

HOMELAND SECURITY AFFAIRS



THE JOURNAL OF THE NAVAL POSTGRADUATE SCHOOL
CENTER FOR HOMELAND DEFENSE AND SECURITY

<http://www.hsaj.org>

The Missing Piece of NIMS: Teaching Incident Commanders How to Function in the Edge of Chaos

Cynthia Renaud

ABSTRACT

The National Incident Management System (NIMS) has become a subject of controversy, as many practitioners find severe limitations with the system's field effectiveness. To label NIMS a complete failure and look for a different response tool would be rash and premature. A deeper exploration of NIMS shows that it is very useful in structuring response efforts for large-scale incidents, but only in later operational periods, when a certain amount of order has been restored. The NIMS failure point, however, is that it offers limited help to those first-arriving responders who must deal with the initial chaos inherent at the outset of every scene. This article explores the dynamics of the initial edge-of-chaos that characterizes the first phase of every large-scale incident and offers recommendations for additions to NIMS that will better prepare first-responding incident commanders to work their way through that chaos and later apply the NIMS process with purpose.

INTRODUCTION

Public safety's handling of large-scale incidents is always judged by how well they ended. How many lives were saved or lost? How much property was lost or destroyed? How quickly was the affected community returned to normal? Some response efforts are judged kindly (Oklahoma City Bombing), some mercilessly (Hurricane Katrina), and others reveal learning points and spark national growth in the discipline (9/11).

Critiques of New York City's response efforts to the cataclysmically overwhelming events on September 11, 2001 can be found in many sources.¹ Through a fairly surgical dissection of 9/11 that benefits from the clarity of hindsight, two main points have emerged: (1) the lack of interoperable communication severely hindered response

efforts; and (2) there was little cross-discipline coordination, and no framework in place to foster or create the ad hoc organization needed to respond to such a massive event.

Having these tangibles to tackle, the federal government has given large amounts of Urban Area Security Initiative (UASI) grant funds to local agencies as they further their regional interoperability goals. It has also created and mandated the use of the National Incident Management System (NIMS) as the framework all agencies must use when responding to large-scale events. The first-responder community has been galvanized to address these two main points, subsequently focusing on the ancillary equipment and training necessities that go along with them. Over the past ten years, working on just these two points has become quite a cottage industry in and of itself.

But something is missing in this critique. We have looked at the parts so individually and specifically that we have divorced them from the context in which they need to be considered. The question, considered on the national stage, of "how does one attempt to tackle a spontaneous event the size of 9/11?" has resulted in an over-zealous focus on breaking down that event into manageable parts. In doing so, we have gone after the "low-hanging fruit" of improved communication, radio interoperability, uniform planning forms, and creating a common language among responders. We have created checklists and terms. But we have not yet taken a step back to consider the problem as thinking practitioners.

IMPETUS FOR THE CREATION OF THE NATIONAL INCIDENT MANAGEMENT SYSTEM

After 9/11, Homeland Security Presidential Directives (HSPD) 5 and 8 mandated establishment and implementation of the

National Incident Management System (NIMS) as the standard that all first responders must use when handling large-scale incidents. The stated purpose of HSPD 5 is “To enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system.”² Two key points in the HSPD 5 policy section stand out:

(4) The Secretary of Homeland Security is the principal Federal official for domestic incident management. Pursuant to the Homeland Security Act of 2002, the Secretary is responsible for coordinating Federal operations within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Secretary shall coordinate the Federal Government’s resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies if and when any one of the following four conditions applies: (1) a Federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities; (3) more than one Federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President.

(6) The Federal Government recognizes the roles and responsibilities of State and local authorities in domestic incident management. Initial responsibility for managing domestic incidents generally falls on State and local authorities. The Federal Government will assist State and local authorities when their resources are overwhelmed, or when Federal interests are involved.³

These two sections need to be evaluated not so much for what they say, but more importantly for what they *don’t* say, and for the vast, unexplored terrain they create. For in these two policy sections, HSPD 5 says that locals are responsible for handling the *initial phase* of large-scale event response. When that event gets so big, as described in the four

subsections of policy item #4, then the federal government comes in to help and NIMS is deployed. Clearly, by the time the federal government assets arrive on scene, the event will be well past its initial phase and into later operational periods. And it is at this point that HSPD 5 says NIMS will be able to manage effectively the ad hoc organization created to respond to the event. And HSPD 5 is probably correct.

HSPD 8 goes on to elaborate on the stated purpose of NIMS:

[To] prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness goal, establishing mechanisms for improved delivery of Federal preparedness assistance to State and local governments, and outlining actions to strengthen preparedness assistance to State and local governments, and outlining actions to strengthen preparedness capabilities of Federal, State, and local entities.⁴

HSPD 8 is an “all hazards” approach to preparedness, prevention, and response. It defines several terms, including “first responder.” First responders are those who “*in the early stages of an incident* (italics added) are responsible for the protection and preservation of life, property, evidence, and the environment.”⁵

Taken in total, then, HSPD 5 and 8 both realize that local first responders will be the ones handling major events at their outset. Both HSPD tacitly understand that there is an *initial phase* of every event and that federal resources will probably not be called in until after this initial phase has passed. And yet, these HSPD mandate the use of a NIMS that does not address this initial phase of an event clearly enough to help first responders work their way through it. Because the HSPD do mandate that all locals train and be proficient in NIMS and use it during response efforts to large-scale events, many in the first-responder community complain that NIMS does not work. Is it fair to label NIMS a failure, or should we perhaps consider what piece now missing could, if added, make it a useful tool?

STRUCTURE OF THE NATIONAL INCIDENT MANAGEMENT SYSTEM

Consider how NIMS looks when in use. Based on the Incident Command System (ICS), it establishes sections, divisions, and branches, and describes the job duties of each. It is a management organization that can expand or shrink based on the size and complexity of the incident. In its most basic form, it gives an incident commander the responsibility for managing the ad hoc responding organization. It establishes an operations section chief to order the troops carrying out the mission decided upon by the incident commander, planned by the planning section chief, supported by the logistics section chief, and paid for through the finance section chief.

If the incident or event happens in a city with a state-of-the-art Department Operations Center or Emergency Operations Center, all of these people come together in a room wired with flat screen televisions to watch the event unfold on the news. Phones,

radios, and computers are connected so they can talk to each other and to their troops in the field. All the ICS forms they need are in a template on the computer, ready to be filled out for federal compliance and possible later reimbursement. Anyone who has been in one of these rooms during a large-scale event or incident, whether planned or unplanned, knows that it quickly becomes quite a bureaucratic machine.

To help manage an event, NIMS creates operational periods, usually twelve hours in length, so that incident commanders can consider the event in specific, shorter time frames. Each operational period begins with a briefing so that mission objectives can be defined, or re-defined, and communication among all levels of the ICS organization can be fostered. These operational periods help NIMS operate in a very linear fashion, from the outset of the event through the response efforts and into recovery. It forces the event and response efforts into a sort of organized, chronological timeline, as represented below.

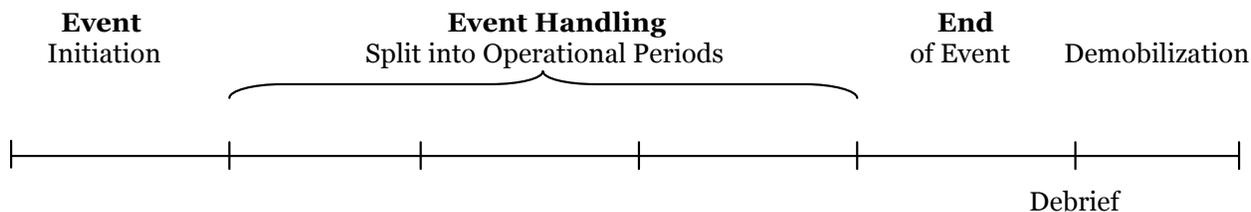


Figure 1. Event/Incident Chronological Timeline Representation

While this looks good on paper, every first responder knows that no event is so neatly or quickly organized. Consider that NIMS was used to structure the organization created to handle Hurricane Katrina. Does anyone in the first-responder community consider those initial response efforts an unmitigated success?

Perhaps it is unfair to judge NIMS effectiveness by such catastrophic events as Hurricane Katrina or something akin to the 9/11 attack. Truly, events of that type are so large, so unimaginable, so horrific to handle, that no first responder could adequately

provide any sort of immediate, effective management. Yet someone must.

NIMS instruction for the first responder states that he/she must “size up the incident” and then, as quickly as possible, resolve it.⁶ After this brief mention, the remaining thrust of NIMS is focused on creating the organization that manages those working to resolve the issue. Little attention is paid to how one must first “size up” the incident. The NIMS focus on *resolving* the issue without first *understanding* it can lead to inaccurate direction and potential loss of life and property.

THE MISSING PIECE OF THE NATIONAL INCIDENT MANAGEMENT SYSTEM

What is the missing piece of NIMS? To answer this question, we must first consider one all-important, never-talked-about, fact regarding the culture of our discipline. As first responders, we are supposed to be calm, cool, and collected at all times. Nothing should faze us, nothing should scare us, and nothing should jolt us out of our comfort zone. We arrive, we solve the problem, we go home. In some sense, NIMS has incorporated that cultural philosophy into its content. The NIMS calmly discusses how forms are filled out and checklists are followed in order to restore order.

What NIMS does not discuss in enough detail is that when first responders are called to a large-scale event, they can arrive to the sounds of gunfire, screaming or mortally wounded people, fires raging, crowds rushing, mobs forming, and other officers or firefighters so overcome by events that they cannot function. Responders are confronted with having to understand this utterly confusing problem and then somehow solve it. In short, first-responding incident commanders arrive to a scene of complete chaos.

Every first responder knows this initial phase exists. Retired Los Angeles Police Department Deputy Chief Mike Hillmann calls it “The Golden Hour.”⁷ Other first responders probably have their own term for it. But while everyone knows it exists, few discussions focus on it. And no organization trains its incident commanders how to function in it, how to understand it, and how to end it.

Also never acknowledged is that this chaos is a normal, natural part of the event. Because this is not routinely taught or practiced, first-arriving incident commanders feel a push to end the chaos immediately and if they cannot do so, believe they are ineffective failures. This can result in incident commanders taking action *even if they are not quite sure yet what they have or what they should be trying to accomplish*. These first actions, taken for the sake of appearing efficient and effective, can lead event response efforts down drastically wrong paths and ultimately cost lives.

What truly determines an incident commander’s final success in restoring order is how effectively he/she can understand what is happening in the chaos and determine a course of action. How quickly can he or she work through a mental process that asks and answers the following questions?

- What has happened here?
- What have I never seen before; what is completely foreign to me?
- What have I seen before; what is familiar to me?
- What do I know?
- What do I need to know?

Once these questions are answered, the incident commander can then consider:

- What do I *want* to do?
- What do I *have* to do?
- What *can* I do?

Once *these* questions are answered, an order emerges from the chaos and the incident commander can consider the last, most important question:

- *What am I trying to accomplish here?*

From here, the forms, checklists, and organization of NIMS can structure a response to the event and bring order to chaos. But without dealing with these questions first, response efforts will either fail or be seriously misguided. Without them, field practitioners operate by what retired Long Beach Police Department Lieutenant Steve Nottingham calls “check-box tactics.”⁸ The NIMS must expand to include a full, complete discussion of this first phase of chaos. It must teach ways to think through the problem at hand and apply process with purpose. It must find a way to teach these skills to incident commanders. This is the crucial, missing piece of NIMS.

THE CYNEFIN FRAMEWORK: A DIFFERENT PERSPECTIVE IN CONSIDERING THE LIFE OF AN INCIDENT

The NIMS currently offers a linear, chronological timeline upon which to structure event response efforts. Consider, though, if the premise of the Cynefin framework might be more a more applicable tool.⁹ “Cynefin (pronounced ku-ne-vin) is a Welsh word that signifies the multiple factors in our environment and our experience that influence us in ways we can never understand.”¹⁰ David J. Snowden has borrowed this term and applied it to a framework of his creation that separates the different spheres in which leaders operate into the following contexts: simple (or *known*), complicated (or *knowable*), complex, and chaotic.

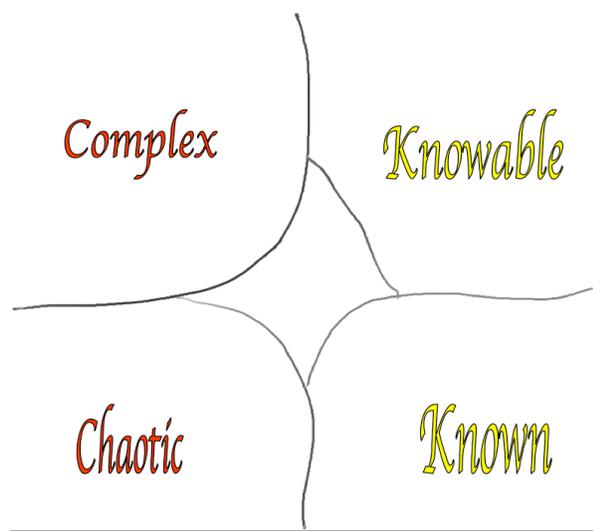


Figure 2: Depiction of the Cynefin Framework¹¹

Having done a great deal of research into the characteristics of each context, Snowden distilled the leader’s job within each of these contexts and determined danger signals that indicate when a leader is not functioning properly within that context as well as ways he or she can respond to these danger signals to ward off disaster. This framework, and Snowden’s subsequent research relating to it, is intended to help leaders operate more effectively in whichever context they find themselves.

Snowden has been applying this framework to governments, industries, businesses, and fire responders for the past decade. He believes that “the purpose of the Cynefin Framework is to help leaders determine the prevailing operative context so they can make appropriate choices.”¹² Recently, it has also been applied to help understand the field of homeland security as well. Christopher Bellavita describes its component parts as follows.¹³

1. *The known:* a space where cause and effect are understood and predictable, hence “everyone” knows what to do about the issue.

2. *The knowable:* a space where cause and effect relationships may be difficult to derive or understand, but researchers and experts – given sufficient time and resources – can determine.

3. *The complex:* a space where one knows cause and effect only retrospectively. What appears logical after the fact – i.e., when the dots have been connected – is but one of many other logical outcomes that could have occurred.

4. *The chaotic:* a space so turbulent that cause and effect are unknown; strategically, it is not clear what to do with any measure of certainty.¹

Instead of using the linear approach (presented earlier in Figure 1) to evaluate response efforts imagine, instead, understanding the life of an event as seen through the lens of the Cynefin Framework. Analyzing the response to a large-scale event through this framework shows that the “The Golden Hour” exists in the realm of the chaotic. Here, the forms, structure, and checklists of NIMS are of little use. As an incident commander effectively works through the chaos, or what Sid Heal details in his book *Tactical Primer* as “fog” and “friction,”¹⁴ the event gives way to a phase of complexity. Now the incident commander can begin to establish some of the NIMS positions and responsibilities that can assist in restoring full order, such as Operations, Logistics, Planning, and Intelligence. Then,

as the event subsides into the knowable, the NIMS organization is now valuable in managing the organizational structure. Finally, the known realm offers that place where NIMS can supervise the business of recovery.

THE EDGE OF CHAOS

Another, complementary way to consider the problem of response efforts during the initial phase of chaos is through an analogy using “the edge of chaos.”¹⁵ Molecular biology research has defined “the edge of chaos” as a place on the edge of every living cell where actors and agents interact with each other and their environments in seeming chaos and disorder.¹⁶ In this space, the interactions affect the life or death of the cell. In this space, a self-created order emerges from the chaos.

Based on this definition, the edge of chaos is a place one can be “in,” and a place that remains in existence until order emerges. If actors and agents (suspects, victims, officers, firefighters) can interact appropriately with their environment (scene of the event, weather conditions, crowd formations, media attention, elected officials responding to the scene), then order can begin to emerge from the chaos. This chaos is that “white space” between the words in HSPD 5; that initial period when the local first responder is on scene before federal assets arrive and the NIMS is stood up to manage the organization responding to the event.

This analogy means that the first-responder community must look at how, holistically, they can establish ways to influence these actors and their environment during that crucial, initial period. But this approach must be based on overarching, main point beliefs, not a NIMS checklist of items to be accomplished by each ICS section position. To work effectively in “the edge of chaos,” or “the golden hour,” actions must be based on the following tenets.

WORKING IN THE EDGE OF CHAOS

Like the national defense effort described in chapter 1, the emergency response to the attacks on 9/11 was necessarily improvised.

In New York, the FDNY, NYPD, the Port Authority, WTC employees, and the building occupants themselves did their best to cope with the effects of an unimaginable catastrophe – unfolding furiously over a mere 102 minutes – for which they were unprepared in terms of both training and mindset.¹⁷

THE FIRST TENET OF WORKING IN CHAOS: FIND THE RIGHT INCIDENT COMMANDER

Not every person can be a doctor. Not every person is geared toward being an engineer. Not every police officer will make an excellent detective. And not every police officer, high-ranking or not, can be an effective incident commander. In the ideal situation, agencies determine well ahead of a large-scale event which of their command staff are experienced, educated, and trained for assuming the role of incident commander. In the next-to-best case scenario, agencies dispense with niceties and remove from the scene of the event those officers who truly cannot function in this role. In the reality of the middle ground we occupy, agencies usually go with the theory that hope is indeed a strategy, and they just hope that the right person is on-duty when a major incident happens. In most agencies, help will be shortly on the way as tactical teams and command teams are called out from home, but the work done by the first arriving incident commander in that “golden hour” will certainly set the initial tone, pace, and direction of the response efforts.

In *The Unthinkable*, Amanda Ripley dedicates a section to finding the “right” person, entitled “Special Forces Soldiers Are Not Normal.”¹⁸ She details what Charles Morgan III, an associate clinical professor of psychiatry at Yale University, found after fifteen years of studying how people are physically, psychologically, and physiologically wired differently. Some people with certain chemical make-ups and psychological profiles react efficiently and effectively under extreme stress, while others cannot optimally function in such an environment.

He found that blood samples of special forces soldiers and enlisted military servicemen who fare well in survival school showed higher levels of the chemical neuropeptide Y, a compound that helps one stay focused on tasks performed under stressful conditions. These soldiers reported few-to-no incidents of disassociation in events they had endured up to that time. Some psychological profiles indicated most of them had suffered through difficult childhoods or previous traumatic events. Morgan's research, in total, explained why not all soldiers are alike and why some can endure stressfully chaotic situations better than others. Applying this finding to law enforcement officers is not a far stretch. Clearly, the implications of these findings for local first responders working in the chaos of early large-scale response efforts are widespread.

The NIMS is a useful framework comprised of section descriptions, checklists, and job duties that most people can be taught to apply in managing complicated incidents. However, the unique skills, abilities and even chemical-physiological makeup that comprise effective incident commanders probably cannot be taught or cultivated in every first responder, but rather must be developed in those found to possess the natural proclivity for performance under stress.

THE SECOND TENET OF WORKING IN CHAOS: "NOT EVERY INCIDENT HAS A PLAY BOOK! SOMETIMES YOU JUST NEED TO THINK..."¹⁹

How does one "think" when confronted with a scene that could encompass masses of injured people, hurt first responders, environmental destruction, conflicting information, and the stubborn refusal of that incident to bend, initially, to the "playbook" checklists supplied in the NIMS forms and section responsibilities? Law enforcement literature and teaching curricula are curiously silent on this topic. Yet it must be explored if public safety is to better handle the next 9/11 or Hurricane Katrina.

Karl Weick has researched this question as it pertains to emergency response, and framed answers using the concept of

"sensemaking" – the way human beings make sense out of complex situations. It is the sociological study of how people confronting chaotic, challenging events manage to work with and through the myriad components to bring some sort of resolution and calm to a turbulent or uncertain situation. "To engage in sensemaking is to construct, filter, frame, create facticity and render the subjective into something more tangible."²⁰

When should sensemaking be used? Not every situation one confronts is problematic. Many everyday events follow known, readily understood patterns and orders. Sensemaking is necessary when a practitioner confronts a situation falling into the Cynefin framework area of complex or chaotic. When the practitioner's goal is to move that situation out of these realms and into the complicated, and eventually the understandably simple, he or she must engage in sensemaking. As Weick describes it, "In order to convert a problematic situation to a problem, a practitioner must do a certain kind of work. He must make sense of an uncertain situation that initially makes no sense."²¹ This type of situation presents a daunting task in which known methods rarely provide applicable resolutions because the situation is new and untested. And so,

Sensemaking begins with the basic question, is it still possible to take things for granted? And if the answer is no, if it has become impossible to continue with automatic information processing, then the question becomes, why is this so? And, what next?²²

Sociologists and social anthropologists have found that East and West appear to approach problems differently. P.E. Drucker found that the West focuses on the *answer* to a problem where the East focuses on *defining the question*.²³ Sensemaking causes practitioners first to define the question and, in doing so, to consider how the various parts can work together to frame the answer. The NIMS, as a framework, rightly focuses on the *answer* to a crisis situation. Because it means to impose order as quickly as possible, it offers a robust management structure to perpetuate order. Defined management positions break an incident into workable pieces so that one person or group can focus

on logistical tracking, another on intelligence gathering and dissemination, another still on operational and tactical concerns, et cetera.

But what of *defining the question*? When do practitioners responding to the initial phase of a large-scale event have the opportunity to first define the question? What are they trying to accomplish at that particular scene? How did this happen? What type of enemy are they facing? Is there still an active force inside the event that must be neutralized, or is the event past that and are life-saving measures the main focus? These questions, and many others like them, must first be considered and answered so the very applicable structure of NIMS can effectively move the event further toward the Cynefin realm of “simple.” Without answers to these questions, incident commanders and first responders could make missteps costing lives or delaying the apprehension of dangerous suspects.

THE THIRD TENET OF WORKING IN CHAOS: MANIPULATION AND IMPROVISATION ARE NOT DIRTY WORDS

Imagine a large earthquake in the Southern California area; a terrorist event in the Los Angeles/Long Beach Port complex; a Mumbai style attack in a crowded tourist area. From the outset, a host of police officers, fire fighters, private security, media, innocent bystanders, critically wounded victims, business firms, politicians, and a host of other entities will implode on the scene and create an ad hoc working group with all representatives dependent upon each other for survival and a successful conclusion. In the eye of this hurricane, however, will be one person carrying the 500-ton weight of the title “Incident Commander.” In any of these events, one fact stands out: the incident commander (most likely a law enforcement officer) will be charged with making disparate groups work together toward a common goal. Most of these groups do not work for the law enforcement agency and cannot be “ordered” to act in a particular way. In this situation, the ability to manipulate people, things, and events can be the difference between success and failure.

The *Oxford English Dictionary* defines manipulate as being able “to handle; esp. with dexterity.”²⁴ One way of considering the skill of manipulation during incident command is to look at Mike Hillmann’s ideas about in extremis *decision making* and in extremis *leadership*; the latter is defined as “giving purpose, direction and motivation to people where there is eminent physical danger and where followers believe that leader behavior will influence their physical well-being or survival.”²⁵

Based on a several-decade career of responding to large-scale incidents, Hillmann has found the challenges for the incident commander working in the initial phase of chaos involve the reality of: imminent death or serious bodily injury; problems with control versus true command; “overwhelmed by events” (OBE) and the inability to react; confusion and ambiguous and conflicting information; environmental problems (such as noise, destruction, death, chaos, dark, wet, uncertainty); competitive issues of time and priority; a lack of think time; and the weight of the consequences resulting from success or failure.²⁶ Hillmann further believes that the effective incident commander must be: calm in the face of danger; focused; possess the ability to prioritize; have a positive attitude; be decisive and relentless in achieving objectives; apply experience from prior assignments; be able to set aside his or her ego; be in good physical condition; have the ability to overcome obstacles; and anticipate/manage change.²⁷ The successful incident commander must fulfill the following expectations those in the event have of him or her: assume command; focus on the mission and “get it done;” establish priorities; determine objectives; define expectations; maintain situational awareness; trust subordinates; constantly evaluate and readjust; at the right time, develop incident organization (ICS); and be decisive.²⁸

I saved decisive for last. It appears a little earlier on Hillmann’s bullet-point list, but it provides a nice segue into another topic few people like to discuss openly, for it seems somewhat akin to calling for treason against the King. But here it is: some of us (and when I say “us” I mean ranking officials in law enforcement agencies who will be called upon as incident commanders in large-scale

events) are not good at making decisions. Some of us are simply incapable of making decisions quickly. It's not our fault, really. Once we hold rank in a police department we become "managers" as well as leaders. We have to learn to work with our fellow command officers, liaise with elected officials, accommodate community groups, mediate employee problems, mete out discipline, work through union meet-and-confer issues, et cetera. All of that teaches us to make decisions carefully and thoughtfully in our day-to-day business life. Unfortunately, that carefully developed skill – carried over into responding to the initial chaos of a large-scale incident – could prove disastrous.

We all remember from our Police Academy recruit training days that how we train translates to how we perform in the field. We, as leaders, must train ourselves daily to make decisions. Even if the decisions are small, do not put off until tomorrow what you can decide upon today. That way of thinking and acting will carry over into actions taken and decisions made at the outset of large-scale events. This seemingly small point is a vitally important one.

Finally, because it has been established that checklists will not work in chaos, one must ask, then, what is the opposite of a checklist? The answer is improvisation and creativity. Weick asserts: "What we do not expect under life-threatening pressure is creativity."²⁹ However, when confronted with a situation never exactly encountered before (e.g., 9/11) or one of an unfathomable magnitude (e.g., Hurricane Katrina), the successful first responding incident commander must employ creativity and improvisation as quickly as possible.

THE FOURTH TENET OF WORKING IN CHAOS: FIND LEVERAGE POINTS AND CREATE MENTAL SLIDES

Leverage points are "the starting point for insightful problem solving," the "focus for building a solution."³⁰ Leverage points can be specific things, events or people. They can rise from relationships established long before the event occurs and involve social capital. As defined by Don Cohen and Larry

Prusak in *In Good Company*, social capital is "the stock of active connections among people; the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible."³¹ Finding leverage points in the chaos can help incident commanders work to restore normalcy.

Finding leverage points means that one first needs to be able to recognize them and then understand what to do with them in the context of that situation. How does this happen? Arjen Boin and others researched response efforts to several national, large-scale incidents for their book *The Politics of Crisis Management* and found the following:

Experienced incident commanders rarely arrive at situational assessments through an explicit conscious process of deliberation, as researchers of many stripes and colors were long wont to assume. Professional commanders of this kind have developed a rich store of experience and a repertoire of tactics upon which they draw when confronting a critical incident. The minds of these crisis commanders work like a mental slide carousel containing snapshots of a wide variety of contingencies that they have encountered or learned about. When they find themselves in a new situation, this is immediately compared with their stored experiences. This mental slide carousel quickly revolves until an adequate match is found. Each slide contains not only an image of the situation but also a recipe for action.³²

Incident commanders with a vast store of these "mental slides" recognize leverage points and use them to their advantage. But how do we create such slides among our community of first-responding incident commanders? Anyone who has endured the ICS 100, 200, 300, 700, or 800 classroom lectures knows that the current NIMS training model certainly does not support the creation or use of mental slides. And it is important, here, to differentiate between *education* and *training*. Where *training* molds one's brain to perform a specific task in a way an outside influence wants it performed, *education* enables the person to think for him/herself. First responders need both training and education to perform their

jobs effectively. Unfortunately, in police work and firefighting, the emphasis is mostly on training and much less on education. Although NIMS is useful training, it lacks the educational component needed to make it effective for event response.

Such a vast area of need within the first responder community must be immediately addressed. This article will recommend ways to train and educate incident commanders to create, enhance, and strengthen the mental slides needed to respond to the initial phase of chaos inherent in large-scale incidents.

THE FIFTH TENET OF WORKING IN CHAOS: THE PARTY ALREADY STARTED...YOU'RE LATE

Another important point all incident commanders must remember is that when they arrive at the scene of large-scale event they are, indeed, *late*. Whenever they arrive, others who were there at the outset were, in a sense, part of that cataclysmic incident – trained first responders or civilians and citizens caught in the vortex of being in decidedly the wrong place at the wrong time.

In certain situations, though, these victimized people might be acting heroically. They might be further along in the sensemaking process than the arriving incident commander is or can be. With whatever little piece of their contributing complexity making up the chaos that they have latched on to, they might very well be doing something right. They might be doing something positive in one little area that will start a chain reaction among other aspects of the chaos. Arriving incident commanders often blunder by stopping those actions and breaking that forward momentum because they do not understand what is going on. They feel extremely uncomfortable and unable to make any sense of the situation until they have been “fully briefed.” Their quest for situational awareness and their need to feel – and be seen as – in command of the situation can cause them to interfere with positive action at the event.

While it seems counterintuitive to the need to take immediate and decisive action, a good incident commander will take a moment to go through some simple, cognitive

sensemaking steps on arrival. He/she will think, what has happened here? What am I trying to accomplish? What do I recognize in this event? What have I never seen or heard about before? What do I know? What do I need to know? What can I begin to do? In doing this, the incident commander’s challenge is to “catch up” to the event, not attempt to stop the quickly spinning carousel of chaos so he/she can step on to participate in the ride.

CHANGING POLICE CULTURE: MULTI-ASSAULT COUNTER TERRORIST ACTION CAPABILITIES (MACTAC) AND THE USE OF EMERGENCY ACTION TEAMS (EAT)

The Los Angeles Police Department has initiated a training course for its line-level officers in response to tactics used in such incidents as the Beslan School Massacre and the more recent Mumbai attack. Multi-Assault Counter Terrorist Action Capabilities (MACTAC) was created to respond to the challenges of highly dynamic “violent incidents” involving a combination of multiple subjects, victims, and locations; simultaneous attacks; seizure of hostages; active shooters; barricaded subjects; and use of explosives. MACTAC is aimed at the first responding officers tasked with neutralizing the threat. It teaches the importance of Immediate Action Rapid Deployment (IARD), “The swift and immediate deployment of law enforcement resources to *on-going, life threatening* situations where delayed deployment could otherwise result in death or serious bodily injury to innocent persons.”³³ The imperative of MACTAC is to:

Stop the violence now [by] engaging adversary(s) with a minimally safe team; move quickly to the sounds/sources of violence; search only when the source of the violence is unknown; move past victims and threats (IEDs, etc.) and engage and neutralize adversaries.³⁴

MACTAC is essential training for line-level officers. The Long Beach Police Department instituted similar training about twelve years ago after the Columbine shooting through teaching Emergency Action Teams (EAT) and

the concepts discussed above that involve moving toward the sound of gunfire and neutralizing the threat without waiting for a commanding officer's order to do so.³⁵

MACTAC and EAT training raise an almost explosive question. Why do we do this type of training for our line-level officers specific to their jobs, yet we do *not* train and educate our incident commanders in the skills specific to *their* jobs? While there is NIMS and ICS training, these checklists and forms are not helpful in that first, crucial response timeframe. If our industry is now recognizing that certain events such as Mumbai and Beslan require different training to equip the mind and body of those line-level officers to think about handling active shooters, why does it not recognize that incident commanders have their own unique circumstance they must train for? They must learn how to work in the edge of chaos, that initial "golden hour" that exists in every large-scale event. Tactics of old that dictated a "contain and wait for SWAT" mentality have been replaced by MACTAC and EAT and an immediate engagement of active shooters. Now we must move our first-responding incident commanders into a comparable education and training model that teaches them how to work in the initial chaos so that they can bring the event through the complexity and into an area where the checklist, forms, and structure of NIMS are so useful in allowing disparate agencies to work together and restore order.

CHANGING THE COMMAND OFFICER CULTURE

Just as MACTAC and EAT were a culture shift in law enforcement, so is the idea of educating and training incident commanders to work in the edge of chaos. Chiefs and commanding officers often question how they can change the culture of an organization. The most common response is "through hiring and training." And while that is still a valid place to instill cultural changes, another, often overlooked place is through internal promotional testing processes.

The Long Beach Police Department conducts a lieutenant's exam consisting of multiple phases. One of those phases is, and

has been for decades, a "Critical Incident Management" exercise. It simulates a real-time event and begins when candidates are placed in a room for about fifteen minutes with an initial scenario description. Each candidate is allowed to make notes, look at their patrol resource list and generally consider the problem at hand. The candidate is then taken into another room where a rating panel sits behind a table. He or she stands at a board with a map of the city and is given additional updates to the situation at timed intervals. Candidates are expected to manage the critical incident as a lieutenant would in the field by talking aloud and telling the raters how they would assign resources, what missions they would assign, et cetera.

A routine tactical exam goes something like this: it might start with a shooting and one victim down with a suspect who fled in a car. There might be a vehicle pursuit, a crash, and an officer-involved shooting. Finally, the suspect might run into a house, barricade himself and take hostages. All of this information is given neatly and understandably to the candidate. The final question is always "The duty chief is on scene. Please brief him on this incident."

The exam is stressful and requires an ability to demonstrate supervisory and leadership skills as well as knowledge of policy. Over the years, however, this test has become fairly incestuous, as the past group of recently promoted lieutenants trains the next group of sergeants preparing to take the lieutenant's test. There are different theories about how candidates should address and solve the tactical scenario. Some opt for the "clock method," in which you remember to circle back to each crime scene continuously in a clockwise fashion to ask for updates and ensure you have handled everything. Others operate in the "quadrant philosophy" where you separate the map into four quadrants and work one quadrant of crime scenes to completion before moving to the next.

Our field supervisors have been studying for these tactical exams for years. Because they have prepared and memorized ahead of time, every candidate regurgitates the necessary lists, stating, "I am the incident commander, my command post location is _____ (fill in the blank), I need porta-potties, barricades, Public Service to respond

with lights, a scribe, and command post security....” I have listened to many candidates recite these lists during their exam and I often wondered how many of them really knew why they put their command post where they did, why it was necessary to secure it, really considered whether or not they would need porta-potties or if they even needed lights brought out to the scene. But all of these items are on the checklist, and so they go through that checklist process. I have lost faith that they apply any of this checklist-process with purpose.

More disturbingly, I came to realize that supervisors operate the same way in the field. This makes some supervisors ill equipped to deal with the chaos inherent in the initial phase of every large-scale event. So we decided to change how we structured the lieutenant’s tactical exam. We created a Mumbai style attack in the downtown Long Beach area and gave the candidates little information at the outset. Instead of feeding them further information, we clogged them with questions and uncertainties from their officers in the field. Instead of progressing through an incident in an orderly manner, we kept them in that initial “golden hour” with two teams of active shooters, multiple victims, the press crawling all over the location, a sergeant with an EAT who refused to engage the active shooters, the chief and elected officials calling in, the Communications Center overwhelmed with phone calls, a shortage of AR-15 rounds in the field, and, in short, utter chaos for the twenty-five minutes of their exam. The final question was not that the scenario was over, their duty chief was on scene, and they were to brief him or her. Instead, we asked them, “What components of ICS would you use to manage this incident, and why?”

Some candidates complained bitterly. They said it wasn’t what they were expecting. They said it was unfair because it was not like past tests and so it was not what they were used to. They felt it was too open-ended because they never got a chance to solve the incident completely, wrap it up with a nice bow, and hand it off to the duty chief. They complained that they were not given updates of information, only useless noise and mostly insignificant questions from operators. They

said it was just complete chaos.

We told them welcome to the reality of their jobs as lieutenants and as incident commanders.

RECOMMENDATIONS

As Arjen Boin and his fellow researchers discovered through studying decades of crisis management at large-scale, volatile incidents, “The initial phase of crisis coordination can do without rules, but successive phases require a few key rules that facilitate the interaction between the various actors and structure information flow.”³⁶ The NIMS provides those rules that, if used effectively, form the needed framework to structure event response in successive phases of an incident. The area remaining unexplored by NIMS, however, is, the initial phase of the crisis. What are the characteristics of this phase? Are there any consistent, recurrent, predictable pieces? Or is the chaos of this phase the only predictable part of it? If so, how can we understand the nature of chaos in ways that will better prepare first responders to work it to a point where NIMS becomes applicable?

The Boin research team also found that

A truly effective crisis response cannot be forced: it is to a large extent the result of a naturally evolving process. It cannot be managed in linear, step-by-step and comprehensive fashion from a single crisis center, however full of top decision makers and stacked with state-of-the-art information technology.³⁷

These discoveries suggest the need for an exploration of that unsettled place sorely lacking in clearly defined rules, set policies, procedures, protocols, and cause-and-effect constructions. In short, Boin’s discoveries regarding the nature of crisis response lead to an area where most police officers and firefighters fear to tread.

First responders spend a majority of their careers training for specific events. This is their known world. If a fire happens, determine the type (chemical, wood, wildfire) and apply the proper solution. If facing an active shooter adversary in a high school, police officers will form emergency action

teams and move toward the threat using the best possible cover and practicing such proven building search techniques as “pie-ing” around corners. But who knows how to respond to planes being flown into buildings? Who can prepare for the mass chaos of attempting to manage a response to Hurricane Katrina?

There is certainly no suggestion here that NIMS be abandoned nor training for specific, known events halted. But the first-responder community would greatly benefit from an addition to the NIMS literature recognizing the initial, edge-of-chaos phase existing at the beginning of large-scale events. This chaos is normal and to be expected. First responders arriving at a scene should not believe they are ineffective if they cannot issue direct orders that end the chaos immediately. Instead, they should realize that it might take some time to work through the chaos and that their barometer for success is not whether they can immediately end the chaos, but rather, how quickly and effectively they can manipulate all elements to work through it.

While there are no checklists for working through chaos, evidence suggests that sensemaking is useful for first responders who find themselves in these situations. While NIMS currently teaches organizational structure, it is silent regarding how an incident commander comes to determine what that structure should be trying to achieve and the direction in which it should be moving. Some work with sensemaking as a strategy for determining mission, path, and direction for the ICS structure created to handle subsequent phases of the event would be invaluable. In fact, it is everything. A well-functioning team is useless if they have misidentified the problem and are, therefore, following the wrong path.

As Boin found, “Leaders are important not as all-powerful decision makers but rather as designers, facilitators, and guardians of an institutional arrangement that produces effective decision-making and coordination processes.”³⁸ These concepts cannot be taught by simply including them in the current NIMS checklists written for each section position.

Because of this, NIMS should also recognize that not every person has the innate skill set necessary to perform well in

crisis situations. Not every first responder will be able to grasp and apply the concepts of sensemaking in chaos. In any local first responder community, however, there are people who do have those innate skills. These people should be sought out and developed. A federal approach to supporting and standardizing some of the education they undergo would create a nationwide community of best practices. As these experienced first responders come together to talk about how to work an edge-of-chaos situation, they contribute to the useful literature on the subject and to creating and broadening the education that could lead to lives saved in future large-scale events, whether caused by terrorists or nature.

Thousands of years of warfare teach us the striking importance of the leader at a crisis event. As Philip II of Macedon said, “An army of deer led by a lion is more to be feared than an army of lions led by a deer.”³⁹ Decades of law enforcement experience prove what most have felt – that leaders must possess the one trait that cannot be taught or acquired: courage, for “everything rests upon courage.”⁴⁰ What can be acquired, though, is experience. And experience is another vitally necessary component to effective leadership in an edge-of-chaos event because it helps first responders recognize component pieces imbedded in the overall chaos. These pieces, if thoughtfully considered, can help incident commanders make sense of an unusual situation and begin to formulate plans to restore order.

“It has been said that a warrior’s most formidable weapon is his mind. It follows then that the sharper the commander’s mind, the sounder the decisions.”⁴¹ The most effective way to sharpen the mind is through education built on realistic scenarios that force the student to become actively involved in the course of study. The NIMS currently hosts large area-wide events in different parts of the nation meant to bring varying local agencies and disciplines together to participate in a table-top exercise. Scripted and publicized well in advance, they allow agencies to practice using the NIMS organizational framework to manage the event and allocate and track resources. While there is certainly value to these exercises, a few adjustments to this practice could leave

first responders better prepared to deal with the initial phase of chaos inherent in large-scale events.

A small group should be brought together to research this phenomenon of “edge of chaos” further. Such a body would include experienced, open-minded practitioners along with a selected mix of academically focused teachers. Together, this group would craft the most realistic scenario possible evolving in actual time. This is no small undertaking. It means having a physical facility where some type of chaos can be convincingly played out. The coordination alone of resources and role-playing “actors” will be challenging. First responders will then be let loose in this environment to interact in the chaos and attempt to bring about resolution. This will be the antithesis of a controlled, table-top exercise in the safety of an Emergency Operations Center.

Along with what happens during the scenario itself, the debrief and observation of the instructors afterwards will be invaluable. This type of continuous discussion and learning focused on a sensemaking approach will create a body of knowledge about how first responders can best work within the chaos known to exist at the outset of large-scale events. Truly devious instructors who craft the scenarios their unsuspecting students will “live through” at this training facility will undoubtedly add to the mental slides of every student they affect. Because of this, first responders who arrive at the scene of what would otherwise have been a completely new experience to them should feel more confident beginning their sensemaking of the situation because they had experienced something close to it or analogous to it in their scenario work. While expensive, such a realistic training presentation will undoubtedly pay for itself by how it readies first responders.

Ultimately, this type of education provides the all-important *why* because, as General A. M. Gray found, “Tactics is not whether you go left or right, tactics is why you go left or right.”⁴² Understanding the chaos of an event enough to piece together *why* certain things need to be accomplished will allow first responders to make the best decisions possible.

Finally, these small classes participating in the realistic scenarios must include cross-discipline and multi-jurisdictional students. The value of pre-existing relationships cannot be emphasized enough for effective event response. Personal relationships that have created a level of trust among parties provide the foundation for the strong bonds necessary to achieve a coordinated response to any event. As the *9/11 Report* found:

While no emergency response is flawless, the response to the 9/11 terrorist attack on the Pentagon was mainly a success for three reasons: first, the strong professional relationships and trust established among emergency responders; second, the adoption of the Incident Command System; and third, the pursuit of a regional approach to response. Many fire and police agencies that responded had extensive prior experience working together on regional events and training exercises.⁴³

The NIMS and ICS are an invaluable tool for a structured event response and provide an organization that best handles the complicated nature of a coordinated response effort. But in the initial, chaotic phase inherent in every large-scale event, the organizational structure of ICS is not yet useful. First responders with the inherent skill set to “function in an environment fraught with uncertainty, friction, and risk” will have “the most profound impact on the successful resolution of a conflict.”⁴⁴ These first responders must be educated through participation in reality-based scenario training that will help them practice sensemaking techniques, add to their library of mental slides, and foster relationships with each other across disciplines and jurisdictions so that, if the unthinkable does occur yet again, those men and women will be as ready as possible to insert themselves into chaos and wrestle it back to normalcy.

ABOUT THE AUTHOR

Cynthia Renaud currently serves as police chief in Folsom, California. Prior to accepting this position, she served with the Long Beach Police Department for twenty years. During her career, she has been on the scene of many large-scale incidents and

has participated in pre-planned events and protests. Chief Renaud holds a Master of Arts Degree from the Naval Postgraduate School in national security studies and a Master of Arts Degree from California State University, Long Beach, in english literature. She is a graduate of the FBI National Academy, Session 214, and a member of the National Tactical Officers Association.

¹ Sources reviewed for critiques of 9/11 and subsequent government actions based on those critiques include Thomas H. Kean, Chair, *The 9/11 Commission Report* (New York: Norton, 2004); U.S. Department of Homeland Security (DHS) Homeland Security Council, *National Strategy for Homeland Security* (Washington, DC: DHS, July 2002); DHS Homeland Security Council, *National Strategy for Homeland Security* (Washington, DC: DHS, October 2007); DHS, *Homeland Security Presidential Directive 5* (Washington, DC: 2003); DHS, *Homeland Security Presidential Directive 8* (Washington, DC: 2003); and DHS, *National Response Plan* (Washington, DC: DHS, 2004).

² DHS, *Homeland Security Presidential Directive 5*, 1.

³ Ibid.

⁴ DHS, *Homeland Security Presidential Directive 8*, 1.

⁵ Ibid.

⁶ DHS, *National Incident Management System*, 4-11.

⁷ Mike Hillmann (retired deputy chief of police, Los Angeles Police Department; retired assistant sheriff, Orange County Sheriff's Department), in discussion with the author, November 2010.

⁸ Steven Nottingham (lieutenant, Long Beach Police Department), in discussion with the author, January 2010.

⁹ David J. Snowden and Mary E. Boone, "A Leader's Framework for Decision Making," *Harvard Business Review* (2007): 68-76.

¹⁰ Ibid., 69.

¹¹ Christopher Bellavita, "Changing Homeland Security: Shape Patterns, Not Programs," *Homeland Security Affairs* 2, article 5 (October 2006): 5.

¹² Snowden and Boone, "A Leader's Framework for Decision Making," 71.

¹³ Bellavita, "Changing Homeland Security: Shape Patterns, Not Programs," 5.

¹⁴ Sid Heal, *Sound Doctrine. Tactical Primer* (New York: Lantern Books, 2000), 133.

¹⁵ Cynthia Renaud, *Making Sense in the Edge of Chaos: A Framework for Effective Initial Response Efforts to Large-Scale Incidents* (master's thesis, Naval Postgraduate School, 2010).

¹⁶ Mitchell M. Waldrop, *Complexity. The Emerging Science at the Edge of Order and Chaos* (New York: Simon & Schuster, Inc., 1992).

¹⁷ Kean, et al., *The 9/11 Commission Report*, 315.

¹⁸ Amanda Ripley, *The Unthinkable: Who Survives When Disaster Strikes – and Why* (New York: Crown, 2008), 93.

¹⁹ Mike Hillmann, *Incident Command Challenges* (PowerPoint presentation, n.d.).

²⁰ Karl Weick, *Sensemaking in Organizations* (USA: Sage, 1995), 14.

²¹ Ibid., 9.

²² Ibid., 21.

²³ Ibid.

²⁴ *Oxford English Dictionary*, (USA: Oxford University Press, 1971), 1716.

²⁵ Mike Hillmann, *In Extremis Decision Making...Defining the Critical Incident* (PowerPoint presentation, n.d.), quoting Colonel Thomas A. Kolditz, professor and head of Department of Behavioral Sciences and Leadership at U.S. Military Academy, West Point.

²⁶ Ibid., 3

²⁷ Ibid., 4

²⁸ Ibid., 5

²⁹ Karl Weick, "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster," *Administrative Science Quarterly* 38 (1993): 639.

³⁰ Gary Klein, *Sources of Power: How People Make Decisions* (Cambridge, MA: Massachusetts Institute of Technology, 1998), 113.

³¹ Patti Anklam, *Net Work. A Practical Guide to Creating and Sustaining Networks at Work and in the World* (Oxford, UK: Elsevier Inc., 2007), 14-15.

³² Arjen Boin et al, *The Politics of Crisis Management. Public Leadership Under Pressure* (New York: Cambridge University Press, 2005), 35.

³³ Mike Hillmann, *Multi-Assault Counter Terrorist Action Capabilities* (PowerPoint presentation given at the FBI National Academy Associates 2010 Annual Training Conference), 4.

³⁴ Ibid., 5.

³⁵ Lieutenant Steve Nottingham, Long Beach Police Department. Course Curricula for Advanced Officer Training Class, (1999-2001).

³⁶ Boin, et al, *The Politics of Crisis Management*, 63.

³⁷ Ibid., 64.

³⁸ Ibid.

³⁹ Heal, *Tactical Primer*, 39.

⁴⁰ Ibid., 38.

⁴¹ Ibid., 39.

⁴² Ibid., 71

⁴³ Kean, et al., *The 9/11 Commission Report*, 314.

⁴⁴ Heal, *Tactical Primer*, 39.



Copyright © 2012 by the author(s). *Homeland Security Affairs* is an academic journal available free of charge to individuals and institutions. Because the purpose of this publication is the widest possible dissemination of knowledge, copies of this journal and the articles contained herein may be printed or downloaded and redistributed for personal, research or educational purposes free of charge and without permission. Any commercial use of *Homeland Security Affairs* or the articles published herein is expressly prohibited without the written consent of the copyright holder. The copyright of all articles published in *Homeland Security Affairs* rests with the author(s) of the article. *Homeland Security Affairs* is the online journal of the Naval Postgraduate School Center for Homeland Defense and Security (CHDS).

<http://www.hsaj.org>

