

the medical contingent within the task force structure, however, brought its own issues, especially in the frantic first days. The long hours of surgery and other duties of a clinical physician practising emergency medicine in rudimentary conditions was not conducive to the other staff functions of a commander. In particular, it gave no time for the commander to step back and undertake ongoing assessment of the medical aspects of the mission, for instance, whether redundant services could be returned to Australia and gaps in capability filled by reinforcements.¹⁰⁹ These issues were to be grappled with in subsequent operations.

Standard peacetime conditions of service were applied for Operation Shaddock.¹¹⁰ On 6 June 1999, Prime Minister Howard announced the creation of the Humanitarian Overseas Service Medal (HOSM) in the Australian system of honours to recognise Australians who 'render humanitarian service overseas in hazardous circumstances such as war zones, during peacekeeping operations or in times of natural disaster or civil strife'. Despite Howard's announcement of the award specifically mentioning the PNG tsunami mission as one reason for its creation, and despite support subsequently from the Land Commander, Major General John Hartley, and commander of the DJFHQ, Major General Peter Cosgrove, Operation Shaddock was not recognised as eligible service for the HOSM.¹¹¹ In fact, the ADF was not recognised as an eligible organisation under the award until 2005, and at the time of writing only personnel serving on Operations Sumatra Assist I and II, Operations Pakistan Assist I and II, Operation Haiti Assist, and Operation Pacific Assist (after the 2011 tsunami in northern Japan) have been eligible.

Despite the various organisational limitations in PNG's disaster response, the effort of countless individuals – both official and private – involved in the response to the disaster in a remote area of the country was extraordinary. The local people around Aitape and Vanimo were unprepared and unskilled for the scale of response required, but nevertheless rose to the challenge. Phil Stenchion, an officer from Emergency Management Australia sent to PNG to assist the NDES, remarked that the various shortcomings in PNG's official response did not 'have ... any serious impact on the way the affected people have been cared for or managed'.¹¹²

¹⁰⁹ Note on file, 'Health support lessons learned – Operation Shaddock', n.d., Defence: EDMS, B28227.

¹¹⁰ Signal 190103Z, COMAST to various, 19 July 1998, Defence: EDMS, B28205.

¹¹¹ Copies of these documents in P. Copeland, 'The inquiry into recognition for Defence Force personnel who served as peacekeepers from 1947 onward', *Peacekeepers and Peace Makers Association*, viewed 30 July 2010, pp. 137–9, AWM: AWM390, PKI/821/37.

¹¹² Stenchion, 'Observations on the tsunami disaster in Papua New Guinea', p. 58.

'The worst in living memory'

Operation Niue Assist and disasters in the Pacific, 1998–2004

In the early afternoon of 5 January 2004, Morgan and Ida Mougavalu sat in their house on the main road in Alofi, capital of the small Pacific island state of Niue (see map 18).¹ Wind and rain from the approaching Cyclone Heta lashed against the window, as they looked out over neighbours' houses and the lush greenery that covered this part of town. At around 4 pm, they watched in disbelief as their neighbour's house was washed away by waves that had breached the 30-metre-tall cliffs that overlooked the sea at this point on the coast. A further huge wall of water then smashed into their home, lifting their car into a nearby tree and threatening to wash away them and their seven-year-old daughter. Eventually they managed to struggle out of the damaged building, and spent a cold night huddled with other survivors in a small filing room of the nearby local library.²

Niue, a low-lying island of only 260 square kilometres situated around 450 kilometres east of the Tongan islands, is one of the smallest self-governing countries in the world. It gained independence from New Zealand in 1974, but Niueans retain New Zealand citizenship, with the right to freely enter, live and work in the country. The population in 2004 was around 1,700, with a further 20,000 expatriates living in New Zealand. New Zealand retains defence and foreign affairs responsibilities at the request of the Niuean Government, and provided the island state an average of \$5.9 million in aid assistance annually in the years leading up to 2004.³ The economy of the island is limited to tourism, small agricultural ventures and handicrafts, with the government being the country's largest employer.

¹ In 2004, the international date zone lay to the west of Niue, Samoa and Tokelau, so this was 6 January, Australian time. It will usually be clear from the context, but dates and times are generally given in Niuean time.

² A. Gregory, 'To be alive a miracle for battered family', *New Zealand Herald*, 10 January 2004; and E. Welsh, 'An account of the day Heta struck', 10 January 2004, Niue Yacht Club website, viewed 2 November 2011, copy in AWM: AWM330, PKI/825/3.

³ 'Niue's survival the cheaper option', *New Zealand Herald*, 14 January 2004.

Cyclone Heta was one of only three cyclones to occur in the south-west Pacific during the 2003–04 cyclone season, well down on the average nine for the region.⁴ Unfortunately for the residents of Niue, Heta was classified as Category 5, the most intense and damaging on the Saffir–Simpson hurricane scale, and the island was directly in the path of the storm.⁵ Niue had a limited capacity to respond to a disaster of the scale brought on by Cyclone Heta, and relied heavily on New Zealand and the international community to provide emergency relief to the island's residents and to fund the reconstruction effort over subsequent months. Australia contributed to the immediate response after a request from the Niue authorities to provide a medical team to fill the gap left after the complete destruction of Lord Liverpool Hospital, the only medical facility on the island.

The use of the medical team in Niue in 2004 was the first time in more than a decade that ADF personnel had deployed for any length of time to the Pacific Islands specifically for disaster relief. Before 1993, Australia's response to regional disasters regularly included Royal Australian Air Force (RAAF) transport aircraft to deliver relief supplies from Australia, a helicopter detachment to undertake reconnaissance and local transport services, and other Australian Defence Force (ADF) personnel for a range of supporting functions. There are several reasons for this decline in ADF involvement. First, there were relatively few cyclones in subsequent seasons that necessitated a significant international response. Second, this situation was enhanced by improvements in local disaster management and responses throughout the region.⁶ Lastly, costing arrangements adopted by Australian Government departments favoured a commercial response to regional disasters at this time, either through cash contributions or by the use of civilian transport agencies (see chapter 3).

This chapter provides a background to the disaster in Niue, and describes the operations of the Australian medical team during its two-week deployment to Niue in January 2004. First, Australia's response to seven disasters in the region in the years leading up to and including 2004 will be briefly introduced to place the larger Niue operation in context.

RESPONDING TO DISASTERS IN THE PACIFIC, 1998–2004

The first of these operations came after the majority of crops on the islands of Tanna and Aniwa were destroyed by Tropical Cyclones Yali and Zuman, which struck the Vanuatu islands from 21 March to 1 April 1998 (see map 8). These islands had already been suffering food shortages from the same drought that led to the relief missions in PNG and Indonesia described in earlier chapters.⁷ The Vanuatu Government transported more than 800 bags of rice, in addition to fuel, vegetable seedlings and tarpaulins on

a commercial ship to the southern islands, but appealed to the international community for further assistance.⁸ The patrol boats HMAS *Fremantle* (captained by Lieutenant Commander Mariano Gargiulo RAN) and HMAS *Whyalla* (Lieutenant Commander Mal Parsons RAN) were at that time in the middle of a seven-week south-west Pacific deployment visiting various regional countries to carry out exercises and other activities with local maritime forces. Their fortuitous presence in Port Vila on 20 April led to a request through the Australian High Commissioner to Vanuatu, Alan Edwards, for the ships to transport relief supplies to the needy Tanna island. More than 15 tonnes of rice packaged in 25-kilogram bags was lashed to the decks of the vessels, and transported to Lénakel harbour on Tanna during the night of 22–23 April. Damage to the wharf and fears of sunken ships in the harbour led to a decision for the ships to anchor 400 metres off the beach. Officers and crews from both ships pitched in to unload the rice by hand and deliver it to the waiting volunteers on the beach using the ships' tinnies (aluminium boats) and RHIBs (rigid-hulled inflatable boats).⁹

Flooding of the Mekong River in Vietnam is a regular occurrence, but the early arrival and exceptional amount of rain during the monsoon season of 2000 led to the worst floods in the country for many decades. By the end of October, 5 million residents of the Mekong River delta had been affected, and more than 400 people had died.¹⁰ The Australian Government provided the Australian Red Cross with \$530,000 for relief activities in Vietnam in mid-September when the severity of the situation became clear to the international community, and a further \$2.25 million to neighbouring Cambodia.¹¹ Current policy for responses to overseas disasters outside the immediate region would not have involved Defence, but an appeal by the International Committee of the Red Cross in early October led to a request by the Australian Red Cross for an RAAF Hercules urgently to transport a load of blankets and water containers from Australia to Ho Chi Minh City.¹² After the Minister for Defence, John Moore, approved and agreed to fund the flight, the relief cargo was delivered on 9 October by a Hercules from No. 37 Squadron under the oddly named 'Operation Turnip'.¹³ In a strange twist of circumstance, the C-130 aircraft (A97-160) flown by Flight Lieutenant Ray Werndly had been one of the last RAAF aircraft to previously visit Saigon, as Ho Chi Minh City was then known, when it had participated in the humanitarian airlift mission before the fall of the city to North Vietnamese forces in April 1975.¹⁴

Australia and Vietnam had maintained diplomatic relations since 1973, but formal defence relations were not established until 1998. The first Australian defence attaché to Vietnam, Colonel Gary Hogan, was posted to Hanoi in February 1999, with a Vietnamese defence attaché first posting to Australia in September 2000, just before

4 S. Burgess, 'Southwest Pacific Tropical cyclones summary for 2003/2004 season', National Institute of Water and Atmospheric Research website, viewed 3 November 2011, copy in AWM: AWM330, PKI/825/3.

5 Mitchem, 'Hurricanes/typhoons', p. 328.

6 See for example A. Kaloumaira, 'Expert group meeting on the roles of regional organisations and networks in strengthening capacities for disaster management', UNDP, Geneva, 25–27 September 2002; and UN DHA South Pacific Programme Office, 'South Pacific disaster reduction programme: Pacific Island countries'.

7 G. Padgett, 'Monthly global tropical cyclone summary: March 1998', Australia Severe Weather web-

8 Situation report 2, OCHA, 'Cyclone Zuman', 9 April 1998.

9 Report of proceedings, 'HMAS *Fremantle* – April 1998', 7 May 1998; and report of proceedings, 'HMAS *Whyalla* – April 1998', 5 May 1998, both in Defence: SPC–A; and G. Davis, 'Patrol boats in dash to island', *Navy News*, 18 May 1998.

10 USAID, 'Vietnam floods fact sheet #1', 16 November 2000.

11 Media release AA 00 39, A.J. Downer, 17 September 2000.

12 Brief for COMAST, 'Flood relief for Vietnam', c. October 2000, Defence: EDMS, C312876.

13 Unit history sheet, 'No. 37 Squadron', 7 October 2000, Defence: APDC.

the Hercules delivery of supplies the following month.¹⁵ With re-engagement with Vietnam a priority for the Australian Government, the relief flight was supported by the Department of Foreign Affairs and Trade (DFAT) and the Department of the Prime Minister and Cabinet (PM&C), and approved by Defence Minister John Moore.¹⁶ The goodwill gained by the mission was certainly a boost for the modest defence relationship between the two countries, but it was very much an exception that confirmed the policy of using Defence assets for disaster responses only in the Pacific region. Nevertheless, Colonel Hogan met the aircraft at Ho Chi Minh City along with Red Cross volunteers and members of the Vietnamese Defence Force, who were on hand to assist unloading the relief cargo on board.¹⁷

On 7 June 2001, HMAS *Kanimbla*, captained by Commander Stephen Turner RAN, arrived in Port Vila for a goodwill visit before joining Operation Trek, Australia's peace-monitoring mission to Solomon Islands, as support ship.¹⁸ The following day, the eruption of a volcano on Lopévi island, in central Vanuatu 135 kilometres north of Port Vila, covered nearby Paama island with highly acidic volcanic ash, contaminating water and food supplies for the island's 1,700 residents (see map 8).¹⁹ A request from the Vanuatu Government for the use of *Kanimbla* to transport water and a disaster assessment team to Paama was relayed through the Australian High Commission and supported by DFAT in Canberra.²⁰ The ship left Vila on 10 June, delivering the Vanuatu disaster assessment team to Lori on Paama that day. The water, which was stored in 500 20-litre bladders on the tank deck of the ship, was transported to three locations on Paama that day and the next using the embarked Sea King helicopters from 817 Squadron. Commander Dave Gwyther RAN, officer commanding the helicopter detachment on the ship, observed that delivering the underslung loads of water into areas with tall tropical trees with the helicopters kicking up volcanic ash proved to be 'challenging flying'.²¹

An urgent need for relief supplies in Tonga after Cyclone Waka led to a one-off relief flight by an RAAF Hercules aircraft in early 2002. The cyclone, one of the most destructive in decades, subjected Tonga to wind gusts up to 260 kilometres per hour during 30–31 December 2001 (see map 3). Substantial damage to buildings on the islands of Vava'u and the northern Niuafo'ou in particular left an urgent need for shelter, water purification and sanitation, and temporary power and lighting for thousands of households.²² On 3 January 2002, the Tongan Government approached the governments of Australia and New Zealand with a request for assistance, with Australia agreeing to supply 650 tarpaulins, 150 tents, blankets and water purification tablets.²³ Civilian chartered aircraft were not available at short notice, so these supplies were delivered directly to Vava'u on

5 January by a Hercules aircraft from No. 36 Squadron.²⁴ Special dispensation was received from the Governor of Vava'u to unload the relief supplies on a Sunday (owing to strict Sabbath regulations in Tonga), but this was undertaken 'in record time' with the assistance of a local rugby team and others waiting at the airfield. The crew were given a basket of local pineapples and watermelon in appreciation for their timely delivery, but these had to be consumed before departure owing to Australian quarantine regulations.²⁵

Twelve months later, average winds greater than 240 kilometres per hour from Cyclone Zoe pounded the remote southern islands of Anuta and Tikopia in Solomon Islands during 28 and 29 December 2002. The lack of communications with the 1,600 residents of the islands led to a request from the Solomon Islands Government on 31 December for Australia to provide an aircraft to undertake reconnaissance photographs of affected areas – there was no airstrip on the islands to land relief supplies.²⁶ A Hercules from No. 36 Squadron, the unit on call for search-and-rescue operations at that time, departed RAAF Base Richmond just after 11 am on New Year's Day 2003 after a brief delay while clarification was sought on whether supplies were to be carried – in this instance they were not, but the aircraft did carry several civilian media representatives. Low-level photographs confirmed severe damage on Anuta and Tikopia, and confirmed the survival of local residents after fears of total destruction from the Category 5 storm.²⁷ The ADF provided a range of further options for assistance, including the use of Navy ships and helicopters, further Hercules flights, and Army engineer support.²⁸ Australia's contribution to the Solomons' emergency response was, however, limited to supply of rice and funding for the Royal Solomon Islands Police patrol boat and two commercial ships to transport supplies and personnel to the remote islands.²⁹

The final ADF contribution to regional disaster relief before the Niue deployment occurred in December 2003, and involved the delivery of food supplies by HMAS *Wewak* to Anuta and Tikopia in the remote Santa Cruz Islands of Solomon Islands. In June that year, Cyclone Gina passed by the islands, damaging many crops and buildings that had been rebuilt after Cyclone Zoe six months previously. The bulk of local rice supplies were also spoiled, and by November 2003 the islands' residents were living on sago palm and whatever seafood they could catch.³⁰ At that time, *Wewak*, captained by Lieutenant Commander Etienne Mulder RAN, was on deployment to Operation Anode, part of Australia's contribution supporting the Regional Assistance Mission to Solomon Islands (RAMSI). The RAMSI commander, Lieutenant Colonel Quentin Flowers, approved the use of the ship to transport 85 tonnes of rice, sweet potatoes and yams provided by AusAID.³¹

15 'Vietnam country brief, DFAT website, viewed 10 December 2014, copy in AWM: AWM330, PKI/839/7.

16 Brief for CDE, 'C130 assistance for Vietnam flood relief', 3 October 2000, Defence: EDMS, B50734.

17 Capt J. Toohey, 'Good morning, Vietnam: Goodbye, Far Albert', *RAAF News*, December 2000.

18 For background to the International Peace Monitoring Team (IPMT) in Solomon Islands, see Breen, *The good neighbour*, pp. 342–59.

19 Situation report 2, OCHA, 'Lopevi volcanic eruption', 12 June 2001.

20 Cdr D. Gwyther, 'Sea King choppers fly into volcanic situation', *Illawarra Mercury*, 25 June 2001; and hot issues brief, 'Defence assistance to Vanuatu Government', 9 June 2001, Defence: EDMS, B18724.

21 Cdr D. Gwyther, 'Sea King choppers fly into volcanic situation', *Illawarra Mercury*, 25 June 2001.

22 Situation report 2, OCHA, 'Tonga – Cyclone Waka', 23 January 2002.

24 Media release, EMA, 'EMA extends emergency assistance to Tonga', 4 January 2002; and email, M. Sorensen to W. Cook, 4 January 2002, DFAT: 02/0271.

25 Report, L. Langford, 6 January 2002, DFAT: 02/0271; and email, Wing Cdr J. Baldock to author, 16 September 2014, copy in AWM: AWM330, PKI/829/1.

26 Signal 311112Z, COMAST to various, 31 December 2001, DFAT: 03/0537.

27 Minute, Maj Gen K. Gillespie to Minister, 2 January 2003, Defence: EDMS, B211764; and Flt Lt J. Riddell, 'New Year's Day over the Solomons', in *Royal Australian Air Force annual*, 2003.

28 Brief HQAST 183-9-3, Air Cdre B.E. Plenty to A/CDE, 2 January 2003, Defence: EDMS, C312951.

29 Report, 'Sitrep as at 051800 Jan 2003', 5 January 2003, DFAT: 03/0537.

30 Situation report 1, OCHA, 'Solomon Islands – Cyclone Gina', 30 June 2003; and 'Forgotten isolated Pacific island pleading for food in face of famine', Agence France-Presse (Paris), 5 November 2003.

31 Report of proceedings, 'HMAS *Wewak* – November 2003', 10 December 2003, Defence: SPC-A; and

Wewak arrived at Tikopia in the morning of 4 December 2003, where it unloaded 65 tonnes of the cargo over the reef using two local banana boats. The crew were treated to a traditional dance by locals that afternoon, and the remainder of the food on board was unloaded at Anuta on 7–8 December.³²

The subsequent deployment of a medical team to Niue in January 2004, as described in detail below, did not substantially change the policy by which AusAID responded primarily with commercial resources and cash. Nevertheless, in February 2004, two Hercules aircraft from Nos 36 and 37 Squadrons delivered 2,400 tarpaulins, 2,600 water containers and 5,200 water purification tablets to Vanuatu.³³ During the period 25–27 February, Cyclone Ivy passed over all the main islands of Vanuatu, killing two people, and causing damage that affected around a quarter of the population (see map 8).³⁴ Known as Operation Vanuatu Assist, the use of RAAF aircraft was considered in this instance only because there were no commercial aircraft available to have the relief supplies arrive in Port Vila in time to meet the departure deadline of a ship that was provided by the Red Cross to transport the supplies to the outer islands.³⁵

The mode of ADF involvement in these seven regional responses between 1998 and 2004, as detailed in table 18.1, was different from that undertaken previously. The cost of RAN involvement after Cyclone Namu in 1986 led to a reluctance by AusAID to

Table 18.1 Relief operations in the Pacific, 1998–2004

Date	Unit/ship	Assistance	Pilot/captain
Cyclones Yaff and Zuman, Vanuatu			
22–23 Apr 1998	HMAS <i>Fremantle</i> HMAS <i>Bendigo</i>	Delivery of rice to Tanna Island	Lt Cdr M. Gargiulo RAN Lt Cdr M. Parsons RAN
Mekong flood, Vietnam			
9 Oct 2000	No. 37 Sqn	Transport blankets and water containers	Flt Lt R.J. Wernldy
Lopévi volcano, Vanuatu,			
10–11 Jun 2001	HMAS <i>Kanimbla</i>	Transport water to Paama Island	Cdr S. Turner RAN
Cyclone Waka, Tonga			
5 Jan 2002	No. 36 Sqn	Transport relief supplies to Vava'u	Flt Lt M. Sedgwick
Cyclone Zoe, Solomon Islands			
1 Jan 2003	No. 36 Sqn	Aerial reconnaissance of Anuta and Tikopia	Flt Lt J.S. Riddell
Cyclone Gina, Solomon Islands			
4–8 Dec 2003	HMAS <i>Wewak</i>	Delivery of food to Tikopia	Cdr E. Mulder RAN
Cyclone Ivy, Vanuatu (Op. Vanuatu Assist)			
1 Mar 2004	No. 36 Sqn	Transport relief supplies	Flt Lt J. Riddell
1 Mar 2004	No. 37 Sqn	Transport relief supplies	Flt Lt P. Cseh

Source: various, copies in AWM: AWM330, PKI/824/17; AWM330, PKI/839/6; AWM330, PKI/824/9; AWM330, PKI/829/1; AWM330, PKI/828/3; AWM330, PKI/828/21; and AWM330, PKI/824/8

fund Navy for material responses to disasters in the region. AusAID was not averse, however, to Navy making some form of contribution to regional nations if RAN ships were on regularly programmed deployments to the region, even if this assistance came several months after the immediate need following a natural disaster. Likewise, commercial air transport was preferred to the use of RAAF aircraft given the policy of cost reimbursement between the departments. After Cyclone Ami left a trail of destruction in Fiji in January 2003, for instance, a total of \$630,000 was provided by AusAID for the response, which included the charter of helicopters and cargo aircraft.³⁶ RAAF aircraft were not used.

CYCLONE HETA, NIUE, 2004

On 1 January 2004, only three weeks after the delivery of relief supplies by *Wewak* to the islands of Tikopia and Anuta as described above, Cyclone Heta formed as a tropical cyclone, some 280 kilometres north-west of the small island-state of Tokelau. It intensified as it moved south, passing to the west of Samoa on 4 January, where it developed into a Category 5 tropical cyclone, with sustained wind speeds of around 250 kilometres per hour, gusting more than 300 kilometres per hour. Heta then moved south-east towards Niue, finally passing around 50 kilometres to the west of the island in the afternoon of 5 January.³⁷

A confluence of factors led to Cyclone Heta inflicting severe wind and wave damage on Niue, in particular to coastal areas on the west of the island. The passage of Heta placed the island in the field of maximum force and destructiveness of the wind at a time when the storm was at its peak. Further, a high spring tide in the afternoon of 5 January, a north-west-facing coast in south Alofi perpendicular to the oncoming wind, and a submerged coastal terrace that acted as a ramp to lift the seawater onto land, all combined to create waves that swept over the cliffs 20–30 metres high that lined the island.³⁸ These waves had enough power to destroy buildings, fling around cars and trucks, strip the land of vegetation, and carry and deposit huge rocks and chunks of coral onto land. The house of local resident Ernie Welsh, situated next to the coast, was one of many reduced to a cement slab by the force of the waves.³⁹

The brunt of the cyclone struck along the west coast, from Hikutavake in the north to Avatele in the south, with the greatest damage occurring to the southern part of Alofi (see map 18). Here, the Fale Fono (parliament building), the Justice and Lands Department building, the museum and cultural centre, the island's fuel storage tanks, the Niue Hotel, numerous other businesses and the industrial centre were damaged or totally destroyed. An official assessment found that 90 per cent of housing on the island

36 S. Middleby, 'Cyclone Ami Fiji: Lessons', February 2003, DFAT: 04/0150.

37 Atangan and Preble, '2004 annual tropical cyclone report', pp. 223–6; and 'Season 2003–2004 tropical cyclone Heta track map', Australia Severe Weather website, viewed 2 November 2011, copy in AWM: AWM330, PKI/825/3.

38 R. Howorth, 'Cyclone Heta: Initial lessons learnt', Pacific News Agency Service (Suva; hereafter PNAS), 14 January 2004. A spring tide is not named after the season, but is a period of maximum tide range every two weeks when the earth, moon and sun form a rough line, compounding the tidal force on the ocean.

39 E. Welsh, 'An account of the day Heta struck', Niue Yacht Club website, 10 January 2004; and J.F. Anthoni, 'Cyclone Heta wreaks havoc on Niue Island', Seafriends website, both viewed 2 November

32 Report of proceedings, 'HMAS *Wewak* – December 2003', 6 January 2003, Defence: SPC-A.

33 Signal 290640Z, CDF to various, 29 February 2004, Defence: EDMS, B301316.

34 Situation report 4, OCHA, 'Cyclone Ivy', 11 March 2004.

suffered some damage, with more than sixty buildings being completely destroyed or considered structurally unsound. Across the island, outdoor kitchens, community centres, churches, gardens, crops and forests also suffered damage, causing severe disruption to livelihoods.⁴⁰ Incredibly, only two people died as a result of the onslaught from Cyclone Heta: a local nurse, Cathy Alec, was crushed in her ruined house, and her 18-month-old baby, Daniel, who was found cradled in his mother's arms, later died as a result of his injuries.⁴¹

The destruction of Lord Liverpool Hospital in Alofi, the only medical facility in Niue, was of immediate concern in the aftermath of the cyclone. The twenty-bed facility was built in 1962 – its predecessor had been destroyed by a cyclone in January 1960 – and included an operating theatre, medical wards, X-ray facilities, maternity, dental and aged-care services. The hospital was refurbished after it was damaged by Cyclone Ofa in 1990, but a lack of funds prevented its relocation to higher ground away from the coast at that time. The New Zealand government minister, Paul Swain, and the director of the hospital, Dr Harry Paka, agreed after Cyclone Heta that the decision not to move the hospital at that time 'probably wasn't the best one'.⁴²

With the imminent approach of Cyclone Heta on 5 January, staff at the hospital discharged all patients who were considered well enough to return home, and moved others to a ward in the main building. Despite the worsening situation, a 'red alert' had not been declared according to the island's cyclone alert system during the morning of 5 January. Nevertheless, the hospital authorities decided to evacuate to the Public Works building, further inland on the plateau above the town. When the waves hit during that afternoon, equipment and medical supplies that had been packed ready for removal were destroyed, and the hospital was rendered unusable.⁴³

DOMESTIC, NEW ZEALAND AND INTERNATIONAL RESPONSES

The delay in activating the cyclone alert system until the threat was imminent was recognised by the Niuean Government as a shortcoming in its response.⁴⁴ At the time of the disaster, the Premier, Young Vivian, was in New Zealand making funeral arrangements for his wife, who had passed away several days before. Niue's National Disaster Management Office (NDMO) was staffed from within the Police Department, and the Chief of Police would normally chair the National Disaster Council to coordinate disaster responses. The dissolution of the council in the early phase of the operation led to marginalisation of the staff of the NDMO.⁴⁵ The response to Heta was subsequently managed by a Cabinet Emergency Management Committee headed by the Deputy Premier, Toke Talagi, with individual ministers taking responsibility for aspects of the relief effort.

The lack of a centrally coordinated response led to some confusion over who was in charge, but the relief effort progressed quickly, with local telephones, power and water being available by 10 January and other services resuming several days later. International communications were not available until after 18 January, when a new telecommunications satellite station provided by the French Government was installed on the island.⁴⁶ Niueans who were left homeless by the cyclone were housed by relatives or friends, and food supplies were distributed through village councils.⁴⁷ Food was generally available in the period after the cyclone, although some food items and bottled water were in short supply before the arrival on 17 January of a regular transport ship with food supplies for three weeks. The ship also carried fuel, which was by that time scarce.

Staff from Lord Liverpool Hospital began treating casualties at the Public Works Department building, to which they had evacuated patients on the morning of the cyclone. Thereafter, Niuean authorities established a temporary health facility at the youth centre, situated inland and adjacent to the island's airport. Some supplies, equipment and older handwritten family medical records were salvaged from the ruins of the hospital, but computerised records and most medical supplies were lost.⁴⁸ The local medical staff, grieving for their colleague killed in the cyclone, worked long hours in the first two days after the cyclone, treating casualties and waiting for the arrival of much-needed supplies and assistance.

New Zealand took a lead role in coordinating the international relief effort, given its history with the island nation, so the High Commissioner, Sandra Lee-Vercor, and officials from the New Zealand Ministry of Foreign Affairs and Trade (MFAT) and the Ministry of Civil Defence and Emergency Management were active in the response. The first of several Royal New Zealand Air Force (RNZAF) C-130 Hercules aircraft arrived in Niue in the morning of 7 January local time, some 36 hours after the peak of the storm. The aircraft carried an assessment team, tarpaulins, blankets, water pumps, generators, satellite telephones, medical equipment, drugs and other supplies.⁴⁹ A second RNZAF Hercules arrived later that day, bringing several members of the Niuean parliament, prominent community members and further relief specialists and supplies.⁵⁰

MFAT contracted two air ambulances from International SOS, a private healthcare provider based in Sydney, to fly to Niue to make a medical assessment and evacuate casualties if required. The two aircraft arrived in Niue in the morning of 7 January, around the same time as the first New Zealand Hercules, and evacuated Daniel Alec, the son of the Niuean nurse killed during the cyclone, and a volunteer worker who had suffered a suspected broken hip.⁵¹ The RNZAF Hercules also carried less serious casualties and several dozen New Zealand nationals on their return to Auckland.⁵²

40 Premier's Department, Government of Niue, 'National impact assessment of Cyclone Heta', p. 4.

41 A. Gregory, 'Disaster on Niue – the aftermath', *New Zealand Herald*, 9 January 2004; and 'Niuean toddler injured by Cyclone Heta dies', PNAS, 26 January 2004.

42 A. Gregory, 'Hospital was rebuilt on unsafe ground', *New Zealand Herald*, 10 January 2004.

43 Hetu and Hibbert-Foy, 'Coping with Cyclone Heta', p. 21.

44 Nosa, 'Niue's perspective on preparedness for avian influenza and pandemic threats', p. 3.

45 J. Laurence, 'Cyclone Heta Niue – EMA post-mission report', 22 January 2004, Defence: EDMS,

46 'Telecommunications with Niue restored', New Zealand Press Association, 18 January 2004; and 'FRANZ relief system in Niue (January 2004)', Embassy of France in Wellington website, viewed 10 January 2012, copy in AWM: AWM330, PK1/825/3.

47 Laurence, 'Cyclone Heta Niue'.

48 S. Close, 'Draft transition plan version 2', 14 January 2004, Defence: EDMS, C136060; and Hetu and Hibbert-Foy, 'Coping with Cyclone Heta', p. 21.

49 Information bulletin 2, IFRC, 'Pacific: Cyclone Heta', 9 January 2004; and 'Emergency relief supplies from New Zealand arrives in cyclone-ravaged Niue', PNAS, 8 January 2004.

50 'Emergency relief for Tonga and Niue', PNAS, 9 January 2004.

51 'Injured baby and volunteer worker on way to Auckland', New Zealand Press Association, 8 January 2004.

52 'Cyclone Heta: NZAF Hercules returns to Auckland', New Zealand Press Association, 10 January 2004.

Neighbouring Pacific states contributed to the relief and reconstruction effort in Niue. The Cook Islands donated \$115,000, and sent two containers with food and clothing.⁵³ Fiji gave Niue a grant of \$40,000, and the Fiji-based UNICEF Pacific provided sports and recreational equipment, vaccines and a medical kit to support a thousand people for three months.⁵⁴ French Polynesia sent two tonnes of relief supplies, and the French Polynesian Intervention Group, a unit set up by the president, Gaston Flosse, provided around fifty workers to clear debris in Alofi, and help construct twenty kit houses donated by the French territory.⁵⁵

AUSTRALIAN RESPONSE AND ADF PLANNING

AusAID staff maintained close contact with local governments, members of NGOs and the Red Cross, and High Commission staff in the affected countries of Samoa, Tokelau and Tonga as Cyclone Heta passed through the island nations of the South Pacific.⁵⁶ The lack of information from Niue prompted the deployment of Ross Sanson, the AusAID program coordinator posted in Wellington, on the first RNZAF Hercules into the country on 7 January, Niue time. Sanson sent first-hand reports to Australia, by a hand-held satellite telephone in the absence of other means, confirming widespread damage to communications, infrastructure and buildings, including the destruction of Lord Liverpool Hospital.⁵⁷

After meetings with officials from the Niue Government, New Zealand High Commission and NGOs, Sanson relayed a verbal request from Deputy Premier Talagi for Australia to provide a mobile medical treatment facility with an environmental health capacity for a period of two to three weeks. The proposed deployment was supported by New Zealand High Commissioner Lee-Vercoe and by officials in MFAT. It was not to treat casualties from the cyclone, but to provide health care on the island in the short term while civilian agencies prepared for a longer-term medical plan.⁵⁸ The Minister for Foreign Affairs, Alexander Downer, approved Australian assistance, and AusAID requested Emergency Management Australia (EMA) to 'mobilise resources' and coordinate the response. Given the urgency of the situation and the lack of time to work out detailed costings, Defence Minister Robert Hill decided to absorb the costs of the mission within the Defence budget rather than seek reimbursement from AusAID, as was the usual practice.⁵⁹ Acting Prime Minister John Anderson subsequently announced an additional \$150,000 to Niue for emergency relief needs, and \$100,000 to Samoa for immediate relief and assessments of damage.⁶⁰

Despite initial advice from the small New Zealand medical team deployed to Niue that Australian medical staff would not be required, preliminary defence planning on 8 January identified the need for a primary health-care unit, a medium-dependency unit with midwife capability, an environmental health team, a small command and communications capability, and a two-person public affairs team.⁶¹ Staff from Headquarters Air Command began planning for a sustained relief effort, with a 5-tonne forklift and driver, and a small air terminal team to support two aircraft the first day and one or two sustainment flights per week thereafter.⁶² A video conference in the morning of 9 January, with the participation of staff from Headquarters Australian Theatre, Air and Land Headquarters, and the Joint Logistics Command, further refined the structure, equipment requirements and aims of the mission.⁶³ The Minister for Defence approved the deployment of ADF troops overseas on Operation Niue Assist later that morning, and the Chief of the Defence Force, General Peter Cosgrove, issued orders for the mission at 1.36 pm.⁶⁴

The command arrangements for Operation Niue Assist were as follows. The Commander Australian Theatre, Rear Admiral Marcus Bonser, had overall responsibility for the mission. The Chiefs of Army and Air Force each assigned personnel for the mission, as listed below, with operational command delegated to the Land Component Commander, Major General Mark Evans, who was at that time acting in the position. The contingent was too small for the use of the Deployable Joint Force Headquarters, as had been the case with Operation Ples Draai and Operation Shaddock in 1997 and 1998 respectively. Instead, the contingent commander was given a small dedicated headquarters to ensure reliable control and communications and to allow the medical team to focus on their tasks.

The contingent commander was Major Ron Armstrong, an officer from the Logistics Support Force Headquarters in Randwick with experience in the Royal Australian Corps of Transport and as a military observer with the UN Mission in East Timor in 1999–2000. The officer in command of the medical team was Major Sean Kennaway, then operations officer in the 1st Health Support Battalion. The senior nursing officer, Major Sue Taggart, had trained as a midwife before joining the Army, giving the contingent the capability identified the previous day.⁶⁵ The remainder of the seventeen-person contingent included a primary health-care team (one medical officer, a nursing officer and three medical assistants), a ten-bed medium-dependency unit (two nursing officers and two medical assistants), an environmental health team (one scientific officer and two technicians) and a small headquarters (the commander and three staff).⁶⁶

The contingent was instructed to be self-sufficient, given the uncertainty over infrastructure in Niue, and therefore carried enough food, water, medical supplies and

53 'Cooks' help for Niue friends to be presented in NZ', PNAS, 12 February 2004.

54 'Fiji provided F\$50,000 to cyclone affected islands', PNAS, 14 January 2004; and 'UNICEF aids Niuean children', PNAS, 22 January 2004.

55 'Niue restructure moves on', PNAS, 29 January 2004.

56 See for example note for file, 'TC Heta – updates', 6 January 2004, DFAT: 04/0081.

57 Cable WL21815, Wellington to Canberra, 8 January 2004, DFAT: 04/0081.

58 Email, S. Close to various, 8 January 2004, DFAT: 04/0081; and minute, V Adm R.E. Shalders to R.M. Hill, 9 January 2004, Defence: EDMS, B296893.

59 Letter, A. March to R. Cameron, 'AUSASSISTPLAN – Niue – Cyclone Heta', 8 January 2004, DFAT: 04/0081.

60 Media release, J.D. Anderson, 'Australia to send health care team to cyclone-ravaged Niue', 9 January 2004.

61 Letter, A. March to R. Cameron, 'AUSASSISTPLAN – Niue – Cyclone Heta', 8 January 2004, DFAT: 04/0081; and signal 081319Z, CDF to COMAST, 9 January 2004, Defence: EDMS, C441228.

62 Draft signal, HQACAUST to 86 WG, 9 January 2004, Defence: EDMS, B481227.

63 Minute 2003/72796/1, COFS to HQAST, 13 March 2004, Defence: EDMS, C464467.

64 Minute, V Adm R.E. Shalders to R.M. Hill, 9 January 2004, Defence: EDMS, B296893; and signal 090236Z, CDF to COMAST, 9 January 2004, Defence: EDMS, C440674.

65 Interview, S.J. Taggart, 1 March 2005.

66 Report, 'Health support plan: Operation Niue Assist', n.d., Defence: EDMS, C136045; and 1 HSB, 'Environmental health appreciation: Op Niue Assist', n.d., Defence: DRN, copy in AWM: AWM330.

equipment for the three-week mission. Instructions were given to limit the amount of cargo to what could be carried in one RAAF Hercules from No. 37 Squadron, so there was little hope of acceding to a request from New Zealand to carry a bulldozer on the flight to help clear rubble in Alofi.⁶⁷ Last-minute approval to take a Land Rover to Niue to manage environmental and public health problems, however, led to a need for a second sustainment flight, as the vehicle and all the required stores could not fit in one aircraft. A civilian Shorts Belfast freighter, which had just returned from a resupply flight to the Solomon Islands, was subsequently chartered to carry the remaining food, fuel and water.⁶⁸

As is often the case with disaster responses, the time from notification to deployment of personnel was small, in this case just over nine hours from the initial warning order to the departure of the contingent. Aside from an environmental health brief and some instruction from the EMA liaison officer, Joanne Laurence, the contingent did not undergo any detailed briefing before departure. Other preparations were also lacking; uniforms and bedding were not impregnated with insecticide, anti-malarial regimes were not commenced before departure, and pre-deployment medical screening and administration was skipped.⁶⁹

ARRIVAL AND SET-UP

The RAAF Hercules from No. 36 Squadron arrived in Niue just before 8 am local time on 9 January 2004, two days after the arrival of the first RNZAF Hercules.⁷⁰ On board were the seventeen members of the medical contingent, a three-person public affairs team, the EMA liaison officer and the aircraft's crew. The direct flight from Richmond, some 4,500 kilometres, took a little more than nine hours, and despite the tiring overnight flight, the priority on arrival was to unload and set up. The cargo was unloaded by hand onto a six-wheeled flat-top truck provided by the local authorities. After unloading, the aircraft flew to Pago Pago in American Samoa, where it refuelled and stayed overnight before returning to Australia. The three members of the public affairs team returned on this flight, having collected images, vision and information to distribute to Australia's media.⁷¹ The sustainment flight left Australia on 11 January with the remaining cargo, sustainment and further medical supplies identified by the contingent, and one tonne of clothes and other gifts for children donated by the Niuean community in Australia.⁷²

Meanwhile, the contingent was met at Halan International Airport by the Deputy Premier, Toke Talagi, and other local authorities. The commander soon met police and health officials, and the New Zealand High Commissioner and the AusAID representative, Ross Sanson.⁷³ Talagi expressed his thanks to the Australians, but seemed

concerned that there were no plans for further aircraft and that a communications antenna was not on board. He also seemed unaware of the contingent's plans to stay for only three weeks, expressing a strong preference for them to remain until the hospital was rebuilt.⁷⁴

The Australian health unit was established adjacent to a youth centre, which was being used as a temporary health facility by staff from the damaged Lord Liverpool Hospital. It had been the intention to set up the contingent's primary health-care unit and tented medium-dependency unit in tents brought from Australia, but approval was received to establish the latter in an ancillary building of the youth centre.⁷⁵ The spare tent was subsequently used for sleeping quarters for the contingent, as their accommodation tents had been offloaded from the aircraft before departure. The facility was operational by midday on the day of their arrival, 9 January, giving the local nurses working long hours at the temporary facility at the youth centre an opportunity to tend to their families.⁷⁶

Of immediate concern to the contingent was the large quantity of asbestos among the debris from the cyclone. Local people, including children, seemed unaware of the danger and were handling the material without protective equipment. Many buildings in Niue that had been damaged in the cyclone used asbestos, including those rebuilt by the New Zealand Government after cyclones in 1959 and 1960.⁷⁷ The New Zealanders had asbestos removal teams operating by 10 January, and arranged to have additional equipment sent on an RNZAF Hercules on 13 January. The commander of the Australian contingent, Armstrong, sought approval from Land Headquarters in Sydney for additional asbestos safety equipment and storage bags to be sent on the Australian sustainment flight, which arrived in Niue in the morning of 11 January local time. A team of around eighty locals were subsequently trained in proper handling of asbestos by the New Zealanders and Australians, and by 16 January they had collected loose asbestos on the island for storage and later disposal.⁷⁸ Despite these efforts, the threat from asbestos continued to be of concern throughout the deployment and for many years after.⁷⁹

WORK OF THE MEDICAL TEAM

The Australians had planned their contingent to treat between twenty and thirty outpatients per week from a static health clinic.⁸⁰ There was, however, only one patient on the first day: an 11-year-old boy with a broken arm, which led to concerns that the

67 Minute, Maj Gen M. Evans (DCJOPS) to CDF, 28 May 2004, Defence: EDMS, C464467; and email, C. Marchant to S. Close, 9 January 2004, DFAT: 04/0081.

68 Minute, Air Cdre K.J. Paule to R.M. Hill, 12 January 2004, Defence: EDMS, B297107.

69 Laurence, 'Cyclone Heta Niue'; and 1 HSB, 'Environmental health appreciation: Op Niue Assist', n.d., Defence, DRN, copy in AWM: AWM330, PKI/825/3.

70 The captain was Flt Lt J. Allen (unit history sheet, 'No. 37 Squadron', 9 January 2004, Defence: APDC).

71 'Niue Assist trip report, 09–11 Jan 04', c. 11 January 2004, Defence: EDMS, B483938.

72 Minute, Air Cdre K.J. Paule to R.M. Hill, 12 January 2004, Defence: EDMS, B297107.

73 Signal 100602Z, LHQOPS to ADHQOPS, 10 January 2004, Defence: EDMS, C441219.

74 'Niue Assist trip report, 09–11 Jan 04', c. 11 January 2004, Defence: EDMS, B483938.

75 Email, R. Armstrong to author, 25 September 2014, copy in AWM: AWM330, PKI/825/3.

76 Signal 100602Z, LHQOPS to ADHQOPS, 10 January 2004, Defence: EDMS, C441219; Laurence, 'Cyclone Heta Niue'; and Hetu and Hibbert-Foy, 'Coping with Cyclone Heta', p. 21.

77 The New Zealand Government had allocated NZ\$10 million to remove the asbestos before Cyclone Heta ('Aid money to upgrade housing', PNAS, 25 March 2004).

78 Laurence, 'Cyclone Heta Niue'; and 'Asbestos clean-up equipment heading to Niue', PNAS, 12 January 2004; signal 100602Z, LHQOPS to ADHQOPS, 10 January 2004, Defence: EDMS, C441219; and signal 160601Z, LHQOPS to ADHQOPS, 16 January 2004, Defence: EDMS, C443246.

79 Email, S. Frame to various, 23 January 2004, DFAT: 04/0150. The piles of asbestos continued to be an issue for the Niue Government, the first containers not being removed by New Zealand until 2014 ('Debate over who cleans up Niue's asbestos', TVNZ OneNews website, 18 February 2010, viewed 25 September 2014, copy in AWM: AWM330, PKI/825/3; and media release, Government of Niue, 'First shipment of asbestos', 17 July 2014).

80 'Health support plan: Operation Niue Assist', n.d., Defence: EDMS, C136045.

ADF health team would be underutilised. Discussions with local authorities led to a decision for the Australians to conduct several mobile health clinics at outlying villages, which would take the teams to areas of need and allow them to gauge the general levels of health in the community.⁸¹

The first of four mobile health clinics was opened from 8 am on 10 January. Notices on local radio ensured a good turnout, and by the end of the day the Australians had treated seventy-seven patients, mainly for upper-respiratory tract infections, minor wounds, pre-existing conditions and post-cyclone stress counselling.⁸² Three more clinics were held in various parts of the small island between 12 and 14 January, treating an additional seventy-three patients in total.⁸³ The clinics were held in church or village halls, and were generally well attended. Such a service was, however, not offered in normal times, so after all quarters of the island had been covered by the Australian clinics, the service was discontinued, despite the fact that it had been well received by the local people and appreciated by the Niuean Government.⁸⁴

The primary health-care team in the tent at the youth centre treated fifteen patients in the first four days. There was no call during this period or subsequently for the ADF resuscitation team, and the only use of the medium-dependency unit was for the short-term transfer of two patients from the local health facility. From 11 January, the ADF medical staff began treating patients from the local facility in the youth centre, averaging twenty-two patients per day until the last was treated on 20 January.⁸⁵ The ailments here were similar to those treated at the mobile clinics: fevers and upper respiratory infections and redressing wounds. The primary health-care team tent was maintained for overflow capacity, but it was not required as the level of care provided for in the youth centre was sufficient for the needs of the island's residents.⁸⁶

In addition to advising local authorities with regard to the handling of asbestos, Lieutenant Mark Tamblyn and his environmental health team chlorinated all the groundwater supplies on the island, confirming that the water was potable by 12 January.⁸⁷ The large amount of decomposing food increased the local fly population, leading to the ADF initiating a program to control breeding sites. A local health worker accompanied the ADF environmental health officers and was trained in correct procedures for disposing of waste.⁸⁸

After the first week, the number of patients reduced markedly, leading to the members of the contingent engaging in other activities to keep busy. These included assisting local medical staff to salvage and dry medical records from Lord Liverpool Hospital, and helping to clear local roads of fallen palm trees.⁸⁹ One task the contingent did not

assist with was cutting a fire break to help control a bushfire, which had broken out in the north-west of the island on 10 January, the day after their arrival. The New Zealand High Commissioner made the request for ADF assistance after the Niueans were unwilling to move their fire truck from the airport. Understandably, the Australians refused, as they had no equipment, no protective gear, no experience in fire-fighting and no knowledge of the area.⁹⁰

The Australians lived in field conditions during the short deployment, sleeping on collapsible stretchers in the tent brought from Australia. Personnel ate combat ration packs and drank bottled water, and there were no reported illnesses or injuries among the contingent. Armstrong considered morale to have remained high during the short mission, although he was concerned that the reduced number of medical treatments required in the final days might have lowered the overall sense of achievement.⁹¹

TRANSITION AND RETURN TO AUSTRALIA

Despite the hopes of Deputy Premier Talagi on their arrival, the ADF contribution to Niue after Cyclone Heta was always planned to be a short-term deployment. In the longer term, however, the Australian Government was committed to assisting the recovery of the island, particularly the medical services destroyed by the storm. Of the remainder of the initial \$150,000 provided by Australia after the purchase of relief supplies delivered in the sustainment flight of 11 January, \$40,000 was used to build a customs warehouse, and the remainder was allocated for restoration of the medical system.⁹²

To assist in the transition to recovery, the commander of the medical contingent, Major Kennaway, provided a report to the Niue Hospital medical director that detailed the supplies and equipment needed to maintain a suitable level of health care at the temporary facility after the departure of the ADF team. This list was compiled by the contingent's medical officer, Captain Rob Lewin, in conjunction with volunteer doctors from New Zealand, and included an electrocardiograph (ECG) machine, oxygen supply equipment, a blood pressure monitor, a defibrillator and a polymobile X-ray machine and supplies.⁹³ AusAID provided these supplies and equipment, which were transported to Niue on the RAAF Hercules flight that returned the contingent to Australia. Local medical staff were trained in the use of the equipment during the 2.5 hours in which the two pallets of the contingent's equipment were loaded onto the aircraft, with surplus medical consumables being given to the hospital.⁹⁴

Planning for the return of the contingent began almost as soon as the team arrived in Niue, and was closely linked to the transition plans. By the end of the second day, the commander had drafted a plan for the restoration of local medical services and determined that the contingent should be able to return to Australia by around 20 January local time.⁹⁵ Several days later, Armstrong modified the plan to have the withdrawal

81 Signal 100602Z, LHQOPS to ADHQOPS, 10 January 2004, Defence: EDMS, C441219.

82 Signal, LHQOPS to ADHQOPS, 11 January 2004, Defence: EDMS, C441212.

83 Signal 130624Z, LHQOPS to ADHQOPS, 13 January 2004, Defence: EDMS, C442249; signal 140656Z, LHQOPS to ADHQOPS, 14 January 2004, Defence: EDMS, C442629; and signal 150651Z, LHQOPS to ADHQOPS, 15 January 2004, Defence: EDMS, C442906.

84 Signal 150651Z, LHQOPS to ADHQOPS, 15 January 2004, Defence: EDMS, C442906.

85 Signal 210717Z, LHQOPS to ADHQOPS, 21 January 2004, Defence: EDMS, C445321.

86 Email, R. Armstrong to author, 25 September 2014, copy in AWM: AWM330, PKI/825/3.

87 Signal 130624Z, LHQOPS to ADHQOPS, 13 January 2004, Defence: EDMS, C442249.

88 Signal 140656Z, LHQOPS to ADHQOPS, 14 January 2004, Defence: EDMS, C442629.

90 Laurence, 'Cyclone Heta Niue'.

91 Signal 150651Z, LHQOPS to ADHQOPS, 15 January 2004, Defence: EDMS, C442906.

92 S. Close, 'Draft transition plan version 2', 14 January 2003, Defence: EDMS, C136060.

93 Letter, S. Kennaway to Niue Hospital Medical Director, 12 January 2004, Defence: EDMS, C136059.

94 Signal 190639Z, LHQOPS to ADHQOPS, 19 January 2004, Defence: EDMS, C443930.

95 Signal 140656Z, LHQOPS to ADHQOPS, 14 January 2004, Defence: EDMS, C441212.

coincide with the delivery of medical supplies and equipment identified to be provided by AusAID.⁹⁶ The Hercules from No. 37 Squadron arrived in the afternoon of 22 January with the supplies and to return the contingent.⁹⁷ Also on the aircraft was a civilian doctor and a nurse provided by the Australian Red Cross with funding from AusAID. Dr Siobhan Bourke and David Overlack received a briefing from the departing ADF medical team, as well as taking receipt of surplus contingent medical supplies.⁹⁸

Niue lacked suitable facilities to clean ADF equipment, including the Land Rover, for inspection by the Australian Quarantine Inspection Service. The decision was subsequently taken to undertake the cleaning and inspection at RAAF Base Richmond after the return of the contingent. This proved to be an efficient arrangement, and a recommendation was made for it to be standard practice in future missions.⁹⁹ As will be seen in the following chapters, however, the scale of the relief effort after the Indian Ocean tsunami later that year led to a substantial and time-consuming effort to clean and inspect equipment in the deployed area.

CONCLUSION

The New Zealand High Commissioner to Niue, Sandra Lee-Vercos, described Cyclone Heta as the 'worst in living memory'.¹⁰⁰ The seventeen-person Australian medical contingent deployed from 9 to 22 January 2004 in response to the disaster provided 242 treatments at the temporary clinic near the airport and a further 158 treatments during four mobile health clinics around the island.¹⁰¹ The contingent's environmental health team chlorinated groundwater supplies, provided advice on the safe handling of asbestos, and undertook activities to reduce the numbers of mosquitoes and flies breeding on the island.¹⁰² Further to the deployment of the medical team, Australia also provided \$218,000 for equipment, staff and supplies for the interim hospital in addition to the initial contribution of \$150,000, and later contributed \$4 million for the Niue trust fund.¹⁰³

Overall, Operation Niue Assist was a small mission for the ADF, but one that provided a valuable medical service for Niue during the transition period after the destruction of the local hospital and before the establishment of an adequately equipped temporary facility. Although the medical team provided more overall treatments than was initially planned, most were minor procedures. There was no call on the contingent's ability to provide high- or medium-dependency care, or maternity services, but these were available if required.

⁹⁶ Signal 150651Z, LHQOPS to ADHQOPS, 15 January 2004, Defence: EDMS, C442906.

⁹⁷ Minute, Air Cdre K.J. Paule to Gen P.J. Cosgrove, 20 January 2004, Defence: EDMS, B297650. The aircraft was piloted by Flt Lt M.G. Biner (unit history sheet, 'No. 37 Squadron', 22 January 2004, Defence: APDC).

⁹⁸ Email, S. Frame to various, 23 January 2004, DFAT: 04/0081.

⁹⁹ Signal 200823Z, COMAST to LCAUST, 20 January 2004, Defence: EDMS, C136048; and minute, Brig B.R. Dawson to HQAST, 'Post-operational report: Operation Niue Assist', 13 March 2004, Defence: EDMS, C464467.

¹⁰⁰ 'Emergency relief supplies from New Zealand arrive in cyclone-ravaged Niue', PNAS, 8 January 2004.

¹⁰¹ Signal 220620Z, LHQOPS to ADHQOPS, 22 January 2004, Defence: EDMS, C445473.

¹⁰² Signal 140656Z, LHQOPS to ADHQOPS, 14 January 2004, Defence: EDMS, C442629.

¹⁰³ Minute, S. Close to R. Barge, 'Aid – Niue – Cyclone Heta relief', 30 January 2004, DFAT: 04/1368; and 'Australia follows NZ contribution to Niue rebuilding', New Zealand Press Association, 7

The levels of damage to houses, infrastructure and livelihoods led to fears of an exodus from which the island state could not recover. The population in the 2006 census, however, was listed as 1,607 – only slightly down on the 2001 figure, showing a willingness of the local people to remain and rebuild their community.¹⁰⁴ The New Zealand Government provided an initial \$8.1 million for reconstruction of Niue, and later a further \$18 million in assistance spread over five years. This included funds for the construction of a new hospital, Niue Ffoo, which was built inland near the airport, and the provision of a new parliament building and power station.¹⁰⁵ Despite these efforts to rebuild the island's infrastructure, Niue continued to remain heavily dependent on foreign aid, and the country would attract only a fraction of the tourists who visit its larger South Pacific island neighbours.

Despite the lack of deployments to the Pacific in the decade before 2004, the ADF had elsewhere been extremely active, with some of the largest and longest disaster operations to date. As described in earlier chapters, the severe El Niño drought led to substantial disaster relief missions in Papua New Guinea (Operation Ples Draï) and Indonesia in 1997–98 (Operation AusIndo Jaya), followed closely by the deployment to northern Papua New Guinea after the Aitape tsunami in July 1998 (Operation Shaddock). Concurrent involvement in peacekeeping missions through the 1990s and early 2000s ensured that the ADF remained at a high tempo of operations. These missions included some of the largest contributions Australia has made to international peacekeeping, including to Somalia, Cambodia, Rwanda, Solomon Islands and East Timor.

The deployment of the small ADF medical contingent to Niue provided few substantial lessons for future deployments. Nevertheless, the benefit gained by the ability to deploy mobile health clinics was identified by Land Headquarters for consideration in future deployments. This was taken up to great effect in the Australian response to the earthquake in Kashmir the following year. The deployment of a small headquarters to shield the officer commanding the health element of the contingent was also noted.¹⁰⁶ For the ten medical staff from the 1st Health Support Battalion deployed on the mission, the routine nature of the treatments encountered provided little opportunity to develop their field experience. By the end of that year, however, half of these personnel would face a much greater challenge when they deployed to a remote area of Indonesia as part of Australia's medical response after the Indian Ocean tsunami of 2004.

¹⁰⁴ Barnett and Ellemor, 'Niue after Cyclone Heta', p. 3.

¹⁰⁵ Ibid., p. 4; and 'Niue gets security boost as part of NZ assistance', New Zealand Press Association, 1 November 2004.

¹⁰⁶ Minute, Brig B.R. Dawson to HQAST, 'Post-operational report: Operation Niue Assist', 13 March 2004, Defence: EDMS, C464467.