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Leadership in Routine Emergencies and Crises

The Deepwater Horizon incident

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Leadership in emergencies is a crucial element of becoming a high-performing Coast Guard officer. In this article, we argue that emergency leadership is not a single skill or uniform set of organizational competences. Instead, we identify a spectrum of emergency situations, ranging from what we will call “routine emergencies” through “crises,” differentiated by increasing degrees of novelty in the emergency challenge.¹ Leaders and their organizations must develop capacities for managing in both types of situations.

Over time, societies have developed specialized organizations to deal with emergencies, including emergency management, police, firefighters, emergency medical technicians, and emergency medicine. By far the most common form of emergency they face is what we have elsewhere termed “routine” emergencies.² These situations are not necessarily small in any sense. In fact, they may be quite large and dangerous. We call them routine because these hazards can be anticipated, even when their timing, scale, and precise location cannot be predicted. Routine emergencies occur frequently enough that organizations can frame and inform expectations about future incidents.

It is this degree of predictability that allows society to prepare in advance and thereby reduce the harm that such emergencies might otherwise cause. This is highly important because the vast majority of emergencies that arise are routine in this sense.

The professionalization of emergency services over the past century and more has made life safer and protected property and other values in ways that earlier generations could only dream of. It also has resulted, in large part, because organizational leaders anticipate emergencies by type and have prepared responses.

Most importantly, leaders prepare by framing plans to avert, minimize, or respond to routine emergency events. They train, equip, and exercise individual responders so they will be ready when needed. They devise coordination methods and practice implementation of response tactics. They also strategically station critical resources—people, equipment, supplies—in appropriate places so a response can be launched rapidly. In turn, when an emergency actually arises, responders can deploy resources effectively. Ideally, over time and through repeated occurrences, organizations, leaders, and individual responders develop experience with many types of emergencies and become highly proficient in handling them.

Excellence in Routine Emergencies

What constitutes excellence in responding to routine emergencies?

Effective preparedness includes a robust set of contingency plans for anticipated scenarios, combined with people who have strong training, skills, practice, and actual operational experience. Coordination methods are well established and drilled. When routine emergencies occur, responders know what factors matter and therefore what to look for. As they determine what they are facing, they typically trigger standard operating procedures that all experienced personnel have practiced, and often employed, before. Of course, any emergency has distinctive features, and these are accommodated through real-time customization of standard operating procedures. But the basic approach to routine emergencies has been set in advance. When well prepared for routine emergencies—even very large or dangerous ones—response organizations can act



Workers from the BP contracted company SWS offload boom to pre-positioned areas along Lake Powell, May 11, 2010. U.S. Coast Guard photo by Petty Officer Renee C. Aiello.

with confidence, discipline, a sense of purpose, clarity about what needs to be accomplished, and well-honed skills.

Expertise and Hierarchy

Leadership in routine emergencies is expertise-driven and usually hierarchical. Leaders know what to do because they've trained for such situations and performed well before. Ideally, they are chosen for their knowledge, effectiveness during prior events, and demonstrated capacity to function under pressure. They exercise authority directly and expect compliance from their subordinates, who follow them because they have confidence in their leaders' proven judgment.

Following events, leaders are accountable for results. They are evaluated by how those results compare to what has been achieved in similar events. At their best, response organizations can aim for operational precision and high efficiency in routine emergencies.

To say an emergency is routine does not mean it may not be hazardous and have substantial scale. Nor does this terminology imply the organizational capabilities that enable effective response are in some sense ordinary. To the contrary, it is a huge achievement for response organizations to develop, refine, and keep well-honed the multiple

capacities that enable them to deal with potentially tragic or costly occurrences. In fact, the histories of each type of emergency response profession can be told as narratives in which increasing numbers of previously unmanageable hazards were turned into tractable—routine—response problems.

Routine Emergencies in the Deepwater Horizon Response

From this perspective, the Coast Guard can be regarded as an organization whose missions, in very important elements, require preparation for a wide range of maritime emergencies, many of which can be anticipated in general type and are therefore routine in the manner that we use that term in this article.

The *Deepwater Horizon* incident illustrates this in a number of ways.³ The oil drilling platform explosion, fire, and sinking were extremely dangerous and terrifying to the people affected. The long-lived, uncontrolled outpouring from the undersea oil well created unprecedented costs and serious effects for individuals, businesses, communities, and governments in the region. But for many in the Coast Guard, the response was not unprecedented. It called for skills and practices developed well in advance.



In the immediate aftermath of the explosion, teams deployed for search and rescue operations that drew on fundamental Coast Guard practices and experience. As the extent of the disaster and the immediate consequences were perceived, the Obama administration organized its overall response under the Oil Pollution Act of 1990 (OPA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Under OPA, which gives the federal government authority to direct responses to large-scale oil spills, the Coast Guard is the lead federal agency for coastal spills.

Two days after the fire, when the *Deepwater Horizon* sank to the ocean floor, the administration expanded its response, still pursuant to protocols articulated in OPA and the NCP. It established a unified area command, in which representatives of the affected states, the federal government, and BP, as the responsible party, could coordinate a multi-jurisdictional, multi-agency, multi-sector, and inter-governmental response. A very experienced commander,

much more complex and novel than it had first appeared. Even then, in many respects, the massive response efforts that took place over several months involved capacities and practices of oil spill cleanup and mitigation, regulating sea traffic, and safety that the Coast Guard had developed and institutionalized long before.

Fortunately, the Coast Guard was able to reap the many benefits of having turned significant aspects of the problems it had faced into routine emergencies rather than crises. That these accomplishments in the *Deepwater Horizon* aftermath were sometimes given less than deserved political and public recognition does nothing to diminish the achievement resulting from years of organizational development.

The Distinguishing Features of Crisis Leadership

On the spectrum of emergencies, we differentiate a “crisis” from a “routine emergency” by one key trait that has many consequences. By contrast with routine emergencies, crises involve substantial *novelty*—characteristics of the emergency that have not been previously encountered by the organizations or people involved.⁴

Novelty may stem from several different sources. The most common is an event that, while anticipated by type, is so large in scale that it exceeds the planning frame and the resources ready to deploy in response. A second source of novelty is an event that is truly unprecedented—a “new under the sun” event—for which no plan has been prepared and that may require improvising in response. Or, third, novelty may arise from a combination of emergencies that occur at the same time or close together. Each of these may have been prepared for separately, but the conjoined occurrence may confuse previous plans, or overload responders.

Crises put enormous strain on the entire response system, including simultaneously engaged response entities. In a prototypical crisis, the multiple dimensions of situational awareness—gathering information and assessing what is happening, projecting likely future results, and conceiving and implementing appropriate actions in response—are very weak in comparison to what happens in routine emergencies. Rank and file responders, and even leaders, may feel events and consequences are out of control and beyond their usual operating capabilities, generating very high stress.

Although responders may have experience with some aspects of the situation, in novel circumstances no single leader or decision maker is a comprehensive expert. Rather than depending on standard operating procedures or checklists, they have quite limited “scripts” to rely on.



U.S. Coast Guard Commandant Admiral Thad Allen meets with Rear Admiral Mary Landry, the federal on-scene coordinator for the *Deepwater Horizon* incident, and other local, state, and federal members participating in the unified command to discuss leveraging every available resource to respond to the British Petroleum oil spill and minimize the associated environmental risks in May 2010. U.S. Coast Guard photo by Petty Officer Michael De Nyse.

Rear Admiral Mary Landry, head of the Coast Guard’s Eighth District, took the lead, serving as the federal on-scene coordinator.

Under this organizational structure, in the weeks and months that followed, the Coast Guard and its partner agencies undertook a complex set of activities related to the direct impacts of the oil rig’s explosion and sinking. It investigated the causes of the accident, the increasingly complex oil leak cleanup, and the widening circles of consequences for the Gulf oil industry, fisheries, and regional tourism.

These activities often required policy and organizational innovations, many of which originated out of the National Incident Command (NIC), that were established as a layer above the unified area command, since the event was



Clouds of smoke billow up from controlled burns taking place in the Gulf of Mexico in May 2010. They were set to reduce the amount of oil in the water following the *Deepwater Horizon* oil spill. U.S. Coast Guard photo by Chief Petty Officer John Kepsimelis.

Strategy and actions must be improvised to meet unprecedented demands, in part by piecing together existing plans and capacities in new combinations, as well as through innovation. Plans and tactics may have to be adapted and re-adapted as the situation unfolds, perhaps in repeatedly unexpected directions. But improvisation under the pressure of crisis entails heightened risk. Under normal conditions, for reasons of effectiveness and safety, response organizations generally prefer to develop and execute new capabilities cautiously and only after careful planning, training, and practiced implementation. In crises, that prudent approach is often not possible.

Sudden Versus Emergent Crises

We can distinguish two patterns by which crises arise. The first may be termed a “sudden” crisis, an event clearly beyond routine that occurs with dramatic visibility. For example, a no-notice natural disaster, like an earthquake, a severe technology failure, or a terrorist attack would constitute a “sudden” crisis.

The second is an “emergent” crisis—an event that at first appears to be routine but at some point, gradually or dramatically, transforms into a novel occurrence that goes well beyond the plans and capacities designed for routine emergencies.

Both types of crises are difficult to deal with, but emergent crises pose special response problems. It may prove initially difficult for the responders deployed to the scene to recognize the gradually evolving break between the characteristics of a routine emergency and those that constitute a crisis. This is especially true when normal circumstances—weather or sea conditions—fluctuate within a relatively wide operating range.

Moreover, when a situation initially appears to be a routine emergency, the individuals and units deployed in response are those that are used to dealing with that form of routine emergency. They bring the mindsets, training, skills, operating procedures, and experience appropriate for those situations. Thus they may not quickly recognize conditions are morphing into a different challenge.

Sometimes they may fail to perceive signs or data that do not align with their expectations because, convinced that they understand what they are facing, they are not looking for such information. In addition, responders who expect to see and deploy for a routine emergency may become highly invested in making a success of their first approach. They can be reluctant, or refuse, to perceive or admit reinforcements or different tactics are needed.

In responding to either sudden or emergent crises, the stakeholder environment is likely to become far more



complex than normal. In routine emergencies, a single, specialized response organization is likely to have a well-defined lead or sole role. Political oversight is likely to be minimal and restrained unless dysfunction occurs.

In crises, the number of key actors is likely to be much larger, and the institutional lead, even when formally declared, is often ambiguous in practice. There will be many action overseers, often with too little clarity about responsibility and authority. Not only are other agencies likely to be involved in a crisis, but also other levels of government. In particularly dire situations, other nations may receive or give aid or make demands on responders.

As a result, the multiple response organizations involved in a crisis must find ways of collaborating effectively rather than overlapping, duplicating, or interfering with each other. Coordination of domestic responders and, in a severe crisis, integration of the resources of international actors is crucial. While effective coordination and collaboration are required, they may prove very difficult to achieve. A response organization is likely to share legal authorities and operate parallel to other tactical units it does

not directly control. Unity of command will be an ideal that may be attained only by voluntary cooperation, not the exercise of authority.

In extended duration crises, political leaders are likely to come off the sidelines and become deeply involved, possibly bringing very different perspectives to a crisis situation than career professionals. Their viewpoints are often both more superficial but also broader than professional responders'. They typically lack expertise in emergency practices but better understand stakeholder pressures and the problems of publicly communicating, mobilizing support, and helping the community cope with loss.

Sometimes sharp tensions emerge between operational chiefs and political leaders. The latter may interfere with what operational leaders see as appropriate professional practice; the former may try to hold political leaders at arm's length even when important value choices must be made. Ideally, senior operational and political leaders will work in tandem to recognize each other's competencies, while accommodating differing perspectives and decisions and standing up for their professionals' strategic and



Crew members from U.S. Coast Guard Cutter *Harry Claiborne* observe the operation of a Vessel of Opportunity Skimming System as it collects oil from the Gulf in May 2010. VOSS is used to help remove oil from the Gulf surface. U.S. Navy photo by Petty Officer Jonathon E. Davis.



Admiral Thad Allen, National Incident Commander for the *Deepwater Horizon* oil spill, briefs the Unified Area Command in New Orleans in June 2010. U.S. Coast Guard photo by Petty Officer Ayla Kelley.

tactical viewpoints. Failure to do so can exacerbate tensions.

Moreover, in a crisis, because goals and priorities may be unclear or conflicting, there may be contention among political leaders of different levels who each have different bases of authority or represent different constituencies. This can make managing in a crisis very difficult for the professional response leaders.

Professional leadership in crises thus demands abilities and skills that are quite different from those necessary for leading in routine emergencies. Leaders must be alert for novelty that could be easily missed in an emergent crisis. They are effective not only because of their expertise and experience but to a great extent because of their ability to cope with the unexpected. Open to the realization that no one is a comprehensive expert in the face of novelty, they reach out to others who have useful expertise or varying experiences. To achieve situational awareness and generate ideas about response, leaders need to feel comfortable with a flattened organizational structure effective for drawing on information from all levels of their own organization and from very diverse sources outside. Hierarchical command may have to be relaxed not only to secure a broader perspective but also to engage many partners over whom no single leader has direct authority. Because improvised problem solutions may not work completely or at all on first try, strong leaders have to be ready to adapt their approach to find better tactics and be fault-tolerant of themselves and their subordinates.

Two Distinct Modes of Operations and Leadership	
For Routine Emergencies:	For Crises:
<ul style="list-style-type: none"> • Development of contingency plans for different threats • Professionalization of personnel through education, training, exercising • Standardization of procedures and practices (SOPs) • Leadership: based on authority and expertise • Hierarchical command structure • Precision execution 	<ul style="list-style-type: none"> • Limited "scripts"; plans must be substantially adapted as the crisis develops • Incompletely specified skill sets; no one is an expert • Improvisation and invention required, not implementation of SOPs • Leadership based on ability to cope with the unexpected and manage across organizational boundaries • Variable command structure: collaborative to gather information, more directive for implementation • Fault-tolerant execution

Graphic courtesy of authors.

Leadership in the *Deepwater Horizon* Crisis

In addition to the features of routine emergencies previously described, the *Deepwater Horizon* incident displayed many of the dilemmas of crisis leadership outlined above. Of course, the initial explosion and sinking of the oil drilling platform was a sudden crisis, but more complex dimensions of crisis emerged only gradually as the extent of the oil outflow was perceived and the difficulty of stemming it discovered.

The event presented many novelties—scale exceeding the planning frame, never-before-seen challenges, and a complex combination of emergency conditions. The



dimensions of the oil spill and ongoing undersea discharge were unprecedented and extremely technically demanding to deal with. At the outset situational awareness was very poor. The federal government overall was significantly dependent on BP, the responsible party, for information and technical expertise.

The physical environment was hostile. Technical estimates of the rate and volume of the oil leak kept increasing dramatically over the first weeks. Estimates of environmental damage burgeoned in ways that could not be reliably confirmed. The stakeholder environment was exceedingly complex, conflict-ridden, and lacked institutional communication channels suited to the novel circumstances of the crisis. This was not only a technical crisis, but impacted the three major pillars of the Gulf economy—oil, fisheries, and tourism. It also was an environmental hazard with a complicated set of legal challenges, and involved a political crisis, a Democratic president, and five Republican governors.

Coast Guard Admiral Thad Allen and his top NIC staff had to improvise in many ways to manage these pressures. As the crisis deepened, for example, the media began to question whether this was “Obama’s Katrina,” a severe challenge to the public welfare that the administration could be perceived as mishandling as the previous administration was seen to fail in its response to Hurricane Katrina.

Therefore, the Obama White House took an increasingly major role in monitoring how the NIC was handling

not only operations but the political implications. In terms of the accountability relationships of the NIC, there was also some tension between the secretary of Homeland Security and the White House staffers representing the president, both of whom saw Admiral Allen as reporting directly to them.⁵

But other political leaders were also deeply engaged, including the five Gulf state Republican governors whose jurisdictions were experiencing the impacts of the oil spill. Several of these governors, who often had contrasting perspectives on the response and represented different local constituencies, became vocal critics of the NIC and the Obama administration.⁶ Consequently, the NIC and the White House instituted daily conference calls that continued for more than three months with the five governors to raise and discuss problems and complaints. To some extent, these calls skewed what the NIC otherwise might have done, focusing it more on day-to-day issues while partially distracting it from a longer term agenda—but the calls helped defuse and contain the political pressures that could have upended the professional leadership of the NIC had it been perceived as unresponsive.

As time went by, the NIC also discovered that, as a result of the state-centric design of the Oil Pollution Act, elected leaders in the local governments along the Gulf coast felt exposed to constituent ire resulting from their lack of information and influence. Consequently, the NIC improvised



Skimming operations continue to help mitigate the effects of the BP *Deepwater Horizon* oil spill in June 2010. U.S. Coast Guard photo by Petty Officer Jaclyn Young.

a system by which individual Coast Guard officers were assigned as liaisons to specific communities.

The bureaucratic stakeholder environment of this crisis was also exceedingly complex, and the NIC leadership had to learn how to adapt and operate in this context. Several dozen federal agencies ultimately claimed legal authority over, or equity in, some aspect of the crisis. The Environmental Protection Agency was vigilant about oil spill impacts, the Food and Drug Administration focused on the effects on fisheries, and the State Department expressed concern about possible foreign affairs complications if oil drifted to Cuba's shores.

The sheer numbers of agencies and the issue density surpassed the capabilities of the White House staff as well as the NIC. Even Admiral Allen, an experienced public servant, was initially daunted by the need to deal with these diverse concerns. To cope, another institutional improvisation, the Interagency Solutions Group, was devised. The group had a number of subcommittees that met with senior NIC leaders to air issues and devise feasible solutions that the agencies could live with. This innovation helped ensure that the NIC became aware of technical and legal issues, accommodated or managed agency concerns, and kept decision making and response implementation coherent and coordinated.

This meant Admiral Allen and the NIC leadership had to strategically manage across multiple organizational, jurisdictional, sectoral, political, and international boundaries to deal with the *Deepwater Horizon* crisis. They had to overcome the initial poor situational awareness and cope with lack of political awareness on several crucial points. Because coordination among the many actors with interests at stake was often problematic, the NIC had to be highly innovative to create institutional means to make the response coherent and deal with the many emerging pressures as the response proceeded. As leaders, they had to be collaborative facilitators while problems were discovered and examined, then more authoritative, more hierarchical commanders as implementation commenced. Throughout, they could not rely only on practiced methods that were highly useful in routine emergencies. They had to be deft improvisers who could adapt repeatedly.

At the tactical level, the many Coast Guard members who were involved in this massive response had to replicate the improvisational skills of the NIC leadership to cope with the many dilemmas the *Deepwater Horizon* crisis served up.

While not flawless, the response to the *Deepwater Horizon* crisis was ultimately generally effective, thanks, in large part, to the Coast Guard.

Looking Ahead

Across the spectrum of emergencies, response organizations and their leaders must be ready for routine emergencies, as well as sudden and emergent crises. Leadership in each demands a distinctive set of skills and practices.

Routine emergencies usually prove to be the dominant challenge in number and frequency, and getting responses right for these types of anticipatable emergencies is certainly crucial and necessary for any response organization. Indeed, society benefits greatly when the range of routine emergencies is expanded—when potential crises are transformed into routine emergencies through planning, training and exercising.

But even though routine emergencies prove to be the dominant type of situation they confront, leaders of response organizations have to master a different set of skills in order to perform strongly in crises. The question for response organizations is whether leaders can become truly “ambidextrous.” Will the next generation of leaders, as well as the current one, be ready to manage routine emergencies effectively but also be able to recognize novelty when it appears, manage in a different mode, prove highly adaptive, and improvise the responses necessary to deal with crises?

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*Together, Howitt, Leonard, and Giles co-authored and co-edited *Managing Crises: Responses to Large-Scale Emergencies* (CQ Press, 2009) and *Public Health Preparedness: Case Studies* (American Public Health Association, 2017).*

Endnotes:

- ¹ This spectrum contains a continuum, not two distinct categories; but for simplicity of exposition, we shall describe them as separate categories.
- ² See Herman B. “Dutch” Leonard and Arnold M. Howitt, “In Desperate Peril: High Performance in Emergency Preparation and Response,” in Deborah E. Gibbons, ed., *Communicable Crises: Prevention, Response, and Recovery in the Global Arena* (Charlotte, NC: Information Age Publishing, 2007), pp. 2–25; Leonard and Howitt, “High Performance in Emergencies: Two Modes of Operation,” in Howitt and Leonard, *Managing Crises: Responses to Large-Scale Emergencies* (Washington, DC: CQ Press, 2009), pp. 611–624; Leonard and Howitt, “Acting in Time against Disasters: A Comprehensive Risk Management Framework,” in Howard W. Kunreuther and Michael Useem, eds., *Learning from Catastrophes: Strategies for Reaction and Response* (Upper Saddle River, NJ: Wharton School Publishing, 2010), pp. 18–40; and Leonard and Howitt, “Leading in Crisis: Reflections on the Political and Decision-Making Dimensions of Response,” in Ira Helsloot, Arjen Boin, Brian Jacobs, and Louise Comfort, eds., *Mega-Crises: Understanding the Prospects, Nature, Characteristics, and the Effects of Cataclysmic Events* (Springfield, IL: Charles C. Thomas Publishing, 2012), pp. 25–34.
- ³ Here and throughout this paper, material about this crisis is drawn from David W. Giles, “The *Deepwater Horizon* Oil Spill: The Politics of Crisis Response (A and B),” (Cambridge, MA: Harvard Kennedy School Case Study Program, 2013), Case Numbers 1981.0 and 1982.0.
- ⁴ The perspective of novelty is subjective: “novel” means new to the people or organizations involved even if others have previously experienced it.
- ⁵ David W. Giles, “The *Deepwater Horizon* Oil Spill: The Politics of Crisis Response (A and B),” (Cambridge, MA: Harvard Kennedy School Case Study Program, 2013), Case Numbers 1981.0 and 1982.0.
- ⁶ *Ibid.*