

OFFICIAL JOURNAL OF THE AUSTRALIAN INSTITUTE OF EMERGENCY SERVICES

VOLUME 18 NO. 5 SPRING 2005 PRINT POST PUBLICATION NO. PP337586/00067

HURRICANE KATRINA THE RESULTS ARE NOT ACCEPTABLE

* BEST PRACTICE IN EMERGENCY MANAGEMENT * HOW DO YOU VOLUNTEER? * NASA DETAILS EARTHQUAKE EFFECTS ON EARTH

bluelight

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Print Post Approved PP 337586/00067

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PUBLISHER

National Emergency Response is published by Countrywide Media

countrywidemedia

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WEB REGISTRATION

The new Website has been registered and is http://www.aies.net.au

WEBSITE CONTENT

The new Website has sections for each State as well as National Areas. If you have ideas for State Division content, please contact your State registrar, for National content, email web@aies.net.au.

Please be aware that all content must go past the National Registrar prior to web publication to ensure it meets required guidelines.



OFFICIAL JOURNAL OF THE AUSTRALIAN INSTITUTE OF EMERGENCY SERVIC

Volume 18 No. 5 Spring 2005

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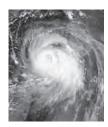
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Front Cover Photograph provided courtesy of NASA. It is a photo of Hurricane Katrina at 8:42am EDT on August 28, 2005. For more NASA images and information, go to www.nasa.gov



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FROM THE PRESIDENT'S DESK

Maurice E Massie

QPM, LFAIES, National President

t was pleasing to finally receive the Winter Edition of our magazine. I would like to thank all those responsible for the production and in particular, those who provided the various articles.

I found them most interesting, as I am sure other members did. It is obvious that this particular magazine relied very much on the contributions made by our Registrar, Bob Maul and I would especially thank him for his efforts.

The excellent article from Dallas Baker titled 'Volunteering in Paradise' was very interesting and is the sort of article that we would seek from other members. Dallas is a new member of our Tasmania Division having transferred from the Queensland Division.

It is important that members submit articles for publication in order that we maintain a viable magazine. It is only through this means that our publishers can sell the necessary advertising in order to cover the costs associated with its production and distribution.

WORLD EVENTS

It has been a devastating year thus far in respect to major events that have occurred. Firstly, the London bombings and attempted bombings have served to give rise to real concern and proved to be yet another example of the way our world is heading.

Following the event, the actions on the part of the London populous in returning so quickly to the subways so soon afterwards, highlighted the spirit of the people.

It brought out the 'Brits' psyche of the 'the stiff upper lip' and 'soldiering on regardless' which went a long way to negating the efforts of the terrorists in their resolve.

Secondly, the hurricanes Katrina and Rita, which have caused so many deaths and devastation in the Gulf Coast of America. It certainly pin-pointed the need for good and effective disaster planning and it was obvious that in relation to the hurricane Katrina, there were many short comings throughout all phases of the operation.

At the time of writing, news is coming out of Bali in Indonesia, that there have been at least three bombings, which have resulted in a number of deaths, one being an Australian, aged 16 years of age, with three other Australians who are reportedly critically injured.

It is almost three years to the day since the previous bombing which killed so many Australians. This event is particularly worrying being so close to home and affecting Australian citizens.

NATIONAL CONFERENCE AND EXPO GOLD COAST – 3, 4, & 5 NOVEMBER 2005



The time of this Conference is rapidly approaching and I would like to congratulate the Queensland Division on its initiative in organising the Conference.

The Conference theme being Earth, Water, Wind and Fire -

integration of Emergency Services, is certainly a relevant topic, particularly in the light of last year's Tsunami and the events mentioned in the preceding paragraph.

In accordance with the wish of General Council and of the Queensland Division, both I and our Registrar/ Secretary Bob Maul will be attending the Conference.

I will be interested to observe and note what the various speakers have to say and of course, what input comes from the floor of the Conference, particularly in relation to those matters which we, as an Institute, may be able to assist in identifying and rectifying any shortcomings.

ISSUES RAISED AT GENERAL COUNCIL IN MELBOURNE 2005 REQUIRING ACTION ON THE PART OF DIVISIONS

I am aware of the fact that our Registrar/Secretary Bob

Maul has now circularised minutes of the subject meeting and in those minutes are contained items that require specific attention on the part of Divisions. I would like to cite those particular matters and ask that Divisions address them at their earliest.

(3.3) Web Page Update

- The Board resolved that in order to ensure the currency of information on the website, each State Division is to appoint a person who will ensure that Mark Sawszak and Martin Page are provided with information updates for placement in that State's Section of the AIES web site.
- To facilitate this process, each Division is to send the items in the first instance to the National Web site address www.aies.net.au

(3.4) Divisional NER State Correspondents

From the comments made at Conference it is obvious that some Divisions have not identified within their Division a specific person to act as a National Correspondent. Articles for inclusion in NER are to be sent in Microsoft Word format to the following email sites: ner@aies.net.au and general.secretary@aies.net.au (National Registrar/ Secretary) as a back up.

(3.8) Membership

Following a report from the Registrar that our Membership was in decline and needed to be urgently addressed by Divisions.

Whilst it was suggested that a large drop in Membership could be attributed to the problems associated with the distribution of the NER magazine,

it was also evident that a large drop off had occurred due to age factors and retirements of members from Emergency Management Agencies. New blood was urgently needed to bolster numbers and Divisions should be approaching younger Emergency Management Operatives and encouraging them to join the Institute.

The Institute is the only independent forum which operatives have available to them. General Council resolved that each Division is to provide a report at next year's Council Meeting as to how they are addressing this issue.

15. CAPITATION FEES AND COUNCIL LEVY

The Council resolved that Capitation Fees due and payable to General Council need to be remitted to General Council by no later than the 31 March each year.

A statement as to how the Capitation Fees were arrived at is also to be submitted to General Council for National Accounts Audition purposes and submitted with the levy to the General Registrar.

The statement should cover a list of various members of each Division, i.e. all categories of members.

In view of this time frame, and having regard to the fact that the AIES works on a calendar financial year, from 1 January to 31 December, notices for the payment of subscriptions must be sent out to members no later than 30 September each year and the AGM of the Divisions must be held before 31 March each year, so that the accounts can be verified before submission to General Council.

26. DATE/VENUE OF NEXT A.G.M. AND GENERAL COUNCIL OF INSTITUTE

It was formally resolved that the next Annual Meeting of General Council and the next AGM of the Institute is to be held in Adelaide, South Australia, on 10 April, 2006. Divisions will need to include this date in their calendar of events.

FROM THE EDITOR'S DESK

Mark Sawszak MAIES

National Editor

What a busy period it has been. We have had floods, storms, hurricanes, tsunamis, terrorist attacks and the avian bird flu virus! First of all, I would like to extend my thanks to the editorial team, Mark Preston and Martin Page. Without your help we would not be able to pool articles together, update mailing labels and generally support getting the NER Journal out to our members with quality articles and fantastic pictures.

I must admit, there was an error in the last edition of NER under the article "Volunteering in Paradise". Special thanks go to Mrs Shirley Baker, wife of Dallas Baker for contributing the wonderful pictures for this article.

After receiving many comments concerning the website, Martin Page has made changes to the site. We have received positive feedback regarding the changes and hope that all members with internet access go and visit the website, www.aies.net.au. If you have any comments or suggestions for the website, please send them to the following email address: web@aies.net.au or to the registrar for your state.

We are still in desperate need of articles. If you could all make an effort to send through articles it would be greatly appreciated. The more articles we have the better we can theme our journal for that period. Deadlines for articles will be placed shortly on the website along with some guidelines. Articles should be emailed to ner@aies.net.au in Microsoft Word format, with photos supplied separately or you can send them in the old fashioned way by posting them to PO Box 6001 UNSW Sydney NSW 1466.



The more articles that we can get the better we can make our journal. Don't worry if you are not an expert at grammar, as we can help you in this quest. We check articles for content, spelling, consistency etc.

I hope we get some more articles from our members and a special thanks to those members and outside organisations that have contributed to the success of the National Emergency Response Journal.

I would also like to wish the Queensland Division of AIES every success in their upcoming Conference to be held on the Gold Coast. I understand at the time of going to print that this Conference may have already concluded. If not, I urge you to attend. Details can be found on the AIES website under the Queensland State Page.

BEST PRACTICE IN EMERGENCY MANAGEMENT – OVERSEAS UNIVERSITIES

Gaye Cameron MAIES

Manager, Emergency Management Unit, University of New South Wales, Australia

(This is an abridged version of Ms Cameron's overseas study tour on emergency management practices in overseas universities. If space permits, the rest of her paper may be published in future editions of our journal.)

FOREWORD

I have been actively involved in emergency management in one way shape or form since leaving school over eighteen years ago. During this time, I have seen and actively been involved with disasters on a large scale - Newcastle Earthquake, Thredbo Landslide, Sydney Bush Fires, and the Sydney Hail Storm, which also affected UNSW. From being an emergency worker, to now an emergency manager, I cannot stress how important emergency planning is as a critical strategic tool for any organisation - including a University.

I have learnt many lessons in life, and I would like to dedicate this paper to my family for their love and support, my partner Mark for his patience and understanding, and to two great mentors, the late Naval Commander John Jeppeson – former Division Controller, State Emergency Service, and to Mr Robert (Bob) Maul – retired District Emergency Management Officer (Sydney East Region), for their years of experiences, skills and knowledge passed down to me.

Anyone or any organisation, including a University, is vulnerable to incidents and emergencies. This can be through individual's actions, malicious actions of an 'organisation', by instrument of a man-made thing that goes wrong, or just a simple natural disaster. Some organisations and people are especially susceptible because they live in unusually hazardous environments - such as a University, but others are vulnerable because of in-built characteristics, which impair their ability to protect themselves from or respond to crisis situations.

From the beginning of February through to the beginning of April, 2005, I travelled around the world and visited six Universities, which are part of the Universitas21 Organisation. (http://www.universitas21.org). These included:

- The University of British Columbia, Vancouver, Canada;
- McGill University, Montreal, Canada;
- University of Glasgow, United Kingdom;
- University of Edinburgh, United Kingdom,
- University of Hong Kong, Hong Kong, and the
- National University of Singapore, Singapore.



By visiting these six Universities, I was able to capture a global perspective across various cultures on what best practices Universities have in place for managing emergencies. I must

comment, the diversity of cultures, in my mind, is one outcome from this study. Canadian Universities take on the emergency management models publicised by the Federal Emergency Management Authority (FEMA) in the United States, compared to Asia, where they base their models more on 'military' operations. I can also state that 'terrorism' has also added 'salt to the wound' in respect to the organisations implementing emergency management.

"Emergency Planning at UBC consists of several functions which include **Emergency Preparedness Training; Fire** Safety Training; Assistance in developing Department Fire and Safety Plans; Maintaining the UBC Disaster Response Plan; Testing and exercising emergency plans; Development of the Emergency **Operations Centre and Development of** an Emergency Social Services Program."

University of British Columbia (UBC), only 30 minutes from the heart of downtown Vancouver, holds an international reputation for excellence in advanced research and learning. The spectacular UBC campus is a 'must-see' for anyone who goes to Vancouver. While I was there, I saw the snow-capped mountains as they meet the ocean, and the other breathtaking views that you see around every corner. UBC boasts some of Vancouver city's best attractions and recreation facilities, including the Museum of Anthropology, the Chan Centre for the Performing Arts, the UBC Botanical Garden and Centre for Plant Research, and endless opportunities to explore forested trails in the adjoining 763-hectare Pacific Spirit Regional Park. The main campus is situated on 402

5



hectares, which is surrounded by the 763 hectare forested parkland. It has 412 buildings which range in size including multi storey buildings. UBC has a student population of 43,000 students (38,000 Undergraduates, 8,000 Post Graduates).

Emergency Planning at UBC consists of several functions which include Emergency Preparedness Training; Fire Safety Training; Assistance in developing Department Fire and Safety Plans; Maintaining the UBC Disaster Response Plan; Testing and exercising emergency plans; Development of the Emergency Operations Centre and Development of an Emergency Social Services Program.

Emergency Planning falls under their Department of Health, Safety and Environment, same as the University of New South Wales (UNSW). I was impressed with the emergency arrangements that were in place. Their dedicated Emergency Planning Coordinator, whose background is paramedical services, has developed a network of both internal and external stakeholders, to ensure UBC is emergency prepared. The University works closely with the Provincial Emergency Program, which is part of the British Columbia Government, Ministry of Public Safety & Solicitor General. The reasoning behind this, as a large infrastructure, two of the highest risks that UBC faces are 'wild fires' and 'earthquakes'.

"What impressed me was that the University has gone one step further with emergency planning, and has established a dedicated 'Emergency Operations Centre', a large room which also doubles as a 'Multi Media Room'..."

What impressed me was that the University has gone one step further with emergency planning, and has established a dedicated 'Emergency Operations Centre', a large room which also doubles as a 'Multi Media Room', and has six other small offices, toilets adjoining. This EOC has independent power, parking, and has other communications built in, including radio for other public utilities. Once a year, UBC tests the operations of this centre, by conducting a 'real' drill for stakeholders to attend, and at a simulated incident/emergency.

Another issue that was outstanding was the relationship between the Security and Emergency Planning Coordinator. They both come from different divisions within UBC, but together they serve the same community in an emergency. This amicable relationship is critical to ensure a university is better prepared to respond and recover from any incident or emergency. This working relationship is the same as UNSW – the Emergency Management Unit falls under Human Resources, whereas Security falls under Facilities Management. Together the two have a great working relationship, which is imperative to ensure there is a quick response and recovery from any incident or emergency.

UBC also had an 'active' Emergency Planning Committee. The Chairperson of the Committee was the Executive Officer of the Vice President or Vice Chancellor (UNSW equal). I was fortunate enough to be at UBC when the quarterly meeting was being held. The Committee members were comprised of Executive Officers from Human Resources, Facilities Management, Planning and Development, Insurance/Finance, Emergency Planning Coordinator, Counselling Services, other key stakeholders of UBC, and sitting in the committee as an observer and contributor was a Representative from the Provincial Emergency Program (Government Representative), who I would liken to our District Emergency Management Officer (DEMO) equal. This planning committee is vital to ensure major stakeholders within the University have a greater appreciation and understanding of emergency management, and that it is a management tool, especially when contemplating 'business continuity planning'. It was great to see the Emergency Planning Coordinator received full support from this committee, which aid her in coordinating University services in emergencies and exercises.

An issue which I was seeking out for this study was how other universities tackle the issue of dealing with persons with disabilities during emergency situations. UBC Emergency Planning Coordinator advised me that emergency planning arrangements took into account persons with disabilities, especially in times of evacuations.

There was also a census at UBC, that persons with disabilities were accommodated as close to the ground floor where possible, and the emergency teams within the buildings were informed as to where persons with disabilities would be located in times of emergencies. It was also noted, in their emergency procedures, a person who had a disability, in particular a person in a wheelchair would be accommodated in a fire stair, or a high fire rated area, and where possible, an emergency warden or a volunteer would remain with the person until public emergency services arrived to evacuate the person, unless such circumstances prevail the person to evacuate with or without the disabled person. This issue had been controversial for sometime, and I do believe could never be black or white.

Moving across from the west coast of Canada to the east coast, I stopped at Montreal, to visit McGill University.

The weather was spectacular with blizzards, -11 degrees Celsius, snowing. With Mount Royal as a backdrop to McGill's main campus, it sits in the heart of downtown Montreal, one of the most exciting cities I have personally experienced in Canada, with three million residents and four universities.

The Downtown Campus encompasses 35 hectares compared to its counterpart at UBC which has 402 hectares. Its mix of cultures and languages makes it a dynamic place, which includes museums, restaurants, skyscrapers, nightclubs and beautiful public parks. What made it more interesting, Montreal's first language is



French, which was a challenge in itself for me. The campus is a mosaic of historic and modern buildings. The Downtown Campus is an oasis of green and beauty in the centre of a safe, sophisticated and uniquely bilingual city. McGill has a smaller population of students compared to UBC – 29,000 students

(22,500 Undergraduates, and approximately 6,500 Post Graduate students).

Emergency Planning is coordinated by Security, which falls under Central Administration (Human Resources). The Safety and Environment department has some input into the writing of the procedures, but have no direct impact upon its implementation. In discussions with the Security Manager, they did have outside interaction with the emergency services, primarily in respect to response to the campus.

The campus was also fortunate to have buildings occupied by one, maybe two faculties/divisions, whereas at UNSW, a majority of our buildings have multiple occupants. One interesting aspect that McGill had in place with their security was that in the event of an incident or emergency, staff/personnel were encouraged to call their public emergency number (911), security were able to monitor outgoing calls from the campus to this number, which would identify who was making the call, their extension and location from where the call was made. Security was then able to dispatch a patrol to the origin of call, and investigate the emergency. This was a great set up, but could not guarantee security the identity of who made the call, nor a full description of what was happening, or had happened.

When I asked about McGill's Emergency (Disaster) Plan, they responded that they didn't have one in place. The University has 'emergency procedures' which cover the fundamental basics (fire, chemical spill, bomb threat etc.), but did not have a 'site emergency plan' like UNSW. When asked the question if they had a person similar to our 'District Emergency Management Officer', I was advised that Montreal falls under the Province of Quebec, and the Department of Transport administered 'Security and Emergency Preparedness'.

The Security Manager at McGill liaises closely with the Occupational Safety Unit, to ensure there is an efficient response/recovery from chemical, biological and radiation incidents. Like Australia, the Fire Services in Canada also respond CBR incidents. As well as this, the Security Manager also reports directly to the Deputy Vice Chancellor, who is McGill's Chief Emergency Officer, much similar to the University of NSW. Like UBC, I asked McGill if, when organising their emergency plans, how they factor in persons with disabilities. Although not directly written in their procedures, their equity unit has mentioned it in their policies.

After experiencing the artic cold of Montreal, it was time to travel to the United Kingdom, Scotland. First port of call is the University of Glasgow. My first impression of the University was 'wow'. The University of Glasgow dates from the middle of the fifteenth century. Its history matches its architecture. With deep entrenched history, finding information regarding this institution would be easy. Its history has been written since 1450. I was introduced to Professor Robin Leake, Vice Principal, Physical Sciences & Engineering. Through this introduction, I gained a sound knowledge and understanding of this great institute.

I met with the team from Safety and Environmental Protection Services (SEPS), who gave me an in-depth briefing about the services they provide, in regards to emergency arrangements, in particular to fire preparedness, chemical, biological and radiation mitigation strategies, and how they communicate with Security Services, which fall under a separate department (Estate Services). I was impressed that the University of Glasgow has a fulltime employed person who is the Fire Safety Officer. One of his many roles was to conduct the in-house training, not only on the use of fire extinguishers, but he also completed building audits, to ensure the buildings maintained strict fire regulations. It is interesting to note, in the last five years, Glasgow University lost a building to a fire - Biological Sciences Building. This event was shared at all the Universities I travelled to, except for Hong Kong. UNSW has been blessed to have not had this take place.

Fire Regulations in Glasgow are quite stringent. It was very interesting to note the similarities with UNSW and Glasgow, in particular Facilities Management, Campus Services, and Security. Through various meetings, I was also able to discern similarities with UNSW Emergency Management Arrangements. Although SEPS coordinated and wrote the emergency instructions, it is actually 'estates/facilities' management, who implement the arrangements. That is, respond to the incident/ emergency, supply resources, personnel and others to maintain business continuity, and assist in the recovery from the event.

Glasgow University also had an active Emergency Planning Committee, which met every three months. The Campus has an Emergency Operation Centre, where key stakeholders respond to in an emergency, and centrally coordinate resources and personnel to an event, and also manage the recovery.

Emergency management arrangements for personnel with disabilities are in parallel to the arrangements set in place at UNSW. Many of the buildings at Glasgow are old, and have heritage conditions placed on them, so lifts and elevators are a luxury. Security arrangements at Glasgow University are of a high order and performed very professionally by highly trained staff who are clad in immaculate uniforms. The University has a very close working relationship with police, fire, and ambulance services. It takes security very seriously, and major crime, in particular theft, was low.

Overall, I would say from Glasgow's lengthy history and its experiences with emergencies in the past, they are well prepared for any incident or emergency. The entity's emergency planning arrangements are very thorough and well rehearsed.

AND HOW DO YOU VOLUNTEER? EMERGENCY MANAGEMENT VOLUNTEERS SUMMIT 2005

Steve Anderson MAIES-NSW



rganised by the AEMVF and hosted by EMA, almost 400 representatives of state and territory emergency services gathered in Canberra for two and a half days of rich and rewarding networking, striving to assist the forum in developing some future directions, whilst also sharing information of the forum's achievements to date. Delegates were sourced from all states and territories of Australia and 15 representatives were from Canada, Fiji and New Zealand.

The delegates were sourced from all Emergency Service organisations, volunteers and volunteer managers including ADRA, AIES, Anglicare, Australian Council of

State Emergency Services, AFAC, Australian Red Cross, AVCG, Australian Volunteer Firefighters Association, Convention of Ambulance Authorities, Royal Volunteer Coastal Patrol, SES Volunteers Association, St Johns Ambulance, St Vincent de Paul, SLSA, Salvation Army, Volunteering Australia, VRA and others.

INAUGURAL CONFERENCE OCTOBER 2001

As part of the United Nations International Year of the Volunteer the National Volunteers' summit was held in Canberra. This was the first ever summit for emergency sector volunteers. The main themes examined then were training, funding, legal/protection and recognition. The most tangible outcome from the 2001 summit was the formation of the AEMVF. The forum acts as a focal point and advocate for the member organisations on sector wide issues.

"A national forum representative of the volunteer emergency management sector, to facilitate better communication between the organisations within it, and to provide advocacy for the sector and its members."

The AEMVF was formed as a result of a recommendation by the delegates at the 2002 National Volunteers' Summit.

The inaugural meeting of the AEMVF was held in Canberra on 11/4/02 and defined the forum as "A national forum representative of the volunteer emergency management sector, to facilitate better communication between the organisations within it, and to provide advocacy for the sector and its members."

At this meeting, the attendees agreed that the objectives of the forum would be:

- To foster communication between its members and with government
- To share information
- To provide advocacy, particularly on behalf of the NGOS
- To focus on recognition, training, legal/protection and funding

APRIL 2005 CONFERENCE

Delegates were primed, expectations were fostered and as for the writer, a feeling of humility of being around so many champions of volunteering from all around Australia and from other parts of the world.

DAY 1 Tuesday 5/4/05

This day was taken up with pre conference registration and a networking cup of coffee and a chance to catch up with some old acquaintances from previous conferences, education and ES involvement.

Then the participants loaded onto 3 buses for the short trip to Reid for the visit to the National Emergency Service Memorial. In Kings Park on the shores of Lake Burley Griffin we gathered and were greeted by Mr. Neil Head from EMA.

The presentation was opened with 1 minute's silence to remember colleagues who had been injured or died in service of the community. A timely reflection with the recent loss of servicemen in the helicopter crash in Indonesia.

The memorial depicts distinct stages of emergency work including communication and preparation, direct response, engagement, rescue, respite and relief. Sue-Anne Fulton, project coordinator from the National Capital Authority, explained how the memorial was conceived to recognise the tragic loss of life during the 1998 Victorian bushfires.

Salvation Army Lieutenant-Colonel John Staite said that the memorial "represents those that have reached out in doing their job and paid the supreme sacrifice for their community".

Delegates inspected the memorial up close, a highly recommended stop for all volunteers visiting Canberra. Visitors should take some time to inspect the memorial, possibly late afternoon to early evening as the receding light changes your view every minute ending up with the memorial illuminated during the night.

Delegates then boarded the bus for the return journey to the National Convention Centre for the welcome reception. Director General of Emergency Management Australia welcomed dignitaries, attendees and guests to the summit.

At the reception, Attorney-General the Hon. Philip Ruddock MP, said that Australia was fortunate to be served by more than 500,000 emergency sector volunteers with exceptional skills and outstanding abilities. Describing Australia as "a land of extremes", he said that the risks of bushfires, floods and cyclones are ever present, giving the example of Cyclone Ingrid in March putting hundreds of communities on alert. On top of this, the Attorney-General said "the risk of terrorist attack has now added a new and urgent dimension to our emergency management planning".

"The Attorney-General said that governments can never hope to replicate the work volunteers do, "ordinary Australians are in the best position to work for the good of their community and overcome the problems they face".

The Attorney-General said that governments can never hope to replicate the work volunteers do, "ordinary Australians are in the best position to work for the good of their community and overcome the problems they face". The Attorney-General stated, "The government recognises the expertise you provide in this area. Accordingly, the government has allocated \$16 million for a national Emergency Volunteer Support Fund."

The Attorney-General finished his address saying, "I know you don't volunteer for money, personal reward or grand recognition. You volunteer because you care, because you want to make a difference and because you want to contribute to our great country. On behalf of the Australian Government, I want to assure you that your efforts, your dedication, professionalism and sheer hard work are well and truly recognised and appreciated".

The Attorney-General then announced the winners of the 'Emergency Management Volunteers in Action' photographic competition. The competition, sponsored by the Harvey Norman Group, had two strands. In the professional stream there were 18 entries, while there were 185 entries in the amateur/volunteer stream.

The Attorney-General said that the photo competition was designed to capture that decisive moment. All entries had to tell a story - a story of leadership, professionalism, teamwork, camaraderie, community spirit - bringing the role of volunteers to life.

Day 2 Wednesday 6/4/05

The Hon. John Landy, Administrator of the Commonwealth of Australia, officially opened the 2005 summit.

The Administrator said he was honoured to be among so many dedicated Australians who make such extraordinary contributions to our nation. "The (recent) tragic event off Nias Island serves as poignant reminder of the vulnerability and uncertainty of life for all men and women who serve in potentially dangerous circumstances."

"Above all, I see your role as one of active citizenship. I respect and applaud the work volunteers do and extend my encouragement and heartfelt thanks for your commitment. Whatever your role in emergency management, I trust you will find great value in this summit."

Administrator Landy finished his address by saying "Above all, I see your role as one of active citizenship. I respect and applaud the work volunteers do and extend my encouragement and heartfelt thanks for your commitment. Whatever your role in emergency management, I trust you will find great value in this summit."

Next there was a presentation by Mr. Michael Carmody, Commissioner of Taxation from The Australian Tax Office who used the opportunity to launch two new publications for the non-profit sector:

- Volunteers and Tax explains the tax treatment of common payments made to volunteers. It provides guidance on the GST, fringe benefits tax and pay as you go withholding obligations that may arise on transactions involving volunteers.
- 2.Non-Profit Organisations and Fundraising explains the various concessions that exist under the income tax, GST and fringe benefits laws to assist non profit organisations with their fundraising activities.

These two publications are part of a range of products prepared for non profit organisations.

REPORT CARD FROM THE NATIONAL SUMMIT FOR EMERGENCY MANAGEMENT VOLUNTEERS 2001

The chair of the AEMVF, Major General Brian (Hori) Howard then presented the key-note address of the summit, by first tracing the development of volunteer organisations involved in managing emergencies, from 2001 until the present day and outlined what the future may hold.

Before 2001, there was no real sense of togetherness amongst volunteer organisations. They worked well during emergencies, but did not regard themselves as a sector. Two events in 2001 changed this:

1. The first Emergency Management Volunteers' Summit

2. The Council of Australian Governments review into natural disasters.

This review recognised the vital role played by the emergency management volunteer organisations.

One of the most tangible outcomes was the formation of a volunteer emergency management sector.

The 2001 summit also provided input into the COAG review into natural disasters which was also significant to the future of the sector. The report called on all levels of government to provide increased assistance to volunteer emergency management organisations.

The forum has made steady progress, concentrating on sharing ideas and achieving peak body status for the sector. With EMA's support it is now conducting a major survey into the costs of being a volunteer. In explaining the purpose of the 2005 summit, Major General Howard said that the forum is seeking advice on the vision for the sector's future and would continue to pursue the first summit's four main themes.

1. Recognition 2.Legal/protection 3.Training 4.Funding. In concluding his keynote address, Major General Howard said "The emergency management sector is the backbone of Australia's emergency management system. As a collective, it is effective and efficient. Governments and the community however must acknowledge the sector's stresses and strains..."

DRIVERS FOR CHANGE - "THERE IS ONLY ONE CERTAINTY- CHANGE IS PART OF LIFE" Dr. Fiona Wood, Australian of the Year 2005, Director of the Burns Unit at Perth Hospital.

What a fantastic and uplifting experience to hear a visionary and what a strong leader. She had planned and exercised for a large scale disaster five years before the Bali tragedy. This resulted in world wide praise and recognition for ground breaking research into burns treatment and the treatment provided by the burns unit at the Royal Perth Hospital. She emphasised the need for collaboration, planning and exercising and for first responders to be well trained because what they do initially can minimise the long term effects on victims.

"We should take the challenge, not to be driven but to be driving the change from the front". Dr. Wood gave an example of "living, pulsating spirit of positiveness".

On reflection of her experiences, she said, "We should take the challenge, not to be driven but to be driving the change from the front". Dr. Wood gave an example of "living, pulsating spirit of positiveness". Imagine a meteor is going to hit earth, one group of people are going to be saying "we're all going to die". The other group, the change leaders like volunteers and emergency managers, are saying "we're getting ready for a really big fireworks show".

As for the writer, I am still thinking about this fireworks show. Can we raise some money? Can we run a chook raffle? Can we sell a sausage sizzle? Can we get some media for it? Let's lift the profile of the organisation. Can we recruit some members out of it?

Dr. Wood stated that, "The drivers for change should be societal and it starts with you and in universities and schools. Children are vital in the whole scheme of things and we should facilitate positivism around them."

A thoroughly uplifting presentation. An inspiring preamble to the business end of the summit and work that the delegates were about to launch into. "Change - It's a challenge - but it is doable." Then it was down to work.

Discussion forum sessions facilitators, Mr. Paul Mitchell and Ms. Heidi Reeve from the company 'The Human Enterprise', continued the high energy theme throughout the remaining forum sessions extracting from the delegates high quality work. Helping the AEMVF form policy direction. When approached to facilitate the summit 'The Human Enterprise' said they would be honoured to participate, provided they could volunteer their services.

Delegates were able to quickly and easily contribute their ideas by using a new conferencing technology called I-meet to facilitate the best outcomes for the summit.

The project manager for I-meet, Mr. Stephen Coleman, said that this was the largest event so far that had utilised this technology. This enabled delegates in small groups to discuss and contribute ideas they knew would be heard.

During these sessions summit delegates identified the following pressures for change.

SUMMIT ATTENDEES IDENTIFIED THE FOLLOWING PRESSURES FOR CHANGE

Demographics

- Ageing population
- Rural versus metro
- Generation x

Participation Constraints

- Family
- Personal
- Legal
- Time • Work
- WOIN

Community Expectations

• Demand for higher standards of service

- Litigation
- Full service

Resourcing

- Funding
- Training

- People
- Skills attrition
- Workload
- Nature
- Time Sensitive
- Busy lifestyle

ATTENDEES THEN IDENTIFIED EXAMPLES OF BEST PRACTICE

Acknowledgement

- Buddy system
- Awards
- Social Functions
- Training
- Profiling your organisation to the community
- Two-way communication
- Employer support

Demographics

- Targeted recruiting
- Flexible training programs

Advocacy

- Network / connecting
- Family
- Social functions
- Community involvement
- Training

Professional & Personal Development

- Benchmarking
- Leadership
- Training
- Personal development
- Youth development
- Career path

Day 3 Thursday 7/4/05

ENHANCING LINKS TO BENEFIT VOLUNTEERS AND THEIR COMMUNITIES

Mr. Len Foster, Chief Executive Officer, Australian Fire Authorities Council.

Mr. Foster maintained that developing two-way linkages with communities and establishing strategic national perspectives were two crucial factors that would help meet the challenges facing the emergency management volunteers sector in Australia.

Some of the issues that Mr Foster discussed were emergency services being insular and reactionary. He confirmed the mindset change that was needed from the tactical issues of the previous summit to the strategic issues that the sector needed to address, to ensure success today and into the future. He outlined the significant changes in community expectations, particularly over the last ten years.

These have driven change. Issues like an increase in litigiousness, and the way the community viewed volunteers.



On this the writer is not sure that there is even enough education or knowledge of the community whether 'that team on tonight's news is actually unpaid professionals'.

"These have driven change. Issues like an increase in litigiousness, and the way the community viewed volunteers. On this the writer is not sure that there is even enough education or knowledge of the community whether 'that team on tonight's news is actually unpaid professionals'."

We must recognise that the community is the most important strategic partner that we have. But this requires a community to be empowered so that the community is actually working with us. An informed and prepared community will reduce the efforts required in our response activity and improve our ability to recover after events. To be successful, to relate to their community and to develop understanding, emergency service organisations need to develop marketing, promotional and advocacy programs to help engage with the community.

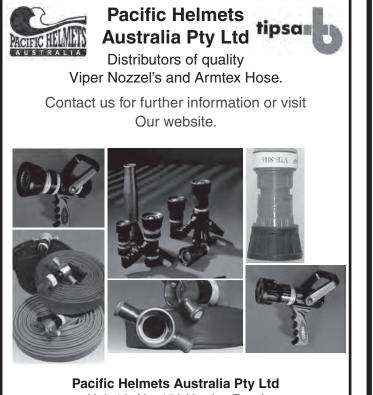
Scale cannot be ignored. It is vital that emergency service organisations move from the local to the corporate organisational structure. ESO ignoring issues of the concept of scale do so at risk of great peril. Maybe even to their demise.

Then more forum discussion was initiated, enhancing links to further benefit volunteers and their communities.

PARTNERSHIPS ENHANCING OUTCOMES FOR COMMUNITIES:

Formal / Strategic

- Documented & ongoing
- Accountable
- Charters, MOUs,
- Legislation
- Reporting
- Education resources
- Advisory committee



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- Consultancy groups
- Inter-agency

Informal

- School visits
- Community education
- Sausage sizzle
- Joint training
- Demonstrations
- Work with service clubs
- Funding sponsorships
- Managing relationships

Multi-Agency

- Training including exercises
- Plans interoperability documentation
- Consultative forums
- Economies of scale

PARTNERSHIP IN PLACE TO ENHANCE OUTCOMES FOR VOLUNTEERS:

- Training
- Formal & informal recognition
- Flexible learning options
- Memorandum of Understandings
- Funding / fundraising / sponsorship
- Reimbursement for volunteers
- Networks of EM volunteer resource centres
- Volunteer incentives member benefit cards, fly buys, discount cards etc.

TYPES OF PROGRAMS

- Media
- Employers
- Businesses
- Local government
- Surveys
- Benefits schemes
- Social opportunities

A plenary session then took place where 5 volunteers from around Australia shared their motivations for volunteering. Five different organisations were represented.

"He strongly advised the conference delegates that they should cease hoping and waiting for governments to help, saying that volunteers should help themselves."

A session was then presented by the AEMVF Chair Major General Howard on his summation of the summit. He said whilst he recognised that there were pressures facing the sector, these pressures were not unmanageable. He strongly advised the conference delegates that they should cease hoping and waiting for governments to help, saying that volunteers should help themselves. Communications within and between organisations was seen as a major factor that would assist volunteers to manage change. Major General Howard said the 4 main issues from this summit that the forum would take back were:

- 1. As good two-way communication is essential within the sector, the AEMVF website was to be developed as a priority. Regular newsletters, chat rooms, bulletin boards and examples of best case achievements was to be developed.
- 2. The summit yielded offers of sharing of information of research findings on recruiting and retention of volunteers. These would be made available to the sector.
- 3. At the next meeting of the AEMVF, the summit recommendations and best practice examples would be analysed and distilled by the forum.
- 4. That the emergency management environment had a number of advocates and the minister would take the forum recommendation items to the next meeting of the Augmented Australian Police Ministers Council.

The summit closing address was then presented by Commissioner Phil Koperberg, NSW Rural Fire Service.

Commissioner Koperberg stated that "By far the great majority of services provided to the welfare of the broader Australian community are provided by volunteers. In this contemporary age of accountability, more and more is expected of volunteers across a range of community services both at the emergency level and welfare level. Agencies have to ensure that non-core activity resulting in additional burdens on volunteers is kept to a minimum if the good will of volunteers is to be maintained."

He said "We need to ensure that in 20 years time we are not sitting in this room discussing the same issues. We need to provide an environment in which volunteers can efficiently and effectively discharge their duties".

Volunteerism is something in which the community has an enormous investment and those who volunteer must be supported to enable them to deliver their services unimpeded.

NASA DETAILS EARTHQUAKE EFFECTS ON EARTH



Tsunami Destroys Lhoknga, Indonesia - January 10, 2003 Before Earthquake

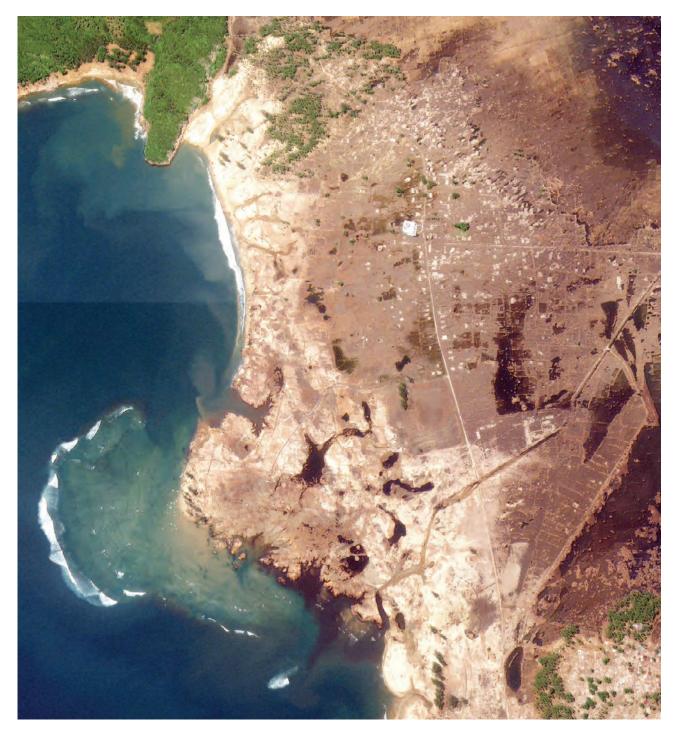
NEWS RELEASE JANUARY 2005

ASA scientists using data from the Indonesian earthquake calculated it affected Earth's rotation, decreased the length of day, slightly changed the planet's shape, and shifted the North Pole by centimetres. The earthquake that created the huge tsunami also changed the Earth's rotation.

Dr. Richard Gross of NASA's Jet Propulsion Laboratory, Pasadena, California, and Dr. Benjamin Fong Chao, of NASA's Goddard Space Flight Centre, Greenbelt, Md., said all earthquakes have some affect on Earth's rotation. It's just they are usually barely noticeable. "Any worldly event that involves the movement of mass affects the Earth's rotation, from seasonal weather down to driving a car," Chao said.

Gross and Chao have been routinely calculating earthquakes' effects in changing the Earth's rotation in both length-of-day as well as changes in Earth's gravitational field.

They also study changes in polar motion that is shifting the North Pole. The "mean North pole" was shifted by about 2.5 centimetres (1 inch) in the direction of 145 degrees East Longitude. This shift east is continuing a long-term seismic trend identified in previous studies.



Tsunami Destroys Lhoknga, Indonesia December 29, 2004 After Earthquake

They also found the earthquake decreased the length of day by 2.68 microseconds. Physically, this is like a spinning skater drawing arms closer to the body resulting in a faster spin.

The quake also affected the Earth's shape. They found Earth's oblateness (flattening on the top and bulging at the equator) decreased by a small amount.

It decreased about one part in 10 billion, continuing the trend of earthquakes making Earth less oblate.

To make a comparison about the mass that was shifted as a result of the earthquake, and how it affected the Earth, Chao compares it to the great Three-Gorge reservoir of China. If filled, the gorge would hold 40 cubic kilometres (10 trillion gallons) of water.

That shift of mass would increase the length of day by only 0.06 microseconds and make the Earth only very slightly more round in the middle and flat on the top.

It would shift the pole position by about two centimetres (0.8 inch).

The researchers concluded the Sumatra earthquake caused a length of day change too small to detect, but it can be calculated. It also caused an oblateness change barely detectable, and a pole shift large enough to be possibly identified.

They hope to detect the length of day signal and pole



Left to Right: Tsunami Strikes Sri Lanka , January 1, 2004 Before Earthquake. Tsunami Strikes Sri Lanka, December 26, 2004 After Earthquake.

shift when Earth rotation data from ground based and space-borne position sensors are reviewed.

The researchers used data from the Harvard

University Centroid Moment Tensor database that catalogs large earthquakes.

The data is calculated in a set of formulas, and the results are reported and updated on a NASA Web site.

The massive earthquake off the west coast of Indonesia on December 26, 2004, registered a magnitude of nine on the new "moment" scale (modified Richter scale) that indicates the size of earthquakes.

It was the fourth largest earthquake in one hundred years and largest since the 1964 Prince William Sound, Alaska, earthquake.



Tsunami Damage in Northern Sumatra, December 29, 2004 After Earthquake. Tsunami Damage in Northern Sumatra, December 17, 2004 Before Earthquake

The devastating mega thrust earthquake occurred as a result of the India and Burma plates coming together. It was caused by the release of stresses that developed as the India plate slid beneath the overriding Burma plate.

The fault dislocation, or earthquake, consisted of a downward sliding of one plate relative to the overlying plate. The net effect was a slightly more compact Earth. The India plate began its descent into the mantle at the Sunda trench that lies west of the earthquake's epicentre.

For information and images on the Web, visit: http:// www.nasa.gov/vision/earth/lookingatearth/indonesia_ quake.html



HURRICANE KATRINA "THE RESULTS ARE NOT ACCEPTABLE" PART 1

Gunnar J. Kuepper

Chief of Operations, Emergency & Disaster Management, Inc.



West Chalmette, New Orleans, Louisiana. Oil is leaking from the storage facility in Chalmette into this neighbourhood. The New Orleans flood water contains mould, oil, gas, and things not identifiable. Hundreds of thousands of people have been displaced by Hurricane Katrina. They need water, ice, food, housing, and jobs. MARVIN NAUMAN/FEMA photo

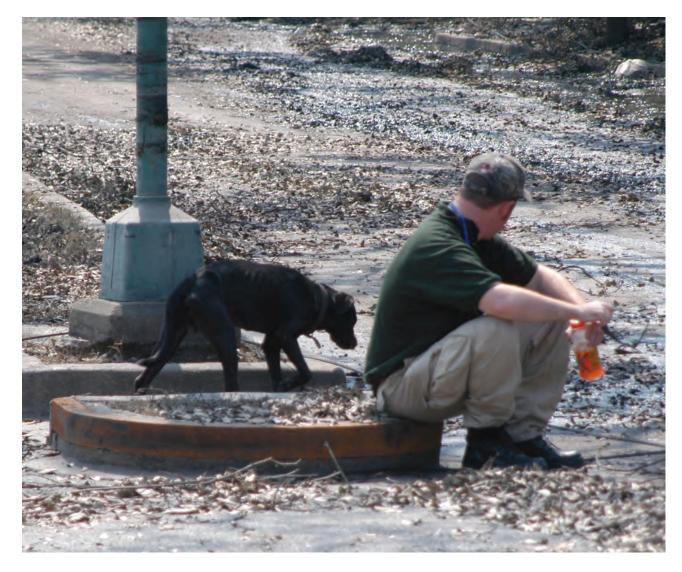
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New Orleans, Louisiana. A dog, seeking affection, food and water, slowly approaches a rescue worker. Thousands of animals were left to wander the streets after being unwillingly left behind by their owners when the city was evacuated because of Hurricane Katrina. Win Henderson/FEMA photo

INTRODUCTION

Hurricane "Katrina" hit the US Gulf Coast of Mexico about 7am on Monday, August 29 with enormous destructive force. More than 240 people have been confirmed dead so far and that number is expected to go up significantly. Katrina will most likely be the costliest hurricane, if not the costliest natural disaster, that has ever hit the United States. Damage estimates range from US \$10 to 25 billion, whereas we at EDM consider damages and economic consequences of up to US \$100 billion as realistic predictions.

At least 1.3 million households were without power. Tens of thousands of houses and businesses are destroyed or severely damaged. Many transportation routes, including streets, waterways, and airports are not functioning or damaged. Some areas have not been completely surveyed and searched and therefore information is not complete.

Until Friday, September 2, the situation in New Orleans had dramatically deteriorated and could only be described as catastrophic. Water continued to flow into the city from the broken levees. The situation was chaotic; electricity, phone, drinking water, and sewage services are still completely broken down.

Thousands of people have been air rescued and evacuated from rooftops mainly by the US Coast Guard and other military helicopters. Bodies have been floating in the waters or lying on the streets. Search and recovery operations started in New Orleans on Sunday, September 4. The number of deaths is still unknown, it may reach thousands. As of September 5, we at EDM expect a figure not exceeding 2,000, but that is a conservative estimate.

On Thursday, September 1, rescue boats and helicopters were attacked, and some supply vehicles had been stopped and robbed at gunpoint. On the same day, the situation of ten of thousands of people trapped at the Superdome, the Convention Centre, and several other places within the city, had reached a point of suffering and calamity rarely seen in the western world. Many of those suffering included special needs or elderly people, as well as infants and young children.

On Wednesday, August 31, the entire federal disaster response machinery, which consist of tens of thousands of emergency workers and military personnel was activated and mobilised.

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On Thursday, September 1, three days after impact, the federal government still did not seem to have even a general idea about the situation particularly in the city of New Orleans. Central coordination did not appear to exist as of the end of Thursday, September 1. A few thousand people had been bussed from the New Orleans Superdome to the Houston Astrodome, but tens of thousands of others were left at the Superdome and the Convention Centre until Friday, September 2 without water, food, medical attention or security.

Communication between the city, the state, and federal agencies was virtually nonexistent. Until Friday, emergency services were rarely, if at all, seen in the city. Rumours and conflicting messages were widespread. It seemed that only the media was able to provide some data and images from the area and its catastrophic conditions.

As of Friday morning, September 2, only a fraction of these much needed resources had reached the city of New Orleans. Remarkably, even US President Bush said, "the results are unacceptable".

HISTORY OF HURRICANES IN THE US

In the last one hundred years only three category 5 hurricanes made landfall in the US.

- In 1935 the "Labour Day" Hurricane
- In 1969 Hurricane Camille
- On August 24, 1992 at 4:30am, Hurricane Andrew made landfall with sustaining winds of 145 mph and gusts exceeding 175 mph (260 km/h) in the southern part of the greater Miami area; up to 50 people died and damages exceeded US \$20 billion. Shortly after noon on August 25, Hurricane Andrew was about 150 miles south of New Orleans, threatening to strike the Louisiana coast with sustained winds at 140 mph. Avoiding a disastrous outcome for the city, the hurricane changed course to the west and made landfall between the cities of New Iberia and Lafayette in Louisiana.

OTHER NOTABLE HURRICANES

• On September 8, 1900, strong winds of up to 195 km/h and a massive surge destroyed most of the harbour city Galveston, located at the Gulf Coast in Texas. At least 6,000 of its 37,000 residents were killed and another 6,000 died along the Gulf Coast region.

HURRICANES AND FLOODING IN NEW ORLEANS

- 1915 Category 4 Hurricane
- 1927 Widespread flooding along the Mississippi River; thousands of people lost homes and were left without food
- 1957 Hurricane Audrey with a storm surge of up to 12 feet (4 metres)
- 1965 September Category 3 Hurricane Betsy at the time the most destructive hurricane in history; hit the South Florida region and again made landfall with wind gusts



urricane Katrina August 28, 2005 at 11:45 a.m.

exceeding 145 mph before midnight on September 9 over the low Mississippi River Delta; in Louisiana more than 27,000 houses were destroyed or severely damaged; 17,000 people were injured and 58 people died; New

Orleans: the Mississippi River rose more than ten feet. The city's levee system could not hold back the large quantities of water; the massive pumping system, even in 1965 the largest in the world, failed when nearly all parts of New Orleans lost power. More than 300 city blocks were submerged and countless residents had to rescue themselves on the rooftops.

Some residences were flooded to ceiling level in less than thirty minutes, in other areas the inundation was delayed until hours after the storm had passed. Throughout the US, the hurricane caused 75 deaths and damages of up to US \$7.4 billion.

PATH OF THE HURRICANE:

On Monday morning, August 29, around 7:15am, Katrina made landfall in the state of Louisiana in the Parish Plaquemines south of the town of Buras, located approximately 50 miles (80 km) south of New Orleans.

With wind speeds of up to 140 mph (225 km/h), Katrina made landfall as a Category 4 hurricane.

The prediction of the hurricane path was extremely accurate. The National Oceanic and Atmospheric Administration (NOAA) National Hurricane Centre anticipated landfall in the Gulf Coast region surrounding New Orleans 60 hours prior.

The predicted landfall 24 hours prior was only 15 miles (24 km) off, and the 12 hours predicted landfall was less than 10 miles (16 km) off from the true landfall location.

Due to these exact predictions, the city of New Orleans and other coastal regions ordered a mandatory evacuation early on Sunday, August 28. It is estimated that approximately 80% of the residents of New Orleans left the city.

In the early afternoon of Tuesday, August 30, the storm system had moved to the state of Tennessee with wind speeds of 35 mph (56 km/h), Katrina was downgraded to a tropical depression. The storm system was still moving with the speed of 25 mph (34 km/h), dumped up to 8 inches (20 cm) of rain, and was accompanied by tornadoes in the inland areas.

IMPACTED REGIONS AND CITIES

The path of destruction at the coastal areas spread over a distance of 200 miles from west of New Orleans to Pensacola in Florida. People, property, and infrastructure along the Gulf of Mexico in Louisiana, Mississippi, Alabama, and Florida were directly hit.

STATE OF ALABAMA

- Robert Riley, Governor
- Population 4.5 million
- At least 2 deaths
- Approximately 720,000 households and businesses without electricity

City of Mobile:

• Population 200,000

• Flooding reached 11 feet, matching a record set in 1917 The Cochrane-Africatown USA Bridge was struck by the PSS Chemul, a 13,000-ton semi-submersible accommodation/ maintenance vessel owned by PEMEX. It had been dry docked on a heavy lift barge for repair and refurbishment when it broke free Monday about 11am The vessel collided with a dock, and struck a barge loader near the dock. The top of the Chemul reportedly struck a side of the bridge and the vessel pivoted into the bridge, becoming lodged.

STATE OF MISSISSIPPI

- Haley Barbour, Governor
- Population approximately 3 million
- Capital City Jackson
- Population density in the inland counties is approximately 10 people per square mile; density increases in the coastal regions to up to 250 people per square mile
- Only 44 miles of coastline.

TIMELINE

Tuesday, August 30:

• at least 900,000 people without electricity

Thursday, September 1:

 841,000 people without power, electricity restored for 25,000; Telephone services down; Highway 90 impassable due to sand, debris and other damage to pavement.

Thursday, September 8:

• Power restored to 76% of Mississippi Power customers; full restoration expected for Sep 11; 85% of the Cellular South network in the three coastal counties was up and running.



Coastal counties (from west to east):

- Hancock County Harrison County Jackson County
- Harrison County: Population nearly 200,000, 80 fatalities unconfirmed

City of Biloxi: Population 50,000 significant damages to restaurants, shopping centres, churches: heavy damage particularly in the eastern part; neighbourhood of Point Cadet completely isolated; multi-storey apartment complex at the beachfront collapsed, at least 30 people killed.

City of D'Iberville: Population 8,000 Missionary Baptist Church destroyed, damage to local high school

City of Gulfport: Population 75,000 on 57 square miles located 75 miles east of New Orleans

Hancock County: Population 45,000

City of Waveland: Population 7,000. All structures within half a mile of waterfront were completely destroyed.

Jackson County: At least 18 deaths

City of Long Beach: Population 15,500

City of Moss Point: Population 16,000

City of Pascagoula: Population 26,000 Mayor Matthew Avara, estimated 25,000 left homeless in the wake of the hurricane

STATE OF LOUISIANA

- Kathleen Blanco, Governor
- Mitch Landrieu, Lieutenant Governor
- Population 4.5 Million
- State is divided into 64 counties known officially as parishes



Capitol City Baton Rouge

Population 230,000, located inland 75 miles north of New Orleans

TIMELINE:

Friday, August 26:

• Governor Kathleen Blanco declared a state of emergency

Sunday, August 28:

• Governor Blanco wrote to President Bush because the situation was "beyond the capabilities of the state and affected local governments"

Wednesday, August 31:

• 3,780 National Guard were activated

Impact:

- At least 715,000 households without electricity
- Estimated 750,000 phone lines out of service in the most heavily damaged areas (according to BellSouth Corp., the region's leading local phone provider)

SAINT BERNARD PARISH

City of Chalmette

- Parish seat
- Population 33,000 on 7.3 square miles
- Elevation: 7 feet
- Location 7 miles east of downtown New Orleans
- Flooded when segments of the Inner Harbour Navigation Channel gave way

JEFFERSON PARISH

Population 480,000

The sprawling parish stretches from Grand Isle on the Gulf of Mexico to Lake Pontchartrain in the north, and includes some of the metropolitan area's most exclusive neighbourhoods. Different from New Orleans, hurricane

Spring 2005 • National Emergency Response

Katrina brought destruction to a much wider economic cross-section. With police checkpoints on every major street corner and ID checks for parish residents, looting was not a major concern.

In the enclave of Old Metairie, the rows of mansion homes sustained little structural damage from the storm itself but had some of the worst flooding. Only a few windows were broken and the live oaks survived. Water rippled up to the knobs at front doors and completely covered high-end vehicles in garages.

On Monday, September 5 residents were allowed to return to their homes and were happy to see that the storm had spared most of their houses. About 15% of the parish is flooded. Some homeowners were considering a lawsuit against the federal government for having a levee that could survive no more than a Category 3 hurricane.

NEW ORLEANS

Metropolitan Area (identical with Orleans Parish):

• Population 1.4 million on a landmass of 180 square miles (470 square kilometres)

New Orleans City:

- 490,000 people in 190,000 households
- Nearly 70% of the population is African-American
- Estimated 30% of the population lives below poverty line
- Median household income: nearly US \$30,000 annually
- Subtropical climate with mild winters and hot, humid summers; in January daily highs are around 62° Fahrenheit, in July, lows average 74° F, and highs average 91° F. On average, 60 inches of precipitation falls annually.

Emergency Services:

The city maintains a fire department with 759 personnel operating out of 33 fire stations. The city's health department is responsible for EMS (Emergency Medical Services) which includes transport by ambulance.

Nearest major cities: Baton Rouge (75 miles north, population 230,000), Alexandria (230 miles northwest, population 130,000), Houston (350 miles west, population 2 million), Shreveport (360 miles northwest, population 400,000), Atlanta (470 miles northeast, population 430,000), Mayor Ray Nagin, elected into office in 2002

TIMELINE:

Sunday, August 28:

- The National Weather Service predicted landfall near the City of New Orleans, a mandatory evacuation is ordered and around 300,000 people flee the city with their own modes of transportation, at least 10,000 people line up to seek shelter in the Superdome
- During the night the water level of Lake Pontchartrain rose several feet



Monday, August 29:

- Around 7am Hurricane Katrina made landfall approximately 50 miles south of the city
- Around 7am the floodwall on the eastern side of the Industrial Canal broke open in at least two places; the 9th ward of New Orleans became inundated with floodwaters up to 10 feet deep



Tuesday, August 30:

- Around 1:30am at 17th Street Canal at the western border to Jefferson Parish, the rising waters of Lake Pontchartrain overflow the concrete levee and eroded the structure's earthen base; this led to the collapse of a 200 yard section of flood barriers; within a day.
- Approximately 80% of the city was flooded up to 20 feet (7 metres) deep.
- A 300-foot section of the floodwall at London Avenue Canal had given way.
- Electricity, clean water, and sewage systems failed completely, as well as most of the phone system.
- Drinking water, ice, and gasoline was not available within a 45 miles radius of the city.
- At least 20,000 people were sheltered in the Superdome in deteriorating conditions; power and A/C were out, toilets were not working and were overflowing.
- Hundreds of people were rescued by helicopters and boats from roofs or the attics of flooded houses.
- The initial storm impact and subsequent destruction

caused by the 145 mph winds was severe but sustainable. Some high-rises, including the Hyatt Hotel had almost all windows blown out, street signs were mangled, brick walls crumbled and destroyed parked cars in the French Quarter, and trees had fallen on streetcar tracks and roofs.

"The flooding of the city was only indirectly caused by the hurricane. Large parts of New Orleans are located below sea level and the city is protected by a complex system of canals and levees. The New Orleans District has 350 miles of protection levees, built to withstand hurricane Category 3 storms."

The flooding of the city was only indirectly caused by the hurricane. Large parts of New Orleans are located below sea level and the city is protected by a complex system of canals and levees. The New Orleans District has 350 miles of protection levees, built to withstand hurricane Category 3 storms.

The initial wave of storm surge that poured over the floodwall of the 17th Street Canal dug a 26-foot-deep gouge on the other side. This resulted in the failure of several wall panels. With another breach at the London Avenue canals, the city, and particularly the neighbourhoods of Lakeview, Pontchartrain Shores, and Pontchartrain Gardens, became inundated with water up to 20 feet (7 metres) deep.

The south shore of Lake Pontchartrain forms the northern border of New Orleans. With a length of 40 miles (65 kilometres) and a width of 25 miles (45 kilometres), it is the second largest saltwater lake in the US. The lake averages a depth of 12 to 14 feet (3.6 to 4.2 metres). To the east, the Rigolets Strait connects to another lake, which in turn connects to the Gulf of Mexico.

The US Army Corps of Engineers is responsible for repairing the dam breaks near the 17th Street canal and at the London Avenue canal floodwall at 6100 Pratt Drive. The federal agency has exclusive jurisdiction for maintaining the levee system and repairing the breaches.

Continued in NER Journal Vol 18, No 6 Summer.

NEW AIES MEMBERS

We are pleased to announce that the following persons have become members of our Institute since the last edition of NER was published. From this edition onwards we intend to include the names of members who join the Institute.

Name	Affiliation	State
Aaron Leinonen	Flinders Medical Centre	SA
Aprel Baldey	Queensland SES	QLD
Carleen Hitchins	Tasmania SES	TAS
Catherine Patrick	Royal Adelaide Hospital	SA
Colin Irwin	New South Wales Police	NSW
Commissioner Franklin Bridgewater	St John Ambulance	SA
Dallas Baker	Lachlan Fire Brigade	QLD
Daniel Martin	Royal Adelaide Hospital	SA
David Mack	South Australian Metropolitan Fire Service	SA
David Tingey	South Australian Ambulance Service	SA
Debbie Harrop	South Australian Ambulance Service	SA
Digby Longhurst	Tasmania SES	TAS
Dr Alan Capps	Royal Adelaide Hospital	SA
Dr Brett Ritchie	Women's & Children's Hospital	SA
Dr Gerry Newmeister	Flinders Medical Centre	SA
Dr Hugh Grantham	South Australian Ambulance Service	SA
Dr Ivan Bastian	Institute of Medical/Veterinary Science	SA
Dr Mark Boyd	Flinders Medical Centre	SA
Dr Mark Moore	North Adelaide Hospital	SA
Dr Peter Riddell	Flinders Medical Centre	SA
Dr Timothy Semple	North Adelaide Hospital	SA
Edward Bennett	Queensland Police Service	QLD
Heather Dodd	Royal Adelaide Hospital	SA
Helen Isles	Fire and Emergency Services Authority	WA
Joy Booth	North Adelaide Hospital	SA
Justin Kibell	Victoria SES	VIC
Karl Krelle	Tasmania Police	TAS
Lewis Winter	Bunbury City Council	WA
Margeret Maloney	Royal Adelaide Hospital	SA
Martin Boyle	Tasmania SES	TAS
Michael Wilcox	Fire and Emergency Services Authority	WA
Neil Mills	Flinders Medical Centre	SA
Paul Miller	Department of Health	SA
Rebacca Paech	Royal Adelaide Hospital	SA
Richard Turnbull	Institute of Medical/Veterinary Science	SA
Robert Atkinson	Department of Health	SA
Vanessa Dittmar	Department of Health	SA
Wayne Banks	Queensland Police Service	QLD
Wendy Scheil	Department of Health	SA
Wing Commander Dr Andrew Pearce	Royal Adelaide Hospital	SA

MEMBERS EMAIL LIST

As an aid to members, and the ongoing task of keeping in touch with our members, we will be creating a National Email List of interested member's email addresses so we can email updates and announcements. If you are interested in adding your email address to this list (separate from the NER Mailing Database) and receiving these announcements in the future, email your state registrar (listed on the AIES Contacts page) or web@aies.net.au with the subject of the email being email list.

AUSTRALIAN CONFERENCES

2005

Fire Safety 2005 International Conference "Sea-Road-Rail"

November 2-4, Melbourne

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Fire at sea, on road or rail has its own unique challenges and needs to be addressed with specific methods developed to ensure lives are not placed at even greater risk. The conference will have a number of keynote speakers drawn from national and international experts. For more information, go to: www.rocarm.com/Registration.htm

Australian Bomb Data Centre Conference 2005

November 29 - December 1, Canberra The Australian Bomb Data Centre will be hosting the 14th Annual Conference from 29 November to 1 December 2005. The conference will be held at the National Convention

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Centre in Canberra. Due to the nature of the conference, registration is restricted to police, military and related government participants.

For more information, go to:www.afp.gov.au/afp/page.GovCorporate/ABDC/Home.htm

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Fire Safety sea Road

2005 International Cor

2006

4th Annual National Security Australia 2006 Conference

February 27-28, 2006, Sydney

The National Security Australia series of annual forums is Australia's leading national security event. National Security Australia is proud to announce the 4th Annual National Security Australia 2006 Forum scheduled for 27–28 February 2006 at the Sydney Convention and Exhibition Centre.

For more information, go to: www.nationalsecurityaus.com

NZSEE Annual Conference 2006

"Remembering Napier 1931 – Building on 75 Years of Earthquake Engineering in New Zealand"

April 10-12, 2006, New Zealand

Next year's conference will be in Napier to mark the 75th Anniversary of the 1931 Napier Earthquake that devastated the city. Napier is having a series of events in February 2006 to mark the anniversary, and this will be capped off by our annual conference there. For more information, go to: www.nzsee.org.nz/EVENTS/events.shtml

18th International Symposium on the Forensic Sciences

"Forensic Sciences: Classroom to Courtroom" April 2-7, 2006, Western Australia

The theme of the Symposium, Forensic Science: Classroom to Courtroom, emphasises the importance of scientific research and education as the foundation stone of forensic practice. This conference will be held at the Esplanade Hotel Fremantle in Western Australia. For more information, go to: www.anzfss2006.org.au

Rescue Expo 2006 "Emergency Services Working Together"

May 19-21, 2006, Hawkesbury It's time for the Rescue Expo again, and in 2006 it's in Hawkesbury again. Location will be the Hawkesbury Showground in Clarendon from the 19-21 May. For more information, go to: www.rescueexpo.com.au

Australasian Bushfire Conference 2006

"Life in a Fire-Prone Environment: Translating Science into Practice" June 6-9, 2006, Brisbane

The Bushfire 2006 theme aims to provide a forum to share new ideas on the complex issues of bushfire management. The Conference encourages communication between agencies and groups involved in bushfire management,

to build upon the lessons learnt from previous bushfire campaigns, to facilitate a new understanding of the role of fire in the landscape.

For more information, go to: www.bushfire2006.com

AFAC/IFCAA Bushfire CRC Conference "Building our Legacy"

August 10-13, 2006, Melbourne

Changes in Climate, Demography and Technology will dictate our direction forward. The conference will present a future landscape based upon the legacy of today's research and development, management processes and all the various influencers of fire and emergency management.

More information can be found at: www.afac2006.org/

2008

2008 IAWP Training Conference "Policing New Territory"

September 2008, Darwin

"Policing New Territory emphasises the important role of law enforcement leadership in creating safer and more secure communities and the need for a law enforcement environment, which envisions the future in its people and their diversity."

For more information go to: www.nt.gov.au/pfes/police/community/iawp/index.htm



NATIONAL



Symposium on the

Forensic Sciences

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Application for admission to AUSTRALIAN INSTITUTE OF EMERGENCY SERVICES (ABN 75 050 033 764)



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Completed Application forms with fees should be forwarded to the Division Registrar in the State where you normally reside. Further information may also be obtained by contacting your Division Registrar or General Registrar of the Institute at the following addresses:

NATIONAL COUNCIL

The General Registrar Australian Institute of Emergency Services (General Council) 14, No 159 Middle Head Road Mosman, NSW 2088 Fax: (02) 9265 4830 or E-mail: general.registrar@aies.net.au National Web Site: www.aies.net.au

TASMANIA

The Registrar TAS Division of Australian Institute of Emergency Services PO Box 1 Lindisfarne, TAS 7015 E-mail: registrar.tas@aies.net.au

QUEENSLAND

The Registrar QLD Division of Australian Institute of Emergency Services P O Box 590 Fortitude Valley, QLD 4006 E-mail: registrar.qld@aies.net.au

WHAT ARE THE INSTITUTE'S AIMS

To provide a professional body for the study of the roles and functions of Emergency Services and Emergency Management Organisations throughout Australia, and the promotion and advancement of professional standards in these and associated services.

THE INSTITUTES OBJECTIVES ARE:

- To raise the status and advance the interests of the profession of emergency management and counter disaster services administration.
- To represent generally the views and interests of the profession and to promote a high standard of integrity and efficiency in the skills of emergency and counter disaster administration.
- To provide opportunities for association among members and students to promote and protect their mutual interest.
- To facilitate full interchange of concepts and techniques amongst members.
- To bring to the notice of the public such matters that are deemed to be important for safety and protection of the community and to promote research and development of emergency services generally.
- To establish a national organisation to foster international cooperation in counter disaster services administration.

WHAT THE INSTITUTE OFFERS YOU:

- An opportunity to be part of a progressive Australia wide Institute dedicated to the progression and recognition of the Emergency Service role in the community.
- An independent forum where you can be heard and your opinions shared with other emergency service members.
- A journal with information from institutes and other sources around the world in addition to the interchange of views between Divisions in Australia, as well as access to the Institute web site.
- Reduced fees for members at Institute Seminars and Conferences and an information service supplied by professional experienced officers.
- A Certificate of Membership.
- The opportunity to use the initials of the particular membership status after your name.

ACT, NEW SOUTH WALES AND NEW ZEALAND

The Registrar

NSW Division of Australian Institute of Emergency Services PO Box 149 Ryde, NSW 1680 E-mail: registrar.act@aies.net.au, registrar.nsw@aies.net.au, registrar.nz@aies.net.au

SOUTH AUSTRALIA, WESTERN AUSTRALIA AND NORTHERN TERRITORY

The Registrar SA Division of Australian Institute of Emergency Services 16 Greenfinch Crescent Wynnvale, SA 5127 E-mail: registrar.nt@aies.net.au, registrar.sa@aies.net.au, registrar.was@aies.net.au

VICTORIA

The Registrar - VIC Division of Australian Institute of Emergency Services. C/O- 44 Webb Street Warrandyte, VIC 3113 Email: registrar.vic@aies.net.au

• Corporate members receive a bronze plaque free of charge and can advertise on the AIES Web Site, as well as provide articles for inclusion in the Institute's journal.

WHAT DOES MEMBERSHIP COST:

Nomination Fee:	\$20.00
Annual Subscription:	\$30.00
Fellows:	\$40.00
Corporate Subscription:	\$250.00
Note: Institute Fees may be	tax deductible.

MEMBERSHIP:

There are four classes of membership:

Members • Fellows • Life Fellows • Corporate
There are five categories of affiliation with the Institute that may be offered to persons who do not meet the requirements for membership:
Associate • Student Member • Retired Member • Honorary
Member • Honorary Fellow

WHO CAN JOIN:

Applications for membership will be considered from persons who are at least twenty-one years of age and who:

- Are members of a permanent emergency service or associated service with at least two years experience, or
- Are volunteer members of emergency or associated services with a minimum of four years experience as an emergency services member.

Admission as a member may be granted if in the opinion of the General Council the applicant meets all other conditions of membership and passes such examinations and/or other tests as may be required by General Council.

WHERE DO MEMBERS COME FROM:

• Ambulance Service • Community Services • Emergency Equipment Industry • Emergency Management Organisations. • Fire Services • Health, Medical and Nursing Services • Mines Rescue • Police Service • Safety Officers • SES • Transport Services • Volunteer Marine Rescue • Volunteer Rescue Associations

AIES NATIONAL CONTACTS

NATIONAL (GENERAL) COUNCIL

National President
Maurice Massie, QPM., LFAIES
General Registrar/Company Secretary
Bob Maul, LFAIES., JP

Phone: (03) 6248 6373 Email: president.national@aies.net.au Phone: (02) 9969 9216 Email: general.secretary@aies.net.au

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