

Commanding the Expanding Incident



Fire Officer 3C - Student Supplement
Version 1.0 - 2025

Commanding the Expanding Incident

Release Date

April, 2025

Photography Acknowledgment

To the best of the author's knowledge, the images that appear in this document were shared with them or are available through a public platform. They are included in this publication to engage readers and support student learning. The author is grateful for the ability of these images to enhance the materials.

Terminology

For this publication:

- The term Incident Commander (IC) refers to the role being fulfilled on an incident.
- The term Fire Officer 2 refers to anyone who operates in a Company Officer, Fire Captain, Fire Officer, or similar level position.
- The term Fire Officer 3 refers to anyone who operates in a Battalion Chief; Chief Fire Officer; Chief Officer; Division, Deputy, or Assistant Chief; Duty Chief; Shift Commander; or similar level position.

Table of Contents

THE COMMAND CHALLENGE.....	3
1: COMMAND CONCEPTS	6
2: RESPONSE-ABILITIES.....	21
3: INITIATING, ASSUMING, AND TRANSFERRING INITIAL COMMAND.....	27
4: SITUATIONAL AWARENESS.....	36
5: RISK MANAGEMENT AND DECISION-MAKING	47
6: COMMUNICATIONS.....	62
7: INCIDENT PLANNING AND ORGANIZATION	68
8: DEVELOP THE INCIDENT ORGANIZATION.....	80
9: DEPLOY	83
10: NOTE THE CHANGES	97
11: TRANSITIONING, TRANSFERRING, OR TERMINATING COMMAND.....	99
AFTERWARD	102
REFERENCES, ACKNOWLEDGEMENTS, AND CREDITS	103
ACRONYMS	104
APPENDIX A	107

The Command Challenge



Commanding an expanding incident in an uncontrolled environment, amidst inherent chaos and disruption is one of the greatest challenges a Fire Officer 3 may face in their career. The points of overwhelm are numerous: units on the radio requesting assignments, civilians experiencing one of the worst days of their lives, news media in your face wanting an exclusive interview, superiors trying to reach you for information and updates...not to mention what the actual incident may be doing—burning, spreading, collapsing, expanding, and causing more harm. How do we, as an Incident Commander (IC), manage ourselves, the incident, the resources, and the crews assigned to us *and* ensure public safety, while working to control the damage all at the same time?

How do we morph a chaotic scene into an organized, functioning, field worksite to save lives, stabilize the incident, and protect property and the environment?

This is the crux of what follows; after obtaining an understanding of underlying principles, we'll apply a systems-based approach that combines traditional, time-tested methods with the latest fire service best practices to achieve calm where previously chaos has ruled.



What are the features of an expanding incident, and what sets it apart from the other incidents that are routinely handled without much trouble? In this text, the terms *expanding*, *escalating*, and *extended* are used somewhat interchangeably, but they all signify an incident with characteristics of increasing complexity. Beyond routine emergencies, expanding incidents are actively getting worse, may last a while, and may require extensive resources. Knowing which incident dynamics are in play is a critical factor in determining how you, as the IC, approach the situation.

Expanding incident operational leadership characteristics are succinctly summed up in the National Wildfire Coordinating Group (NWCG) S-300 Extended Attack Incident Commander course objective:

“Demonstrate effective command and control over a quickly assembled team in a time constrained and rapidly changing incident environment while simultaneously conducting planning efforts for the next operational period.”¹

The requirements for commanding active incident operations are challenging: the IC, under extreme pressure, often with little information, must make decisions and deploy units with either a lack or an abundance of resources that must be quickly organized, deployed, and supervised towards a common objective. We do this until we reach three possible end-states:

we control the incident, transfer command to someone else, or transition the incident to an Incident Management Team (IMT). Even if the incident starts as a Type 1 incident, you will need to bridge command until an IMT arrives and takes over.



This text introduces and develops a requisite knowledge base and provides systems and techniques but is not an effective replacement for skills honed by extensive practice and experience.

**“Good judgment is the
result of experience...and
experience the result of
bad judgment.”**

Mark Twain

Relationship to Failure

No amount of knowledge gained from a book can replicate or replace the practice of trying, testing, and modifying learned techniques. This comes through learning, practicing, and *making mistakes* then correcting as you go.

¹ NWCG S-300, Mission-Centered Solutions, 2007.

The fire service has a poor relationship with mistakes, but mistakes are a natural and appropriate part of learning. Failure isn't the absence of mistakes; failure is not trying in the first place or making the same mistake repeatedly. That's why both doctors and lawyers call it a "practice." But perhaps musicians define it best: they *play* when they practice.



It's these points of overwhelm coupled with Dr. Morris Massey's (1976)² condition of a "significant emotional event" that create the most sudden, profound change and lasting impact on our lives. It isn't easy to grow oneself, to continually challenge one's personal status quo. Yet that is our calling as good Fire Officers.

Being the person in charge of a dynamic, rapidly expanding incident is the faint of heart, the woefully inexperienced, or the unprepared.

**"Most learning occurs through
trauma."**

**Chief Dan Turner
CAL FIRE**

Ouch! Welcome to the expanding incident...are you up for the command challenge?

² Dr. Morris Massey "Who You are is Where You Were When," (1976).

1: Command Concepts

Definition of Duty

Fire Officer 3 job performance requirements are based on National Fire Protection Association (NFPA) professional qualification standards. NFPA standards 1021 and 1140, along with NWCG S-300 Extended Attack Incident Commander course objectives, are the core material that form this course. California-specific expectations for incident commanders are also included. The goal of this course is to introduce and familiarize fire service chief officers with core concepts and skills to manage expanding all-risk incidents.



This includes managing multiagency incident planning, deployment, and operations; developing policies, procedures, and programs to integrate with community emergency management plans; identifying the roles of various local, state, and national agencies; identifying authority and responsibility for implementing interagency agreements; and being able to employ the Incident Command System (ICS) to manage an expanding emergency of moderate complexity until it is either mitigated and handed over to an IMT.

Attitude, Skills, and Knowledge (ASK)

What ASK components does a competent IC possess? There are many, but a good IC never stops “ASKing”—learning, changing, growing, practicing, and perfecting their craft. An IC must be a master at gathering Situational Awareness (SA), have a deep and thorough understanding of ICS, and be able to use it creatively, on the fly, but keep its basic principles intact. Like a rubber band, ICS should be able to flex and bend without breaking.

A solid-performing IC must also master leadership traits that are conducive to maintain composure in stressful, high-tempo environments under arduous conditions. We should be capable organizers in the allocation, deployment, and production capabilities of various emergency resources. ICs must also be able to understand, apply, and adapt the incident planning process, principles of engagement, appropriate strategies and tactics, and risk management measures to be safe and effective. We must be well-versed in anticipating problems and issues; those that have been identified and the

unknowns that inevitably arise during an expanding incident. We must also be prepared with local knowledge and have developed positive relationships within our agencies, with those agencies we may work with, and with the public that we serve. These characteristics—coupled with our training, experience and qualifications—form the basis and foundation of our *ability to respond* prior to assuming the position of IC.

Four Command Competencies

An IC position task book (PTB)³ is organized into three tiers or levels. The first, highest level contains four major command competencies. Within each of these competencies, a second level consists of behaviors to meet, followed by individual task to perform. Through task performance, behaviors are met, and by demonstrating behaviors, the four competencies are practiced.

1. Assume position responsibilities
 - a. Ensure readiness for assignment
 - b. Ensure availability, qualifications, and capabilities of resources to complete assignment
 - c. Gather, update, and apply situational information relevant to the assignment
 - d. Establish effective relationships with relevant personnel
 - e. Establish organization structure, reporting procedures, and chain of command of assigned resources
 - f. Understand and comply with ICS concepts and principles
2. Lead assigned personnel
 - a. Model leadership principles of duty, respect, and integrity
 - b. Ensure the safety, welfare, and accountability of assigned personnel
 - c. Establish work assignments and performance expectations, monitor performance, and provide feedback
 - d. Emphasize teamwork
 - e. Coordinate interdependent activities

3 NWCG ICT3 Position Task Book, PMS311-02, 2009.

3. Communicate effectively

- a. Ensure all relevant information is exchanged during check-in, briefings, and debriefings
- b. Ensure documentation is complete and disposition is appropriate
- c. Gather, produce, and distribute information as required by established guidelines and ensure understanding by recipient
- d. Communicate and assure understanding of work expectations within the chain of command and across functional areas
- e. Develop and implement plans and gain concurrence of affected agencies and the public

Ensure completion of assigned actions to meet identified objectives

- f. Administer and/or apply agency policy, contracts, and agreements
- g. Gather, analyze, and validate information pertinent to the incident or event and make recommendations for setting priorities
- h. Prepare clear and concise assessments regarding hazards, fire behavior, weather, and other relevant events
- i. Make appropriate decisions based on analysis of gathered information
- j. Take appropriate action based on assessed risks
- k. Modify approach based on evaluation of incident situation
- l. Anticipate, recognize, and mitigate unsafe situations
- m. Ensure operations consider socioeconomic, political, and cultural aspects
- n. Plan for demobilization and ensure demobilization procedures are followed
- o. Transfer position duties while ensuring continuity of authority and knowledge and accounting for increasing or decreasing incident complexity



The competencies, behaviors, and tasks are not listed sequentially. An IC may need to consistently apply these competencies throughout the incident and behaviors and tasks may occur in different orders depending on incident requirements. It's important to realize that while the PTB tasks may generally follow the flow of an incident, the

competencies may be applied in an ongoing fashion or out of the printed order of the PTB.

Operational Leadership

The greatest single factor that determines the outcome of an expanding incident is confident and competent leadership. This means providing purpose, direction, and motivation to accomplish difficult tasks under dangerous, stressful conditions. In confusing and uncertain situations, good leaders will:

- Take charge
- Assess the situation
- Motivate others with “can do safely”
- Empower others to initiate taking appropriate action in the absence of orders
- Communicate specific instructions and ask for feedback
- Supervise at the scene of action⁴

Your Reputation Arrives Before You Do

We’ve all experienced the effects of poor leadership at one time or another; the groans when certain chief or company officers come up on the radio. We may have also experienced the sigh of relief from knowing a competent leader was on the way. Either way, your reputation gets there long before *you* arrive. As you read further, consider the following questions:

- What qualities and characteristics of leadership are most important?
- What are the traits and behaviors in the best leaders that inspire and cause others to not only follow, but desire to emulate?
- If you are not that leader, what are you doing about it? What daily steps can you take in the steady, ongoing practice of becoming the best leader you can to be?

Critical Team Skills

⁴ 2018 *Incident Response Pocket Guide*, Operational Leadership, p. iv.

The United States Coast Guard (USCG)⁵ has identified several critical team skills that can be employed to reduce the probability for human error. The first five are discussed in this chapter.

1. **Operational Leadership:** Directing and guiding the activities of other team members, stimulating personnel to work together as a team, and providing feedback to team members regarding their performance.
2. **Situational Awareness:** Always knowing what is happening on the incident, with personnel, and the ICS organization.
3. **Decision Making:** Applying logical and sound judgment based on the information available.
4. **Communication:** Clearly and accurately sending and acknowledging information, instructions, and commands; and providing useful feedback.
5. **Assertiveness:** Actively participating, stating, and maintaining a position until convinced by the facts (not the authority or personality of another) that your position is wrong.
6. **Incident Engagement:** Incident action planning and organizing; deploying staff and resources; directing and controlling incident activities; evaluating changes and adjusting efforts.
7. **Adaptability and Flexibility:** Altering a course of action to meet changing demands, maintaining constructive behavior under pressure, and working effectively with other team members.

The Art of Delegation

Delegation is getting work done through others, by entrusting a balance of authority and responsibility to initiate actions independently and assume responsibility for certain tasks. Staff is delegated responsibility to make decisions without referring to the IC, who maintains ultimate responsibility. Therefore, it's paramount that an IC delegates in a way that things get done safely.

Delegation accountability is achieved through motivation (the IC sets tone for entire incident), organization (only the IC should assign Command and General Staff positions), praise and reprimand (praise in public, reprimand in private) and addressing errors (by focusing on the problem).

⁵ USCG Incident Management Handbook, (2014).

⁶ NWCG S-300 Instructor Guide.

When addressing errors, review the cause and coach the subordinate when time allows by ensuring they understand the problem, provide input, and are allowed to fix the problem, ensuring they feel confident enough to resume work while taking steps to prevent recurrence.

Command and control delegation begins with Commander's Intent. Establish controls (methods to ensure the IC is informed of a breakdown in operations in time to correct it and still meet incident objectives).

Communication and information access impacts delegation:

- Subordinates need full and rapid access to the relevant information.
- Communicate information received from outside sources down to subordinates.
- Ensure horizontal communication for key information between all staff to achieve common operating picture.
- Confident leaders encourage open communication:
 - Listen to diverse points of view
 - Encourage respectful challenge of decisions
 - Provide additional criteria
 - Encouraging respectful conflict leads to better decisions
 - Restricting information increases ineffective leadership

How to Delegate

The IC must first determine what to delegate and what not to delegate. Considerations should include how well the IC knows the team members and their skill sets.

Things an IC could delegate include:

- Tasks not associated with IC position
- Things others do better
- Areas with subject matter expertise they don't have

"Never tell people how to do things. Tell them what to do and they'll surprise you with their ingenuity."

General George S. Patton

- Decisions that can be made at a lower level

What not to delegate:

- Overall incident objectives
- Clear intent and instruction to staff
- Prioritization of competing objectives (choosing which objectives and tasks take priority over others)
- Judgments about acceptable risk (i.e., evacuation, structure protection, perimeter control)

Next, identify requirements for effective delegation and make sure subordinates have clear direction and intent for task, including:

- Understanding objectives and guidance parameters
- Having the authority to achieve task (command climate, effectively delegated the task)
- Using talents and skills to best advantage
- Understanding the end state
- Knowing how to carry out task
- Determining how to carry out task

Levels of Decision Making and Delegation	
IC decides and informs the team	• Team plays no active role in decision making • Practically no delegated authority • May be necessary due to emergency situations or time constraints
IC decides and “sells” decision to team	• Does not motivate or tap team talents but provides more understanding of IC’s motivations • Can build team cohesion if team agrees with IC • Can be a barrier if team disagrees with IC rationale
IC presents decision with background ideas and invites questions	• Higher level of team involvement and discussion • Enables team to understand and accept or agree with decision more easily • Enables team to appreciate issues and reasons for decision
IC suggests provisional decision and invites discussion	• Enables team to influence IC’s final decision • Acknowledges team has something to contribute to decision-making process
IC presents situation or problem, seeks feedback, then decides	• High involvement and high influence for team • Team is encouraged and expected to offer ideas and additional options • Team discusses implications of each course of action
IC explains situation, defines parameters, and asks team to decide	• IC effectively delegates responsibility to team within stated limits • IC can manage risk and outcomes according to the constraints they stipulate • Requires a mature team because IC remains accountable for any resulting issues
IC allows team to identify problem, develop options, and decide on action within AHJ’s defined policy/constraints	• Team effectively doing what IC does in lowest delegation level • Team is delegated responsibility for: ○ Identifying and analyzing situation or problem ○ Defining process for resolving situation or problem ○ Developing and evaluating options ○ Evaluating implications ○ Deciding on and implementing a course of action • IC retains accountability for any resulting disasters, while team must get credit for all successes • Team must be mature and competent, and capable of strategic decision-making • IC delegates all authority but retains all responsibility

By now, you've initiated an understanding of the challenges ICs face with the responsibility to command an expanding incident, and the ASK's components and competencies ICs need to model and practice. We've also touched on operational leadership, including critical team skills and the art of delegating. Hopefully you've gained an understanding of the framework and context an IC needs to bring to an all-risk incident. But what about the incidents themselves—what are the characteristics of individual incidents, including their dynamics and complexity levels? How do we take who we are and interface into what's happened?

Incident Dynamics

Most incidents can be described as either static or dynamic.

A static incident is something like a traffic accident. Something bad happened, but it's already happened and is probably not getting worse. While individuals with injuries are anything but static and leaking gasoline and oncoming traffic have the potential to negatively impact the scene, for the most part, the incident won't significantly change after the initial event.



A dynamic incident, by comparison, is growing and still unfolding. A structure fire that grows exponentially, doubling in size every minute, is a dynamic incident. Other dynamic incidents may include active shooter scenarios, an active hazardous materials (hazmat) leak, or a wildfire.

Task Choreography

When responders first arrive, a simultaneous choreography usually unfolds as numerous crew members engage in accomplishing multiple tasks all at the same time. Take a three-story apartment fire; water supply is being established with sprinkler and standpipe systems charged as utilities are secured and forcible entry is made while hose lines are stretched. At the same moment, interior searches are conducted as ladders are placed and ventilation is coordinated with fire attack. On a working

wildland/urban interface (WUI) fire, responders simultaneously engage in perimeter control, structure defense, and civilian evacuations.

This contrasts with a linear or sequential choreography, where one task must be completed before another can be initiated. For example, on a hazmat incident the crew must identify the product and complete a safety plan before making entry and taking control measures.

Operational Tempo

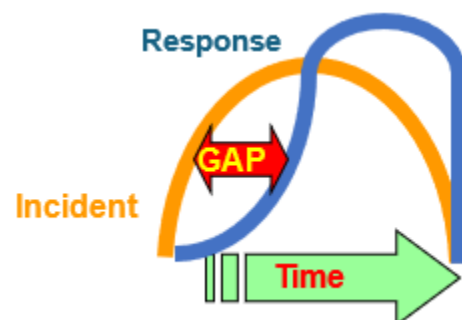
Operational tempo refers to the incident's pace or battle rhythm. The pace is often dictated by the values at risk and the amount of discretionary time, especially in the early stages of an incident. But as the incident builds and expands, a pulsing rhythm develops, often in synch with the arrival of alarms or responding resources. There is often a marked ebb and flow to the incident's pace.

Theater of Operations and Command Climate

The theater of operations refers to the totality of the environment that we must operate within and how we inhabit that environment, including all external factors. Command climate encompasses our command tone within the chaos of the external environment—the “feel” responders bring to incident—and our temperament; whether we respond or react, how we communicate with others, and how approachable we are. Overall, it's up to the IC to set a tone of collective calm.

The Command Gap

The command gap refers to the difference between the incident as it expands and the response to that incident. It can be caused by the incident itself outpacing the response efforts; having enough resources without having sufficient overhead personnel to deploy, supervise, and manage those resources; or the incident expanding faster than we can build an effective organization to adequately manage the emergency.



In most cases, incident response will initially lag behind the incident, but as more resources arrive and the ICS organization is built, the incident is eventually declared “controlled.” You might also experience a tortoise-and-the hare scenario, where the response eventually outpaces the growing incident.

A command gap can result in dangerous situations for first responders as the incident transitions from an initial response to an extended or expanded response. If those in command can’t keep up, or remain stuck in the initial response mode, it can create chaos and confusion. It’s imperative that all responders act within the commander’s intent but take appropriate initiative in the absence of orders⁶ to ensure effectiveness and safety.

Incident Complexity

A greater alarm/extended attack incident is usually classified as a Type 3 incident, which often grows faster than resources can be deployed to control it. It often has high values at risk and may also provide little discretionary time. The initial response capabilities have been exceeded, and there’s a high potential for more damage and injuries. The incident has not been mitigated by the initial responders, and a substantial augmentation of resources is required. Type 3, 4, and 5 incidents comprise about 95% of total incidents.

This text primarily focuses on Type 3 incidents for several reasons:

- Type 4 and 5 incidents are usually handled without much ado, and the consequences may be significant, but not severe.
- A competent Type 3 IC can handle a larger, more complex incident from beginning to end, or serve to bridge the gap between initial response and the arrival of an IMT on a major incident.

⁶ Incident Response Pocket Guide, NWCG, 2025, page v.

The first efforts at the scene set the stage for what follows. It's critical that initial Type 4 and 5 ICs and subsequent Type 3 ICs recognize and prepare for a larger incident organization in the early stages of an expanding emergency to get things calmly organized.

This sets the stage for an orderly and efficient transfer of command or for the smooth transition to a higher complexity incident. In both cases the Type 3 IC should be capable of handling and organizing the incident itself. But it is crucial

that this IC is also able to plan far enough ahead to allow for an orderly transition to either a new operational period with additional resources, and/or to an IMT, if necessary.



Incident Complexity Chart

General Features	Positions Activated	Resources	Examples
Type 5 Incident			
- Short duration - Minimal staffing required - No formal planning process or written incident action plan (IAP)	- IC (may be a Company Officer/Fire Officer 2) - Single resource leaders	1-5	- Medical aid - Vehicle accident - One-alarm fire - Small wildland fire
Type 4 Incident			
- Usually controlled in single operational period - Modest staffing needed - No formal planning/IAP - Limited logistical support	- IC (usually a Battalion Chief) - Limited Command or General Staff	6+	- More complex rescue - Multi-vehicle accident - Simple hazmat - Two-alarm fire - Modest vegetation fire
Type 3 Incident			
- Multiple operational periods - Numerous kinds/types of resources needed - Informal planning process and some written IAP elements (as needed) - Modest logistical support - Incident command post (ICP) and small incident base (as needed) - Population/infrastructure at risk - Interdepartmental/interagency coordination usually necessary - Interaction with elected officials/media - May need to transition to higher complexity and a formal IMT	- IC (Battalion or Division Chief) - Command Staff - General Staff - Operational Branches, Divisions and/or Groups - May include partial or full activation of a local Type 3 IMT	200+ total personnel	- High rise response - Major accident/multi-casualty incident - Complex hazmat - Passenger aircraft emergency - Train derailment 3-5 alarm fire - WUI fire - Localized natural emergency
Type 2 Incident			
All characteristics of a Type 3 incident, but: Multiple mutual aid units needed	Formal delegation of Authority, Local Agency Administrator,	Large ICS organization 500+ total personnel	- Larger wildland fire - Limited/localized disaster or

General Features	Positions Activated	Resources	Examples
- Major logistical support required - Formal planning process and written IAP - Formal incident base established	- and Local Line Officer - IC, Command, and General Staff are members of a Type 2 IMT - Local agency chief officer may become the Deputy IC		- portion of a larger disaster - Widespread emergency over a limited area
Type 1 Incident/Complex Incident Management (CIM)			
All characteristics of a Type 2 incident, but: - Longer lasting - Larger or more complex - Aviation operations with several types and numbers of aircraft involved - Statewide or national media attention	All Command and General staff are qualified Type 1 IMT members	500+ personnel per operational period 1,000 + total personnel	- Widespread disaster over a large area - Major wildland fire - Large civil disturbance - Many localized incidents with Area Command in place

A Type 3 incident is probably the most complex for the uninitiated in terms of what needs to happen in a limited amount of time to either mitigate or transition to an incoming IMT. If you have access to a qualified local Type 3 IMT that can be quickly assembled, you're in the lucky minority. But you're still not off the hook; they need to be requested, deployed, briefed, and supported. But most may not get a formal IMT for a Type 3 incident. Even with a Type 3 IMT, local first responders remain heavily engaged on an expanding incident to either mitigate the emergency or to transition it to a formal Type 1 or 2 IMT. And if you don't have a Type 3 IMT close by, it's all going to be all on you to mitigate this mess with professional composure.

Type 1 and 2 incidents call for experienced and qualified IMTs and the job of the local authority is to manage and support those efforts. When a Type 1 or 2 IMT arrives, it's crucial that much of the footwork to ensure an orderly transition is already accomplished prior to their arrival.

This is the responsibility of Type 3 IC. Luckily for an incoming IMT, they can

negotiate when they'll assume management of the incident. In the meantime, the typical Type 3 IC doesn't have much of a ramp-up period, the luxury of a pre-formed team, or the ability to negotiate when they'll assume command.



Summary

Research for WUI fires show that most incident damage occurs within six hours, while the average mobilization time for a Type 1 team is 6-18 hours⁷. Either way, an IC must stay engaged on all fronts to represent the interests of their jurisdiction.

"Experts suggest that ICs continue to run an incident as if they planned to fight it to the end, ensuring no reduction in the quality of effort toward fire control."

**Chief Michael Rohde
Orange County Fire Authority**

⁷ Michael Rohde, Command Decisions During Catastrophic Urban Interface Wildfire, p. 223 (CSU Long Beach, 2003).

2: Response-Abilities

Whether you are in the first agency pickup truck to stumble across the scene, the first engine or truck company officer to initiate command, the duty battalion chief, or in charge of a large division of battalions, as the IC, you only get so long to blame externals before you must take responsibility for how the incident unfolds.



To paraphrase the ancient Chinese philosopher-warrior, Sun Tsu: If we don't have confidence in our success when we first roll out of the station on an expanding incident, we're already at a disadvantage.⁸

Part of achieving that confidence in battling the big dragons is the preparation you've already accomplished prior to response. Your knowledge, mental mindset, pre-planning, equipment gathering, and consistent and persistent practice in the art of commanding an expanding incident will set you on the path to success before that call to respond even occurs. All of this is part of the groundwork that must be in place before you assume the position responsibilities of a Type 3 IC.

As an IC, you have a sacred duty to develop your craft into an art through your ability to respond—not just to the incident itself, but to respond to changes within that incident as it develops, to the needs of responders and the public. It's literally your “response ability” to provide leadership under arduous conditions and circumstances, that determines the outcome of an incident.

Integrating Fire Service Resources

Community Emergency Plans

The integrated emergency management system contains national, state, and local elements. National elements include presidential authority, the National Incident Management System (NIMS), ICS components, and Emergency Support Functions (ESF). State law requires a Standardized Emergency Management System (SEMS),

⁸ The Art of War, Sun Tsu, 5th Century BCE.

maintains the State Emergency Plan (SEP), and the role of the California Office of Emergency Services (Cal OES).

Counties and cities develop and maintain a Local Emergency Operations Plan (EOP) or Local Emergency Management Plan (LEMP) along with the Local Hazard Mitigation Plan (LHMP) and the General Plan (Hazard Element).

National, state, and local emergency management agencies can include:

- Federal Emergency Management Agency (FEMA)
- Cal OES
- Operational Area Coordinators (fire)
- Local Emergency Operations Center (EOC) coordinators (e.g., law, medical health)

Emergency Management agency functions include:

- Mitigation and community risk reduction
- Preparedness, training, and planning
- Response, including mutual aid, interagency coordination, and cooperative agreements, FEMA ESF, and coordination between the EOC and ICP
- Recovery, rebuilding, and resilience

ICs should evaluate how the fire service (city or county fire agency versus fire district) interacts within the integrated emergency management system. This includes roles, responsibilities, and relationships with:

- EOCs and their preparedness and emergency management planning integration
- The emergency management interagency planning and coordination process
 - Systems and processes for ordering, tracking, and utilizing resources
 - Local, regional, state, and federal operational areas
- NIMS-compliant emergency resource directory (ERD) for fire and non-fire resources

ICs should be able to demonstrate familiarity with emergency management interagency planning and coordination and know how to effectively interact with this system.

Emergency Resource Directories

An IC should be able to develop or improve a plan to ensure the organization's mission is performed in times of extraordinary need. When it comes to fire service resources, you go through local, regional, state and federal channels using the mutual aid system to request them. But what happens if it's a flood and skip loaders and dump trucks are needed? How would you obtain resources that may not come from the fire service?

To do this, you must first identify local hazards and events that may require outside resources and review your local EOP LEMP and local operational agreements. Part of the planning process is to conduct a needs assessment, including what resource types are on hand and what may be available locally and regionally. Then, evaluate the capability and availability of external resources and how you would obtain them.

ERDs are lists of specific resources that are either uncommon or need to be obtained outside of normal mutual aid channels. During a flood incident, skip loaders and dump trucks may be more appropriate than water tenders or fire trucks. Usually, these resources are found in fire agencies and these requests would normally flow from the command post to the local EOC, if activated. Having a pre-established list with several 24-hour contacts is crucial to obtaining these non-fire resources quickly, especially after-hours or on holiday weekends.

Another factor in maintaining a robust and up-to-date ERD is using private vendors when agency resources have been drawn thin. Having vendor contacts, contracts, and agreements in place beforehand ensures a timely response when an incident is ramping up with no financial surprises when the incident winds down.

Knowing what agreements are in place or need to be drawn up prior to an incident, coupled with an ERD that allows those resources to be obtained quickly when needed, allows for incident managers to integrate these resources within a larger disaster context and within the ESF of the National Response Plan framework.

Mutual Aid Agreements

Jurisdictional Authority and Applying Agreements

Another important “response-ability” is to know your jurisdictional authority and those of the agencies your apt to respond with long before a significant incident unfolds.

Developing relationships and having a solid foundational knowledge of interagency agreements and jurisdictional boundaries leads to more efficient, effective, and timely incident management as soon as the incident escalates.

Questions to consider:

- What’s your jurisdictional authority and those of the agencies you frequently interact with?
- Where is there overlap? What are the differences?
- What are the differences between federal and state approaches to wildland fire suppression?
- What is the jurisdictional authority of a county environmental health agency versus a fire agency when it comes to hazmat regulation and mitigation?
- What about the role of a Local EMS Agency (LEMSA) versus a fire agency or the role of the California Highway Patrol (CHP) at a freeway incident?

As an IC, you should be able to determine the various mission and goals of different agencies and organizations. This includes different approaches to life safety, environmental, cultural, fiscal, and political priorities. Understanding your common ground as well as your differences can ensure cooperation and collaboration over competition and conflict at an incident.

Knowing the types and kinds of existing agreements is crucial to quickly applying them when the time is needed:

The difference between auto aid and mutual aid

- Master Mutual Aid verses assistance-by-hire
- State, regional, county, and local agreements
- Special need/use agreements



- Cost apportionment/cost sharing
- Fire Management Assistance Grants (FMAG)

It's also important to understand the political geography of your area including: first-due areas, direct protection area (DPA), and Local, State and Federal Responsibility Areas (LRA, SRA, and FRA, respectively). These concepts are covered further in the FIRESCOPE ICS-900 document.

Implementing jurisdictional authority means that agency representatives need to arrive with the authority to make decisions on behalf of their organization without having to confer with superiors (which could delay decision-making efforts), especially in unified command situations. This authority also extends to making financial and resource allocation decisions that may affect cost apportionment and/or cost sharing for the incident.

Assistive Technology

This is a broad category that encompasses fire behavior and weather forecasting models, Global Positioning Systems (GPS) mapping layers, satellite imagery, and infrared scanning tools. It may also include the first-due IC's phone or tablet if your agency uses an ICS formatted application. These technologies are constantly changing, can be immensely helpful, and have limitations such as limited connectivity in an outlying area. Do not become over reliant during routine incidents in a way that limits your capacity on a larger incident if they are unavailable. Another word of caution is that some personnel may be too focused on a screen and miss important personal observations that maintain their SA. Whatever technological tools are employed, the users should be thoroughly familiar with both their capabilities and their limitations.

Also consider technological suites of services such as fire, weather, and flood forecasting products issued from various agencies. The two geographical fire coordination centers in California (North or South Ops) offer fire predicative services, the National Oceanic and Atmospheric Administration (NOAA) issues regional and spot weather forecasts, and the California Department of Water Resources has river/flood cresting time and height information on its website. Regardless of the source, it's best to know before you go.

Command Kit

If you haven't begun one already, begin to assemble a "command kit." It could be permanently mounted in a vehicle assigned to you, or a portable file box that you put into your vehicle when you assume duty. Include reference materials, forms, and supply items that relate to your position.

For example:

- Incident-specific reference materials, such as radio frequencies, pertinent phone numbers, maps, photos, etc.
- Common ICS forms, the ICS Field Operations Guide (FOG), and Incident Response Pocket Guide (IRPG)
- Agency-issued or personal incident control/tactical worksheets for risk-specific hazards
- Visual magnifier for building plans, topo maps, or small-print manuals, etc.
- Dependable writing instruments, steno-type notepad, and other office supplies
- Hands-free flashlight with extra batteries, etc.

Summary – Being Response-Able

Ultimately, being response-able means being responsible for yourself and those assigned to you as an IC. It's the ability to cultivate the right attitude, skills, and knowledge to perform effectively. It encompasses the accepted responsibility to step into the leadership role on difficult incidents. It's managing yourself and others and is dependent on a requisite knowledge of incident dynamics, resource pre-planning, and the mutual aid system. You have a responsibility to be an active learner, hone your skills, and strive for excellence because when you're in charge of an expanding incident, "good" just isn't good enough. Too many people have too much at stake for you not to give your all to the art of incident command.

3: Initiating, Assuming, and Transferring Initial Command

The intent of initiating command is to communicate who's in charge and taking personal responsibility for the incident, for the safety of the people assigned to it, and for the public in harm's way. Whether you're a rural first-due officer or in charge of an urban division, you will be the one to guide the incident from the time you take charge until it's either successfully concluded or you've properly transitioned it to someone else.

The Eight Standard Functions of Command⁹

To be effective, good leaders practice the eight standard functions of command. These standards have been incorporated in one form or another into many emergency response organizations, including the Phoenix and Los Angeles City Fire Departments. These standards are more sequential than the PTB Command Competencies, but some still apply throughout an incident:



1. **Initiating Command:** The assumption, confirmation, and positioning of command.
2. **Noticing Conditions and Risk:** Understanding the situation, practicing ongoing SA, identifying hazards, assessing risk, and making sound decisions.
3. **Communications:** Establishing and maintaining positive communications with others on scene and with those supporting the incident.
4. **Incident Action Planning and Organizing:** Establishing incident objectives, strategies, and tactics with a focus on the preparation, dissemination, and execution of the plans. Building the organization through ICS.
5. **Determine Resource Needs:** Staffing with people and resources and providing direction to get the job done.

⁹ Fire Command, 2nd ed. By Alan V. Brunacini, 2002; and NFPA 1561 Standard on Emergency Services Incident Management, 2002.

6. **Establish Direction and Controls:** Selecting benchmarks, decision points, and ensuring timelines are in sync with tactical task completion to meet the incident objectives.
7. **Notice Changes and Adjust the IAP:** Noticing what conditions have, are, or will be changing and reviewing, re-evaluating, and revising the IAP to reflect the reality of the situation.
8. **Transition, Transfer, or Terminate Command:** Transitioning to a higher/more complex incident, and therefore to an IMT; transferring command to another (usually relief or a higher-ranking officer); or terminating the command function and demobilizing resources because the incident has successfully concluded.

Role of the Company Officer as Initial IC (ICT4)

Generally, the Company Officer/Fire Officer 2/Type 4 Initial IC's role in incident command is transient, more focused on what's happening now, and is more reactive to changes within the incident. This is partly due to the role conflict between having to manage the incident while also supervising crew members. Sometimes the initial IC lacks the discretionary time to multi-task effectively, especially if active rescues are needed or lives are at stake. This role is also determined by several other factors, including the arrival time of the first-due chief officer and the extent of the incident.

The primary focus of a first-due company officer is to observe what's happening, develop an initial incident assessment, and establish tactical priorities. Initial ICs should be able to plan at least 20 minutes ahead of what's currently happening.

Another critical factor is the ability of the initial IC to establish and maintain a positive command tone that sets the stage for the rest of the incident. This will help ensure a smooth transfer of command when the ICT3 arrives.

"If we've been on scene for more than 20 minutes and it's still chaos, it's OUR fault."

**Fire Captain Rich Hupp
CAL FIRE**

These are the three most critical tasks for an initial ICT4 to develop:

- Project a common operating picture
- Set a tone of collective calm

- Make short-term plan

Being able to communicate what's happening and formulate top priorities and an initial plan, while setting a professional tone is crucial to creating an accurate shared incident mental model for inbound responders. This is a skill that takes practice.

Role of the Chief Officer/ICT3

In contrast to the Initial ICT4, the first-due chief officer/ICT3 has a different focus, scope, and perspective. For expanding incidents, a chief officer not only considers what's happening now, but also forecasts what is likely to happen. Their mindset needs to be far enough ahead of the incident to engage in proactive measures. They must also consider the incident's internal and external impacts on responders, the public, resource availability, infrastructure, politics, and surrounding agencies. ICT3's must have a 20,000-foot view and maintain their planning efforts well ahead of what's currently happening. This role continues to change and evolve far ahead of the incident.



The necessary work to catch up with, and get ahead of, an expanding incident can take hours or even days. But what you do in the first 20 minutes, including the initiation of effective and strong command, is crucial. Your command bearing, operational leadership, and decisions will have lasting impacts for the rest of the incident and for those assigned to it. The incoming Type 3 IC is not only focused on what's happening now, but forecasts where the incident will be in two hours or even two days ahead and plans for it accordingly.

Transitioning From Initial Response to Extended Command

Once initiated, command may be transferred or assumed by others, including UICs. If you arrive at the scene and someone else has already initiated command, consider the following:

- Don't be in a hurry to assume command from a competent initial IC. Take time to understand the situation, assess potential, and forecast what may happen before you formally transition to assume command.
- Provide the opportunity for a face-to-face transition briefing if possible. (If an ICS-201 hasn't been started yet, now is the time to start one.)
- Find out what the initial IC's plan is, how much progress is being made, and assess if there is an immediate need to modify or change that initial plan.
- Get a complete rundown of resources and reconcile them into four categories:
 - On scene and assigned, where they are located, and what they're doing
 - On scene and available, location of staging area(s)
 - Resources ordered and enroute with identifiers and approximate ETAs
 - Pending or planned resource orders
- Discuss with the outgoing Initial ICT4 what role would be best for them. Depending on what is happening, you may need them as an operational line resource or as initial ICS staff. If it's a Fire Officer 2, consider whether it's more advantageous to return them to their crew. This should be predicated on whether that crew can make a decisive difference on the incident. If not, consider utilizing the entire crew for initial ICS positions like Operations, Staging Area Manager, resource tracking, command post radio operator and/or scribe.
- Communicate the change of command broadly after determining when you will assume the ICT3 role.

If the incident cannot be controlled by initial resources, transition from initial tactical operations to an expanded/extended mindset and withdraw from direct tactical supervision. Begin incident documentation (e.g., ICS Form 201) including:

- Incident sketch
- Incident status and strategy, tactics, and current actions
- Fire organization
- All resources: on scene assignment or availability, enroute, and ordered

Consistently inform designated officer, dispatch, incoming IC, or other higher-level officers of:

- Incident status
- Progress of on-scene resources
- Additional resource needed

- Weather conditions, especially changes
- Special situations (i.e., values threatened)

Ultimately, as an ICT3 you need to be able to complete the following functions during the first hour of an expanding incident:

- Establish incident check-in point(s) to receive, brief, and assign incoming resources using check-in recorders or staging area managers.
- Establish up to six Branches, Divisions and/or Groups.
- Develop Incident Objectives and communicate Commander's Intent.
- Create an incident projection map.
- Establish Sitstat, Restat, and initial Logistics functions.
- Identify and address PACE (Primary, Alternate, Contingency and Emergency) plans, safety issues, and risk management.

Incident Command Post Considerations

Initially, the command post location should be readily visible and accessible for first-arriving resources. As the incident progresses, the IC should become more removed from the heat of battle. If you're an IC arriving later in the incident, you may have more latitude in choosing a command post location that's further from the action in a more appropriate location. In determining a proper location to set up your ICP, consider incident potential, security, media access, and the need for infrastructure like shelter from weather, meeting space, communications/internet connectivity, and restrooms.

Command Barriers

There are barriers to effective command, just as there are barriers to SA. Political pressures, media attention, or high-risk operations can increase stress on the IC. Stress on the IC also increases while trying to make decisions with incomplete or inadequate information, or under rapidly changing conditions. Other barriers to effective operational leadership include organizational issues such as ambiguous objectives or unclear intent, poor strategy or tactics, and breakdowns in coordination between ICS elements. In short, you may assume command of, or inherit, an off-rail incident that you need to get back on track.

Operational Tempo

Sometimes called “battle rhythm,” operational tempo is the pace of the incident. How much control do you have over the pace? Sometimes very little; it’s dictated by how quickly high-risk external events unfold and this is largely out of your ability to influence. But responders may get caught up in discretionary time pressures, especially a false sense of urgency.



What contributes to this false sense? Sometimes, seconds matter in life-or-death situations. Are expanding incidents life-or-death? They can be, especially for those engaged at the tactical or task level. But ICs should not be engaged at the task level on an expanding incident. If anything, the decisions you make, which could have major impacts on fellow responders and the public, may be best handled after you take a deep breath and avoid hasty decisions. Generally, if lives are not immediately at stake, you may operate at an accelerated tempo but should not fall prey to any false sense of urgency. Often, if ICs can slow down internally, they find their decisions are sounder, and the stress of the entire incident deescalates externally as well.

Command Collapse

Incident command can be jeopardized when responders lose faith in the incident leader due to a lack of command presence or an inability to make decisions or provide adequate direction. Symptoms of overwhelm can abound: the 1,000-yard stare or “deer in the head lights” syndrome, radio silence from the IC, failure to respond to changing conditions, or failure to adjust a plan that isn’t working. An IC that reverts to task-level minutia while ignoring the big picture is engaged in the “tailboard syndrome”—when people in charge feel stressed and revert to small tasks that they know how to do, giving them a small sense of control in an overwhelming situation. Any, or all, of these issues can cause “command collapse,” which can have a devastating and dangerous effect on incident responders.

Command collapse leads to organizational disarray and can lead to injury or death among civilians and responders. When command collapse occurs, the results can be more devastating than no response or plan at all as other individuals and resources may try to fill the leadership vacuum, fostering freelancing through uncoordinated

actions which opens a safety gap on the incident. Lack of competent command and cohesive planning leads others to create their own plan. Command collapse fulfills the adage, “The only thing worse than no plan is two plans.”

Command Presence

Command presence is a comprehensive form of verbal and non-verbal communication, encompassing all aspects of an IC's state of being. It includes everything from physical bearing to the “vibe” an IC projects. All these cues influence and affect those who encounter an IC, either in person or over radio frequencies. Your state of being has an impact on how the incident unfolds and on the performance of your team members.



“Be an island of calm in a sea of chaos.”

**Chief McCollum
Fire Chief, California**

Many have heard the idiom that “panic is infectious.” Well, so is calm. Strong operational leaders can instill a calming influence over an incident. Command presence is “the bearing or demeanor of the person in charge” (CalFire, 2014). According to the CalFire’s WUI Operating Principles,

“Strong command presence sets the tone for the incident and instills a sense of security and competency that spreads throughout all levels of the incident organization. Great leaders look, act, and speak with authority and confidence. They project a calm, organized and focused image.”

The tone established through strong command presence is important; it’s not just setting the tone for the incident but the literal tone and tenor of the IC’s voice both on the radio and in person. Command presence and tone is not just saved for the incident but is practiced everyday through your bearing, attitude, and the way you communicate.

Unified Command

If unified command is appropriate and in place, all those agencies having jurisdictional authority within the incident should participate in developing incident objectives. Depending on the incident complexity, it can take some time to develop and agree on objectives through consensus. It's crucial to have good working relationships with other unified command agencies prior to an incident. This also speeds up the process needed to become an efficient team.

Unified command should be considered for agencies having a statutory jurisdiction and should adhere to the following precepts:

- One co-located command post
- Incident objectives are unified and prioritized
- Strategy is coordinated among all agencies
- One IAP
- One Operations Section Chief (OSC)



Unified Incident Commanders (UICs) may take turns being the lead/point of contact for the OSC and other members of the command and general staff or may choose a point person so that all UICs speak as one voice. Be sure to appoint one spokesperson to represent all the UICs for the operational period (it can rotate between UICs for subsequent operational periods).

At a minimum, the UICs should discuss the following with the Plans Section Chief (PSC) and OSC present:

- Common understanding of the incident's issues and key requirements
- Agreement on incident priorities and objectives
- Recognition of constraints and limitations affecting the accomplishment of incident objectives
- Operational guidance for meeting incident objectives that accounts for and mitigates the identified limitations

Summary

The effective and smooth initiation of command is predicated on training, experience, and practice. It is also based on teamwork and communication between the initial IC and the incoming extended attack IC. If the extended IC inherits a chaotic incident from the initial IC, the extended IC will need to re-set the incident's tone. The initial IC should communicate a common operating picture and develop an initial plan of action with the first-in resources for at least the next 20 minutes. This allows the incoming extended IC to better understand the situation, build on the plan of the initial IC, and establish an extended incident outlook that is at least two hours ahead of current incident conditions. As the incident progresses, the extended IC may also need to consider and plan for what will happen over the next 24 hours. In all cases projecting a calm and confident command presence is crucial.

4: Situational Awareness

Developing and Maintaining Situational Awareness

An IC must initiate an accurate assessment of the situation upon arrival and continue this throughout an incident. You don't want to make any incorrect assumptions when you assume command. "Trust, but verify," is another apt version for taking in all that is happening with all your senses (including your intuition).



SA is the perception of events occurring within the environment as time unfolds, the accurate comprehension of their meaning, and the projection of their future status. Failure to develop or maintain SA can lead to catastrophic consequences, including putting responders in harm's way through tactics that are not aligned with predictable outcomes.

The National Park Service states that, "situation awareness involves being aware of what is happening around you in order to understand how information, events, and your own actions will impact your goals and objectives, both now and in the near future." Lacking SA or having inadequate SA has been identified as one of the primary factors in accidents attributed to human error.¹⁰

Your perception of the current environment is based on several factors, including your own experiences, visual observations, reports from others, and local familiarity and pre-incident planning efforts. SA is a continuous internal process that forms the foundation for risk-based decision making, such as determining the life safety priority of an incident by determining the survivability profile at a structure fire. SA includes understanding the values at risk within a dynamic environment while determining ongoing tactical actions based on incident priorities.

SA is affected by how we have experienced and perceived the world. The following four components affect our SA in any given situation:

¹⁰ Hartel, Smith, & Prince, 1991; Merket, Bergondy, & Cuevas-Mesa, 1997; Nullmeyer, Stella, Montijo, & Harden, 2005.

- **Experience and Training:** Experience and realistic training build a mental file stored in long-term memory. Poor training is often worse than no training at all because it gives us a false picture of reality.
- **Job Skills:** The more we practice our job skills the more we develop habit patterns.
- **Team Management Skills:** Teamwork allows us to share information and build a complete mental model.
- **Health and Attitude:** Good health keeps our level of SA high. A positive attitude leads to an open mind and lets us effectively process information.

Effective team SA depends on team members developing accurate expectations for team performance by drawing on a common knowledge base. This concept, known as maintaining a “shared mental model”, allows team members to effectively anticipate and predict the needs of other team members and adapt to task demands efficiently.



All sound strategic and tactical decisions rely on an underlying accurate understanding of the incident situation, which can be summed up with three questions:

1. What has happened?
2. What is happening?
3. What is likely to happen?

Failure to maintain ongoing SA can result in missteps that may lead to tragedy. Adequately assessing and understanding the situation can lead to sound and timely decisions that affect a positive incident outcome. Tragedies often occur based on decisions that were made with partial or faulty SA and put responders in the path of a destructive force. After the fact, others often ask, “How did they not see this coming?”

Situational Awareness Levels

SA levels range from 1) a basic perception of cues to 2) an understanding of what’s happening and it’s impacts, to 3) the ability to project and forecast future events.

- Level 1 – A basic perception of cues in the current situation.
- Level 2 – Comprehension of current situation that is beyond mere perception.
- Level 3 - Projection of future status from current events; ability to forecast future events and situations that allows for timely decision making.

The SA that the IC gathers and communicates impacts the effectiveness of other resources. Initially, accurate SA is needed to develop a common operating picture that ensures all team members have a shared understanding of the situation. Next, the transfer of command involves a shift in SA responsibility. As the incident (and command team) grows, building and maintaining SA on complex incidents requires collaboration with the entire team and the IC relies more on the command staff to maintain SA.

Situational Awareness Development Phases

1. SA development begins before the incident starts. Pre-dispatch intelligence is gathered from available sources such as weather reports, fire behavior predictions, and any early warnings about the nature of the incident. This phase involves analyzing available data, historical context, and initial reports to understand potential risks and challenges, giving responders a foundation for pre-deployment decision making as the situation evolves.
2. Gathering initial dispatch information that provides a clearer picture of the situation, such as location, size, and nature of the incident, along with any immediate hazards, resource needs or requests. This stage helps responders assess the severity of the event and begin preparing for the operational response, while also identifying initial gaps in knowledge that need to be addressed.
3. Upon arrival at the scene, SA expands as responders make direct observations. This includes assessing environmental conditions, evaluating hazards, and observing the behavior of the incident (such as fire behavior, weather conditions, or hazardous materials). Communication with others at the incident further refines the understanding of the situation. This is the critical phase where on-the-ground realities begin to shape a common operating picture and initial tactics.

4. As the incident unfolds, SA must be continuously updated. The IC and the team need to collect and analyze information in real time, adjusting their strategies based on changing conditions, new intelligence, and feedback from the field. Communication remains key, as updated reports from personnel on the ground, aerial reconnaissance, or specialized resources help build an accurate and dynamic picture. The IC must maintain a flow of information between various resources and maintain a unified strategy, even as the incident grows in complexity.
5. To aid in maintaining SA, responders make use of established reference tools like the IRPG and tactical worksheets. These tools help structure information gathering, track key details, and assess priorities. They are critical in ensuring that all decision makers are aligned, minimizing the risk of oversight, and ensuring that the operational response remains focused and effective. These references also provide standardized procedures for collecting and organizing critical data, ensuring that no essential detail is overlooked.

As an incident grows and becomes more complex, so must the IC's mindset to get strategically ahead of the incident making projection and forecasting becomes more crucial. Throughout all these phases, developing SA is a continuous process. The goal is to maintain a clear, accurate understanding of the incident to make informed, timely decisions that guide effective resource allocation and ensure the safety of responders and the public.

Situational Awareness Barriers

Dr. Richard Gasaway, a structural firefighter and neuroscientist, identified a total of 116 barriers to SA.¹¹

¹¹ <https://www.samatters.com/fifteen-situational-awareness-barriers/>.

According to Gasaway, the numerous distractions on the scene of a dynamic, expanding incident can cause a loss of SA. Loud noises, bright lights, smoke, flames, panicked civilians, radio traffic, assigned and incoming resources making requests all contribute to a sense of overload that creates barriers to SA. Other frequent barriers to obtaining or maintaining good SA at an incident are task fixation and saturation, over confidence, complacency, peer pressure and short-term memory overload.



Time and Sense Distortion

The ability to perceive changes in the incident environment diminish under stress. Picture yourself walking down a country road. As you walk, you notice rust on the barbed-wire fence, or a butterfly landing on a fence post. You notice a slight breeze in the air, the rustle of it stirring the tops of the oak trees, and you smell the fresh-cut field of alfalfa as you pass by. Now picture yourself on that same stretch of road, but this time in a Formula 1 racecar traveling at 110 miles per hour. Suddenly all the detail is lost and your entire viewpoint is concentrated on a single point of road one mile ahead. Everything around you is a blur. That's the difference between normal day mode and expanding incident mode. It's called tunneled senses, a chemically induced, biological narrowing of perceptual fields leading to an inability to capture crucial information.

There's also a peculiar change of time perspective between a Fire Officer 2 and a Fire Officer 3 on an incident. The Fire Officer 3, who is not engaged at the task level, has a very different perception of the time it takes to complete a given task. At a single-family dwelling fire, for instance, a Fire Officer 3 who is the IC may wonder why she's not seeing a stream or steam from the windows yet, while inside, crews are struggling to stretch lines around sharp corners, deal with furniture and household clutter through heavy smoke to reach the seat of the fire. The IC wonders why it's taking so long, while the Fire Officer 2 inside feels he's making good progress. Some call this disjunction "chief's time" and it can be a source of frustration for both line crews and overhead on incidents.

But what it illustrates is that people can experience the same reality in vastly different ways, depending on perspective. Another common example of this is when the reporting party asks, “What took you so long to get here?” All response timelines may be appropriate and normal, but the resident’s experience of time was different.

If you need to test this yourself, set a tea kettle to boil from room temperature. The first time, distract yourself with other chores. The second time, stand there just watching and waiting. Those same six minutes will take much longer the second time around.



Then couple these distortions with an often-false sense of urgency and a natural tendency for the brain to make up information. According to Gassaway, “in the absence of a complete, coherent understanding of what’s happening, the brain can fill in missing information gaps with made up information, and you’ll have no idea your brain just lied to you.”¹²

Operational Tempo

The fast-paced nature of an incident can create a sense of urgency that might cloud decision making and hinder SA. High operational tempo often leads to rushed decisions, which may not fully consider the complexity of the situation. To counter this, it’s essential to implement tactical pauses when appropriate. These pauses allow the team to step back, assess the situation more thoroughly, and recalibrate if needed. It’s also important to recognize and avoid falling into the trap of a false sense of urgency—where immediate action seems critical, but the situation may not require such a rush. By taking the time to prioritize tasks and decisions, responders can ensure that actions taken are both measured and effective, preventing hasty choices that could compromise SA or safety.

¹² <https://www.samatters.com/fifteen-situational-awareness-barriers/>.

Input Overload

As the incident progresses, the flow of information increases dramatically, leading to the risk of information overload. With so much data coming in, it can become overwhelming to process and prioritize everything effectively. To mitigate this barrier, it's important to filter information, distinguishing between what is essential and what is not. Prioritizing information is key to ensuring that the most critical updates are addressed first allowing responders to stay focused on what matters most.



On an incident, there is a difference between information and intelligence. Information can be anything and everything to do with the incident, from incident specifics use to formulate strategies to public information. But not all information is necessary or useful to an overloaded IC. Some bits of information are completely irrelevant while other bits are crucial. How does an IC decide which is important and which is not? Information must align with incident priorities to be useful.

Intelligence, by contrast, is information that has been screened, prioritized, and properly vetted. The vetting process analyzes the information to determine its value, appropriateness, and accuracy. For example, on an initial alarm incident, a Fire Officer 3's aide may conduct the walk-around or make entry to the third floor to determine progress.



The IC or senior command staff must take this raw information and vet it into intelligence. On larger incidents within the ICS, Field Observers (FOBS) conduct reconnaissance to gather raw intel, which may be vetted by hazmat, fire weather and/or fire behavior specialists assigned to the Situation Unit.

Additionally, delegating the responsibility for managing specific types of information can help lighten the load on the IC and ensure that all aspects of the incident are being

addressed. By managing input overload, the team can maintain a clearer understanding of the evolving situation and respond more effectively.

Another of Gassaway's findings includes an important command post fundamental: the human brain is not wired to hear and process two things simultaneously. This means that when you have a command channel, a tactical frequency, and someone talking to you all at once you can only hear one of them. The other two are missed and can't be comprehended.

Incident Command Mindset

The conscious transition from initial to extended command means the IC gives up tactical control to focus and retain strategic management of the entire incident. (If you're still on the tac channel directing later-arriving units on expanding incident, you're not delegating.) Some ICs revert to the "jump seat syndrome," focusing on details they are comfortable with as a means of regaining psychological control during a situation where they feel powerless.

Be very wary of confirmation bias: if you have a plan and are imposing it on a situation that no longer fits, yet you're convinced in the merits of its success despite feedback from others, it's time for a strategic pause to reconcile actual progress with expectations. All of this underscores the fact that you need to rely on your team: whether ad-hoc or a formalized IMT.

Brad Mayhew, a federal wildland firefighter with extensive experience with serious accident investigations on the fireground, concludes that consciousness is like a flashlight. One's perceptions will generally only perceive what the mind is already looking to confirm. For example, no one notices wall outlets in a room until they need a plug. Mayhew states that your consciousness, and therefore your perceptions, are like a flashlight roaming a darkened room. You perceive what you're focused on, and not much else. Another example of confirmation bias.

Recent research on stress has implications for everything from obesity and addictions to finance, suggesting that stress may modify the way people make choices in predictable ways. A new review shows that acute stress affects the way the brain considers the pros

and cons, causing it to focus on pleasure and ignore the possible negative consequences of a decision.

Ask yourself:

- How often does reality meet your expectations?
- Is it easier to change your expectations or the reality of the world?
- How does getting disappointed with progress inform us of actual reality?
- Are we willing to listen when the plan isn't working?

A plan is just our expectations; it isn't reality. But when we're stressed, we tend to automatically ignore negative feedback. Meanwhile, reality is the feedback we so often ignore, resist, or downplay in favor of the plan.

"I finally made my peace with the building between the fourth and fifth alarms. It was going to burn its way, not mine."

**Chief Mark Bisbee
Watsonville Fire Department**

Being mindful of stress reactions that may cause you to neglect, ignore, or discount important inputs and information is a red flag you can learn to recognize. Managing personal stress reactions to intense, high-risk operations take practice.

Daily practice in being aware of your internal state and your responses to external influences is one of the best things an aspiring Type 3 IC can do to prepare ahead mentally and psychologically of time.

Span of Control

One of the key barriers to maintaining SA is the issue of span of control, which refers to the number of individuals or tasks a leader can effectively oversee. When the span of control becomes too wide, it becomes difficult for the IC to maintain a clear understanding of all aspects of the operation. To combat this, it is crucial to expand your organization as the incident grows. By delegating tasks to capable team members, the IC can ensure that each aspect of the response is adequately managed. This allows the

IC to focus on the big picture while others handle the details, ensuring that no critical information slips through the cracks and SA is preserved.

Loss of Situational Awareness

The aviation industry uses the “Two-Challenge Rule” to detect fixation in a team member. If a team member fails to adequately respond to two or more challenges regarding omissions or questionable actions, the individual is assumed to have lost SA and some action is required. Apply this rule in daily operations.

According to the USCG, the loss of SA usually occurs over time and leaves a trail of clues. Be alert for the following clues that may indicate lost or diminished SA:



- **Confusion or gut feeling:** Confusion, disorder within the team, or a gut feeling that things are not right is one of the most reliable clues because the body is able to detect stimulus long before we have consciously put it all together. Trust your intuitive feelings!
 - No one watching or looking for hazards
 - Use of improper procedures
 - Departure from regulations
 - Failure to meet planned targets
- **Unresolved discrepancies:** When two or more pieces of information do not agree, continue to search for information until the discrepancy is resolved.
- **Ambiguity:** When needed information is confusing or unclear, clarify or fill in the missing pieces before proceeding.
- **Fixation or preoccupation:** When someone fixates on one task or becomes preoccupied with work or personal matters, they lose the ability to detect other important information. Early detection of both fixation and preoccupation is essential.

The best way to identify these clues is by knowing the behavior of your team members and being alert to change.

Improving Situational Awareness through Practice

This combination of detailed zooming-in coupled with a mega overview from a detached perspective is the best way for ICs to maintain a realistic SA throughout the incident. It takes Mayhew's flashlight perspective that and periodically "toggle-switches" over to a floodlight to illuminate and gather information from the entire scene. For SA to be accurate, it must be a constant and continual process. It needs to encompass the constantly changing external and internal realms of reality that takes in meaningful detail and the larger picture.

Accurate and ongoing SA is not a solitary endeavor; it is a team function that requires information sharing, collaboration on ideas, and listening to others, even when (especially when!) what they're telling you isn't what you want to hear. You must develop a sense of your own limitations and know when to rely on input and advice from others. A good IC must learn to be aware of their tendency to shut down and disregard information that may be contrary to a set plan of action.

Maintaining accurate SA also requires a degree of mindfulness and includes your internal responses to the situation, your state of mind, barriers, and limitations. You must be mindful, conscious, and observant of when you might become closed-off or shut down under stress.

In summary, maintaining SA is a dynamic process that requires addressing barriers like span of control, information overload, operational tempo, and IC mindset.

By expanding the organization, delegating tasks, filtering and prioritizing information, and recognizing the need for tactical pauses, the team can manage these challenges effectively, ensuring that SA remains clear, accurate, and actionable throughout the incident. Simply put, SA is keeping track of what is going on around you in a complex, dynamic environment.

TRY THIS

Skip Coleman, a Division Chief with the Toledo Fire Department, stated he would often park across the street from an incident, and focus his vision to zoom in on details; for example, how a ladder was being placed. Then he would zoom out and get a wider, more expansive view of things like smoke conditions and structural stability.

5: Risk Management and Decision-Making

Situational Awareness and Risk



It's well documented that inexperience and poor training serve as an on-ramp to tragic incidents. But even well-trained and experienced ICs can get distracted, make bad decisions, and have a bad day.

The links between maintaining adequate SA and using good judgement to weigh risk cannot be overstated: fatal incidents occur when people are unwittingly put in harm's way.

This is done because there isn't adequate SA, or because the risks were not factored properly. What works against ICs are distractions and the assumption, real or imagined, that there isn't adequate time to fully analyze the situation, the risks, and the placement of people to intervene in the incident.

Sometimes extreme risks with no discretionary time do present themselves. To quote Chief Alan Brunacini, "You may need to risk a life to save a life," and this is reflected in the NFPA 1500 Safety Standard. But it is a rare occurrence and isn't often a factor in many tragic incidents. You simply cannot complete risk identification without performing adequate SA first.

Controlling risks means eliminating, reducing, or managing hazards that can lead to mishaps. The consistent application of risk management techniques can help modify team member attitudes and change motivational factors known to put people at risk. Risk management philosophy is to increase mission success while reducing risk to personnel and resources to an acceptable level.

These basic decision-making principles must be applied before any anticipated incident task is performed:

Accept no unnecessary risk: Unnecessary risk contributes no benefits to the safe accomplishment of a task or mission. The most logical choices for accomplishing a mission are those that meet all the mission requirements while exposing personnel and resources to the lowest possible risk.

Make risk decisions at the appropriate level: Making risk decisions at the appropriate level establishes clear accountability. Those accountable for the success or failure of an incident must be included in the risk decision process. Supervisors at all levels must ensure that subordinates know how much risk they can accept and when to elevate the decision to a higher level.

Accept risk when benefits outweigh costs: Weighing risks against opportunities and benefits helps to maximize resource capability. Even high-risk endeavors may be undertaken when there is clear knowledge that the sum of the benefits exceeds the sum of the costs.

Integrate risk management at all levels on the incident: To effectively apply risk management, leaders at all levels must dedicate time and resources to incorporate risk management principles into briefings for all phases of all operations. Integrating risk management into planning as early as possible provides overhead with the greatest opportunity to apply risk management principles.

The Operational Risk Management program assumes that every incident has some degree of risk exposure.

- You will never know all the risks.
- Every incident requires managing risk by applying adequate risk controls.
- Resources available to identify and manage risk are limited.
- The goal is to eliminate all unacceptable risk at each incident.

TRY THIS

Get a kitchen timer and set it for 10 minutes at your command post.

When it dings, take a full moment to update your SA.

(Hint: It only works if you stop what you're doing, bring your head up, and really look around at detail and the larger view to understand what's going on and what's changed.)

Implementing a Risk Management Process

While it would be preferable to perform an in-depth application of risk management for every task, time and other resource limitations apply. Therefore, risk management exists on two levels to meet an appropriate need:

Time critical risk management is an “on-the-run” mental or verbal review of the situation using the basic risk management process without necessarily recording the information. This process is used to consider risk while making decisions in a time-compressed situation.

Deliberate risk management is the application of the complete process. It primarily uses experience and brainstorming to identify hazards and develop controls and is therefore most effective when done in a group. Examples of deliberate applications include written IAP planning, high-risk operations with discretionary time, or incident pre-planning.



Operational Risk Management Steps

Risk management equals life safety; therefore, how we keep risks in check is very important and the top priority for all ICs. Risk management processes provide step-by-step methodologies to properly assess and mitigate (control) hazards. It is a continuous cycle of gathering information through SA, identifying and assessing hazards, developing controls, and making risk decisions.

Every incident requires risk management to keep it within acceptable boundaries. The methods that follow can certainly be applied to all risk situations and should be readily available in any IC's toolbox.

Identifying HARM

HARM is short for “Hazard Assessment and Risk Mitigation,” a short, often mental, two-step process. Once a risk has been identified, it must be prioritized, processed, and mitigated.

Hazard Assessment	Risk Mitigation
1. Live wires down	1A. Flag area 1B. Deny entry 1C. Post lookout
2. Vicious dog in backyard	2A. Use indirect streams over side fence 2B. Call animal control
3. Stairway compromised due to fire	3A. Notify interior crews 3B. Place additional ground ladders at windows

Another viable application of the HARM process is initiating an ICS-215A (Incident Action Plan Safety Analysis) and ICS 208 (Safety Message/Plan).

Risk Management Process

Let's break down the risk management process categories into smaller steps:

1. **Define what needs to be done:** What work needs to be accomplished? Review current and planned operations describing the tasks at hand (ICS 215, 215A).
2. **Identify the hazards:** The key to successfully analyzing risk is clearly defining the hazard. Hazard identification should consider known hazard sources. Brainstorm with team members that understand all aspects of the strategies, tactics, tasks, and systems under consideration. List all hazards associated with major steps in the task formulated in Step 1.

Identify risk scenarios through personal observation, professional judgment, and proposed assignment analysis. Potential failures (things that can go wrong) can be equipment or operational in nature and can be both internal and external to the team. Ensure effective hazard identification in each of the following categories:

- **Equipment:** Is the equipment functioning properly? Can it be expected to function properly throughout the planned task or evolution?
- **Environment:** How will the weather, fuel, and topography or building layout impact risk?
- **Personnel:** Is the team properly trained and capable of handling the demands of the mission? Are they fatigued, complacent, or suffering from the effects of physical or mental stress?



Other elements to consider include:

- Incident objectives
- Communication

- Who's in charge
- Previous incident history/behavior
- Weather and/or other local factors

Adequately defining the hazard often requires you to put many pieces of information together. Defining the hazard will directly affect how you evaluate the level of risk. The more specific the hazard identification, the more accurate its risk assessment will be and the more thorough the development of risk control options. In planning an assignment or task, anyone can miss or fail to recognize a hazard. It is important for the team to discuss hazards to prevent this mistake.



3. **Assess the hazards and risks:** Risk must be considered as it applies to individual resources and the overall incident. Individual risk levels must be determined for each hazard identified. Risk assessment is conducted by evaluating specific elements or factors, that when combined, define risk. The level of risk must be understood as it applies to the team and/or the incident.
 - Probability vs. severity
 - The potential for other risk issues to emerge as conditions change
 - Risk-specific checklists that apply to the incident (i.e., high rise, swift water, wildfire, structural collapse, etc.)

Risk Assessment Questioning Technique

This simple technique uses five questions that anyone can ask anywhere, anytime. Use it to reduce risk in everything that you do.

- Why am I doing this?
- What could go wrong?
- How will it affect others or me?
- How likely is it to happen to me?
- What can I do about it?

4. **Identify the options:** Starting with the highest risk hazards assessed in Step 3, identify as many risk control options as possible for all hazards that exceed an acceptable level of risk. Risk control options include:
- Spread out the risk by either increasing exposure distance or by lengthening the time between exposure events.
 - Transfer the risk. Transference does not change probability or severity; however, it can shift losses or costs to another entity.
 - Avoiding risk altogether requires canceling or delaying the job, mission, or operation. It is an option that is rarely exercised due to mission importance; however, it may be possible to avoid specific risks until conditions are more suitable.
 - Accept the risk when the benefits clearly outweigh the costs, and only as much as necessary to accomplish the mission or task.
 - Reduce the risk if possible. The overall goal of risk management is to plan missions or design systems that do not contain hazards, although this is usually impractical or impossible in complex systems. The easiest way to reduce risk is by increasing individual awareness of the hazard and its associated risk.

Brainstorm a list of ways to reduce the risk levels that you considered acceptable in Step 3.

- Determine the consequences of each alternative for each assignment/task.
- Develop control measures that reduce risk.
- Identify emergency procedures.
- Evaluate risk versus gain by determining if the benefits of the operation now exceed the levels of risk that the operation presents.
- Very high risk versus gain decisions require the concurrence of the appropriate level of command. A high level of risk that cannot be effectively controlled should be reported through the chain of command to the appropriate leadership level.



5. **Decide:** Select the best alternative or combination of alternatives. The mission priority and time criticality will often drive which option is chosen.

6. **Implement controls:** Act! This may mean increasing, replacing, or reassigning resources (i.e., people, equipment, and/or information), and ensuring the risk controls are known, understood, and properly implemented into the operational plan by personnel at all levels.
 - Are controls in place to mitigate risk?
 - Are selected tactics and tasks based on expected conditions?
 - Have instructions been given and understood by all?

7. **Supervise, continually monitor, and evaluate the situation:** At key points in the mission, it is important to assess risk. While continual, nonstop observation of hazard and risk controls is necessary, it's important to step back and look for any changes in conditions that would negate controls already in place or necessitate the implementation of new controls. This step also serves as a reality check to verify that the incident objectives, strategies, tactics, and tasks are still valid.
 - Are the controls and risks in balance? Risk management is a continuous process. React to changes by returning to Step 1.
 - Are controls adequately mitigating the hazards?
 - Are changes to the operation, equipment, environment, and/or people effective in mitigating the hazards and in lowering risk?

Decision Making

Judgment is a process that produces a thoughtful, considered decision. In other words, it is the ability to perceive a situation and decide. Good decisions equal good judgment; poor decisions equal poor judgment. Judgment determines team actions in each situation and depends on information that team members have about themselves, their unit, and the environment. On any incident, many judgments are made. This series of judgments is called a judgment chain.

Poor judgments may be the outcome of applying erroneous information or using an ineffective decision-strategy. If an upstream judgment is flawed, it can affect the other ones downstream.



Recognizing Poor Judgment Chains

When individuals exercise poor judgment and are not aware of it:

- **Reality Is Distorted:** They are lulled into a misperception of reality. They rationalize why things are happening using this reality as fact.
- **False Information Is Perpetuated:** They often create false information that they use to make future judgments. The probability is high that these judgments will be flawed.
- **Fewer Alternatives Seem Acceptable:** As more poor judgments or false information is added to the chain, the seemingly available alternatives for solving problems narrow.

The Chain of Decision Making

A structured approach to decision-making is important to prevent a poor decision chain from forming and growing. This approach includes a step to evaluate judgments. To be effective this step has three parts:

1. **Seek Feedback and Point Out Errors:** Feedback can come from two sources: your senses (i.e., clues to loss of SA) or an observer. Generally, the best feedback comes from others. Although senior team members are expected to use their knowledge and experience to critique their judgments, don't hesitate to get a double-check or second opinion.
2. **Assess Team Stress Level:** Too much or too little stress can reduce our ability to exercise good judgment. Assess the stress and attempt to obtain an optimal level before continuing.
3. **Manage Resulting Risk:** For any poor judgment chain to be broken, team leaders and members must recognize that they are human. Be open to the possibility that you can make poor judgments. Be willing to admit and correct errors. Apply the seven steps of risk management to correct any hazardous situations resulting from poor judgment.

Proactive vs. Reactive Decision-Making Models

In the best of situations, proactive decision making usually leads to more positive outcomes. As an extended attack IC, you may need to utilize both models; the reactive model for the current operational period and the proactive for planning the next. No matter how adequately we may think we have planned for various outcomes, we are often faced with unexpected situations with little discretionary time to make important decisions.

Reactive Decision Making and Risk Assessment Matrix (RAM)

To quickly estimate risks in terms of consequences and probability, create a RAM:

- Draw a graph, matrix, or simple table with a vertical axis labelled "Consequences" and a horizontal axis labelled "Probability."
- Use a simple scale of 0 (very small) to 5 (very large). Consequences are credible potential worst-case scenarios that may develop. Probabilities are your best assessments of the likelihoods that individual consequences will occur.
- Brainstorm the possible consequences to which you're exposed and then assess the risk of each consequence's occurrence. Where possible, base these risk assessments on real-world evidence and experience.
- Plot these on the RAM. You'll find that as you do this, your contingency planning priorities quickly become clear.

This estimate can act as a quick graphic depiction of the risk impacts you may be facing. This can be a beneficial exercise when confronted with little discretionary time as part of the reactive decision-making model.

Recognition-Primed Decision Making (RPD)

This is a term developed during a study on the decision-making processes of 22 fireground commanders from eight different agencies¹³. This study, commissioned by the military, focused on how high-stake decisions are made under severe time constraints. It found that trained and experienced fireground commanders could reach decisions quickly by



scrolling through thumbnails of previous experiences and generally choosing one that best fit the situation they were facing. This process, conducted unconsciously, usually rendered the closest fit and enabled the fireground commanders to decide between at least two options with startling accuracy.

But there are a few caveats to RPD. It rendered sound decisions for highly trained and experienced fireground commanders facing different situations, but not completely out of their skill set. RPD is not a good fit for inexperienced ICs and it doesn't provide a sound decision-making process if the incident is beyond anything the IC has faced before. This factor underscores Gordon Graham's mantra¹⁴ "if its predictable, it's preventable", which implores us to almost over-train on low frequency/high risk events.

Rule-Based Decisions

Rule-based decisions require a mix of conscious control and automatic control and are appropriate in familiar or trained-for problems. We tend to switch to this decision-making model when we think about our actions and look for solutions that have worked before or an appropriate rule to follow. We recognize the situation as familiar and default to the decision strategy that succeeded in the past.

A potential problem with this method is that we may have developed bad habits or an inappropriate rule or the situation may be slightly different and the rule we select may not work.

¹³ Klein, 1988.

¹⁴ Graham, 1990.

Knowledge-Based Decisions

Knowledge-based decisions are made when neither a skill-based nor rule based strategy will work or is not appropriate to the situation.

This strategy is used reluctantly when a creative approach is needed and requires conscious thought and a structured decision-making process. Knowledge-based decisions are examples of the analytical decision-making style at work.

Remember, this requires considerable mental effort and the mind is reluctant to go there, it likes things simple. We are required to think about the problem, evaluate it, and find an appropriate decision strategy even if we have never learned exactly what to do.

The potential problem is that this is more time-consuming. It takes more mental effort and we may be reluctant to do it.

OODA Loop

The OODA loop is an acronym that refers to a decision cycle of “observe, orient, decide, and act” and was developed by John Boyd, a military strategist for combat operations. Its premise is that flexibility and resilience can overcome sheer power. This cycle, if kept in constant motion during an incident, enables the IC to maintain better SA. Raw observations of the evolving situation, coupled with an awareness of one’s implicit filtering system, is what all decisions are based on. But these observations must be processed (oriented) to be useful; we need to make sense of what we’re observing by running it through our genetic heritage, the cultural traditions of our organization, and previous experiences. According to Boyd, this orientation process is the most important part of the loop because it shapes the way we observe, the way we decide, and how we act.



Properly Refusing Risk

The IRPG provide a methodology to turn down an unsafe assignment in an articulate manner. It is disappointing that this valuable process isn't as widely known, training on, and utilized in all-risk settings as it could be. Using this tool would eliminate much confusion and conflict that arises when personnel feel an assignment is unsafe but have trouble articulating in a coherent manner why they don't "feel right" about what they're being tasked to do.



According to the IRPG,

"Every individual has the right and obligation to report safety problems and contribute ideas regarding their safety. Supervisors are expected to give these concerns and ideas serious consideration."

When an individual feels an assignment is unsafe they also have the obligation to identify, to the degree possible, the safe alternatives for completing that assignment. Turning down an assignment is one possible outcome of managing risk.

A “turn down” is a situation where an individual has determined they cannot undertake an assignment as given and they are unable to negotiate an alternative solution.

The turndown of an assignment must be based on an assessment of risks and the ability of the individual or organization to control those risks. Individuals may turn down an assignment as unsafe when:

1. There is a violation of safe work practices.
2. Environmental conditions make work unsafe.
3. They lack the necessary qualifications or experience.
4. Defective equipment is being used.

The individual directly informs their supervisor they are turning down the assignment as given. Use the criteria outline in the Risk Management Process [and any risk-specific rules, protocols, or procedures] to document the turn down.

The supervisor notifies the Safety Officer immediately upon being informed of the turn down. If there is no Safety Officer, the appropriate Section Chief or the IC should be notified. This provides accountability for decisions and initiates communication of safety concerns within the incident organization.

If the supervisor asks another resource to perform the assignment, they are responsible to inform the new resource that the assignment was turned down and the reasons why it was turned down. If any unresolved safety hazard exists or an unsafe act was committed, the individual should also document the turndown.

Summary

Incident safety begins with appropriate SA, which is used to make decisions regarding risk. Tragedies usually occur when people are in the wrong place at the wrong time, so tactics should align current and expected incident conditions with where and when

people are deployed. Maintaining SA, implementing the risk management process, and effective decision-making are crucial for ICs because strategy and tactics are based on these foundational processes.

6: Communications

Establishing Effective Command and Control Communications

In many after-action reports (AARs), communication is raised as a primary issue of concern. It could be what *was* communicated, but more often it's what was *not* communicated adequately. We all operate on a host of assumptions about what others already know and may not communicate an important item or detail. And it's not just *what* we communicate that matters but also *how*, *when*, and *why*.



How we communicate is much more than just the verbal messages we convey. Our tone of voice also conveys a message and signals our state of mind. Is the tone fearful, excited, or angry? Is it calm, open, but cautious? The words we select, our posture, and body language also convey our overall state of being, and others will notice.

According to the IRPG, all firefighters have five communication responsibilities:¹⁵

- Brief others as needed
- Debrief your actions
- Communicate hazards to others
- Acknowledge messages
- Ask if you don't know

The IRPG further states, "In addition, all leaders of firefighters have the responsibility to provide complete briefings and ensure that their subordinates have a clear understanding of their intent for the assignment."¹⁶



¹⁵ Incident Response Pocket Guide (NWCG, current edition).

¹⁶ Incident Response Pocket Guide (NWCG, current edition).

Communication and Conflict Management:

- Encourage open communication.
 - Involve others in decisions that affect them.
 - Actively seek feedback and suggestions and encourage others to do the same.
 - Confront conflict constructively to minimize impact to self, others, and the organization
- Articulate performance expectations to subordinates.

Commander's/Leader's Intent

The purpose of the objective is to direct every operation toward a clearly defined, decisive, and attainable objective.

An effective antidote for command collapse is to assert Leader's Intent. Leader's Intent is a clear, concise statement about the mission's [incident's] overall tasks, purpose, and expected results.

Intent must be clear, concise, and understood:

- Task = What is to be done
- Purpose = Why it is to be done
- End State = How it should look when done

Asserting Leader's Intent can achieve two opposite goals for the IC. On one hand, it can serve to re-focus incident personnel to take appropriate action (i.e., coordinated efforts within the scope of the Leader's Intent and incident objectives). This serves to rein in any resources who may be freelancing by acting outside the interests of the incident. Freelancing is detrimental to the incident and should not be allowed.

On the other hand, some incidents have rapidly changing conditions that prohibit timely information gathering, evaluating, and decisions on adjusting tactics by command. When faced with high-tempo changes, during communications overwhelm, or when resources arrive faster than the ICS organization can build, asserting Leader's Intent can immediately decentralize command and delegate tactical decisions down to the single resource level. One of the formally stated values of operational leadership is to

“demonstrate initiative by taking action in the absence of orders.”¹⁷ This is the very essence of delegated authority through Leader’s Intent.

Asserting Leader’s Intent empowers resources to take appropriate action and coordinate with each other at the ground level. Appropriate action is illustrated the by difference between infantry, who remain in formation until ordered, and special forces teams like Navy Seals, who improvise, adapt, and overcome while remaining focused on the mission’s goals through Leader’s Intent. There are a couple of caveats to this:

- Units must act in the best interests of the incident objectives through coordinated support of each other and
- They must notify superiors as soon as possible of the actions they have taken.

Briefings

The quality of the briefing process often determines the success of the plan. Briefings set the stage for what follows. They clarify expectations for team members and establish ground rules for the task.

Make the following part of your routine briefing process:



- **Specify Desired Results:** What is the desired result or objective? What do you want in terms of quality and quantity?
- **Set Expectations:** Explain what you expect from other team members and what they can expect from you and from the mission. This is also your opportunity to ensure that your expectations of fellow team members are accurate and there have been no changes in personnel, equipment, etc., that will affect the outcome of the mission.

¹⁷ *Incident Response Pocket Guide* (NWCG, current edition).

- **Clarify Responsibilities:** Discuss the principles, policies, and procedures essential to achieving the desired results with the team. Review lessons learned to determine critical tasks and “No-Nos”. When identifying “No-Nos” identify what level of initiative is expected from specific team members:
 - Stage/wait until instructed
 - Ask whenever there is a question
 - Prompt/provide a recommended course of action
 - Take appropriate actions and immediately notify or report back routinely
- **Identify Available Resources:** Ensure the team has all applicable information and that equipment capability is understood. Ensure all personnel who have a need to know have been included in the team planning process. For major evolutions, that means the Operations Section needs to be represented at planning briefs.
- **Establish a Climate for Learning:** There is a learning opportunity during every task or evolution. Create a climate for learning by ensuring that all team members understand this is an objective and take advantage of the opportunities as they arise.
- **Accept/Encourage Input:** If you truly want team members to be assertive, you must give them permission to do so. The time you spend encouraging and accepting input during the briefing will set the stage for the rest of the mission.
- **Maintain a Positive Attitude:** Your attitude as a team leader is contagious. A positive attitude demonstrated by the leader will lead to positive attitudes by all team members. This is especially critical during high risk, high stress missions.
- **Make Your Team Accountable:** Ensure team members understand the performance standards (i.e., navigation standards, standing orders, standard operating procedures, training assessment/ready for operations checklists, etc.) that will be used in evaluating the results. Set aside a specific time when you will debrief the team.

Providing Performance Feedback and Support

Feedback is crucial as it may provide information or questions that may have not been considered when the IAP was developed. It is well within the responder's right to ask questions or raise concerns; after all, they are the ones being tasked to complete the work assignments. Feedback shouldn't be viewed as questioning or challenging the individual, but rather the issues; focus on the problem, not the person.

Feedback is cultivated through setting a positive, open tone through active listening skills. This creates an environment where personnel feel free to share legitimate concerns and to speak up to ask questions without hesitation. Usually, if one person asks a question, there are others who are thinking the same thing, but may be more reluctant to speak up.

- Ensure both internal and external people's needs are met.
- Coach and provide feedback to subordinates.
- Recognize and acknowledge positive performance.
- Support personnel working on advancement and training.

Types of Incident Briefings

Briefings include:

- The initial incident briefing between the initial IC and the expanded/extended IC
- An operational briefing at the start of each operational period to inform on-coming resources about the incident and their roles in achieving the incident objectives
- Breakout briefings for Branch, Division or Group resources held just after the operational briefing to discuss specific assignments listed in the ICS 204
- Tailgate or field briefings to discuss individual resource work assignments and tasks
- Debriefings, or AARs, to discuss/critique actions already taken

Briefing Format

According to the IRPG, the following are components of a proper briefing:

- **Review of the current situation:** Including weather, conditions, etc.
- **Actions/Execution:** Including who's in charge; the Leader's Intent with overall objectives and strategy; specific tactical assignments; contingency plans; and emergency plans, including medical/rescue resources, transportation options and procedures
- **Communications:** The communications plan, including tactical, command, and air-to-ground frequencies; cell phone numbers; other radio contact identifiers, etc.
- **Service/Support:** Other ground and air resources working nearby/available; logistics, such as transportation and obtaining supplies and/or equipment
- **Risk Management:** identifying known hazards and risks; control measures to reduce/mitigate risk; identified decision points for reevaluating operations



We've all been on those incidents where someone is taking up airtime yelling about nozzle pressure when the IC is trying to get an "All Clear" or evacuate responders from the building. Don't hesitate to remind everyone on the air to practice radio discipline as part of your command presence and setting a clam tone.

ICs must prioritize communications, both interpersonal and through technology mediums, to be effective. Technology has made communication more efficient but may also hamper verbal and non-verbal interpersonal dynamics. The key is to focus the communication means and methods so that messages are clearly transmitted and received.

7: Incident Planning and Organization

Incident Planning

Safe and effective IAPs are the result of a comprehensive planning process. This includes having accurate and on-going SA, properly assessing risk, and making appropriate decisions. It is also predicated on establishing a credible and appropriate tone and positive incident communications.



So far, you've responded to the incident. You've taken some time to:

- Initiate, establish, or assume command
- Make an initial resource request for additional staffing and/or resources
- Understand the situation, note hazards and risks, and make sound decisions based on proven methods
- Establish positive communications including setting a calm professional tone and broadcasting your intent as the IC

Just like SA, the incident planning process is on-going throughout the incident. In the early initial stages of a rapidly expanding incident, it's common for the entire IAP process to be quick, unwritten, and conducted mentally by the IC. This often includes a round of quickly gathering what's happening and making subconscious mental decisions utilizing RPD, assigning initial units, and making rapid resource requests to bolster the initial response.

As the incident increases in size and complexity, it's crucial that ICs also migrate their mindset away from initial response mode to a more formalized approach and process that includes developing some written elements of an IAP. This approach is not as structured as it may be with a formally organized IMT, but it involves a compressed version of that same incident planning process.

What makes the planning process so challenging during an expanding incident is that team members need to conduct incident actions concurrently with planning efforts. Usually, the planning process is only concerned with the next operational period. On rapidly expanding incidents, the workload is fourfold:



1. Dealing with the ongoing incident,
2. Planning for the current operational period,
3. Laying the groundwork to plan for the next operational period, which may also include
4. Providing for a smooth transition to an incoming IMT.

All these items need to be done concurrently, and usually, with minimal staffing. This is why expanding incidents so often go awry, get off track, or simply falter in execution.

The initial planning process is measured through a few key meetings, although on an expanding incident, it may look more like an informal football huddle; but what needs to be accomplished is essential the same.

The first get together should be with the IC and their Command and General staff. It may not be possible on a growing incident to gather everyone together at once because they may hit the ground running as soon as they arrive. Then, there should be a discussion about tactics that kicks off defining work assignments. The third meeting should be about the plans themselves, to make sure key folks understand and support the plans. Finally, there should be a rigorous review of the plans to make sure they're solid, realistic, and achievable.

With formally recognized IMTs, the planning process is part of a routine regimen and follows a specific format, the Planning P. Without a team, or before an IMT arrives, it's crucial that there is at least an abbreviated planning process that follows along the same lines. This helps shorten an IMT's ramp-up time and ensure an orderly transition. If you have someone who's up to speed on ICS Plans functions, you can rely on them to lead this process. If you're still without a PSC and the incident is dynamic and

overwhelming, you may have to reprioritize and do some Planning functions yourself or risk chasing after this incident and losing your ability to effectively manage it.

The planning process is also about matching workload to resources. The relationship between planning and staffing/resources cannot be overstated. The planning process not only takes some staff and time to develop, it is also a process that combines the tasks that need to be accomplished with the resources who will get it done.

Now it's time to start getting ahead of this emergency through the incident action planning process.

Developing an Effective Incident Organization

Developing and Using an Incident Action Plan

One of the key activities of a competent IC is the ability to track and anticipate both what's happening now and what is likely to happen with the incident in the future. Having the capacity to detach from current activities is crucial so you can read and understand what is likely to unfold before it occurs. This is so you can keep the public and emergency responders safe, pre-position resources, and anticipate needs. On larger incidents with established IMTs, this is done through the Plans Section in the Situation Unit. But on an initial or rapidly expanding incident, you may be the only person in a position removed enough from the immediate action to engage in this crucial activity.



For most routine emergencies, the time mindset of the initial alarm IC should hover about 20 minutes ahead of what's currently unfolding on the incident. For an initial attack/alarm incident, if you are not at least 20 minutes ahead of what's currently going on, you're already behind. The last thing you want as the IC is an unpleasant surprise because you haven't forecasted or kept your SA current.

On expanding Type 3 incidents, the IC should regularly range at least two hours ahead of the incident. This includes developing forecasts for incident activity, tasks to be accomplished, resource ordering, and logistical support. For Type 1 and 2 incidents, IMTs usually plan at least two days out, and in some cases, up to two weeks! If your incident will last more than 12 hours, or will transition to an IMT, it's highly recommended to formalize certain elements of the IAP.

In short, the IAP itself effectively structures the objectives, strategies, and work assignments on the incident so efforts are synchronized, coordinated, communicated, and safely executed. The IAP articulates a pyramid of actions in descending order, with each subsequent layer consisting of more elements than the layer above. Working from the top down:

- Incident objectives are the general desired outcomes of what needs to be done and where it needs to be done.
- Strategies are methods or approaches for achieving the required results.
- Tactics are the specifics of how each strategy should be accomplished.
- Tasks or work assignments are the individual work steps taken to accomplish a tactic.

The IAP development steps for an IC are:

- Confirm incident priorities
- Develop the incident objectives
- Identify and select tasks/work assignments and tactics
- Develop strategies and PACE plans
- Assemble the plan
- Review, critique, and scrutinize the plan
- Communicate the plan

Confirming incident priorities consists of reviewing the overarching requirements listed in order of importance. What are the most important things to be done? What core capabilities are involved? Especially when you are overwhelmed at the command post, focusing on a few, but highly important, essential gives the incident focus. In general, most expanding incident priorities are:

- Life safety
- Incident stabilization
- Property/environmental conservation

Incident Objectives

Developing incident objectives takes practice. According to FEMA, writing good incident objectives can be as challenging as it is important because they are the focal point for conducting all response activities. Incident Objectives are predicated on the following:

- Understanding the situation
- Leader's Intent
- Incident priorities

Incident objectives are usually more general in the early stages of an expanding incident and get more specific and detailed as SA and the resource status knowledge increases. They should generally state what needs to be done, but not so close and tight that they become tasks or work assignments. Incident objectives should be:

- Clear: Use simple, precise language
- Measurable: Progress can be observed and be accounted for
- Achievable: If the objective cannot be completed in a reasonable timeframe with available resources, it may not be a viable objective
- Flexible: Objectives must be broad enough to allow for field improvisation as required by actual conditions

Incident objectives should be numbered and retain that number throughout the incident. They may be slightly re-worded later if the revisions meet the same intent.

Incident objectives should be prioritized by urgency, with the most urgent listed first.

The steps in developing incident priorities are to first frame the problem, then use the objective to describe what is to be accomplished: what and where, but not how or by whom. Use enough detail to make it meaningful, but don't "go tactical." Is it obtainable with available resources? (Available might not mean on scene, but that you'd be



realistically able to obtain it within a reasonable time.) Ensure that the objective and its results can be used as a metric to measure actual progress and attainment.

Incident objectives should begin with an action verb, such as provide, execute, conduct, complete, implement, etc. Try not to use passive verbs like assess, monitor, continue, etc.

Some functional areas that incident objectives could focus on:

- Search and rescue
- Evacuation
- Fire suppression
- EMS
- Law enforcement
- Decontamination
- Public safety and health

Examples:

- Provide for the safety of responders and the public
- Contain the fire between the 9th and 13th floors of Regis Tower
- Evacuate Rio Bolsa neighborhood
- Keep sulfur product north of Kit Creek
- Conduct search of Largo Gap area

On incidents that spread over a wide geographical area like floods, wildfires or hazmat spills, or plumes, the incident objectives serve to define a geographical box to contain the ultimate limits of the incident. On dynamic incidents that are rapidly expanding, it's often wise to envision your box like a rope lasso: you may initially draw the box big, but once you get a handle on it, draw the box in tighter. For example, it's better to be more proactive with evacuation zones and allow people back into undamaged areas early than to deal with the chaos and danger of late evacuations.

Strategies, Tactics and Tasks

Strategies determine the actions to take under uncertain circumstances and the resources to deploy to meet the incident objectives. In other words, strategies are the laces that bind the plan with the resources to meet the objectives. Therefore, strategies may be flexible and several may be employed at the same time, by different resources, on different parts of the incident. Strategies are important because resources are usually limited and must be organized and coordinated to meet the objectives.



Strategies can define the “how” or the approach resources will take (i.e., offensive, defensive, or a combination of the two). It can also be used to describe the levels of engagement, known as DRAW: Defend, Reinforce, Advance, and Withdraw (or delay). On wildfires, strategies can describe the modes of engagement such as direct, indirect, or parallel attacks. It can be used to describe strategic attack situations (i.e., initial, extended, major fire, or siege), all of which can be a determinant for resource availability. Ultimately the term strategy is quite flexible, It can be applied to a variety of situations and contexts, but the underpinning element is that strategy begins to associate resources who will take some kind of action to implement and accomplish the incident objectives.

While strategies often describe the how incident objectives are to be met, tactics further dials down into even more specifics, detailing what needs to be done. Tactics are broad groups of tasks or work assignments. For example, search and rescue, interior fire attack, rope rescue, dilute the product, etc.

According to the FEMA Incident Action Planning Guide, strategies are developed to accomplish the incident objectives and serve to provide a framework for the development of tactics. Strategies implement the incident objectives by grouping and restricting the tactics to avoid conflict with the incident objectives. Incident strategic planning encompasses dynamic situations as well as any constraints or limitations on the use of specific tactics on an incident.

Once the incident objectives and strategies have been defined, tactics and tasks/work assignments are identified and selected at the tactics meeting. Tactics provide specific details about the actions to be taken to implement strategies and achieve incident objectives: the who, what, where, and when.

Tasks or work assignments are specific details based on incident requirements that must be done as part of accomplishing a tactic. They contain the *where* and *what* of work assignments. For example: (1) conduct a search of the rubble (2) in a grid fashion, (3) looking and listening for signs of life, and (4) utilizing cameras and (5) canine units.

For an interior structure fire attack, the tasks may be: (1) don all protective gear, including SCBA, (2) select the 2" pre-connect hose and (3) stretch line to door, (4) bleed out air in hose line, (5) control flow path at the door, (6) stretch lines into interior of building, (7) protect areas of egress, and (8) extinguish the fire.

A task analysis based on anticipated incident requirements is the first step towards developing the *who* of the IAP. By analyzing the tasks, the best suited resources to accomplish that tactic can then be selected. Partnering required tasks to appropriate resource is why work assignments must be considered. Where resources are more plentiful or easier to obtain, work tasks can be considered first. Where resources are limited, it may be wise to consider what they can best accomplish and build the plan around what's readily available. This may mean that some tasks or tactics, and even some strategies, must be revised when considering resource abilities and availability.

Enacting Operational Plans

When you initiate or assume command, you consider if there is an immediate need to change or modify the initial plan. In some cases, the initial plan continues to serve the incident well. But as the incident itself expands beyond the initial phase, it becomes necessary to step back and take a larger look, and to begin to formulate a larger, broader plan.



In many instances, this lack of recognition of the incident dynamics causes ICs to retain the initial plan long after it is viable and leads to a crisis-management mindset that never gets ahead of, or in front of, what's happening now. ICs end up chasing their incidents from behind instead of cutting them off way ahead. It's important to recognize and modify the initial attack mindset as early as possible. An initial attack mindset keeps reacting to what's happening now. A PACE planning mindset is less concerned about the now and focuses on where the incident is going, where it will be two hours or more from now.

Decision points are clearly demarked points of reference, that when reached, causes a decision to be made to either enact or not to enact an alternative solution. Decision points can be a geographical point, a point in time, or a set of conditions that trigger consideration of alternative measures, a change in strategy or tactics, or simply a confirmation to keep with the same plan. In short, when decision points are reached, it's a time to consider how the plan is going, and if there's a need to change it.

Consider long and short-term PACE plans for the incident, including the impact of potential hazards and unplanned events on the incident. Having several plans prepared on an expanding incident ensures a smoother transition should changes be necessary due to dynamic conditions.

The primary plan is your first, most viable go-to option that doesn't chase behind the incident but looks at it proactively. Where can resource safely interject themselves far

enough ahead of the incident? This ties directly into the incident objectives. The primary plan is where most of the incident resources will be engaged.



Some of your efforts, and resources, should also be focused on an alternative plan. The alternative plan is one you can fall back on easily if your primary plan doesn't work out. However, this doesn't mean that your primary plan should have unnecessary risk involved.

Contingency plans reflect your worst-case scenario if all else fails. They are your last line of defense. They may not be your first or second choice but you should put enough effort and resources into this plan that your confidence remains high in its success if needed.

Emergency plans developed for the expected "unexpected" emergencies, like accidents or injuries involving responders. Sometimes these are classified as "incidents within the incident." On rapidly expanding, dynamic emergencies the stakes and risks can be high. Having an emergency plan in place allows the IC and ICS staff to take immediate action when something goes wrong.

Contingency and emergency plans must be adequately resourced and units pre-positioned so they can be implemented without hesitation should the need arise. Having contingency and emergency plans without resources committed and ready to go is useless. For example, if you had a plan for a firefighter mayday, but no crews assigned and immediately ready to intervene, the plan itself is of little use. Even on a routine day-to-day basis, a first alarm incident should have at least one unit not engaged or assigned, ready to render help if something unforeseen happens. On a second alarm, two units should be held in reserve, on a three-alarm, three units, etc.

Putting PACE plans together allows ICs to respond to incident changes with calm consistency. For example:

- The primary plan is to hold this wildfire at Deer Creek with Division A resources.

- If the fire crosses the Deer Creek drainage, the alternate plan is to hold the fire at Doe Valley Road with three engine Strike Teams.
- The dozers assigned to the Contingency Group will cut a line above Doe Valley on the lee side Buckhorn Ridge.
- Task Force 1 with two ALS engines, a rapid extraction team, and two ambulances will be staged at Fawn Lodge for emergencies.

It's extremely challenging to effectively command an expanding incident. You may have to negotiate with other ICs as part of unified command; track all assigned, available, incoming, and ordered resources; keep current on SA and incident status; manage risk decisions; and plan for what may come, if you're going to get ahead of the incident.



The major elements of the planning process are:

- Establishing incident priorities and objectives
- Developing strategies and tactics
- Identifying work assignments for resources
- Identifying overhead/support staff positions needed
- Placing a comprehensive, consolidated resource order
- Identifying and developing other IAP elements
- Disseminating and briefing responders on the plan
- Assessing and verifying the IAP for accuracy and progress

The value of interagency training with local overhead staff members who may form an “on-the-fly” ad hoc IMT during an expanding incident cannot be overstated. The value of forming positive working relationships with other agencies who you may share jurisdictional responsibilities or overlap is essential.

Operational Periods

FEMA defines an operational period as a designated time scheduled for executing an identified set of operational actions as specified in the IAP.

This may be just a few minutes during an initial phase. Consider a structure fire with a potential for rescue: the incident may be up-tempo until an “all clear” is declared, then everyone takes a deep breath, and is more deliberate to avoid injury during the incident stabilization and property conservation phases. The search and rescue phase is essentially a separate operational period. An operational period for a hazmat incident may last as long as one entry team is in the exclusion zone to get a sample.

The length is usually 12-24 hours for most working incidents, but operational periods vary greatly depending on the incident and how the IC chooses to classify them. During the recovery phases of a large disaster, the operational period may stretch a week or more.

Operational periods are usually chosen for the natural breaks that may need to occur to relieve resources (shifts), re-evaluate major new phases or direction an incident could take, or to gear up for the next major step in an incident.

8: Develop the Incident Organization

Performance Pyramid

The Eye of Providence on the dollar bill is meant to be the All-Seeing Eye, used throughout the world on coats of arms and currencies to symbolize omniscience, watchful protection, and the pursuit of wisdom. Taken a bit differently, think of it as the vision that guides our efforts; not quite attached to tangibles but providing guidance for where or what we want to be. The top layer of the pyramid represents the ultimate or final goal or objective we want to achieve in service to our vision. The next layer is the strategies we employ to reach the objectives, which sits on top of a layer of tactics. Tactics are accomplished through the completion of groups of tasks, which form the foundation and base layer for all we attempt to achieve.



From the bottom up, tasks are how we get things done. Groups of tasks become tactics and groups of tactics help accomplish our strategies. Strategies work towards our incident objectives and incident objectives point to a larger vision of what we want to do or be. This is the performance pyramid and is employed any time a group of people work together towards a common goal: the very definition of a team.

The performance pyramid serves to clarify and differentiate between the performance levels we use toward accomplishing our incident objectives.

Operational Planning

Developing an incident organization is predicated on adequate forecasting, clearly defined incident objectives, and a good idea of resource availability. One of the main tools in incident organization is to match the work that needs to be done with the resources to get it done. While not part of the official IAP, the ICS 215G (Operational Planning Worksheet) allows for the PSC and OSC to get organized for the next operational period. The ICS 215G contains areas for the OSC to put in the task that need to be accomplished by either functional or geographic area, with the total number of required resources need (by kind and type) to get the work done. The next step is for the PSC to get with the Resources Unit Leader to determine what resources are on hand and how many resources need to be ordered to fulfill the tasks. Next, a resource order needs to be placed to obtain those resources so that they will arrive in time for the next operational period.

It's crucial during the operational planning process to consider the appropriate span of control for task-oriented resources so that adequate supervision and oversight is maintained. Failure to plan properly can lead to an abundance of resources with one to deploy or supervise them, rendering them either dangerously managed or useless because directives cannot be communicated. There have been numerous instances of Division/Group Supervisors with spans of control that far exceed what is humanly possible on fast-moving and hazardous incidents.

Logistical Support

Equally important to consider is the logistical support needs of those assigned to the incident. In terms of priority, water is usually first, followed closely by food, hygiene, and weather protection needs. Pallets of water and non-perishable food, along with readily deployed porta-potties will go a long way toward increasing production rates. Providing sufficient logistical support like water and food with enough calories to support hard task-driven work, will ensure incident objectives are met on time.

You should think of facilities long before the incident occurs, with after-hours contacts and emergency use agreements in place. Providing shelter from the elements with enough space for all projected incident functions is paramount. Using a high school can be good when school is out of session. Sometimes it's better to plan bigger, a fairground, for instance, where you only may need a portion of the space for a smaller incident but can expand into the entire complex without relocating. The projected size

and complexity of the incident, coupled with location, will play a big factor in determining where best to set up.

The key aspect of incident organization is essentially a skill in matching:

- SA to risk management
- Risk management to incident priorities
- Priorities to strategies
- Strategies to tactics and tasks
- Tasks to resources
- Resources to Overhead and Logistics

A disparity between any of these can (and has) contributed to disastrous consequences. Ultimately, you are attempting to match the IAP to the incident itself. The IAP, and its implementation, is the act of organizing the incident, striking to achieve balance between the incident and what responders bring to turn chaos into the homeostatic state of equilibrium that existed before the incident.

The key factor in organizing is to officially decentralize control from the Command Post, Command and General Staff, so that ground level responsibility and authority reside deep down the chain of command with the field responders. Personnel should be empowered through the organizational structure to take appropriate action in the absence of orders, within the Leader's Intent. Decentralization of authority and delegation of decision making to the lowest levels possible allow for flexibility and adaptability while still maintaining the incident objectives and Leader's Intent.

9: Deploy

Effectively Manage Multiple Resources by Objectives and Priority

The ability to get resources where they need to go and working quickly, safely, and efficiently is the goal of appropriate resource utilization on incidents. Knowing which local resources you are likely to receive on an incident and having pre-



arrangements in place for obtaining additional or specialized resources is crucial. It becomes an undue burden to try to develop resource utilization plans after the incident has begun.

There are several key factors in resources utilization: tracking resources, balancing overhead positions with operational resources to maintain a manageable span of control, matching the right resource for the assignment, and supervising and support resources.

Principles of Engagement

Before diving into the nuts and bolts of resource deployment and direction, we need to visit some fundamental principles of engagement that provide a foundation of tactical truths in utilizing resources. How resources engage in a dynamic expanding incident environment is crucial because this is truly where the rubber meets the road, where the works get done, and where people are put into the face of danger.

A lack of understanding about principles of engagement can lead to missteps in deploying and directing resources, which can either put people in harm's way or cause you to over or under deploy resources. This can be critical, especially when resources are scarce.

A Prussian military strategist who wrote *On War* and whose work has had a major impact in military strategy for nearly two centuries came up with several principles of

engagement that are applicable to incident operations.¹⁸ These have been modified for the fire service and are paraphrased as follows:¹⁹

- **Principle of Objectives:** Objectives unify and focus strategic actions, allowing resources to work towards a common goal.
- **Simplicity:** Leader's intent, orders, and directives should be simple, concise, and clear.
- **Offense:** Take assertive actions towards incident priorities. Offensive action is necessary to achieve decisive results.
- **Mass:** Having enough staff and resources assembled is key to accomplishing incident objectives.
- **Maneuverability:** Resources should be maneuverable enough to keep up with incident dynamics; time and flexibility for resources to position at advantageous points.
- **Reserves:** Having resources in reserve is essential for changing conditions and unforeseen situations. Reserves provide flexibility, sustain power, and maintain momentum.

Resource Engagement Strategies: DRAW-D

- Defend
- Reinforce
- Advance
- Withdraw
- Delay

Resource Utilization

On a rapidly expanding incident it's important to get Overhead on the ground and engaged as soon as possible. Without adequate Overhead, individual resources are usually limited in their ability to self-assign, assemble into groups, and act appropriately within Leader's Intent unless they are highly trained and experienced in doing so. In many cases, lack of Overhead causes clogs in staging areas and getting resources deployed and working on the incident.

¹⁸ Von Clausewitz, 1832.

¹⁹ Mission Centered Solutions, 2007.

The incident itself will dictate which of these positions is most critical to fill. As a general guide, there should be at least two Overhead for any initial working incident. For instance, a one-alarm fire should have two Overhead, a second alarm should bring two more, a third alarm should bring three more, a fourth, four...etc. If you can build in Overhead depth to existing alarm assignments, as the incident grows, so does the overhead capability to effectively utilize those resources. In actuality, 16 Overhead for a five-alarm fire is just minimally appropriate for the resources and workload.

Organizing and Tracking Resources

Tracking resources is a critical activity on any expanding incident. Most of the time, you can remember familiar resources without needing to write them down. When enroute to an expanding incident, the best advice is to never get behind. If the initial IC is requesting more resources and you're not at scene yet, but plan to assume command, pull over, stop and notate the resources. It may not be your problem yet, but it will be as soon as you're on scene.



If you live in or close to an urban area, you may encounter the situation where resources arrive faster than you can deploy Overhead to effectively manage them. Having a pre-arranged amount of Overhead automatically dispatched as the incident grows, or a module of preset positions that can be ordered at once, takes one more thing off your plate as the IC. One less thing to remember when you are on an incident and already approaching overwhelm.

Losing track of resources amounts to losing the incident. Not only can resources get lost in the incident, serious safety and accountability issues begin to creep up. If there's an unexpected event and you don't have a handle on available or inbound resources, you're at a serious disadvantage in handling the new "incident within an incident." If you're beginning to fall behind on resource tracking, get some help and get back on top of it early. It will only get worse as more units arrive and disappear somewhere.

An ICS 201 (Incident Briefing) form is handy for the initial response, but you'll quickly run out of room. A handy tool for resource tracking is the Branch Assignment sheet (Appendix A). You can group resources by location, or by kind/type if you're in a staging area and need a quick look at what's available.

Resource Requests

As an IC on an escalating emergency, you may need to place a quick, initial order for more resources before you formulate your IAP. You should avoid multiple “nickel and dime” requests for this and that until you can place a more comprehensive, consolidated resource order. However, if your Overhead will be trickling in more slowly, consider staggering your resource requests as well to avoid bunch-ups at staging areas. Also, consider the capabilities of your dispatch center. If you order too many resources at once it may also overwhelm the dispatch center and slow the process down.

You may be able to request uncommon resources that may not be a part of a mutual aid/box alarm system through your local EOC. It is essential to have a pre-established list of specialized resources with 24-hour numbers to obtain them. Many jurisdictions maintain ERDs just for this purpose. Be particularly careful in agreeing



to order certain resources, especially private ones, that may come with an invoice later. Especially on non-reimbursable incidents, there has been a lot of heartache where some agencies were unaware of the “you order, you pay” rule and were responsible for paying a large bill.

To avoid resource request duplication, all resource ordering for a given incident should come from a single point. This could be at the Command Post with multi-jurisdictional or multi-functional agencies each agreeing to their part of the resource order, or at a single dispatch/command center that unified command agencies agree on. Oftentimes, quick

verbal agreements can be made and notated on exactly which resources each agency is willing to provide. In any case, this helps to assure that the resource order is part of a coordinated effort, and not duplicated, which may further stretch already impacted local resources.

Reflex time is the inclusive deployment time it takes for a resource to be:

- Requested from the incident
- Processed through Dispatch
- Prepared for response (initial attack, immediate need, or planned need)
- Relocated to the incident (travel time)
- Checked in, assigned, and briefed
- Moved to its assigned location
- Actively working on scene

You can see from this process that it's crucial to have as much as possible worked out beforehand, and to order what you need in a timely manner.

Resource Availability and Capabilities

The more specialized your need for a specific resource is, the more reflex time you can expect. When considering the resources available on an incident, sometimes the plan is dictated by which resources are immediately or readily available. Beware of plans that call for resources that cannot be obtained easily, especially when multiple incidents are occurring, creating a lack of resources or a run on priority resources.

Being familiar with resource capabilities is key to integrating those resources into the IAP. Miss-matching resource capabilities to the work assignment can create confusion and lead to unproductive efforts and safety issues. If you are not personally familiar with the resource capabilities needed, depend on others with that subject matter expertise. In dealing with non-familiar hazards, try to place a technical specialist within the Plans Section to advise on both work assignments and resource placement on the ICS 215 (Operational Planning Worksheet) (and ICS 204s, if used). Workload and production rates vary with the incident, but consulting with someone familiar with the resources capabilities and types of hazards will help to ensure that the ICS 215 is a true reflection of operational reality.

More than any other factor, the capability of any given resource is determined by the people operating them. Training, experience, qualifications, and willingness of the operators and crews mean much more than the kind or type of resource they arrived with. Often individuals arriving on a given resource are cross-qualified and trained to operate in other situations and circumstances than



originally appear. But you may also find that some resources are only marginally trained or equipped to handle their work assignment. In every case, be sure supervisors vet and verify capabilities as actually encountered and attempt to utilize every resource in a way that safely contributes to accomplishing the incident objectives with minimal risk.

Also be aware that resource capabilities can be affected by a variety of internal and external factors, including morale, crew integrity and cohesion, local knowledge and

familiarity, fatigue, environmental factors, etc. These factors can have a measurable effect on capabilities.

Resource Supervision and Support

Assigning a resource on an ICS 204 (Assignment List) is a relatively simple process, but supervising and supporting multiple resources over several operational periods is another matter. If you're lucky, you'll have sufficient Overhead for the supervision part and an experienced Logistics Section Chief (LSC) to provide support.



On an expanding incident, things that normally are not a factor begin to creep up if not adequately addressed as part of the overall incident plan; things like fire engines running out of fuel after pumping for eight straight hours, water, food, bathroom facilities for personnel, shade, shelter, rest, and rehab facilities if environmental factors are present. Lack of adequate planning far enough in advance can have a detrimental effect on resources if not addressed early enough in the incident.

Some specialized resources, such as utilizing inmates for some work assignments or heavy equipment which need special permits to travel, may require more support than others. When placing your resource order don't forget to consider the support needs that come with these resources.

Directing, controlling, and evaluating are crucial steps in implementing the IAP and achieving the incident objectives.

- Give clear directions, provide briefings with feedback
- Initiate actions, provide support to achieve goals
- Establish controls and monitor outcomes by implementing benchmarks and other mechanisms to measure and manage performance
- Continually update SA and evaluate incident progress
- Adjust in the IAP as necessary

Providing Direction

Directives should be as clear, concise, and as on-point as possible. Oftentimes during an escalating incident, discretionary time is at a minimum. But for the sake of clarity and safety, face-to-face briefings should be provided. At a minimum, it goes back to Leader's Intent: (1) This is what need to be done, (2) here's why, and (3) this is what it looks like when completed.

Briefings

Briefings are essential to communicate information and directives throughout the incident organization. Resources should be briefed with an opportunity for questions and feedback. This also serves to establish a tone and set the framework for the relationship between boss and subordinates. Just as the IC imparts Leader's Intent, so must Branch Directors, DIVS, and Strike Team/Task Force Leaders. While face-to-face is always best to incorporate nonverbal communication, in high stakes, time-crunched situations it may not always be feasible.



Establish Controls

Controls are methods or systems designed to inform the IC of a breakdown within the incident in time for the breakdown to be corrected while still meeting the incident objectives. Breakdowns of one kind or another occur on most incidents. The IC may not know what or when but should be prepared for the eventuality of a random glitch which affects the incident plan. Hence the need for PACE plans and to always expect the unexpected.

Methods and systems of control are necessary to have in place so breakdowns are readily identified. Being notified of a breakdown in a timely manner is key and predicated on the fact that robust communication between all ICS elements is intact and functioning strongly.

Managing Resource Overwhelm

A good plan will enable you to get ahead of the incident and get it effectively organized. But while the extended incident planning process is underway, the incident must still be handled, and often it can't wait for a written IAP to materialize for that to happen.

There are several ways to quickly get a chaotic incident organized, including:

- Asserting/re-asserting commander's intent
- Delegating to others
- Decentralizing control and allowing units to take appropriate actions in the absence of orders
- Organize by Branches, either functionally or geographically
- Order no more than 10-12 Strike Teams in the first 2-3 hours with appropriate overhead to supervise, and no more than 15-20 Strike Teams in 3-4 hours²⁰

By reasserting commander's intent, you can reaffirm your goals as the IC. This also lets other resources which have arrived since your last broadcast to get on the same page and serves to re-focus initial and extended efforts on the identified priorities.

Delegating to others is essential; you simply cannot do all the required command and planning tasks yourself. Offloading the major ICS sections to others will eliminate many cards you'd otherwise be stuck holding yourself. Activate a Deputy IC position who can assist with placing resource orders on your behalf, assist with the ICS 215 (Operational Planning Worksheet) process, or attend briefings for you. This frees you up to focus on priorities.

Decentralizing control means empowering units in the field to take appropriate actions on their own while remaining under the guidance of your Leader's Intent. The paradox of regaining control is to delegate it away. Anything held too tightly is bound to fall from ridged hands. Maintain flexibility, adaptability, and ease of control by not clinging too tightly to it. Don't try to do everything yourself; rely on your team.

20 Rhode, 2002, Command Decisions During Catastrophic Urbaninterface Wildfire: A Case Study of the 1993 Orange County, California, Laguna Fire, p.225.

When resources arrive faster than the incident organization builds, it creates a gap where resources are lost in the system or bunched up in staging areas. When access is limited, stage resources. But it's best not to delay ready and available units because of a lack in Overhead or in organizing the incident, unless you have discretionary time.

Start grouping resources through Divisions, Groups, and Task Forces. Contact key resources you know are in a specific geographic location and assign them a collateral Overhead duty of a Branch, Division, or Group. Have them find out which resources are located near them and start getting them grouped together and organized. Have them report back to you within a certain timeframe with the unit/resource identifiers.



Give Branches, Divisions, and Groups time to gather themselves together before reporting back to you who's where and doing what. Send FOBS as wranglers to gather up loose or lost resources. Have them work with line Overhead on assigning these rogue units into the organization.

Allow organizational actions to develop from the ground up while at the same time casting a big lasso around the incident by identifying Branches early on. The lasso is pulled into a tighter loop as resources get organized from the bottom up and from the top down.

Don't skimp on Overhead positions. If you can, pre-identify key positions and try to have them pre-organized into modules for easy ordering. Especially if you are in an urban area, you may find that initial resources can arrive much faster than you are able to deploy the Overhead positions to organize and process them into the incident.



The more adept you are at organizing, the faster those resources can go to work. On a dynamic expanding incident there is nothing defensible about a big staging area where resources sit around waiting for an assignment because there isn't any Overhead available to put them to work. The irony is that stepping back a bit and letting go of tight control over personally assigning incident resources allows line units to help you get everyone organized.

The key thing to remember is that effective planning and organizing efforts marry the right resources to the work assignments. These resources, when properly organized, get the incident objectives accomplished.

Keeping TABS

TABS stands for Tactical Actions versus Benchmarks and Safety. Establishing benchmarks with resources is essential. Benchmarks are designated “way points” along the path that serve to measure progress toward completing work assignments and, by

extension, incident objectives. Benchmarks can be geographical, based on task completion, or time bounded. Establishing benchmarks can serve as a vital point of reference on progress and as decision points to evaluate the merits of the tactical direction. Tactical actions should be in alignment with both identified benchmarks and safety standards. Getting the job done quickly while incurring unnecessary risk is not an acceptable option.

Geographical benchmarks should include reference points known by and communicated to the affected resources. For example, crews should know that if the strip mall fire gets past unit seven, where the last fire wall is located, the plan is to go defensive. Or, if the river gauge rises to 37 feet, we're evacuating the neighborhood. These may also be termed "decision points".

Production Rates

For time-bound benchmarks on a structure fire, what is the time standard for a truck company to vertically ventilate a single-family residence of ordinary construction with a standard pitched roof? If the IC sets a benchmark of 10 minutes, and the truck company is still fumbling with getting the saw started after 12 minutes, does this lack of progress affect the IC's overall plan for the incident?

For task completion benchmarks on wildland incidents, resources have standard production rates for handline construction in various types of fuel, hose lays, and for dozers constructing fireline based on type of dozer, type of vegetation, and slope. If a resource, or group of resources, is out of synch with expected timelines it affects the entire plan for that section of the incident. If the supervisor has resources out ahead of the fire and is trying to gauge successful line completion before the fire arrives, meeting benchmarks is critical, especially for the safety of personnel. Task completion benchmarks could also be applied to resources working ahead of an advancing flood or hazmat spill.

Methods of keeping TABS include direct observation, periodic reports or by proxy, such as other Overhead or by aircraft. Periodic reporting is best conducted by gathering a quick set of information: Conditions, Actions, and Needs (CAN) reports. In these reports, subordinate resources give a quick update on the conditions they're encountering, their

current actions, and any needs (such as more resources) to complete the work assignment in the identified timeframe.

These periodic reports could also be combined with a Personnel Accountability Report (PAR) if needed. Usually enacted in high risk or Immediately Dangerous to Life or Health (IDLH) situations, this reporting lets the supervisor know that all personnel under their control are alright and accounted for.

A key factor in resource utilization is to match the right resource to the right work assignment based on a variety of factors including qualifications and capabilities, the most important being the personnel operating them. Once resources are effectively matched to the work assignment, or in the case of limited available resources, matching the work assignments to the resources on hand, it remains paramount to supervise and support those resources as best as possible so incident objectives can be met as quickly and as safely as possible.



Lack of sufficient progress at a benchmark should be analyzed. Why is progress not as expected? There could be numerous reasons, such as:

- Lack of understanding the work assignment
- Not properly trained, experienced, or qualified
- Physical/environmental barriers
- Expectations are not realistic: need to redefine work, benchmarks, or adjust tactics
- Unsafe or unforeseen conditions encountered
- Mechanical breakdown or injury
- Distraction/lack of focus
- Competing priorities
- Workload not balanced/not enough resources assigned
- Lack of leadership

It's important to drill down a bit and determine the cause of the delay in progress and to make the necessary adjustments, including the consideration to add or exchange resources for a better fit, change the tactics and try something else, or provide more resources/logistical support.

10: Note the Changes

Review, Evaluate, and Revise the Incident Action Plan

It's important to realize that on an expanding incident where ICS resources and organizational elements are still arriving and forming, the IAP will continue to evolve and change, especially during the first operational period. When considering the incident organization, often in the initial stages of an expanding incident before things gel, Branch or Division boundaries can shift as the incident fluxes. After the initial bursts of activity, arrival, assignment, and deployment of major resources, things tend to quiet down, even if only just a little.



As the ICS organization gradually matures and things begin to solidify, making major changes to a written and distributed IAP can cause confusion if not handled properly. Adjusting a written IAP that has already been distributed to the field can be a tricky business. Therefore, distributing an initial IAP early in the first operational period may not be the best idea. It's usually best to wait for the beginning of the next operational period to make significant organizational changes to the written IAP. This way, the new set of resources can orient to the new changes from scratch and not have to shift their mindset midway through an operational period. To command safely and effectively, you need to continually reassess the plan and change it according to actual observations and feedback.

- The overall incident objectives may remain as is, but the approach to implementing those objectives with strategy and tactics may need to shift as conditions change.
- The fact that IAPs are generated 12-24 hours prior to implementation automatically creates a time and conditions gap that must be reconciled through a refreshed update on conditions and SA.

When it comes to strategic or tactical changes, the IC should not hesitate to change or modify plans that:

- Are clearly unsafe or are not working
- May have been appropriate before conditions changed, but now operational actions should be adjusted to reflect the new reality

- Are unrealistic or untimely
- Have operational actions that do not jive with resource reality (not yet enough resources on scene or plenty of resources that can engage the incident differently)
- Have other identified high priority or high stakes reasons for an immediate change to the IAP, such as a significant IWI, predicted change in conditions or weather, or sudden diverting of inbound resources to a new higher-priority incident, etc.

11: Transitioning, Transferring, or Terminating Command

Transferring Command to an Incoming Incident Management Team

A complete understanding of the situation may not be possible in the initial stages of an expanding incident. According to FEMA, a thorough understanding includes:

- Incident level, location, complexity, and scope
- Incident requirements
- Kind, type, and number of available resources
- Constraints and limitations
- Environmental conditions
- Complexity analysis
- Preparedness plans
- Existing agency agreements



Command and General Staff Meeting

If time and conditions permit, try to have at least a brief get together with key members of your team. This is usually run by the PSC, who kicks off the meeting with a roll call and introductions. This is followed by opening remarks from the IC, then the incident objectives for the next operational period.

Terminating Command

The debrief provides an opportunity to evaluate and recognize teams or individuals for their performance. This includes identifying performance areas that need improvement. It is a feedback session. Make the following behaviors part of your routine debrief:

- Conduct self-critique
- Accept/encourage feedback and suggestions
- Focus on process

- Demonstrate consistency

Conduct an After-Action Report or Post-Incident Analysis

Openly critique your actions and determine what you can learn from them. Encourage similar behavior on the part of other team members. This should be approached as an opportunity to learn from recent experience. Unless you are aware of your performance, you cannot know what you should continue doing or what you should change. Encourage feedback, be open to feedback, and actively solicit it.



Make time for the debriefing process! AARs are important on many levels to improve human factors through an awareness of errors and by identifying actions to be corrected next time.

Planning

- How do team members get and pass information necessary to meet incident objectives in the planning process?
- How do members communicate during the incident about changes in equipment status, personnel readiness, changes in weather, and whether mission objectives are still applicable?
- How effective was the planning process in identifying critical factors and forecasting the incident tempo?

Staff and Resource Utilization

- How well are team member capabilities matched to task requirements?
- How effectively are workloads balanced during the incident?
- How are task priorities assigned or changed?

Directing, Controlling, and Evaluation

- How effectively was the team and individuals in adapting to incident tempo changes?
- How effective was the team and individuals in detecting changes or errors in the nature or timing of activities?
- How well did the team and individuals adjust activities in response to changes, errors, and omissions?
- How well did the team monitor compliance with established incident standards in the proper coordination of individual activities?
- How well did the team adjust to nonstandard activities?

Maintaining Incident Records

Records should be maintained for the required period after the incident's conclusion. It's common for incident documentation to be requested two to three years after the incident.

Afterward

A Final Note

Like each of us, this document is a work in progress. These principles have been presented to you from the school of experience, adapted from the “learning through trauma” of many competent ICs. Not all principles will resonate with you or apply to your situation; take what works. I wish you the best, brightest, and safest career possible. My sincere hope is that the gap between the promise of your potential and the reality of what you’re able to achieve is a small one indeed.



Author Information

Commanding the Expanding Incident was compiled, developed, and presented by Chief Mark Bisbee for the 2018 IAFC Conference in Dallas, TX. Chief Bisbee’s career spans more than three decades with state, county, and local government fire and emergency service agencies in the San Francisco Bay Area.

Chief Bisbee has served as a training officer, field battalion chief, and a working fire chief in many ICS positions, including ENGB, FIRB, STEN, DIVS, FOBS, FBTS, ICT3, PSC3. He has been on a Federal Type 2 IMT, and assigned to earthquakes, floods, and major fires in three western states. He has also taught ICS courses for over 20 years, written articles in *Fire Chief* and *Wildfire* magazines, and has presented on command topics at Fire-Rescue West, FDIC in Kansas City, MO, and in Dallas, TX. He currently is a Battalion Chief (RA) for the California OSFM State Fire Training Division and serves on the state FIRESCOPE and CICCIS task forces and is co-chair of the California FESHE Consortium.

References, Acknowledgements, and Credits

1. Alan Brunacini, Fire Chief, Phoenix Fire Department
2. Bret Mayhew, author and critical incident investigator, United States Forest Service; Orange County Fire Authority
3. CALFIRE Incident Management Team #3 (IMT 3)
4. CALFIRE Wildland/Urban Interface (WUI) Guide
5. Doug Campbell, United States Forest Service
6. Dr. Richard Gassaway, fire fighter and neuroscientist
7. Gary Nelson, Assistant Chief, Los Angeles County Fire Department
8. John Boyd, military fighter pilot
9. Karl Weick, United States Forest Service
10. Los Angeles City Fire Department policies and procedures
11. Michael Rhode, Battalion Chief, Orange County Fire Authority
12. Mission-Centered Solutions
13. National Park Service Risk Management guidelines
14. National Wildfire Coordinating Group S-300 course curriculum and Incident Response Pocket Guide
15. Paul Gleason, United States Forest Service
16. Skip Coleman, Division Chief, Toledo Fire Department
17. Sun Tsu, Chinese military general, philosopher, and writer (771-256 BC)
18. Ted Putnam, United States Forest Service
19. Tim Sappok, Division Chief, CALFIRE
20. United States Coast Guard Incident Command System and Operational Risk Management manuals

Acronyms

AAR – after-action report

Cal OES – California Office of Emergency Services

CAN – conditions, actions, and needs

CHP – California Highway Patrol

DPA – direct protection area

EOC – Emergency Operations Center

EOP – Emergency Operations Plan

ERD – Emergency Response Directory

ESF – Emergency Support Functions

FEMA – Federal Emergency Management Agency

FMAG – Fire Management Assistance Grant

FOBS – Field Observers

FOG – Field Operations Guide

FRA – federal response area

GPS – global positioning system

IAC – incident action plan

IC – Incident Commander

ICP – Incident Command Post

ICS – Incident Command System

IDLH – immediately dangerous to life or health

IMT – Incident Management Team

IPRG – Incident Response Pocket Guide

LEMSA – Local EMS Agency

LHMP – Local Hazard Mitigation Plan

LEMP – Local Emergency Management Plan

LRA – local response area

LSC – Logistics Section Chief

NFPA – National Fire Protection Association

NIMS – National Incident Management System

NOAA – National Oceanic and Atmospheric Administration

NWCG – National Wildfire Coordinating Group

OSC – Operations Section Chief

PACE – primary, alternate, contingency and emergency (plans)

PAR – personnel accountability report

PSC – Plans Section Chief

PTB – position task book

RAM – risk assessment matrix

RPD – recognition-primed decision making

SA – situational awareness

SEMS – Standard Emergency Management System

SEP – state emergency plan

SRA – state response area

TABS – tactical actions versus benchmarks and safety

UIC – Unified Incident Commander

USCG – United States Coast Guard

WUI – wildland urban interface

Appendix A

[illegible]

Branch Communication Summary							
Function	Frequency	System	Channel	Function	Frequency	System	Channel
Command				Logistics			
Tactical				Air to Ground			
Prepared by (RESL):		Approved by (PSC):			Date:		Time: