



The Parliament of the Commonwealth of Australia

DEFENCE SUB-COMMITTEE
VISIT TO
EXERCISE TANDEM THRUST 97
12-14 MARCH 1997

Joint Standing Committee on Foreign Affairs, Defence and Trade

May 1997

Introduction

On 4 February 1997, the Defence Sub-Committee of the Joint Standing Committee on Foreign Affairs, Defence and Trade was briefed on Exercise TANDEM THRUST 1997 as part of its continuing programme of briefings on Defence matters. The briefing was given by the Assistant Chief of the Defence Force for Strategic Operations and Plans, Air Vice Marshal B G Weston AM; the Maritime Commander Australia, Rear Admiral C J Oxenbould AO, RAN; and the Commander Flotillas, Commodore T H Cox, AM, RAN. On conclusion of that briefing, Admiral Oxenbould invited the Sub-Committee to visit the exercise, and suggested an itinerary for the visit.

Members of the Sub-Committee visited the exercise area over the period 12 - 14 March 1997. The itinerary for the Sub-Committee's visit is shown at Appendix 1.

Exercise Aims and Timings

Exercise TANDEM THRUST was the first in an anticipated series of US Pacific Command - sponsored major combined exercises, involving a combined task force of US and ADF naval, marine, land, air and special forces combined components. The aim of the exercise was to train both the staff of the Commander, US Seventh Fleet, and elements of the Australian Defence Force for operations in the Pacific area. The exercise was also intended to demonstrate a variety of ADF and US military capabilities in a combined arms environment and test the capability of Australian and United States command and control procedures.

The exercise comprised a Command Post Exercise (CPX) and a Special Operations Forces Exercise (SOFEX), followed by a Field Training Exercise (FTX). The exercise began with the deployment of the Commander of the Exercise Control Group to Sydney on 22 January 1997, and concluded at the completion of the FTX on 22 March 1997. The Field Training Exercise (FTX) component was conducted in the Shoalwater Bay Training Area (SWBTA), near Rockhampton over the period 10 - 22 March 1997.

Exercise Participants

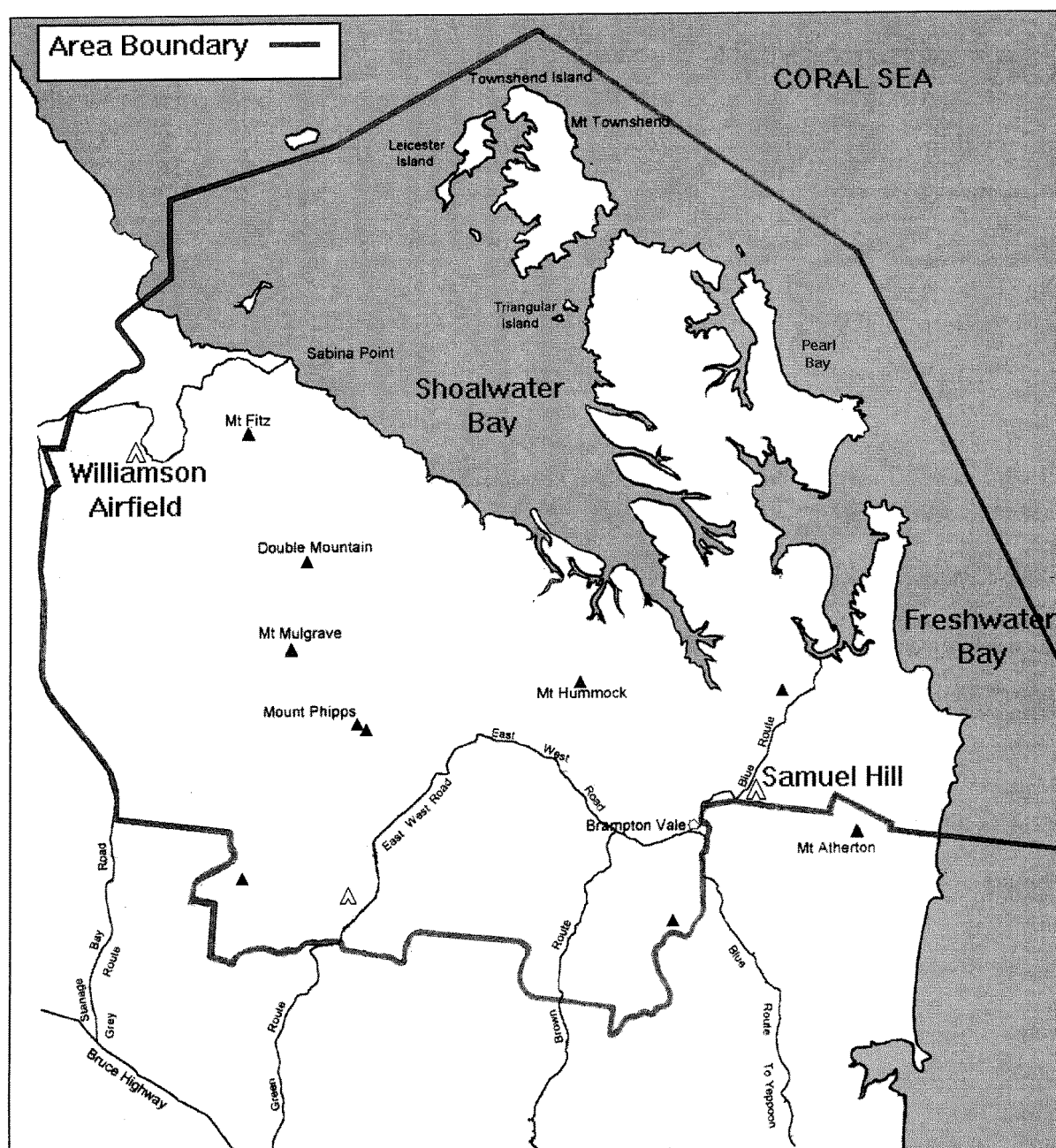
Approximately 21,500 US personnel took part in the exercise, of which several thousand made an amphibious landing into the SWBTA. Most remained at sea as part of the Carrier Battle Group and Amphibious Ready Group. Approximately 5,700 ADF members participated from all of the three Services.

The exercise involved operations by 203 US and 49 ADF aircraft, and saw participation by 23 US ships (including the *Forrestal* Class aircraft carrier USS INDEPENDENCE, the amphibious command ship USS BLUE RIDGE, and the nuclear submarine USS SALT LAKE CITY) and 20 RAN ships (including HMAS BRISBANE, SYDNEY, MELBOURNE, ADELAIDE, TOBRUK, WESTRALIA, and the submarine HMAS OTAMA).

The Shoalwater Bay Training Area

The SWBTA, purchased by the Australian Government in 1965, is used by the Australian Navy, Army and Air Force for independent and joint exercises. Other countries, particularly New Zealand, Singapore and the USA have also exercised in the area. SWBTA has a land area of 270,000 hectares or 1000 square miles and is managed by the Australian Army. As the marine sections are included in the Great Barrier Reef Marine Park, military use of these areas is carried out in consultation with the Great Barrier Reef Marine Park Authority and the Queensland Department of Environment. The land parts of the SWBTA are managed by the Army's Base Administrative Support Centre in Rockhampton.

Figure 1 Map of Shoalwater Bay Training Area



Environmental Issues

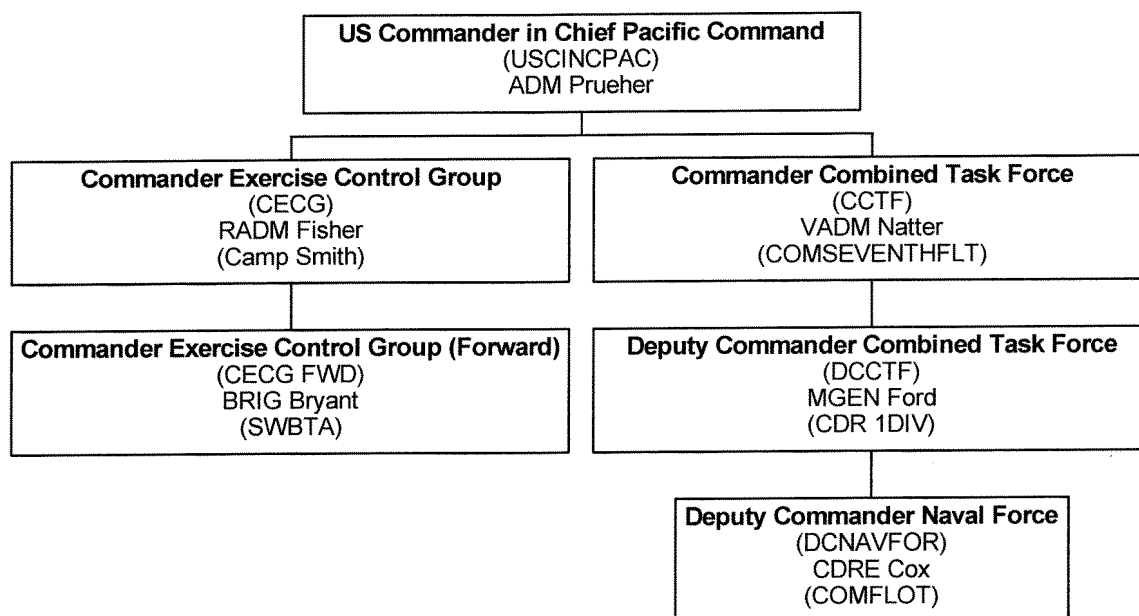
In the publicity leading up to commencement of the exercise, community concern became evident, with regard to the conduct of a major military exercise in an area overlapping part of the Great Barrier Reef Marine Park. The initial brief to the Sub-Committee confirmed that the exercise planners maintained close liaison with the Great Barrier Reef Marine Park Authority, the Queensland Department of Environment, the Shoalwater Bay Environmental Management Advisory Committee and other environmental and cultural bodies throughout the planning process to ensure appropriate consultation and compliance. Procedures were put in place to regulate activities to minimise environmental impact, including the following:

- sensitive areas and locations of protected flora, fauna and cultural sites were protected by declared avoidance measures, while maintaining the integrity of the exercise,
- all participating forces were fully briefed prior to exercise commencement on their responsibilities in regard to care of the environment, and
- an environmental monitoring group was established by Defence to monitor the exercise and to provide expert environmental management advice.

Exercise Command Structure

The following command structure was used for the exercise, to incorporate senior US and Australian appointments.

Figure 2 Senior Command Structure, Exercise Tandem Thrust 97



Wednesday, 12 March 1997

Present:

Senator D J MacGibbon (Chairman)
Mr W L Taylor, MP

Initial Briefing - Headquarters Exercise Control Group, Rockhampton

Briefings on the exercise were conducted at 1630 hrs, by a team comprising BRIG Ian Bryant - the Commander Exercise Control Group (Forward), Commander Brad Fussell, USNR, and Commander Peter Lockwood, RAN.

The briefing team gave an overall brief on the exercise, including an overview of the agreement of procedures between US Forces and the ADF for the conduct of the exercise. An important feature of the exercise was consolidation of the already high level of interoperability that exists between the forces of the two nations. One example of this interoperability was that between the US Army's 25th Infantry Division and the 3rd Brigade of the Australian Army. It was notable that the US Task Force, on arriving in Australia, became a fully integrated part of the 3rd Brigade.

Two areas where interoperability between the two forces was below that required was in the areas of communications and information systems. Although both nations speak English, their differing interpretations remain a source of communication problems. It also became noticeable that ADF interconnectivity capabilities lagged those of the US forces by a significant margin, as the US progresses in its efforts to pursue digitisation and satellite communications. Although most of the communication problems emerging from the exercise were solved, given sufficient time, effort and ingenuity, there remained a risk of Australia being left behind technologically.

The exercise also provided examples of the growing problem of information overload. While new methods of communications and intelligence dissemination offer the capacity to better inform commanders in the field, there remains the concomitant danger that the volume of information available may exceed the capacity of the commander and his staff to process. As new information systems are developed, it is essential that parallel systems also be developed that filter the information, to provide the commander with all the information he needs, in a form he is able to assimilate, without overwhelming his capacity to deal with it.

Commander Fussell commented on the impacts that the cyclonic conditions had had on the exercise: While the cyclone had posed a challenge, it provided unexpected benefits in testing both the participating combat units in extreme conditions, and testing the ability of the joint planning staff to replan and reschedule exercises to ensure that exercise objectives were met. However, as a result of the weather conditions, a number of exercise objectives were not able to be met. Among these were:

- Mine countermeasure (MCM) training - 70 percent of MCM activities had to be curtailed due to the inability of the MCM vessels to operate in the extreme conditions.

- The Australian portion of the amphibious lodgement - up to 50 percent of the training objectives could not be achieved. The US amphibious activities were less affected, as they were able to place a greater reliance on amphibious landing by helicopter.
- The US Special Forces Mk 5 Boat activities had to be cancelled, as they were unable to operate to full capability in the sea conditions
- Approximately one third of the tactical manoeuvre phase intended for the Marine Forces (represented by elements of the 3rd Marine Expeditionary Force) was not achieved, as the delayed amphibious landing shortened the time available for these activities.

In spite of the above, the Exercise Control Group estimated that approximately 93 percent of the exercise's training objectives were met.

Thursday, 13 March 1997

Present:

Senator D J MacGibbon (Chairman)
 Rt Hon I McC Sinclair, MP
 Mr W L Taylor, MP

Discussions with Commander Exercise Control Group - Headquarters CECG, Rockhampton

The Sub-Committee met with Rear Admiral Kenneth L Fisher, USN, the Commander of the Exercise Control Group (CECG). Rear Admiral Fisher briefed the Sub-Committee on overall objectives of the exercise. He believed that the most important aspect of the exercise was the detailed planning carried out in the Command Post Exercise conducted in Hawaii in the pre-deployment phase of the exercise.

This was the first truly combined all-environment strategic-level activity that had been conducted between the forces of the two nations since World War II. Over the last twenty to thirty years, virtually all combined Australian-US activities had seen integration at the tactical level only. Although Exercise TANDEM THRUST involved combined activities at the tactical level, its main benefits resulted from the integration of military staffs at the operational and strategic levels for formulation and execution of plans. This has been the first exercise where the allies have participated as equal partners throughout the planning and conduct phases. Rear Admiral Fisher also spoke on the benefits ensuing from the deployment of personnel, materiel and equipment to the SWBTA and setting up of the combined command and control system. He was not overly disappointed that the cyclonic weather had delayed the amphibious landing. The landing would still take place by whatever means were required, and if by helicopter rather than landing craft, it would still provide practice in the execution of a major amphibious landing.

Rear Admiral Fisher's views of the imposed environmental restrictions were generally positive. US forces were used to operating with similar restrictions on their own exercise areas and ranges. Also, the large size of the SWBTA provided some mitigation of the problem, in that the relatively small areas which required protection for environmental reasons did not impose undue restrictions on tactical manoeuvring, or the conduct of the exercise generally.

Commander Lockwood briefed further on environmental matters. Environmental protection was a high priority in the planning and conduct of the exercise, although on occasions this introduced artificialities into military activities. One example of the impact of environmental issues on the exercise was the issue of siting simulated surface-to-air missile batteries in the Mount Hummock area, for use as air strike targets. The priority for their siting was to ensure minimisation of erosion caused by the explosion of the strike weapons, rather than to simulate a realistic siting for military advantage.

Logistic Support Base - Rockhampton

The Sub-Committee met with LTCOL Keith Christianson, ARA, the Commanding Officer, Combined Engineering Group. As implied by its name, the Combined Engineering Group comprised elements of both Australian Army and US Marine units amalgamated to provide civil engineering works in support of operations. This particular group had been formed specifically to provide works within the SWBTA in support of Exercise TANDEM THRUST. The US forces had made a major contribution to the funding of these works, having provided over \$400,000 for infrastructure support works for this and future exercises in the area. As at the date of the Sub-Committee's visit, this money had been used to complete the construction of a variety of roadworks, culverts, bridges, washing-down facilities and concrete pads for tents. The Sub-Committee observed many examples of the works provided by the engineering group, including the several significant roads throughout the area. In keeping with the intended use of thoroughfares within the SWBTA, all roads are unsealed.

While at the Rockhampton Support Centre, the Sub-Committee also viewed ADF computers running some innovative new software being used for the exercise by the Combined Engineering Group. These included the 'Imagine' and 'Arcview' applications, which use digitised terrain information and overlays of maps and imagery, for terrain visualisation. The Combined Engineering Group was using a digitised terrain simulation of the area surrounding Freshwater Beach, the amphibious landing site. This provided a unique perspective of the main areas of operations for the exercise. Similar applications are used by the US military for intelligence and targeting purposes, and the Australian Army used the 'Imagine' software in this way for Exercise TANDEM THRUST; for example, to determine the siting of special forces observation posts, and for briefing patrols on expected terrain. However, an additional and innovative use made of the software by the Australian Army on this exercise was for engineering purposes. These applications included:

- assisting in siting of targets, to ensure minimum environmental impact resulted from air attacks.
- determining watershed, to both indicate possible areas of flooding and for environmental protection purposes.

- calculating the effects of rainfall on soil surfaces around the SWBTA, to predict vehicular mobility and areas liable to bog vehicles.

The Sub-Committee remarked that innovation remained a hallmark of the ADF.

3rd Marine Expeditionary Force Headquarters - Samuel Hill, SWBTA

The Sub-Committee left the Rockhampton airport area by RAN Sea King Helicopter, bound for the SWBTA. The Sub-Committee was interested to see this use of Sea Kings for carriage of passengers and general cargo around the exercise area. This use was in keeping with the Sea King's current role as a utility helicopter, since having been replaced in its combat role by the Seahawk. The Sub-Committee wondered, however, whether use of the helicopter for passenger airlift was an economical employment of the aircraft.

The first destination in the visit to the exercise area was Samuel Hill, which is one of the major developed military bivouac areas in the SWBTA. The site is equipped with permanent ablution and toilet blocks, concrete pads to improve the wet-weather habitability of tents, and a number of robust, steel-structured buildings with cement floors, although no internal fittings. Power to the site is supplied by mobile generators. The site was used during Exercise TANDEM THRUST as a deployment base for the Headquarters of the 3rd Marine Expeditionary Force (III MEF).

Figure 3 Defence Sub-Committee members with Brigadier Generals Ayres and Byrum, USMC, at Samuel Hill deployment base



From L to R: Brigadier General Byrum, Senator MacGibbon, Mr Taylor, Major Brown (exercise liaison officer), Mr Sinclair, Brigadier General Ayres.

The Sub-Committee was briefed by Brigadier General Ayres, USMC, the Commander 3rd Marine Division, and Brigadier General B Byrum, USMC, the Commander III MEF

(Forward). Following an overall brief by both commanders on exercise objectives, the Sub-Committee inspected the III MEF Headquarters and facilities. The Headquarters was equipped with a very complex communications setup, including two very large satellite dishes for US equipment, and two Australian Army dishes for the Parakeet communications system. Those US personnel interviewed by the Sub-Committee were generally very complimentary about the capabilities of the Parakeet system, and its compatibility to integrate with US links.

The differing perspectives of Exercise TANDEM THRUST 97 by the ADF and USMC forces gave an interesting comparison. Although this exercise was a major event for the ADF, it was merely one in a coordinated series of exercises for the USMC forces, with similar large exercises also being conducted in Japan and the Persian Gulf.

The Sub-Committee noted the extent to which the USMC forces operated across the whole spectrum of military capabilities and integrated the requirements of land, sea and air operations. The extent to which the USMC coordinated its forces across the three environments as part of its normal operations showed what could be achieved in time, with development and constant exercise of joint operations doctrine.

Another important aspect of the Samuel Hill deployment was the presence of a small ADF communications contingent, commanded by an Australian officer, Major John Wilson, the Operations Officer from No 1 Signals Regiment. Major Wilson's group was integrated into the USMC's No 7 Communications Battalion, and was in charge of configuring US and ADF communications systems to ensure seamless integration. This gave ADF personnel unprecedented access to the US network, and represented one of the first occasions when the US military had allowed a foreign national such a degree of control over their vital communications links. The Sub-Committee was impressed by this capacity to integrate the communications systems of the US and Australian forces, and further noted the degree to which the US forces accepted ADF personnel, both in their command chain, and on an individual basis.

The Sub-Committee was also shown the comprehensive air traffic control system set up at Samuel Hill for the exercise. The deployed equipment was capable of, and responsible for controlling a large block of airspace, from sea level to 60,000 ft over SWBTA and a large part of adjacent ocean. Air traffic data feeds for the system were provided from Air Services Australia from multiple sources along the Queensland coast, from Townsville to Brisbane. Air data was also integrated into the system from USN ships off the coast, from US AWACs aircraft and from two US mobile ground based radars in the training area. The system was also capable of providing all communications necessary for the control and safety of all exercise air traffic.

Another US military detachment operating from the Samuel Hill deployment base was Task Force 143 of the Texas National Guard. The Sub-Committee was briefed on the deployment of this detachment, which was airlifted from Texas, and transported almost directly to SWBTA, stopping only to refuel in Guam. This ability to deploy a major fighting detachment quickly between continents served as a demonstration of the US strategic airlift capability, and shows what is intended by the US military's aim of achieving 'Global Reach'.

Combined Engineer Group (Forward) - Samuel Hill, SWBTA

The Sub-Committee visited the forward detachment of the Combined Engineer Group, and were briefed by the commanding officer of the detachment, Major David Buckley ARA. The detachment was again a combined unit, comprising 21 Construction Squadron RAE, plus a large number of US 'Seabee' (Construction Battalion) elements. This was the engineering unit performing civil engineering tasks in the field, including construction and repair of roads, culverts and bridges. Another important construction work specifically for this type of combined exercise was washing-down facilities for US and other overseas vehicles for quarantine purposes. This comprised a cement pad with drainage ponds for the collection of oil and dirt.

The Sub-Committee viewed examples of the construction works by the group, including the pouring of concrete pads for tents. The group was capable of pouring 13 slabs in one day, for large military tents (20' x 40'). The group had deployed with an extensive range of plant for construction works, including large and medium bulldozers, graders, front-end loaders, fork lifts, dump trucks and cement trucks. This equipment was deployed from both Australian Army and US units.

An important characteristic of the work performed by the combined engineering group was the proportion of the work that they were able to perform on site. By blasting their own stone from a quarry within the area, crushing it to the required grades in a mobile crusher, and mixing cement on site, the group's only external dependence was for fuel and cement powder. By working in this way, significant civil engineering projects could be completed quickly, while giving excellent value for money. As an example, MAJ Buckley estimated that the group was able to produce cement at a cost of \$60/metre³, compared to an estimated cost of \$200/metre³ if the cement were brought into the area by a contractor. The Sub-Committee noted that this was a case where the Commercial Support Program did not necessarily offer an avenue of significant cost savings. The Sub-Committee also observed the high level of enthusiasm for the task from members of the combined unit. The excellent state of the roads within the SWBTA at that time was testament to the unit's capability.

No 4 Forward Support Battalion - Williamson, SWBTA

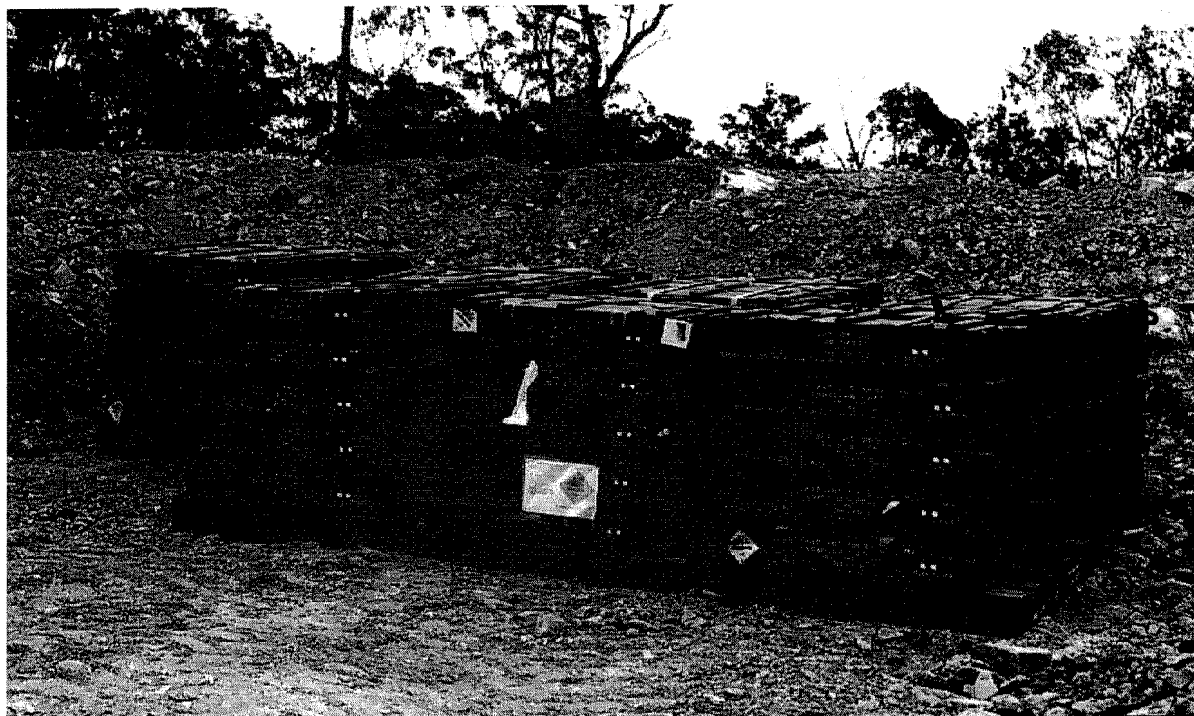
The Sub-Committee departed Samuel Hill by RAN Sea King helicopter for Williamson, another major deployment area within the SWBTA. There, they visited No 4 Forward Support Battalion (4FSB), and were briefed by its Commanding Officer, LTCOL Pat Coward. The concept of a battalion specifically formed to provide a wide range of logistic and other support activities was apparently a new concept, which the Sub-Committee understood was being trialed during the exercise. The capabilities of the battalion included:

- an Amphibious Beach Team, which functioned as the beachmaster unit for amphibious landings;
- a Water Transport Troop, equipped with LCM8 landing craft and a Shark Cat, and capable of carrying 220 tonnes of cargo, or 800 personnel (200 if combat laden);
- a Terminal Troop, for transfer of equipment across the amphibious beachhead, and capable of 24 hour operations, and transfer of 500 tonnes of equipment and cargo per day;

- a Road Transport Section (Heavy), equipped with a fleet of large transport vehicles, and capable of carrying 91 tonnes of cargo (126 when combat laden);
- a Combat Support Detachment;
- an Army Field Post Office;
- a Signals Troop;
- a Workshop troop, to provide mechanical repairs, salvage and fabrication in the field;
- a Petrol Platoon detachment, capable of carrying 50,000 litres of bulk fuel;
- an Ammunition Detachment; and
- a Fire Troop, equipped with two fire tenders.

Although well equipped, the unit seemed to be made up of separate groups with little in common. The Sub-Committee questioned whether this arrangement would provide for an accurate assessment of the unit's capability, although by accounts received from user units, it provided a valuable service.

Figure 4 Ammunition storage arrangements at No 4 Forward Support Battalion, Williamson, SWBTA



The Sub-Committee examined the ammunition dump which was constructed in a shallow, disused quarry. Ammunition for weapons ranging from small arms to 155mm artillery shells was stacked on 1 tonne pallets, with 10 tonnes to a bay. Each bay was bunded, close to the pallets, with loose uncompacted earth, with bund walls two metres wide at base, rising to

around half a metre higher than the pallet tops. The Sub-Committee queried some aspects of the dispersal of the ammunition, but it was explained that this storage arrangement was a managed risk, which could be tolerated for a forward field deployment.

Another area of concern was the battalion's fuel storage area. This was located within the 4FSB deployment area, quite close to the battalion's other functional areas. The Sub-Committee noted the absence of firebreaks around the perimeter of the fuel storage area, and questioned the safety provisions in place. It was pointed out that the fuel storage was situated lower down a slight grade from the camp, and that, in the event of a major accident, the fuel would not run toward the camp's other functional areas.

On departure from Williamson, the Sub-Committee overflew the new construction camp within the SWBTA, Camp Growler.

No 327 Contingency Air Base Wing - Rockhampton Airport

On return to Rockhampton Airport, the Sub-Committee visited No 327 Contingency Air Base Wing (327 CABW), and was briefed by its Officer Commanding, SQNLDR Alan Ross.

327 CABW is a support unit, formed by Headquarters Air Command when required to provide air base and operational support to forward air operations in contingencies or exercises. The air support provided by the Wing (one of four theoretical CABWs, numbered 324 to 327) is unique to air operations, and separate from the logistic support able to be provided by the Army. Its aircraft and airfield specific roles include air traffic control, air movements support, aircraft and equipment maintenance, aircraft communications, and ground defence for airfields. The wing is based on a cadre staff drawn from No 1 Operational Support Unit (No 1 OSU - based in Townsville) and the Air Transportable Telecommunications Unit (ATTU - based in Richmond), who are mobilised for contingency operations when required, and augmented with shadow-posted personnel from permanent bases, such as Williamtown, Amberley and Edinburgh.

As deployed for Exercise TANDEM THRUST, the wing comprised 167 personnel, based at Rockhampton (114 members), Williamson (41 members) and Samuel Hill (12 members). The wing is capable of deployment to a dirt strip with no facilities, although in this exercise, the Rockhampton detachment was operating out of the old Rockhampton civil terminal, which was being rented at \$50 per day. The terminal was still equipped with the baggage conveyor (although this was no longer functional), but had been otherwise gutted. Although the terminal provided a relatively comfortable working environment, compared to the arduous conditions experienced on a field deployment, the Sub-Committee noted that the facility was less than ideal accommodation. In view of the increasing use of the SWBTA by deployments from the ADF, as well as the US and Singapore, there is a need for some permanent office facility at the airport. The building would benefit from the addition of airconditioning, sound-proofing and partitioning into separate offices. The facility also required improved ablutions to make it more habitable for deployed personnel. Desks and terminals for telephones, faxes and computers should also be provided.

Friday, 14 March 1997

Flight to USS INDEPENDENCE - off Queensland coast

Present:

Senator D J MacGibbon (Chairman)
Mr J W Bradford, MP
Rt Hon I McC Sinclair, MP
Mr W L Taylor, MP

The Sub-Committee Members were briefed for a flight on a Greyhound carrier on-board delivery (COD) aircraft to USS INDEPENDENCE. The intended take-off time of 0900 hours was delayed twice and the COD eventually took off from Rockhampton at 1211 hours, rendezvousing with the USS INDEPENDENCE after a flight of about one and a half hours. Unfortunately, the cyclonic weather conditions hampered the carrier deck landing, and although the aircraft managed to land on board the carrier, it was unable to arrest successfully on three attempts, to enable disembarkment of the Sub-Committee members. After the third attempt, the aircraft captain was forced to abort the visit and return to Rockhampton. The aircraft landed at 1530 hours at Rockhampton, and the visit concluded.

Final Remarks

The Sub-Committee felt that the conduct of Exercise TANDEM THRUST, although primarily designed to exercise USMC capabilities, was a worthwhile activity, to the extent that it reinforced the ability of ADF elements to operate in a combined force. As originally planned, the exercise provided an opportunity to test a range of ADF capabilities. However, the Sub-Committee noted that the changes to the exercise due to the adverse weather resulted in a less valuable exercise of ADF capabilities. Australian elements were unable to fully participate in the major amphibious landing as planned, because of the sea conditions. The USMC were able to proceed with their part of the amphibious operations through their use of Blackhawk helicopters, but the ADF contingent was not equipped to permit the option of a helicopter-borne landing.

One positive factor claimed to result from the adverse weather conditions was that the many planning adjustments required by the encroachment of Cyclone Justin served to test the flexibility of the combined command structure. During the limited duration of its visit, the Sub-Committee was unable to observe this.

Other significant issues arising from the Sub-Committee's visit to Exercise TANDEM THRUST 97 were as follow:

- Interoperability and interconnectivity with allied forces, particularly in the area of communications, remains a priority issue for ADF force development.
- The exercise demonstrated the ADF's ability to integrate with the US in the planning and command of a major exercise, and in a capacity above that of tactical-level augmentation of forces.

- The SWBTA continues to offer an excellent venue for major joint and combined exercises, and there is a clear necessity to maintain it for such use. Minor rectifications to some facilities within the SWBTA could greatly improve habitability and operational effectiveness. Work carried out on infrastructure within the SWBTA appears to strike the appropriate compromise between that required for operational effectiveness and the need to inflict minimum environmental impact.
- Environmental issues were clearly an important consideration in the conduct of the exercise. These were most evident from the environmental controls imposed on the beachhead operations on the intended amphibious landing, although in the event, the beachhead landing was not conducted due to the weather conditions. The environmental controls required did not appear to impact unduly on the overall training value of the exercise.
- The Sub-Committee was informed that the most successful and valuable part of the exercise resulted from the planning involved in the Command Post Exercise (CPX) conducted in Hawaii before commencement of the Field Training Exercise in the SWBTA. The Sub-Committee will endeavour to obtain a full briefing on the conduct and outcomes of the CPX, to complete its review of Exercise TANDEM THRUST 97.
- The Forward Support Battalion concept, which was understood to have been under trial for this exercise, produced an unusual, disparate grouping of unrelated elements without the cohesion which seems necessary for an operational unit. Although anecdotal evidence pointed to the potential value of such a composite unit, the Sub-Committee believes that the concept may require further development.
- Notwithstanding the participation of a number of ADF elements, and the integration of ADF commanders into its command structure, Exercise TANDEM THRUST 97 was primarily a US Marine Corps exercise, incorporating a level of Australian participation. The scenario of an amphibious landing particularly was more conducive to exercise USMC capabilities, rather than those of the ADF. The Sub-Committee would like to see an increased Australian involvement in these exercises, and ideally would like future exercises in this series to be designed to better match ADF training requirements, and provide greater value for ADF combat forces and command structures.

Ian Sinclair, MP
Chairman