Vol. 36 No. 11 November 2019

INTERNATIONAL ASSOCIATION OF EMERGENCY MANAGERS

IAEM Bulletin

In this issue

Think Tank Partners:

From the IAEM-USA President

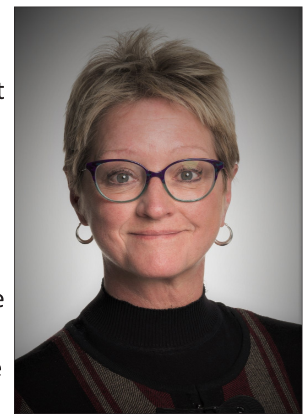
An Optimistic Look at the Future of EM, Despite the Threats Facing Us

By Marty Shaub, CEM, UCEM, IAEM-USA President

I am optimistic as I end my term as President of IAEM-USA. While there is much to be concerned about, there is much to appreciate.

A World of Issues

In 2019, the United Nations released a preliminary report on Earth's biodiversity. It drew on the wisdom of 15,000 research papers to produce a 1,500+-page report. In particular, it looked at extinction and human factors like population growth and greenhouse gas levels. Gloomily, it warned of a massive biodiversity loss because of human activities. Factors like warming oceans, climate change, and deforestation are annihilating species at a breakneck speed. The report concluded that in addition to animals at risk of extinction, half of the world's rivers and 40% of the oceans showed severe degradation. Around 75% of the land showed the same negative human-related impact.



Our partners at the National Oceanic and Atmospheric Administration (NOAA)

continued on page 2

IAEM Think Tank Set for Nov. 19 on Increased Importance of Community Outreach to Emergency Managers

IAEM has scheduled an IAEM Think Tank on **Nov. 19, 2019, 8:00-9:30 a.m. EST**, to be held at the IAEM Annual Conference in Savannah, Georgia. The title of the event is "Community Outreach and Why This Is Important to Emergency Managers Now More Than Ever." **Speakers will be**: Herman Schaffer, assistant commissioner, NYCEM and Director of Community Engagement Division; Laura Mellem, public engagement manager, New Orleans Office of Homeland Security & Emergency Preparedness; and Sherry Lea Botop, public information officer and community engagement manager, Baldwin County Commission, Alabama. Those not attending the conference can register online to participate via webinar.

About IAEM and Harvard NPLI Think Tanks

Based on the idea behind FEMA Think Tanks, IAEM partnered with Harvard NPLI to engage our partners, promote innovation, and facilitate discussions in

continued on page 2

201 Park Washington Court, Falls Church, VA 22046-4527
phone: 703-538-1795 • fax: 703-241-5603 • e-mail: info@iaem.com • website: www.iaem.org

From the IAEM-USA President

continued from page 1

started tracking Earth's heat around 139 years ago. Recently, the numbers revealed something disturbing. Although the last few decades saw a steady rise in the planet's temperature (between 0.4 and 0.8 °C), the last five years (2014-2018) were the hottest on record. The warmer climate has spawned nasty weather and made seasonal patterns unpredictable. Storms and summers are more intense. Snowfall disappears or falls in weird places. For this reason, 2018 lashed out with devastating wildfires, heat waves, excessive rain, and hurricanes. NOAA recorded 14 weather-related events in the United States alone that claimed 247 lives and $91 billion in damages.

Our Planet Is Changing, and We Aren't Helping

Nurdles are sprinkles used by the plastic industry as raw material and turned into bottles, bags, and basically anything plastic. While the ocean's plastic bag problem has been a frequent story, the pellets are quietly invading coastlines around the world. They wreak damage on marine life that confuses the sprinkles for food.

Oil spills are bad, but one has been gushing for 15 years. The **2004 Taylor oil spill** is an ongoing spill located in the Gulf of Mexico, around 11 miles (18 km) off the coast of Louisiana, which resulted from the destruction of a Taylor Energy oil platform during Hurricane Ivan.

It is the longest oil spill in U.S. history. It is unsure how much oil is escaping, and some estimates claim it could be 100 barrels a day. The situation is an ecological nightmare. Everything that lives in the Gulf of Mexico travels through this region. One reason attempts to stop the spill have met with failure is that a mudslide hid the pipes deeply under sludge. If no solution is found, there is enough oil to continue gushing into the ocean for the next 100 years.

> **"Unless someone like you cares a whole awful lot, Nothing is going to get better. It's not."**
> **– Dr. Seuss, *The Lorax***

Our Bright Future

The overall college enrollment rate for young adults increased from 35% in 2000 to 40% in 2017. In 2017, college enrollees were more diverse than in the previous five-year period. More varied experiences were reflected in the incoming students. The challenges facing us will require strong problem-solving skills based on good data. Encouraging behavior change (which will most certainly be part of at least some solutions) will necessitate practiced communication. The tools that will help us are increasingly technology-based. Seeing the next generation seeking higher levels of learning with intention brings me a sense of calm. Seeing the diversity of our community reflected in that educational pursuit brings me hope.

Seeing young professionals/emerging leaders in IAEM step up to work with and among our more seasoned colleagues also makes me optimistic. We have a record number of attendees heading to Savannah and the IAEM 67th Annual Conference and EMEX Expo, Nov. 16-20, 2019.

An additional source of optimism that we are on the right track includes the increase in involvement in the 2019 officer elections (more candidates stepping up to run). It is my extreme hope that the trajectory of our young professionals' engagement intersects with our governance structure with intention, sooner versus later. In this way, I hope 2019-2020 is the transition year to our New Normal.

Lastly, election outcomes and impacts loom. For some of us, our official community election results could put some of us in a less than secure position in relation to our relationships with elected officials. It is once again time to assert our availability to bring a newly-elected official up to speed with regard to issues facing our communities – issues for which we are uniquely situated to prepare them. Likewise, it is time for us to prepare for the potential changes that may come in 2020. Politics aside, the outcome of our elections provide the opportunity to present our expertise to those who need it for decision-making. Make it happen.

My sincere gratitude for your support during these past few years on the IAEM Executive Committee, and particularly this past year as President. It's been brilliant, and so are all of you! ▲

Best,
Marty Shaub, CEM, UCEM

Think Tank: Nov. 18

continued from page 1

the field of emergency management. As a benefit of membership, IAEM and Harvard NPLI will provide access to Think Tank videos or podcasts following the events. IAEM Think Tank moderator is The Honorable Richard Serino, a distinguished visiting fellow at Harvard University, National Preparedness Leadership Initiative, and a senior advisor at MIT's Urban Risk Lab. ▲

CEM® News

New Version of All IAEM Certification Exams to Be Released in Early 2020

IAEM will be releasing a new version of all certification exams in early 2020. Individuals planning to take the IAEM Certification exam after January 20, 2020 should access the revised study guide from the IAEM certification website and review the updated resource list(s) to prepare for the exam. All exams must still be proctored by an approved proctor. Information about proctors can be found on page 5 of the study guide. ▲

Use the Revised Study Guide for Exams Taken After Jan. 20, 2020

Individuals planning to take the IAEM Certification exam after Jan. 20, 2020, should access the revised study guide from the IAEM website and review the updated resource list(s) to prepare for the exam. All exams must be proctored by an approved proctor. See page 5 of the study guide for details about proctors. ▲

2019 Recertification Reminder: Submit Applications by Dec. 31

Candidates due to recertify in 2019 should submit their application by 11:59 PM Eastern on December 31, 2019. Keep in mind that the recertification fee must be applied to the candidate's account before submitting the application. Payments made online are processed the next business day so plan accordingly. ▲

Make 2020 the year you earn your AEM® or CEM® certification!

www.iaem.org/CEM

IAEM Annual Conference News

Learn How to Get the Most out of the IAEM Annual Conference

The Conference Committee Chairs recently hosted a webinar on how to expand your conference experience – getting the most out of the IAEM Annual Conference. Hear from the planners all you need to know about the conference. View the recording here. ▲

Show Us Your Badge Discounts

The Show Us Your Badge program offers discounts from businesses in Savannah's Historic District and nearby areas. The program is offered exclusively to conference attendees and is not available to the general public. You will save money at the local restaurants, attractions, tours, shopping, and more. Find the local establishments participating in this program here. ▲

Are You New to the IAEM Annual Conference?

Is this your first time attending the IAEM Annual Conference? Did you just arrive in Savannah and don't know a lot of folks? Join us at our **New Attendee Welcome Event**, as we bring together new and some seasoned conference attendees to network and expand our personal and professional circles.

We'll laugh, we'll exchange business cards – and hopefully, make a friend or two.

This is the not-to-be-missed kick-off event of the IAEM Annual Conference. It is the place to be to network with other emergency managers. This year we will be hosting it on the lawn of the Westin Savannah Harbor Resort with spectacular views of the river overlooking the city. This is your opportunity to network, see old friends, meet new friends and begin the conference on a high note. We hope to see you there!

Tickets are required for this event and are included in some registration types. If your registration does not include a ticket, you can purchase a ticket separately by adding it to your registration. Heavy hors d'oevres and one complimentary drink will be provided. ▲

Westin Hotel Riverscape Room
Sunday, Nov. 17, 2019
Pre-Welcome Meet Greet:
4:30-5:15 p.m.
Welcome Party:
5:30-7:30 p.m.

Bidding Is Open for the IAEM Scholarship Program Annual Conference Online/Silent Auction to Help Provide College Funding

By Dawn M. Shiley, IAEM Scholarship Program Director

Donate Items Online or In Person at the Conference

The IAEM Scholarship Program 2019 Annual Conference Auction runs from Nov. 1 until 12:30 p.m. EST, Nov. 20, 2019. Anyone may participate in the auction, before the conference, at the conference, or remotely, and proceeds will support IAEM scholarships and help further the education of students studying the field of emergency management, disaster management or a related program.

Some items open for bid include:

- BBQ Pitmaster tools and accessories;
- Civil Defense era official booklets;
- Hurricane Irma and Harvey pins;
- Red Cross collectibles;
- Jewelry;
- 10-watt Bullhorn;
- Specialty gift baskets;
- Children's Crayola and Disney activity basket;
- Challenge coins;
- And more!

How to Bid

Bid in the auction by visiting biddingforgood.com/IAEMScholarshipProgram to set up your BiddingForGood account – and then follow the auction using mobile bidding, if you don't want to be outbid.

In-Kind Item Donations Are Still Being Accepted

Items may be donated to the auction by visiting the auction site, and using the "Donate Item" link in the left menu. Donations may be corporate or individual. Pictures and descriptions may be uploaded. The items may be sent to the conference by contacting IAEM Scholarship Director Dawn Shiley. The donation also may be sent directly to the winning bidder by the donor if the donor is willing to assume shipping charges.

The program values all item donations and in particular seeks items similar to those listed for sale on the site. Emergency management collectibles, such as vintage civil defense items or challenge coins (especially event or exercise coins), are well received. In addition, donations of vacation rentals always do well. A tax receipt is provided to those who donate items.

Giving Tuesday and Cash Donations

Cash donations to the IAEM Scholarship Program are always greatly appreciated. In this month of Thanksgiving, please take a moment to give back to the profession. Donations do not have to be large to make an impact. If every IAEM member gave $5 during the month of November, the fund would grow by more than $20,000.

Online donations are accepted through the IAEM website. You also can visit the online auction mentioned in this article, click the donate button on the left menu, and donate securely through BiddingForGood. Finally, IAEM will be announcing its #GivingTuesday campaign page later this month. When you receive the email, please follow the link and give through the campaign page. Then share the page with others you know via social media or email. Think about making an early donation on the Tuesday before Thanksgiving and a week prior to #Giving Tuesday. By doing this you can give before you shop on Black Friday and Cyber Monday.

Direct any questions about the IAEM Scholarship Program or its fundraising activities to Scholarship Program Director Dawn Shiley, shiley@iaem.com, 703-538-3542. ▲

CEM® Corner

Sample Exam Questions: Children in Disasters, Part 2

By Daryl Lee Spiewak, CEM, TEM, MEP, Lead Trainer for the CEM® Commission, and Chair, IAEM Editorial Committee

In the last article, we began our discussion on a new topic – Planning for the Needs of Children in Disasters (IS-366a). In that article, we discussed the physical and emotional needs of children in disasters as well as the importance of family unity. In part two here, we will focus on the various components of a community's infrastructure that supports children. We also will look at some planning considerations when caring for children in disasters.

FEMA tells us "stable routines are critical to the physical and emotional well-being of a child." With that being true, it is critical then that we, as emergency managers, "consider ways to prevent or minimize disruption to a child's routine during and after a disaster." After our analysis, we need to capture the results in our emergency plans, training, and exercises.

A Community's Support for Children

A child's "stable routine" revolves around the infrastructure and activities that shape his or her routine. These infrastructures and activities include:

- Families;
- Child care providers;
- Schools;
- Classmates and friends; and
- Child social services.

Families are super critical to the well-being of children. We know families come in all shapes and sizes too. In addition, some children may even be homeless. Regardless of the makeup of the family unit, it is critical that we consider ways to keep families together. As we stated in the previous article, "preserving family unity during an emergency or disaster situation directly supports the physical safety and emotional stability needs of children."

Child care is important not only for the child's well-being, but also is critical for the community itself. We know that proper and adequate child care promotes the emotional stability of the child by supporting his or her needs and maintaining the child's routine. For the community, child care is a business that employs people, purchases supplies, and pays taxes to the community. Recently, the National Association of Child Care Resource and Referral Agencies (NACCRA) said that more than 11 million children "are routinely cared for by someone other than their working parents." This means that if adequate and proper child care services are unavailable due to a disaster, those working parents will be unable to work because they will be staying home to care for their children. This will negatively impact the emotional well-being of the child and the economy of the community.

Children, up to the age of 18, generally spend 25% or more of their daily routine in **school**. The relationships and experiences children get in school greatly impact their attitudes and understanding of the world around them. As a result, "schools provide a structured environment, positive role models, and nutritious meals that some children may lack at home."

When the children are in school, staff there provide for their physical safety. They have procedures for school evacuation, shelter-in-place, and lock-downs. Schools conduct regular drills with children, and they have counselors to help children cope with changes in their daily routine. This makes schools a valuable resource for community response and recovery activities.

An area most of us don't think about is the emotional support provided to children by their **classmates and friends**. Because children develop strong emotional ties to their classmates and friends, separation compounds the emotional distress they feel from the disaster itself. Therefore, it is critical that we consider ways to return children to their regular routines, including social interaction with their peers. Working together in small groups with peers, children learn to cope with emotional distress by reconnecting and rebuilding personal relationships.

When planning for children in disaster, don't forget to consider the needs of displaced children. Children who have been displaced from their regular schools should be placed into schools with local children rather than being grouped with other displaced children. This gives those children "a sense of normalcy and stability while allowing them to focus on the future."

Child social services agencies support children in many ways during normal times. They also

continued on page 6

CEM® Corner

continued from page 5

provide valuable services during and following disasters that we should include in our planning. Some of the critical activities supported by child social services in disasters include, but are not limited to, the granting of consent to treat unaccompanied children, the release of certain medical and social information, unidentified patient locator protocols, and releasing children to other guardians who may or may not be the child's biological parent(s).

All of the above activities involve legal issues that will be different for different communities. It is critical that we include the legal system in our planning efforts. The legal system will tell us what the legal issues are when dealing with at-risk children during and following a disaster. They also will provide procedures to help prevent us from unknowingly violating the law.

Disasters will happen. Children will be negatively impacted by disasters. Therefore, we should collaborate with school officials, child care providers, and social services agencies to ensure that they are protected before a disaster strikes, that they are able to support and care for our children during a disaster, and that they can be brought back on line quickly and safely in the aftermath of a disaster. It is part of our Whole Community preparedness efforts. And as we said in the previous article, "our community depends upon you and so do the children and families living there."

Examination References

As for the previous standards, NFPA 1600 does not describe when or how to address the needs of children in disasters. Therefore, for the exam we need to refer back to the FEMA Independent Study Course IS-0366a – *Planning for the Needs of Children in Disasters* for background on the core questions.

Practice Questions

Here are two core-type questions for our analysis in this article.

1. Which of the following statements is true regarding children in disasters?

a. During evacuation, separate adults with special medical needs from their child caretakers.
b. Group unaccompanied children together for schooling.
c. Include private-sector child care providers in emergency planning.
d. Push children into ordinary routines so they can put the disaster behind them.

This question is asking you to know certain characteristics about the community infrastructure supporting children during disasters and to select the true statement. In **response a**, we are talking about unity. This one says to separate the caregiver (in this case the child) from the adult who has special medical needs. Since separation goes against family unity principles, the statement is false. **Response b** is also incorrect because the principle here is to maintain the children's normal routine as much as possible. We should place the unaccompanied children in regular classes with local children rather than in groups by themselves. **Response c** appears correct. Even though child care service providers maintain their own plans, emergency managers should include them in all preparedness activities as a critical part of the Whole Community. **Response d** at first appears to be correct because we seek to return children to their normal routines as quickly as possible. However, pushing children before they are ready to move on and return to normal negatively impacts their psychological well-being. Therefore, the correct response is **c.** See IS-0366a - *Planning for the Needs of Children in Disasters*.

2. Which of the following activities are NOT performed by Child Social Service Agencies?

a. Apply a family-centered approach that incudes assessment, early intervention, and treatment.
b. Assist in the social integration of children.
c. Establish safe play areas in all shelters to foster natural childhood development.
d. Rely on the local EOC to help parents identify and track potential problems.

This question is asking you to know the roles and responsibilities of child care service providers in a disaster coupled with an understanding of the needs of children in disasters. In **response a**, the provider applies a family-centered approach to caring for the children. This is important because family provides structure, safety, security, and routine necessary for a child's well-being, especially in a disaster situation. We see that **response b** is also correct because social interaction is a necessary part of a child's routine and mental health. **Response c** appears to be correct, because safe play areas in the shelters help the children engage in building and maintaining relationships with their peers, in a safe and secure environment, while engaging in routine activities. **Response d** appears to be correct at first glance, but is this really something the EOC should be doing? Or should the EOC ensure that the appropriate agency is performing this important task instead? The EOC has so many critical tasks to perform, with few

continued on page 7

CEM® Corner
continued from page 6

staff, so the EOC must rely on the appropriate agencies to perform many tasks necessary during the response. This is one of them. Therefore, the only correct response for this question is **d.** See IS-0366a - *Planning for the Needs of Children in Disasters*.

During the Certification Exam

When reading the questions and responses, be sure you understand exactly what the question is asking of you, and read each response before selecting the correct one. It is too easy to get distracted and select a response that appears to be correct at first glance, but is not the correct response for the question being asked.

The Next CEM® Corner

Next month we will continue our discussion on planning for the needs of children in disasters with a focus on mitigation and prevention activities supporting the child's world. We also will analyze some practice exam questions. As usual, please send any questions you have about the examination or the certification process to me at info@iaem.com, and I will address them in future articles. ▲

Learn about the IAEM Certification Program at www.iaem.org/CEM. Learn how you can find a mentor to assist you in earning your AEM® or CEM®.

IAEM-USA Regional Events

Register today!

Dec. 12-13, 2019

IAEM-USA Region 1 Conference: "Institutional & Government Emergency Managers Working Together to Build Community Resilience"

University of Connecticut
McHugh Hall
Storrs, Connecticut

https://www.iaem.org/Region1Conference2019

Save the Date!

Apr. 26-29, 2020

IAEM-USA Region 4 2020 Conference: "To Resilience and Beyond!"

Huntsville, Alabama

Call for Speaker Proposals

IAEM-USA Region 4 has announced the call for speakers for the region's 2020 conference. Suggested speaker topics include, but are not limited to: resilience successes and best practices; long-term recovery planning; developing a social media presence; big data; integrating utilities into your recovery plan; disaster resilience and impact of climate change; emergency management lessons learned; Readiness, response and recovery operational coordination; regional hazard mitigation plan application process; and coordination and cooperation of regional and federal responses.

The deadline for speaker proposals is Jan. 13, 2020, 5:00 p.m. EST. Proposals must be emailed to John Walsh on the official proposal submission form by the deadline. ▲

IAEM in Action

Teri Smith, CEM, incoming IAEM-USA president, meeting with Katherine Fox, FEMA's assistant administrator for mitigation within the Federal Insurance and Mitigation Administration (FIMA), Oct. 28, 2019, at the NEMA Annual Forum. Each year, the National Emergency Management Agency (NEMA), a partner of IAEM, holds two national forums that provide opportunities to discuss national and regional emergency management strategies with other emergency management professionals from around the country and with experts in the field. The NEMA Annual Forum took place Oct. 26-29, 2019, in Coeur D'Alene, Idaho.

Incoming IAEM-USA President Teri Smith, CEM, with NEMA President Brad Richy, director, Idaho Office of Emergency Management, and NEMA Vice President Sima Merick, executive director, Ohio Emergency Management Agency, on Oct. 28, 2019, at the NEMA Annual Forum.

Incoming IAEM President Teri Smith meeting with FEMA's Assistant Administrator for Grant Programs Bridget Bean and Virginia Department of Emergency Management Director Dr. Jeff Stern, at the 2019 FEMA Annual Forum, on Oct. 28, 2019, in Coeur D'Alene, Idaho.

Member News: Jerry Quinn, MBA, receives CESA Gold Award

At the recent California Emergency Services Association (CESA) meeting on Nov. 4, 2019, IAEM member Jerry Quinn, MBA, president, GJQ Consulting LLC, received the Gold Award from the California Emergency Services Association (CESA) State Board for his exceptional efforts in the field of emergency management and his unwavering dedication to the CESA organization and its members. Gold Awards are presented to an organization or individual who has shown exceptional efforts in the field of emergency management resulting in benefits statewide. In addition, Quinn has received two previous awards from the CESA State Board, as well as the 2011 Fetz Service Award from the CESA Coastal Chapter Board.

Disaster Zone

Getting the Most out of Emergency Management Conferences

By Eric E. Holdeman, Senior Fellow, Emergency Management Magazine, blog at www.disaster-zone.com

I have always enjoyed attending emergency management conferences. Learning something new during sessions, meeting people, networking, and connecting with old friends are some of the key aspects of what makes for a successful event for me.

I admit to spending time either in the vendor area or in the hallways catching up with peers who I have not seen for a time. It is amazing what you can learn during the informal and social hours that are programmed into conference schedules.

Are You Engaged or Not?

I have found it interesting that not everyone is as engaged in the conference experience. Some emergency managers attend just to get out of the office and have a way to travel "officially" at someone else's expense. It is the social side of things – such as escaping for a round of golf, playing tennis, swimming in the pool, or spending time in the casino – that are their key reason for attending the event.

Then there are experienced emergency managers, who I find wandering the hallways, who remark, "I didn't find anything of interest in the schedule to attend." They have "been around the horn" and don't think that there is anything new to learn from the scheduled sessions. This then is the part I'd like to address in the remaining space of this column.

EM Conference Topics of Today and the Future

I expect that the conference sessions of today and the future will be covering (or at least, should be covering) many technological innovations that will impact our profession and the delivery of emergency management services.

Here is a short list of topics that would be appropriate to have at an emergency management conference:

- FirstNet.
- Interoperable "digital" communications.
- 5G and the impact to communities.
- Drones in emergency management.
- Sensors for drones.
- Realtime sharing of video and other digital data.
- Cybersecurity and the emergency manager's role.
- Counter drone technologies.
- Artificial Intelligence (AI) in emergency management.
- Impacts of Coronal Mass Ejections (CME) to the electrical grid.
- Climate change impacts to our weather; nature; invasive species; disasters.
- Using Block Chain to secure data.

I expect that I might have missed a technology or two in the list above that will impact our profession and programs. If you think you know it all, have learned it all, and have nothing new to add to your quiver of knowledge and experience, think again.

Looking Forward to Future EM Conferences

We are living in an era of rapid technological change, and it is incumbent on all of us to do our best to understand the technology and incorporate it into our programs to the best of our ability. Conferences of the future will be great places to learn, understand, and apply what we have learned to make our communities and organizations more disaster resilient. ▲

IAEM Annual Conference Special Focus Issue: "Honor the Past, Treasure the Present, Shape the Future, Part 2"

Please sure to read the October 2019 issue of the IAEM Bulletin, which includes Part 1 on the conference theme. The October issue included feature articles by speakers at this year's conference. While Part 2 does include one conference speaker's article, the remainder were written by IAEM members and others.

The *IAEM Bulletin* is a benefit of membership in IAEM, now in its 36th year of providing information, resources, and ideas for IAEM members.

About the IAEM Bulletin

The *IAEM Bulletin*, the official newsletter of the International Association of Emergency Managers, is published monthly by IAEM to keep members abreast of association news, government actions affecting emergency management, and research and information sources.

The publication also is intended to serve as a way for emergency management colleagues to exchange information on programs and ideas. Issues from the past five years through the present are available in the members-only IAEM Bulletin Archives.

The *Bulletin* is distributed electronically via the members-only archives to emergency management officials each month, representing all levels of government, industrial, commercial, educational, military, private, nonprofit and volunteer organizations.

Publishing an article in the *IAEM Bulletin* may help you to meet IAEM's certification requirements. If you haven't written an article lately, or at all, for the *IAEM Bulletin*, check out the author's guidelines.

The members of the IAEM Editorial Committee know that every one of us has a story to tell. ▲

Angola's Community Health Emergency Rapid Response Team (CHEERT)

An Example of Preparing Low and Middle Income Nations (LMIC) to Respond at the Local and Regional Level Independent of International Support

By Michael D. Owens, D.O., MPH, CEM, FAAEM, Naval Medical Center Portsmouth

During the 2014 Western Africa Ebola (EVD) outbreak, the international community was late to respond. The first case was reported near Gueckedu, Guinea, in December 2013. The disease spread to Sierra Leone, Liberia, and Nigeria by the time the World Health Organization (WHO) declared it a Public Health Emergency of International Concern (PHEIC) in August 2014.

Therefore, formal international response did not occur until September 2014, at which time there were approximately 9,000 confirmed cases, including 423 healthcare workers. Outbreak containment was at a tipping point. At this time the Centers for Disease Control (CDC) estimated that there would be 550,000 cases (1.4 million corrected for underreporting) by Jan. 20 in Liberia and Sierra Leone alone if not controlled. On the other hand, if a 70% threshold patient isolation rate of new cases threshold was reached the outbreak would be over by December 2014.[1]

Origin of the Rapid Response Team (RRT)

This need for rapid containment and response refers to one of the most fundamental concepts of emergency management. This concept is responding at the lowest level and increasing the span of response based on need and capability. Many countries susceptible to these PHEICs are low and middle-income countries (LMIC). However, this LMIC status does not prevent them from developing Rapid Response Teams (RRTs) capable of initial response, identification, and containment. Guinea, Liberia, and Sierra Leone are identified as LMICs by the World Bank. Is it this LMIC designation that labels such nations in a way that the global emergency management community overlooks this most fundamental concept of response?

Unfortunately, these nations are still recovering from the death of 423 healthcare workers during the 2014 Western Africa outbreak that crippled the medical infrastructure. If they had coordinated and addressed the outbreak per the most fundamental Emergency Operations Plans (EOPs) of lowest level response, many of these 423 health care workers may have survived and the local/regional response may not have had to depend on laborious and slow-moving international efforts.

One of the mitigation and response lessons learned includes RRTs that are trained, prepared, and mobilized immediately when a suspect case is identified. The Liberian Ministry of Health and Social Welfare (MOHSW), supported by the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and other agencies in Liberia, used Rapid Isolation and Treatment of Ebola (RITE) and began to systematically respond to suspected cases in remote areas in August 2014.[2]

The goal of the RRT was to rapidly isolate and treat patients, safely transport patients to existing Ebola Treatment Units (ETUs), safely collect and transport laboratory samples, identify the index case, conduct contact tracing, train teams in safe burial procedures, and observe contacts for 21 days.

Pandemics and Geometric Progression

Pandemics expand based on the mathematical concept of geometric progression, also known as geometric sequence. Geometric sequencing of a series of numbers finds a number by multiplying the previous number by another fixed number called the common ratio. For example, the sequence "2, 4, 8, 16" is a geometric progression with a common ration of 2.

Using this formula, tear a simple piece of paper in half, and stack it on itself where the average thickness of a piece of paper is about 0.1 mm. After it is torn once, stack the two pieces together so the stack is now 0.2 mm tall. Tear these two pieces of paper and stack them on top of each other again such that the thickness is now doubled from the previous fold (i.e., four pieces stacked now total 0.4 mm in height).

continued on page 12

[1] M. MI, "Estimating the Future Number of Cases in the Ebola Epidemic – Liberia and Sierra Leone, 2014-2015," *Morbidity and Mortality Weekly Report,* vol. 63, no. 3, pp. 1-14, Sept. 26, 2014.
[2] Center for Disease Control (CDC), "Update: Ebola Virus Disease Epidemic – West Africa February 2015," *Morbidity and Mortality Weekly Report (MMWR),* vol. 64, no. 7, pp. 186-187, Feb. 27, 2015.

Angola's Community Health Emergency Rapid Response Team (CHERRT)

continued from page 11

If this sheet of paper is torn and stacked repeatedly on itself, after 50 tears the height of the paper will easily reach beyond the moon (1.125 x 10^{11} meters or 69,975,134 miles). This is the power of geometric progression and the mathematical concept that illustrates the outbreak of infectious disease.

The Reproduction Ratio

In pandemics, this common ratio is called the Reproduction Ratio (R_o). During the 2014 EVD outbreak, the R_o was equal to about 1.7 (the stack of paper reaching the moon example uses a R_0 equal to 2). This means that every one person infects about 1.7 individuals on average. If the average timeframe for an individual to become infected is one week, it only takes 43 weeks for the entire world's population of 7.5 billion to be infected if no barriers are put in place {11.6 billion = 1(1-1.7^{43})/1-1.7}. The actual number would reach 11.6 billion per the previous calculation, which is greater than the estimated 7.5 billion global population for September 2018.

The Angola Community Health Emergency Rapid Response Team (CHERRT)

This is the importance of RRTs. They work at the local/regional level to contain and/or mitigate the outbreak while external resources mobilize support. This is one of the most fundamental concepts in emergency management: Respond at the local/regional level and expand the level of response per the conditions in the field. Respond before the numbers "progress" at a rate at which the emergency management community can no longer prevent an outbreak from becoming a global pandemic.

The nation of Angola, with the support of Naval Medical Center Portsmouth and the United States Embassy in Angola, trained 44 participants from the Forças Armadaas Angolanas (FAA) and the Angolan Ministry of Health (MOH) to be members of an RRT in 2017. This comprehensive RRT, which often includes epidemiologists, clinicians (doctors and nurses), lab experts, communication officers, anthropologists, logistics personnel, mental health providers, data managers, along with experts in infection prevention and control, rapidly mobilizes in a manner similar to that of the National Medical Disaster System (NDMS) Disaster Medical Assistance Teams (DMATs).

In December 2017, immediately after the full team concluded an intensive two-week training program sponsored by the United States Embassy and United States Navy medical personnel, this RRT independently conducted a full-scale exercise that included all branches of the Angolan military, the Ohio National Guard, the Serbian Army, local providers, and regional and national police.

In December 2018, the team conducted another two weeks of training to update current providers and train new members. This team is known as the Community Health Emergency Rapid Response Team (CHERRT). Responding to cyclone IDAI, the Angolan CHERRT sent 54 health technicians linked to the MOH and 46 other providers linked to the Ministry of Defense to support response efforts in Mozambique. This fully functional and independent team is capable of providing response at the local and regional levels when international assistance may not be required, or when the disaster is mitigated and fewer external resources are required.

Conclusion

Angola is listed as an LMIC by the World Bank. This classification did not prevent this motivated nation from addressing a significant national and potential global hazard. All nations and organizations should use the Angola RRT example as a lesson in how to develop programs that prevent and mitigate disasters at the lowest levels through active preparedness activities. Governments and nongovernmental organizations (NGOs) should look beyond response activities and invest in LMIC nations by teaching them to independently prepare to address hazards. ▲

Disclaimer

The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, or the U.S. Government.

Copyright Statement

A Local Implementation Model for the National Preparedness Goal: Streamlining Planning, Operations, Evaluation, and Capability Building at the Local Level

By Courtney Bernet and Emily Ruesch, DC Homeland Security & Emergency Management Agency

What if you could write your Emergency Operations Plan one time and it would automatically populate your hazard-specific plans? What if your plan also helped you to identify resource gaps and build capabilities? Right now, we use ESFs to organize our response agencies; we use core capabilities to check the THIRA box and write our after-action reports; we write stacks of disparate hazard-specific plans; and now we are trying to incorporate the use of Lifelines. It's hard to fuse this all together.

How We Got Here

Over the last 30 years, the emergency management profession has established a multitude of best practices and operating constructs to enable consistent, replicable preparation for and response to emergencies and disasters. In 1992, the Federal Emergency Management Agency (FEMA) released the Federal Response Plan codifying emergency support functions (ESFs) as the standardized groupings of resources and capabilities needed during disaster response. In 2008, the first Emergency Management Accreditation Program (EMAP) standards were released establishing best practices for the international emergency management community.

In 2011, FEMA established 32 core capabilities to standardize functions within the five mission areas, prevention, protection, mitigation, response, and recovery. And in 2018, FEMA rolled out seven lifelines to assist decision-makers in more quickly determining the scope, complexity, and interdependencies in a disaster response to distinguish the highest priorities and create effective solutions.

The Problem

All of these constructs addressed an emerging issue in emergency management and gave practitioners additional tools to support their communities in the face of disasters – but in different ways. These distinct national concepts (e.g., ESFs, Core Capabilities, Lifelines) have created and reinforced silos among emergency management functions, requiring different language and vocabulary for planning rather than for operations, for strategy development rather than for resourcing.

We see strong examples of this in traditional plans that are too long, vague, and labor-intensive to serve as practical tools during response operations, collecting dust on a shelf. This results in slow, inconsistent, and less agile responses. We find additional examples when there are disconnects between planning and capability measurement that let us assume that we have a capability because we have a plan.

The plan, however, does not give us the capability unless we have the resources to execute it. Creating consistent language gives us the tools needed to start breaking down these silos to ensure that planners and operators, field personnel and directors, are consistently and meaningfully contributing to the development of preparedness in our communities.

So – in the face of lifelines, core capabilities, ESFs, mission areas, and all the other best practices that exist, how do local jurisdictions take all the doctrine, guidelines, and information and create a common-sense approach to emergency management that works for their communities?

Creating a Locally-Based Construct

This collection of constructs gives us a lot of vocabulary to talk about emergency management, but let's set them all aside for a second and talk about what it is that we actually do.

In plain language, there's a set of services that we as government agencies provide to the community in emergencies – debris removal, sheltering, mass feeding, public information, damage assessments, to name a few – and every community has, over time, defined that list for themselves, without necessarily having a formalized structure around it the way we have for ESFs and core capabilities.

But what if we, as emergency managers who must look holistically at an emergency, added that structure to support consistency in talking about our roles and responsibilities while allowing us to move seamlessly across core capabilities, ESFs, Lifelines, and all other elements of the preparedness cycle? The proposed solution here is a services-based construct that relies on a key set of principles and structures to address these

continued on page 14

Local Implementation Model for National Preparedness Goal

continued from page 13

problems and produce desired preparedness outcomes.

- **Single-Agency Ownership**. Each service is owned and defined by a single agency. This ensures that the agency that owns a service can articulate the level at which they expect to deliver that service, and clearly understand the resources they have and the planning, organizational, equipment, training, and exercise resources they still need to be able to achieve that goal.
- **Defined, Standardized Components**. The service construct allows agencies to articulate in their own terms the tasks and activities they provide to each other or the community in anticipation of or response to disasters. Each service is documented in a consistent, concise, easily accessible plan that includes a summary, specific triggers for activation, a concept of operations, the support team, service dependencies, critical tasks, critical information requirements, target delivery levels and required resources to achieve those results (as seen in Figure 1 below).
- **External Delivery**. Services are offered to the community, private sector organizations, or government partners. They account for externally facing activities rather than internal agency operations, ensuring that partners and the community know what they can expect to see from each agency in the face of a disaster. The understanding creates a predictability that allows partners to better engage at the right times and in the right ways.
- **Coordination for the Delivery of Interagency Missions**. While each service is owned by a single agency, services are rarely delivered in a silo. Multiple services are bundled into missions and delivered in coordination to meet the needs of the community (as seen in Figure 1 below).
- **Functionality as Operational Tools**. Through the creation of missions and alignment to hazards, services become the building blocks of broader, incident-specific operations guides. By activating only the necessary services within a mission's concept of operations, we are able to more efficiently achieve a common objective. As incidents evolve, so too can the response guides by turning services on or off in response to changing needs, serving as flexible operational tools and on-demand quick-reference guides for responders in the EOC or the field.
- **Alignment to Other Identified Constructs**. To avoid interoperability issues from jurisdictionally-defined services, it is critical that all defined services clearly map back to national standards and best practices. This allows the jurisdiction to quickly pivot and coordinate with external partners using the appropriate terminology based on the needs of any given situation (as seen in Figure 1).
- **Strategy and Prioritization of Money, Time, and People**. That information then becomes the basis for strategy development and funding prioritization as a jurisdiction continues to build the capabilities necessary to deliver services at target performance levels.

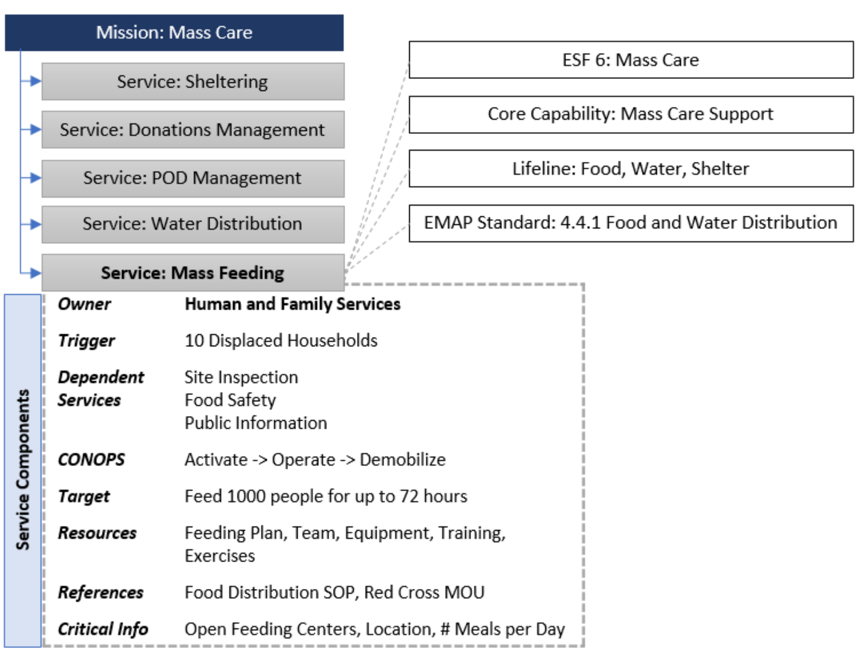


Figure 1: Example of a Mission, comprised of a Set of Services

Going Forward

Looking to the future, we don't know what we are going to encounter, but with climate change rapidly affecting the planet's weather patterns, the interconnectivity of the cyber world, and new human-caused threats continually emerging, we can be relatively certain that sooner or later we will all encounter emergencies we've never fathomed.

In the face of an uncertain future, it is critical that we are able to maneuver more easily across emergency management roles and develop capabilities in a way that gets us the most from our time,

continued on page 15

Local Implementation Model for National Preparedness Goal

continued from page 14

money, and hard-working emergency managers. Utilizing the service construct, jurisdictions can implement national best practices at the local level in ways that enable consistent and effective capability development in support of the following outcomes:

- **Clear Roles and Responsibilities**. Services allow agencies to articulate what tasks and activities they perform in anticipation of or response to an emergency, and deconflict those roles with other agencies so an entire jurisdiction is working under one common operating picture. The identified terminology remains consistent through all phases of the preparedness cycle (i.e., risk assessment, strategy development, resourcing, planning, operations, evaluation).
- **Consistent Terminology**. Consistent terminology across preparedness processes breaks down silos, streamlines capability development, and supports a better cross-agency understanding of expectations during response and recovery activities.
- **Interoperability with Partners**. To maintain interoperability with our counties, states, external jurisdictions and federal partners, whether or not they adopt the services model, each identified aervice maps back to each national preparedness concept to enable clear conversation with a variety of audiences outside the home jurisdiction.
- **Single-Agency Accountability**. With single-agency ownership comes single-agency accountability, giving the owning agency a clear charge to develop and deliver each service in coordination with mission partners and align their emergency functions with internal strategy, key performance indicators, budget, and organization.
- **Systematic, Organized Capability Building**. Understanding where there are gaps, agencies can work with their partners to begin identifying strategies to fill those gaps when the need arises, leading to more rapid response capabilities and increased levels of preparedness.

Ultimately, services give us the flexibility to move across constructs and elements of the preparedness cycle, while providing enough structure to ensure that our preparations for and response to disasters are agile, consistent, and constantly improving.

Learn More

If you have questions, contact Emily Ruesch, emily.ruesch@dc.gov, or Courtney Bernet, courtney.bernet@dc.gov. For more information, view our full presentation here. ▲

Get involved in IAEM! Join an IAEM committee or caucus.

Go online to see a complete list of **IAEM-USA Standing Committees, Caucuses, and Ad Hoc Committees** and **IAEM-Canada Committees** with links to each committee's web page. Peruse committee pages to find your area(s) of interest. Then **contact the chair**, and volunteer to participate in that committee's work.

FEMA Provides No-Cost Exercise Support

By Bonnie Johnson, National Exercise Division, Federal Emergency Management Agency

The emergency preparedness landscape is constantly evolving and can make it extremely difficult for emergency practitioners, with strapped resources and competing priorities, to effectively assess and validate capabilities and identify gaps. It is no secret that it is difficult to delineate what the most effective or detrimental approaches are prior to a disaster, but regular exercise and preparation can provide a clearer and more informed picture to responsibly drive response and recovery efforts.

FEMA developed its 2018-2022 Strategic Plan to create a shared vision for the field of emergency management and to set a path forward to unify and further professionalize emergency management across the country. Through FEMA's Strategic Plan, two of the three strategic goals (Building a Culture of Preparedness and Ready the Nation for Catastrophic Disasters) are bolstered by FEMA's National Exercise Division's implementation of the National Exercise Program (NEP); available at *no cost* to state, local, tribal, and territorial sponsors who are accepted into the program.

The NEP is a smaller, but significant, cog in a much larger machine known as the National Preparedness Goal. The National Preparedness Goal is to secure a resilient nation, with the capability to prevent, protect against, mitigate, respond to, and recover from threats and hazards that pose the greatest risk. The National Preparedness System is the process by which we achieve the goal of a more resilient nation; and within that system is the NEP, the nation's prime mechanism for validating capabilities.

The current NEP cycle is guided by nine Principal Strategic Priorities set forth by the National Security Council's Principals Committee and developed through an examination of real-world threats, data from the National Preparedness Report, stakeholder preparedness review, and real world after- action reports.

The NEP is available and ready to support emergency managers looking for assistance and expertise in validating capabilities and identifying gaps within a collaborative learning environment. NEP participants receive technical assistance related to all aspects of exercise design, development, conduct and evaluation; access to exercise evaluation guides; exercise templates; and exercise starter kits (also known as "exercises in a box" that provide materials and guides to run your own tabletop exercise on a variety of threats and hazards); and assistance with after-action reports. Again, all of these resources are available at *no cost* to the sponsor.

If You Are Interested in Being an NEP Sponsor

If you are interested in being an NEP sponsor, please fill out the nomination form. For more information about the program, email NEP@fema.dhs.gov.

Finding the Funny Through the Years

By Jan McInnis, Keynote Speaker and Comedian

What's the one thing that the past, present and future have in common? Change! Emergency management isn't static for sure. From rules and regulations to the constant stream of new technology, you aren't doing business the same old way. And one of the biggest changes is the way in which we communicate information to others.

People are being exposed to hundreds of more messages a week than they were 10 years ago, so if you're communicating your message in the same way that you have always done, then your message may be getting lost in the noise. The face of communication also has changed over the decades. Thanks to the boom in social media, people are more casual and want to connect on a more personal level.

One way to get people's attention with your message, and make your message more personal and memorable, is through using humor.

Using Humor to Handle Change

At the 2015 IAEM Annual Conference, I had a great time sharing my keynote, "Finding the Funny in Change." I hope those of you who attended are using some of my tips – if not, this is your friendly reminder! At that conference, we talked about using humor to handle change, but it's perfect for many other business situations. As a follow up to my keynote, and to catch up with the rest of you, here's a quick refresher article with some ideas on using humor in your message.

Emergency management may not be funny, but how you get people to listen to your message, and remember it, *can be*. Humor grabs people's attention and gets them to listen. Experts say that if you want people to retain information, you must connect that information to an emotion. Humor is a great emotion to use because people will take time for something funny, and they also remember it and want to share it. A lot of cats got famous on YouTube because they pawed a piano or stole a dog's bed (seriously, look up "cat stealing dog's bed").

Do you need people to remember some important emergency information? Use a little humor. Businesses spend millions on funny ads because they understand that humor works. You can use humor too, without spending millions.

Humor also helps defuse tension, and as we know, emergency management can be chock full of tension. If you need to calm people down and release that tension, then use humor – it'll change the energy. Is your staff stressed? A little humor can get them from ruffled to relaxed in a heartbeat.

And humor tells you about people. Listen to the humor that others use. It'll tell you about their state of mind. Sarcastic humor lets you know that the person might not be taking things seriously, while self-deprecating humor clues you in that the person doesn't take *himself* too seriously. If you want to gauge the people on your team and what they're thinking, pay attention to *their* humor.

So, do you want to try your hand at using a little humor in your next message? I'm not talking about being a comedian, but rather using it as another business tool that you have at your disposal. Here are some tips:

■ **First off, be *counterintuitive* like Southwest Airlines**. They get people to listen to their safety instructions because the instructions are funny, and they make the instructions funny by saying things that *seem* to be the opposite of our common sense. One of my favorite lines, after they've finished their safety spiel, is: "To those of you who listened to our safety instructions, thank you. To those of you who didn't – good luck!" Instead of scaring people into listening to their safety instructions, they do the exact opposite. They wish them good luck. It gets a laugh, and people remember it.

So say something that goes against what we think to be true. An email, for example, on "top reasons you *shouldn't* prepare for an emergency," with a fun list of things that they probably really *don't* want to do, may get more people to read that email. Include ideas such as "Don't prepare...it's much better to pay $50 bucks for a gallon of water rather than have an emergency supply ready that costs you nothing," may get people laughing *and* get them to remember to prepare.

And speaking of top lists, joke formulas like these are great ways to inject humor. Thanks to late night TV, people are used to seeing top lists (and other joke formulas). The lists grab people's attention, and people will usually take the time to read them. And remember, it doesn't have to be Top 10 . . .it can be Top 8 or Top 18, or whatever you come up with.

■ **Another quick and easy way to use humor is self-deprecating humor**. It's personal, and it creates a fast connection with others. In my keynote, I talk about my size 12 feet. Sadly, it's true! And after every

continued on page 18

Finding the Funny Through the Years

continued from page 17

keynote, I have people come up to me and tell them their shoe size. Our big feet connect us. Mentioning something unusual about yourself or a funny/weird experience you had, draws people in to what you're saying. What has happened to you over the years, on vacation or at a family gathering for example, that would be a fun way to connect with others? Start with the funny, and you'll catch people's attention.

■ **Which brings us to...it's all about asking funnier questions**. Comedians don't take the world at face value. We ask funny questions that lead to funny answers. You can do this too. Here's a quick exercise to practice using humor. The next time you're at a networking event, such as your IAEM Annual Conference, move off the standard script when you meet someone, and ask them funnier questions.

Replace the "Where do you work" question with a "What was your weirdest job" question. We've all had weird jobs, whether it was a first job in high school or a side gig that helped pay the bills. When I ask this question from the stage, I get some funny answers – from cleaning Exxon bathrooms (yuck) to plucking chickens (and much worse). There's usually someone else in the audience who has done the same thing, and we have an instant connection and a few laughs.

My worst job? Telemarketing! Yeah, I know, awful. I lasted six hours, which gave me seniority! As I point out, nobody lasts long telemarketing anything.

Social media has made this the "me" era because everyone wants to share about themselves! So dig deep, and share your personal information. You'll find out interesting stuff about others, which leads to connections and being memorable.

Once you're comfortable asking funnier, off the "beaten path" questions, you'll be able to do it to break the ice during tense moments when you really need to calm someone down or during calm moments when you have to prepare them for tense times.

■ **And remember – with humor, start small!** Comedians start out doing three minutes at open mic nights because we don't have the skills to do an hour of jokes at first. So, just pick one thing – ask one funny question while networking or write a few lines for a top list. Get a little success and experience with using humor, and you'll enjoy it and want to do more.

Change how you've communicated in the past, by using humor in the present, so that people listen to and remember your message for the future. You'll find out that using humor is not only easy, but also fun.

About Jan McInnis

Jan is a keynote speaker, author, comedian and comedy writer who shows businesses how to use humor. You may remember her from the IAEM 2015 Annual Conference. She has shared her keynotes with thousands of groups, has written comedy for everyone from The Tonight Show to guests on Jerry Springer (her parents are proud!). Contact Jan at www.TheWorkLady.com or Jan@TheWorkLady.com. ▲

Disaster Tourists

By Brad Milliken, Disaster Services Analyst & Response Lead, Pacific Disaster Center (PDC Global), managed by the University of Hawaii, Kihei, Maui, Hawaii

In the late summer of 2019, Hurricane Dorian, the strongest hurricane to make landfall in the Atlantic Basin, pummeled the Bahamian islands of Abaco and Grand Bahama with sustained winds of 185 miles per hour, peak wind gusts of 220 miles per hour, 48 inches of rain, and 15-19 feet of storm surge.

Response Coordination

Hurricane Dorian left an unfathomable amount of damage to physical, cultural, and social networks in its wake. The magnitude of Hurricane Dorian's impacts drew the attention of organizations from around the world, and many flocked to Nassau, the location of the disaster response coordination, to offer their assistance.

This community of responding organizations received daily informational briefs, where ongoing operations were summarized and concerns were brought forth for discussion by the group. The capabilities of individual organizations that comprised the group varied greatly, but a common desire to use available resources to assist those in need leveled the playing field of discussion.

Tourist Surfaces

Several days into the response, a small group of previously unnoticed persons made their agenda known. During one of the daily informational briefs, a prime specimen of this subset addressed the group at large[1]: *"I am Tyler from www.TylerisaCoolGuy.com and I want to be on the next flight to Abaco so I can raise awareness of this event via social media."*

To clarify, immediately following a brief where he had been told that food, water, and medical attention needs were unmet, Tyler wanted to occupy space on a flight to "raise awareness" about an event that had dominated news cycles for over a week. This request is the pinnacle of the disaster tourism mindset, and Tyler is a disaster tourist.

What Is Disaster Tourism?

In the disaster response community, few descriptors carry the disgrace and stigma of "disaster tourist." Like any other kind of tourist, a disaster tourist wants to take in the sights. A disaster tourist wants to see something everyone else has not seen. A disaster tourist wants an exclusive experience.

The sights a disaster tourist wants to see are the lowest moments for the affected persons who serve as attractions after a disaster. The feeling of exclusivity comes from walking among those with nothing and having the gall to pretend to understand the full extent of their tragedy. The experience a disaster tourist desires is so void of human emotion that even the immense magnitude of total devastation is an insufficient deterrent.

The underlying element that makes disaster tourism so repulsive is the acknowledgement that suffering exists and wanting to see it anyway. Disaster tourists knowingly pursue destruction and devastation without the goal of helping those in need, but with the intent to be the first to post a picture.

What Motivates Disaster Tourists?

Most disaster tourists are not purposely ill-intentioned. Some might even think their actions are beneficial or warranted. For the sake of clarity, journalism and the legitimate communication of information is not under fire. Documenting devastation is unfortunate but necessary for more reasons than could fill this page. What separates disaster tourism from journalism is that the former is more concerned with providing an experience to the individual rather than educating the public. The disconnect is a lack of understanding with regards to both timing and situational awareness.

When compared to the prioritization of resources in support of immediate lifesaving operations, the social media feed of any individual is meaningless. Disaster response operations feed on information, and all offers of assistance must be evaluated. An offer of something meaningless occupies precious mental bandwidth of decision-makers, even if only for a moment, that should be reserved for something more meaningful. In every emergency or disaster response plan to ever have existed, not one drop of ink is devoted to providing one-of-a-kind experiences to social media influencers or their ilk.

In addition to the mental and procedural resources unnecessarily occupied by disaster tourists, people without the skill set to contribute during a crisis can became a drain on actual resources. Seats on an aircraft, square footage on a barge,

continued on page 20

[1] Name and website have been changed for the purposes of this article.

Disaster Tourists

continued from page 19

and the items that sustain responders in a disaster environment simply *must* go to those with the greatest capacity to meet unmet needs. In every comprehensible scenario, the need to raise awareness would never become primary when assessing the allocation of actual resources.

Finally, and while not all-encompassing, the majority of those who could be called disaster tourists are amateurs in the sense that they are not formally trained in any aspect of disaster response or how to function in a post-disaster environment. Those who enter a hazardous situation without understanding what they are getting into are a liability. The reason search-and-rescue teams do not conduct operations mid-hurricane is so they can avoid becoming subjects of a search and rescue operation themselves. Poor situational awareness can turn would-be responders into additional victims.

At the time of Tyler's request, the entirety of Abaco's water utility infrastructure had been compromised by saltwater intrusions, an effect of the storm surge's occupation of the island's well fields. All teams deploying to Abaco were notified that they would be responsible for sourcing their own water, an outcome that several teams had expected and prepared for. A discussion with Tyler revealed that he was not prepared to source his own water, nor was he prepared to supply his own shelter. In total, he was not prepared to do much aside from take pictures with his smartphone and eat however many granola bars he could stuff into the pockets of his suspiciously clean fly-fishing vest. If provided transportation to Abaco and given authorization to roam the island, the probability of Tyler becoming thirsty and a victim to exposure was too high to ignore.

Despite this, Tyler and several others like him pleaded with members of organizations who had previously arranged transportation to be taken on a day trip to Abaco. Like spoiled children, they pouted about being denied the experience they wrongly assumed a one-way ticket to Nassau ensured them. As they made their exit, they avoided the line for volunteers. They walked past the signup for persons willing to assist in the emergency supply distribution center as the slew of disaster response veterans shook their head in recognition of the unavoidable presence of people who hid their motives behind empty offers to contribute to the ongoing response.

Tyler's argument suggested that the only way to truly appreciate the damage of the hurricane and convey it to his social media following was to see it for himself. In order to seize the notoriety associated with being the first to tell the story he wanted to tell, he had to feel it all for himself. Without understanding the context of disaster tourism's imposition on the disaster response community, Tyler sought to bring his agenda to fruition by attempting to blend in with responders. Within the boundaries of disaster response, the circumstances of Tyler's request could have feasibly led to his demise, would have required the allocation of resources that could be more appropriately distributed, and unnecessarily consumed mental bandwidth of response decision makers. The continued pursuit of such an agenda actively hindered ongoing response operations. Tyler acknowledged this dilemma and pursued his agenda anyway.

The most frustrating aspect of disaster tourism comes from the need for communications and media savvy persons to support the disaster response machine. The growing number of platforms on which information is exchanged is a source of both problems and solutions that never used to exist. To process the amount of information made available, the disaster response machine needs people to capitalize on the opportunity to filter and respond to generated content rather than heartlessly contribute to its creation. Potential disaster tourists possess a skill set that is only growing in importance. The ability to extract actionable information and verify unconfirmed reports is a skill that is desperately needed wherever disaster response decisions are made.

A small group of individuals, encouraged by their proximity to devastation, discarded multiple opportunities to use their skill set to support the disaster response machine. They rejected several chances to contribute to the ongoing response because it was not happening in a way that suited them. There is no excuse for that kind of selfish behavior and there should be no place for people who seek to experience the suffering of others for any purpose other than eliminating it.

Conclusion

Those who say, "I am here to help," and mean it, can and will find a way to do so. Those who view that statement as a password into the disaster response club or as a cover for their own agendas will find no entrance to nor quarter from the disaster response community and those responsible for its operations. ▲

EDXL in Emergency Data Exchange: "Saving Precious Seconds in the Golden Hour"

By Rex Brooks, Secretary of the OASIS Emergency Management Technical Committee (OASIS EMTC)

The Emergency Data Exchange Language (EDXL) from the Emergency Management Technical Committee (EMTC) of the Organization for the Advancement of Structured Information Standards (OASIS) can play a critical role in making the most of the "Golden Hour" for patients injured in emergency situations. The Golden Hour – also known as golden time – refers to the period of time following a traumatic injury, during which there is the highest likelihood that prompt medical and surgical treatment will prevent death.

Setting aside, for the moment, the many other issues at work in the emergency context, EDXL provides two Information and Communications Technology (ICT) specifications that directly affect healthcare in those precious moments of the Golden Hour." These are:

- Hospital AVailablity Exchange (EDXL-HAVE) currently in version 2.0 issued jointly with the healthcare standards body Health Level 7; and
- Tracking of Emergency Patients (EDXL-TEP) currently in version 1.1, which is used in the bi-directional transform specification that allows emergency patient information to be translated from OASIS EDXL-TEP v1.1-based data to HL7 v2.7.1 admit, discharge and transfer data used by hospital administrations.

In addition to the immediate emergency, the bi-directional transform also serves to keep a patient's information current during routine transfers between hospital systems or in evacuations.

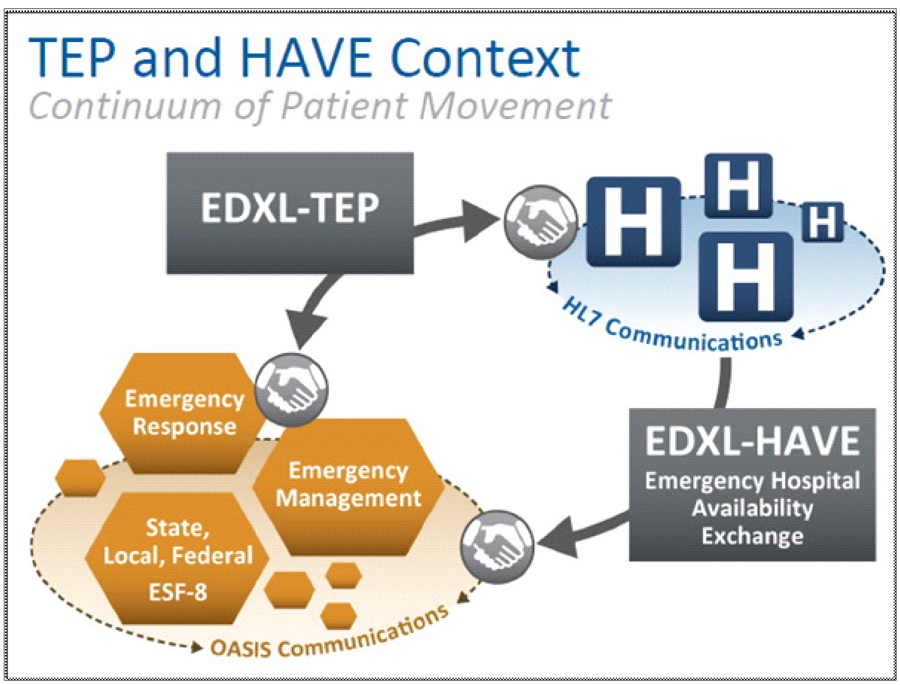


Figure 1, EDXL-TEP v1.1 from OASIS and the jointly released EDXL-HAVE-v2.0 from OASIS and Health Level Seven (HL7) are designed to work together in the continuum of patient movement.

These specifications fall within the intersection of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), legislation which provides data privacy and security provisions for safeguarding medical information, and the rapidly developing National Public Safety Broadband Network (NPSBN), known as FirstNet, being built out by AT&T to provide dedicated network availability for the exchange of vital data in emergency and non-emergency situations for United States' first responders from local, state, tribal and national jurisdictions.

Both of these specifications answer or address important issues noted in the following paragraph from the abstract of a recent report sponsored and published by the National Institute of Standards and Technology (NIST). The report, titled Interoperability of Real-Time Public Safety Data: Challenges and Possible Future States, states:

"The proliferation of advanced data-sharing technologies and the emergence of a national public safety broadband network (NPSBN) are revolutionizing the communications capabilities of first responders in the United States. Fire departments, law enforcement agencies, emergency medical service providers, and other public safety entities are beginning to adopt messaging applications, sensors, networked cameras, and other technologies that provide a wealth of real-time information about people,

continued on page 22

DXL in Emergency Healthcare Data Exchange

continued from page 21

infrastructure, and incident environments. However, the rapid expansion of these technologies presents important technical, economic and governance challenges that need to be addressed for these technologies to provide interoperable communication solutions for all members of the public safety community."

These specifications also answer the questions cited next from the abstract for the presentation by the chair of the EMTC for the 2019 International Association of Emergency Managers (IAEM) Conference to be held in Savannah, Georgia, Nov. 15-20, 2019. The abstract asks:

"What if we had a method for collecting data from a patient at first encounter through triage, transport, and to final care? What if this data could be updated and monitored along the way and used to provide dispatch direction to ambulances so that patients would be transported to the nearest hospital with the care needed? What if the hospital emergency room doctors had access to the incoming patient data to include the vitals, actions and any medications provided along the way? What if all the data could be automatically input into the patient's electronic health record in the hospital? What if this could be done using current hospital systems and triage products? What if this could be done securely? What if this same data format could be used for hospital evacuation and routine patient transfer? What if this patient data could be shared securely across local, state, federal and international boundaries?"

Coping with "Big Data"

A previous article published by Inside Analysis, Open Government Data Act – Emergency Data Exchange Language (OGDA – EDXL), detailed the current state of EDXL in the context of the OGDA. The specifications we're looking into here were shown to be part and parcel of the effort to make various kinds of vital data available freely within the agencies of the federal government. However, this development needs to reckon with the advent of "Big Data" and user-behavior analytics and predictive analytics.

Big Data is a field that treats ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing application software. Data with many cases (rows) offer greater statistical power, while data with higher complexity (more attributes or columns) may lead to a higher false discovery rate. Big Data challenges include: capturing data, data storage, data analysis, search, sharing, transfer, visualization, querying, and updating.

It is important for the decision makers in the emergency management (EM) domain to stay abreast of the growth and spread of Big Data. It is essential that the data in the emergency management domain hew to consistent, open, voluntary, and non-proprietary consensus standards, especially the EDXL suite of standards and specifications.

How Does it Work?

The two graphics included with this article (page 21 and page 22) come from recent presentations that focus on how HAVE and TEP are designed to work together with EDXL-DE Distribution Element. The DE is the message header-wrapper that handles content-based routing of EDXL messages. The graphics show the movement of data in the Emergency Healthcare context, and

continued on page 23

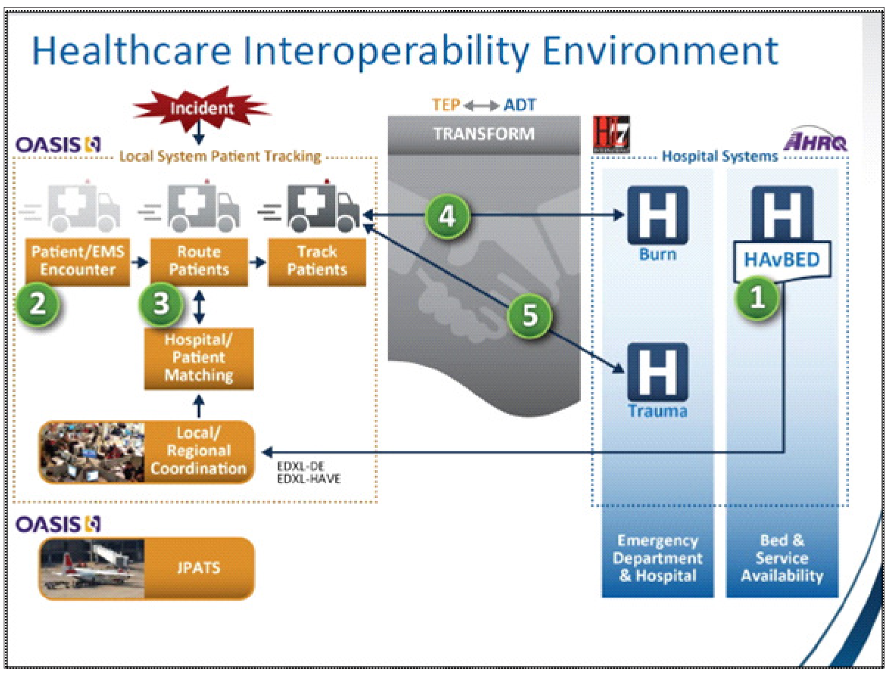


Figure 2. Above, you can see how the process is designed to unfold in practice. Note: The HavBED program before it was discontinued under the Agency for Healthcare Research and Quality (AHRQ)[1] has been superseded by EDXL-HAVE-v2.0.

DXL in Emergency Healthcare Data Exchange

continued from page 22

how these standardized messages are designed to work in practice. Because these images are largely self-descriptive, details of how they work in any given scenario are not provided here. These details can be found in the specifications, which can be accessed through the links in the third paragraph of this article.

From Vision to Reality: We're Closer than We Think

Having access to all the data agencies collect could lead to a problematic situation unless the use of freely available data standards for specific topic areas like emergency management is mandated or accepted by common use. This would our analytic capabilities a common reference system of controlled vocabularies, that is vocabularies with well-known and widely accepted data models.

This is not meant to imply that there are existing emergency management software applications, including mobile apps, which capture patient (or victim) data, but all use their own proprietary formats. However, this data can be made interoperable if there are transform provided to the accepted EDXL standard.

Also, in-hospital systems do not need to change their messaging. They can just use the bi-directional transform to provide interoperability for patient (or victim) data collected and/or needed during transport. The comprehensive NIST paper quoted earlier spells out the technical, economic and governance challenges for the public safety community in regard to improving and promoting better and more widespread interoperability of emergency data. By interoperability we mean that data from one jurisdiction's ICT system can be used by another jurisdiction's ICT system. This is a key concept that needs to be implemented to improve emergency management communications.

In emergency situations, it is often the case that emergency medical personnel are required to administer first aid and begin the process of recording a patient's vital signs and taking in personal information when time is always a critical factor. While anything which makes that process easier, faster and more consistent could be considered important, coordinating a patient's personal electronic health records is not something that should create a bottleneck. However, when a patient is unconscious, unresponsive, or otherwise unable to provide access to their health records, EMTs can only make fundamental triage decisions. Often, they may only have a patient's basic ID from a driver's license or credit card.

Therefore, if they have software incorporating EDXL-HAVE-v2.0 and EDXL-TEP-v1.1 built into their mobile devices, it can be a vital help. If they also share a healthcare data interoperability network capable of transforming patient information from EDXL-TEP to HL7 Hospital Administration documentation, it would be even better, faster and less prone to error due to redundant data input. It could well be that having a name makes a search of various healthcare systems feasible and quick enough to help with such decisions as to which local or regional hospital system is the best fit for a given patient. Such systems make it possible to keep a running account of a patient's treatment and movement which is persistent, so that when more information becomes available, it can be added to the ongoing record rather than requiring a new intake process.

This route can be very complicated, but with EDXL-HAVE-v2.0, EDXL-TEP-v1.1, and the Bi-directional transform from EDXL-TEP-v1.1 to HL7-v2.7.1 and a local-regional or state level healthcare data sharing ecosystem could make all the difference. ▲

Member News: Elysa Jones Speaks at CAP Workshop

IAEM member Elysa Jones represented OASIS and the Emergency Management Technical Committee at the recent Common Alerting Protocol (CAP) workshop in Mexico City*. The meeting was hosted by the Mexico City Secretariat of Integral Risk Management and Civil Protection.* ***Co-sponsors included****:* ***IAEM****, International Federaration of Red Cross and Red Crescent Societies, International Telecommunications Union, OASIS, and World Meteorological Organization. More than 30 countries were represented to discuss implementations of CAP around the world.*

Hope for the Future: Taking our Skills to the World

By Leslie L. Wilson, Program Manager, Rays of Mercy, Tajikistan

High in the Pamir Mountains of Central Asia, an earthquake-triggered avalanche in 1911 buried the remote little village of Usoi. Word of the disaster in this isolated region took about six weeks to reach Russian authorities. In the narrow mountain pass, the avalanche formed the Usoi Dam, named for the 300+ villagers entombed at the base. Over a century later, at 1,860 feet, it remains the tallest dam in the world. Impeded water from the river below created massive Lake Sarez.

YouTube videos from an earthquake in 2004 show severe shaking at the top of the earthen dam and avalanches sliding into Sarez. The volume of water, if it was all unleashed, would flood massive portions of Tajikistan, Afghanistan, Uzbekistan, and Turkmenistan potentially all the way to the Aral Sea, affecting over 5 million people.

However, in 2000, a UN-sponsored study concluded that total failure of the dam is unlikely. Still, the threat of even a portion failing could trigger a massive disaster for the many villages below.

High Risks and Challenges, but Few Resources

Disaster risks are high. Challenges in this harsh area are enormous. Resources to manage disasters are few. During a United Nations Development Program (UNDP) interview, the Tajik government's Committee of Emergency Situation reported the grim 2017 statistics: 720 avalanches, 41 mudflows and 23 landslides. Tajikistan is a country about the size of Illinois. At 10,455 feet, the nation has the third highest average elevation in the world. The rugged and remote Pamirs dominate the eastern half, including two of the highest 100 peaks in the world. Welcome to Tajikistan.

Current State of Emergency Management

On this, my fourth trip since 2010, I was invited to participate in a disaster risk management summer course on the University of Central Asia's (UCA) Khorog Campus in the Pamir Mountains. The experience opened my eyes to the extensive work being done uniting emergency management with the science behind disasters. Professors came from Switzerland and Austria, as well as an American professor on the UCA faculty.

English is the working language for classes in the tri-nation chain of campuses. As the only native English speaker in this gathering of students and faculty from eight countries, I was delighted and relieved, given my limited language skills.

Our hosts are part of the Aga Khan Development Network (AKDN) and the associated Aga Khan Agency for Habitat (AKAH), major players in all phases of the disaster cycle here and in neighboring nations. On one of our many field trips, we met a trained team of disaster volunteers for one village under the guidance of Swiss nonprofit Caritas, which views Tajikistan as one of the most vulnerable nations to climate change. Part of their training stems from our Community Emergency Response Team (CERT) program.

As a culture of preparedness gradually takes shape, hundreds of villages now have a disaster risk management plan with guidelines on multi-hazard responses. Given the remoteness of many villages, high-tech strategies play a dominant role, where Google Earth Pro backed by ground truthing combine with current academic research. Adhering to the Sendai Framework, AKAH partnered with government agencies to develop the Open Center platform "to enhance the collaboration on information management and dissemination amongst both government agencies and international partners." which "eventually contributes to effective emergency planning and management." Additionally, sifting through vast Soviet archives and gleaning knowledge from local villagers all impact the detailed disaster plans tailored to each village and many cities.

Seeing America's Incident Command System embraced was a happy surprise. Even so, much of the training is based on introductory courses. The wealth of free online courses such as EMI's Independent Study Program were unknown to emergency management teams here.

The Red Crescent of Tajikistan can do little compared to our robust American Red Cross, given the extreme shortage of funds and resources. The International Federation of the Red Cross/Red Crescent (IFRC) has a permanent presence in the country to help fill in the gap.

Still another aspect is the need for psychological support. However, the field is almost nonexistent here.

A casual conversation with my doctor (seems I developed a bad case of pneumonia while hiking mountains with my class) revealed a huge need throughout the nation for

continued on page 25

Hope for the Future: Taking our Skills to the World

continued from page 24

medical evacuation procedures. She collaborated with the UN and other humanitarian organizations to begin this expansive undertaking. Hopefully, serving as a liaison, I'll be able to help further her efforts. There are many in the United States with far greater expertise who could find a wealth of opportunities to hone their skills while gaining a global perspective on the complex disaster landscape.

One of the challenging components, as always in this poorest of former Soviet Republics, is the expense. Tajikistan has over 50% unemployment. Many of its citizens work in Russia and other countries. The money they send home – remittances – comprised 29% of the nation's GDP in 2018, one of the highest in the world according to the World Bank.

International nonprofits have shouldered much of the expense to achieve recent great strides, but much more needs to be done. With increasing temperatures of recent years come more glacial melt, triggering more mudflows and other disasters. Winter snows, avalanches, and rockslides are just a few of the common hazards that can leave stricken communities totally on their own for days, perhaps weeks. Last month a researcher at UCA reported one of the largest glaciers had retreated by more than four miles in just a few decades. Changing climate patterns have impacted traditional life for these otherwise resilient people of the Pamirs. To further complicate the situation, a growing population is expanding into high risk areas. The increasing needs must be addressed now. However, outside help is absolutely mandatory for this young nation struggling to gain a firm foundation in dealing with its disasters.

Great Potential for Expanding Positive American Efforts Globally

That's where I hope to see more Americans, particularly in emergency management, lend a hand. We have a rich heritage of response to disasters. The knowledge and experience compiled into excellent source material is readily available, actively practiced, and repeatedly fine-tuned. In fact, the field of emergency management has made tremendous leaps forward in recent years to now include degree programs. Our volunteer force, which never ceases to amaze me, shoulders a major share of the work when disasters strike. Some also work internationally where the need is great. But they usually arrive after the fact. More help is needed in preparedness, mitigation and prevention, as well as training of local volunteers to shoulder more of the load.

But what of the many reservists, part-time and retired responders, trainers and specialists in all areas of emergency management? Working here *pro bono* in recent years has given me opportunities to soar beyond the available employment and opportunities for growth back home. Our disaster-trained personnel – so many now trained and more coming – often are without work in the field.

Additionally, the academic community could seize many opportunities to develop projects, secure grants, provide online programs, and exchange students and professors with institutions like the University of Central Asia. Several years ago, I had the opportunity to meet with Dr. Adenrele Awatona, at the University of Massachusetts/Boston, to discuss the challenges of a post-earthquake housing development in Tajikistan. As founding director of the Center for Rebuilding Sustainable Communities after Disasters (CRSCAD), his interest in visiting Tajikistan, its universities, and its disaster sites was encouraging. I hope the time may now be ripe to make the trip a reality. Training for Tajik workers in programs like ICISF's Critical Incident Stress Management (CISM) courses would be invaluable.

Cumulatively, we have a great wealth of knowledge and resources to share. Countries like Tajikistan have willing emergency managers and disaster response personnel with whom we could brainstorm to devise solutions tailored for this unique nation.

The Challenge for Our Planet's Future

In this time of global changes in climate triggering greater and more frequent disasters, the problems are not just in America. We can be rightfully proud of the great strides we have made in the field of emergency management, including many standards adopted worldwide. With a global community growing ever closer and more intertwined in all aspects of life, isn't it time to enhance our reach beyond our borders? In the process, we enhance our own insights and gain better perspectives of the global impact of natural disasters. The future is upon us, shaping us and our responses to disasters everywhere. The time is now for a united front to more effectively shape the future of emergency management globally in our common battle against the increasing planet-wide disasters that face us all. ▲

BC Housing Releases Tool to Rapidly Assess the Safety of Structures After Disasters

By Steven Bibby, Director, Security and Emergency Services, BC Housing, Burnaby, British Columbia, Canada

BC Housing has released its latest tool to support tenants, owners, occupants and communities impacted by damaging events such as floods, fires, wind storms and earthquakes. When a disaster causes residents to evacuate their homes, it is crucial to rapidly assess the safety of structures and allow people to remain in or return to their homes and businesses as soon as possible. This reduces the social impact of such events, allowing communities to recover quicker and reducing the impact on emergency and social service resources.

BC Housing has provided communities and individuals with Rapid Damage Assessment training for several decades. As the provincial agency that develops, manages and administers a wide range of subsidized housing options across the province, they began training their own building management staff around 1990 to ensure that they could assess their own buildings quickly. In 2016, they embarked on a research project to identify best practices from around the world.

Developing a Post-Disaster Building Assessment Framework

Partnering with the Justice Institute of BC, Engineers and Geoscientists BC, and the Architectural Institute of BC, this team developed a Post Disaster Building Assessment (PDBA) Framework and Recommendations that communities across the country can use in advance of natural disasters or emergencies situations. The Framework can help communities determine which teams will be responding in an emergency, and equip the teams to ensure that they have the tools necessary to perform post-disaster building assessments. This supports communities in their ability to get people back in their homes as quickly and safely as possible.

The Framework includes the shared expertise of 49 organizations from around the globe that are involved in related building assessment fields such as engineering, search and rescue, and emergency management. The research project was funded by the Canadian Safety and Security Program, a federal program led by Defence Research and Development Canada's Centre for Security Science (DRDC CSS) in partnership with Public Safety Canada.

The framework and the tools are evidence-based, and they capture learning from the 2011 earthquake and tsunami in Japan, several earthquake responses in New Zealand, as well as local events in British Columbia and Alberta. For example, when flooding impacted the community of Grand Forks in May 2018, BC Housing provided assistance with training and coordinating personnel to use the PDBA process for their homes and businesses.

This process was a key contributing factor in people being able to return to their homes or businesses quicker, and for identifying those that had restrictions or that were unsafe for occupancy. BC Housing's PDBA process allowed emergency personnel to quickly identify the status of businesses and residences. BC Housing also had shared the

continued on page 27

Photo taken during the June/July 2012 flooding in BC's Columbia Shuswap Regional District.

BC Housing Releases Tool to Rapidly Assess Safety of Structures After Disasters

continued from page 26

Geographic Information System (GIS) based tools with Alberta in 2016, which they used to assist evacuees following their devastating fires in Fort McMurray.

BC Housing's damage assessment training had been provided to emergency personnel in Alberta only a few years prior, following the 2013 floods in Calgary and High River. The GIS tools were developed through a cooperative process between BC Housing, North Shore Emergency Management, and the University of British Columbia Department of Engineering, and are now managed by Geo-BC.

Building Assessor Registry of Trained Personnel

In addition to the BC PDBA Framework, BC Housing has created internationally-recognized tools, including the newly released Building Assessor Registry of trained personnel. The first of its kind in Canada, the Registry will significantly reduce the response time to assist communities in an emergency by linking the personnel who are trained in building assessment with those communities which require assistance.

The Registry allows individuals to self-identify their training, qualifications, contact information, and their willingness to assist communities following a damaging event. When an emergency does occur, any community who requires the assistance of the building assessors can contact BC Housing through Emergency Management BC to request their help. BC Housing then will contact the assessors who are available, and will connect them with the impacted community for deployment.

PDBA Advisory Committee Formed to Represent Primary Stakeholders

In order to develop provincially recognized credentials, qualifications, forms and training, a provincial PDBA Advisory Committee was formed in 2018 to represent the primary stakeholders who would be involved in the process. The advisory committee includes representation from small, large and indigenous communities, along with provincial ministries and agencies, and many professional organizations representing architects, engineers, building officials, technologists, facilities managers, and others.

This advisory committee meets cyclically to ensure that the tools, processes and governance will continue to meet the needs of the communities and the province. Through the PDBA Research Project, they also have developed a network of international experts in building assessment who can be called upon to assist when needed.

Two Levels of Training in Support of the PDBA Program

Training is available to help individuals, communities and organizations learn how to use the various tools and processes that have been developed. BC Housing regularly provides two levels of training in support of the PDBA program. BC Housing's Rapid Damage Assessment training teaches people how to quickly assess buildings to determine whether they are unsafe to occupy using internationally adopted protocols developed by the Applied Technology Council (ATC). For communities and organizations who need to develop or manage a their own PDBA program, they offer the Coordination of Damage Assessment training. Engineers and Geoscientists BC have begun providing technical training for engineers and others who use monitoring devices for their prioritized post-earthquake response and assessments. The Architectural Institute of BC also provides the ATC training to their membership and guests based on a model from California's Safety Assessment Program.

Available Resources

BC Housing continues to meet with representatives from other provinces, territories and countries to encourage the development of a unified national and international PDBA program. In support of this endeavor, resources such as the research, recommendations, tools, placards, and further information gathered is available for free on the BC Housing website or by contacting the author and BC Housing's Security and Emergency Services staff at ses@bchousing.org. ▲

From the IAEM-USA Training & Education Committee

We Are the Future of Emergency Management, but Is the Field of Emergency Management Ready for the Future?

By Howard Simons, M.S. Disaster and Emergency Management,
Z.A.S. LLC Emergency Management, Baltimore, Maryland

The field of emergency management (EM) has been on a course to be recognized and respected as a professional field of practice. It has come a long way from the retired military official to the college-educated emergency manager with multiple certifications in the field of emergency management. The growth of the field of emergency management has had a profound effect on the field. New emergency managers graduating from different accredited colleges are considered practitioners, scholars and researchers in the field of emergency management.

The Bureau of Labor and Statistics has projected a growth of 8% from 2016 to 2026. Local, state, federal government, and non-governmental organizations have started to understand the importance of the field of emergency management.

Hiring and Integrating Young Emergency Managers into the Profession

Even with the significant strides the EM field has made, it has found itself stagnated in the hiring and the integration of young emergency managers into the profession. This is not a new problem for EM. When you look at the number of job postings and the data on the growth of the field, it's hard to understand how this is still an issue for EM.

There have been articles written by established contributors to the EM profession. Brian Heaton (2013) points out that, "the emergency management profession needs to work on figuring out how to classify positions and control entry into the field of EM." Ebersole Ashley (2014) explained that "young emergency managers are going to have to be flexible, take low-paying entry-level jobs, or relocate for higher-paying jobs with the same responsibilities." This description of the job market in the emergency management field is a reality to most young emergency managers. The exact nature of this article is to ask the question: "How do we get more young college and newly graduated emergency managers more involved in the field of EM?

Education in emergency management provides practitioners with a variety of skills to plan, prepare, manage, and mitigate different forms of job functions. The knowledge gained from education in emergency management provides flexibility or nexus to perform various jobs in related fields. This statement does not mean "do not pursue jobs directly in the field of emergency management." This statement provides young emergency managers the ability to understand the many specialized skills that emergency management provides, they begin to understand that EM has broader connections to other areas, another area such as risk management, safety, planning infrastructure maintenance, program management, policy writing, and research. The gap of experience can shrink to fit the emergency manager that agencies are focused on hiring.

Breaking into the Field

This is what emergency managers like me had to do to gain the experience needed to apply for different emergency management positions. I work for a large fire department that has a strong emergency management agency, where I have performed several tasks like writing policies and SOPs for our EM department. Yet, it was not enough to move to the next level as an EM practitioner.

I had to take the next step to apply my skills in the field of safety and policy writing. The field of safety management is based on the core functions of emergency management risk assessment, planning, and mitigation. It was not a difficult field for someone with an education in EM to adapt to, but it did provide me with a better understanding of management factors needed for EM. That, I now consider to be the proverbial back door to a job in EM.

This outlook is being shared is to help young emergency managers to see a broader range of opportunities. This is not a replacement for internships, networking or volunteering for different EM projects that will get you the work affiliated with the field. The normal ground is pounding and knocking on doors until someone tells you yes. Think out of the box, and better utilize your knowledge and skills. The EM field has different career relatives (kinship) that you can explore.

The IAEM-USA Training and Education Committee and the Black

continued on page 29

We Are the Future of Emergency Management, but Is the EM Field Ready for the Future?

continued from page 28

Emergency Management Associations (BEMA) have recognized the issues that young EM practitioners are facing. They are attempting to build relationships with different organizations, agencies and colleges to come up with ways to bridge the growing gap that exists between young and seasoned EM practitioners. BEMA is addressing community-based emergency management to help urban communities understand the importance of EM by focusing on the cultural and social differences that are being missed or misunderstood by local, state and federal government. This provides opportunities for young emergency managers to get involved. BEMA also focuses on international relationships to seek more opportunities for aspiring emergency managers.

Conclusion

In closing, the issue of young emergency managers not being more involved in the field is not a simple issue to address in one article. These issues are deep, with different levels and needs that peel away like an onion. One of the concerns is the lack of diversity within the field. Do government agencies and NGOs truly respect the degree and certification needed to be emergency managers, or are they still focused on the old-style emergency manager with practical experience but lack of knowledge about the field? In its attempt to be a respected scholarly field, has emergency management made it too difficult to obtain CEM® certification? These are questions that young emergency managers have asked themselves in some form or fashion in their journey to become an EM practitioner. ▲

References

- Brain Heaton, 2013, Emergency Management Magazine, Are Emergency Managers Finding Jobs.
- Ebersole, A. (2014). JOB SEARCH: The Challenge for Young Emergency Management Professionals, PA Times.
- Jim Mckay, 2015, Emergency Management Magazine, Shaping the Narrative.
- Bureau of Labor and Statistics, 2019.

These 2019 Webinar Recordings Are Available Online for IAEM Members

IAEM members can access recordings of IAEM webinars that they missed or want to hear again. Go online for details.

- IAEM-USA Region 1 Webinar: “The Cavalry Is Not Coming – Long-Term Power Outages and Individual Preparedness (Nov. 6, 2019)
- IAEM Conference Committee Webinar: “Expanding Your Conference Experience: Getting the Most out of Attending the IAEM Annual Conference (Nov. 4, 2019)
- IAEM-USA Region 1 Webinar: “Healthcare System Resilience in the Face of Change (Oct. 17, 2019)
- IAEM-USA Children & Disaster Caucus and CDS Webinar: “Emergency Childcare Services Post-Disaster” (Oct. 16, 2019)
- IAEM-USA Emerging Technology Committee Webinar: “Creating Alerts and Warnings for Short Messaging Channels” (Oct. 9, 2019)
- IAEM-USA Region 1 Webinar: “The Future of FirstNet and Opportunities for Emergency Managers (Sept. 25, 2019)
- IAEM-USA Universities & Colleges Caucus Webinar: “AEM/CEM Certification: Why Is it Important?” (July 31, 2019)
- IAEM-USA Emerging Technology Committee Webinar: “Social Media for the Everyday Emergency Manager: Real World Examples from the Field” (June 28, 2019)
- IAEM-USA Region 1 Webinar: “The Team Rubicon Response to the 2018 Aquidneck Island Gas Outage (June 25, 2019)
- IAEM-USA Universities & Colleges Caucus Webinar: “2018 Higher Education Emergency Management Webinar: A Summary” (June 19, 2019)
- IAEM-USA Emerging Technology Committee Webinar: “Social Media for the Everyday Emergency Manager” (June 19, 2019)
- IAEM, AHEPP, and ASPR Webinar: “Critical Partners: Emergency Managers and Health Coalitions (June 7, 2019)
- IAEM Thursday Learning Webinar: “It’s 2019: Why Is Protecting Children in Disasters Still Innovative” (Feb. 21, 2019)
- IAEM Thursday Learning Webinar: “What We Don’t Know About State Spending on Natural Disasters Could Cost Us” (Jan. 17, 2019)

EM Calendar

Visit www.iaem.org/calendar for details on these and other events.

Nov. 15-20 **67th IAEM Annual Conference & EMEX**, Savannah, Georgia. Complete details about the conference can be found at **iaemconference.info**, and registration is open now!

Nov. 19 8:00-9:30 EST, IAEM Think Tank: "Community Outreach and Why This Is Important to Emergency Managers Now More Than Ever." See page 1 for details.

Dec. 12-13 **IAEM-USA Region 1 Conference**: "Institutional & Government Emergency Managers Working Together to Build Community Resilience," University of Connecticut, Storrs, CT. **details and registration**

2020

Jan. 12-16 American Meteorological Society 2020 Annual Conference: "That AMS Past, Present and Future: Linking Information to Knowledge to Society," Boston, MA.

Mar. 10-12 Northern European Conference on Emergency and Disaster Studies, Risk and Crisis Research Centre, Ostersund, Sweden.

Mar. 31-Apr. 3 NACCHO Preparedness Summit: "Fixing our Fault Lines: Addressing Systemic Vulnerabilities," Dallas, TX.

Apr. 7-8 2020 National Hurricane Conference: "Improving Hurricane Preparedness," Orlando, FL.

Apr. 26-29 **IAEM-USA Region 4 2020 Conference**: "To Resilience and Beyond," Huntsville, AL. Deadline for speaker proposals is Jan. 13, 2020, 5:00 p.m. EST. See page 7 for details.

May 4-8 New Jersey Emergency Preparedness Conference, Harrah's Waterfront Conference Center, Atlantic City, NJ.

June 1-4 22nd Annual Emergency Management Higher Education Symposium, National Emergency Training Center (NETC), Emmitsburg, MD.

Learn about the don't-miss EM event of the year!

Visit the IAEM Annual Conference & EMEX Expo website at:

iaemconference.info

IAEM Staff

Chief Executive Officer
Elizabeth B. Armstrong, MAM, CAE
703-538-1795, ext. 8
armstrong@iaem.com

Deputy Executive Director
EMEX Exhibit Manager
Clay D. Tyeryar, MAM, CAE
703-538-1795, ext. 7
ctyeryar@iaem.com

Membership Manager/Registrar
Sharon Kelly
703-538-1795, ext. 1
info@iaem.com

Communications & Marketing Manager
Scholarship Program Director
Dawn M. Shiley
703-538-1795, ext. 3
shiley@iaem.com

Certification Manager
Kate McClimans
703-538-1795, ext. 6
CEMinfo@iaem.com

Conference Manager
Julie Husk
703-538-1795, ext. 2
jhusk@iaem.com

IAEM-USA Director of Government Affairs
Thad Huguley
615-870-9316
thad@iaem.com

Program Manager
Chelsea Firth
941-320-1258
chelsea@iaem.com

EMEX Sales
Kyler Bartee
703-538-1795, ext. 1706
kbartee@iaem.com

IAEM Bulletin Editor
Website Content Manager
Karen Thompson
703-499-0441
thompson@iaem.com

IAEM Headquarters
201 Park Washington Court
Falls Church, VA 22046-4527
Phone: 703-538-1795
Fax: 703-241-5603
info@iaem.com | www.iaem.org

Need more info about staff?
Visit the IAEM Staff web page.

New IAEM Members: Aug. 16-Sept. 15, 2019

IAEM-CANADA

Alberta Region

Sarah Ann Olson
Ponoka, AB

Canada Atlantic Region

Antoine Nabil Bakhache
Halifax, NS

British Columbia

David Dales
North Vanvcouver, BC

Ontario Region

Tim Hunt
Calgary, ON

Quebec

Dr. Michel C. Dore Esq.
Montreal, QC

IAEM-EUROPA

Antonino Cannistre
Messina, Italy

Lucy Watson
New Haw, United Kingdom

IAEM-INTERNATIONAL

Olatunde Adebayo Akinsanya
Lagos, Nigeria

Sophy Kurian
Dubai, United Arab Emirates

Please welcome these new IAEM members!

IAEM-LATIN AMERICA & CARIBBEAN

Chrystall Kanyuck-Abel
Road Town, Tortola
Virgin Islands (British)

Earl Hernandez
Arima, Trinidad and Tobago

IAEM-OCEANIA

Gareth Cunningham
Ringwood, North Australia

Peter Franklin
Tapping, Australia

Ian Murray Ralston
Axedale, Australia

IAEM-USA

IAEM-USA Region 1

Adam D. Burpee
Merrimack, NH

Michele DeLuca
Norwalk, CT

Dean C. Desautels
Rutland, MA

Shawn M. Kraft
Chelsea, MA

Seth A. Lapriore
Buzzards Bay, MA

Donna Nielsen
Stoughton, MA

Jebril Alexander Postle
Sutton, MA

IAEM-USA Region 2

John M. Barattini
Wampsville, NY

Robert M. Burd
Williamstown, NJ

Daniel Crowley
Bronx, NY

Theodore John Fisch
Pawling, NY

Christopher Mitchell Ford
Ossining, NY

David Gibson III
Haddon Heights, NJ

Michael Lynn Osburn
McGuire AFB, NJ

Claude D. Rounds
Troy, NY

Stacey L. Ryan
Somerset, NJ

Peter Tedeschi
Albany, NY

Joan Thomas, CEM, MEP, ABCP
Bronx, NY

IAEM-USA Region 3

Ali Al Siwar
Philadelphia, PA

Abdullah Mohammed Alhareth
Philadelphia, PA

Funayyis Atwah
Philadelphia, PA

Samantha M. Brann
Arlington, VA

Ronan P. Dalcross, AEM
Bristow, VA

Kenneth Darby Jr.
Philadelphia, PA

Robert Gelormine
Chesapeake, VA

Sammy Hanzlik
Fayetteville, PA

Matthew Herlocker, CEM
Washington, DC

Danica A. Jolly
Newport News, VA

Robert Michael Maloney
Timonium, MD

Beth A. McAteer, CEM
Annville, PA

Lauren Ashley McBride
Arlington, VA

Nicole M. McDermott
Alexandria, VA

Mary W. Morton
Chesapeake, VA

Stacie C. Neal, CEM
Richmond, VA

Cara Noverio
Washington, DC

Jana Pierce
Arlington, VA

continued on page 32

New Members

continued from page 31

Carlo Sanchez
Rockville, MD

Kevin Russell Shrader
Morgantown, WV

Rachel Slotter
Ocean City, MD

John Sokich
Silver Spring, MD

Ileana Velez Alvarado
Washington, DC

Senorajoy Weddington
Catonsville, MD

Alexander Yesnik, CEM
Arlington, VA

IAEM-USA Region 4

Travis Auman
Greensboro, NC

John Bogdan
Charlotte, NC

Avi Paul Bryan
Orlando, FL

James Clarke
Charlotte, NC

Ryan Connelly
Ravenel, SC

Melody Cook
Pelion, SC

Benjamin J. Coppock
Navarre, FL

Dr. Timothy John DePalma
Boca Raton, FL

Bryan Garey
Orlando, FL

Steven J. Haertel
Edgefield, SC

Kate Hardie
Orlando, FL

Justin Harty, CEM
Aiken, SC

Allison N. Juarez
Douglasville, GA

Sean Kice
Nashville, TN

Peter Koonz
Spring Hill, TN

Charles Lane
Atoka, TN

Dr. Jeffrey T. Lindsey
Gainesville, FL

Oscar Llerena
Ft. Lauderdale, FL

Dr. David E. Oliver, Ed.D, CEM, CSP
Bowling Green, KY

Joseph Daniel Pitchford
Stockbridge, GA

Dora Pleasant
Arlington, NC

Matthew Rhodes
Thunderbolt, GA

Stephen W. Spencer, CEMP
Lebanon, TN

Erika Taylor
Nashville, TN

Hendrix A. Valenzuela
Farmville, NC

Tara Vargovich
Orlando, FL

Jim Wright
Charlotte, NC

IAEM-USA Region 5

Daniel Bovitz
Medina, MN

Douglas A. Cooke, AEM
Milan, IN

Raymond Hamilton
Chicago, IL

Janelle L. Hood
Olmsted Falls, OH

Robert M. Jeffers
Huntington, IN

Malena Lane Kelm
Wanamingo, MN

James E. Kenyon
Scott AFB, IL

Han Gul Lee
Grand Rapids, MI

Holger Vinicio Loor
Moorhead, MN

John Lukancic, AEM
Joliet, IL

Lauren Martin
Chicago, IL

Colin Andrew Nolte
Kent, OH

John A. Schmit
Chicago, IL

Matthew F. VanFossan
Bargersville, IN

Brad Weiler
Stevens Point, WI

Kelsey Yamanaka
Chicago, IL

IAEM-USA Region 6

Evan Adamson
Edinburg, TX

Kyle Scott Curry
Fayetteville, AR

Amy Hyman
State University, AR

Antonio Lopez Jr.
Weslaco, TX

John C. Luther
Fayetteville, AR

James Austin Meaux
Kingwood, TX

Johnny R. Morales
La Porte, TX

Christopher M. Purcell
Allen, TX

Wendell N. Ramclam
San Antonio, TX

Juliana Elisia Rosado
Denton, TX

Sarah Seaquist
Denton, TX

Ryan Silsbee
Cibolo, TX

Adam Charles Stocking
Killeen, TX

continued on page 33

Please welcome these new IAEM members!

New Members

continued from page 32

Cynthia Vargas
Rosharon, TX

Nick Zubel
Albuquerque, NM

IAEM-USA Region 7

Jason Campbell, CEM, MPA
St. Louis, MO

Jodi A. Freet
Tipton, IA

Amy E. Hays
Pleasant Hill, MO

Edwin Menzenwerth
Kirkwood, MO

Ryan N. Murdock
Raymore, MO

Brendan Payne
Florissant, MO

IAEM-USA Region 8

Cole Baker
Fargo, ND

Zachery Bruns
Fargo, ND

Philip R. Chaffee, CEM
Salt Lake City, UT

Todd N. Davidson, CEM
Fort Collins, CO

Justin Louis DeKeyser
West Fargo, ND

Otoniel Diaz
Brighton, CO

Gregory J. Gust
Grand Forks, ND

Bernard Lodge
Loveland, CO

Willow Rivera
Fargo, ND

MIchael Teener
Fargo, ND

Kenneth Williams III
Billings, MT

IAEM-USA Region 9

Norma Amaro
Sunnyvale, CA

Gerard Siguenza Baleto
Tamuning, GU

John Beldin-Quinones
San Francisco, CA

Ross Chesnick
El Segundo, CA

Catrina Christian
Concord, CA

Robert Church, CEM
Flagstaff, AZ

Eliza G. Coll, CEM
Phoenix, AZ

Aaron S. Dwoskin
Fresno, CA

Jason Robert Kruggel
Clovis, CA

Alan Long
Anaheim, CA

Charlie McGillis
El Segundo, CA

Farin Malin Mondia
Dededo, GU

Josie Ross
Henderson, NV

Joey C. San Nicolas
Hagatna, GU

Rachel Skidmore
Las Vegas, NV

Megan Spencer
El Segundo, CA

Melanie Stricklan
El Segundo, CA

Kimberly Thomson
Auburn, CA

Cherish Embre'sha Vaught
San Diego, CA

Waheeda Yousofzoy
Walnut Creek, CA

IAEM-USA Region 10

Gene L. Juve
Vancouver, WA

Shannon Kirchberg
Milton, WA

Doak Mahlik
Edmonds, WA

Curry Mayer
Bellevue, WA

Edmund Charlie Palmer
Fort Wainwright, AK

Robert Quinn
Portland, OR

Gloria Van Spanckeren
Tacoma, WA

Grace Weller
Anchorage, AK

Marco Massavelli
Torino, Italy

Please welcome these new IAEM members!