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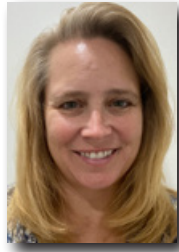
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Resources Not to Be Overlooked

By Catherine L. Feinman



The term “whole community” is frequently used in preparedness materials and discussions. In practice, though, how often is the whole community represented and all community resources considered? Routine planning meetings and exercises use the same phone and email lists. The regular participants get to know each other and build beneficial relationships. The key players in the last emergency response prepare for the next response.

However, the standard phone and email lists and the contacts from the last response may not include other valuable community stakeholders and critical resources. Even during interagency meetings and exercises, it can be easy to get comfortable with the same names and faces. When emergencies and disasters occur, though, there are many others beyond those participants who could be leveraged for support and resources. Consider the stakeholders and resources that are not always included in whole community planning efforts. For example:

- [Tribal emergency management](#) and rural stakeholders may have unique resources and different preparedness needs.
- Volunteers have a lot to offer, but planning is needed to coordinate efforts and leverage their knowledge, skills, and resources. This includes [Community Emergency Response Teams](#) and [general aviation](#).
- The private sector includes critical [communications](#) capabilities and other valuable resources that may be underutilized when not included during the planning process.
- [Military personnel](#) have life-saving skills that can be taught and applied to civilian mass casualty scenarios and emergency response efforts.

In general, whole community preparedness means involving key stakeholders in developing preparedness plans and procedures and ensuring that their roles and responsibilities are outlined in those plans. When key players are not involved or valuable resources are not recognized during the planning phase, gaps are realized during the response and recovery phases. For example, as COVID-19 spread, the need for new planning partners and new resources was realized. In addition, the capabilities and contributions of nontraditional partners were recognized.

With the many lessons from the past two years, now is the time to [build resource capacity](#) and look beyond the typical planning partners and resources. Before the next pandemic, [school shooting](#), [violent extremist attack](#), or natural disaster, identify unused or underutilized resources and invite new faces to the whole community planning table.

Strategic Depth & the Fight Against Violent Extremism

By Richard Schoeberl & W. Cochran Pruett



A year has passed since the U.S. withdrawal from Afghanistan. Since then, intelligence agencies have [shifted focus](#) from al-Qaida to [China](#)'s growing military, political, and economic aspirations. However, despite the lack of U.S. presence on the ground in Afghanistan, the nation must continue to preserve the importance of gathering intelligence on extremism within the greater Middle East including parts of

Central Asia. Allocating resources elsewhere cannot sacrifice continued counterterrorism efforts. Notwithstanding the current administration's [justification](#) for the military's withdrawal in 2021 (i.e., al-Qaida was no longer in Afghanistan), al-Qaida is not dead. Under the rule of the Taliban, Afghanistan will remain a haven for terrorist organizations. Neither Ayman al-Zawahiri nor al-Qaida could operate in Afghanistan without the knowledge and permission of the Taliban.

The Death of a Leader, But Not the Followers

The recent successful strike against and subsequent death of al-Zawahiri on the third-floor balcony in an affluent area of Kabul (only a short distance from the former U.S. embassy) is a poignant moment to reassess the relative benefits and challenges associated with the continuing U.S. counterterrorism efforts. While the world remains engrossed in the ongoing conflict in Ukraine, violent extremists are continuing to plot against the U.S. These signs remain obvious as al-Zawahiri was not hiding for 21 years but rather, until recently, sitting comfortably in Kabul at a Taliban safe house until killed. Al-Zawahiri's presence in Afghanistan is a strong indicator that al-Qaida's resurgence is mounting again. If nothing more, al-Zawahiri's presence solidifies that the bond is stronger than ever between the Taliban and al-Qaida. A February 2022 [UN assessment](#) strongly reinforces this assertion:

There are no recent signs that the Taliban has taken steps to limit the activities of foreign terrorist fighters in the country. On the contrary, terrorist groups enjoy greater freedom there than at any time in recent history.

The [Doha Agreement](#) – designed during the Trump administration and delivered during the Biden administration – was intended, among many things, to remedy numerous security concerns within the region and force the Taliban to keep Afghanistan from becoming a terrorist haven, a recruitment hotbed, and a launching pad for future terrorist attacks after the U.S. withdrawal. Unfortunately, the Taliban seems to have ignored that part of the agreement and has since denounced the killing of al-Zawahiri as a violation of the terms of the Doha Agreement. The [U.S. State Department](#) suggests the opposite,

arguing that the Taliban was “hosting and sheltering” al-Zawahiri and “grossly” violating the Doha Agreement and “assurances to the world that they would not allow Afghan territory to be used by terrorists to threaten the security of other countries.”

Al-Zawahiri’s mere presence confirms that he received protection from the [Taliban](#). The killing of al-Zawahiri will likely invigorate al-Qaida’s recruitment efforts and further strain U.S.-Taliban relations. Although uneasy and uncertain before the killing of al-Zawahiri, relations now will become noxious. Observation of many pro-al-Qaida social media platforms has encouraged followers to ramp up the attacks on the U.S. and seek revenge for al-Zawahiri’s death. Some social media sites note that “[dark days await America](#).”

Intelligence & Technological Capabilities

Assuming tensions in the Middle East will get worse before they get better, the U.S. must maintain vigilance for the disruption of terrorism movements – particularly those in leadership. The benefits of current U.S. counterterrorism efforts are evident, and the ongoing capacity for U.S. “[over-the-horizon](#)” precision strikes is apparent. The U.S. withdrawal from Afghanistan brought the advantage of focusing military effort and spending in areas of the globe with greater strategic significance, such as East Asia and Europe. It has given the U.S. military contracting and manufacturing community the space to shift toward conventional war supply (e.g., significant military armament and other aid to Ukrainian forces) to good effect. The “[Fact Sheet](#)” on the 2022 Department of Defense National Security Strategy reflects these priorities. It is arguable whether these efforts would have been achievable with a continued sizeable military presence in Afghanistan.

The successful strike against al-Zawahiri is also further demonstration and proof of impressive U.S. intelligence and technological capabilities. A lethal drone strike conducted halfway across the world inside an unfriendly nation is difficult. The fact that it produced very little collateral damage is also laudable. The strike represents a highly sophisticated and adeptly managed technological and human capital nexus that can extend similar results globally. These demonstrated capabilities will continue to provide good leverage for the U.S. on the global stage. It also evidences continued U.S. capabilities to target threats in the Afghanistan region from abroad. These will remain important because al-Qaida will seek to replace al-Zawahiri while leveraging Afghanistan as a safe haven under the protection of the Taliban, allowing continued plotting against the U.S. and its allies.

Some might argue that this strike closes the loop on the attacks of 9/11, thus bringing an end to a 21-year search. Some may also argue that the strike represents the final retributive chapter on the long story that came to a head with the brutal attacks on the U.S. in 2001. Undoubtedly, the U.S. has relentlessly eliminated or captured the ring of planners and supporters of the infamous attacks one by one, no matter where they lived. As a result, the al-Qaida of today is not the same as the al-Qaida of 2001. In many ways, this is because of the relentless pursuit and elimination of its leaders. However, al-Zawahiri’s death could mark the beginning of renewed tensions between the U.S. and the Taliban leadership.

Part of the fundamental problem of U.S. counterterror efforts is that successes such as the al-Zawahiri strike often hide the inherent challenges. They can often drown out the real factors contributing to the success and lessen awareness of resources needed for continued future success. The al-Zawahiri strike was likely the result of legacy intelligence capabilities that the U.S. built in Afghanistan over the past two decades rather than any inherent or new over-the-horizon capability. The U.S. robust intelligence capability formerly in Afghanistan is rapidly dwindling without the protection and resources previously provided by the U.S. government's full-scale commitment.

Strategic Choices & Ongoing Challenges

Perhaps recent history can elucidate the heart of the issue in Afghanistan. Strategic choices in that region were presented as a false dichotomy, an all-or-nothing approach to U.S. involvement that extends well back into the initial U.S. responses to the terror attacks in 2001. In the face of competent advice, two successive presidential administrations have chosen to view the U.S. commitment in Afghanistan as an either-or scenario. Both the Trump administration, through its negotiations with the Taliban, and the current Biden administration, with its wholesale withdrawal, were committed to an approach that drained nearly all U.S. resources from Afghanistan. To both administrations, the answer was simple, nothing in Afghanistan.

For the Biden administration, these ideas came to the forefront in a nearly forgotten controversy with [General Stanley McChrystal](#) and President Obama in 2009-2010. The controversy began over publicly released information from a McChrystal recommendation to double down on a counterinsurgency strategy in Afghanistan. Perceived within the Obama political apparatus, including Vice President Joe Biden, as an attempt by the military establishment to restrict the president's decision, the alternative quickly became the Biden-team sponsored "counterterror plus" strategy. This controversy, ably described by former Defense Secretary Robert Gates in his book [Duty](#), pitted an all-in counterinsurgency approach against a scaled-down counterterrorism approach in Afghanistan.

With the benefit of hindsight, while Biden had advocated increased support for a Pakistan partner in counterterrorism, Gates looked to rely on an Afghanistan regime that proved either unwilling or unable to sustain any determined assault against the Taliban. However, any Pakistan-centered policy option was doomed to failure, as evidenced by the harboring of Osama bin Laden in Abbottabad by elements within the Pakistani Inter-service Intelligence agency (ISI). The Afghan government proved too weak to resist the Taliban's resurgence. Nevertheless, Gates recognized then the same essentials that remain now. All the approaches to al-Qaida and their Taliban supporters

Strategic depth means detecting, tracking, anticipating, and eliminating terror threats in their expected safe havens before effective terror attacks can be executed against U.S. interests.



had already failed by 2009. Neither the counterinsurgency nor counterterrorism plus strategies could work. He recommended in his book an approach that “had to narrow the mission and better communicate what we were trying to do.”

That clarity is what is needed now. But as past decisions were ultimately about military power commitments in Afghanistan, the fundamental choice now is the level of commitment of other security measures within the region, specifically intelligence capabilities. Given the changed politico-strategic environment in the greater Middle East, it is uncertain what capabilities will be dedicated to counterterrorism efforts. An increased pledge of support from NATO allies is now a moot point. The European crises consume much of their energy and resources. Asian alliances and partnerships are similarly consumed with Chinese provocations and belligerency.

The Need for More Strategic Depth

What most informed analysts have known all along since 9/11 is that strategic depth is necessary to confront the ever-morphing hydra of the threat:

- What strategic depth means precisely, especially regarding the deployment of intelligence capabilities, is a million-dollar question on the counterterror front.

- At what scale is the U.S. government willing to develop, deploy, and sustain regional networks of clandestine informants, ISR (intelligence, surveillance, and reconnaissance) assets, and other operational capabilities?
- What costs, institutionally and monetarily, are required for such an effort?

Strategic depth means detecting, tracking, anticipating, and eliminating terror threats in their expected safe havens before effective terror attacks can be executed against U.S. interests. This means being able to strike not just one high-payoff target like Zawahiri but striking multiple high-value targets within the same network near simultaneously on-call. That will require a robust intelligence effort spatially and temporally near the terror network itself. Frankly, this means a significant infiltration and espionage only possible through high-level strategic commitment.

The current [U.S. National Defense Strategy](#) reflects counterterror as an economy-of-force effort designed to deter attacks and manage the persistent threat of violent extremist organizations. The priority of effort should focus on larger-scale threats such as China and Russia. As the landscape of the terrorism threat shifts, shapes, and grows within a changing global environment that provides relative safety to Middle Eastern terror organizations, one wonders whether the current U.S. counterterror approach reflects the necessary strategic depth to prevent another 9/11.

Al-Qaida has not yet announced its new leadership. Most recently, the threat from the terrorist movements has weakened significantly and suffered organizational setbacks, as the Islamic State and al-Qaida leadership have been killed. Nevertheless, the continued monitoring of al-Qaida and the Islamic State is essential to diminish their threat. Although it has been a test for al-Qaida and the Islamic State to generate eagerness to recruit when their supporters witness continued defeats and setbacks, the killing of Zawahiri might just be the spark that ignites al-Qaida 2.0.

Richard Schoeberl, Ph.D., has over 25 years of experience, including the Federal Bureau of Investigation (FBI) and the National Counterterrorism Center (NCTC). He served various positions throughout his career, ranging from a supervisory special agent at the FBI's headquarters in Washington, D.C., to acting unit chief of the International Terrorism Operations Section at the NCTC. In addition to the FBI and NCTC, he is an author of numerous articles on terrorism and security. He has served as a media contributor for Fox News, CNN, PBS, NPR, Al-Jazeera Television, Al Arabiya Television, and Al Hurra. He works with the international nonprofit organization Hope for Justice, combatting human trafficking, and additionally serves as a professor of Homeland Security at The University of Tennessee Southern.

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Credentialing a Nation's Volunteer Responder Network

By Patty Ridings



On an August night in 2005, a concerned neighbor woke political science teacher and author Daniel Aldrich and warned him to flee with his wife and children as Hurricane Katrina approached. Aldrich, who attributes his family's survival to his New Orleans neighbor, was profoundly impacted by this experience. He began researching how people help each other in disasters and spent years studying organic responses in different countries. Now the director of the Resilience and Security Studies program at Northeastern University, [Aldrich](#) is convinced that communities "are the sum of their relationships" and neighbors are the "key to survival."

Observing the contributions of non-professional responders in Japan, Aldrich [concluded in 2011](#) that "it is the personal ties among members of a community that determine survival during a disaster, and recovery in its aftermath." The Japanese model would play a critical role in the development of Community Emergency Response Teams (CERTs) in the United States.

Assistant Fire Chief [Frank Borden](#) of the Los Angeles Fire Department (LAFD) shared a similar interest in disaster response as Aldrich. In 1985, Borden accompanied an American delegation to Japan to study earthquake preparedness. He was struck by the willingness of ordinary citizens to train so they could help rescue others. He was convinced that vulnerable Los Angeles, California, would benefit from a similar proactive culture. Before he could solidify his plans, Mexico City tragically experienced an 8.1-magnitude earthquake. Without formal training, [100 rescuers lost their lives](#). Borden traveled to the disaster zone to learn what basic training might have saved their lives.

In 1986, the LAFD launched the first training programs Borden and his colleagues developed – the Community Emergency Response Teams (CERT). Their success encouraged other cities to implement similar CERT initiatives.

Building a Culture of Self-Reliance

CERT's [primary objective](#) was to promote neighborhood preparedness that would "enhance the ability of individuals and communities to reduce their emergency needs and to manage their existing resources until professional assistance becomes available." The [CERT program](#):

[E]ducates volunteers about disaster preparedness for the hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations.

Borden stated in a [2020 interview](#) that, in 1991, when FEMA was looking at community preparedness programs in the country, they decided Los Angeles had the best. They

wanted to expand it across the United States. It became more imperative to combine the state CERT programs into something cohesive, to instill very strict guidelines. The future of CERT revolves around cohesiveness.

The guidelines of the new citizen training program would include [unified training](#) and credentialing. It would allow professional agencies, even those from different states, to:

- Predict CERT response procedures across jurisdictions,
- Interact with CERT teams during multi-agency responses,
- Efficiently communicate with team members, and
- Classify volunteer activity for cost-recovery grants.

A unified and systematic organization would best serve the [600,000](#) CERT volunteers, section chiefs, and team leaders nationwide by:

- Codifying CERT mission, goals, and best practices;
- Standardizing certification requirements; and
- Ensuring compliance with national procedures.

Verified Digital Credentials: Supporting a FEMA Partnership

In August 2021, FEMA released its [National Resource Typing for the Community Emergency Response Team](#) (CERT) program, setting the national credentialing standard.

What is a CERT?

The Department of Homeland Security and the Federal Emergency Management Agency describe the Community Emergency Response Team (CERT) program as “a nationally supported, locally implemented initiative that teaches people how to better prepare themselves for hazards.”

[CERT members](#) are trained to help neighbors during emergencies before professional responders arrive through:

- Basic disaster response,
- Team organization,
- Disaster medical operations,
- Fire safety, and
- Light search and rescue.



Source: FEMA About CERT page.

To reach a FEMA credentialing level, an individual needs to achieve specific training and experience metrics. However, the challenge was in how FEMA CERT credentials would be issued to every eligible member.

To address this challenge, the National CERT Association ([NCA](#)) partnered with Merit, a digital platform that enables the organization to issue verified digital credentials to individuals. As a result, CERT members now receive and keep digital certifications once they have completed the required training and tests. The credentials can be trusted by emergency services agencies at every level because they are issued directly by the NCA and only to qualified volunteers.

One example of facilitated certification is that thousands of individuals who took the [online/hybrid CERT training courses](#) offered through the University of Utah obtained official digital credentials on Merit recognized by NCA. The certifications enable the university to communicate directly with graduates and share opportunities for more classes and training for which they qualify. Interested individuals may [begin the online portion of the training at any time](#) and see resources on where to complete the in-person training.

These and all NCA credentials are fully compliant with Systems and Organization Controls (SOC) and the Health Insurance Portability and Accountability Act (HIPAA) security requirements and integrated with FEMA's National Response Framework and National Qualification System. The credentials facilitate creating effective communication networks and sharing member status with CERT chiefs, leaders, and offices of emergency managers.

CERT members can also obtain digital proof of specific, in-demand capabilities, such as responding to certain emergencies, speaking multiple languages, or having expertise in connecting with vulnerable populations. Interoperable platforms for digital credentials enable organizations and agencies to easily share information for disaster planning and rapid response during actual crises. They can be accessed by legacy systems, which provide economy to agencies and non-profit organizations for which budgeting is often an obstacle to innovation.

The brutal lessons of catastrophic earthquakes inspired the original CERT founders to train courageous people to safely help others survive. Today's CERT programs deploy verified, skilled, and credentialed volunteers. Agile, real-time digital solutions are enhancing whole-community resilience.

Patty Ridings is currently the public information officer for the National CERT Association (NCA). She also is the community impact officer for Covenant Solar & Roofing. In addition to that role, she is active in the community and volunteers with approximately 38 non-profit organizations. She serves as a board member for Family Harvest Church and Succor Humanitarian and is part of the International Association of Women (IAW) National Diversity, Equity, and Inclusion Council. She also serves as the community engagement and philanthropic coordinator for the Orland Park IAW leadership team. For three years, she served as the president of the Tinley Park Citizens Police Academy Alumni Association (TPCPAAA) and a board member of the Tinley Park Chamber of Commerce. She continues to serve veteran's organizations, including The National Women Veteran United (NWWU), by bringing awareness of women's issues in the military.



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Uvalde Shooting – A Predictable Surprise

By William H. Austin



When intentional acts of violence occur, it is understandable for people to wonder if the incident was preventable. For example, after a mass shooting killed 19 students and 2 teachers in Uvalde, Texas, on May 24, 2022, many were questioning the predictability of the gunman’s actions and the decision-making process of the responders. Examining critical elements of the actions taken before, during, and after the incident help to answer these questions.

The 2004 publication entitled “Predictable Surprises: The Disasters You Should Have Seen Coming and How to Prevent Them” by Max H. Bazerman and Michael D. Watkins defines a predictable surprise as “an event or set of events that take an individual or group by surprise, despite prior awareness of all the information necessary to anticipate the events and their consequences.” The authors summarize predictable surprises into six key elements:

- Leaders know the problem exists;
- Organizational members recognize the problem is getting worse over time;
- Fixing the problem will cause high costs or political angst;
- Addressing the predictable surprise will not reward any leader, which includes uncertain costs that may be much higher than they thought;
- Leaders fail to prepare because maintaining the status quo is the natural tendency; and
- A small vocal minority benefits from inaction and special interest groups that benefit from the status quo will fight hard to block reform.

Three simple illustrations of a predictable surprise are the failure of the Enron Corporation in 2001, the terrorist attack of September 11, 2001, and the COVID-19 pandemic that emerged in the U.S. in 2020.

The OODA Loop (Boyd’s Cycle) & the Brake Light Theory

The [OODA Loop](#) decision concept (observe, orient, decide, act) was created by U.S. Air Force Colonel John Boyd in the 1950s as a creative concept for training fighter pilots in the “art of war.” Boyd taught pilots that attacking the minds of their opponents leads to a greater understanding of human reaction time. His study of human reaction resulted in his

pilots having a 10:1 kill ratio over the enemy. When someone drives a motor vehicle, they often unknowingly use the OODA Loop. The “Brake Light Theory” is a familiar example that illustrates this concept as a simple reaction time. Here is one example of this theory:

On a typical day just north of Tampa, Florida, cars on Interstate 75 fill all three lanes as far as the eye can see. Every driver is traveling around 77 mph trying to get somewhere important. Suddenly drivers begin to slam on the brakes. Vehicles in the right lane swerve to the right shoulder of the road while drivers in the left lane attempt to move to the left shoulder or median. Each driver’s decision in the next few seconds can be traumatizing and even deadly, resulting in a multi-vehicle accident involving damage and possible death for 50-100 vehicles and their occupants. Each driver must now decide what to do.

Consider this individual account of Jane Doe, who is traveling north in the center lane on her way to visit family when she notices the brake lights. She instinctively tries to slow down, but the car behind her approaches rapidly. Envisioning being hit from behind; she eases off the brake. Meanwhile, the vehicle’s brake lights continue to turn on and off in front of her. Focused on not hitting the car in front of her, Jane attempts to move into the left lane. However, the driver behind her does the same thing and, as a result, blocks her escape to the left. Finally, with the center lane coming to a dead stop, she forces her way into the right lane. A catastrophe was narrowly avoided.

Brief History of Mass-Shooting Situations in Schools and Response Training

One could argue that mass-shooting training and planning began in April 1999, after the massacre at [Columbine High School](#). Columbine was a wake-up call where two young men killed 13 people. At Columbine, just 13 minutes after the first call, two students killed 12 other students and a teacher and wounded 23 other people. Next, they killed themselves. SWAT (Special Weapons and Tactics) teams took 47 minutes to enter the school, resulting in massive criticism of law enforcement.

Emergency leaders across the nation recognized that a new incident response approach was needed, including immediately using available officers and going toward the sound of the gunfire. The goal was to interdict the shooter or shooters and stop the incident. Lessons learned from Columbine led the U.S. Justice Department to help fund the Advanced Law Enforcement Rapid Response Training ([ALERRT](#)).

In a 2013 FBI Law Enforcement Bulletin, former senior FBI official [Katherine Schweit](#) cited statistics from a study of active-shooter events between 2000 and 2010: (1) 57% of mass-shooting incidents are still active when officers arrive on the scene; and (2) 75% of those incidents required law enforcement action to end the shooter threat. Both factors certainly apply to the Robb Elementary School shooting incident. She also cited a different 2012 study of 35 active-shooter incidents, which found that 37% of the incidents ended less than 5 minutes after they began, and 63% ended in less than 15 minutes. Neither of these factors applied to the Robb shooting.

Cameras have played a key role in post-Columbine response incidents (as seen in Uvalde) and can assist identification of the shooter.

Abject Failure at Robb Elementary School

The Bazerman and Watkins research helps to prove what the head of the Texas Department of Public Safety called an “[abject failure](#)” at Robb Elementary in Uvalde, TX. Citizens across the U.S. and other nations watched as the disaster unfolded and were asking the following questions:

- How could this be happening?
- Who is in command of this operation?
- What happened to the emergency “active-shooter” response plan?
- What happened to the emergency response training learned from Columbine, Sandy Hook, or Parkland High School?

Using Bazerman and Watkins’ six critical elements of a disaster, consider the various school employees who testified to the Texas House of Representatives [Investigative Committee](#) on the Robb Elementary Shooting on the predictable versus nonpredictable components of the Uvalde, Texas school shooting:

- School district leaders decided not to fund School Resource Officers at all elementary schools.
- School staff and mid-level leaders testified the way things worked was normal and getting worse. Major concerns and problem areas comprised policies for locking doors, the Raptor Alert System, facilities and management, and maintenance of doors and keys.
- Fixing the problem would cause high costs and political questions.
- Addressing a predictable problem (such as an active shooter) called for a plan and training but was met with the increasing exposure in the school district to a phenomenon known as bailouts (in this context, it means illegal immigrants bailing out of vehicles and running from law enforcement).
- A lack of understanding or training in the National Incident Management System led to the designated Incident Commander (Uvalde Independent School District Active-Shooter Response Plan) not assuming command or appointing an incident commander.

This article reviews the Uvalde school shooting findings to determine aspects of predictability and gaps in the decision-making process.

- Failure to act caused severe communication problems, a lack of a recognizable strategy for the incident, or a lack of coordination of tactical operations. In addition, the response used was based on the belief that the incident was a “barricaded subject” and not an “active shooter.”

Additionally, the Uvalde school shooting contained many influencers. Questions could broadly include, “What were the real contributing problems?” Factoring in influencers such as gun control and mental health problems is obvious. Other influencers, such as local law enforcement capabilities, level of incident command system (ICS) training, and prior experience, also cloud the picture.

Now consider the school itself. Factors such as teacher and staff knowledge of the facility and staff training for emergencies at the school were obvious. Lax management practices and weak school security will also come into the probe.

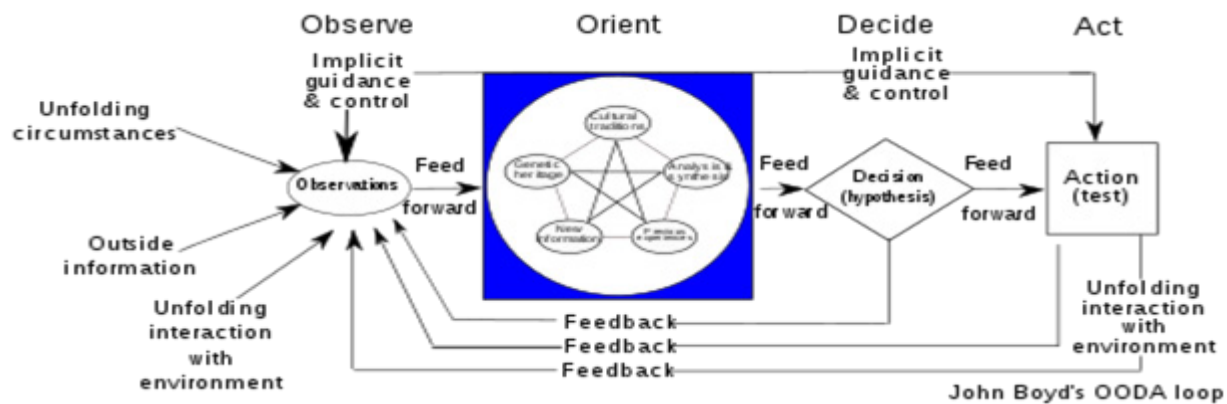


Fig. 1. John Boyd's OODA Loop (Source: CC BY-SA 4.0).

The world is not as predictable as people sometimes think. Even with a bias and plenty of nay-sayers, the OODA Loop offers a framework to increase the art of decision-making (see Fig. 1). However, decisions involving extensive response delays or failure to act increase the potential for the incident to have a bad outcome and far-reaching consequences.

The predictable surprise was supposed to show how everything going wrong was based on the apparent failures that would have been addressed before the incident occurred. The Uvalde case showed obvious failures based on the unused active-shooter response plan. A traumatic, life-threatening event was happening. However, rather than immediately implementing the active-shooter plan, there was confusion, failure to set up incident command, and a broken communication system (as portrayed in [bodycam footage](#)).

In addition to being a predictable surprise based on [testimony](#) provided by first responders, school district staff, and the principal of Robb Elementary School, the

real surprise was the abject failure mentioned above. For example, Uvalde CISD Police Chief Arredondo (who was designated incident commander under the active-shooter response plan) testified to the Texas House of Representatives Investigative Committee on the Robb Elementary Shooting Report 2022 ([page 52](#)) that he thought he was dealing with a barricaded subject situation and did not know that children and teachers had already been shot. The multiple failures that converged in this incident were the lack of leadership and implementation of an emergency operations plan, poor understanding of a common operating picture, and a lack of command presence.

7 Key Research Areas

Despite lessons learned from Columbine, Sandy Hook, and Parkland High School, it was shocking to see the cascading failures at Robb Elementary School. In the May 28, 2022, issue of the Wall Street Journal, columnist [Peggy Noonan](#) summed it up as, “We’re out of words because we’re out of thoughts because we said them all and spent them all after Columbine and Sandy Hook and Parkland.”

National importance, common sense, and sheer determination drive the efforts to stop the continuance of mass-shooting incidents across the nation. Each time an active shooter has attacked a school, leaders repeat the promise to study what happened, update the response plan, train first responders and find a quick way to stop the killer. Key research areas to consider include the impact that the following elements have on gun violence in the U.S.:

- School safety
- The Second Amendment
- State and local laws
- Response operations
- Robb Elementary School
- Mental illness
- Federal politics



School Safety Impact

School officials in any district will promise to do everything they can to protect students from a mass shooting. The Uvalde Consolidated Independent School District made that promise too. The security budget had doubled in recent years. The school district formed its own police department and created threat assessment teams at each school. As required by state law, they wrote their own plan for dealing with an active shooter and built fences around each school. Uvalde also had software to monitor social media, a threat reporting system, and the requirement that all teachers lock their

classroom doors. Despite all this preparation, an armed and distraught 18-year-old former student simply entered an unlocked door, continued down a hallway, and entered a classroom, where he would soon kill 21 people.

The Second Amendment Impact

The [Second Amendment](#) to the U.S. Constitution is a prime source of the major debate that constantly follows any gun discussion in the U.S. Studying the original debate beginning with the [Federalist Papers](#) helps explain why it took approximately ten years for the nation's founders to approve the Constitution. The Second Amendment continues to be one of the most contentious political arguments in the country. Another significant source of debate over firearms involves state and local law.

State and Local Laws Impact

Within the past decade, a [new phenomenon](#) has been slowly developing in various locales nationwide – the concept of allowing (even encouraging) teachers or school employees to carry guns. This strategy has been the leading solution pushed by gun-rights advocates, who contend it gives the school a fighting chance in case of attack. According to the [National Conference of State Legislatures](#), at least 30 states allow individuals other than law enforcement to carry weapons on school grounds. Examples of specific state laws that are impacting gun use in schools include:

- In [Florida](#), 45 of the 74 districts have over 1,300 school staff members serving as armed guards. This move happened after the Douglas High School shooting in Parkland in 2018.
- Approximately 84 of the 1,200 [Texas](#) Association of School Boards districts allow designated staff members to carry firearms.
- [Ohio](#) recently made it easier for teachers to carry firearms in schools with a new bill that reduces the required amount of training needed.
- [Massachusetts](#) passed a bill on August 1, 2022, to change its state gun laws following a U.S. Supreme Court ruling that made it harder to limit access to firearms.
- Governor J.B. Pritzker, from [Illinois](#), signed HB4383 into law on May 18, 2022. The bill bans the sale and possession of “ghost guns” (i.e., unserialized, privately made firearms that cannot be traced by conventional means) statewide.

Response Operations Impact

Disaster operations can be described as simply left of boom or right of boom. The left of boom is the time before the incident, which involves managing the preparatory work

to train, equip, and develop new policies. The right of boom is the time after the first shot is fired when leaders use their collective disaster knowledge to note what is working and what is not. At the Uvalde school shooting, delayed police entry was again a response gap despite the lessons learned from Columbine and Sandy Hook.

Robb Elementary School Impact

The Robb Elementary School's impact on law, policy, planning, training, mental health research, and gun control started the day of the mass shooting. Like the past school shootings, the political fallout will be substantial at first and fade from the collective memory until the next shooting occurs. However, on June 8, 2022, the [Department of Justice](#) announced the next steps in its critical incident review by charging the department's Office of Community Oriented Policing Services (COPS) to conduct a full review and supply a roadmap for community safety and engagement before, during, and after such incidents.

Mental Illness Impact

Searching for solutions, the American Psychological Association ([APA](#)) commissioned a 2013 report for a panel of experts to provide research-based recommendations on reducing gun violence incidents across the U.S. That APA report concluded the following:

- No single profile can reliably predict who will use a gun in a violent act.
- The most consistent and powerful predictor of future violence is a history of violent behavior.
- Psychologists are needed to develop and evaluate programs and settings in schools, workplaces, prisons, neighborhoods, and other relevant contexts that aim to change gendered expectations.
- Although it is essential to recognize that most people suffering from a mental illness are not dangerous, for those at risk for violence due to mental illness, suicidal thoughts, or feelings of desperation, mental health treatment can often prevent gun violence.
- Prevention of violence occurs along a continuum that begins in early childhood with programs to help parents raise emotionally healthy children and ends with efforts to identify and intervene with troubled individuals who are threatening violence.
- Firearm prohibitions for high-risk groups – domestic violence offenders, persons convicted of violent misdemeanor crimes, and individuals with mental illness who have been adjudicated as a threat to themselves or others – have been shown to reduce violence.

Federal Politics Impact

Many investigations were launched in response to the mass shootings in 2022, including the school shooting in Uvalde, Texas. On June 25, 2022, the most extensive bipartisan [gun-safety law](#) in decades was enacted, making it easier to restrict criminals and people with mental illnesses from buying weapons. The bill addressed mental health – for example, adding juvenile adjudications and mental health records to the background check system. However, the bill does not address every issue that could have possibly influenced the outcome of the Uvalde and other mass shootings (e.g., bans on classes of firearms or types of magazines, universal licensing, raising of the age to buy a firearm, limits on firearm purchases, national tracking database).

Next Steps

The investigation of the Uvalde shooting will continue at the federal level, lawsuits are sure to follow, and the former police chief for the school district has been fired. Standard practice for active-shooter incidents is to respond quickly with the law enforcement officers on the scene, go to the sound of gunfire, and terminate the threat.

For first responders, [Rob Wylie](#), in his May 22, 2022, article entitled “Rapid response: Five ways to be prepared for an MCI [mass casualty incident] in your community,” suggests that the key areas to study now are:

- Train with police to begin lifesaving measures as soon as possible,
- Rapid triage is the first order of business,
- Be good at the basics,
- Have the right tools, and
- Have and communicate a plan for exfiltrating the wounded.

For school and public safety agencies, encourage all community members (e.g., teachers, family members, co-workers, and friends) to speak up when they witness actions or discussions that indicate potential threats. Public safety messages and reporting mechanisms are two ways to promote awareness and possibly thwart future mass shootings.

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Respecting Tribal Emergency Management

By John Pennington



Emergency management professionals tend to exhibit what they routinely advocate within their respective communities – [resilience](#). As the field of emergency management continues to evolve, its leaders and their organizations must adjust and adapt to more than just response scenarios. They are expected to speak to the still lingering questions of who emergency managers are, what they do, and how they are defined. The daily bureaucratic obstacles they overcome can impress even the most seasoned policymaker. As that evolution continues and daily adaptations occur, nowhere is resilience more evident than in tribal emergency management.

A Bright and Unique Light in Emergency Management

Tribal emergency management, in the truest sense, fits into a classification all by itself. Most practitioners place emergency management into a category of either a domestic government function (e.g., federal, state, local) or a somewhat parallel component of government (e.g., health care and higher education). The former is tied to federally driven policy and doctrine that informs everything from response structures and the recovery process to grant eligibility and mitigation protocols. The latter, health care and higher education, touch the realm of the former. Still, these functions largely adhere to a federal policy outside the traditional emergency management scope that emanates from the [Robert T. Stafford Act](#), as amended. Those lines may sometimes blur, but practitioners in both areas will often disclose that they are still characterized by bright lines within the [Joint Commission Standards](#) and [The Jeanne Clery Act](#).

Federally recognized tribes in the United States and outlying territories are now appropriately identified within the government function of emergency management, commonly referred to as state, tribal, territorial, and local ([STTL](#)). However, for Alaska Natives and American Indians that comprise those federally recognized tribes, their emergency management roles and responsibilities are decidedly more complicated, and their story has not yet been fully recognized or shared.

A Foundation for Future Relations

Currently, the Federal Emergency Management Agency ([FEMA](#)) and its leadership are guiding federal efforts to recognize the value, distinct cultures, and inherent [sovereignty](#) of the nation's [574 tribal nations](#). FEMA has decisively led the federal effort toward establishing solid and long-lasting government-to-government relationships with tribes. The current administration, led by [Administrator Deanne Criswell](#), has furthered that effort by establishing a [2022-2026 Strategic Plan](#) that mirrors many of the shared values and commonalities observed between diverse tribal communities – values that tribal emergency management has been focusing on for years. In addition, FEMA released its first-ever [Tribal National Strategy](#) on August 18, 2022.

With FEMA’s strategic focus on equity as a foundation of emergency management, climate resilience, and a prepared nation, tribal emergency management and its dedicated professionals inherently stake claim to a strong and experienced posture (a voice) that can positively contribute to achieving these goals. Collectively, there has been a consistent push in tribal emergency management for acknowledgment of its distinctiveness. Tribal emergency managers possess a foundational skillset that replicates the skills of their non-tribal colleagues in cities, counties, and states. However, they also must bridge the gap between the federal- and state-prescribed doctrine and the indigenous worldview that informs emergency management within their tribes. As a result, they have no choice but to work within two unique systems. This balance between systems drives what sets them apart.

Tribal emergency managers frequently strive to adhere to the principles that define an evolving emergency management field, but they also must adhere to their distinct cultural traditions and protocols. These distinctions, at times, can create differences in approach between tribal and non-tribal emergency management. The Smithsonian’s Heritage Emergency National Task Force ([HENTF](#)) and the National Congress of American Indians ([NCAI](#)) both emphasize, as an example, the high value placed on preserving “culture and heritage” during a response, as opposed to protecting “property” as a high priority in non-tribal community response. In addition, during a disaster’s response and recovery phases, the tribal emergency manager must navigate significantly more federal agencies than their non-tribal colleagues.

During a disaster, when city or county emergency managers routinely work within the Stafford Act system, which centers on or near their state and FEMA, tribal emergency managers must perform within or parallel to that system. However, because of the



complexities contained within 200-plus years of federal Indian law and post-colonization policies, they must frequently work with other federal agencies as well, including but not limited to the Bureau of Indian Affairs ([BIA](#)), Indian Health Services ([IHS](#)), and Department of Housing and Urban Development – Office of Native American Programs ([ONAP](#)). At times, there can be an exhaustingly long list of agencies involved. Consequently, during disaster response and long into recovery, tribal emergency managers must straddle both worlds and interact more intensely with the federal government than their non-tribal colleagues. The NCAI [testified to these challenges in 2019](#).

Respect and Resilience

The current presidential administration and FEMA are addressing how tribes are treated in the federal grant process for emergency management. For too long, federally recognized tribes have sought equal footing with states in how emergency management grants are structured and awarded. The stories and [testimonies](#) from tribal emergency management leaders are numerous. Still, they consistently revolve around tribes communicating their belief that they are treated as second-class governments, subservient to states, and often at the mercy of how states choose to award (if at all) grants like the Emergency Management Performance Grant ([EMPG](#)).

Often, it is the lone tribal emergency manager that has had to fight this specific grant battle, and often in concert with another tribal emergency manager or an emergency management association like the National Tribal Emergency Management Council ([NTEMC](#)). Finally, they may be on the cusp of achieving part of the equity referenced in the FEMA Strategic Plan.

In my capacity as lead faculty for the National Emergency Management Advanced Academy ([NEMAA](#)), I continue to facilitate conversations with tribal and non-tribal emergency managers about how tribal emergency management has been historically treated as a single “project” from time to time, and not as an emergency management “program.”

– John Pennington

Tribal emergency managers have persevered in the face of seemingly insurmountable odds. They have faced marginalization on the edges and, at times, directly to their faces by some of their neighboring states and local governments. Yet, through it all, they have remained true to their cultures, their traditions, and their belief systems while only asking to be included or treated as equal. Reconciliation can take many forms and occur over many generations. For emergency management, the road to reconciliation is finally being paved, and hopefully, there is no turning back.

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Tribal Nations Test Their Communications Capabilities

By Bruce Fitzgerald



Thunderbird and Whale was the first-ever national-level exercise thoroughly planned and executed by tribal nations. Lynda Zambrano, executive director of the National Tribal Emergency Management Council (NTEMC), shared her team's approach to the exercise and how they maximized resources to benefit tribal and non-tribal communities in the Pacific Northwest.

Tribal Nations Take the Lead

The Thunderbird and Whale exercise simulated the scenario of a 9.0-magnitude earthquake and a resulting 100-foot tsunami so tribal first responders could practice responding to a catastrophic disaster. The exercise covered the area along the Cascadia fault line, spanning from northern California to Alaska, including jurisdictions as far north as British Columbia and as far east as Montana. Satellite communications hubs were also set up in Florida, Virginia, and Southern California to support the operations.

The Federal Emergency Management Agency (FEMA) planned to conduct its traditional Cascadia Rising national-level exercise as a discussion-based engagement. However, tribal public safety organizations wanted to take this further with a full-scale exercise. The natural choice to plan and execute the training was the NTEMC, a network of tribal nations that promote emergency management best practices. According to Zambrano:

Our organization was asked if we would take the lead on a national-level, full-scale functional exercise for the tribes so they could physically engage and exercise their comprehensive emergency management plans.

The challenge was that, instead of the typical 2-4 years to prepare for a national-level exercise, the tribes had six months and no funding. Zambrano said, "A real-life event will not take a vacation or wait on us, so we felt it was imperative that we do this for our tribes."

The Story of Thunderbird and Whale

Once tribal nations took the lead, they changed the name of the exercise from Cascadia Rising to Thunderbird and Whale to reflect a traditional story within Pacific Northwest tribes that dates back thousands of years. Here is Zambrano's version of the story and how it relates to the exercise:

Thunderbird soared far out over the placid waters of the ocean. As quick as a flash, the powerful bird darted and seized Whale in its flinty talons and soared away toward the land. Thunderbird carried Whale to its nest in the lofty mountains. The two fought a terrible contest, resulting in shaking and trembling of the earth beneath (representing the earthquake) and a rolling of the great waters (representing the tsunami).

With a new name reflecting their heritage, the tribes planned and coordinated a realistic exercise that would benefit the tribal and non-tribal communities in the Pacific Northwestern U.S.

Communications as a Priority

With only six months to plan, the tribes initially focused on communications, which FEMA identifies as Emergency Support Function #2 ([ESF-2](#)) in the National Response Framework. To create a realistic exercise, the tribes simulated zero communications after the earthquake hit. “We told everybody they had to turn off their cell phones and couldn’t use their laptops or answer email or text messages,” said Zambrano. The plan for initial communications was to use ham radios, which do not rely on infrastructure like towers and can operate on battery or solar power.

The next critical step was to get a [FirstNet deployable](#) on-site. FirstNet deployables are stationed around the country and can be on-site within 14 hours of the initial request. Using ham radios to send an email via radio pathways, they contacted the FirstNet Response Operations Group at AT&T, led by former first responders. Based on the assessed public safety needs, the group guided the deployment of the FirstNet deployable assets. In the case of this exercise, the group deployed a FirstNet SatCOLT (satellite cell on light truck) to the NTEMC’s emergency operations center to provide connectivity via satellite. The SatCOLT also came with a cache of FirstNet devices that responders could test in real-time, using features like push-to-talk.

“The assumption was that, due to the earthquake, we had no cellular communications and very limited email and data until a SatCOLT arrived,” said Zambrano. “I am very proud and happy to report that everything ran extremely smoothly, and the support was there and on time. By the following day, we were able to initiate cell phone, email, and internet traffic.” Communications are one of the most valuable tools in responding to disasters. “The FirstNet SatCOLT was a critical piece of equipment for us to be able to communicate with the outside world during the disaster,” said Zambrano. “Without it, we would have been dead in the water for a very long time.”



Exercise Benefits the Community

With communications secured, the tribes expanded the exercise to encompass all 15 emergency support functions. “This truly became a full-scale exercise,” said Zambrano.

The Thunderbird and Whale participants used the exercise’s resources to assist communities in the Pacific Northwest directly. Pilots – who volunteered to provide transportation for the exercise’s food distribution agencies – distributed 80,000 pounds of food, water, and supplies to coastal tribal nations and local food banks, just as they would in an actual disaster.

Another benefit of the exercise was that participating tribes learned each other’s best practices for emergency management. “One of the tribes engaging in this exercise saw what we were doing and said, ‘Why are we not working with FirstNet?’ And they immediately had FirstNet come out and do a presentation. Now they’re shifting all their first responders to FirstNet,” said Zambrano.

She stressed that, even considering all the other benefits, the real point of the exercise was saving lives. “I really wanted to bring the focus back to the number of lives that were saved by conducting this exercise,” said Zambrano. “If we don’t talk about the number of lives saved, then we’ve lost the point of having communications.”

Exercise Support

The Thunderbird and Whale exercise used a template from the Homeland Security Exercise and Evaluation Program (HSEEP) planning documents. The FirstNet Authority offers support to emergency managers preparing similar plans through the agency’s Network Experience Engagement Program ([NEEP](#)), which includes:

- Pre-incident or event support,
- An exercise inject catalog, and
- Post-incident or event reviews.

This article was updated with permission from the [First Responder Network Authority](#).

[Bruce Fitzgerald](#) is the First Responder Network Authority’s senior public safety advisor for Emergency Management. Prior to joining the FirstNet Authority, he worked at AT&T as a FirstNet principal consultant for Maine and Vermont, where he partnered with public safety agencies to adopt and implement FirstNet. He has experience in crisis management, fiscal and program direction, and government relations at the federal, state, and local levels. He worked for 14 years at the Maine Emergency Management Agency (MEMA), serving as the state emergency management and homeland security director among other roles. He also served as chair of the Governor’s Homeland Security Advisory Council (HSAC). He has served as the FEMA Region 1 vice president, national committee co-chair, and member of the board of directors for the National Emergency Management Association and worked closely with state partners and Canadian provinces through the Northeast States Emergency Consortium and the International Emergency Managers Group. During statewide emergencies, he served as the emergency operations center coordinator with responsibility for coordinating the Emergency Response Team and Disaster Recovery Team. In that role, he responded to the St. Patrick’s Day and Patriot’s Day disasters in 2007, a statewide ice storm in 2014, and national hurricanes Katrina, Rita, Irene, and Sandy. In 2012, he led a team of state and private officials and the National Guard to assist the City of New York in recovering from Hurricane Sandy.

Building Resource Capacity – Start Now

By Andrew Altizer & Timothy Murphy



One old Chinese proverb says, “The best time to plant a tree was 20 years ago. The second-best time is now.” Many organizations did not have what they needed when the pandemic surfaced in early 2020, and many still do not have what they need to respond to or recover from a natural disaster or a terrorist attack. In addition, most emergency plans rely on other entities (municipal first responders, county or state emergency management, etc.) to support their needs. Building resource capacity takes persistence, planning, patience, funding, and executive support. Like any plan, although there is no magical formula for building resource capacity, the first step is identifying needs. It is essential to understand that the subsequent steps and the process of building resources takes time – sometimes several years. Whether an organization is just getting started or is in the process of advancing resource capacity goals, the following suggestions provide guidance on moving forward.

Even though getting everything needed all at once is impossible, it is essential to start now and not wait. New equipment and supplies must be budgeted every year to build capacity. It is crucial to seek executive support when budgeting by illustrating how new resources will be vital in mitigating the impacts of future emergencies. Beyond the annual budgeting process, additional options for securing further financial support can be pursued, such as taking advantage of end-of-year monies, seeking grants and donations, and obtaining assistance from other departments within the overarching organization.

Identify Potential Dangers and “What If” Scenarios

A good way to know what resources an organization will need in the future is first to identify the threats and hazards that can impact the community and region. This step includes determining the short- and long-term effects of a given threat, hazard, or risk, followed by the technical and human resources needed to mitigate these effects, including the necessary skills and capabilities of agency personnel. In addition to dangers that have a direct effect, planners should evaluate and incorporate into the planning process any potential regional threats, hazards, and risks that may have an indirect impact on the local community. In such cases, it is critical to know whether the agency’s resources would be required for incidents occurring in neighboring communities and how the agency would support these operations.

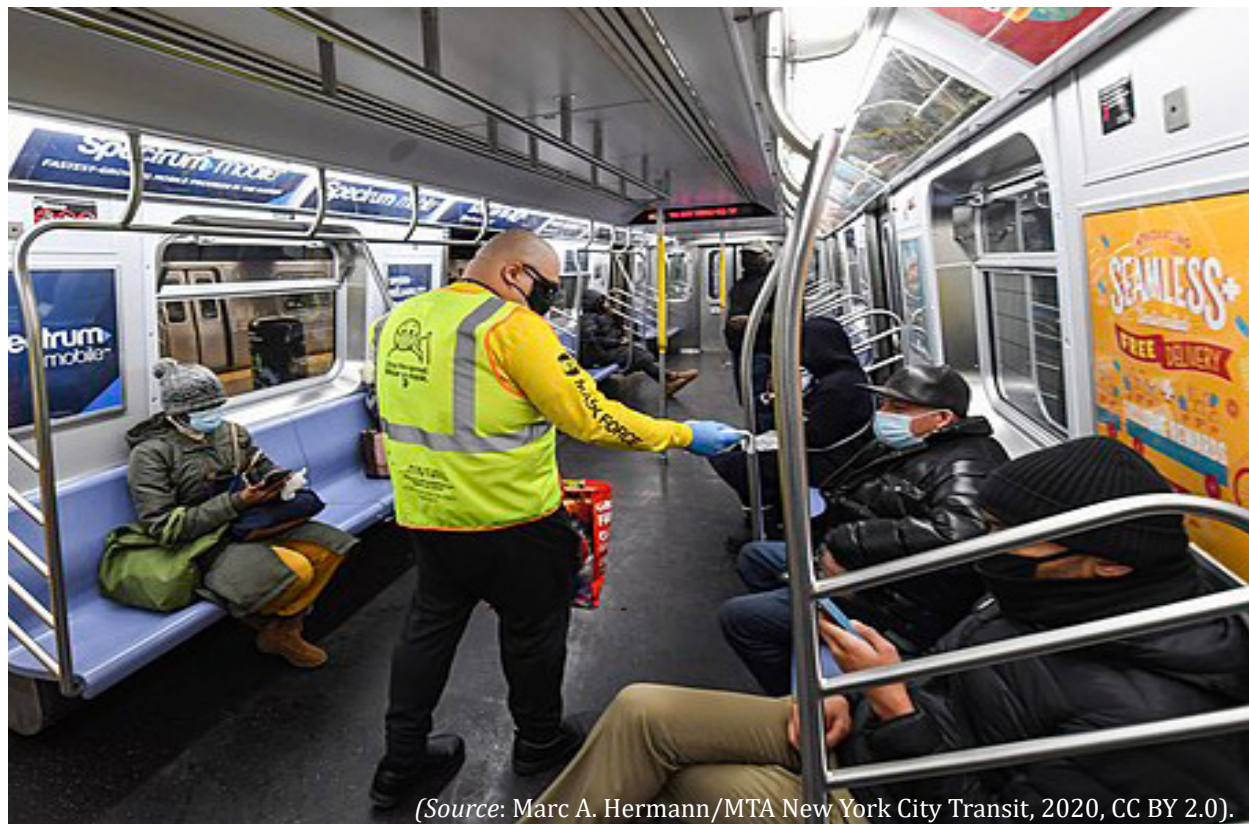
By “imagining” the aftermath of a given disaster scenario, it is easier to identify the goals and the likely tasks needed post-incident. With an intent to return the area/community to its pre-incident status, considerations should include the resources

necessary for ensuring life and safety and preventing further harm. During an incident response, additional resources often exceed daily capacity – transportation, utilities, communication resources, housing, food, and water are just a few likely strains on recovery efforts that will demand additional resources. Although impossible to prevent every disaster, taking preventative measures can help to avoid resource crises.

Knowing who would coordinate the response and what they need are also critical planning components – other agencies should not be relied upon to come to the rescue. As COVID-19 demonstrated, expecting other agencies or jurisdictions to provide necessary resources is wishful thinking, especially when a disaster affects a larger region. At a minimum, an organization should be self-sufficient for several days.

Capitalize on Special Event Needs and Real-Time Incidents

State and federal financial support to large-scale, special events, such as “all-hazard” planning, can be leveraged by agencies, including using equipment made available for the event. Some equipment and resources can be used in the aftermath of an actual emergency rather than simply sitting in a warehouse waiting for next year’s event. In addition, special event after-action reports provide a valuable tool for identifying shortfalls that can enhance capabilities for other events and incidents. As an example, some after-action reports related to COVID-19 would show the need for heating units at drive-through testing sites. Such heaters would enhance similar future operations but also would ensure that heaters would be available for countless other responses (power



(Source: Marc A. Hermann/MTA New York City Transit, 2020, CC BY 2.0).

outages, flu-vaccine pop-up sites, reunification sites, etc.). Of course, the opposite is also true – resources specifically purchased for responses could improve special event operations. Consequently, leveraging a resource request to include both (all-hazards and special events) shows financial responsibility, teamwork, and a commonsense approach.

Although it may be an unpleasant fact, capitalizing on real-time, ongoing incidents may provide the opportunity to procure new resources. The phrase “never let a disaster go to waste” may seem tasteless, but an agency should never pass on a chance to enhance preparedness and build capacity. The real-time incident does not have to be in the jurisdiction where the plan is created. It could be a tragedy where the response did not go well or simply one that receives a lot of media coverage. Other ways to express the importance of building resource capacity include:

- *Continuity of operations* – Returning to normal operations is more than simply returning to work. Critical functions must be maintained even before returning to normal operations, and many of these functions rely on resources that are not used daily. However, identifying and ensuring access to these resources before an emergency is vital for maintaining critical operations. COVID-19 demonstrated that many organizations did not have what they needed in advance and could not obtain the resources once the severity of the pandemic was realized.
- *Historical background* – Using past emergencies to help build preparedness capacity involves carefully reviewing after-action reports. These reports often identify what was needed – and what was unavailable – during the recovery phase of a disaster. For example, pandemics, active shooters, catastrophic weather events, etc., are good places to see what was needed to respond and recover.
- *Exercises* – The primary objective of disaster exercises is to identify resource gaps. Identifying these gaps in a stress-free environment can pay huge dividends when a disaster strikes by sharing lessons learned with key stakeholders and then filling the gaps identified as shortfalls

Overcoming Barriers

Beyond normal and somewhat expected budgetary concerns, two other areas often make it challenging to build resource capacity: competing needs and naysayers.

Competing needs – Safety, security, and preparedness are integral parts of any organization. Executive staff members understand the importance of “being ready” before and after an emergency, but their organizations have competing daily needs. Reducing conflicts for competing needs takes patience, long-range planning, and executive support.

Despite lessons from COVID-19, many entities still do not have what they need to respond to or recover from a natural disaster or a terrorist attack.

Competing needs may even come from within the same public safety department. For example, in a police department, daily patrol vehicles must be maintained for the safety and security of the overarching organization. These immediate needs undoubtedly would take precedence over competing equipment needs that may be required later. More clearly stated, requesting mass casualty incident resources would take a back seat when patrol cars are needed right now.

The Naysayers – Consider the times when there was a particular resource shortage. Pointing out the need to be prepared before an emergency is better than locating and acquiring resources during or after an emergency. Careful planning takes into consideration both life safety and continuity of operations. Providing examples from past disasters helps too. For example, imagine the response to someone asking the following question in 2019 versus today, “Why would we need so many disposal (or perhaps even N95) masks?”

Public safety leaders must always be prepared to answer the “What do you need?” question with details. Therefore, it is beneficial to have a “living,” regularly updated resource-needs document that includes specific equipment and personnel needs – including training and detailed costs – and be “purpose ready.”

COVID-19 has provided many valuable lessons, including the importance of having the resources needed before an emergency. The pandemic also showed how difficult it is to acquire resources when an incident expands geographically and becomes long-term. Although few organizations have everything on hand when a disaster strikes, organizations with a baseline to get started are in a better position to respond and can return to normal operations much sooner.

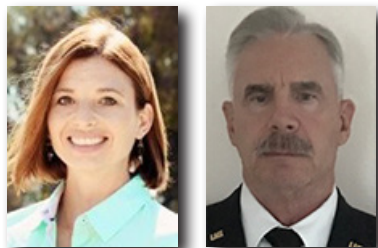
The phrase, “You don’t know what you don’t know,” applies to building emergency preparedness resource capacity, and it takes continuous research to adapt to changing threats. It is also helpful to “get out of the office” and see what other organizations have on hand that could be mutually beneficial for operations. Finally, one of the main differences between those who get what they want (or need) and those who do not is that they asked for it! So, start planning and ask now for what will be needed in the future.

Andrew (Andy) Altizer recently joined Westminster School’s Safety & Security Department in Atlanta. His previous positions include the director of emergency management at Kennesaw State University for over seven years and the director of emergency preparedness at Georgia Tech for eight years. He served as the critical infrastructure program protection manager in Georgia Emergency Management Agency’s Homeland Security Division for over four years. He served over 10 years in the active and reserve components of the U.S. Army.

Timothy S. Murphy is the Special Operations Commander at Kennesaw State University Police Department. He has been with the department for over 25 years. He plans and manages traffic and security operations for large-scale athletic/special events. He is a graduate of the Northwestern School of Police Staff and Command.

Military Combat Skills for Civilian Disaster Response

By Lisa Nenno & Timothy Miller

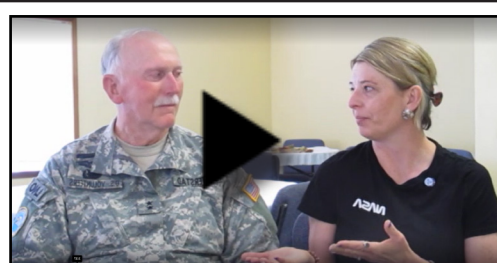


During their service, military personnel acquire a broad range of lifesaving skills that are critical when on the frontline during wartime. Effective medical triage is one of the skills needed during combat and any major disaster or catastrophic event. When preparing and training for all hazards, the learned experience from military veterans provides a unique perspective to build training exercises in partnership with civilian agencies and organizations

Natural Disaster Scenario Exercise

Expertise in triage and assessment is essential in war zones and natural disaster scenarios. In June 2022, at the request of the National Tribal Emergency Management Council (NTEMC), combat veterans from the U.S. Volunteers Joint Services Command ([USV-JSC](#)) participated in a whole community exercise conducted in the Pacific Northwest. The simulated 9.0 earthquake caused widespread impacts, with an aftershock that triggered buildings and homes to collapse. Operation Thunderbird and Whale (signifying an earthquake and tsunami in the Native American culture) was a unique natural disaster training exercise conducted in partnership with national organizations focused on supporting vulnerable populations. USV-JSC's objectives for the exercise were to better prepare civilian exercise participants for their potential roles in a future disaster by:

- Teaching the essential elements of medical triage;
- Defining the various roles in disaster response;
- Providing expertise from subject matter experts;
- Sharing information about valuable resources and where to find them; and
- Explaining what to do when communications are down.



As a trauma nurse and combat veteran, Lisa Nenno was a part of a multidisciplinary medical team that served in a combat hospital in Kandahar, which served coalition soldiers, local Afghan adults and children, and detainees. Every day, the MedEvac helicopters would land with casualties from forward operating bases and combat: traumatic amputations and gunshot wounds, blast injuries, and traumatic brain injuries. The main task was to provide immediate care and stabilization of patients for transport to Landstuhl, Germany. Skills learned in combat included providing culturally sensitive care, learning to work with limited resources, and being prepared to use only the most basic equipment. Triage and trauma care were performed with a skilled team of physicians and nurses.

Led by Nenno, USV-JSC implemented a triage training protocol based on personal experiences from working in a combat hospital in Afghanistan. Participants received minimal preparation, resources, and training in advance to make the exercise realistic. The medical portion went live with a rapidly orchestrated medical trauma procedure protocol based on an impromptu scenario announced by the emergency operations center (EOC). A three-person team from the USV-JSC arrived as first responders to provide lifesaving services at the Farmer Frog Farm (located in Woodinville, WA), where 12 civilian participants from the farm played disaster victim roles.



Barn Collapse Exercise, June 2022

The USV-JSC team arrived on the scene to find a barn collapse at Farmer Frog Farm caused by an aftershock of the 9.0 earthquake. The group performed a combined START triage algorithm based on lessons learned from mass casualty triage in combat. The [START](#) (Simple Triage And

Rapid Treatment) system provides a rapid method for first responders to triage mass casualties based on respiration, perfusion, and mental status.

The scene was safe to enter, so they began evaluating injuries using basic triage methods:

- *Immediate (red)* – casualties requiring immediate lifesaving treatment;
- *Delayed (yellow)* – casualties requiring medical intervention but not with urgency;
- *Minor (green)* – casualties with minor to no injuries (also called the “walking wounded”); and
- *Expectant (black)* – casualties that are unlikely to survive based on their injuries.

They found 11 wounded and one fatality. With limited supplies, the team used what they found around the barn and surrounding area to create tourniquets, slings, bandages, litters (rescue stretchers), and immobilizers. Then, using litters made from wood and tarps found on the scene, they loaded the casualties onto a transport vehicle and brought the patients to the flight line for medivac support from the air.

Key Takeaways & Lessons Learned

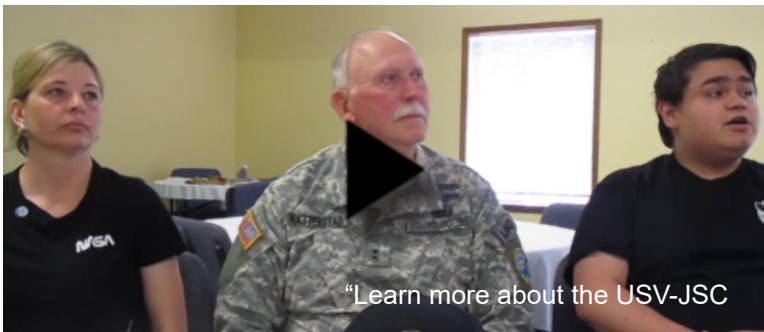
After the exercise, the USV-JSC team and the Farmer Frog participants met at the EOC for a discussion about what the participants learned and what actions should be taken to prepare for a real-life threat. For example:

- Real-life trainings can be vulnerable moments for combat veterans.
- Having a variety of perspectives, strengths, and backgrounds are influential in achieving the best outcome.

- Bringing family and friends to the exercise enhances the importance of preparing for a real-life disaster.
- Military participants gained insight and guidance by partnering with non-military participants.
- Communication can always be improved for logistics, planning, and supplies.
- There is a need to educate other community stakeholders on the work of the USV-JSC (military volunteers), NTEMC (tribal emergency management), and Farmer Frog (a unique farm providing multi-state food distribution in a national emergency).

The Global COVID pandemic emphasized the need to be prepared to respond at a moment's notice. Even though many people do not have military training, volunteers with training can have a significant impact on disaster response. Combining military experience with local and national communities to act and serve together will achieve the best outcome.

The Thunderbird and Whale exercise brought the USV-JSC team together with its civilian partners, who had the capabilities to triage casualties successfully, evacuate the



wounded, and transport the severely injured to the flight line for immediate care. This exercise provided a realistic experience and lessons learned for all participants. The USV-JSC plans to continue emergency management planning with powerful entities such as Farmer Frog (food distribution) and the

NTEMC (tribal emergency management). The exercise succeeded because all participants worked together using their various strengths and perspectives.

Moving forward, pursuing similar full-scale exercises every two years will help build community partnerships. However, training, learning best practices, and working with a strong team between training exercises are also essential. These types of community efforts will educate potential volunteers and build excitement about emergency preparedness. This is not a fear-based approach but a whole-community effort.

LCDR Lisa Nenno has worked in various healthcare specialties, including adult general medicine and intensive care unit (board certified critical care nurse), and served in the United States military – Navy Critical Care Nurse/trauma for 5 years (deployed to Afghanistan for 8 months supporting Operation Enduring Freedom). After her military service, she cared for children and young adults in a school university health setting in a management role overseeing OBGYN/midwife clinics and corporate health/wellness center performing physicals for the FBI and Secret Service – fit for duty annuals. She graduated from Yale University with her nursing degree and from the University of San Diego with a doctorate in nursing. She is a member of United States Volunteers – Joint Services Command and VFW Post 3348.

Timothy James Miller graduated from Washington State University in 1968 and was commissioned a second Lieutenant in the U.S. Army Corps of Engineers. He served in Germany (24th Engineer group) and Vietnam (577th Engineer Battalion, 18th Engineer Brigade). In Vietnam, he commanded HHQ Company and was the S-2 (Security and Intelligence) Battalion staff officer. Although serving in two positions, perimeter security was his primary responsibility. As a captain, he recruited, organized, and equipped a 130-member Chinese (Nung) Security Force. As the security force commander, he was awarded the Army Commendation Medal and the Bronze Star by Battalion Commanders Col Koren and Col Kitts. He left active duty in 1972 but stayed active in the Army Reserve as a company commander (659th Engineer Company, Spokane, WA) while finishing his MBA at Eastern Washington University. After finishing his degree, he left the military as a captain. In 1979, he started his own business forms and systems distributorship, which he sold in 2017. In 2005, he joined the Washington State Guard and, as a commander of the color and honor guard, was in charge of the unit performing military honors at Tahoma National Cemetery. For his achievements as a Military Emergency Management Specialist (Senior Level), Major Miller was awarded the Legion of Merit by the Washington Adjutant General LTG Timothy Loewenberg. He now serves as the commander of the 103rd BCT.



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Taking Flight – Creating a Robust Aviation Response, Part 1

By Sky Terry



On June 18-21, 2022, the West Coast General Aviation Response Plan ([WCGARP](#)) was initiated for a full-scale, multi-agency, multi-jurisdictional, all-day training exercise as a part of the National Level Exercise led by Tribal Nations in the Pacific Northwest. This exercise, originally named Cascadia Rising – and re-named the Thunderbird and Whale 2022 when the Tribes took the lead – incorporated the WCGARP as a two-part aviation response to an earthquake and tsunami incident.

Although the June exercise marked the first full-scale implementation of the WCGARP plan, pilots in the area had been preparing for that exercise for over a decade, beginning with a seaplane exercise at Lake Whatcom in 2009. Conducting land-based drills began with a joint effort in 2015 when a California Disaster Airlift Response Team ([CalDART](#)) pilot flew food from Bellingham International Airport direct to the San Francisco Bay area. This initiated an effort (by Sky Terry and Paul Marshall, who was the original developer of the DART concept) to bring the formal DART program to Washington. By 2018, pilots established the first official Washington DART in Clallam County. However, the past two years of progress are the most remarkable.

General Aviation Overview

The term “general aviation” refers to noncommercial pilots who voluntarily donate their time or aircraft to help move supplies or people as needed. Unlike commercial operators, who require different certifications, general aviation pilots cannot accept money for their time, fuel, or any other financial compensation. However, these pilots have the same rights to airports as commercial enterprises – like personal automobiles, emergency vehicles, and commercial trucks sharing the roadways. The only exception is small private airports, which require advance arrangements for accessibility.

Over the past decade, general aviation pilots have made significant advances in preparing pilots and ground crews to respond to local disasters.

To ensure safety, the [Federal Aviation Administration](#) sets general guidelines for airspace, with the Coast Guard having authority over seaplanes and waterways that border two or more states. However, most emergency coordination efforts involve key community stakeholders, including emergency management agencies, emergency medical services, Tribal leadership, amateur radio operators, Civil Air Patrol, and groups like [Miracle Food Network](#), which help move the food from the airport to the final destination.



Point Roberts EVAC exercise, September 2020

2020 - Developing the Plan

To address the Cascadia earthquake scenario, many people (including Sky Terry, Rol Murrow from Emergency Volunteer Air Corps ([EVAC](#)), Paul Marshall from CalDART, Alan Barnard from Clallam County DART) provided tremendous input and guidance to create the

WCGARP in May 2020. The plan aims to make a coordinated response effort that links national efforts with local pilots. For example, in a disaster, response agencies would collaborate with general aviation pilots to fly resources into the damaged West Coast states and, on return legs, fly injured or displaced people out of the affected areas. The EVAC and [Air Care Alliance](#) are the primary leads and central clearing house.

In May 2020, pilots were already assisting with the COVID-19 response by flying face shields and other personal protective equipment (PPE) to area hospitals and flying abandoned dogs from Mexico to Washington to rehome them. May 9, 2020, was the first full use of WCGARP when CalDART – assisted by EVAC, Walla Walla Emergency Management, and Walla Walla DART – delivered [500 face shields](#) to Walla Walla’s medical front-line workers.



Pilot Meyer Goldstein delivered donated produce to a volunteer at Grove Field, Camas, Washington for distribution (Source: Steve Aberle, June 21, 2022).

In September 2020, the Whatcom County EVAC DART hosted an annual multi-county DART exercise, including a successful test of two-way radio communications with “impacted sites” in Washington. During that exercise, general aviation pilots flew [400 lb](#) of donated food to [Point Roberts](#) for delivery to the local food bank. Adding to the realism of the activity, COVID-19 border restrictions between the U.S. and Canada at that time had already isolated Point Roberts from any land-based access to the U.S.

The remainder of 2020 gave general aviation pilots many ways to assist with the COVID-19 response and other humanitarian aid by delivering tens of thousands of masks, additional PPE, and food to those in need. Despite less-than-ideal weather conditions on some flight days, no injuries or mishaps occurred.

Since December 2020, general aviation pilots in the Northwest have been developing relationships with the National Tribal Emergency Management Council ([NTEMC](#)), [Farmer Frog](#), and multiple aviation and emergency management leadership from California, Oregon, Washington, and Idaho. The initial discussion in December focused on transporting 125 pallets of PPE across Washington – ground shipment from Monroe to Arlington Airport – followed by flights to three other states (California, Oregon, and Idaho). The first airlift occurred in January 2021 with the transport of nearly 30,000 lbs of food and face masks. Since then, this expanding effort has been bringing together [volunteer DART pilots](#) and other organizations to provide emergency and disaster support to their local communities.

2021 – Exercising the Plan

Many experts have [predicted](#) that it is only a matter of time before the coast along the Cascadia Subduction Zone (i.e., the northern part of California, Oregon, Washington, and Vancouver, Canada) is impacted by a massive 9-magnitude or greater earthquake. When that day comes, general aviation may become the primary lifeline for transporting food, supplies, and people to and from disaster-struck areas. Training exercises help pilots, ground crews, and other participants understand their critical roles and responsibilities and help identify and close gaps that could hinder response efforts.

The first ever full-scale joint exercise where the northwest region’s DARTs and Civil Air Patrol participated with amateur radio operators and many other local, state, and federal representatives, took place in [June 2021](#). Although local and state emergency response agencies had been training annually for this event, the COVID-19 pandemic demonstrated the need to include air support resources in the training process. That exercise involved many drills occurring concurrently with interlocking responses and multiple flights.

A critical step in protecting vital mobility transport in the early days after a catastrophic event involves assessments of roadways, fuel supply lines, and potential landing sites on

land and water. The 2021 exercise revealed a few planning gaps to consider for future high-magnitude earthquakes in the Cascadia region:

- Supply lines for aviation may need to shift on both the west side and east side of the Cascadias;
- Multi-airport relays may be required;
- The location of seaplanes is critical for minimizing potential damage to the aircraft;
- The potential damages to roadways may leave general aviation as the only immediate way to access some affected areas; and
- The ability of general aviation to use waterways could make it one of the very first resources available (see a [video of the Point Roberts seaplane operations](#)).

During the June 2021 exercise and others since then, general aviation pilots, DARTs, the members of the WCGARP effort, and many other volunteers have been taking significant



steps to be trained and ready to help deliver lifesaving aid when needed (e.g., transport of supplies and people, aerial damage assessments, communication links, etc.).

Call to Action

DARTs and other general aviation pilots can assist their communities significantly

during local and regional disasters. And these efforts are not isolated to the United States. Similar efforts exist around the world – for example, in [Papua New Guinea](#) in September 2022, volunteer pilots provided disaster support to remote areas following a 7.6-magnitude earthquake.

To get started, emergency management and other response agencies should coordinate with general aviation pilots when developing local emergency response plans. Pilots also can join the EVAC, or they can create a DART anywhere by following a [basic template](#).

This is Part 1 of a two-part article. Part 2 will share lessons learned from pilots during the 2022 Thunderbird and Whale Exercise.

Sky Terry is currently a Licensed Practical Nurse (since 2011). Since shortly after the Nisqually Earthquake in Washington in 2001, he has been a primary leader in the development of general aviation as a critical response resource after the “big one.” His experience includes five years in the U.S. Army in communications with a secondary role as a combat lifesaver; three years as a volunteer firefighter at Mukilteo Fire Department and DuPont; two years as a nursing assistant; 14 years in search and rescue for Snohomish and Pierce Counties; and leader for multiple responses to the COVID-19 pandemic in Washington with general aviation resources. Additionally, since 2009, he has been the primary designer and organizer/leader for annual exercises in developing general aviation as a resource in Washington (currently conducting two large-scale drills annually).

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