Disaster Modeling in New York

A large-scale computer simulation of disasters in New York City called Plan C may help hospitals and emergency responders anticipate casualties and stressors on the health care system.

Devised by an interdisciplinary team of doctors, computer specialists and social scientists, Plan C was recently run on a simulated sarin gas attack at different locations in Manhattan. The scenario was based on the actual sarin gas attacks that occurred in Japan in 1994 and 1995.

"With the input of city demographic information, hospital resource and public transit data, the results showed that under certain circumstances, up to 22,000 individuals might become exposed, leading to 178 intensive care unit admissions," the simulation found.

According to lead author New York University Dr. Silas Smith, M.D., "In terms of creating the model, we wanted to start with a point source release ... This allowed us to model a smaller population, so we were able to keep track of every single individual agent's movement on a minute-by-minute basis. We ran it 100 times for two days. We wanted to have a defined population and defined area of release."

According to news releases, the so called Plan C, developed by researchers at NYU, "is an innovative tool for emergency managers, urban planners, and public health officials."

For more information and detail, please see the article on page 6.

Costing Out 'The Big One'

A recurrence of the 1906 San Francisco earthquake would result in economic damage of between $39 billion and $328 billion in 2005 dollars, and cause between 3,000 and 24,000 deaths, according to a paper by Kevin Vranes and Roger Pielke, Jr. in the August 2009 Natural Hazards Review.

The researchers adjusted earthquake damages over the past 100 years for inflation, increases in wealth, and changes in population.

There is no time trend over the period for increasing or decreasing damages, they report. “Since 1900, 13 events would have caused $1 billion or more in losses had they occurred in 2005; five events adjust to more than $10 billion in damages. Annual average losses range from $1.3 billion to $5.7 billion with an average across data sets and calculation methods of $2.5 billion, below catastrophe model estimates and estimates of average annual losses from hurricanes. Fatalities are adjusted for population increase and mitigation, with five events causing over 100 fatalities when mitigation is not considered, four (three) events when one percent (two percent) mitigation is considered. Fatalities in the 1906 San Francisco event adjusts from 3,000 to over 24,000, or 8,900 (3,300) if one percent (two percent) mitigation is considered," the authors write.

For more information and detail, please see the article on page 6.

Recent Disasters

DERA members and affiliates have recently tracked or assisted response efforts resulting from the following disasters or emergencies.

- Typhoon Morakot caused damage across Taiwan, the Philippines, and China's Fujian province in early August, resulting in deaths and substantial infrastructure damage. In the Philippines, one dozen died and as many as 12,000 homes were completely destroyed. Taiwan reported nearly 500 deaths and $4 billion USD in damage. At press time, efforts to reconnect land routes to some communities continue. Three deaths were confirmed in China in addition to numerous injuries, though property damage is extensive, affecting over three million people.

- The Station Fire near Los Angeles, California burned over 160,000 acres. The fires resulted in the deaths of two firefighters, the loss of numerous residences, and notable damage to local infrastructure. The fire is currently 95% contained. The costs of this disaster, both to individuals and to the state, are still being calculated.

- Flooding has killed hundreds and displaced tens of thousands in West Africa. The most heavily hit countries are Ghana, Niger, and Burkina Faso.
Letter from the Chair

In my last message, I talked about the number of disasters that had confronted us in the previous year. Since then, we have seen fewer natural disasters than “normal” but every disaster is local. We see wildfires in dry areas and significant flooding in other ones. Failures of man-made infrastructure are on the rise. As we see an aging infrastructure around the world, we see increasing failures. At a time when the economy is in poor shape, there are many projects that need immediate attention to avoid sudden and unexpected failures.

Even as professionals, it can be helpful to remind ourselves of the basics: when you are confronted with an unexpected issue, assure that you are safe and will continue to be so. Check on your family, loved ones and neighbors and tend to their needs. You are really the first response. In some cases you may be the only responder for some extended period of time, even days. Public safety response teams may be attending to the needs of others in more serious condition or may not be able to reach you without endangering their lives...

Remember to have your supplies in order, all the time. You never know when you will need them. I didn’t say if, I did say when. At some point you will need them or to support others in need.

Each year, my family gives other family and friends what one person calls his “doom and gloom” gift. Recently we gave weather radios, magneto crank flash lights and I can’t reveal this year’s gift. After a tornado, one of the relatives called from the bank she works at and asked where we bought the weather radio we had given them. It seems that the bank didn’t have one and now decided to add that to their preparedness kit. Don’t think of this as “doom and gloom” -- think of it as a reasonable way to prepare. I encourage you to give preparedness items when you give gifts; your gift may save a life.

As we enter the last quarter of the year, I urge you to donate generously to DERA to help further our mission of outreach, education, and emergency response. Also, if you renew your membership now...
for 2010, DERA will be able to avoid the cost of mailing renewal notices and reminders. This helps us keep costs down and devote more resources to membership services and disaster response.

Although our operating costs have risen steadily, DERA will not raise membership dues for 2010. DERA membership remains an outstanding professional bargain - please invite your friends and colleagues to join.

Stay safe, be safe.

Howard Pierpont
Board Chair - DERA

---

**FEMA Holds ESF-14 Training in Atlanta**

*By Jon R. Wallace, MSW, CSWM*

The Federal Emergency Management Agency’s Long Term Community Recovery (LTCR) Branch held a training workshop for Emergency Support Function (ESF) 14 headquarters and national disaster reservist cadre personnel at Atlanta’s Courtyard Midtown Hotel July 21 – 23, 2009. The training was an opportunity to field test a developing training module, provide a review of and opportunity to learn from LTCR deployments in 2008, and enable attendees to “put faces to names” and renew friendships and working relationships. ESF-14 activations in Colorado, Texas, Puerto Rico, and the Midwest were reviewed.

The mission of ESF-14 is to promote successful long-term recoveries for communities suffering extraordinary damages. It does so by working through the State to identify and coordinate potential sources of recovery funding and provide technical assistance in the form of impact analyses and recovery planning support where appropriate.

The mission is complete when all potential resources have been identified and coordinated with the severely damaged areas, when warranted impact analyses are done, and when the necessary support has been provided to launch community recovery plans. Simply put ESF-14 works in partnership with Federal, State, locals, and voluntary and faith-based agencies and the business community to identify opportunities for stronger and safer recovery and leverage resources to make recovery happen.

A major strength of ESF-14 is its ability to help organize and promote a collaborative process which brings all sectors of a disaster affected community together in partnership with federal and state resources to facilitate recovery. Technical assistance brings the ability to solicit input and encourages a process which brings elected officials to the table together with citizens and community members, county officials, state agency representatives, and federal agencies to identify together issues to address thus communicating across economic, social, political, and jurisdictional lines.

This visioning process culminates in the identification of local recovery goals and the development of a recovery plan thus providing focus and a roadmap as the community moves forward. Coordination brings state and federal agencies to the table working face to face with community leaders to identify available resources and promote partnership efforts.

Thus, ESF-14 attempts to incorporate all elements of the community as part of the recovery process, encourages consideration of the interrelationships of various sectors, and forces community, federal, and state partners to look at the long-term implications of decisions. Critical to this process is the review and integration of local and state mitigation plans.

With the early successes of ESF-14 in disasters large and small across the country we will no doubt see an increase in utilization of this effective and holistic community recovery tool.

---

**New Mobile Technology Helping Emergency Management**

*By Keith Carson, Disaster Reservist*

I was amazed recently to hear about 4,389 geo-coded, time/date stamped, color-coded rapid damage assessments done in just 6 hours by 6 crews during Hurricane Ike, with no cell towers, no Internet, and no power. Wanting to know more, I tracked down the man responsible for this feat, and thought others needed to know about it too.

I had the opportunity to speak at length with Scott Lewis, President of the Eagles Wings Foundation, and head of the Pathfinders Task Force who has come up with a way that emergency managers and other personnel can use affordable, rugged, flip cell phones to rapidly conduct windshield damage assessments and human needs assessments, even when cellular service is not working following a disaster. Recently this system also migrated into the Blackberry Curve, with or without a camera.

The Eagles Wings Foundation has more than 100 cell phones for this type of operation. Lewis told me that while deployed to Hurricane Ike, some of the latest technology available was used successfully. The system is called Pathfinders, named after a Task Force dating back to Hurricane Floyd in 1999.

With no power, no cell towers, no Internet, and no fancy, expensive satellite solutions, Pathfinders Task Force (PTF) Ike was able to use its team’s cell phones to gather vital information and relay it to the local Emergency Operations Center for quick evaluation in one of Texas’ hardest hit areas. “With 19 feet of storm surge, the challenges were many, but the phones performed their tasks seamlessly, and the results were remarkable” Lewis told me.

The mobile software technology was developed for the Pathfinders’ Management Team as a result of the “lessons learned” from Katrina, where in just 14 days, 126,000 homebound survivors were visited by their crews using Garmin GPS units, with no real documentation or communications capability. Since then, and during the development phase, a military spec, simple, flip phone was selected for the team because the phones were both rugged and very affordable compared to
expensive and fragile PDA’s, which also had a much more complicated learning curve for trainees.

Ike was the first test of the system in a real disaster. Lewis told me that while in Texas they were able to rapidly train volunteers who never had seen the software solution in less than 30 minutes. In Ike’s totally disconnected environment, and on the first day of operations, 6 crews with 3 people each geo-coded and time/stamped 4,400 rapid damage assessments using cell phones. The maps and data collected by the cell phones were vividly displayed in the local EOC.

For the next six days, hundreds of volunteers went door to door with 100 cell phones collecting human needs assessment information from thousands of Ike survivors at their doorways - with the cell towers still down. The communication system was designed to let the team’s cell phones be downloaded by Bluetooth to the Pathfinder base’s servers.

However, their Information Technology Section was able to have all 100 phones communicating with normal laptops by day three of their Ike response, and with no connectivity at all. When cell towers are up, the system works like a regular phone, with a real live time, robust tracking system and all sorts of data collection monitors.

They designed the software to prompt the user through a series of checklists on the phones when he/she visits a home to determine the welfare of the survivors and what relief they need.

The volunteer enters information on the phone using drop-down boxes on more than 20 questions that target household and special needs, and the information is geo-coded and time-stamped using the GPS data, so a follow-up crew can be sent immediately if needed. This entire system was focused to support this emergency response team which relies primarily on communication with a real live time, robust tracking system and all sorts of data collection monitors.

In addition to automated checklists, information can be entered in comment spaces by a text message. For example, when a volunteer arrives at a house and a survivor is safe and well, there is a box with this option for them to check. When checked, the volunteer enters the name, address, and phone number of the survivor. Once the volunteer has entered the appropriate information for a household, he/she simply presses a “submit and save” box on the phone before moving on to the next site. Pie chart snapshots then summarize thousands of data fields in an easily reviewable form.

The new technology also adds features which allow for enhanced Excel spreadsheet documentation, much of which will serve in mitigating future disasters as a host of agencies are able to analyze and manipulate the data collected from impact zones. During full scale exercises and in Ike, they easily customized questionnaires on the phones to collect community specific data which could be used for mitigation and analysis, not to mention FEMA’s requests for documentation.

To learn more, I would suggest you contact Scott Lewis directly. You can also visit the non-profit’s web site to see how their Task Force has taken advantage of this cutting edge technology to support their operations.

Further Information is Available from www.theeagleswingsfoundation.org

---

Attention All Members: 2009 Dues are now due

Please check your membership expiration date shown on the mailing label of this newsletter. If you haven’t yet paid your 2009 dues, please save DERA the cost of mailing a reminder by making your payment now. You have two convenient methods:

Express Renewal by Mail

Just send us your address label with a check for your dues. Dues rates are shown on the last page of this newsletter. Show any changes needed to your mailing address, or update your email or phone if these have recently changed.

Mail to:
DERA Membership
P.O. Box 797
Longmont, CO 80502

Online Renewal

www.disasters.org/renew.htm

---

Programs of Study for Future Emergency Managers
By Jessica Tillapaugh

The modern world needs professionals working in the field of emergency management. With the expanded threat of terrorism and a number of high-profile natural disasters throughout the world in recent years, it is no surprise that institutions of higher education across the United States are increasingly establishing and expanding emergency management programs of education. Having emergency management as a profession is of vital importance at nearly every level of society. Complex threats of the modern age encouraged the rise of emergency managers who are needed to cope with the threats posed by natural hazards, technological hazards, and terrorism. Across the United States, there are now 118 Emergency Management educational programs in 39 states.

In Colorado, the state I call home, the University of Colorado at Boulder, Red Rocks Community College in Lakewood, the University of Denver, and the University of Colorado at Colorado Springs have come together to collectively design and establish a cohesive multi-disciplinary Emergency Management and Homeland Security program of study and research. Colorado does not offer a degree or certificate program designed to educate graduate students using the all-hazards emergency management model. This model is focused on preparing emergency managers to cope with all hazards facing modern society in the public, private, and non-profit sectors.

Currently, I am enrolled in the Emergency Management and Homeland Security (EMHS) program at the University of Colorado, and I plan to transfer to the University of Denver to participate in the Peace Corps Master’s International Program. Programs like these allow students to spend years working in their field of service while adding a multinational education. The EMHS program is distinguishable from most other programs in that is geared towards more taking a multi-disciplinary, all-phases, all-hazards approach to the development of individual courses within the program. I am looking forward to finishing this program knowing that I have learned what I set out to learn and will enter the field prepared to tackle future challenges.
To anyone interested in the field, I would encourage you to seek out a degree or certificate program. The foundational knowledge is broadly applicable and emergency managers will continue to be in great demand for years to come.

Jessica Tillapaugh is a guest contributor and student of Emergency Management near Denver, Colorado.

---

**THE ST ANDREWS PRIZE FOR THE ENVIRONMENT**

Cash prize awards totalling $125,000

**CALL FOR ENTRIES**

Are you doing something special for the environment?

The aim of the Prize is to promote a practical solution to an environmental problem, with potential or illustrative in products that can be readily scaled in other regions, thereby improving overall effectiveness and help to those that need it most.

The Prize is open to entrants from anywhere in the world

The winner will receive $75,000 USD and two runners up will each receive $25,000 USD.

First stage submissions are required by 31 October 2009

Find out more at: www.theandrewsprize.com

---

**Job Announcements**

**Public Safety Management**

School of Public and Environmental Affairs

Indiana University

The Indiana University School of Public and Environmental Affairs at the Indianapolis campus seeks to fill two public safety management faculty positions beginning August 2010, pending budgetary approval.

A tenure-track appointment in Public Safety Management will require teaching assignments at the graduate and undergraduate levels, with an emphasis on the former. Candidates seeking appointment at the associate or full professor ranks must have a demonstrated record of scholarly research publications, an ability to attract external funding, well developed teaching skills, and a commitment to service. The successful candidate must have expertise in one, or more, of the following areas: risk assessment, crisis management, public safety management, and/or emergency management. All applicants must have a PhD, or other terminal degree prior to the effective date of the appointment.

A non-tenure-track appointment in Public Safety Management will involve primarily teaching and teaching related service in the Public Safety Management programs. Candidates should have expertise in more than one of the following areas: public safety management, homeland security, emergency management, and terrorism policy. Because this is primarily a teaching appointment, the successful applicant must have a documented record of high quality teaching at the university level. The workload for this appointment will include six courses per year, teaching related service activities, and public service activities, as appropriate. All applicants must have a Master's degree, but a PhD or other terminal degree is preferred.

SPEA is a multi-disciplinary, professional school of Indiana University, committed to excellence in teaching, research, and civic engagement that addresses critical issues of public affairs including criminal justice and public safety. IUPUI is a vibrant campus located in thriving downtown Indianapolis within walking distance of the state capitol.

Applications will be reviewed beginning November 15, 2009 and will be accepted until each position is filled. SPEA and Indiana University are committed to diversity and especially interested in candidates who will contribute to achievement of our diversity objectives. Please submit a letter of application, current vita, complete contact information, and the names, street and email addresses, and telephone numbers of four references to:

Dr. Terry Baumer
Director, Criminal Justice and Public Safety Programs, and Chair, Search Committee

---

**Analyst**

The Human Rights and Business Project of the Danish Institute for Human Rights is seeking an analyst to join our team in Copenhagen. The position involves providing support to advisors in consultancy projects, strategic research and methodology and tool development.

Candidates should have a relevant academic background and one to three years’ working experience related to human rights and business issues.

Applications in English should include a cover letter, CV and short writing sample. For further information, please visit: www.humanrightsbusiness.org

---

**Environmental Specialists**

Are you looking for challenging work? Do you want to contribute to Latin America and the Caribbean?

You can make a difference at the Inter-American Development Bank. We are searching for outstanding individuals to fill these positions at our Washington, DC headquarters.

We need Environmental Specialists to assist in providing direction and leadership in mainstreaming strategic environmental priorities in the IDB’s development portfolio, support the enhancement of sustainability value and outcomes of operations, and provide advice and
expertise to identify and manage environmental and social risks.

Requirements of these positions includes at least 6 to 8 years of experience in the field of environmental policy and programs with an advanced degree in the natural sciences, environmental management or a related field.

For full job descriptions, responsibilities and requirements, please go to:

www.iadb.org/careers

DB offers a competitive compensation and benefits package and a diverse and inclusive work environment.

Recent Disasters, from Page 1

Though devastation may be most pronounced in these countries, the U.N. World Food Program reports that serious damage is widespread across other countries throughout Western Africa. Because the floods have dealt substantial damage to transportation infrastructure as well as farmland, the humanitarian situation is expected to worsen as food and other necessities become increasingly scarce.

• The state of Tennessee declared an emergency in late August after withstandng severe storms and flooding.

• Flash floods hit Istanbul in early September following Turkey’s most substantial rainfall in a century. At least thirty people are confirmed dead and many more are missing following the flooding.

• The H1N1 influenza virus continues to challenge public health experts. Efforts to develop vaccines and other countermeasures are slow, though ongoing.

• Australia is currently experiencing the worst drought in years, and many areas of the country have reported unusual dust storms resulting in respiratory distress and accelerated erosion of farmland.

• A minor earthquake struck Bhutan, and was felt in Arunachal Pradesh, India. Minor damage has been reported, though no fatalities were expected.

• Flooding in the Southeastern United States has resulted in at least ten deaths and untold property damage. Though coverage of these floods has been centered predominately around Atlanta, Georgia, the states of Alabama, Kentucky, North Carolina, and Tennessee have also seen damage.

Disaster Modeling NY, from Page 1

This tool helps officials prepare and evaluate optimal plans for responding to “an array of hypothetical urban catastrophic situations,” according to a news release. But while the Sarin attack was the most recent scenario run by the group, Smith says that they are next planning to model a pandemic flu outbreak. In the future, they hope to expand the model to deal with impacts from environmental disasters like a hurricane hitting New York.

“We would like to be able to translate this to that kind of scenario,” Smith says. “The underlying technology could probably do it, covering environmental scenarios, the tidal zones or ‘slosh’ zones affecting New York, especially if we can incorporate other models like HAZUS that FEMA provides.”

“Once you have an idea of the affected population, you could set a model like this up to see what would happen, where those affected populations might go. The trick would be—as in any model—in selecting the parameters.” While the current simulation was set in New York, Smith says his group demonstrated the model was portable for at least several other cities, including Philadelphia, Boston, and San Francisco.

“Models all have limitations,” he says, “and we tried to provide some of the obvious and less obvious limitations to our own model. We put together a multidisciplinary team of computer scientists, doctors, and sociologists because the perspective of everyone is particularly important. We thought it was necessary to create a model with perspective.”


More info:

www.nyu.edu/ccpr/laser/plancinfo.html

Source: Natural Hazards Observer, September 2009.

FEMA Director Craig Fugate on ... Survivors, Money, and Star Trek

By Dan Whipple, Editor of Natural Hazards Observer

Changing vocabulary is a first step in the effort to manage hazards and disasters as a partnership among the federal government, the states, the local governments and the community, Federal Emergency Management Agency administrator Craig Fugate says.

"I'm doing my little social science experiment. I'm changing vocabularies one word at a time," Fugate says, "We call people 'survivors,' not 'victims.' We've always looked at the public as a liability. Everything was based on the proposition that they were there waiting for people to take care of them."

He adds, "You can't look at the public as a liability. You have to look at them as a resource. The survivors are the ones we have to empower."

Fugate gave the opening keynote speech at the 34th Annual Natural Hazards Research and Applications Workshop in Broomfield, Colorado, on Thursday, July 16, 2009.

In his talk, Fugate continued a theme that was prominent in his confirmation hearings in April. In his opening statement at that time, before the U.S. Senate Committee on Homeland Security and Governmental Affairs, he said, "We have to begin looking at our citizens as a resource, not as a liability in our plans. We have to integrate and build capacity and capability at the local level, the state, and federal level. It has to incorporate the volunteer, faith-based and community-based organizations, and the private sector."

At the Workshop, Fugate reemphasized the cooperative and coordinated effort necessary to plan for, respond to, and mitigate hazards. "FEMA by itself is oftentimes nothing more than a funding mechanism," he says. "We may set policy and guidance and things through those mechanisms, but the bottom line is: It's money."

But all of the activity that goes into dealing with disasters "is really a team effort," he says. "It is not just FEMA. It is our parent agency the Department of Homeland Security, it's the entire federal family ... But, hey, guess what? Who's got more fire
Disasters are best managed locally, Fugate says. "But that doesn’t mean they’re by themselves."

Fugate was upbeat about the potential for new technology and social networking to provide information and education during disasters. Holding up his Blackberry, he said, "This is the tricorder of Star Trek fame. It’s my communicator, it’s geo-aware ... I can send my location out. I can send pictures and video out. I can actually send out my observations, too."

He says that there has been some resistance in bureaucratic circles to using social networking information because “this is not official.” He was optimistic about the possibilities of changing behavior because of the wealth of information available from social networking. He cited the example of a rumor that spread in Florida that gasoline prices would be reaching five dollars a gallon after a hurricane knocked out some refineries. The information wasn’t correct, but people nonetheless bought up gasoline supplies to try to beat the price increase. This power to get people moving, changing behavior in the face of crises is an untapped potential resource in times of disaster, he said.

Fugate’s “little social science experiment” appeared to have an immediate impact at the Workshop at least, as speaker after speaker in later sessions caught themselves mid-sentence, cutting off the word “victim” after the first syllable and replacing it with “survivor.” He also persuaded everyone to call him “Craig,” instead of “Mr. Fugate” or some other unwieldy title.

Reaction to Fugate’s speech was positive. "I see a time of greater positive change coming to FEMA and the emergency management profession if Craig is given the time and support necessary to allow him to expand the vision that he created for emergency management in Florida to the whole country," said Bob Goldhammer of the International Association of Emergency Managers.

Emphasizing that he was speaking for himself and not for his organization, Goldhammer adds, "One might think that changes in FEMA operations and policies will happen quickly, but I don’t think that will be the case. As fervent as Craig is, and as much as emergency managers want to see things happen, he will have to operate within the confines of a fairly well established hierarchy of duties and agendas.

"This constraint applies not only to FEMA but within government as a whole. It would be challenging enough to try to steer a new course for the agency if everything around it was stable, but with all the changes that are taking place within the federal government—especially with the new administration selecting new people for leadership positions—I believe it is going to take some months or longer to see the impacts of the policies that Craig is promoting," Goldhammer says.

Source: Natural Hazards Observer, September 2009.

Volunteers Wanted

Please let us know if you are interested in volunteering for one of the following positions...or if there is a special project you would like to undertake with DERA sponsorship:

Board of Directors. Two Board positions become vacant on the first of July. If you would like to serve in one of these key decision-making positions, please submit a letter of interest and a resume with references. The nominating committee will contact you to set up a telephone interview.

State Liaison Officers and Assistants. These are the “front line” jobs in DERA. State Liaison Officers represent DERA to state and local officials, establish good working relationships with agency staffs, VOADs and other NGOs, and provide media relations in time of emergency. Our aim is to have a primary and two assistant liaison officers in each U.S. state and territory, with comparable positions for our international membership. Please submit a letter of interest and a resume with references. The Liaison Coordinating Committee will contact you to set up a telephone interview.

Regional Planning and Response Coordinators. These positions coordinate the activities of State Liaison Officers with territorial responsibilities generally following FEMA Regional boundaries. Please submit a letter of interest and a resume with references. The Liaison Coordinating Committee will contact you to set up a telephone interview.

Newsletter Editor and Assistant. Our Newsletter Editor, Catherine Lawhun, has taken on responsibilities as Director of Operations for DERA emergency response missions. Kevin J.D. Wilson is editing the newsletter while the search for an editor is conducted. Lawhun and Wilson will work with the new editor for an orderly transition over the course of a few newsletter editions. Please send a letter of interest and resume.

Webmaster Assistant. Design and management of www.disasters.org

Peer Review for DERA Monograph Publications

Speaker’s Bureau Coordinator and Assistant

Assistant for Financial Development and Grants

National Contingency Plans Chief and Assistant

International Program Assistant

Online EOC Coordinator and Watch Officers. DERA maintains an online EOC at www.dera.us/eoc. The site needs an overall coordinator and several individuals to watch world and national events and post updates. Everything can be done from a web browser at home or even a WiFi hotspot.

Student Awards and Scholarship Coordinator. Arranges publicity for the program, coordinates with program sponsors, and presents awards.
DERA is partnering with FedHealth to make this book available to our members at the lowest possible cost.

It's a Disaster! is the highly acclaimed, definitive guide to disaster preparedness, prevention and first aid.

Every professional should have a copy for reference and every family should use one as their personal preparedness guide.

Now is the time to obtain this invaluable reference for yourself while taking advantage of our discount pricing on copies for your friends and colleagues.

Presenting this book as a gift is a testimony to your care and thoughtfulness.

Use the professional planning strategies and tools in It's a Disaster! for your own preparedness as well as an emergency guide for unexpected situations.

For the next 30 days, DERA will pay the postage on your order. Please do not delay and be disappointed. Order your copies today.

DERA Publications
P.O. Box 797
Longmont, CO 80502

Indicate how many copies you are ordering:

- 1 Copy $15.00
- 2 Copies $25.00
- 3 Copies $35.00
- 4 or more Copies: $11.50 each

How many? ___________

Price includes shipping by Priority Mail in the U.S. Foreign orders, please add $6.50 for airmail postage.

Please enclose a check or money order payable to DERA Publications
**Members**
Add your strength to ours!
*Join our international network of prominent leaders, professionals and volunteers active in all phases of emergency preparedness, community safety and disaster response.*

**Speakers**
Whether you are a well-known subject matter expert or just have interesting experiences to share, organizations around the world are looking for program speakers. 
*DERA links members with an interest in speaking to audiences through our Speaker's Bureau. We also produce Podcasts, Webcasts and preparedness teleconferences which require little or no travel.*

**Writers**
DERA offers numerous opportunities for publication: Our highly regarded Monograph Series is a peer-reviewed special publication for stand-alone research papers, field reports and preparedness guides, normally 12-36 pages in length. Our quarterly newsletter, Disasters•Org, gives members the opportunity to publish either a regular column or special articles.  
*DERA provides members with the opportunity to gain professional recognition through high-quality publications.*

**Watch Officers**
DERA operates an online Emergency Operations Center at www.dera.us/eoc  
*We need additional Watch Officers to keep the site updated with breaking news and situation reports. Watch Officers can post updates from anywhere they have access to the web. Even if you only have limited time and irregular schedules, you can be an important part of this program.*

**Regional and State Coordinators**
Network where you live and work! DERA program coordinators and assistants attend key meetings in their state or region and network with all who might have an interest in DERA programs.  
*DERA aims to provide every state with a program coordinator who provides liaison between governmental agencies, other nongovernmental organizations, and DERA members in the area.*

**International Program Coordinators**
Since our founding in 1962, DERA has been very active in supporting international preparedness and relief efforts and we have sponsored emergency response teams throughout the world.  
*DERA international program coordinators represent DERA within each country where DERA members have a presence and seek opportunities for cooperation, mutual assistance, and program development.*

Learn more about DERA at www.disasters.org

Please join us: We’d be honored to have you as a member.  
You may apply for membership online or use the form on the reverse.
Professional Affiliation

Membership Application

Name: ________________________________________________ Title: _______________________
Organization: ________________________________________________________________________
Street Address: ________________________________________________________________________
City: _____________________________________ State: ___________ ZIP/Postal Code:__________
Country, if not USA or Canada: ___________________________ Phone: ________________________
Email:___________________________________________________ Radio Callsign:______________

Please Select Membership Classification

Enclose Check or Money Order for Dues Payment

Amounts are in U.S. Dollars

☐ Individual Membership - Professional
   $50.00 per year
   $25.00 for Student, Retired or Unemployed

☐ Individual Membership - Management Level
   $75.00 per year

☐ Lifetime Individual
   $450.00

☐ Nonprofit Organization
   $75.00 per year

☐ Governmental Office
   $95.00 per year

☐ Small or Startup Business
   $125.00 per year
   Please contact us for corporate membership

Foreign currency and drafts are credited at commercial exchange rates. All checks must be payable through a U.S. bank.
Add $5 per year if you wish newsletter sent by Airmail, or $20 for Global Priority Mail. Rates good for 2009-2010.

Join online with any major charge card at www.disasters.org

or mail this application with check or money order to

DERA Membership
P.O. Box 797
Longmont, CO 80502-0797
USA

Please tell us if a member referred you so we can thank them: ________________________________

DERA was founded in 1962 and is a Nonprofit U.S. IRS 501(c)(3) Tax Exempt Organization. FEIN 39-1777651.