. Unified Command Structure.
- e. Consolidated Action Plans.
- f. Manageable Span-of-Control.
- g. Pre-designated Incident Facilities.
- h. Comprehensive Resource Management.

The variations incorporated for high rise incidents are described below.

MODULAR ORGANIZATION DEVELOPMENT

The order in which the ICS organizational structure develops may vary with the type and nature of the incident. A series of examples of modular development follow which are included to illustrate a typical method of expanding the incident organization at a high rise incident to reflect the size and complexity of the incident and the available resources at a given time in the incident.

Initial Response Organization

Initial response resources are managed by the Incident Commander who will handle all Command and General Staff responsibilities.

Reinforced Response Organization

The Incident Commander has identified the incident as having significant potential and requiring a large resource commitment. The Incident Commander will establish some key Command positions.

Multi-Division 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 Organization

The Incident Commander has identified a number of actual or potential specialized incident problems and has established all Command and General Staff positions and has established several branches to effectively manage the problems and resources.

DESIGNATED INCIDENT FACILITIES

Two ICS incident facilities (Interior Staging Area and Base) have modified functions and locations in the high rise incident that reflect a fire location many floors above the ground and the complexity of the incident.

Interior Staging Area

The high rise incident requires that the regular concept of Staging Areas be modified. The limited access and vertical travel distance of the larger high rise building requires that a resource staging area be established within the building and that its functions be expanded somewhat. The staging area is generally located three floors below the lowest fire floor as long as the atmosphere can be kept clear. The specific changes are described fully in the Interior Staging Area Manager's Position Description.

Base

The Base at a high rise incident resembles a ground level staging area early in the incident. A major fire in a high rise building will require the Base to be expanded and to perform the functions of an Incident Base supporting large numbers of personnel. The nature of the urban/suburban environment and the ability of an agency to rotate personnel back to stations may impact the manner in which the Base functions. Base should be located away from buildings to provide personnel safety from falling glass and debris.

ORGANIZATION AND OPERATIONS

The five major functional areas of the ICS; Command, Operations, Planning, Logistics and Finance do not change in the high rise incident. All positions in the ICS organization applicable to a structure fire apply to the high rise fire incident.

The positions and modifications are described in the position descriptions that follow.

The major responsibilities and procedures for each are fully developed in the Position Manuals.

Modified ICS Positions

Certain existing ICS positions and functional units within the high rise incident organization have additional or modified responsibilities that require full descriptions. These positions are Ground Support Unit Leader, Base Manager, Interior Staging Area Manager, Safety Officer and Medical Unit Leader.

Specialized High Rise ICS Positions

Because of the nature of a fire incident when confined in a tall building and the many engineered elements of the building a special functional unit is identified and described. This is known as Lobby Control.

In recognition of the extreme hazards of this type of fire control operation and the difficulties in assuring firefighter accountability in interior operations, as well as the egress and ingress of building occupants, the Lobby Control Unit is established. This unit provides access control, entry accountability, routing and movement control into and inside the structure. In the initial period of an incident, or in a less complex incident/building, or if modified by agency policy, the Lobby Control Unit may assume the functions, control and coordination of various systems within the building and as shown in the basic organization chart.

As incident escalates, dependent upon agency policy, a separate Systems Unit may be established under Lobby Control. In recognition of the basic and specialized systems incorporated into all high rise buildings, from electrical supply systems to smoke removal systems, the System Unit may be utilized to operate, supervise and coordinate the vital operation of the building systems. The Systems Unit coordinates the efforts of various Technical Specialists who might be required to assist in the operation or repair of the systems.

The positions and modifications are described in the position descriptions that follow. The major responsibilities and procedures for each are fully developed in the Position Manuals.

POSITION CHECKLISTS

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

- a. Review Common Responsibilities (page 1-2).
- b. Obtain briefing from Logistics Section Chief, Support Branch Director or Incident Commander.
- c. Participate in Support Branch/Logistics Section planning activities.

- d. Evaluate safety, layout and suitability of previously selected Base location. Make recommendations regarding relocation if appropriate. Request necessary resources and personnel. Base should be located away from buildings to provide personnel safety from falling glass and debris.
- e. Establish Base layout and identify/post each function area as appropriate to the incident size and expected duration - Crew Ready Area, Equipment Pool, Rehabilitation Area, Command Post, Apparatus Parking, Restrooms.
- f. Provide safety, security and traffic control at Base and Command Post.
- g. Provide facility services - sanitation, lighting and clean up at Base and Command Post.
- h. Maintain accounting of resources in Base and periodically update Planning Section or Incident Command.
- i. As requested by Operations, Logistics or Incident Command direct crews and equipment to designated locations.
- j. Maintain records of activities and submit reports as directed.
- k. Secure operations and demobilize personnel as determined by the demobilization plan.
- l. Maintain Unit Log (ICS Form 214).

HIGH RISE INCIDENT GROUND SUPPORT UNIT LEADER: The Ground Support Unit Leader is responsible for providing transportation for personnel, equipment and supplies; providing refilling of SCBA air cylinders and maintenance of SCBA's; 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 Ground Support Unit Leader reports to the Support Branch Director (if established) or the Logistics Section Chief.

- a. Review Common Responsibilities (page 1-2).
- b. Obtain briefing from Logistics Section Chief, Support Branch Director or Incident Commander.
- c. Participate in Support Branch/Logistics Section planning activities.
- d. Implement traffic/movement plan, including ground level movement and building primary support stairs, as developed by Planning Section or Incident Commander.
- e. Post or mark ground level safe movement routes and outside safe refuge areas identified in the traffic/movement plan.
- f. Appoint personnel and activate transport services including stairwell, ground level and general motor transport.
- g. Appoint personnel and activate fueling, maintenance and support of apparatus and portable power equipment and building plant as appropriate.
- h. Collect and maintain records of rented or reimbursable equipment use.
- i. Appoint personnel and activate SCBA air cylinder refilling, maintenance and support.
- j. Maintain inventory of support and transport vehicles and maintenance and fuel supplies.
- k. Submit reports to Support Branch/Logistics Section or Incident Commander as directed.
- l. Secure operations and demobilize personnel as determined by the demobilization plan.
- m. Maintain Unit Log (ICS Form 214).

LOBBY CONTROL UNIT LEADER: The Lobby Control Unit Leader's primary responsibilities are: To operate a personnel/crew accounting system for all building entry and exit; control all building access points and direct personnel to correct stair/elevator or route; control and operate elevator cars; and direct building occupants and exiting personnel to proper ground level safe areas or routes. As directed by the Incident Commander or agency policy, this unit

shall be assigned the responsibilities of Systems Control in the early stages of an incident, or in less complex incidents/buildings, or if modified by agency policy. The Lobby Control Unit Leader reports to the Support Branch Director/Logistics Section Chief. The unit should be prepared to provide the Incident Commander or Plans Section with current information from the personnel accounting process.

Departments and/or agencies must have policy regarding the use of elevators, stairways, or combinations of both when ascending to the upper floors in a high rise building during a fire or reported fire operations. While the safest method of ascending to upper floors is the use of stairways, it may be necessary to explore the use of elevators for firefighting operations. This determination is the ultimate responsibility of the Incident Commander (IC) however the actual use of the elevators is directed by the Lobby Control Unit Leader.

- a. Review Common Responsibilities (page 1-2).
- b. Check in and obtain briefing from Logistics Section Chief or Incident Commander, as appropriate.
- c. Make entry, assess situation and establish Lobby Control position. Request needed resources.
- d. Establish entry/exit control at all building access points.
- e. Establish personnel accounting system for personnel entering/exiting the building.
- f. Assume control of elevators and provide operators. Elevator use and operating procedures will follow agency policy and Incident Commander direction.
- g. Provide briefings and information to Incident Command Post.
- h. Direct personnel to the appropriate stairways/elevator for assignment and direct evacuees and exiting personnel to safe areas or routes from the building.
- i. Maintain adequate control of building systems when directed by the Incident Commander or agency policy.
- j. Secure operations and demobilize personnel as determined by the demobilization plan.
- k. Maintain Unit Log (ICS Form 214).

SYSTEMS CONTROL: Systems Control is a function under the Lobby Control Unit Leader. This responsibility includes monitoring and maintaining built-in fire control, life safety, environmental control, communications and elevator systems. Systems Control may operate, support or augment the systems as required to support the incident plan. Systems Control Leader must establish and maintain close liaison with building/facility engineering staff, utility company representatives, and other appropriate technical specialists.

- a. Review Common Responsibilities (page 1-2).
- b. Check in and obtain briefing from the Logistics Section Chief or Incident Commander. Obtain information on the type and current performance of built-in systems.
- c. Assess current situation and request needed personnel and resources.
- d. Request response from and make contact with the building/facility engineer, utility company representatives, elevator service personnel and others as appropriate.
- e. Appoint personnel to monitor and operate building/facility systems display/control panels.
- f. Evaluate the status and operation of the fire and domestic water pumps and water supply. Support or repair as required.
- g. Evaluate and operate as required the heating, ventilation and air conditioning system (HVAC) and the smoke removal and stairwell protection systems.

- h. Evaluate, support and control as needed the building electrical system, emergency power plant and security systems.
- i. Evaluate and support as needed the public address, telephone, emergency phone and other building communications systems.
- j. Secure operations and demobilize personnel as determined by the demobilization plan.
- k. Maintain Unit Log (ICS Form 214).

HIGH RISE INCIDENT INTERIOR STAGING AREA MANAGER: The High Rise Incident Interior Staging Area Manager is responsible for the management of all functions at the in-building Staging Area and reports to the Operations Section Chief. The High Rise Incident Interior Staging Area Manager's organizational responsibilities vary somewhat from the standardized ICS position in that the area also provides a safe refuge/support function within the building. An air cylinder exchange and a rehabilitation/aid function are typically located in the area.

- a. Review Common Responsibilities (page 1-2).
- b. Obtain briefing from Operations Section Chief or Incident Commander.
- c. Proceed to selected floors and evaluate layout and suitability. Select Staging Area floor, which is generally located three (3) floors below the lowest fire floor, and advise Operations and Logistics Section Chiefs. Request necessary resources and personnel.
- d. Establish Interior Staging Area layout and identify/post each function area as appropriate to the incident size and expected duration – Crew Ready Area, Air Cylinder Exchange, Equipment Pool, Rehabilitation/Aid Area.
- e. Determine, establish or request needed facility services – sanitation, drinking water and lighting. Coordinate with Logistics Section or Lobby Control Unit to maintain fresh air. Maintain Interior Staging area in an orderly condition.
- f. Establish a check-in function for arriving and departing crews.
- g. Determine required resource levels from the Operations Section Chief.
- h. Designate area(s) for Rapid Intervention Crew (RIC) or Rapid Intervention Team (RIT) to standby in a state of readiness.
- i. Maintain accounting of resources in Interior Staging and periodically update Operations Section Chief and Resources Unit. Advise the Operations Section Chief when reserve levels reach pre-identified minimums.
- j. As requested by Operations Section Chief or Incident Commander, direct crews and equipment to designated locations.
- k. Secure operations and demobilize personnel as determined by the demobilization plan.
- l. Maintain Unit Log (ICS Form 214).

HIGH RISE INCIDENT MEDICAL UNIT LEADER: The Medical Unit Leader is primarily responsible for the development of the Medical Emergency Plan, for providing medical aid and transportation for injured and ill incident personnel, for providing rehabilitation (Rehab) services for incident personnel and for preparation of reports and records. The Medical Unit may assist Operations in supplying medical care and transportation to civilian casualties, but this is normally limited to situations where civilian casualties are few or not anticipated. The Medical Unit Leader reports to the Service Branch Director (if established) or the Logistics Section Chief (see Figure 2-1). The Medical Unit Leader may interact with Agency Representatives if injuries or illnesses involve another agency's personnel.

- a. Review Common Responsibilities (page 1-2).

- b. Obtain briefing from Logistics Section Chief, Service Branch Director or Incident Commander.
- c. Participate in Service Branch/Logistics Section planning activities.
- d. Assess current situation and request necessary resources.
- e. Prepare the Incident Medical Plan (ICS Form 206).
- f. Establish medical aid stations with EMS personnel available in Staging, arrange emergency transport units and equipment and assign personnel.
- g. Assign personnel and equipment to Rehab locations as directed or required in the Incident Action Plan.
- h. Coordinate plans and activities with the Operations Section Medical Branch or Group.
- i. Prepare Medical Reports and forms as needed or requested.
- j. Secure operations and demobilize personnel as determined by the demobilization plan.
- k. Maintain Unit Log (ICS Form 214).

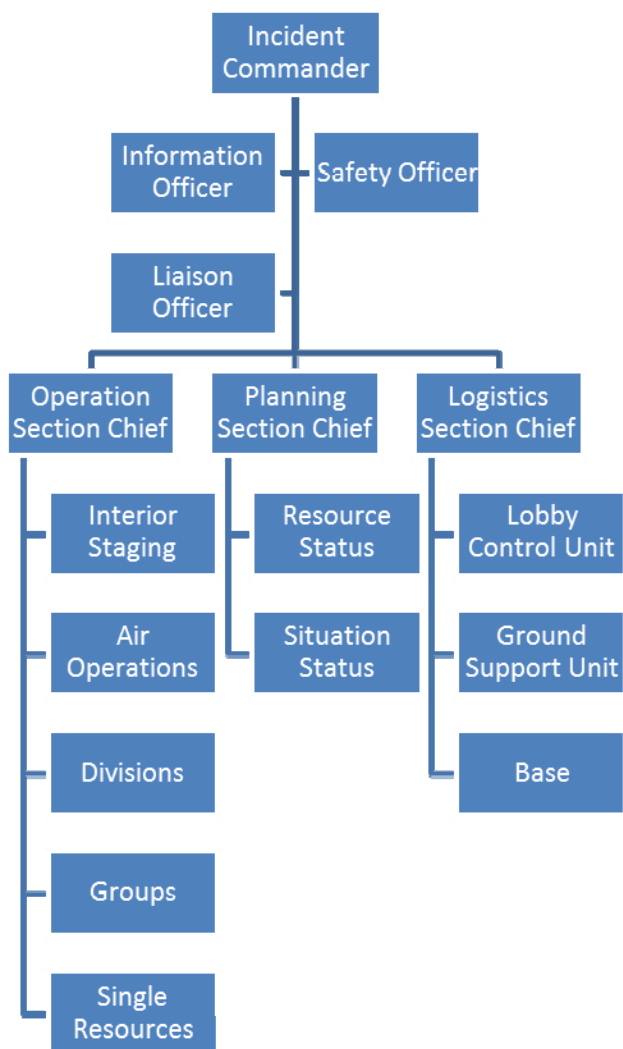
HIGH RISE INCIDENT SAFETY OFFICER: The Incident Safety Officer is a member of the Command Staff and reports directly to the Incident Commander. The Safety Officer is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority. The Incident Safety Officer or his or her assistants have emergency authority to alter, suspend or terminate unsafe acts or conditions when imminent danger is involved.

- a. Review Common Responsibilities (page 1-2).
- b. Check in and obtain briefing from the Incident Commander.
- c. Assess situation and request needed personnel and resources.
- d. Participate in planning meetings.
- e. Evaluate the Incident Action Plan for organizational safety elements.
- f. Review and sign the Incident Medical Plan (ICS Form 206).
- g. Monitor the fire ground and communication channels for hazards, unsafe acts and improper activities.
- h. Take action to limit hazards or correct or stop unsafe actions.
- i. Initiate as needed and confirm the on-going investigation of any incident related accidents or personnel injuries.
- j. Secure operations and demobilize personnel as determined by the demobilization plan.
- k. Maintain Unit Log (ICS Form 214).

FOR MORE DETAILED INFORMATION READ:
HIGH RISE STRUCTURE FIRE OPERATION SYSTEM DESCRIPTION ICS-HR-1 20-1

HIGH-RISE FIRE INCIDENT INCIDENT COMMAND SYSTEM ORGANIZATION CHART

BASIC



HIGH-RISE FIRE INCIDENT INCIDENT COMMAND SYSTEM ORGANIZATION CHART

EXPANDED

