

Lessons from Louisiana, and a new normal in disasters

Journalist Kate Lahey talks to U.S. Colonel Joey Booth about sharing the lessons we learn from major disasters in the USA and Australia.



Colonel Joseph Booth

Colonel Joey Booth is an experienced emergency commander in the USA who is keen to exchange ideas with his Australian counterparts and doesn't mince words. "What we don't need to be doing," he said, "is learning the same lessons from different bloody noses."

Col. Booth has copped one of the bloodiest. He was Deputy Superintendent of Louisiana State Police in 2005, when *Hurricane Katrina* hit the Gulf Coast and killed more than 1 800 people, flooding New Orleans and changing what he thought he knew about disasters. He was incident commander over preparation and response for *Katrina* and later for *Hurricane Rita*. Today, he is Executive Director of the Stephenson Disaster Management Institute, at Louisiana State University. The institute works to improve disaster response management through research and education and by forging stronger collaboration between research and practice.

In July 2013, Col. Booth traveled from the USA to Australia to share his knowledge and forge new relationships that he hopes will benefit both countries as they grapple with a 'new normal' in natural disasters. Col. Booth spoke about this concept at the Emergency Management Conference in Melbourne. He also met with staff from the Australian Emergency Management Institute and other groups from the

emergency sector, as well as representatives of the private sector.

Col. Booth said it was critical to be able to share knowledge in the way that Australia and the US have agreed to do under a Memorandum of Understanding, first signed in 2010, and especially so in the new environment authorities are now operating under. In his presentation to the conference, Col. Booth discussed the increased frequency and cost of disasters, the increase in the number of people affected and - in contrast - the reduction in deaths from disasters between the years 1900-2011.¹

Col. Booth said that although 'big' disasters were getting bigger and more frequent, our improved capabilities in both preparation and response were the reason fewer people were dying in disasters.

"Our ability to reach disaster-affected areas is far greater, our ability to get resources anywhere in the world very quickly is far better than it was in the early years of that reporting period," Col. Booth said in an interview on his return to the USA. Plus, some of the bigger death tolls earlier in the reporting period were due to disease epidemics, which can now be better predicted and immunised against, he said.

As if he needed any more convincing of the 'new normal,' on his way to Australia Col. Booth had been reading news online about wildfires in Colorado.

"It said that Colorado had had record-setting fire seasons three of the last four years. Every year they break the record. Now that's the new normal. We're breaking records on magnitude and scope of disaster, numbers of disasters. As someone said, we're having a 100-year-flood every three years now," Col. Booth said.

About a dozen major wildfires burned parts of Colorado during the US summer in 2013 under record-high temperatures. One fire, known as the Black Forest Fire, caused the evacuation of 40 000 people and destroyed 500 homes, making it the most destructive in Colorado's history. Two people died.

¹ Supporting data showing these trends can be found at EM-DAT: The OFDA/CRED International Disaster Database - www.emdat.be - Université catholique de Louvain - Brussels - Belgium.

Across the USA in June, there were actually fewer fires than average for the month but they burned more area than average, according to the National Climatic Data Centre. At the same time, according to the data centre, there were about four times as many records broken for warmer temperatures (2 800) than there were for records broken for cooler temperatures.

More severe weather is not the only 'new normal'. Other factors creating the new environment were economic constraints, a lower reliance on government and stronger ties with the private sector, Col. Booth said.

Last year in the United States, economic constraints were particularly tight as automatic cuts (to a total value of US\$85 billion) were enforced throughout government departments under what is known as budget sequestration.

The US Department of Homeland Security, which includes the Federal Emergency Management Agency (FEMA), was made to absorb about US\$3 billion in reductions in seven months, about five per cent of its budget.

In February, shortly before the cuts came in to force, the then secretary of the department, Janet Napolitano, told a Senate Committee, "cuts to FEMA would have significant, negative impacts on our nation's disaster preparedness, response and recovery efforts".²

Sequestration also reduced the US Disaster Relief Fund by over US\$1 billion.

Col. Booth said the reduction in funding, which also affected the military, would mean it would take more work to prepare for disasters.

"We're going to have fewer resources to put on to problems than we did before and this comes at a time when we're having a higher number of disasters and a higher demand for those resources.

"We've got to take a risk analysis approach and look at what our threats are and what we can do for low cost in advance of a disaster. I think the resilience quality that we're going to get is not going to be that we're better responders but that we're better prepared," Col. Booth said.

Under constrained resources, people would also need to be less reliant on government help, he said. "Twenty years ago, if something happened, as soon as the disaster passed you were out in your yard cleaning up. Over the years our government programs have grown to be so enormous and so effective that people go straight to the government program. I've heard people talk about a tree blowing down in somebody's yard and rather than clean it up themselves, they'd sit and wait for weeks for someone to come and clean it up for them.

"As we get in a more resource-constrained environment, you're going to see people having to go back to the way we used to do things and have a greater dependency on their own ability to meet their needs," Col. Booth said.

People needed to consider that emergency services would not always meet demand, and practise basic survival preparation, like keeping enough water to last up to five days and storing non-perishable goods at home, he said.

"There's going to be more of an emphasis on that standard of making sure people know how to fend for themselves for the first three to five days following a major disaster. And there needs to be," he said.

More than eight years after *Hurricane Katrina* unleashed its fury on New Orleans, the recovery process continues. Many residents who fled are yet to return, and others are only just returning now. Among the assumptions authorities made in preparing for *Katrina* was that they would evacuate New Orleans in advance, then be able to send everyone home once the hurricane had passed. Instead, levees failed and the city flooded, leaving people stranded both in and out. Col. Booth said one of the biggest problems in helping the city to recover was that local businesses could no longer function. This taught him the importance of getting the private sector back on its feet as soon as possible.

"I really learned that we had not considered that as part of our plan. It just wasn't how government looked at what is recovery. The more I studied this over the years, the more we started collaborating with the private sector and learning what we need to do." Col. Booth said.

The Stephenson Disaster Management Institute is now one of several organisations behind The Louisiana Business Emergency Operations Center (LA BEOC). The centre is dedicated to disaster preparedness, response and recovery for business. It facilitates communication with the state's major industries, as well as owners and operators of critical infrastructure and resources. The LA BEOC is also set up to co-ordinate private sector involvement and support during a time of crisis. Col. Booth said that during other storms since *Katrina*, recovery was slower than it could have been as utilities and services were out and commerce wasn't functioning.

"We started looking at ways to exchange information with the private sector and work with them to help get them back up to normal operating tempo as soon as possible because, in the United States in particular, so much of our critical infrastructure is owned and operated by the private sector, including telecommunications and other really vital infrastructure that has to be operating for government to recover its operation.

"There's a real symbiosis there that has to be dealt with and managed. There's an information exchange and a co-operative platform that has to be established. We had a tendency in the past where, well if in this

2 Written testimony of Secretary Napolitano to the Senate Committee Appropriations Hearing. At: www.dhs.gov/news/2013/02/14/written-testimony-secretary-napolitano-senate-committee-appropriations-hearing.

area, if electricity was out, we would just send in mass amounts of supplies into the area. But when you're giving out free commodities in front of stores that could be opened, you're not helping them come back into business.

"So our priority is not just to get free commodities in the affected area. Our priority is 'what does it take to get those businesses back open?' Small businesses tended to be the least prepared, partly because small business operators often lacked time," Col. Booth said.

To convince small business owners to properly prepare, it was important to focus on the business case for it. In other words, show them a return on investment. This has included highlighting what their insurance doesn't actually cover (despite what they might think it does) and impressing what happens if they are closed and customers get used to shopping elsewhere. Businesses in Louisiana were now being encouraged to plan for any interruption, not just a massive natural disaster, Col. Booth said.

"We're trying to make them understand it doesn't have to be a [one in] 100-year disaster to affect your business or change your life. Even if a pipe breaks in the business above you, or there's a fire on the floor below you, or if someone breaks the key off in the lock at four o'clock in the morning, or if you're a bakery [owner] and your guy who delivers the flour doesn't show up, those can be single points of failure and/or reliance on critical dependencies that may fail. So we're saying, use a contingency model where you have to be prepared for those kinds of interruptions," he added.

Resilience, he said, was about being prepared to deal with an interruption in normal process. "It's far beyond a disaster," Col Booth said.

Insurance companies could also play a stronger role in building resilient communities. "There's got to be a way where we quantify what the value of preparedness is and put some incentives in place to encourage people to be better insured," he said.

In the United States, flood insurance is offered to homeowners, renters and businesses via the FEMA-administered National Flood Insurance Program. Standard home insurance does not cover flooding. The government established the flood program in 1968. To access it, communities must adopt regulations that meet or exceed FEMA requirements to reduce the risk of flooding. The program, however, is tens of billions of dollars in the red. In January 2013, the U.S. Congress passed legislation to increase the program's borrowing authority to US\$30.4 billion to address claims from *Superstorm Sandy* in 2012.

In February 2013, the U.S. Government Accountability Office explained why the flood insurance program continued to create a 'high risk' for the government and US taxpayers.³ It has been considered 'high risk' since 2006 (a year after paying out more than US\$16

billion for *Katrina* losses), due to its 'long-term financial solvency and operational issues'. One of the major concerns the office has expressed about the program is that it has failed to account for climate change.

Some changes were made to the program in 2012, but the Government Accountability Office says they may not be enough to repay the billions FEMA owes to Treasury or to cover future catastrophic losses. Under the changes, many property owners are facing steep increases in premiums. Col. Booth said the rise in premiums would make it harder for some people to obtain insurance. "I think we're not through the process of figuring out what we're going to do about this problem," Col. Booth said.

Operating under all of the factors contributing to the 'new normal' made it even more important to exchange ideas and lessons learned between the U.S. and Australia, Col. Booth said.

"You guys learned a lot in the fires of *Black Saturday*. We learned a lot after hurricanes *Katrina* and *Rita* and there's no point waiting until you get a cyclone that knocks you off your feet or we get a fire that does the same thing to us.

"I think it's critically urgent that we have an environment where we can share those lessons and implement the lessons learned. Especially between Australia and the United States where we have similar methods and similar philosophies of government that allow us to learn from each other and implement some of the same practices and procedures in our emergency preparedness," Col. Booth said.

For this reason, Col. Booth said, the Memorandum of Understanding on Emergency Cooperation⁴ was very important. "Both of us have very mature emergency management practices, we have large numbers of public servants that are in those areas and we also have large economies that would be affected by large natural and man-made disasters. I think the ability for us to share information in that regard is very valuable."

During his time in Australia, Col. Booth visited AEMI's offices at Mount Macedon in Victoria (west of Melbourne). "We presented to each other on our needs, our concerns, what we were doing about it and how we were addressing various issues and we spent some time comparing the commonality in our approach.

"We're trying to establish a more consistent relationship, where we can have a regular exchange of information and update on what we're doing and I'm hopeful that we can even work on some projects together," Col. Booth said.

At the conference in Melbourne, Col. Booth met Dr Alan March, the Associate Dean (Undergraduate) in the Faculty of Architecture, Building and Planning at Melbourne University. Dr March specialises in urban planning for disaster risk reduction. He has lectured at courses at AEMI and is a contributor to this journal.

3 United States Government Accountability Office Report to Congressional Committees At: www.gao.gov/assets/660/652133.pdf.

4 Emergency Management Agreement with the United States of America. At: <http://usrusaustralia.state.gov/us-oz/2010/04/29/ag1.html>.

Col. Booth said he hoped to establish stronger ties with Dr March, to potentially exchange information between the Melbourne and Louisiana State Universities.

"We also have a studio that looks at sustainable architecture designed to look in the type of risk we have. Wind and wave are our most common and serious threat.

"We have several schools at LSU that have research ongoing in that topic. It seems to me it would be very worthwhile to have an information-sharing relationship where we could learn from each other," Col Booth said.

Dr March said he, too, saw great value in this prospect. He hoped it would help to integrate urban planning more in disaster risk management. "I think it would be ideal, since many of the principles and ideas could be exchanged if we managed to develop more of a common theory and knowledge base for work in the disaster area.

"We have a lot to offer here in Australia in terms of expertise, and I think that we need to work on developing the careers of a range of people across multiple disciplines that are related to disaster. This would include providing pathways for research, ongoing placements, links into universities and job-swaps. I am sure there would be other avenues, too," Dr March said.

Col. Booth said he shared the materials he gathered from AEMI with colleagues at home, including publications on how to conduct exercises and how to write plans. He said he was particularly interested in – and impressed by – the organisation of the Victorian Country Fire Authority and Metropolitan Fire Brigade, and the Victorian command structure that put, at the time, the Chief Commissioner of Police at the helm during a major disaster.

"I thought that was an effective way to do it. I thought it was interesting because at least everybody agrees on who's responsibility it is and you don't have to guess from jurisdiction to jurisdiction who you're going to be dealing with. That probably makes it easier, I suppose, for knowing: who do you start with, where do you call and when (people are asking who's going) to be the commander?" he said.

Col. Booth said that while the US had a federal wildfire firefighter service (and many states had effective and large services) generally, local governments dealt with fires in their own jurisdictions. In many jurisdictions in the US, sharing resources with neighbours, and even being able to help each other could sometimes be problematic, he said.

"Fires are like hurricanes, they don't care about geographic local subdivision lines, so it requires doing a little bit more inter-governmental co-operation in advance, and there are notification and request procedures and a reimbursement procedure. I know they do it very quickly and they've got it down to a natural practice but it seems to me it expedites the process when it's all a single entity. Especially in a wildfire situation when you know you're going to have days that are going to be higher risk and you can put resources in those areas." he said.

Having witnessed the political fallout of *Hurricane Katrina* Col. Booth said he was interested to see that AEMI ran a course in developing and using political nous. "I think that's really wise, I'm very interested in learning more about that. Everybody's got some experience with that one!" he laughed.

He described *Katrina* as having become "very political very quickly" and said that this was, at times, a distraction to the response and recovery processes. Asked if he believed *Katrina* was a pivotal point in emergency management, he said: "Sometimes I think it changed the world and sometimes I wonder if anybody was paying attention".

Katrina so severely damaged the local authority in New Orleans, it destroyed "the whole mechanism of how response works. The whole thing is built on that model, that the locals respond and the state and federal governments assist the locals in their response. But after *Katrina*, there was no local authority. There was no police, no fire, everything was flooded, nobody had a place to govern from, they couldn't get to their jobs, communications was destroyed, they had no way to function," Col. Booth said.

In that sense, *Katrina* changed his understanding of disaster response. "There's big disaster, then there's disaster that completely outstrips any local government's ability to respond," he said.

At the time of writing, Col. Booth was looking forward to returning to Australia as the keynote speaker at *Connection! 2014*, 14–18 July at the Australian Emergency Management Institute. See page 67 for details.

About the author

Kate Lahey is a freelance writer and journalist living in the US. She has worked as a city reporter for *The Age* and a business reporter for the *Sydney Morning Herald*. She was also the Victorian political correspondent for Australian Associated Press.

This paper is part of a series of articles reflecting the emergency management agreement of co-operation recently renewed between Australia, through Attorney-General's Department, Emergency Management Australia (EMA) division and United States of America through Federal Emergency Management Agency (FEMA).

