

THE INCIDENT COMMAND SYSTEM

AN

INTRODUCTION

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INTRODUCTION TO THE INCIDENT COMMAND SYSTEM

NEED FOR A MANAGEMENT SYSTEM

Successful organizations do not happen by chance or blind luck. Success requires dedication and professional management on the part of those responsible for the organization's achievements. Lack of good management can have disastrous results. This is true in any organization whether it be business, military, team sports, or the fire service. Some examples are:

- Business success: Any Japanese car maker.
- Notable business failure: Edsel.
- Military success: Operation Desert Storm.
- Notable military failure: Iraqi Army/Navy/Air Force.
- Sports success: Vince Lombardi as coach of the Green Bay Packers.

- Notable sports failure: 1961 New York Mets.
- Firefighting success: Your last fire.
- Notable firefighting failure: First-in company to Mrs. O'Leary's cow, Chicago 1871.

Successful incident management is not totally unlike a team sport such as football. In football the coach puts together the game plan the players are to follow rather than each player deciding on his own where to run and whom to block. Managing emergencies requires that an IC determine the plan that others will follow. Not all football players have the same skills. Running backs, linemen, and wide receivers each have different skills. The same can be said for those who function at an emergency. Law enforcement, fire, EMS, public works, and social agencies all may be required at the same incident and each needs to concentrate on its area of expertise if it is to be effective. If a team or a fire department is to perform to its highest level, it must be well trained, well conditioned, and well managed.

The consequences of a football team not having good leadership and not playing together in a coordinated manner may result in losing a game. Should an emergency incident suffer from lack of leadership and coordination of efforts, the results could be loss of life or injury to civilians and firefighters, additional damage to the property, and failure of those responsible to provide their communities with the level of service they deserve and expect.

Unlike other organizations, emergency response agencies must fulfill their responsibilities under conditions that are hazardous and often confusing. While other organizations can take time to form a committee to study a problem, decisions at the emergency scene must be made based on limited information and under severe time restrictions. Just because an emergency exists does not relieve those responsible for managing the emergency from doing so in a professional manner. Because of the risks and dangers involved, the need for effective incident management is greater than in other organizations.

Elements of an Effective Incident Management System (IMS)

For an IMS to be effective, it should share some common elements. Those elements include:

1. Suitability for use regardless of jurisdiction or agency involved
2. Ability of the organizational structure to adapt to an incident regardless of type of complexity.
3. Applicability and acceptability to users throughout the community and region.

4. Readily adaptable to new technology such as computers or improved communication capabilities
5. Expandable in a logical manner from initial response to a major emergency so as not to have one plan for "everyday" use and a separate plan for "the big one."
6. Basic common elements in organization, terminology, and procedures.
7. Cause the least possible disruption to the existing system during implementation.
8. Fulfill the above requirements effectively and simply to ensure low operation and maintenance costs.

ICS as a Management System

ICS meets the requirements of an effective incident management system in a manner that makes its use practical to all emergency response agencies. In doing so ICS:

1. Provides for manageable span of control.

Definition: Span of control is the number of subordinates one supervisor can manage effectively.

A basic management axiom states that for managers to be effective they must limit the number of subordinates they supervise to a manageable level. Experience has shown that a workable span of control is somewhere between three and seven, with an optimum of five. ICS provides an organizational structure that allows managers to delegate responsibility when they are approaching or have reached the limits of their span of control

2. **Ensures unity of command so that all personnel are managed and accounted for.**

Unity of command means that each individual participating in the operation reports to only one supervisor. This eliminates the potential for individuals to receive conflicting orders from a variety of supervisors, thus increasing accountability, preventing freelancing, improving the flow of information, helping with the coordination of operational efforts, and enhancing firefighter safety.

3. **Provides a standard set of terms for communicating designation of resources and facilities.**

ICS uses plain English rather than 10-codes to communicate. Called clear text, it uses a standard set of words and phrases in lieu of the sometimes confusing and conflicting 10-codes. ICS also offers a set of standard resources designators to identify the range of resources and facilities that may be needed at an incident.

Examples of clear text and standard resource designators can be found in the materials of the ICS classes offered by the National Fire Academy, the National Interagency Incident Management System (NIIMS), manuals offered by Fire Service Publications at Oklahoma State University, as well as other sources.

4. Lines of authority provide for lines of communication.

Based on the simple principle that communications follow the same lines as the organization, the amount of communication is minimized and also limits the number of individuals needing to talk to each other. This improved flow of communications prevents messages from being missed by those for whom they should be intended.

5. Has all-risk design.

ICS can be adapted to any type of emergency whether it be fire, mass casualty, hostage situation, natural disaster, or any other type of emergency. Because it can be used by all agencies involved in the incident, coordination and communications are improved and the amount of confusion reduced.

6. Is suitable for "everyday" use.

Many departments, agencies, and jurisdictions have disaster plans that are used only when a major incident occurs. These plans are often out of date, inappropriate to the emergency, and not understood or trained on by those not involved with drawing up the plan.

ICS can be used every day at every incident and eliminates the need to have different management systems for different sizes or types of emergencies.

7. Provides for safety of personnel

Span of control and unity of command assure that personnel are accounted for and their efforts are coordinated in a manner that provides for firefighter safety. Improved communications and reduced confusion also facilitate protecting their safety.

8. Provides for modular expansion.

As the incident grows or additional resources become available, the ICS organization can expand in a modular fashion to meet the demands of the emergency and still allow for maintaining effective span of control.

9. Improved resource utilization.

With a clear organizational structure, each resource can concentrate on its assignment and eliminate duplication of effort. This maximizes the effectiveness of each resource.

HISTORY OF ICS

FIRESCOPE

In the early 1970s Southern California experienced a series of major wild land fires that required the involvement of a vast number of resources and the participation of local, county, state, and federal jurisdictions and agencies. In trying to manage the complex incidents, a number of problems were identified. They included ineffective communications, lack of a common command structure, lack of accountability, and the inability to coordinate the available resources. The agencies involved formed FIRESCOPE (Fire Resources of Southern California Organized for Potential Emergencies) to identify solutions to the problems they encountered. What they developed was the first generation of ICS. Although it was designed to deal with wild land fires, it has evolved into an all-risk management system

Fireground Command System

Needing to improve how incident operations were managed in the Phoenix Fire Department, Chief

Transfer interrupted!

nd Command System (FGC). Originally developed to be used primarily for structural firefighting, FGC has been adopted by many departments in the country as their all-risk emergency management system.

NFA Model System

The National Curriculum Advisory Committee, which is made up of representatives from all the disciplines involved in emergency management, recommended development and adoption of an all-risk system that could be used by all response agencies. The National Fire Academy has produced the Model Incident Command System that can be used as a model by agencies and jurisdictions wishing to adopt ICS.

Each of these management systems is based on the same management principles, emphasizing the safety of personnel, coordination of incident activities, clear lines of authority and

communication, maximizing the effectiveness of resources, unity of command, and a manageable span of control.

DEVELOPMENT OF REGULATIONS AND STANDARDS

The success and acceptance of ICS nationally have led to its inclusion in a number of regulations and standards. The primary reason for this is ICS's ability to be adopted and utilized by jurisdictions and agencies needing one common emergency management system capable of dealing with all types of emergencies and suitable for use when multiple jurisdictions or agencies are involved.

Occupational Safety and Health Administration (OSHA)

As a result of the Superfund Amendments and Reauthorization Act (SARA) of 1986, OSHA has implemented regulations that require departments in states that have adopted OSHA standards to use an ICS at all hazardous materials incidents.

Environmental Protection Agency (EPA)

For those departments in states that do not require following OSHA standards, the EPA has adopted regulations that impose the same requirements in non-OSHA states.

The regulation states, "The incident command system shall be established by those employers ("employers" includes fire departments) for the incidents that will be under their control and shall be interfaced with the other organizations or agencies who may respond to such an incident."

NFPA 1500

The NFPA Standard 1500: Fire Department Occupational Health and Safety Program states that all departments shall establish written procedures for ICS, and that all departmental members shall be trained in and familiar with the system. It fixes responsibility for firefighter safety at all supervisory levels at an incident and requires a method of tracking and accounting for personnel. It places strong emphasis on scene safety and the role of the incident safety officer.

NFPA 1561

The NFPA Standard 1561: Fire Department Emergency Management Systems provides broad guidelines for what should be included in any emergency management system; the appendix gives examples of successful systems currently in use. It does not provide a new emergency management system or impose rigid rules for adoption.

USING ICS EFFECTIVELY

ICS offers ample opportunity to delegate responsibility and create subordinate positions to maintain span of control. Emergency managers can develop an extensive incident organization, but the cold hard fact is that organizational charts do not put out fires. That is done through the efforts of hard-working, well-managed firefighters. The positions within ICS are there to be utilized if they are needed and will assist in better organizing and managing the incident.

ICS can be looked at as being similar to a toolbox. Just as a toolbox may be loaded with different tools, ICS has a number of positions in its arsenal. If you were to change the spark plugs in your car, you would not need to use every tool in the box but would only use those necessary to do the job. The remainder of the tools would remain in the box until there was a job for which they were needed. The same is true of ICS. Only those positions that are needed to help get the job done should be implemented. The others remain available for an incident in which they may be required.

Just as failure to delegate can cause a manager to exceed a reasonable span of control and produce disastrous results, so can falling into the trap of a manager creating a magnificent organizational chart with a variety of subordinate positions and having no one left to fight the fire. Understanding the system will let you know what positions can best aid in managing the incident and how they can be used to your best advantage.

Although the first-arriving officer may act as the initial Incident Commander until command can be passed, there is a strong likelihood he/she may be reassigned to another subordinate position in the ICS organization. Other officers who are not first-in may be assigned to a subordinate position upon their arrival. Whether the CO must function as the initial IC or is delegated to understand the system. Failure to do so can jeopardize firefighter safety and lead to a breakdown in coordination.

THE FIVE ICS FUNCTIONS

ICS uses the five major components that make up most successful organizations. ICS is broken down into the functional areas of:

1. Command.
2. Operations
3. Planning.
4. Logistics
5. Finance

Command

The function of Command is to assume responsibility for the overall management of the incident. Command establishes the strategy and tactics for the incident and has the ultimate responsibility for the success of the incident activities. Firefighter safety is the primary responsibility of Command. The Command role is filled by the Incident Commander (IC) and is the position that is established at every incident no matter how small or whether it involves only a single resource.

Operations

The function of Operations is to accomplish the strategy Command develops by meeting the tactical objectives. Operations directs all the incident tactical operations and assists Command in the development of the action plan.

Planning

The Planning function is to collect and evaluate information that is needed for preparation of the action plan. Planning forecasts the probable course of events the incident may take and prepares alternative strategies for changes in or modifications to the action plan.

Logistics

Logistics can be described as filling the "Supply Sergeant" role for the incident. Logistics provides services and supplies in support of the tactical operations. Included in Logistics' responsibilities are providing for facilities, transportation, supplies, equipment maintenance and fueling, and feeding and medical services for response personnel.

Finance

Usually formally implemented during large-scale incidents, Finance is responsible for the required fiscal documentation needed and produced as a result of the emergency. Finance also provides financial planning and advice to the IC to aid in meeting any fiscal statutory requirements.

The functions of Command, Operations, Planning, Logistics, and Finance are referred to in ICS as the General Staff positions. When assigned, Operations, Planning, Logistics, and Finance report directly to Command. More detailed descriptions of the General Staff positions can be found in the NFA ICS classes and the NIMS manuals.

COMMAND STAFF POSITIONS

The Command Staff positions are designed to provide aid and assistance in helping the IC fulfill the responsibilities associated with managing the emergency. They handle key incident activities

that enable the IC to concentrate on managing the incident. Command Staff are not part of the line organization and do not count when determining the number of positions under the IC's span of control.

The Command Staff positions are:

1. Safety Officer.
2. Liaison Officer.
3. Information Officer.

Safety Officer

The Safety Officer is responsible for monitoring and assessing safety hazards or unsafe situations and developing measures for ensuring personnel safety. After identifying the hazards, the information is conveyed to the IC, and any necessary adjustments are made to the action plan. The Safety Officer should be appointed when the IC cannot adequately monitor hazards or unsafe conditions due to the size, complexity, or numbers of resources involved in the incident.

The Safety Officer can take immediate action to correct an unsafe act or practice or to remove personnel from the threat of imminent danger. Whenever this is done, the Safety Officer needs to advise the IC and affected supervisors of the action and why it was taken. If there is not a threat of imminent danger, the Safety Officer should follow the normal chain of command to get the corrective action accomplished.

Anyone serving as the incident Safety Officer must have the requisite knowledge of the factors that could affect firefighter safety. If appointed at a structure fire, the Safety Officer needs to have a thorough understanding of fire behavior, building construction, and a clear perception of how the tactical operations are affecting the structure. At a haz mat incident, knowledge of the product(s) involved, how to deal with it/them, and the capabilities of the responders is necessary. Whatever the nature of the emergency may be, anyone given the responsibility of Safety Officer should have the background knowledge and a clear understanding of what dangers the incident can present to personnel.

Liaison Officer

An incident where multiple agencies are involved may require a Liaison Officer whose responsibilities are to provide the point of contact and coordination for assisting agencies not involved in the Command function. The Liaison Officer aids in coordinating the efforts of the other agencies and reduces the risk of their operating independently. Thus, each agency can do what it does best and can maximize the effectiveness of available resources.

Each agency should have an Agency Representative with whom the Liaison Officer can work. The Liaison Officer needs to make sure those representing the various agencies have decision

making authority. If they must contact someone else to get a decision for their agency, the delays that are caused can have an adverse effect on the incident

Information Officer

The Information Officer is responsible for the development and release of accurate and complete information regarding the incident and to serve as the point of contact for the media and other appropriate agencies requiring information directly from the incident scene.

After getting an incident briefing from the IC, the Information Officer establishes an area for the media away from the Command Post and a safe distance from the incident. There the Information Officer will provide news releases, answer questions the media may have, arrange for tours or photo opportunities of the incident from safe areas, and arrange for the media to speak with the IC if incident conditions allow.

STAGING

Without having clear procedures to direct them otherwise, some departments end up having all the responding vehicles massed in front of the involved structure. Access for other vehicles is often blocked, and the ability to move equipment to another location can be hampered, if not impossible. To prevent this from occurring, a Staging Area can be designated. Staging is the location where resources report until given an assignment. It should be located close enough to the incident that resources can respond immediately if given an assignment.

Companies often request assignments while en route to the incident and at a time when the IC may still be trying to determine the extent of the emergency. Radio traffic is usually at its peak and the IC still is trying to put the action plan together. If pressed for an assignment by incoming units, the IC may make a hasty decision not based on the incident needs, but rather yielding to the pressure to give the companies something to do. By establishing a Staging Area, responding companies have a location where they can report while awaiting an assignment and the IC gains time to determine how those companies can best be utilized.

Staging Increases Accountability

By reporting first to Staging, responders are prevented from taking a look at the conditions at the scene and picking a task that looks like the most fun or one they feel needs to be addressed. Should this "freelancing" be allowed to occur, coordination is lost and firefighter safety is put in jeopardy. The IC no longer has control of the action plan or the resources that are responsible for its Implementation.

When resources report to Staging they are logged in and, when they receive their assignment, where they will be operating and who will be supervising them also are recorded. This greatly

facilitates knowing where the resources are and what they are doing. This is of particular importance in departments where personnel respond in private vehicles. Volunteers, paid on-call, call-back personnel, or staff personnel often respond in private vehicles near the scene and blocking access to emergency apparatus. An additional problem is that these individuals may go directly to the scene and into action without anyone knowing their whereabouts. Personnel accountability is lost, and the ability to protect the safety of these individuals is greatly reduced.

Staging offers the opportunity to form crews that can be placed into service in an organized manner if the IC needs to provide relief or meet the incident goals

Similar to the Command Staff positions, in what it serves a support role to Command, Staging does not count when determining the IC's span of control.

Staging Area Manager

Staging is under the direction of the Staging Area Manager whose responsibility is to manage all of the activities within the Staging Area. In a number of departments the first-arriving officer in Staging is designated as the Staging Area Manager until relieved or assigned

The responsibilities of the Staging Area Manager include:

1. Keeping track of all resources coming into and out of the Staging Area.
2. Updating the IC as to the level of resources in Staging.
3. Maintaining a minimum level of resources if one has been determined by the IC.
4. Responding to requests for personnel and equipment at the incident

If the incident is of a size or complexity such that the IC has appointed an Operations Chief, the Staging Area Manager no longer reports to the IC but works directly for the Operations Chief.

THE INCIDENT COMMANDER'S ROLE

When things are going badly and the flames are getting higher and the building smaller, a question that often comes up is "Who the hell is in charge here?" Too often the answer either is no one or multiple choice. Every incident requires that someone be in command to manage and provide for safe and effective operations. Something we all need to remember--if one of us does not assume command--the incident will.

The IC's role is to establish the strategy and tactics needed to control the incident and implement and manage the action plan that will allow the available resources to be successful. The IC has the ultimate responsibility for success or failure and for protecting the safety of the personnel.

As an incentive to delegating responsibility to maintain span of control, whatever responsibilities the IC does not delegate, the IC retains. Without delegating responsibilities and creating subordinate positions, the IC can quickly exceed an effective span of control.

The CO's Responsibility as Initial IC

In the previous modules the emphasis has been on developing and implementing an action plan. The importance of the first-in CO's responsibility to make good decisions upon arrival and with the initial assignments also has been stressed. A review of those responsibilities as the initial IC include:

1. Do a thorough size-up.
2. Identify strategy and select tactics.
3. Develop initial action plan
4. Implement the action plan.
5. Coordinate incident resources.
6. Modify the action plan as necessary.
7. Call for additional resources if needed.
8. Maintain Command until it can be passed or transferred.
9. Be prepared to fill a subordinate position with the incident organization.

DIVISIONS AND GROUPS

Most incidents fire departments respond to can be handled by the assignments given to the initial responding units. A typical room and contents fire in a single-family residence could well be organized in the following manner:

This organization allows the IC to maintain span of control and effectively deal with incident management.

Problems arise when the number of companies involved in the tactical operations exceed the IC's span of control. In an expanding emergency the IC can become overloaded:

The IC's span of control is stretched to the limit and needs to create subordinate positions to get back to a manageable level.

Creating Divisions and Groups

The first-line position created by the IC is most often that of a Division and/or Group.

Divisions: An organizational level responsible for operations in a specified geographical area.

Example: A Division may be responsible for operations on a specified floor of a building or a specified side or area of a structure.

Groups: An organizational level responsible for a specified functional assignment.

Example: A Group may be responsible for search and rescue or for ventilating in the entire structure.

Combining resources into Divisions or Groups allows the IC to reduce the number of individuals to be supervised and communicated with.

C Exceeding Manageable Span of Control

Creating Divisions and Groups

IC Back to a Manageable Span of Control

Relationship Between Divisions and Groups

In the ICS organization Divisions and Groups function at the same organizational level. Divisions do not work for Groups and Groups do not work for Divisions.

Since Groups are responsible for a specified functional assignment in the entire structure, such as ventilation, their responsibilities may cross Divisional boundaries. When this occurs, the Division and Group Supervisors need to coordinate their efforts to assure they are not working at cross purposes and firefighter safety is being protected.

As Divisions are responsible for all tactical operations in their designated areas not assigned to a group, the Division Supervisor must be aware that if search and rescue needs to be accomplished, they are responsible for seeing it is performed.

Managing Divisions and Groups

Division and Group Supervisors are the ICS titles assigned to those who manage this key level of the organization. Division and Group Supervisors report directly to the IC unless the incident is of such a scale that an Operations Chief has been appointed. They would then work for an report to the Operations Chief.

The importance of COs understanding the roles and responsibilities of Division and Group Supervisors cannot be overemphasized. Although the first-arriving officer may serve as the initial IC, there is a strong likelihood they could be reassigned to a Supervisor's role once Command has been passed or transferred. Those COs who are not first in may well be assigned to manage a

Division or Group upon their arrival. For ICS to work as a management system, COs must understand how important it is to the success of the tactical operations for the Divisions and Groups to be well coordinated and well managed. How well the COs understand and utilize the system will have a dramatic impact on the chances for success.

When creating a Division or Group there is some important information the IC needs to pass on to the individuals who are assigned the supervisory positions. Three critical pieces of information are:

1. What area(s) they are responsible for and the tactics or objectives they need to accomplish.

By giving them their areas of responsibility and their assigned objectives, the IC has set the boundaries that will aid in coordinating the incident activities, and the objectives will provide a job description the Supervisors will be expected to meet.

2. What resources they are being assigned to meet their objectives.

When given their resources, the Supervisors will know whom they are to communicate with and the level of resources they will have available to complete their assignments.

3. Their radio designation.

Make sure you know who you are talking to.

Responsibilities of Division and Group Supervisors

The first responsibility any supervisor in the ICS organization has is to ensure the safety of his/her assigned personnel. Division and Group Supervisors need to keep track of their assigned resources and know where they are and what they are doing at all times if they are to protect the firefighters under their supervision.

The Supervisors are responsible for implementing their assigned portion of the action plan. Doing so involves conducting an ongoing size-up of how effective the tactical operations are in meeting the assigned objectives and making the necessary adjustments if needed. Part of that size-up should include an evaluation of how long the personnel currently assigned can operate before needing relief. The Supervisor should anticipate this need so that personnel do not start dropping from exhaustion before relief is requested. The risk of death or injury to firefighters is increased dramatically if they are worked beyond their capabilities.

Communications between the IC (or Operations Chief if one has been assigned) needs to be ongoing. The IC needs to receive periodic updates as to how effectively the action plan is working and whether the assigned objectives are being met. Without this information the IC may be operating in an information vacuum and at a loss as to knowing whether the action plan is working or if it needs to be modified. The Supervisor should advise the IC if additional resources

are required to meet the assigned objectives or whether resources can be released or reassigned. Division and Group Supervisors also need to communicate with each other to assure their tactical operations are being coordinated and firefighter safety protected.

SUMMARY

The incident Command System is a management system that uses proven management principles. It has been proven effective by agencies and jurisdictions across the country as a system that can be used by all responders to any type of emergency. It provides the "tools" an IC needs to be an effective manager and to protect personnel safety. Not only is ICS an emergency management system to be used at a major incident, but also one that is suitable for "everyday" use, which makes it even more valuable when you have "the big one."

The key to any system is how well those who are expected to use it understand it and how they can best employ it to their advantage. For ICS to be effective in your department and in your jurisdiction, you as the CO or prospective CO need to know how you can fulfill your responsibilities as a key player in the ICS organization.

COMBINING TACTICAL RESOURCES

Tactical resources can be organized for specific missions and to reduce span-of-control situations in several ways. Resources can be deployed as Single Resources, Task Forces, or Strike Teams. We address each one of the staffing concepts individually.

Single Resources

Engine Companies, Truck (sometimes called Ladder) Companies, Rescue Squads and numerous other types of specialized companies with an apparatus are Single Resources. Crews (a specific number of personnel, without apparatus, assembled for an assignment, and having a Crew Leader) are usually deployed as Single Resources and report directly to an appropriate supervisory level. This is the most common mode of resource management and it is the one that most departments use in normal activities. The number of personnel in a Crew should not exceed recommended span-of-control guidelines.

Task Force

A Task Force is any combination of Single Resources put together for a temporary assignment. Task Forces can be used at all types of incidents. Examples of two types of Task Forces would be two (2) Engine Companies and two (2) Truck Companies. Another example would be two (2) Engine Companies and two (2) Water Tenders. The number of individual resources in a Task

Force should not exceed five (5). A Task Force operates under the direction of a Task Force Leader. The advantage is that a Task Force solves span-of-control problems and allows common communications among resource elements.

Strike Teams

A Strike Team is comprised of a set number of resources of the same kind and type. One of the most common types of Strike Teams is comprised of the following:

- 5 Engine Companies
- 1250-GMP pumps
- 400-gallon Water Tanks.
- Staffing level of three.

The most commonly used Strike Teams are comprised of Engine Companies. This type of resource is frequently used at wild land fires, although it could also be used effectively at structural fires. A good example would be a large structure with extensive fire. Strike Teams could be formed and deployed under Divisions on various sides of the fire. A Division with a large area to control (structure 1,000 feet wide) could use three or four Strike Teams, which could be 20 Engine Companies. The span of control would be four. Strike Teams operate under direct supervision of a Strike Team Leader.

Task Forces and Strike Teams may be used to reduce span-of-control problems at any supervisory level, but are commonly used at the Division and Group level. A good example would be an incident with a severe exposure problem. Task Forces or Strike Teams could be organized and the Exposure Division Supervisor could have 25 companies under his or her command with a span of control of 5.