TsuInfo Alert

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CONGRATULATIONS

Officials from the National Weather Service have recognized Rota as StormReady® and TsunamiReady™.

Rota joins Guam, Saipan, Tinian and 1,414 other StormReady communities in 50 states and 61 other TsunamiReady communities in 10 states, Puerto Rico, Guam, and the CNMI.

"On behalf of the island of Rota, the Commonwealth of the Northern Mariana Islands Mayor's Office and our partners in the emergency management and response community, we are proud to receive this StormReady and TsunamiReady recognition," said Mayor Joseph S. Inos. "It validates the value we place on education and preparedness, and our commitment to public safety. It further illustrates our experience in dealing with disasters, particularly typhoons."

"The Island of Rota has worked hard to earn the StormReady and TsunamiReady titles, making it the fourth location in the western North Pacific to do so," said Jeff LaDouce, director of the National Weather Service Pacific Region. "The Island should take great pride in providing its residents and visitors with the added protection that the StormReady and Tsunami Ready programs afford. Through the TsunamiReady program, Rota will be highly prepared to protect the lives of its residents and visitors during rare but potentially deadly tsunami events."

From: http://www.guampdn.com/apps/pbcs.dll/article?AID=/20090317/NEWS01/90317004

NOAA recognizes Yakutat, Alaska, as TsunamiReady™ and StormReady®
March 18, 2009

Yakutat, Alaska, has earned the NOAA National Weather Service TsunamiReady and StormReady designations, better equipping the town to handle severe weather and tsunamis. The Yakutat emergency management team fulfilled a rigorous set of warning communication and evacuation planning criteria that establish preparedness standards for tsunami and severe weather hazards.

"I'm honored to recognize Yakutat as our sixth TsunamiReady community in Alaska and second TsunamiReady community in Southeast Alaska," said Tom Ainsworth, meteorologist-in-charge of the Juneau Weather Forecast Office. "The National Weather Service continues to enhance the nation's tsunami and severe weather detection, assessment and warning system, but a timely warning is meaningless unless people know how to respond. This program is designed to help people prepare for what to do should a tsunami or severe weather strike."

Washington is the first of the contiguous states to have all coastal counties earn TsunamiReady™ status.

TsuInfo Alert

In a ceremony in Yakutat on March 24, Ainsworth will present a recognition letter and TsunamiReady and StormReady road signs to community officials.

To earn TsunamiReady and StormReady status, a community must:

- ❖ establish a 24-hour center for receiving National Weather Service warnings and activating local warning systems;
- ❖ have more than one way to alert the public about tsunami and severe weather warnings;
- ❖ create a system that monitors local weather conditions;
- ❖ promote the importance of public readiness through community seminars; and
- ❖ develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

Ainsworth also is encouraging local residents to take steps to prepare for a tsunami and other severe weather events. "Preparation for disaster is everyone's responsibility. Develop your own emergency response plan. Keep a disaster supply kit on hand. Educate yourself about the warning signs," he said.

The TsunamiReady and StormReady programs are part of a partnership between NOAA's National Weather Service and the International Association of Emergency Managers, the National Emergency Management Association and the National Tsunami Hazard Mitigation Program. The TsunamiReady and Storm Ready recognitions expire in three years, after which the community will go through a renewal process.

StormReady® and TsunamiReady™ are registered trademarks of the National Oceanic and Atmospheric Administration.

From:
http://www.noaanews.noaa.gov/stories2009/20090318_ya
kutatalaskatsunamiready.html

U.S. coastline tsunami hazard assessment for the Nuclear Regulatory Commission

Introduction:

Applications to build and operate up to 26 new nuclear power reactors are expected over the next few years, increasing the current level of 104 nuclear power reactors licensed to operate in the U.S. at 65 sites in 31 states. Some candidate Nuclear Power Plant (NPP) sites may be located on coasts subject to tsunamis hazard. The devastation to coastal infrastructure caused by the Indian Ocean tsunami of 24 December 2004 has changed the perception of a tsunami as a low-risk hazard. Tsunamis are now viewed as a hazard of medium probability and potentially high risk for world coastlines. 6 destructive tsunamis that have occurred since 2005 are convincing arguments for such assessment. The December 2004

catastrophe focused attention to sources with underestimated tsunami potential convincing researchers to broaden list of possible danger areas (Geist *et al*., 2005). The Indian Ocean tsunami has also increased awareness of this hazard to the NPPs.

Methodology:

The tsunami science has produced a variety of research tools for tsunami hazard assessment. In particular, the tsunami modeling technology has evolved tremendously during the last 20 years, when crucial field observation and laboratory data have become available for model verifications and testing. The numerical modeling of tsunami dynamics has become a standard research tool in tsunami studies. Modeling methods have matured into a robust technology that has proven to be capable of accurate simulations of historical tsunamis, after careful consideration of field and instrumental historical data. Recently developed standards and criteria for tsunami model use in operations (Synolakis *et al*., 2007) provided solid ground for practical model applications. At the same time, the Sumatra tsunami of 26 December 2004 reminded that most of the world coastal communities and infrastructures are unaware and unprepared for the hazard from coastal flooding by multiple tsunami waves. This event also highlighted research challenges and triggered accelerated efforts to fill the gaps in the tsunami science.

Tsunamis generated by landslides: The first research focus area is development of a computer model to simulate landslide generated tsunamis, with arbitrary parameters and arbitrary scales, including full coupling with water column. The model will be tested comprehensively against field and laboratory data.

Tsunamis from seismic sources: The second research focus is regional and local tsunami hazard assessment from seismic sources, utilizing tools for tsunami hazard assessment studies in NOAA's SIFT tsunami forecast system. SIFT includes a model database of tsunami propagation scenarios which can provide detailed analysis of the tsunami potential for a coastal region or a coastal community and pinpoint high-impact sources for a given coastal location. A very comprehensive analysis is feasible because more than a thousand propagation scenarios for all major seismic tsunami source areas are readily available from the database. The scenario database will be updated with the latest findings from the U.S. Geological Survey (USGS) analysis of tsunami sources.

Case study for Probable Maximum Tsunami (PMT) analysis from seismic, landslide and impact sources: The PMT analysis will include model assessment of tsunami impact from several types of tsunami sources identified from the regional and/or local tsunami hazard assessment. The case study will use the high-resolution inundation model to assess the tsunami impact at the chosen site. The study will use the experience and recommendation from the FEMA pilot study (Tsunami Pilot Study Working

Group, 2006). PMT analysis will not only provide tsunami assessment for a selected community but will have a regional tsunami hazard assessment value.

References:

1) Geist, E.L., V.V. Titov, and C.E. Synolakis (2006): Tsunami: Wave of change. *Scientific American, 294*(1), 56–63. Text of article from the Scientific American website.

2) Tsunami Pilot Study Working Group (2006): Seaside, Oregon Tsunami Pilot Study—Modernization of FEMA flood hazard maps. *NOAA OAR Special Report*, NOAA/OAR/PMEL, Seattle, WA, 83 pp.   + 7 appendices.

3) Synolakis, C.E., E.N. Bernard, V.V. Titov, U. Kânoğlu, and F.I. González (2007): Standards, criteria, and procedures for NOAA evaluation of tsunami numerical models. NOAA Tech. Memo. OAR PMEL-135, NOAA/Pacific Marine Environmental Laboratory, Seattle, WA, 55 pp. [PDF Version]

Links:

The Nuclear Regulatory Commission
From: http://nctr.pmel.noaa.gov/state/nrc/index.html
(includes 2 illustrations not copied here) ♦

Are BCP and emergency management merging?
By Dr. Tom Phelan

Business continuity planners in the private sector have traditionally been quite different from public sector emergency managers in a number of ways. BCP professionals conduct business impact analyses (BIA) to assess risks to business functions, while emergency managers conduct vulnerability assessments to measure responsibilities and capabilities for handling emergencies, disasters, and catastrophes. Both devote their efforts to prevention, response, recovery, and restoration. Both are deeply concerned with communication and are dedicated to the preservation of life, property, and the environment. BCP professionals are more focused on preservation of the enterprise, while emergency managers are dedicated to preserving the community.

What brings us together is the post 9/11 fact that preserving the enterprise or the community may be preserving the nation. One sector cannot exist without the other. Private sector interests depend on robust infrastructure, stability of the marketplace, investor confidence, and reputation. For a corporation to thrive, communication, marketing, sales, and customer service must be fully functioning. These components depend on people, health, transportation, connectivity, security, and trust. Many of these factors are dependent on systems in the public sector. Imagine the banking business below Canal Street in Manhattan without public transportation. Picture George Washington University Medical Center in D.C. without EMT's and rescue squads. Can you see Boston's downtown functioning without Dennis Royer and the public works department to clear snow from the streets following a nor'easter? Notice how external organizations support the enterprise whether public or private.

The strongest evidence of our coming together is the recommendation of NFPA 1600[1] in Public Law 110-53[2]. The law recommends a voluntary accreditation program for private sector entities using a standard that was initially designed for public sector use. NFPA 1600 includes all the program elements of a good emergency plan. It has been recognized by both public and private organizations as an excellent framework. When it is combined with the incident command system (ICS), it provides an adaptable structure for both BCP and emergency management planners.

One aspect of ICS is common terminology. We don't have this across sectors. We don't have it outside of ICS. *Disaster Recovery Journal* and DRI International have worked tirelessly for years to edit and perfect a BCP glossary. Similarly, FEMA, particularly the Emergency Management Institute, has worked to produce a valid glossary. These two entities need to form a working committee to bring their glossaries together. As a PPBI (Private & Public Business, Inc.) member working with both groups, I have connected Kay Goss with Yvonne Lewis of the DRJ Editorial Advisory Board Glossary Committee. Those of you who may have interest in furthering the combination of the two glossaries should get involved. Contact PPBI for a referral at www.ppbi.org.

These are other ways in which BCP and EM are merging. Evidence is available in the work spearheaded by Bill Raisch at New York University's International Center for Enterprise Preparedness (InterCEP). He founded the center with initial funding from the U.S. Department of Homeland Security as the world's first academic research center dedicated to private sector emergency preparedness and resilience. Topical concentrations reflect an emphasis on the "what" and "why" of resilience and include best practices, standards, metrics/assessment, information flow, public-private partnerships, and the economic impacts of resilience including the role of incentives for business. In addition to strong involvement with the U.S. business sector, the Center has an international outreach, actively working with a diversity of multinational corporations as well as representatives from various national governments and NGO's globally.

Another fine example is the work of Brit Weber at Michigan State University, The online newsletter published there is for public agencies, businesses, non-governmental organizations, and other stakeholders involved or interested in public-private partnerships for joint emergency preparedness, mitigation, response, and recovery. Produced through the Critical Incident Protocol (CIP)-Community Facilitation Program under a grant awarded by the Training & Exercise Integration Division, Federal Emergency Management Agency, U.S. Department of Homeland Security, this newsletter provides ideas, suggestions, best practices, and lessons learned to

establish critical incident protocols using public-private partnerships. Michigan State University through the CIP program will "enhance cities, counties, and regions' capabilities to prepare for, respond to, and recover from man-made and natural disasters through public and private sector collaboration, communication, and cooperation." MSU facilitates public-private partnerships and the CIP program is free of charge to participating communities (www.cip.msu.edu).

These innovative programs, glossaries, management systems, laws and standards are providing opportunities for BCP and EM professionals to learn from each other through partnerships.

Dr. Tom Phelan, author of "Emergency Management and Tactical Response Operations: Bridging the Gap." (available from www.elsevier.com), is a founding member of the U.S. Department of Homeland Security, a member of the IBM Crisis Response Team, responding to Katrina, and the Indian Ocean tsunami. He serves on the Board of PPBI.

From: Disaster Recovery Journal, v. 21, no. 4, p. 64. Reprinted with permission

1*NFPA Standards on Disaster/Emergency Management and Business Continuity Programs* (2007 edition) http://www.nfpa.org/categoryList.asp?categoryID=628&URL=Research%20&%20Reports/Fact%20sheets/Homeland%20Security&cookie%5Ftest=1

2Public Law 110-53 http://www.pachamber.org/www/conferences/presentations/0812/Title_IX_of_Public_Law_110.pdf

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NOTE: There is a FEMA Combined Glossary of Disaster Terms at http://www.urbanforestrysouth.org/resources/library/combined-glossary-of-disaster-terms-fema

Disaster Recovery Journal has a Business Continuity Glossary at http://www.moreilly.com/CISSP/Dom9-5-DRJ-Glossary.pdf

Disaster Recovery Journal has a Business Continuity Synonyms Glossary at http://www.scribd.com/doc/7308390/Disaster-Recovery-Journal-Business-Continuity-Acronyms-Glossary

Disaster Acronyms and Glossary at http://www.fdhc.state.fl.us/MCHQ/Emergency_Activities/Files/Disaster_Glossary.pdf

FEMA's ICS Glossary http://training.fema.gov/EMIWeb/IS/ICSResource/assets/ICSGlossary.pdf ♦

NEWS

> **Note to new readers**
> The insert is included for your use as an informational hand-out. If you find others that might be useful to NTHMP participants, please forward them to the editor.

Fugate for FEMA: The time is finally right

Although it seems unlikely President Barack Obama and George W. Bush share much in the way of political perspectives, they do agree on one thing—Craig Fugate is the right guy to head up the Federal Emergency Management Agency.

Obama last week named Fugate, currently director of the Florida Division of Emergency Management, as his pick to lead FEMA. Bush did the same in 2005 after the resignation of the Katrina-disgraced Michael Brown. Fugate turned down Bush's nomination because "the timing wasn't right," according to a recent profile in Time (http://www.time.com/time/nation/article/0,8599,1883485,00.html).

Since then, the clock has been ticking at FEMA, which has inched toward redemption under another Florida emergency official, former Miami-Dade County Rescue Chief R. David Paulison. Paulison told the Associated Press (http://www.google.com/hostednews/ap/article/ALeqM5gfZod0KuGhrwdIk5uJg-SAdnD5tgD96NGEF80) that Fugate would have a lot of bureaucratic hurdles to jump, but when it came down to the business of FEMA, he'd be ready.

"There are few people around the world that have the type of disaster experience that Craig Fugate has," Paulison is quoted as saying.

Natural disasters aren't the only ones Fugate is bound to face as head of the long-vilified agency—and it's Fugate's singular combination of far-ranging experience, bipartisan politics, and all-around-nice-guyness that has everyone from local emergency managers to former FEMA head James Lee Witt hopeful about the future.

"Craig's experience will be an asset in rebuilding the trust and relationships between the federal and state governments," Witt told the Associated Press.

Many others in the emergency management field are breathing a sigh of relief to see a seasoned practitioner fill the position.

"This is a guy who has actually worked in emergency management his whole life and at all levels of government—local, state and federal," Russ Decker, president of the International Association of Emergency Managers, told Government Technology's Emergency Management (http://www.govtech.com/em/articles/625573). "…We think he's in a unique position to understand the needs of all those different levels."

Fugate, who saw Florida through the difficult 2004 hurricane season, began his career as a volunteer fire-

fighter and paramedic, according to a Department of Homeland Security press release (http://www.dhs.gov/ynews/releases/pr_1236196236202.shtm). He served as a lieutenant with Alachua County Fire Rescue and spent 10 years as the Emergency Manager for Alachua County, Florida. He was appointed director of the Florida Division of Emergency Management in 2001.

Aside from crack emergency management skills and an understanding of the emergency process on multiple levels of government, Fugate will bring another useful trait to the job—an affinity for social media. Fugate maintains a blog and a Twitter stream (see the Web Resources section below), and records regular Webcasts for Florida Disaster.org, the division's Web site.

From: *Disaster Research 521*, March 12, 2009

FEMA's new "Sim City" open for business
The Federal Emergency Management Agency has stretched its exercise capacities with the opening of the National Exercise Simulation Center on January 12. The center, which was mandated as part of the Post-Katrina Emergency Management Reform Act, will offer virtual and live all-hazard preparedness and response simulations.

The center is key to creating a Federal Coordination Center at FEMA headquarters, according to a FEMA press release (http://www.fema.gov/news/newsrelease.fema?id=47279) Other pieces of the effort include the Disaster Operations Directorate and National Response Coordination Center. When fully functional, FEMA will provide coordinated planning, training, and operational support to emergency officials at the local, state, regional, and federal levels.

The new simulation center now supports basic training and exercises. Eventually, the center will offer realistic incident scenarios, 24-hour simulation exercises, modeling and planning support, mock-media capabilities, and real world coordination activities.

From: *Disaster Research 518*, January 29, 2009

Lights, camera, action! DHS starring Janet Napolitano
The Department of Homeland Security better be ready for its close-up, because new secretary Janet Napolitano is looking to shine some light on everything from the handling of Hurricane Katrina recovery to future National Planning Scenarios—and calling for action to boot.

In testimony before the U.S. House Committee on Homeland Security Wednesday (http://homeland.house.gov/Hearings/index.asp?ID=171), Napolitano laid out more than a dozen "action directives" she's issued since taking her post in January. The directives call for reassessing current practices to increase communication and transparency, save money, and eliminate duplicated efforts.

"We have to dedicate ourselves to doing what works, and frequently reassess the department to make sure that we are responding to threats as best as possible and making the kind of progress that Americans expect and deserve," Napolitano told the committee. "To me, the process of producing results begins with a prompt assessment of the state of DHS's programs."

Those assessments include a far-reaching efficiency review of the entire agency, a close look at increasing agency coordination—particularly FEMA—with state and local agencies, and an evaluation of the DHS role in building healthcare surge capacity. Transportation, cybersecurity, and immigration enforcement will also share the stage.

Napolitano—who saved Arizona more than $1 billion with a similar scheme (http://www.dhs.gov/ynews/releases/pr_1234889688937.shtm) —hopes to use the bevy of reviews to identify priorities to move the agency forward. She already has a few bullet points on her list, including expanding the use of science and technology and building a better rapport with emergency leaders.

"Already in my time as Secretary, I have traveled to four different states and met with state, local and community leaders in each of them about how DHS will continue to work with them," Napolitano testified. "The range of topics we met about—disaster response, community assistance, the development of new technological capabilities for DHS, and preparedness—speaks to the extent to which DHS must partner with state and local governments to work effectively on any front."

Apart from saying that DHS must "build a 'one-DHS' culture among the different components of the Department, Napolitano's testimony gave no clue as to what might happen in the mystery of FEMA's future in the department. Although a recent report by the DHS Office of the Inspector General (http://www.dhs.gov/xoig/assets/mgmtrpts/OIG_09-25_Feb09.pdf) advises leaving the emergency agency where it is—at least for now—Napolitano isn't going to debut her thoughts on the matter anytime soon, according to a DHS spokesperson quoted in the Washington Times (http://www.washingtontimes.com/news/2009/feb/19/report-opposes-spinning-off-fema/).

"She has been asked this before, and her answer has been that she has an opinion but she will share her opinion with the president before discussing it publicly," according to the article.

She might get a chance to speak up on the matter sooner than expected—a bill to free FEMA from the department was introduced today, according to a press release from the U.S. House Transportation and Infrastructure Committee (http://transportation.house.gov/News/PRArticle.aspx?NewsID=835). The Committee's Chairman, Rep. James Oberstar, is a co-sponsor of the bill. Similar legislation has been introduced in the Senate, as well.

From: *Disaster Research* 520, Feb. 26, 2009

Banda Aceh Tsunami Museum

Banda Aceh's Tsunami Museum has opened (February 23, 2009), a memorial to the 230,000 people who died in the 26 December 2004 tsunami.

The 4-story building was designed by Ridwan Kamil, who modeled it on a traditional Acehness house built on stilts. The first floor is open space to allow flood water or tsunamis to flow through. The building, besides having photograph exhibits, survival stories, and a simulation of a submarine earthquake like the one that triggered the 2004 tsunami, also functions as an education center and an emergency disaster shelter.

The Jakarta Globe National (http://www.thejakartaglobe.com/news/national/article/10783.html) reported Aceh also has the "Taman International Aceh Thank the World garden. The commemorative garden is surrounded by sculptures of 53 small sinking boats, representing the 53 countries that extended help to Aceh after the tsunami hit. Each boat is decorated with a country's flag, the name of the country and the words "thank you" in each country's native language."

NOAA - Emergency managers to test Atlantic/Gulf tsunami warning and response--First coordinated drill for Atlantic, Gulf of Mexico and Caribbean locations, April 2

Residents and visitors along the Atlantic coasts of the United States and Canada, the Gulf of Mexico, Puerto Rico and the Virgin Islands should not be alarmed when they hear tsunami test messages broadcast over their televisions and radios on Thursday, April 2, 2009. That day, at 9:00 a.m. EDT (8:00 a.m. CDT), officials will test the region's communication and response plans to help communities prepare for a tsunami.

Co-sponsored by NOAA and the U.S. National Tsunami Hazard Mitigation Program, this is the first region-wide tsunami warning test to include the Atlantic and Gulf of Mexico coasts of the United States, Canadian Atlantic Provinces, and the U.S. Caribbean Territories and Commonwealths.

NOAA's Tsunami Warning Center in Palmer, Alaska, will commence the exercise by issuing a test bulletin through tsunami warning communication channels. The test bulletin, clearly marked "test message", will prompt local officials to implement their tsunami response plans.

During this exercise, some communities in Puerto Rico will conduct evacuation drills while participating emergency management agencies on the U.S. East and Gulf coasts will conduct preparedness activities, such as workshops and table-top exercises. Upon completion of the exercise, participants will evaluate the effectiveness of their tsunami preparedness plans and make adjustments as necessary.

The United States expanded its tsunami warning system and preparedness activities in 2005 after a devastating tsunami in the Indian Ocean struck the coasts of several countries including Sumatra, Indonesia, with little or no warning, killing nearly 230,000 people. The Indian Ocean region was considered to have a relatively low risk for a destructive tsunami.

"The 2004 Indian Ocean tsunami raised awareness about the urgent need to be prepared," said Jack Hayes, director of NOAA's National Weather Service. "This important exercise will test the Tsunami Warning System to identify operational strengths and weaknesses in each community that takes part." The exercise will increase tsunami preparedness and improve coordination throughout the regions. Coastal residents and visitors are encouraged to prepare their personal tsunami plans prior to this exercise and locate their community's tsunami evacuation routes. The exercise will be cancelled if a real tsunami threat occurs within 24 hours of the test.

From:
http://www.noaanews.noaa.gov/stories2009/20090323_atlanticgulftsunamitest.html

Eighteen countries review measures to improve tsunami preparedness in the Pacific

Following several tsunamis and large earthquakes that have recently affected the South Pacific, 50 representatives from 18 of the region's countries and many observer organizations examined ways to improve protective measures against the threat of tsunamis. The meeting took place in Apia, Samoa, from February 16-18, 2009.

Participants assessed the findings of a Pacific-wide exercise of the Pacific Tsunami Warning System conducted on 29 October 2008, in terms of warning and emergency communication, national and local awareness and preparedness. They also examined strategies that address near-source tsunamis and their threat and impact on coasts just minutes away; measures to enhance and strengthen regional cooperation in the Southwest and Southeast Pacific Ocean and along the Central American coasts; and a review of the warning system's detection and monitoring components.

The Member States attending the meeting, the 23rd session of the Intergovernmental Co-ordination Group (ICG) for the Pacific Tsunami System, have identified their needs and provided detailed suggestions for improvements. Participants expected to map the way forward for the regional tsunami system which has been operating under the aegis of UNESCO's Intergovernmental Oceanographic Commission (IOC) in cooperation with the U.S. Pacific Tsunami Warning Center in Hawaii and Japan's Meteorological Agency since 1965.

The meeting was chaired by Giorgio de la Torre (Ecuador).

From: KAZINFORM, News Service of the UNESCO, Feb. 18, 2009

http://www.inform.kz/showarticle3.php?lang=eng&id=176384 accessed Mar. 24, 2009

Orange County could be successful model for interoperable communications

Many counties, cities and states are still struggling with interoperable communications. And yet, in the late 1990s, Orange County, California managed to connect all of its responders in 31 cities to the same 800 MHz trunk radio system. Why isn't Orange County a model for other counties?

In an article in the new issue of *Emergency Management* magazine, Andy Opsahl says it should be. He says the trunk system that Orange County has uses 81 channels and has nearly 400 talk groups. And for other local governments still struggling with interoperability, Opsahl says Orange County can provide insight as to how to make it happen.

In the article, Opsahl examines interoperability in Orange County and points out where other agencies can use the same techniques. Take the lack of a unified standard, for example. "Motivating agencies that control their own budget to agree on unified standards can seem out of reach," he says. "It's a paramount obstacle to interoperability in most counties."

What did Orange County do to work around the lack of a standard? Opsahl says they formed a technical-liaison committee that met monthly for six years to assure that the technical and operational issues were resolved. The county's communications staff also branched off into several radio shops, each specializing in a particular aspect of responder communications.

To read the full article, click here: http://www.govtech.com/em/articles/596643

From: *Continuity e-Guide*—A Wednesday Update by Disaster Resource Guide, http://disaster-resource.com/newsletter/2009/subpages/v272/newsclip3.htm

New USGS Regional Earthquake Coordinator

Congratulations to Martitia P. Tuttle on her appointment as USGS Regional Earthquake Coordinator for the Central and Eastern United States. She will be based in Memphis, Tennessee at the Earthquake Hazards Program Office.

Ms. Tuttle's interest in and experience with tsunami sediments goes back to 1994 when at the Lamont-Doherty Geological Observatory she persudaded the U.S. Nuclear Regulation Commission to fund her and Alan Ruffman to successfully search for the onshore signature of the November 18, 1929 "Grand Banks" tsunami. She has since done tsunami work in Puerto Rico, U.S. Virgin Islands, and in Thailand.

WEBSITES

http://twitter.com/disastersrus
Disastersrus: Craig Fugate's Twitter Feed

Where in the world is the next head of FEMA? Find out via his Twitter feed (or just check his local Starbucks, judging from his tweets). Although Fugate's feed is now a stream of travel updates sprinkled with occasional disaster-related resources, things are bound to get interesting when Fugate, social media supporter and to-be-confirmed FEMA administrator, takes on his first disaster at the helm of everyone's favorite emergency management agency. Twitter too short-winded for your tastes? Get more in depth with his blog—http://disasterstus.blogspot.com/.

From: *Disaster Research 521*, March 12, 2009

http://www.dosomething.org/grants/disaster
DoSomething.org Disaster Grants

With rock stars in tow, DoSomething.org has been drawing teens into volunteerism—including opportunities in disaster response, relief, and preparedness—for years. Now they'll hand out $500 each week to kids with worthy ideas for disaster-related projects. Check out how to apply online and don't get any ideas, old folks—grants will only be awarded to those 25 or younger.

From: *Disaster Research 521*, March 12, 2009

http://www.ushahidi.com

Ushahidi collects crisis information sent from citizen's cell phone, e-mails, or other web-based technologies, aggregates it, and maps it. Although created at the beginning of the year (2008) to chart political unrest in Kenya, developers plan to make the Ushahidi technology open source and customizable for any organization needing to track crises.

From: *Disaster Research 516,* December 18, 2008

http://www.do1thing.us/index.php
Do 1 Thing

Are preparedness chores easier to digest in bite-size pieces? That's the premise being served up at Do 1 Thing, a site aimed at helping families and local organizations prepare for emergencies one step at a time. The site offers community resources, monthly themes, and simple suggestions meant to add up to a year's worth of preparation. Enter in a loved one's name and watch your motivation (or guilt) factor soar with each targeted e-mail.

From: *Disaster Research 519*, Feb. 12, 2009

http://www.globalnetwork-dr.org/Home/8.id
Global Network of Civil Society Organisations for Disaster Reduction

The Global Network of Civil Society Organisations for Disaster Reduction is putting its money where its mouth is with a new Web site meant to step up communication on disaster risk reduction policy. The group, which was formed in 2007 to facilitate global communication

between groups concerned with disaster risk reduction, is now online collecting local-level viewpoints for its Views from the Frontline program. Visit the site to learn more about the program and how it will support the U.N. disaster reduction plan and the Hyogo Framework for Action.
From: *Disaster Research 518*, January 29, 2009

http://seap.savethechildren.se/en/South_East_Asia/Misc/Puffs/The-Alret-Rabbit/
The Alert Rabbit
Saving yourself from a tsunami isn't the only lesson to be found in *The Alert Rabbit*, a cute cautionary tale created by the children of a Thai village ravaged by the 2004 Indian Ocean tsunami. It's also an example of how kids can promote preparedness when they're involved in disaster risk reduction strategies. The book, along with what went into its making, is available as a PDF download.
From: *Disaster Research 518*, January 29, 2009

http://www.dreamis.info/
Dreamis
Organizations might dare to dream when it comes to financing disaster mitigation and response, thanks to the Disaster Reconstruction and Mitigation Information System. The new site—a collaboration of the World Bank and the Global Facility for Disaster Reduction and Recovery—aggregates and analyzes past disaster information, looks at methodologies and lessons learned, and tracks expenditures to help increase the efficiency of disaster response by governments and aid organizations. Although some parts of the searchable database are still under construction, information on damage and loss—accessible by country, region, disaster, and other terms—can be accessed now.
From: *Disaster Research 518*, January 29, 2009

http://www.abanet.org/disaster/home.shtml
Disaster Law Resources
The American Bar Association is breaking out the law for victims and lawyers alike with this list of resources related to disasters, preparedness, and recovery. Information is arranged by disaster and resource agency and includes Web sites, hotlines, and donation sites.
From: *Disaster Research 519*, Feb. 12, 2009

http://www.disasterrecoveryresources.net/
Disaster Recovery Resources
Disaster Recovery Resources has collected a wealth of new resources on its site, which is dedicated to locating and collecting worthwhile information on community recovery from disasters. Even with the influx of new knowledge, site administrator Claire Rubin (cbrubin@gmail.com) says she's always looking for new material. Take a look at the site map and let her know the section to post your suggestions.
From: *Disaster Research 519*, Feb. 12, 2009

http://www.coastalvalues.org/work/coralvalues.pdf
Economic values of coral reefs, mangroves, and seagrasses—A global compilation, 2008 is a new guide featuring scientific estimates of the economic value of coral reefs, tropical mangroves, and tropical seagrasses in a format organized by ecosystem, ocean region, and country. Producers of the guide include Conservation International, the World Resources Institute, International Coral Reef Initiative, Coastal Ocean Values Center, and National Oceanic and Atmospheric Administration. The guide is available at the website given above.
From: *Coastal Connections*, v. 7, no. 1, p. 4, 2009.

http://www.spinreg.org/
SPIN Registry
The Center for Disaster Risk Policy at Florida State University recently developed what will be a nationwide registry of people with special needs. The Special Population Information Registry, which is expected to launch January 31, will allow officials to track emergency information, housing plans, transportation needs, health conditions, and prescription and medical equipment needs. During a disaster, the registry can be queried to provide reports such as who needs transportation assistance, electricity, or medication.
From: *Disaster Research 516,* December 18, 2008

http://www.diversitypreparedness.org/Topic/Subtopic/Record-Detail/18/resourceId__17724/
Ethnic Media as Emergency Responders
As part of its focus on the use of ethnic media during emergencies, DiversityPreparedness.org has compiled a wealth of resources, articles, and reports on disaster communications in ethnic communities—including this New America Media interview detailing the lack of ethnic communications during Hurricane Ike and the recent Southern California wildfires.
From: *Disaster Research 516,* December 18, 2008

http://www.geo.txstate.edu/lovell/linksjournal/
JMLC Geographic Resources: Publication Listing
The geography-minded among us will appreciate this collection of journals that cover everything from tourism research to disaster prevention to society and culture. The list, compiled by the James and Marilyn Lovell Center for Environmental Geography and Hazards Research at Texas State University, is part of the center's effort to improve understanding of hazards and the environment. Parts of the site are under construction, so proceed with patience.
From: *Disaster Research 520*, Feb. 26, 2009

http://www.airportstudy2008.com/index.html
Airport Disaster Preparedness in a Community Context
Airports are going above and beyond when it comes to disaster preparedness and that may translate into good news for nearby emergency management agencies. This

study by American Public University Professor James F. Smith found airport managers had a "deep understanding and appreciation" of maintaining good relationships with emergency management agencies and that needs could be met "through wise mutual aid agreements made effective through joint training, drilling, and exercising." Information on the 59 participating airports and emergency agencies, TSA findings, and the full report are available.

From: *Disaster Research 521*, March 12, 2009

PUBLICATIONS

Natural Hazards Observer and *Research Digest*

The latest editions of two of the Natural Hazards Center's popular publications— *Natural Hazards Observer* and *Research Digest*—are available online.

Featured articles from the March 2009 *Observer* include:

—Exploring Links between Natural Hazards and Global Warming —The Need for Long-Term Flood Insurance and Mitigation Loans —Climate in Conflict.

Visit the Natural Hazards Center Web site at http://www.colorado.edu/hazards/o/index.html to read the March and past *Observers*. *Research Digest*, our quarterly compilation of research abstracts, can be accessed online at http://www.colorado.edu/hazards/rd/.

From: *Disaster Research 521*, March 12, 2009

The Alert Rabbit

Saving yourself from a tsunami isn't the only lesson to be found in *The Alert Rabbit*, a cute cautionary tale created by the children of a Thai village ravaged by the 2004 Indian Ocean tsunami. It's also an example of how kids can promote preparedness when they're involved in disaster risk reduction strategies. The book, along with what went into its making, is available as a PDF download:

http://seap.savethechildren.se/en/South_East_Asia/Misc/Puffs/The-Alret-Rabbit/

From: *Disaster Research 518*, January 29, 2009

Social Vulnerability to Disasters

Students, professionals, and anyone with an interest in how historic, geographic, and social factors put some populations at risk during disaster will welcome *Social Vulnerability to Disasters*, a new text that takes a multidisciplinary approach to examining how at-risk groups respond to and recover from disasters.

The book, based on the FEMA Higher Education Project social vulnerability course materials, features chapters from leaders in disaster research and provides techniques for community-based mitigation, instruction in building capacity and resiliency, and an understanding of how social, political, and economic influences add to disaster impacts. Topics such as violence and disaster

vulnerability, theoretical framing of world views, and language and literacy are showcased, as well as age, gender, class, race, disability, and health.

Looking for an added bonus? Throw in the feel-good factor of knowing all royalties from the book benefit the Mary Fran Myers Scholarship Fund. The book is dedicated to Myers, a former Natural Hazards Center co-director committed to reducing disaster vulnerability. (http://www.colorado.edu/hazards/awards/myers-scholarship.html). For more information or to order online, visit the publisher's Web site at http://www.crcpress.com/shopping_cart/products/product_detail.asp?sku=AU7856&isbn=9781420078565&parent_id=&pc=.

From: *Disaster Research 521*, March 12, 2009

CONFERENCES, SYMPOSIA

April 14-15, 2009
Partners in Emergency Preparedness

Washington State University Center for Distance and Professional Education Tacoma, Washington.

This conference promotes effective emergency preparedness through partnerships. Expert speakers and conference exhibits will showcase information on earthquake research, contingency planning, school preparedness, technology, news media, and public health.
http://capps.wsu.edu/conferences/emergencyprep/

From: *Disaster Research 519*, Feb. 12, 2009

April 14-15, 2009
Fifth Annual Emergency Preparedness Conference The Yale New Haven Center for Emergency Preparedness and Disaster Response, Washington, D.C. This conference provides best practices for emergency management planning, response, and recovery. Topics include hospital incident command systems, surge capacity, drills and exercises, and topical issues such as pandemics, evacuations, and fatality management.
http://ynhhs.org/emergency/disasterconference/index.html

From: *Disaster Research 520*, Feb. 26, 2009

April 16-17, 2009
Western Australia Emergency Management Conference 2009, Fire and Emergency Services Authority of Western Australia and the Australian Government Perth, Australia. Cost and Registration: $750, open until filled.

This conference will bring emergency managers and practitioners together to prepare for the future using past events as a model. Trends and best practices and a focus on enhancing partnerships to improve emergency management capabilities will be showcased.
https://extranet.fesa.wa.gov.au/sites/volunteers/emc2009/default.aspx

From: *Disaster Research 520*, Feb. 26, 2009

April 27-29, 2009
14th Annual Planning Forum
    Emergency Preparedness for Industry and Commerce Council Vancouver, Canada Cost and Registration: $650, open until filled This conference is a forum to share business continuity and emergency preparedness solutions and learn about topics such as crisis leadership, crisis response in the office, climate change, natural disasters, and pandemic planning.
http://www.epicc.org/showcontent.aspx?MenuID=547
    From: *Disaster Research 521*, March 12, 2009

June 22-24, 2009
Conference on disaster mitigation concerning earthquake and tsunami Istanbul, Turkey ♦

A tsunami of tsunami headlines
by the Language Police
    These headlines have been collected as examples of inappropriate use of *tsunami* in describing events not aquatic or oceanographic.

Be prepared for the regulatory tsunami
        The US Financial Tsunami will hit
RealtyTrac analysis of foreclosure tsunami
        Recovering from the '08 'fertilizer tsunami'
No One IMMUNE from the DEflationary Tsunami
        Is a job loss tsunami building?
Freight Tsunami Gives Way to Economic Depression.
        The Coming Lawsuit Tsunami
UCSC to prepare for 'silver tsunami' of retirements
        A tsunami of TV shows
Md. faces 'tsunami' of power shutoffs
        'Tsunami' of allergic kids
Political tsunami still making waves in Malaysia
        Economic tsunami
Media face **'**tsunami' challenge of internet and financial crisis
        Tsunami of excuses
Protecting our children from the electronic tsunami
        The 'toxic debt' tsunami
Tsunami of drivel

Definition of tsunami: A tsunami is a series of waves that is created when a large volume of a body of water, such as an ocean, is rapidly displaced. The Japanese term is literally translated into "(great) harbor wave." Earthquakes, volcanic eruptions and other underwater explosions (detonations of nuclear devices at sea), landslides, asteroid impacts, and other mass movements above or below water all have the potential to generate a tsunami. Due to the immense volumes of water and energy involved, the effects of tsunamis can be devastating.
From: en.wikipedia.org/wiki/Tsunami ♦

EMERGENCY MANAGEMENT OFFICES
(added November 30, 2007)

American Samoa Territorial Emergency Management Coordination (TEMCO); American Samoa Government
P.O. Box 1086
Pago Pago, American Samoa 96799
(011)(684) 699-6415; (011)(684) 699-6414 FAX

Office of Civil Defense, Government of Guam
P.O. Box 2877
Hagatna, Guam 96932
(011)(671) 475-9600; (011)(671) 477-3727 FAX
http://ns.gov.gu/

Guam Homeland Security/Office of Civil Defense
221B Chalan Palasyo
Agana Heights, Guam 96910
Tel:(671)475-9600;   Fax:(671)477-3727
www.guamhs.org

CNMI Emergency Management Office
Office of the Governor
Commonwealth of the Northern Mariana Islands
P.O. Box 10007
Saipan, Mariana Islands 96950
(670) 322-9529; (670) 322-7743 FAX
 www.cnmiemo.gov.mp

National Disaster Management Office
Office of the Chief Secretary
P.O. Box 15
Majuro, Republic of the Marshall Islands 96960-0015
(011)(692) 625-5181; (011)(692) 625-6896 FAX

National Disaster Control Officer
Federated States of Micronesia
P.O. Box PS-53
Kolonia, Pohnpei - Micronesia 96941
(011)(691) 320-8815; (001)(691) 320-2785 FAX

Palau NEMO Coordinator, Office of the President
P.O. Box 100
Koror, Republic of Palau 96940
(011)(680) 488-2422; (011)(680) 488-3312

Puerto Rico Emergency Management Agency
P.O. Box 966597
San Juan, Puerto Rico 00906-6597
(787) 724-0124; (787) 725-4244 FAX

Virgin Islands Territorial Emergency Management - VITEMA
2-C Contant, A-Q Building,
Virgin Islands 00820
(340) 774-2244;   (340) 774-1491 ♦

Center tools build ocean governance skills
From: *Coastal Connections*, v. 7, no. 1, 2009, p. 3
    Building partnerships and planning for the ocean and marine environment are two vital skills needed for effective regional ocean governance. The following resources developed by the NOAA Coastal Services Center can help your agency or organization get ready for region-wide ocean planning:
    For building partnerships:
Introduction to stakeholder participation—This publication provides guidance on identifying stakeholders, learning participation techniques, and evaluating stakeholder participation. To receive a hard copy, contact Tricia.Ryan@noaa.gov. On-line copies are available at www.csc.noaa.gov/publications/stakeholder_participation.pdf.
    Introduction to survey design and delivery—This publication provides an overview of survey-related information, techniques, and terminology that can help coastal managers learn more about stakeholders. To receive a hard copy, contact Tricia.Ryan@noaa.gov. On-line copies are available at www.csc.noaa.gov/publications/surveydesign_delivery.pdf.
    For ocean and marine planning:
Multipurpose marine cadastre—This interactive mapping tool for the outer continental shelf and state waters provides access to authoritative marine boundary information. It also supports planning efforts by providing ocean-use data about shipping lanes, protected areas, and other topics. It can be found at www.csc.noaa.gov/mbwg/htm/multipurpose.html.
Digital coast legislative atlas—Users of this Web application can select any area on the map to locate coastal and ocean laws that apply to that area. Organizations involved in regional ocean initiatives can quickly access the complex set of laws that govern the nation's ocean waters. The atlas is at www.csc.noaa.gov/legislativeatlas/. ♦

Material added to the NTHMP Library,
March - April 2009

Note: These, and all our tsunami materials, are included in the online (searchable) catalog at http://www.dnr.wa.gov/ResearchScience/Topics/GeologyPublicationsLibrary/Pages/washbib.aspx. Click on SEARCH DATABASE, then type 'tsunamis' in the Subject field to get a full listing of all the tsunami reports and maps in the collection.

Baptista, M. A.; Miranda, J. M., 2009, Revision of the Portuguese catalog of tsunamis: Natural Hazards and Earth System Sciences, v. 9, no. 1, p. 25-42.

Barberopoulou, Aggeliki, 2006, Investigating the damage potential of seiches initiated by seismic wave motions--A case study of the Puget Lowland, Washington State [abstract]: USGS Tsunami Sources Workshop 2006--Great Earthquake Tsunami Sources--Empiricism and Beyond, Menlo Park, CA, April 21-22, 2006.

Bourgeois, Joanne, 2008, Studies of seismicity and paleoseismicity in the Kuril biocomplexity project (KBP) [abstract]. IN Detweiler, Shane; Ellsworth, Bill, compilers, 7th US/Japan Natural Resources (UJNR) panel on US/Japan Natural Resources, p. 68.

Chittibabu, K.; Baskaran, R., 2009, Inundation mapping--A hazard study based on the December 26, 2004 tsunami

along the Karaikal coast of India: Science of Tsunami Hazards, v. 28, no. 1, p. 75-85.

Dahanayake, Kapila; Kulasena, Nayomi, 2008, Recognition of diagnostic criteria for recent- and paleo-tsunami sediments from Sri Lanka: Marine Geology, v. 254, no. 3-4, p. 180-186.

Dominey-Howes, Dale; Cummins, Phil; Burbidge, David, 2007, Historic records of teletsunami in the Indian Ocean and insights from numerical modeling [abstract]: Research Digest, v. 1, no. 1, p. 22.

Frohlich, Cliff; Hornbach, Matthew J.; Taylor, Frederick W.; Shen, Chuan-Chou; Moala, Apai; Morton, Allan E.; Kruger, Jens, 2009, Huge erratic boulders in Tonga deposited by a prehistoric tsunami: Geology, v. 37, no. 2, p. 131-134.

Guth, David W.; Alloway, Gordon A., 2008, Untapped potential--Evaluating state emergency management agency web sites 2008: University of Kansas Transportation Research Institute, 48 p.

Jankaew, Kruawun; Atwater, Brian F.; Sawai, Yuki; Choowong, Montri; Charoentitirat, Thasinee; Martin, Maria E.; Prendergast, Amy, 2008, Previous tsunamis in Thailand [abstract]. IN Detweiler, Shane; Ellsworth, Bill, compilers, 7th US/Japan Natural Resources (UJNR) panel on earthquake research--Abstract volume and technical program: US/Japan Natural Resources, p. 67.

Kumar, C. Satheesh; Murugan, P. Arul; Krishnamurthy, R. R.; Batvari, B. Prabhu Doss; Ramanamurthy, M. V.; Usha, T.; Pari, Y., 2009, Inundation mapping--A study based on December 2004 tsunami hazard along Chennai coast, southeast India: Natural Hazards and Earth System Sciences, v. 8, no. 4, p. 617-626.

Marchand, Helene, 2006, Impacts of the tsunami on a Marine National Park area—Case study of Lanta Islands (Thailand): Ocean and Coastal Management, v. 49, no. 12, p. 923-946.

Myint, S. W.; Yuan, M.; Cerveny, R. S.; Giri, C., 2009, Categorizing natural disaster damage assessment using satellite-based geospatial techniques: Natural Hazards and Earth System Sciences, v. 8, no. 4, p. 707-719.

NFPA Technical Committee on Emergency Management and Business Continuity, 2006, NFPA 1600--Standard on disaster/emergency management and business continuity programs; 2007 edition: NFPA Standards Council, 51 p.

Osada, Yukihito; Kido, Motoyuki; Fujimoto, Hiromi; Kaneda, Yoshiyuki, 2008, Development of a seafloor acoustic ranging system toward the seafloor cable network system: Ocean Engineering, v. 35, no. 1401-1405.

Ossola, Alexandra, 2009, Ancient tsunami swallowed New York?: Earth, v. 54, no. 3, p. 18.

Pararas-Carayannis, George, 2009, Assessment of potential tsunami generation in China's Bohai Sea from direct geotectonic and collateral source mechanisms: Science of Tsunami Hazards, v. 28, no. 1, p. 35-66.

Pavlov, V. I.; Tromp, J.; Tito, E. P., 2009, Tsunami generation by ocean floor rupture front propagation-- Hamiltonian description: Natural Hazards and Earth System Sciences, v. 9, no. 1, p. 217-227.

Roger, J.; Hebert, H., 2009, The 1856 Djijelli (Algeria) earthquake and tsunami--Source parameters and implications for tsunami hazard in the Balearic Islands: Natural Hazards and Earth System Sciences, v. 8, no. 4, p. 721-731.

Shigeki, Sakakibara; Masayoshi, Kubo, 2009, Initial attack of large-scaled tsunami on ship motions and mooring loads: Ocean Engingeering, v. 36, no. 2, p. 145-157.

Singarasubramanian, S. R.; Mukesh, M. V.; Manoharan, K.; Seralathan, P.; Sujatha, K.; Bakkiaraj, D., 2009, Geomorphological and sedimentological changes during and after the December-2004 Indian Ocean tsunami near the Vellar River and the M.G.R. Island area of the central Tamil Nadu coast, India: Science of Tsunami Hazards, v. 28, no. 1, p. 67-74.

Teeuw, Richard; Rust, Derek; Solana, Carmen; Dewdney, Chris, 2009, Large coastal landslides and tsunami hazard in the Caribbean: Eos (American Geophysical Union Transactions), v. 90, no. 10, p. 81-82.

Usha, Tune; Murthy, M. W. Ramana; Reddy, N. T.; Murty, T. S., 2009, Vulnerability assessment of Car Nicobar to tsunami hazard using numerical model: Science of Tsunami Hazards, v. 28, no. 1, p. 15-34.

Weinstein, Stuart A.; Okal, Emile A., 2005, The mantle magnitude M(sub m) and the slowness parameter (Theta)—Five years of real-time use in the context of tsunami warning: Bulletin of the Seismological Society of America, v. 95, no. 3, p. 779-799.

Willyard, Cassandra, 2009, Sickness after the surge-- Predicting the health effects of tropical storms and tsunamis: Earth, v. 54, no. 2, p. 44-49.

Yim, S. C.; Cox, D. T.; Park, M. M., 2009, Experimental and computational activities at the Oregon State University NEES Tsunami Research Facility: Science of Tsunami Hazards, v. 28, no. 1, p. 1-14. ♦

VIDEO-CD-DVD RESERVATIONS

To reserve tsunami videos, CDs or DVDs, contact *TsuInfo Alert* Video Reservations, Lee Walkling, Division of Geology and Earth Resources Library, 1111 Washington St. SE, MS 47007, Olympia, WA 98504-7007; or e-mail lee.walkling@dnr.wa.gov

Adventures of Disaster Dudes (14 min.). Preparedness for preteens. American Red Cross.

The Alaska Earthquake, 1964 (20 min.) Includes data on the tsunamis generated by that event.

Business Survival Kit for Earthquakes & Other Disasters; What every business should know before disaster strikes (27 min.). Global Net Productions for the Cascadia Regional Earthquake Workgroup, 2003. With CD disaster planning toolkit & other data.

Cannon Beach Fire District Community Warning System (COWS) (21 min.) Explains why Cannon Beach chose their particular warning system.

Cascadia: The Hidden Fire–An Earthquake Survival Guide (10 min.). Global Net Productions, 2001. A promo for a documentary about the Cascadia subduction zone and the preparedness its existence demands of Alaska, Oregon and Washington states. Includes mention of tsunamis.

Disasters are Preventable (22 min.) Ways to reduce losses from various kinds of disasters through preparedness and prevention.

Disaster Mitigation Campaign (15 min.). American Red Cross; 2000 TV spots. Hurricanes, high winds, floods, earthquakes.

Earthquake…Drop, Cover & Hold (5 min.). Washington Emergency Management Division. 1998.

Forum: Earthquakes & Tsunamis (2 hrs.). CVTV-23, Vancouver, WA (January 24, 2000). 2 lectures: Brian Atwater describes the detective work and sources of information about the Jan. 1700 Cascadia earthquake and tsunami; Walter C. Dudley talks about Hawaiian tsunamis and warning systems.

International Tsunami Information Centre, 2004, Tsunami warning evacuation news clips and video footage, UNESCO /IOC International Tsunami Information Centre, 1 **DVD**, 12 min.

Killer Wave: Power of the Tsunami (60 min.).National Geographic video.

Mitigation: Making Families and Communities Safer (13 min.) American Red Cross.

Not Business as Usual: Emergency Planning for Small Businesses, sponsored by CREW (Cascadia Regional Earthquake Workgroup) (10 min.), 2001. Discusses disaster preparedness and business continuity. Although it was made for Utah, the multi- hazard issues remain valid for everyone. Websites are included at the end of the video for further information and for the source of a manual for emergency preparedness for businesses.

Numerical Model Aonae Tsunami–7-12-93 (animation by Dr. Vasily Titov) and Tsunami Early Warning by Glenn Farley, KING 5 News (The Glenn Farley portion cannot be rebroadcast.)

Ocean Fury--Tsunamis in Alaska (25 min.) VHS and **DVD**. Produced by Moving Images for NOAA Sea Grant College Program, 2004.

The Prediction Problem (58 min.) Episode 3 of the PBS series "Fire on the Rim." Explores earthquakes and tsunamis around the Pacific Rim

Protecting Our Kids from Disasters (15 min.) Gives good instructions to help parents and volunteers make effective but low-cost, non-structural changes to child care facilities, in preparation for natural disasters. Accompanying booklet. Does NOT address problems specifically caused by tsunamis.

The Quake Hunters (45 min.) A good mystery story,

explaining how a 300-year old Cascadia earthquake was finally dated by finding records in Japan about a rogue tsunami in January 1700

Raging Planet; Tidal Wave (50 min.) Produced for the Discovery Channel in 1997, this video shows a Japanese city that builds walls against tsunamis, talks with scientists about tsunami prediction, and has incredible survival stories.

Raging Sea: KGMB-TV Tsunami Special. (23.5 min.) Aired 4-17-99, tsunami preparedness in Hawaii.

The Restless Planet (60 min.) An episode of "Savage Earth" series. About earthquakes, with examples from Japan, Mexico, and the 1989 Loma Prieta earthquake.

Run to High Ground (14 min.). Produced by Global Net Productions for Washington Emergency Management Division and Provincial Emergency Program of British Columbia, 2004. Features storyteller Viola Riebe, Hoh Tribe. For K-6 grade levels. Have video and **DVD** versions.

Tsunami and Earthquake Video (60 min.). "Tsunami: How Occur, How Protect," "Learning from Earthquakes," "Computer modeling of alternative source scenarios."

Tsunami: Killer Wave, Born of Fire (10 min.). NOAA/ PMEL. Features tsunami destruction and fires on Okushiri Island, Japan; good graphics, explanations, and safety in-formation. Narrated by Dr. Eddie Bernard, (with Japanese subtitles).

Tsunami: Surviving the Killer Waves (13 min.). 2 versions, one with breaks inserted for discussion time.

Tsunami Chasers (52 min.). Costas Synolakis leads a research team to Papua New Guinea to study submarine landslide-induced tsunamis. Beyond Productions for the Discovery Channel.

Tsunami Evacuation PSA (30 sec.). DIS Interactive Technologies for WA Emergency Management Division. 2000.

TsunamiReady Education CD, 2005, American Geological Institute Earth Science Week kit.

Understanding Volcanic Hazards (25 min.). Includes information about volcano-induced tsunamis and landslides.

UNESCO/IOC International Tsunami Information Centre, 2005, U.S. National Tsunami Hazard Mitigation Program public information products—B-roll footage, tsunami science, warnings, and preparedness: UNESCO/IOC International Tsunami Information Centre, 1 **DVD,** 57 min.

The Wave: a Japanese Folktale (9 min.) Animated film to start discussions of tsunami preparedness for children.

Waves of Destruction (60 min.) An episode of the "Savage Earth" series. Tsunamis around the Pacific Rim.

Who Wants to be Disaster Smart? (9 min.). Washington Military Department/Emergency Management Division. 2000. A game show format, along the lines of *Who Wants to be a Millionaire*?, for teens. Questions cover a range of different hazards.

The Wild Sea: Enjoy It...Safely (7 min.) Produced by the Ocean Shores Wash. Interpretive Center, this video deals with beach safety, including tsunamis. ♦

Infrequently Asked Questions

Where do I find information about Business Continuity rules and regulations?

Martin Myers has started a Disaster Recovery Rules and Regulations Webpage

"If you're like I am, I have kept my own list of rules and regulations pertaining to Business Continuity for years. I trade my list with fellow BC professionals for a copy of their prized list. We trade links for good sites where additional regulations may be found. This is a somewhat tedious activity, and certainly not a good way to share with the world of BC planning. Luckily, a fellow member of the DRJ (Disaster *Recovery Journal*) EAB had the idea to start a committee to compile a list of regulations that could be shared through the DRJ to the entire BC world.

We formed a team, shared our lists and on-line resources. Each team member scoured the internet and their own list of BC contacts to glean additional rules and regulations to include in our data base. After a few iterations we realized that our list will never truly be complete, and as long as there are lawmakers and bureaucrats, new laws will be added. We double-checked the list we had compiled, confirmed the links, categorized them as best we could, and we are now ready to release our data base to the BC world. Knowing full-well that our starting list will grow with your help.

The committee worked to categorize our findings in ways that will be helpful. There is a column for country, so the list may be sorted or searched in that manner. Where possible, we also indicated what industry the rule was likely to pertain to. At the bottom of our list we also share other links where a compiled list may be found.

We have cross-checked our list to be sure we have included all the items found elsewhere. We recognize that this list will always be growing as contributions are made, and those contributions are a vital part of the usefulness of tool.

The DRJ Rules & Regulations data base is intended to provide each of us a singular resource where we can go to and find the most complete and comprehensive list or BC-related rules and regulations. This can only be accomplished with you help. If you find a new regulation, send it to us. If you see a way to enhance this lest, let us know. This list is intended to help us all and is intend to be supported by us all as well." **Download the Spreadsheet** (MS Excel)

Acknowledgements: DRJ EAB Rules & Regulations Working Committee: Co-chairs were Martin Myers (Bank of America), and Yvonne Lewis (Canadian Imperial Bank of Commerce).Committee members included Dave Shimberg (Premeir, Inc.), Deidrich Towne (Forsythe), Glen Curole (Category 5 Services), Lisa Smallwood (Comprehensive Emergency Management Professionals), Peter Laz (Forsythe), and William Greenlee (Forsythe).

Martin Myers, MS, MBCP, is a Business Continuity Manager in the Card Services division of Bank of America. He has more than 19 years of experience in developing and evaluating disaster recovery and business continuity plans including emergency preparedness and response, and crisis management for prominent domestic and international companies. His work has taken him throughout the U.S., and to Canada, Bermuda, Panama, Costa Rica, Ireland, the United Kingdom, and South Korea. Mr. Myers is currently a member of the DRJ Editorial Advisory Board and is the Vice-President of the Contingency Planning Association of the Carolinas ("CPAC").

From: http://www.drj.com/index.php?option=com_content&task=view&id=713&Itemid=328 Accessed March 24, 2009

What is tsunami angst?

The "personal opinion" answer is posted at www.anorak.co.uk/anorak-in-america/196736.html

The message also gives a look at how some of the members of the public view tsunami evacuation signs. Tsunami awareness and education must be designed with opposing or uneducated opinions in mind.

Mea culpa: In an attempt to send my electronic mailing lists to the NTHMP, I lost the newest distribution list of about 15 names. From archived e-mails I found 10 names to reinstate. So….if you don't receive this notice, contact me. Seriously, if you know of anyone who recently requested n electronic subscription to *TsuInfo Alert,* please have them contact me. Their subscription "renewal" will automatically come with an apology.

NOAA Recognizes Jefferson County as TsunamiReady™

March 24, 2009. Jefferson County, Wash., has earned the NOAA National Weather Service TsunamiReady designation, better equipping emergency managers to prepare and warn its citizens about tsunamis. With this designation Washington is the first of the contiguous states to have all coastal counties earn TsunamiReady status. Jefferson County joins Clallam, Grays Harbor and Pacific counties as Tsuna-miReady.

Brad Colman, meteorologist-in-charge, and Ted Buehner, warning coordination meteorologist, from the National Weather Service forecast office in Seattle, Wash., will present a TsunamiReady toolkit to county officials on Thursday, March 26, at 2:00 p.m. at the Pope Marine Building, 100 Madison St., Port Townsend. The toolkit includes road signs that identify tsunami inundation zones, evacuation routes and safe areas.

The National Weather Service is encouraging coastal residents to take steps to prepare for a tsunami. "Preparation for disaster is everyone's responsibility. Develop your own emergency response plan, keep a disaster supply kit on hand and learn the tsunami warning signs," Colman said.

Bob Hamlin speaking with local citizens in Jefferson County, Wash.

From:
http://www.noaanews.noaa.gov/stories2009/20090324_jeffersoncountytsunamiready.html Accessed Mar. 26, 2009 ♦

Nations take steps to prepare for ever-present threat of tsunamis

A new warning system for Indonesia may reduce loss of life from deadly waves. Transcript of radio broadcast*:* Voice of America, *16 March 2009.* MP3 downloads of the program are available.

From: http://www.voanews.com/specialenglish/2009-03-16-voa1.cfm ♦

Emergency Responders Need Equipment Compatibility, DHS Official Says

A high-ranking official with the Department of Homeland Security says interoperability might be a buzzword these days, but that doesn't make it any less important. What does he say is standing in the way of implementing interoperable communications?

In an opinion piece on the Government Technology website, David Boyd, director of the Command, Control and Interoperability Division at the DHS's Directorate for Science and Technology, says the reality is that while we can keep improving the technology, until we settle cultural differences, we won't be able to implement the technology.

"Some emergency response agencies remain rooted in turf battles that make collaboration nearly impossible, while other agencies simply don't consider collaboration in their planning," Boyd writes.

"Without collaboration, interoperability can't occur. Command structures, procedures, protocols and shared agreements must be established among regional agencies for responders to provide swift, coordinated support during incidents."

So what should first response agencies do? Boyd says there needs to be a bottom-up approach to addressing interoperability. It's not up to the federal government to mandate how state and local agencies coordinate response, but instead the communities themselves need to make those decisions.

What the federal government can do is "lay out a road map, based on experience and best practices, whereby issues related to technology, standard operating procedures, training, exercises, governance and equipment usage can be shared with the emergency response community," Boyd adds. "The Department of Homeland Security's Office of Interoperability and Compatibility is doing just this by providing guiding principles that may help solve an individual community's problems, depending on that community's budget, manpower, need and other factors."

To read the full article, click here:
http://www.govtech.com/gt/625804?topic=117680

From: http://disaster-resource.com/newsletter/2009/subpages/v276/newsclip7.htm *Continuity e-Guide—A Wednesday Update* by *Disaster Resource Guide* #276.♦

Undersea Tonga Eruption Photos
http://www.boston.com/bigpicture/2009/03/undersea_eruptions_near_tonga.html
A multi-source collection of photographs capturing the March 13, 2009 eruption of an undersea volcano near Nuku'alofa, Tonga.

CREATING A *GO BAG*
By Vali Hawkins Mitchell, Ph.D.

Seasoned disaster planners get their own houses in order before helping others plan for emergencies. Preparing your own personal emergency *Go Bag* is a good start. This first level of survival planning assures that you will have some valued personal items and won't require immediate outside resources if you need to evacuate. You can go out the door in a hurry without making the normal and sometimes fatal blunders of people under extreme duress.

A *Go Bag* is not shelter-in-place preparation. A *Go Bag* is your custom-designed I'm-out-the-door-to-safety-right-now supply. Whether you call it a *Go Bag,* survival kit, emergency pack, shelter stay pack, or what I now call Oh-Oh-I-Forgot-To-Tell-My-Sister-How-To-Get-Ready-Before-Her-Family-Evacuated-The-Fire-That-Burned-13-Houses-In-Her-Neighborhood-So-Now-I'm-Telling-Everyone-Bag, preparing for a potential evacuation is good thinking.

Unfortunately, disasters don't check your schedule for convenient times. During a voluntary or mandatory evacuation there just won't be time to think through your choices calmly. You may not be interested in the complex workings of neurology and brain perception that are triggered during crisis. But if you are interested in emotional continuity management you know that people in crisis do really predictably crazy things. Survival behavior is often not a pretty sight.

You may find yourself in the path of a wildfire as the wind changes, a tanker truck or railroad car spilling random toxins, or a UFO invastion. Who knows what's around the corner in our world today? When something unexpected happens, people naturally try to grab and protect belongings. This is normal behavior. Unfortunately, normal doesn't cut it during a disaster! It is heart wrenching to see people run back into burning homes desparately trying to retrieve pets or valuables and come out with a phone book, an old pillow, a teaspoon, and a broken heart. If you are someone who teaches others to be ready for emergencies, take your own pulse first. Are you ready? Today, long before you may be required to make an exit, make your 5-MINUTE *GO BAG*.

1) RIGHT NOW: Get your backpack

    a) Obtain a backpack that you can carry. Purchased new, or old from a thrift store, a water resistant backpack allows you to keep both hands free.

2) RIGHT NOW: Create your 5-Minute *Go* List

    a) Go from room to room with a small notebook.

    b) In your notebook list the one thing in each room that you would be able to carry in your backpack that, if lost, you would suffer for the rest of your life (such as Grandma's wedding ring, the only photo of your deceased cousin, a special book, a wedding photo).

    c) List only one or two absolute treasures that fit in the *Go Bag* that you can grab as you are running through the house at breakneck speed with your list in hand because you have already pre-decided what you cannot live without. Make those critical choices NOW. If you can put those items in the *Go Bag* now, all the better. If not, list them on the 5 Minute *Go* List.

3) RIGHT NOW: List chores for the 5-Minute *Go* List.

    a) List the tasks you can manage alone. If you have help, you can assign tasks.

        Examples: Turn off the gas and lights. Turn off the water to the house.

                Insulin in the refrigerator

                Cell phone and flash-drives with back-up; batteries

                All critical work-related contact numbers, priority data, or hard copy of emergency plans that you may need to work from an off-site location for a week.

                Lock doors.

                Put the cat out.

                Keys.

                Follow pre-arranged meeting plan with family.

b) Add all your phone numbers, e-mail addresses as you might lose pre-programmed numbers and information. Remember, you only have 5 minutes. Call people AFTER you are out of your home and are safe.

c) Include any originals or copies of valuable documents. Credit card numbers, Social Security cards, birth certificates, passports, banking information, a DVD of photos of personal items for insurance purposes, and an old utility bill to prove your home is (or was) where you think it is right now.

d) Stage your *Go Bag* in a very convenient location.

e) Now start on *Go Bags* for all the other members of your family. As in airline safety, have 'your own oxygen mask in place before you help those around you. Even a toddler can carry a tiny backpack with a blanket, a sweater, extra diapers and a granola bar.

4) WHEN YOU GET MORE TIME

a) Add other personal survival items: three-day (or more) supply of extra medication, old pair of glasses, portable radio and batteries, granola bars, flashlight, etc.

b) I recommend earplugs since you might have to sleep in a shelter with 4,000 of your new best friends. And breath mints. And deodorant.

c) One change of seasonally appropriate clothes (rotate items each season) is necessary.

d) Some cash in small bills for purchases.

Good job! Now you can zoom through your house and out the door in 5 minutes if you get the dreaded *Midnight Knock On The Door*. What you want in your *Go Bag* is up to you. It doesn't have to be fancy or expensive. Once you have the basics in place you can improve the selection or upgrade anytime. Later, you can start a secondary *Go Bag* for the trunk of your car (keeping in mind that car trunks are not always secure; don't store anything valuable or critical there). As time and budget allows you can continue to build and improve long-term emergency supplies. If you just add one or two items to your grocery list each time you shop, you would soon have an ample emergency system in place.

But remember the **Dr. Vali's Spam Rule**: Store stuff you like. If you don't like Spam now…why would you want it during a disaster? On the other hand, I live in Hawaii and Spam is what's happening!

Wait…You Aren't Done Yet!

Grab your notebook and make the following entries:

➢ The 15-minute plan…meaning you have 15 minutes or less to exit. Follow the same guidelines as above, only think what you could do with an extra 10 minutes.

➢ The 30-minute plan… meaning you have 30 minutes or less to exit. Follow the same guidelines as above, only think what you could do with an extra 20 minutes.

➢ The 60-minute plan--- meaning you have 60 minutes or less to exit.

➢ The office *Go Bag*…meaning you have to evacuate from your worksite. This bag should contain similar items as your personal *Go Bag* but should **also** include critical workplace items: a hardcopy of the office disaster plan, critical flash drives, contact phone numbers, and emergency protocols.

Wait…You Still Aren't Done Yet!

Go Bag checklist:

___I prepared my 5 Minute *Go* List.

___I started creating a *Go Bag.*

___I'm working on all my other emergency plans at my own pace.

___I'm feeling better prepared and getting on with my wonderful non-emergency-there-is-no-disaster-now-life.

___I called my sister (or other loved ones) and got them started.

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