

Building Safer Urban Communities in the South Pacific

By Pat Jones & Charlie Higgins

In November 2001, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the South Pacific Geoscience Commission (SOPAC) organised a 2 day regional workshop on 'Building Safer Urban Communities in the South Pacific', in Suva, Fiji. A working group of the chief fire officers and other officials from Pacific Island Countries (PICs) assessed the current capacity of their countries to conduct Urban Search and Rescue (USAR) operations. They noted that this capacity is extremely limited, primarily because of a lack of awareness of the function and generally weak coordination in emergency response. The working group concluded that PICs do need their own USAR capability because of the high level of risk to their urban areas, and they outlined the next steps needed to develop such a capability.

On a global front, the International Search and Rescue Advisory Group (INSARAG) re-established itself in Asia and the Pacific during 2000. The fourth meeting of its Regional Group for Asia/Pacific was held 28–30 November 2001 in Christchurch, co-organised by the Government of New Zealand and OCHA in its capacity as the INSARAG Secretariat. OCHA sponsored the participation of the chief fire officers of Fiji and Tonga; this was the first involvement of PICs with INSARAG.

Following the INSARAG meeting, the OCHA Regional Disaster Response Adviser in Suva wrote a proposal for the development of USAR capacity in PICs. He proposed that each PIC approach the creation of national USAR capacity in four stages, with the first two stages to be addressed over the next 12 months:

1. Raise awareness of USAR amongst politicians, civil servants, and emergency response agencies including NGOs;
2. Train two fire service personnel to Category 2 level, and six personnel from a range of emergency response agencies as Category 1 trainers;
3. Prepare the countries for the rapid influx of foreign USAR teams that would occur after a disaster;
4. Create a higher level of USAR capacity, with two qualified Category 3 (managerial level) team leaders, six to twelve Category 2 members, and widespread Category 1 training of emergency response agency personnel.

The New Zealand Fire Service has already provided places to suitable candidates from PICs on its Category 2 (technician) USAR Course and Australia and Singapore have all indicated the possibility to provide places for PIC participants on their Category 2 courses in future.

At the INSARAG Meeting in Christchurch, the representatives of the Governments of Australia and New Zealand approached OCHA with a proposition to conduct a joint USAR Category 1 (responder) training course in the region, for training officers from the emergency services in a number of PICs. To follow-up on this suggestion, fire

officers from Australia and New Zealand undertook a reconnaissance trip from 11–14 February 2002, and started planning for the course, assisted by the OCHA representative in Suva.

Urban Search and Rescue or USAR, as it is more commonly known, is the location and safe removal of trapped and often injured victims from partially or completely collapsed buildings, whilst providing emergency medical care to stabilise the victim. It involves the integrated response of specialised technical equipment and trained personnel from a number of different disciplines, efficient communications, effective command and control, and sufficient logistical support. The complexity of USAR requires a fully coordinated incident management system to control a multi-agency response by the police force, fire service, and ambulance service, as well as the municipal and national authorities.

The timing of the USAR course reflects growing awareness that the urban centres of some PICs are very vulnerable to structural collapse. The vulnerability is caused by the potentially lethal combination of high exposure to natural and man made hazards ranging from earthquakes, tsunamis, cyclones and floods, to fire and technological accidents, lack of urban planning and building safety standards, and poor enforcement where planning procedures and building codes do exist. Countries must be able to respond to urban building collapse incidents because of the risk both to major population concentrations, and to the vital commercial and administrative functions performed in cities. This is particularly true of most PICs, where the governmental



Courtesy of SOPAC

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and economic focus is concentrated in a few urban centres. The sustainable development of these nations and the wider region therefore depends upon their continued security and prosperity.

The USAR needs in Fiji, Papua New Guinea, Samoa, Tonga, and Vanuatu are similar in scope, but differ in scale. Each of these PICs has at least some high-rise buildings in its capital and other urban areas. They may have been properly designed and built to recognised standards, but there is no guarantee of this, because building codes are not legislated or diligently enforced in any of the countries. Training in USAR was therefore seen as

essential to ensure a level of capability existed should a structure collapse.

The 2002 Pacific Island Countries USAR course was a collaborative venture between organisations concerned with improving emergency management in the region – Emergency Management Australia, the New Zealand Ministry of Civil Defence and Emergency Management, the South Pacific Applied Geoscience Commission, and the United Nations Office for the Coordination of Humanitarian Affairs. Their key partner in Fiji was the National Fire Authority, which developed a practical exercise site and upgraded its existing training

facilities to host the course. The course was held 24–28 June 2002, at the main fire station of the Fiji National Fire Authority, in Walu Bay, Suva.

The week-long USAR course trained five to seven man teams from the fire authorities, police forces, ambulance services, and military forces, of Fiji, Papua New Guinea, Samoa, Tonga, and Vanuatu. Twenty-nine emergency service personnel from these five countries qualified under the internationally recognised Australian standard, as USAR Category 1 responders. Instructors went beyond the syllabus: teaching participants to conduct structural assessment

of damaged buildings in a reconnaissance team in order to prioritise the subsequent USAR operation; preparing them to manage untrained volunteers at large-scale structural collapse incidents; and familiarising them with systems for more coordinated incident management, and for disaster victim identification.

The overall course objectives were to:

1. Train emergency services personnel from five Pacific Island Countries as USAR Category 1 responders.
2. Prepare participants to conduct structural assessment of damaged buildings in a major disaster as a member of a reconnaissance team, in order to prioritise the subsequent USAR operation.
3. Give guidelines to participants on how to manage untrained volunteers at large-scale structural collapse incidents.
4. Familiarise participants with systems to coordinate multi-agency emergency response operations (the Incident Control System (ICS) in Australia and the Coordinated Incident Management System (CIMS) in New Zealand).
5. Prepare participants to act as potential USAR Category 1 trainers for their respective agencies.

The main focus of the course was to provide participants with the level of competency as defined by the Australian nationally registered qualification 14097ACT Short Course in Urban Search and Rescue Category 1. This required participants to undertake a pre-course assignment that covered theoretical aspects, followed by three days of additional theory and practical training.

The classroom-based component of the course was put to the test in a field exercise based on an earthquake scenario and resulting structural collapse incidents. Course instructors drew upon the support of SOPAC's Disaster Management

Unit (DMU) to identify a number of buildings in downtown Suva and develop realistic descriptions of damage that could be expected in the event of a major earthquake. The Course Management Team then inspected each building and requested permission from its owner to use it in the exercise. This activity also helped to link course participants more closely to the Disaster Management Unit staff and services, and productively employ the considerable Geographical Information System (GIS) data that it holds on Pacific cities.

On the exercise, participants were divided into four multi-national teams that were tasked to assess each damaged building and report their findings back to Fiji's National Emergency Operations Centre (NEOC), located within the National Disaster Management Office (NDMO). The teams were debriefed, and their reports were collated and analysed by an incident management team working in the NEOC, comprising staff from OCHA, SOPAC-DMU, and the NDMO. The exercise culminated in the reconnaissance teams being drawn together as a combined PIC USAR Task Force, and, based on the information they had already gathered, being tasked to perform search and rescue operations as prioritised by the incident management team.

In addition to the training, a cache of PPE and technical rescue equipment was donated by EMA, the ACT and NSW Fire Brigades, the New Zealand Fire Service and MCDEM. This equipment was left with the Fiji National Fire Authority to support development of its own stand-alone USAR capability. The equipment cache included helmets, knee and elbow pads, dust masks, gloves, goggles, ICS field kits, 'Stokes Litter' stretchers and most importantly diamond-tipped blades for cutting equipment, a core drill, and a search camera. Additional instruction was provided to training officers from the Fiji NFA in the

maintenance and use of this specialist technical rescue equipment. It is hoped that Australia, New Zealand, and other countries will also help to develop the equipment capabilities of PICs beyond Fiji, by creating more USAR equipment caches.

The course was an opportunity for the newly qualified USAR team members and other stakeholders to discuss how to take forward the development of national USAR capacity in PICs. They determined that these countries should develop a basic USAR capacity, sufficient to manage a minor building collapse incident on their own. In a major disaster such as a devastating earthquake, this limited capacity will enable them to commence operations before the arrival of international USAR teams from neighbouring developed countries. At this stage, USAR Category 1 is an appropriate level of capability for PICs to aim for.

The course also identified the necessary conditions to develop USAR capacity in PICs, and how best to create greater awareness and build support for the initiative amongst the public and, more importantly, those in leadership positions. The next step is to create a cadre of USAR instructors in each country, so that training becomes self-sustaining.

There is much work still to do before the PICs can be said to have a national USAR capability, but the need for it is increasingly recognised domestically and overseas. The enthusiastic reception of this 1st Pacific USAR Course by all participants and the commitment of wider stakeholders demonstrated that the overall goal of creating a limited but sustainable capacity, is achievable.

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