

# **OPERATIONAL SYSTEM DESCRIPTION**

**ICS 120-1**

*GET ICS 230-2*

**INCIDENT COMMAND SYSTEM PUBLICATION**

**DECEMBER 12, 1981**

*DO NOT RIGIDLY APPLY IT, BUT MAKE IT WORK FOR YOU.*

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## 1.0 INTRODUCTION

### 1.1 National Inter-Agency Incident Management System (NIIMS)

The National Inter-Agency Incident Management System (NIIMS) has been developed to provide a common system which fire protection agencies can utilize at local, state and federal levels.

NIIMS consists of two major components as shown in Figure 1-1.

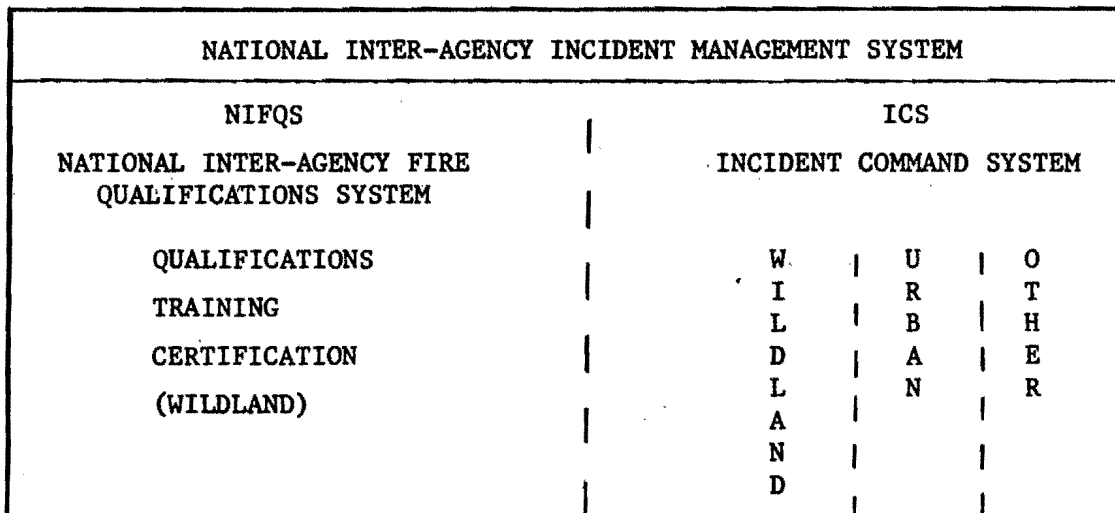


Figure 1-1

### 1.2 National Inter-Agency Fire Qualifications System (NIFQS)

Broadly speaking, NIFQS consists of the standards for qualification and certification, and standard training courses applicable to Incident Command System positions. At present, the NIFQS standards for qualification and certification and training courses stress the application to the wildland urban interface fire protection problem.

### 1.3 Incident Command System (ICS)

The ICS was developed through a cooperative inter-agency (local, State and Federal) effort. The basic organizational structure of the ICS is

based upon a large fire organization which has been developed over time by Federal fire protection agencies. The essential differences are that the ICS is designed to be used for all kinds of emergencies, and is applicable to both small day-to-day situations as well as very large and complex incidents.

This manual is an Operational System Description of the Incident Command System. It consists of the following major sections:

- Section 1 - Introduction (this part)
- Section 2 - ICS Operating Requirements
- Section 3 - Components of the ICS
- Section 4 - Organization and Operations
- Section 5 - Complex Incidents
- Appendix A - Modular ICS Development

## 2.0 ICS OPERATING REQUIREMENTS

The following are basic system design operating requirements for the Incident Command System.

1. The System must provide for the following kinds of operation:  
(1) single jurisdiction/single agency, (2) single jurisdiction with multi-agency involvement, (3) multi-jurisdiction/multi-agency involvement.
2. The System's organizational structure must be able to adapt to any emergency or incident to which fire protection agencies would be expected to respond.<sup>(1)</sup>
3. The System must be applicable and acceptable to users throughout the country.
4. The System should be readily adaptable to new technology.
5. The System must be able to expand in a logical manner from an initial attack situation into a major incident.
6. The System must have basic common elements in organization, terminology and procedures which allow for the maximum application and use of already developed qualifications and standards and ensure continuation of a total mobility concept.
7. Implementation of the System should have the least possible disruption to existing systems.
8. The System must be effective in fulfilling all of the above requirements and yet be simple enough to ensure low operational maintenance costs.

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(1) ICS must be designed to be used in response to emergencies caused by fires, floods, earthquakes, hurricanes, tornados, tidal waves, riots, spills of hazardous materials, and other natural or man-caused incidents.

### 3.0 COMPONENTS OF THE ICS

The Incident Command System has a number of components. These components working together interactively provide the basis for an effective ICS concept of operation:

- Common Terminology
- Modular Organization
- Integrated Communications
- Unified Command Structure
- Consolidated Action Plans
- Manageable Span-of-Control
- Predesignated Incident Facilities
- Comprehensive Resource Management

#### 3.1 Common Terminology

It is essential for any management system, and especially one which will be used in joint operations by many diverse users, that common terminology be established for the following elements:

- a. Organizational Functions
- b. Resources
- c. Facilities

Organizational Functions A standard set of major functions and functional units has been predesignated and named for the ICS. Terminology for the organizational elements is standard and consistent.

Resource Elements<sup>(1)</sup> Resources refers to the combination of personnel and equipment used in tactical incident operations. Common names have been established for all resources used within ICS. Any resource which varies in capability because of size or power (e.g., helicopters) is clearly typed as to capability.

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(1) The term "resources" refers to primary and support equipment, not natural resources.

Facilities Common identifiers are used for those facilities in and around the incident area which will be used during the course of the incident. These facilities include such things as the Command Post, Incident Base, Staging Areas, etc.

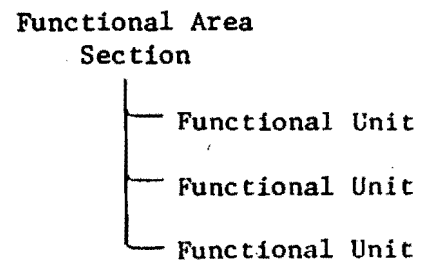
### 3.2 Modular Organization

The ICS organizational structure develops in a modular fashion based upon the kind and size of an incident. The organization's staff builds from the top down with responsibility and performance placed initially with the Incident Commander. As the need exists four separate Sections can be developed, each with several Units which may be established. The specific organization structure established for any given incident will be based upon the management needs of the incident. If one individual can simultaneously manage all major functional areas, no further organization is required. If one or more of the areas requires independent management, an individual is named to be responsible for that area.

For ease of reference and understanding, personnel assigned to manage at each level of the organization will carry a distinctive organizational title:

	<u>TITLES</u>
Incident Command	- Incident Commander
Command Staff	- Officer
Section	- Section Chief
Branch	- Branch Director (optional level)
Division	- Division Supervisor
Unit	- Unit Leader

In the ICS, the first management assignments by the Initial Attack Incident Commander will normally be one or more Section Chiefs to manage the major functional areas. Section Chiefs will further delegate management



authority for their areas only as required. If the Section Chief sees the need, functional Units may be established within the Section. Similarly, each functional Unit Leader will further assign individual tasks within the Unit only as needed.

A fully developed ICS organization with all Units designated is located on Page 4-28. Appendix A describes the build-up of the ICS organization through a series of examples.

### 3.3 Integrated Communications

Communications at the incident are managed through the use of a common communications plan and an incident based communications center established solely for the use of tactical and support resources assigned to the incident. All communications between organizational elements at an incident should be in plain English. No codes should be used, and all communications should be confined only to essential messages. The Communications Unit is responsible for all communications planning at the incident. This will include incident-established radio networks, on-site telephone, public address, and off-incident telephone/microwave/radio systems.

#### Radio Networks

Radio networks for large incidents will normally be organized as follows:

##### Command Net

This net should link together: Incident Command, key staff members, Section Chiefs, Division and Group Supervisors.

##### Tactical Nets

There may be several tactical nets. They may be established around agencies, departments, geographical areas, or even specific functions. The determination of how nets are set up should be a joint Planning/Operations function. The Communications Unit Leader will develop the plan.



Support Net

A support net will be established primarily to handle status-changing for resources as well as for support requests and certain other non-tactical or command functions.

Ground to Air Net

A ground to air tactical frequency may be designated, or regular tactical nets may be used to coordinate ground to air traffic.

Air to Air Nets

Air to air nets will normally be predesignated and assigned for use at the incident.

3.4 Unified Command Structure

*(DO PREPLANNING FOR THIS, GET AGREEMENT FROM ALL JURIS. ON PROCEDURES)*

The need for a unified command is brought about because:

1. Incidents have no regard for jurisdictional boundaries. Wildland fires, floods, hurricanes, earthquakes usually cause multi-jurisdictional major incident situations.
2. Individual agency responsibility and authority is normally legally confined to a single jurisdiction.

The concept of unified command simply means that all agencies who have a jurisdictional responsibility at a multi-jurisdictional incident contribute to the process of:

1. Determining overall incident objectives.
2. Selection of strategies.
3. Ensuring that joint planning for tactical activities will be accomplished.
4. Ensuring that integrated tactical operations are conducted.
5. Making maximum use of all assigned resources.

The proper selection of participants to work within a unified command structure will depend upon:

1. The location of the incident - which political jurisdictions are involved.

2. The kind of incident - which functional agencies of the involved jurisdiction(s) are required.

A unified command structure could consist of a key responsible official from each jurisdiction in a multi-jurisdictional situation or it could consist of several functional departments within a single political jurisdiction. <sup>(1)</sup>

Common objectives and strategy on major multi-jurisdictional incidents should be written. The objectives and strategies then guide development of the action plan. Under a unified command structure in the ICS, the implementation of the action plan will be done under the direction of a single individual -- the Operations Chief. *BEST QUALIFIED PERSON*

The Operations Chief will normally be from the agency which has the greatest jurisdictional involvement. Designation of the Operations Chief must be agreed upon by all agencies having jurisdictional and functional responsibility at the incident.

### 3.5 Consolidated Action Plan *(SHIFT PLAN)*

Every incident needs some form of an action plan. For small incidents of short duration, the plan need not be written. The following are examples of when written action plans should be used:

1. When resources from multiple agencies are being used.
2. When several jurisdictions are involved.
3. When the incident will require changes in shifts of personnel and/or equipment. *(12 HOUR SHIFT)*

The Incident Commander will establish objectives and make strategy determinations for the incident based upon the requirements of the

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(1) As an option, the command structure could include landowners or their representatives. It could also invite the counsel of individuals or agencies having functional expertise or capability.

jurisdiction. In the case of a unified command, the incident objectives must adequately reflect the policy and needs of all the jurisdictional agencies.

The action plan for the incident should cover all tactical and support activities required for the operational period. (SHIFT)

### 3.6 Manageable Span-of-Control

Safety factors as well as sound management planning will both influence and dictate span-of-control considerations. In general, within the ICS, the span-of-control of any individual with emergency management responsibility should range from three to seven with a span-of-control of five being established as a general rule of thumb. Of course, there will always be exceptions (e.g., an individual crew leader will normally have more than five personnel under supervision).

The kind of an incident, the nature of the task, hazard and safety factors and distances between elements all will influence span-of-control considerations. An important consideration in span-of-control is to anticipate change and prepare for it. This is especially true during rapid build-up of the organization when good management is made difficult because of too many reporting elements.

### 3.7 Designated Incident Facilities

There are several kinds and types of facilities which can be established in and around the incident area. The determination of kinds of facilities and their locations will be based upon the requirements of the incident and the direction of Incident Command. The following facilities are defined for possible use with the ICS:

#### Command Post

Designated as the CP, the Command Post will be the location from which all incident operations are directed. There should only be one Command Post for the incident. In a unified command structure where several agencies or jurisdictions are involved, the

responsible individuals designated by their respective agencies would be co-located at the Command Post. The planning function is also performed at the Command Post, and normally the Communications Center would be established at this location. The Command Post may be co-located with the Incident Base if communications requirements can be met.

#### Incident Base

The Incident Base is the location at which primary support activities are performed. The Base will house all equipment and personnel support operations. The Incident Logistics Section, which is responsible for ordering all resources and supplies is also located at the Base. There should only be one Base established for each incident, and normally the Base will not be relocated. If possible, Incident Base locations should always be included in the pre-attack plans.

#### Camps

Camps are locations from which resources may be located to better support incident operations. At Camps, certain essential support operations (e.g., feeding, sleeping, sanitation) can be maintained. Also at Camps, minor maintenance and servicing of equipment will be done. Camps may be relocated if necessary to meet tactical operations requirements.

#### Staging Areas

Staging Areas are established for temporary location of available resources on three-minute notice. Staging Areas will be established by the Operations Chief to locate resources not immediately assigned. A Staging Area can be anywhere in which mobile equipment can be temporarily parked awaiting assignment. Staging Areas may include temporary sanitation services and fueling. Feeding of personnel would be provided by mobile kitchens or sack lunches. Staging Areas should be highly mobile. The Operations Chief will assign a

Staging Manager for each Staging Area. The Manager is responsible for the check in of all incoming resources; to dispatch resources at the request of the Operations Chief; and to request Logistics Section support as necessary for resources located in the Staging Area.

### Helibases

Helibases are locations in and around the incident area at which helicopters may be parked, maintained, fueled and loaded with retardants, personnel or equipment. More than one Helibase may be required on very large incidents. Once established on an incident, a Helibase will usually not be relocated.

### Helispots

Helispots are more temporary and less used locations at which helicopters can land, take off, and in some cases, load water or retardants.

## 3.8 Comprehensive Resource Management

Resources may be managed in three different ways, depending upon the needs of the incident:

Single Resources These are individual engines, bulldozers, crews, helicopters, plow units, etc., that will be assigned as primary tactical Units. A single resource will be the equipment plus the required individuals to properly utilize it.

Task Forces A Task Force is any combination of resources which can be temporarily assembled for a specific mission. All resource elements within a Task Force must have common communications and a Leader. The Leader normally should have a separate vehicle. Task Forces should be established to meet specific tactical needs and should be demobilized as single resources.

### Strike Teams

Strike Teams are a set number of resources of the same kind and type, which have an established minimum number of personnel. Strike Teams will always have a Leader (usually in a separate vehicle) and will have common communications among resource elements. Strike Teams can be made up of engines, hand crews, plows, bulldozers, and any other kind of resource where a combination of common elements becomes a useful tactical resource.

The use of Strike Teams and Task Forces is encouraged, wherever possible, to maximize the use of resources, reduce the management control of a large number of single resources, and reduce the communications load.

In order to maintain an up-to-date and accurate picture of resource utilization, it is necessary that:

1. All resources be assigned a current status condition.
2. All changes in resource locations and status conditions be made promptly to the appropriate functional Unit.

### Status Conditions

Three status conditions are established for use with tactical resources at the incident:

1. Assigned - Performing an active assignment.
2. Available - Ready for assignment. All resources in Staging Areas should be available. *WITHIN 3 MINUTES*
3. Out-of-Service - Not ready for available or assigned status.

### Changes in Status

Normally the individual who makes the change in a resource's status is responsible for providing that information to the central resource status keeping function.

## 4.0 ORGANIZATION AND OPERATIONS

The ICS organization has five major functional areas. The functional areas are:

- Command
- Operations
- Planning
- Logistics
- Finance

These functional areas are structured as follows:

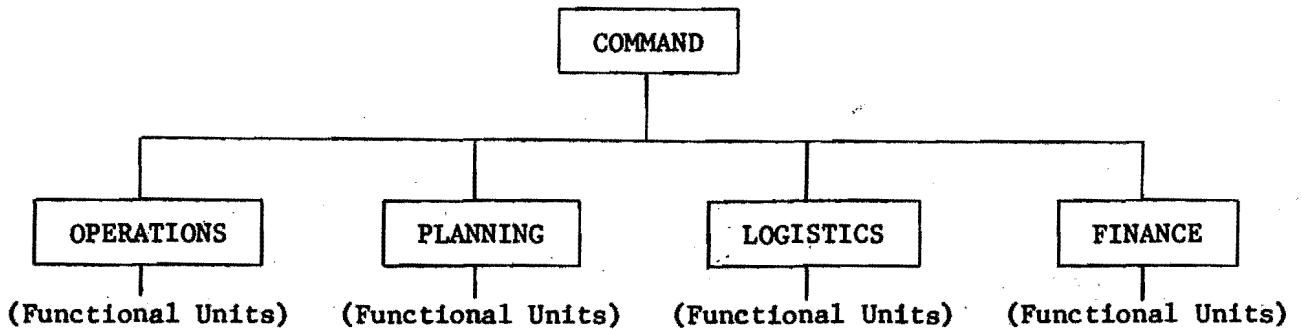


Figure 4-1  
Incident Command System  
Basic Functional Area Structure

These functional areas and their Units are described in the following pages.

### 4.1 Command

Command is responsible for overall management of the incident. Command also includes certain staff functions required to support the command function. The command function within the ICS may be conducted in two general ways.

- Single Command
- Unified Command

#### 4.1.1 Single Command - Incident Commander/Deputy

Within a jurisdiction in which an incident occurs, and when there is no overlap of jurisdictional boundaries involved, a single Incident Commander will be designated by the jurisdictional agency to have overall management responsibility for the incident.

The Incident Commander will prepare Incident Objectives which in turn will be the foundation upon which subsequent action planning will be based. The Incident Commander will approve the final action plan, and approve all requests for ordering and releasing of primary resources. The Incident Commander may have a deputy. The deputy should have the same qualifications as the Incident Commander, and may work directly with the Incident Commander, be a relief, or perform certain specific assigned tasks.

In an incident within a single jurisdiction, where the nature of the incident is primarily a responsibility of one agency (e.g., fire), the deputy may be from the same agency. In a multi-jurisdictional incident or one which threatens to be a multi-jurisdictional, the deputy role may be filled by an individual designated by the adjacent agency. More than one deputy could be involved. Another way of organizing to meet multi-jurisdictional situations is described under Unified Command.

Figure 4-2 depicts an incident with single Incident Command authority.

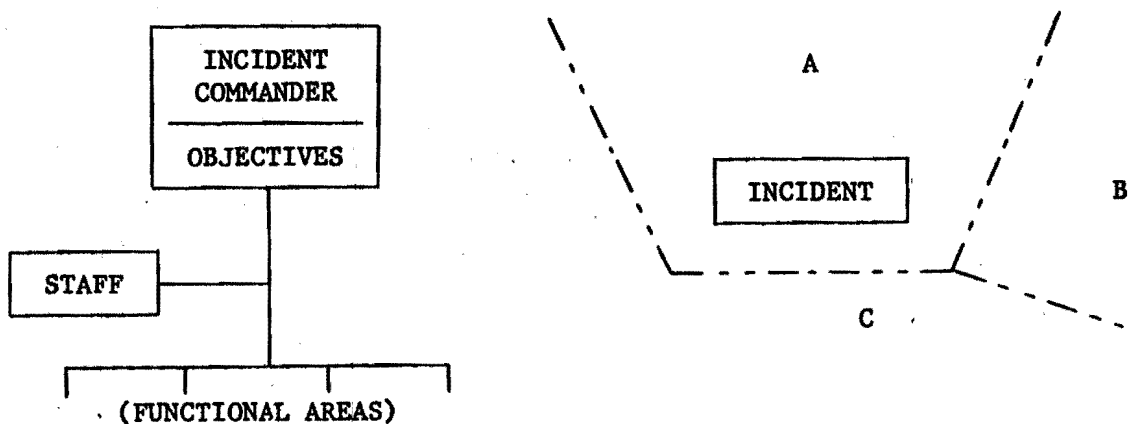


Figure 4-2  
Single Incident Command Structure



#### 4.1.2 Unified Command

A unified command structure is called for under the following conditions:

1. The incident is totally contained within a single jurisdiction, but more than one department or agency shares management responsibility due to the nature of the incident or the kinds of resources required. For example, a passenger airliner crash within a national forest. Fire, medical and law enforcement all have immediate but diverse objectives. An example of this kind of unified command structure is depicted in Figure 4-3.

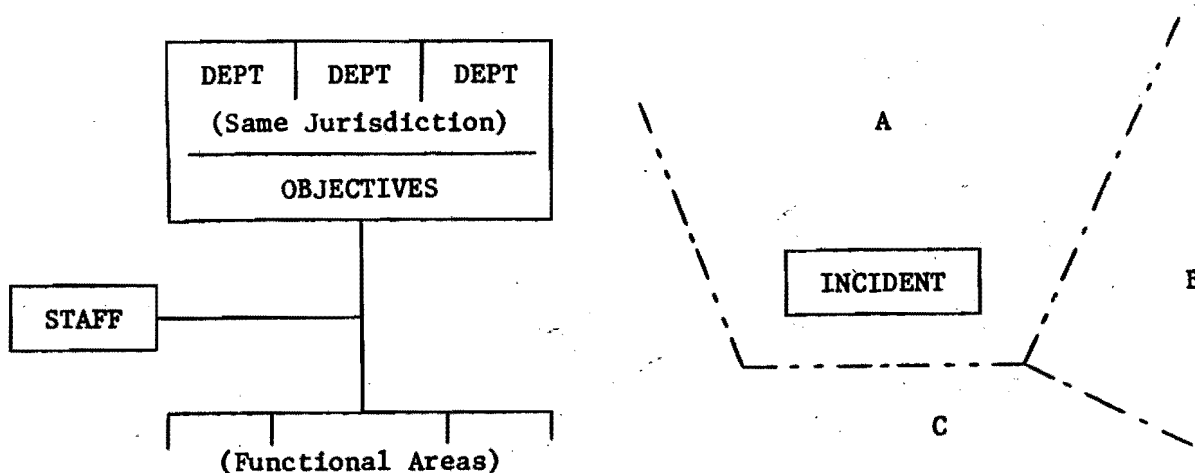


Figure 4-3  
Unified Command Structure  
Multi-Department

2. The incident is multi-jurisdictional in nature. For example, a major wildland fire. An example of this unified command structure is shown in Figure 4-4.

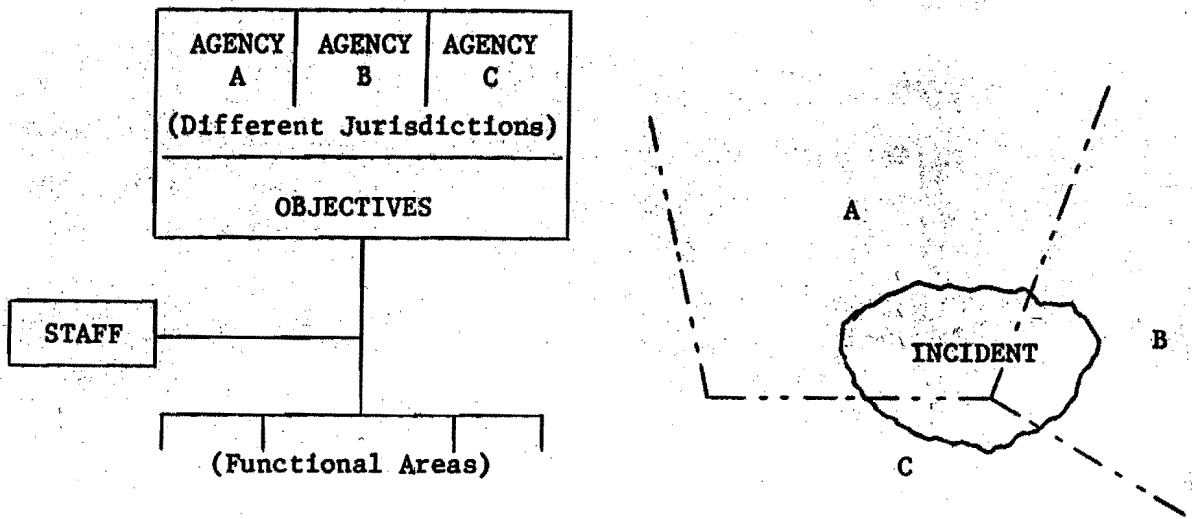


Figure 4-4  
 Unified Command Structure  
 Multi-Jurisdiction

4.2 Single/Unified Command Differences

The primary differences between the single and unified command structures are:

1. In a single command structure, a single Incident Commander is solely responsible (within the confines of his authority) to establish objectives and overall management strategy associated with the incident. The Incident Commander is directly responsible for follow-through, to ensure that all functional area actions are directed toward accomplishment of the strategy. The implementation of the planning required to effect operational control will be the responsibility of a single individual (Operations Chief) who will report directly to the Incident Commander.
2. In a unified command structure, the individuals designated by their jurisdictions (or by departments within a single jurisdiction) must jointly determine objectives, strategy and priorities. As in a single command structure, the Operations Chief will have responsibility for implementation of the plan. The determination of which

agency (or department) the Operations Chief represents must be made by mutual agreement of the unified command. It may be done on the basis of greatest jurisdictional involvement, number of resources involved, by existing statutory authority, or by mutual knowledge of the individual's qualifications.

#### 4.3 Command Staff

Command staff positions are established to assume responsibility for key activities which are not a part of the line organization. In ICS, three specific staff positions are identified:

- Information Officer
- Safety Officer
- Liaison Officer

Additional positions might be required, depending upon the nature and location of the incident, or requirements established by Incident Command.

##### 4.3.1 Information Officer

The Information Officer's function is to develop accurate and complete information regarding incident cause, size, current situation, resources committed and other matters of general interest. The Information Officer will normally be the point of contact for the media and other governmental agencies which desire information directly from the incident. In either a single or unified command structure, only one Information Officer would be designated. Assistants may be assigned from other agencies or departments involved. *ABUFFER*

##### 4.3.2 Safety Officer

The Safety Officer's function at the incident is to assess hazardous and unsafe situations and develop measures for assuring personnel safety. The Safety Officer should have emergency authority to stop and/or prevent unsafe acts. In a unified command structure, a single Safety Officer would be designated. Assistants may be required and may

be assigned from other agencies or departments making up the unified command.

#### 4.3.3 Liaison Officer

The Liaison Officer's function is to be a point of contact for representatives from other agencies. In a single command structure, the representatives from assisting agencies would coordinate through the Liaison Officer. Under a unified command structure, representatives from agencies not involved in the unified command would coordinate through the Liaison Officer. Agency representatives assigned to an incident should have authority to speak on all matters for their agency.

#### 4.4 Organization of Incident Tactical Operations

Tactical operations at the incident include all activities which are directed toward reduction of the immediate hazard, establishing situation control and restoration of normal operations.

The types of incidents for which the ICS is applicable are many and varied. They include such things as major wildland and urban fires, floods, hazardous substance spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tsunamis and war-caused disasters.

Because of the functional unit management structure, the ICS is equally applicable to small incidents and for use in normal operations. Basically, once the ICS operating concepts are adopted by an agency, the system structure will develop in a natural fashion based upon incident requirements.

The agencies which can make use of the ICS could include federal, state and local. In some cases, all may be working together or they may work in combinations. The types of agencies could include fire, law enforcement, health, public works, emergency services, etc.; again, either working altogether or in combinations depending upon the

situation. Many incidents may involve private individuals, companies, or organizations, some of which may be fully trained and qualified to participate as partners in the ICS. There are many ways in which incident tactical operations may be organized and operated. The specific method selected will be dependent upon:

- The type of incident
- The agencies involved
- The objectives and strategies selected

In the following examples, several different ways of organizing incident tactical operations are shown and described. In some cases, the selected method will be determined around jurisdictional boundaries. In other cases, a strictly functional approach will be used. In still others, a mix of functional/geographical may be appropriate. The ICS offers extensive flexibility in determining the right approach based upon the factors described above.

Figure 4-5 shows the primary organizational structure within operations.

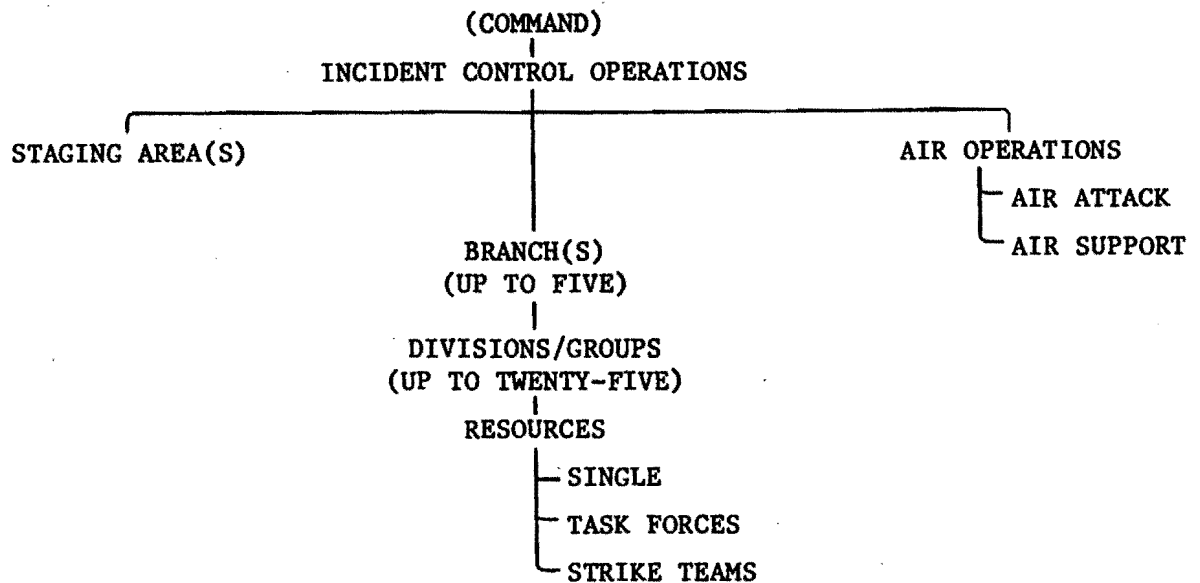


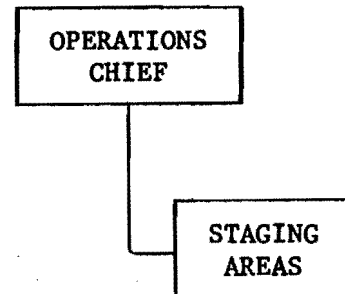
Figure 4-5  
Major Organizational Elements  
Incident Tactical Operations

#### 4.4.1 Operations Chief/Deputies

The Incident Operations Chief is responsible for the direct management of all incident tactical activities. The Chief assists in the formulation of the action plan. The Operations Chief may have deputy positions and deputies from other agencies are encouraged in multi-jurisdictional situations. Deputies should be equally as qualified as the Operations Chief. An Operations Chief should be designated for each operational period, and the Chief should have direct involvement in the preparation of the action plan for the period of responsibility.

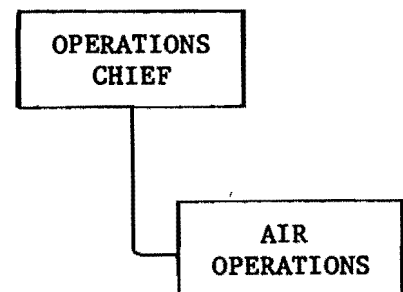
#### 4.4.2 Staging Areas

Staging Areas are locations designated by the Operations Chief within the incident area which are used to temporarily locate resources which are available for assignment. The Operations Chief may establish, move and discontinue the use of Staging Areas. All resources within the designated Staging Areas are under the direct control of the Operations Chief and should be on a 3-minute availability. Staging Area Managers will request logistical support (e.g., food, fuel, sanitation) from appropriate Logistics Section Units.



#### 4.4.3 Air Operations

The Air Operations Organization is established by the Operations Chief. Its size, organization and use will depend primarily upon the nature of the incident, and the availability of aircraft. A method of organizing Air Operations for



maximum load conditions is depicted below. On large incidents, the Operations Chief may deal directly with the Air Attack Supervisor, who in turn will coordinate all airborne activity through a Helicopter Coordinator and an Air Tanker Coordinator. In other cases (e.g., where only a single helicopter is used), the helicopter may be directly under the control of the Operations Chief.

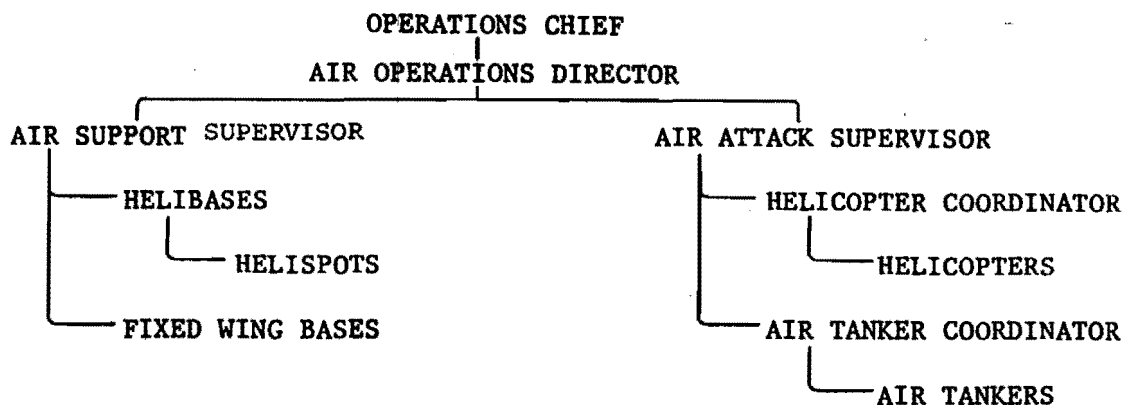


Figure 4-6  
ICS Air Operations Organization

The Operations Chief may establish an Air Operations Director position when:

1. The complexity of air operations requires additional support and effort.
2. The incident requires both a mix of tactical and logistical use of helicopters and other aircraft.

The Air Support Group is responsible for establishing and operating helibases and helispots, and for maintaining required liaison with fixed-wing air attack bases off the incident. The Group is responsible for all time keeping for helicopters assigned to the incident. The Air Attack Supervisor position is established as a separate position whenever both helicopters and fixed-wing aircraft will be simultaneously operated within the incident air space.

#### 4.4.4 Resources

Initially in any incident, the individual resources which are assigned will be reporting directly to the individual who has overall responsibility (i.e., the Incident Commander). As described earlier, as the incident grows in size or complexity, the Incident Commander may designate an Operations Chief to assume tactical direction of resources. In the ICS, resources may be used in several ways:

##### Single Resources

In general, single resources will be used for initial attack, first response situations. They may also be dispatched in extended (reinforced) attack or greater alarm situations in some cases. During an ongoing incident, there will always be situations which will call for the use of a single helicopter, engine, plow unit, crew, etc.

##### Task Forces

Task Forces are any combination of resources put together for an assignment of a temporary nature. Task Forces call for a Leader (usually in a separate vehicle), and with common communications between all resource elements. An example of a Task Force could include an engine, hand crew and bulldozer to work on a temporary assignment under the direct supervision of the Task Force Leader. Task Forces can be very versatile combinations of resources and their use is encouraged. The combining of resources into Task Forces allows for several resource elements to be managed under one individual's supervision, thus lessening the span of control.

##### Strike Teams

Strike Teams are a set number of resources of the same kind and type with common communications operating under the direct supervision of a leader.



Strike Teams are highly effective management units. The foreknowledge that all elements have the same capability, and the knowledge of how many will be applied allows for better planning, ordering, utilization and management. Strike Teams are generally recommended for use with engines and can be used effectively with hand crews, bulldozers and plow units.

#### 4.5 Operations Section

The following section discusses several ways in which an incident may be organized for tactical operations. Considered first will be the use of Divisions/Groups. Following this will be a discussion of the use of Branches.

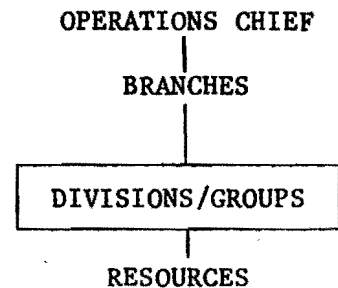
##### 4.5.1 Divisions and Groups

Divisions and Groups are established on an incident when the number of resources (single increments, Task Forces or Strike Teams) exceeds the span-of-control of the Operations Chief.

Divisions are normally established to divide an incident into geographical areas of operation.

Groups are normally established to divide the incident into functional areas of operation.

There is no absolute necessity to differentiate by a separate term, Division or Group. However, the use of the two terms is useful in that a Division will always mean a geographical assignment and a Group will always mean a functional assignment. Both geographical Divisions and functional Groups may be used on a single incident if



there is justification for their use, and if proper coordination can be effected. Following are some examples for the use of Divisions and Groups.

First the need to establish either Divisions or Groups.

In the Figure 4-7, the Operations Chief has five resources under assignment. As two additional Strike Teams are added to the organization, the resources should be divided into a Division structure. See Figure 4-8.

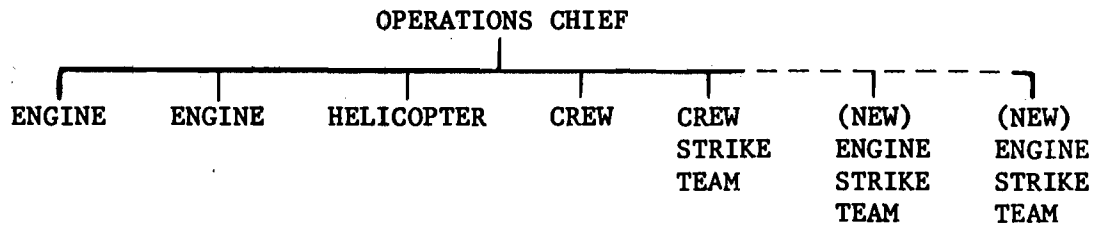


Figure 4-7  
Resources Reporting Directly to Operations Chief

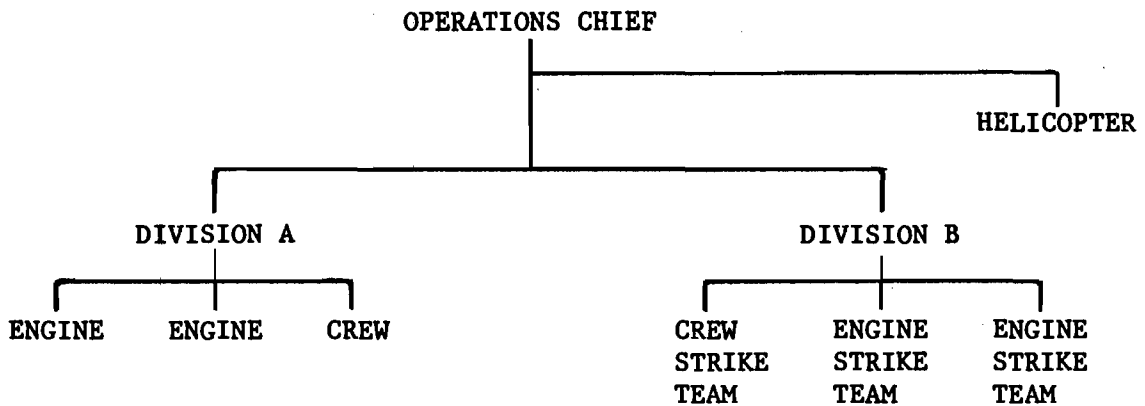


Figure 4-8  
Two Division Organization

## 1. Geographical Divisions

The best use of Geographical Divisions is to divide an area into natural separations of terrain, geography and fuel; and where resources can be effectively managed under span-of-control guidelines.

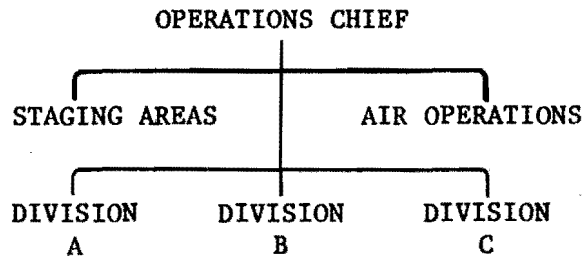
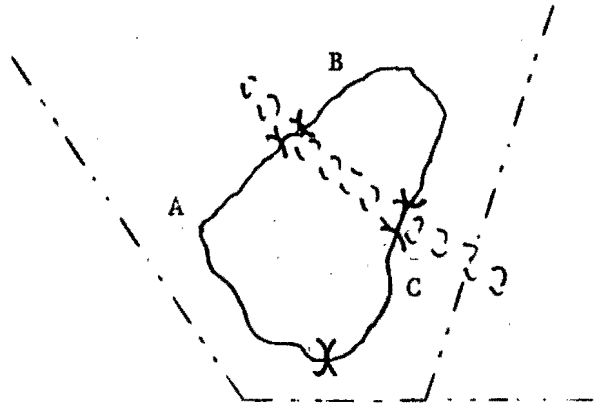


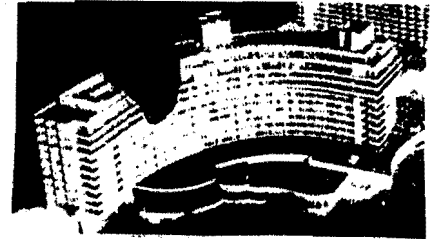
Figure 4-9

Use of Geographical Divisions - Wildland Fire

## 2. Functional Groups

Functional Groups can best be used to describe areas of like activity (e.g., rescue, salvage, ventilation, etc.).

See Figure 4-10 on following page.



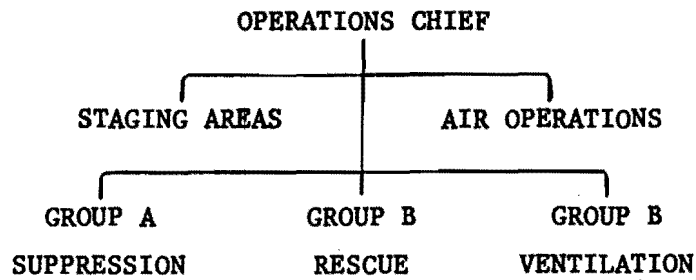


Figure 4-10  
Use of Functional Groups

3. Combined Geographical Divisions and Functional Groups

Three Divisions (A, B, C) established around jurisdictional boundaries; one Group (D) for secondary line construction, one Group (E) for structure protection. Geographical Divisions and functional Groups can also be applied in structure situations. Note that functional Groups can cross Divisions.

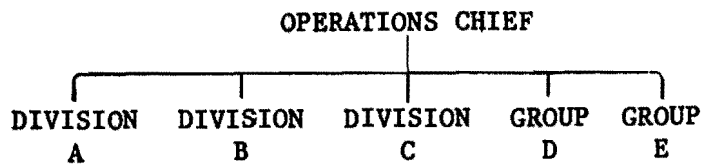
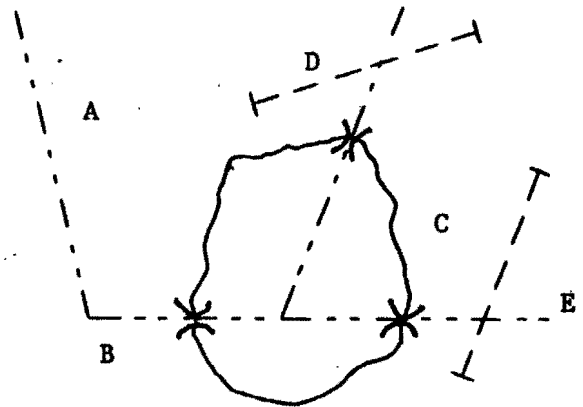


Figure 4-11  
Mix of Divisions and Groups

4.5.2 Branches

Branches may be established on an incident to serve several purposes. However, they are not always essential to the organization of the Operations Section.

In general, Branches may be established for the following reasons:

1. When the numbers of Divisions/Groups exceed the recommended 5-1 span-of-control for the Operations Chief. When this happens, the Operations Chief should designate a two-Branch structure, and allocate the Divisions/Groups within those branches. For example, in Figure 4-12, the Operations Chief has one Group and four Divisions reporting with two additional Divisions and one Group being added. At this point, a two-Branch organization should be formed. See Figure 4-13.

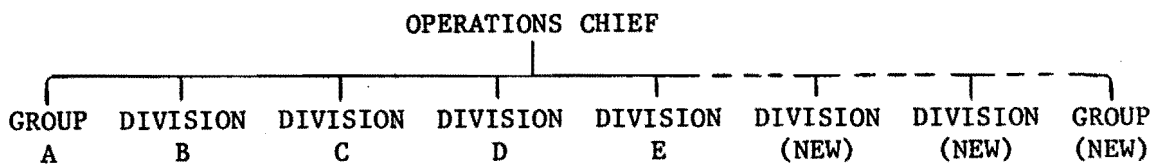


Figure 4-12

Primary Organization: Divisions and Groups Reporting Directly

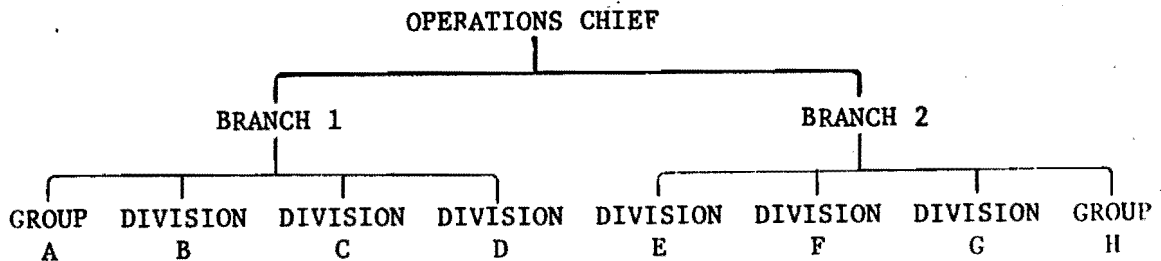


Figure 4-13

Two-Branch Organization

2. When the nature of the incident calls for a functional Branch structure. For example, a major aircraft crash within a city. In this case, three departments within the city (police, fire and health services) each have a functional Branch operating under the direction of a single Operations Chief. In this example, the Operations Chief is from the fire department with deputies from police and health services departments. Other

alignments could be made depending upon the city plan and type of emergency. (Note that Incident Command in this situation could be either single or unified command depending upon the jurisdiction.)

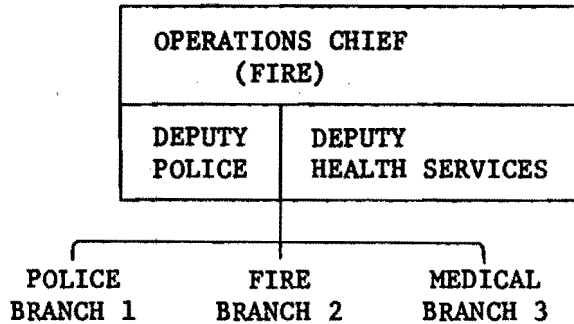


Figure 4-14  
Functional Branches

3. When the incident is multi-jurisdictional and where resources are best managed under the agencies which have normal control over those resources. For example, in a major wildland fire in which there is combined federal, county and city resource involvement.

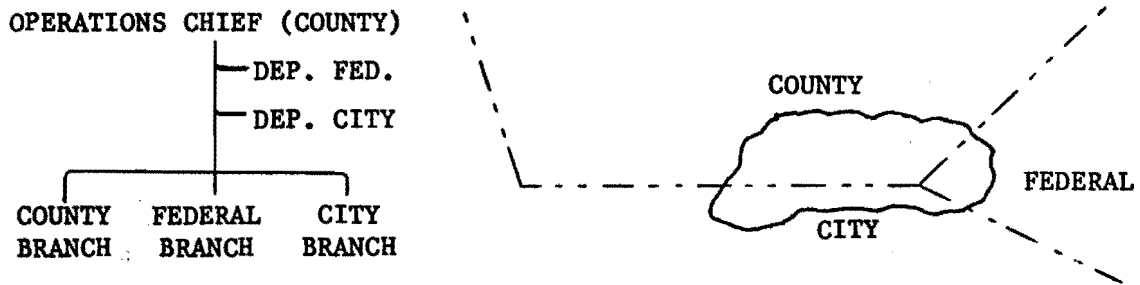


Figure 4-15  
Jurisdictional Branches

#### 4.5.3 Branches, Divisions/Groups

The following figure depicts the organization of a major incident involving Branches, Divisions and Groups.

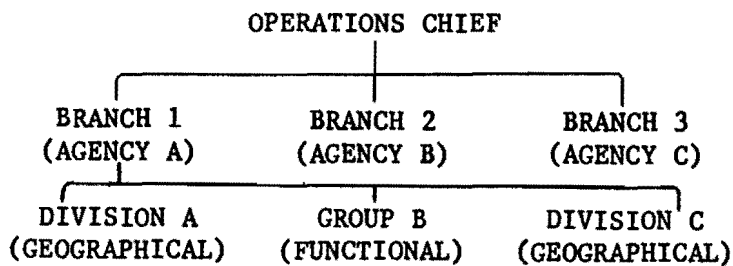
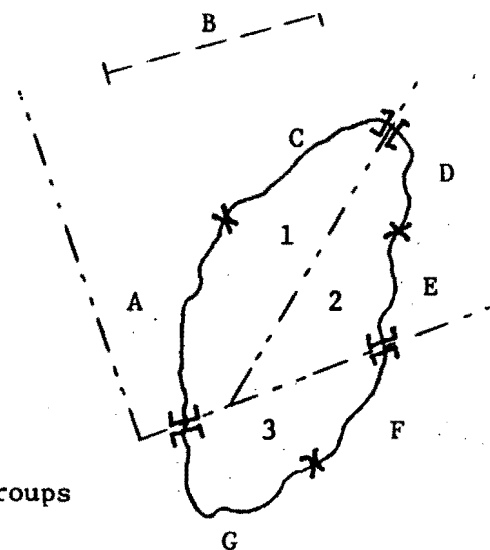


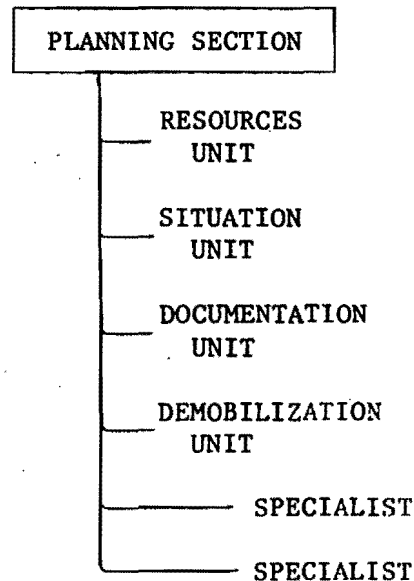
Figure 4-16

Mix of Branches, Divisions/Groups



#### 4.6 Planning Section

The Planning Section is responsible for the collection, evaluation and dissemination of tactical information about the incident. The Section maintains information on the current and forecast situation, and on the status of resources assigned to the incident. The Section is also responsible for the preparation and documentation of action plans. The Section has four primary units and may have a number of technical specialists to assist in evaluating the situation and forecasting requirements for additional personnel and equipment.



##### 4.6.1 Planning Section Chief/Deputy

The Planning Section Chief is responsible for the gathering and analysis of all data regarding incident operations and assigned resources, developing alternatives for tactical operations, conducting the planning meetings, and preparing the action plan for each operational period, *DEMO B PLAN*

The Planning Section Chief will normally be from the jurisdiction which has incident responsibility. Under a unified command structure, The Planning Section Chief could have a deputy from one or more of the other involved jurisdictions.

#### 4.6.2 Resources Unit *LEADER*

The Resources Unit has the responsibility to make certain that all assigned personnel and resources have checked in at the incident. It is also responsible for maintaining current status on all resources. A status keeping system will be required which will show current location of all assigned resources as well as current status condition for all resources. The Resources Unit will maintain a master list of all resources. This should include key supervisory personnel (overhead), primary resources used in tactical operations, as well as support resources, transportation equipment, etc.

#### 4.6.3 Situation Unit

The Situation Unit is responsible for collecting, processing and organizing situation information, preparing situation summaries, and developing projections and forecasts of future events related to the incident. The Situation Unit will prepare maps and intelligence information for use in the action plan. *TRAFFIC PLAN*

The Situation Unit may also require expertise in the form of technical specialists.

#### 4.6.4 Documentation Unit

The Documentation Unit is responsible for maintaining accurate and complete incident files; providing duplication services to incident personnel; and for filing, maintaining and storing incident files for legal, analytical, and historical purposes.

The Documentation Unit is maintained within the Planning Section primarily because that Unit has a major responsibility toward the



preparation of the Incident Action Plan, as well as maintaining files on many records which are developed as part of the overall Command Post and planning function.

#### 4.6.5 Demobilization Unit

The Demobilization Unit is responsible for developing an Incident Demobilization Plan. The plan should include specific demobilization instructions for all overhead and resources which require demobilization. (Note that many city and county agencies do not require specific demobilization due to their local nature.) The Demobilization Unit must also ensure that the Plan, once approved, is distributed both at the incident and to necessary off-incident locations. It is appropriate for Demobilization Planning to begin early in the incident, particularly in developing rosters of personnel and resources, and to obtain any missing information from the incident check-in process.

#### 4.6.6 Technical Specialists

The ICS is designed to function in a wide variety of incidents. Within the Planning Section is the capability, in addition to the four designated Units, to have Technical Specialists which may be called upon depending upon the needs of the incident.

Technical Specialists assigned to the Planning Section may report directly to the Planning Section Chief; may function in an existing Unit (e.g., a fire behavior specialist and meteorologist could be made a part of the Situation Unit); or may form a separate Unit within the Planning Section depending upon the requirements of the incident and the needs of the Planning Section Chief. It is also possible that Technical Specialists could be reassigned to other parts of the organization (e.g., to Operations on tactical matters or Finance on fiscal matters).

Generally, if the expertise is needed for only a short time and will normally be only one person, that person should be assigned to the Situation Unit. If the expertise will be required on a long-range basis and may require several persons, it may be advisable to establish a separate Unit in the Planning Section. For example, if an extensive amount of fire behavior planning will be required for several days, Technical Specialists consisting of fire behavior specialists and a meteorologist may combine to form a Fire Behavior Unit.

The incident itself will primarily dictate the needs for Technical Specialists. Listed below are examples of the kinds of specialists which may be required:

- Fire Behavior Specialist
- Meteorologist
- Environmental Impact Specialist
- Resource Use and Cost Specialists (e.g., crews, plows, bulldozers, etc.)
- Flood Control Specialist
- Water Use Specialist
- Toxic Substance Specialist(s)
- Fuels and Flammables Specialist
- Nuclear Radiation Fallout Specialist
- Structural Engineer
- Training Specialist

#### 4.7 Logistics Section (SUPPORT + SERVICE)

The Logistics Section is responsible for providing all support needs to the incident (except air). The Logistics Section would order all resources from off-incident locations. It would also provide facilities, transportation, supplies, equipment maintenance and fueling, feeding, communications and medical services.

The Logistics Section will be managed by a Logistics Section Chief. The Section may also have a Deputy. A Deputy position is encouraged when all designated Units are established on an incident.

Under circumstances

of a very large

incident, or in

an incident

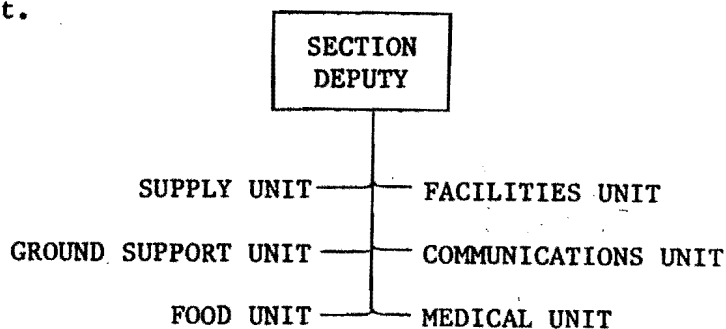
where it is

necessary to

have a number

of facilities

with large numbers of equipments, the Logistics Section can be divided into two Branches. The basic organizational structure of the Logistics Section is shown above.



A two-Branch

organization

structure

for the

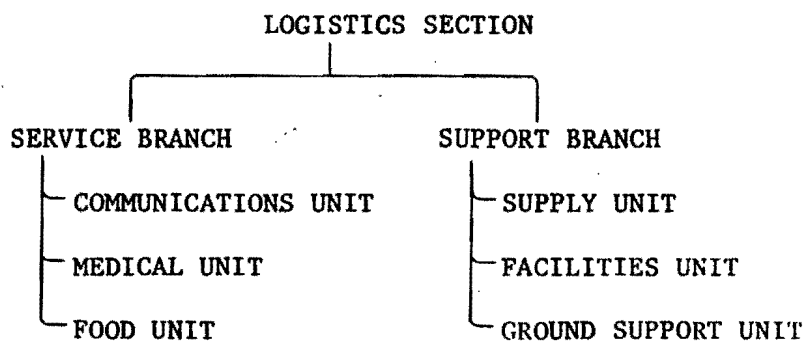
Logistics

Section

could be

as shown

to the right.



#### 4.7.1 Supply Unit

The Supply Unit is responsible for ordering, receiving, storing and processing of all incident-related resources, personnel and supplies.

The Supply Unit when established, has the basic responsibility at the incident for all off-incident ordering. This will include:

1. All tactical and support resources (including personnel).
2. All expendable and nonexpendable supplies required for incident support.

The Supply Unit also has the responsibility for providing the locations and the personnel to receive, process, store and distribute all supply orders. The Supply Unit will also, on those incidents which require it, have the responsibility for handling tool operations which include storing, and disbursement and servicing of all tools and portable nonexpendable equipments.

#### 4.7.2 Facilities Unit

The Facilities Unit is responsible for establishing, setting up, maintaining and demobilizing all facilities used in support of incident operations. The Unit is also responsible for providing any facility maintenance required and for providing security services at the incident.

The Facilities Unit will set up the Incident Command Post, the Incident Base, and Camps as well as trailers and/or other forms of shelters for use in and around the incident area. Oftentimes, the Incident Base and Camps may be established in areas where there are existing structures which may be used totally or in part. The Facilities Unit will also provide and set up necessary personnel support facilities which include:

- Feeding Areas
- Sleeping Areas
- Sanitation/Shower Areas

The Facilities Unit will order through Supply any additional support items required (e.g., portable toilets and shower facilities, lighting units, etc.)

#### 4.7.3 Ground Support Unit

The Ground Support Unit is responsible for:

1. Maintenance and repair of primary tactical equipment, vehicles and mobile ground support equipment.

2. Time reporting on all incident-assigned ground equipment (including contract equipment). *(EQUIPMENT IN CAMPS)*
3. Fueling of all mobile equipment.
4. Providing of transportation services in support of incident operations (except air).
5. Implementing of the Incident Traffic Plan.

The Ground Support Unit, in addition to a primary function of maintenance and services of all mobile vehicles and equipment will, on major incidents, maintain a transportation pool. The transportation pool will consist of vehicles (e.g., staff cars, busses, pickups, etc.) which can be used for purposes of transporting personnel from one location to another. The Ground Support Unit must also provide the Resources Unit with up-to-date information on the status of transportation vehicles, their locations and capability.

#### 4.7.4 Communications Unit

The Communications Unit is responsible for the developing of plans to make the most effective use of incident assigned communications equipment and facilities; the installation and testing of all communications equipment; supervision and operation of the Incident Communications Center; distribution and recovery of equipments assigned to incident personnel; and the maintenance and on-site repair of communications equipment.

The Communications Unit in the ICS has a major responsibility for effective communications planning, due to the potential multi-agency use of the ICS. This is especially important in determining required radio nets; establishing inter-agency frequency assignments; and ensuring that maximum use is made of all assigned communications capability.

The Communications Unit Leader should attend all incident planning meetings to ensure that tactical operations planning can be supported by available incident communications systems.

incident locations, provide information on potential hazardous areas or conditions, and provide off-incident locations and procedures for handling serious situations.

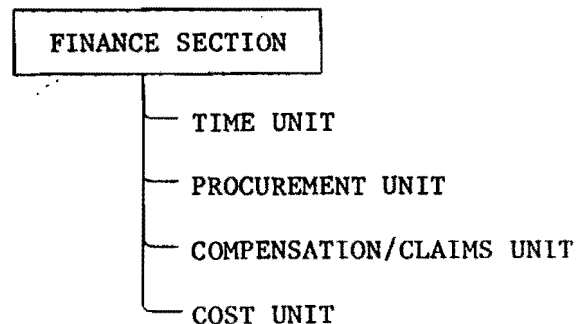
The Medical Unit will also assist the Finance Section in handling compensation-for-injury related procedures and paper work including written authorizations, billing forms, witness statements and administrative documents on medical situations as required.

#### 4.8 Finance Section

The Finance Section is established on incidents when the agency(s) who are involved have a specific need for finance services. In the ICS, not all agencies will require the establishment of a separate Finance Section. In some cases where only one specific function is required (e.g., cost analysis), that position could be established as a Technical Specialist in the Plans Section.

When a Finance Section is established on an incident, the following Units may be established as the need requires:

1. Time Unit
2. Procurement Unit
3. Compensation/Claims Unit
4. Cost Unit



The Finance Section Chief will determine, based on present and future requirements, the need for establishing specific Units. In certain of the functional areas (e.g., Procurement), a functional Unit need not be established if only one person would work in the Unit. In that case, a Procurement Officer would be assigned rather than designating a Unit.

The Finance Section Chief should be designated from the jurisdiction/agency which has the requirement, due to the specialized nature of the Finance functions. The Section Chief may have a Deputy.

#### 4.8.1 Time Unit

The Time Unit is primarily responsible for ensuring that daily personnel time recording documents are prepared and compliance to agency(s) time policy is being met. The Time Unit is responsible for ensuring that equipment time reporting is accomplished in the Logistics Section-Ground Support Unit for ground equipment, and in the Operations Section-Air Support Unit for helicopters.

If applicable, (depending upon the agencies involved) personnel time records will be collected and processed for each operational period. The time Unit Leader may desire to have one or more assistants who are familiar with respective agency(s) time recording policies. Records must be verified, checked for accuracy and posted according to existing policy. Excess hours worked must also be determined and separate logs maintained.

#### 4.8.2 Procurement Unit

The Procurement Unit is responsible for administering all financial matters pertaining to vendor contracts. The Procurement Unit will coordinate with local jurisdictions on sources for equipment; prepare and sign equipment rental agreements; and process all administrative paper work associated with equipment rental and supply contracts.

Note that in some agencies, certain procurement activities will be accomplished as a function of the Supply Unit in the Logistics Section. The Procurement Unit will also work closely with local cost authorities.

#### 4.8.3 Compensation/Claims Unit

In the ICS, Compensation-for-Injury and Claims are included together within one Unit. It is recognized that specific activities are different, and may not always be accomplished by the same person.

Compensation-for-Injury is responsible to see that all forms required by workers' compensation programs and local agencies are completed. The person performing this activity is also responsible to maintain a file of injuries and illnesses associated with the incident and to ensure that all witness statements are obtained in writing. Many of this Unit's responsibilities are done or partially done in the Medical Unit, and close coordination with that Unit is essential.

The Claims function will be responsible for handling the investigation into all civil tort claims involving property associated with or involved in the incident. The Unit will maintain logs on claims, obtain witness statements, document investigations and agency follow-up requirements.

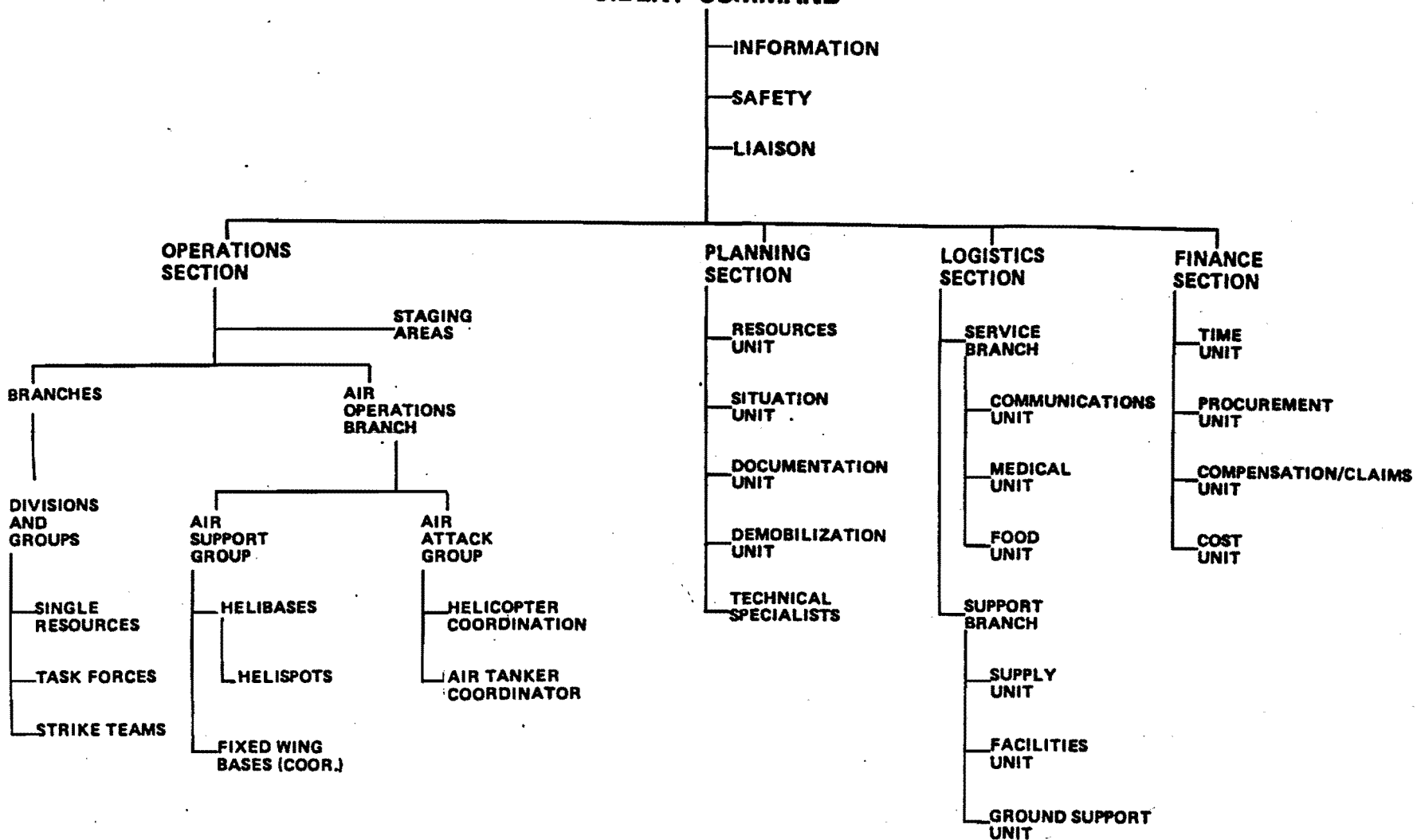
#### 4.8.4 Cost Unit

The Cost Unit is responsible for providing cost analysis data for the incident. The Unit must ensure that all pieces of equipment and personnel which require payment are properly identified; obtain and record all cost data; analyze and prepare estimates of incident costs and maintain accurate records of incident costs.

Increasingly, the Cost Unit will be called upon to input to the planning function in terms of cost estimates of resource use. The Unit must maintain accurate information on the actual cost for the use of all assigned resources.



# INCIDENT COMMAND



4-28

(5-1 reporting ratio for Resources to Branches/Divisions/Groups)

## INCIDENT COMMAND SYSTEM

## 5.0 COMPLEX INCIDENTS

In the application of ICS to very complex and large incidents (e.g., wildland fires which may cover thousands of acres over several political subdivisions) it is possible to use a modified ICS organizational structure to meet the needs of the incident. This section provides a brief explanation of large incident management which may be employed. Not all situations are alike, and other forms of organization than those described here may be as suitable.

Two different examples of organizing for large incident management will be described. The first deals with a single but large wildland fire incident which, because of its size, requires additional support but does not require the establishment of two complete incident organizations. The second example will deal with a large wildland fire incident which could be divided into two separate incidents, each with a complete command structure and with an Area Command Authority to ensure inter-incident coordination.<sup>(1)</sup>

Both examples given here assume a unified command structure as a starting point. There would be no difference if the incidents were being run under a single command structure.

### 5.1 Extending the ICS Organization

A very large wildland fire incident is depicted in Figure 5-1. This incident has grown from a single command (County A) to a unified command organization (Counties A, B & C). The standard ICS functional Sections of Operations, Planning, Logistics and Finance have applied to this point.

- 
- (1) The Area Command Authority (ACA) is an individual and/or organization established to ensure inter-incident coordination for command, operations, planning and logistical matters. The ACA may be located at either of the Incident Command Posts or at a separate nearby location. It may also function from a regional facility. When in existence, the ACA may change the priorities/objectives at any of the incidents under its authority.

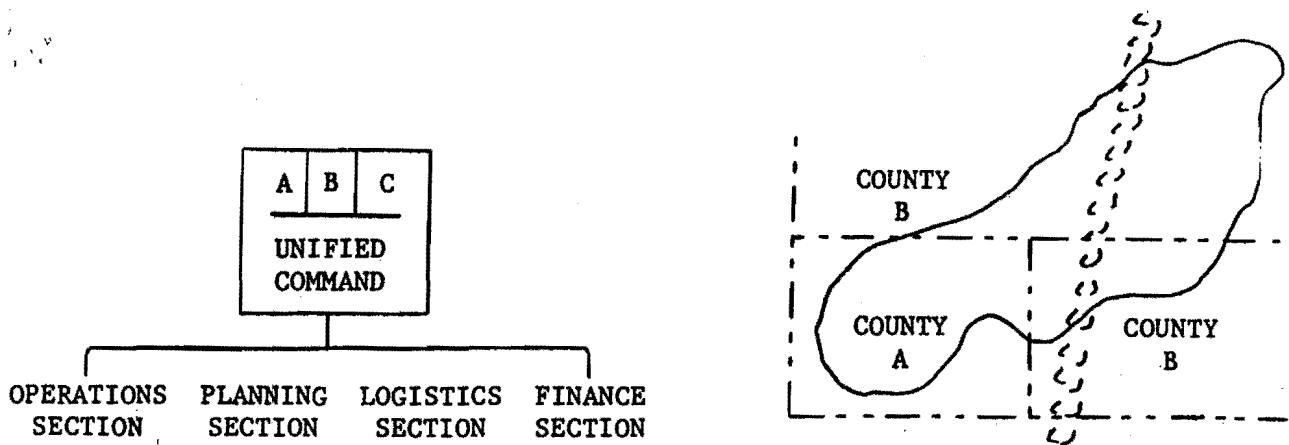


Figure 5-1

Large Wildland Incident Covering Several Political Subdivisions

The following situations could require a change in the structure of the ICS for an incident of this magnitude:

1. The Operations Section is not large enough to accommodate adequate resources under the span-of-control guidelines.

In the ICS, the overall size of the Operations Section is determined by the makeup of the resources within each Division or group.

For example, using a Division consisting of: 3 Crew Strike Teams; 1 Dozer Strike Team; and 1 Engine Strike Team, a "typical" Division could consist of a minimum of 131 personnel. Expanding this to a 25-Division, 5-Branch incident, the personnel complement would be in excess of 3200 personnel for each operational period (shift).

In order to provide additional Operations personnel and stay within span-of-control guidelines, another Operations Section could be added to the existing incident organization. At this time, the unified command structure of the incident would be modified to include a Deputy Incident Commander for Operations. This Deputy would have the responsibility to ensure that all aspects of the two (old and new) Operations Sections were fully coordinated

(between each other and with other Sections). The Deputy Incident Commander for Operations would normally be co-located with the Incident Command. See Figure 5-2.

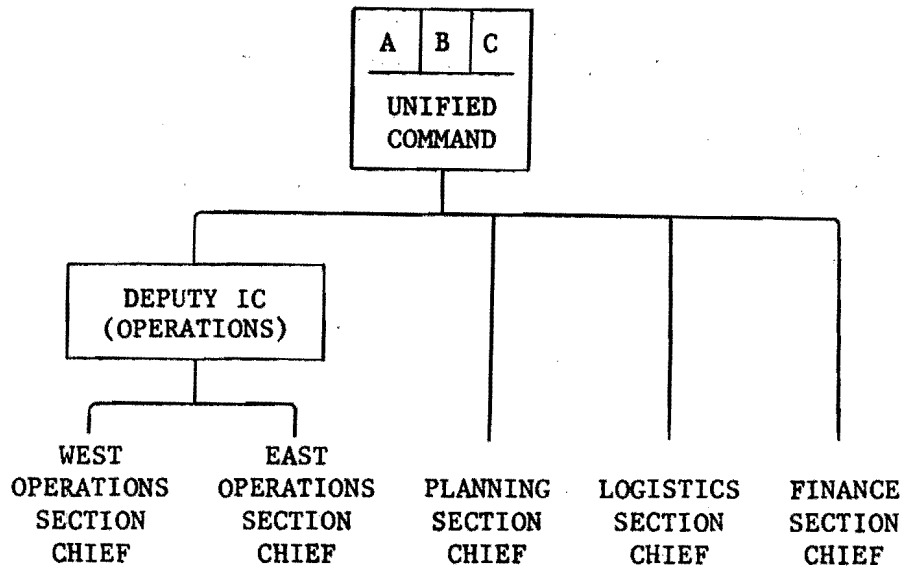


Figure 5-2

Unified Command - Two Operations Sections

2. Logistical support can no longer be maintained adequately.

If the incident were so large geographically that it would not be possible for the Incident Base to support the required number of camps and other Logistics needs, it may be necessary to establish another Logistics Section to support one part of the incident.

In this situation, another Incident Base and necessary camps serviced by that Base could be established. At this point, a Deputy Incident Commander for Logistics should be added to the command structure to ensure full coordination of the two Logistics efforts. See Figure 5-3.

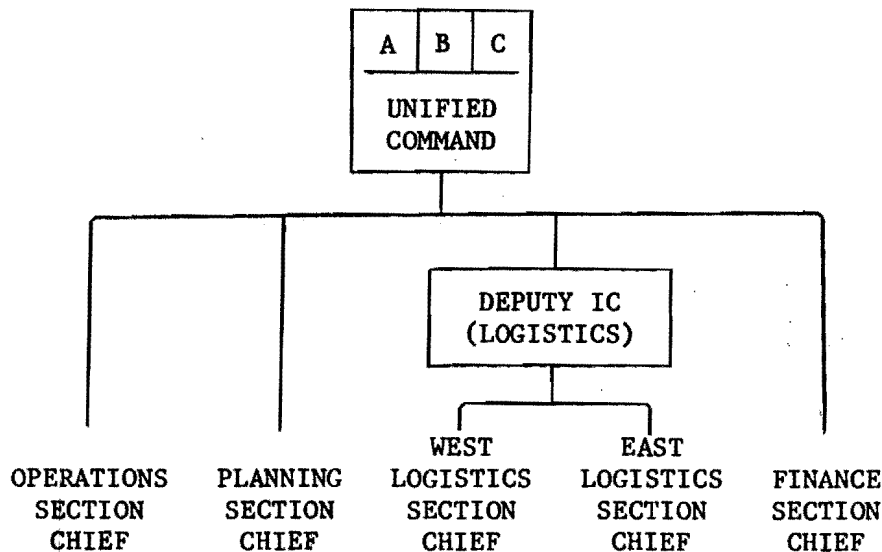


Figure 5-3

Unified Command - Two Logistics Section

3. Incident becomes too large for a single Action Plan.

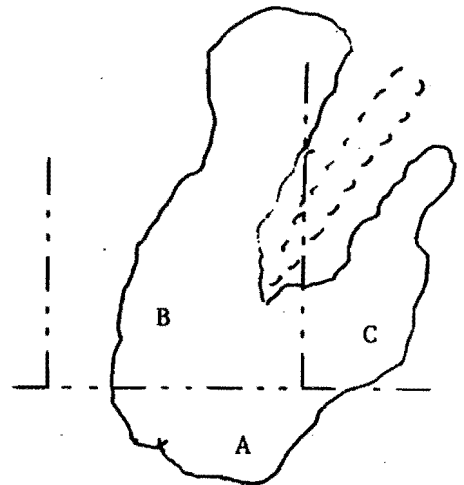
If the incident becomes so large that there is no logical set of objectives that pertain to the entire incident, or if the preparation and/or distribution of the plan could not be feasibly accomplished within the required time frame, then a modified planning structure could be adopted. In this case, the addition of another Planning Section is not recommended. The better solution would appear to have detailed action planning done at the Branch level. This could be accomplished by the Planning Section providing the following to each Branch:

1. Incident general objectives
2. Specific objectives for the Branch for the next operational period
3. Incident resource summary for the next operational period
4. Weather and Safety Information as appropriate
5. Any changes to Logistical support

Individual Branches could then perform detailed action planning from this information. (A modification to this could be accomplished by designating only certain Branches, e.g., those in a mop-up mode, as Branches which would perform Branch action planning. Other Branches would continue under a centralized planning structure.) In either case, the Planning Section should provide each Branch which is doing individual Branch planning with the required capability in terms of personnel and other support to get the planning accomplished.

## 5.2 Dividing an Incident

The diagram at the right describes a very large wildland fire incident which covers an extensive area within several political jurisdictions. The incident is divided by a major ridge. The incident is now so large that the management of both Planning and Logistics operations has become very complex. The incident has until this time been run under a unified command organization. If the unified command determines that the incident should be divided into two separate incidents, the following should be accomplished.



1. An Area Command Authority (ACA) should be established. The existing unified command members may continue as jurisdictional liaison representatives to the Area Command Authority.
2. A decision would be reached by the unified command on how best to divide the incident. This could be done in several ways, depending upon terrain considerations, political boundaries, current Branch structure, etc.

3. Incident Commanders, command and general staff would be selected for each incident.
4. Supporting organizations facilities, locations, etc., would be designated.
5. An appropriate time would be designated for establishing the separate incidents with individual names.
6. The ACA would be responsible to ensure that jurisdictional objectives are being met through the respective Incident Action Plans, and that necessary procedures are established and functioning to ensure inter-incident coordination on all matters.

The organization would be as follows:

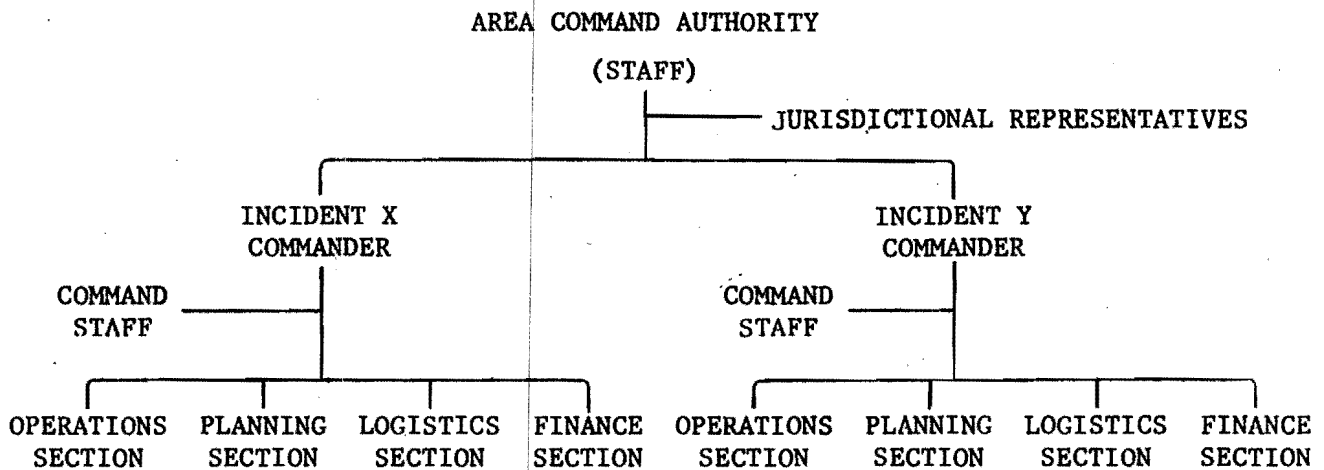


Figure 5-4

ACA - Two Incident Organization

### 5.3 Final Considerations

The key factors to be kept in mind in making a determination to establish an Area Command Authority for large incident management or to extend an existing organization are of cost and effectiveness.

If the Incident Planning and Operations functions are adequate, and have room for growth, but Logistics is not adequate, then the decision should be to establish another Logistics organization, and save the cost of

establishing an entirely new complete incident organization and facilities. Similarly, if Operations and Logistics appear to be adequate but detailed action planning can no longer be accomplished by a single entity, then from an effectiveness standpoint, it would be better to allow Branch Action Planning and ensure that appropriate planning coordination is taking place.

If the incident is divided into two main segments by geographical barriers; is separating naturally; or if it appears that any two of the major functional Sections of the ICS will require extensive augmentation, the most effective solution would be to create two separate incident organizations.



## APPENDIX A

### ICS MODULAR DEVELOPMENT

The ICS was developed to meet both the routine day-to-day needs of fire service agencies, as well as the very large but relatively infrequent major incidents.

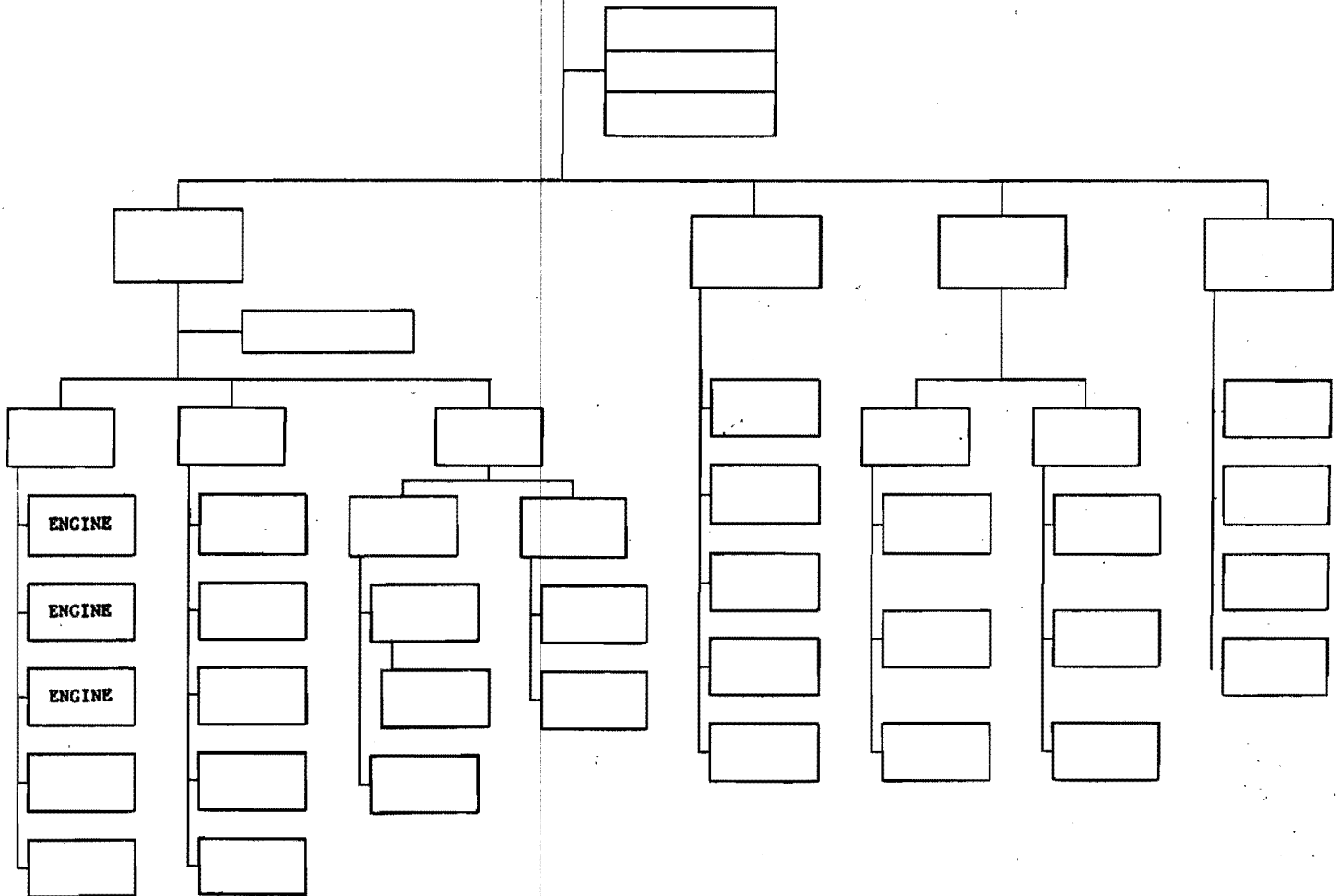
To meet both these needs, the organizational structure develops from the top down, and basically unfolds to meet the need. This is accomplished in the ICS by having a functional organization which accommodates rapid growth and expansion, and by maintaining responsibility for functional performance at the highest level possible. By properly placing responsibility within the appropriate functional area, it is possible to always maintain the size of the overall organization at just what is needed to get the job done.

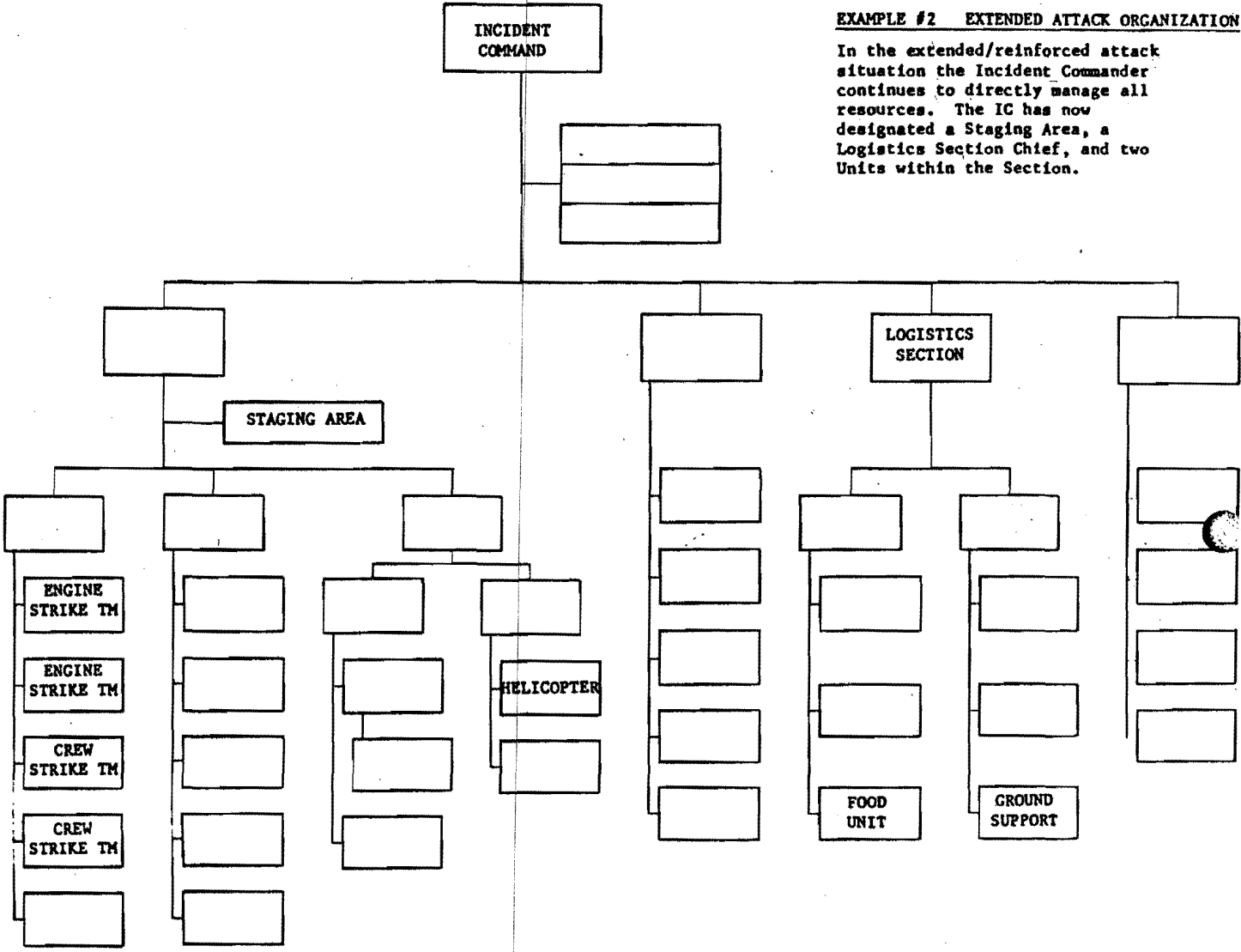
A series of examples will be used to demonstrate the organizing principles used in the ICS.

INCIDENT  
COMMAND

EXAMPLE #1 INITIAL ATTACK ORGANIZATION

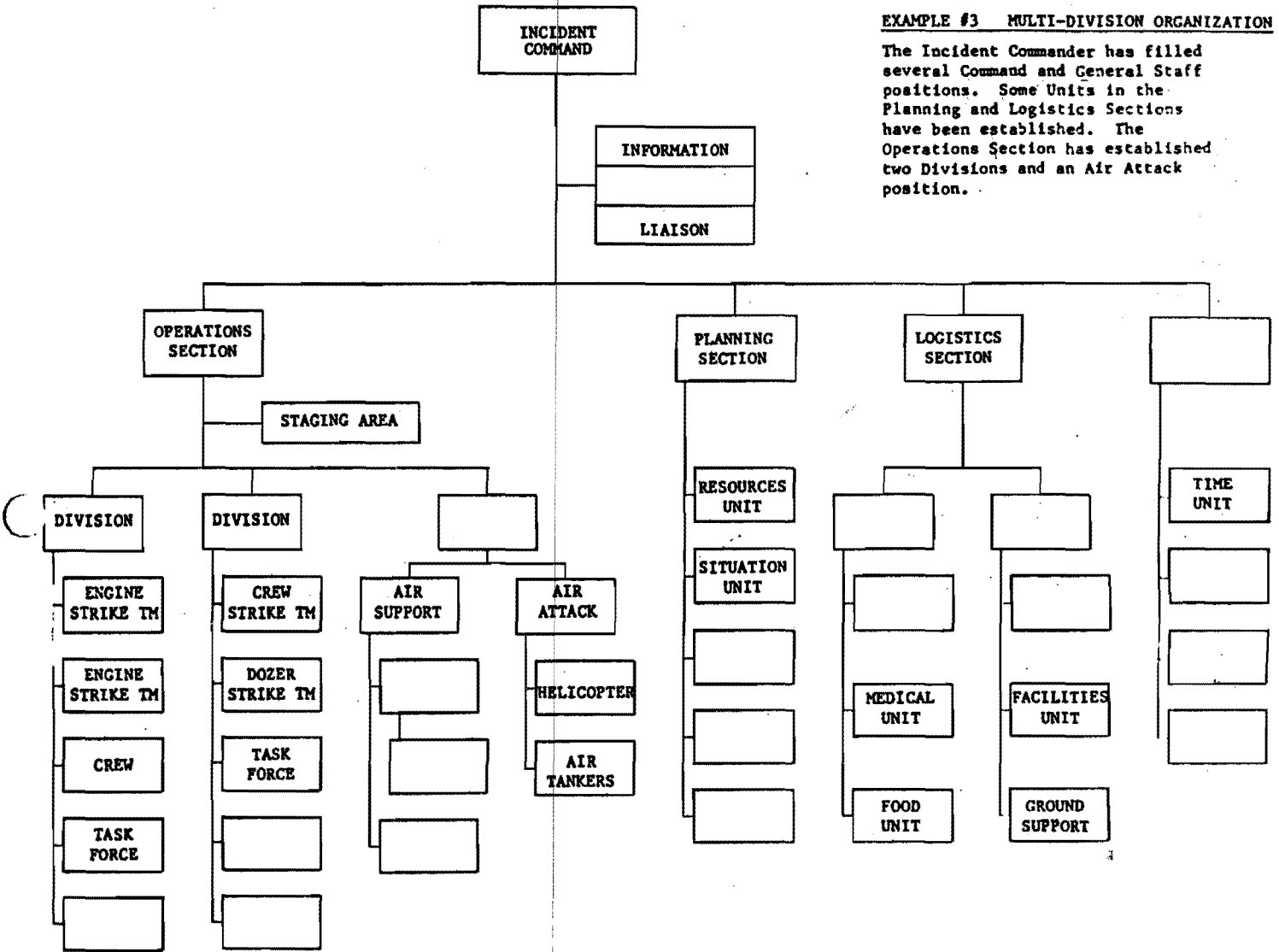
Initial attack resources are managed  
by the initial attack Incident  
Commander who will perform all  
Command and General Staff functions.





**EXAMPLE #2 EXTENDED ATTACK ORGANIZATION**

In the extended/reinforced attack situation the Incident Commander continues to directly manage all resources. The IC has now designated a Staging Area, a Logistics Section Chief, and two Units within the Section.



**EXAMPLE #3 MULTI-DIVISION ORGANIZATION**

The Incident Commander has filled several Command and General Staff positions. Some Units in the Planning and Logistics Sections have been established. The Operations Section has established two Divisions and an Air Attack position.

**EXAMPLE #4 MULTI-BRANCH ORGANIZATION**

All Command and General Staff positions have been filled as well as many of the Units. The Operations Section has now established a two-Branch organization and an Air Operations organization

