CDE #67616

PEAS IN A POD

How close links between the emergency operations and emergency communications centers facilitate emergency response.

By Ryan Wilkinson

Picture this: Keyboards are clacking away as usual when suddenly, the phones on the central dispatch floor start ringing nonstop. As a curious member of the emergency management office, you glance down the hall and notice every tower light at each console is flashing red. Calls are being answered, information is being gathered and resources are being swiftly dispatched. The on-duty supervisor shouts down the hall that a high-hazard, flammable train has derailed. Tank cars have been breached. The initial situational assessment indicates the necessity for a coordinated, multi-agency and multi-jurisdictional effort to effectively respond to and recover from this disaster. That's one of the cues to activate the emergency operations center (EOC) as an integral part of the broader command and coordination structure, providing essential mission support for managing this complex incident.

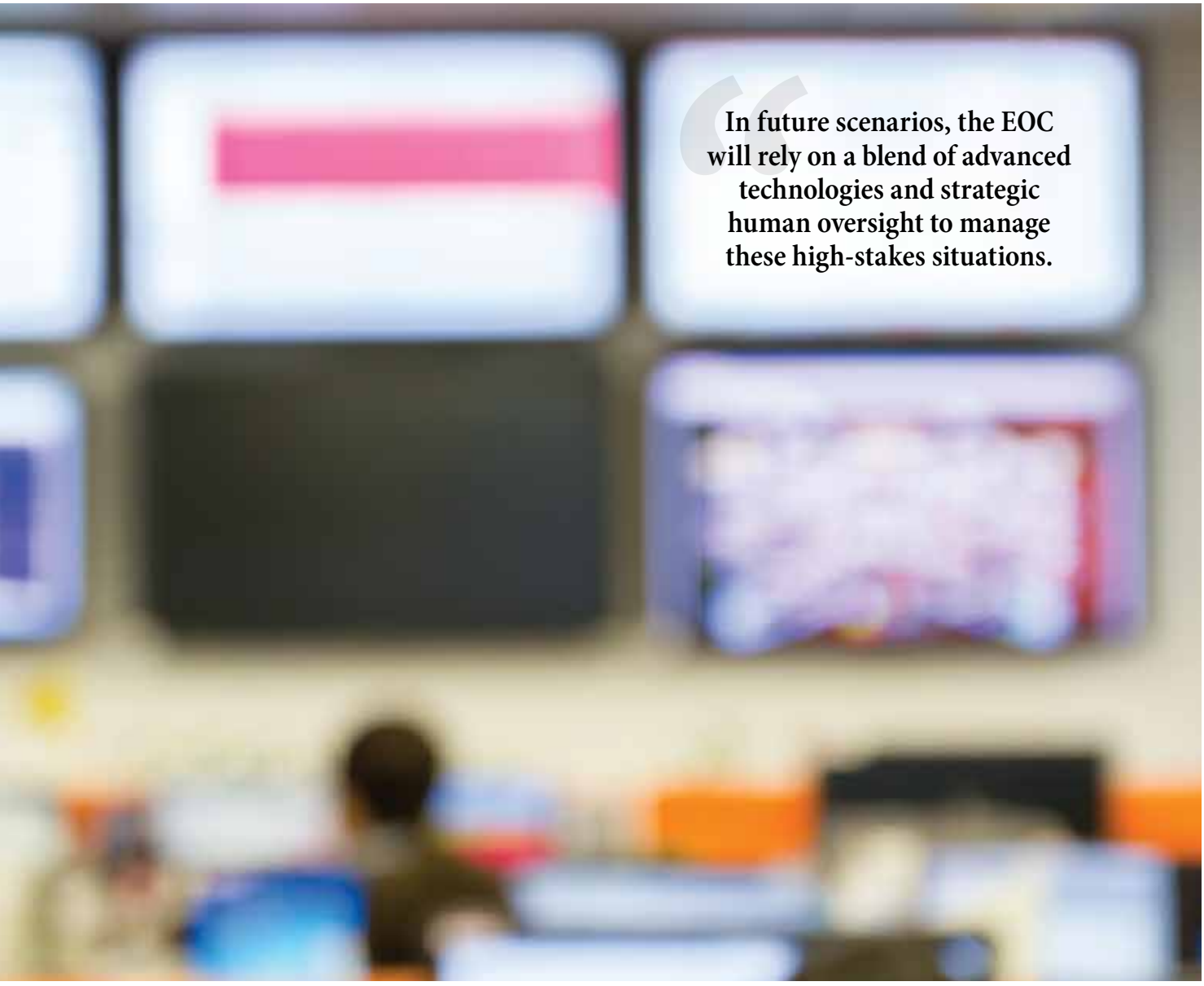
As a county emergency management department, having our physical office space within the only central dispatch building for the entire county is invaluable. You get immediate, 24/7 coordination and situational awareness. You foster relationships with the telecommunicators, supervisors, directors and other administrative staff, building that trust before a really bad day happens. You get to work closely on vital communications policy and procedure with different stakeholders to form a more "bullet-proof" plan. This plan is especially important for that high-priority, low-frequency EOC activation, such as the train derailment scenario.

It wasn't always this way. Before I was hired as the emergency manager in August 2018, emergency management was a division of our sheriff's office, with the emergency management responsibilities delegated to a sergeant. The sheriff's office ultimately focuses on law enforcement because that's its primary mission. But emergency management has become a vast enterprise, requiring collaboration among all levels of government, the private sector, non-profit organizations and even individuals in households. Our board of commissioners became aware of this need as more threats and hazards were emerging that required collaboration with the whole community. At the most fundamental level, it was essential to establish a strong relationship with the ECC to ensure mission readiness and support the EOC before, during and after emergencies or disasters.

The current relationship between emergency management and central dispatch is stronger than ever and I'm confident that the director, deputy director, supervisors and telecommunicators would agree. The emergency communications center plays a crucial role within the Eaton County (Michigan) Emergency Operations Center (EOC), particularly during high-priority, low-frequency activations. They

are an integral component of our communications network, ensuring seamless coordination and response. Our EOC has adopted the incident support model (ISM), ensuring alignment with the National Incident Management System to concentrate solely on support functions, without getting involved in the management of active response operations. Within the ISM model, we also have emergency support functions (ESFs) that can provide additional support to the EOC. ESF partners such as fire/EMS, public health and health care facilities, or public works possess deep knowledge of their respective agencies or organizations and provide specialized expertise in their fields when activated. Central dispatch is the primary agency representing the communications emergency support function. Our mission is to facilitate interoperable communications capabilities; identify critical communications infrastructure, systems, assets and resources; and assess their vulnerability to pre- and post-disaster hazards. Additionally, central dispatch is responsible for implementing and maintaining internal and external alerts, warnings, and notification systems to ensure timely and accurate information dissemination to affected populations. This support is vital for coordination, collaboration and information sharing during emergencies and disasters.

Furthermore, our emergency management department and ECC staff actively participate in each other's meetings, collaboration and training efforts. By having a seat at the regular ECC supervisor meetings, we ensure that its leadership team stays informed about our emergency management program and any project initiatives that may affect it. We also regularly engage ECC personnel in grant-funded initiatives. These include projects like the deployable Eaton County Communications Trailer for scheduled events or incidents, such as significant conferences like the Great Lakes Homeland Security and Training Conference, the Michigan Interoperable Communications Conference and the North American Active Assailant Conference. Through these collaborative efforts, we continue to strengthen



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our partnership and enhance our collective readiness and response capabilities.

Looking toward the future, high-priority, low-frequency EOC activations will be characterized by a heightened level of sophistication and technological integration, significantly enhancing the communication function within the EOC. These rare but critical events, such as catastrophic natural disasters, large-scale industrial accidents or terrorist attacks, necessitate a robust and agile communication framework to ensure an effective and coordinated response. In future scenarios, the EOC will rely on a blend of advanced technologies and strategic human oversight to manage these high-stakes situations.

Upon activation, the EOC will harness real-time data from myriad sources, including satellite imagery and drones deployed at the incident site. This influx of data will be processed using artificial intelligence (AI) and machine learning algorithms to provide a comprehensive and constantly updated situational awareness. Central dispatch, serving as the nerve center of this communication network, will play an important role, ensuring the accurate and swift dissemination of information. Telecommunicators will use advanced communication platforms that integrate voice, video and data streams, enabling seamless interaction between on-site responders and the EOC.

The communication team within the EOC will be tasked with maintaining these interoperable communication systems. These systems will connect various agencies, including law enforcement, fire services, medical responders and public health officials, ensuring that all parties can share information and coordinate their actions without delay. The future EOC will likely employ cloud-based solutions and blockchain technology to secure data integrity and facilitate real-time information sharing across jurisdictions and agencies.

In the event of a high-priority, low-frequency activation, the communication function will also extend to managing crisis communications, public information and education. This involves the deployment of sophisticated alert, warning and notification systems that can reach the affected population using multiple methods of communication, including mobile alerts, social media and other broadcasting systems. AI-driven tools will analyze social media feeds and public communications to gauge public sentiment and misinformation, allowing the EOC to address rumors swiftly and provide accurate information.

Training and exercise using virtual reality and augmented reality will become a standard part of preparation for EOC personnel. These technologies can create immersive training environments that mimic real-world scenarios, ensuring that the communication team is adept at managing the unique challenges posed by high-priority, low-frequency incidents. Additionally, the integration of predictive analytics will enable the EOC to anticipate potential cascading impacts or disasters within the disaster and adjust the communication strategies accordingly.

Future EOCs will also focus on community engagement, leveraging technology to involve the public in readiness activities. Mobile apps and online platforms will allow residents to better understand their risk, report hazards and provide situational updates, creating a more resilient community. This two-way communication will be crucial in high-priority events, as it ensures that the EOC receives grassroots-level information that can be vital for an effective response.

The evolution of emergency management and central dispatch is a testament to the importance of adaptive, integrated systems in safeguarding communities against high-priority, low-frequency events. The future of this relationship will be marked by advanced technological integration and enhanced communication frameworks, ensuring that all relevant parties can respond to emergencies with unprecedented speed and coordination. The seamless flow of information, facilitated by real-time data from multiple sources and processed through sophisticated AI and machine learning algorithms, will provide comprehensive situational awareness, enabling more informed decision making. The adoption of interoperable communication systems, virtual and augmented reality training tools, and predictive analytics will further bolster the effectiveness of the EOC, preparing it for a wide array of potential threats.

Moreover, the emphasis on community engagement and public communication will create a more resilient and informed

populace, capable of contributing to emergency response efforts. The future promises a landscape where technology and human oversight combine to form a robust, agile emergency management system, capable of mitigating the impacts of even the most severe disasters. By continuously fostering strong partnerships, leveraging technological advances, and maintaining a focus on resilience and sustainability, we can build a future where our communities are better prepared and protected against any emergency. ●

Ryan Wilkinson *is the Eaton County (Michigan) Emergency Manager. He focuses on creating plans, structures and partnerships that bring together all levels of government, the private sector and nonprofit organizations before, during and after emergencies and disasters.*

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1. Why is having the physical emergency management office stationed within the central dispatch building invaluable?
   a. It reduces cost
   b. It keeps all employees in one location
   c. It allows for immediate, 24/7 coordination and situational awareness
   d. It helps in training new employees

2. Before August 2018, to which division did Eaton County (Michigan) Emergency Management belong?
   a. Fire department
   b. Police department
   c. Sheriff's office
   d. City council

3. What prompted the board of commissioners to recognize the need for expanded collaboration in emergency management for Eaton County?
   a. Increased funding opportunities
   b. Rapidly emerging threats and hazards
   c. Public demand for more services
   d. Technological advancements

4. How has the role of emergency management evolved over time?
   a. It now requires collaboration among various levels of government, private sector, nonprofits and households
   b. It has become more isolated
   c. It focuses solely on law enforcement
   d. It no longer involves first responders

5. What EOC model has the Eaton County EOC adopted?
   a. Incident command system (ICS) or ICS-like structure
   b. Incident support model (ISM)
   c. Departmental model
   d. Regional model

6. What is the primary role of central dispatch in the Eaton County EOC during high-priority, low-frequency activations?
   a. Managing field operations
   b. Providing medical assistance
   c. Overseeing financial operations
   d. Facilitating interoperable communications capabilities

7. What emergency support function (ESF) is Eaton County Central Dispatch the primary agency for?
   a. ESF #14 — cross sector business and infrastructure
   b. ESF #13 — public safety
   c. ESF #2 — communications
   d. ESF #5 — information and planning

8. What technologies will future EOCs likely employ to secure data integrity and facilitate information sharing?
   a. Typewriters and fax machines
   b. Handwritten notes
   c. Desktop computers
   d. Cloud-based technology

9. How will future EOCs manage crisis communications, public information and education during high-priority-low frequency incidents?
   a. Through traditional mail
   b. By deploying sophisticated alerts, warnings and notification systems
   c. By holding town hall meetings only
   d. By relying solely on traditional news media

10. What could the use of virtual reality and augmented reality in training ensure for EOC personnel?
    a. They will have immersive training environments that mimic real-world scenarios.
    b. They will not need any training
    c. They will only train during actual emergencies
    d. They will avoid technological training

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