



## **RAAF WILLIAMTOWN**

### **ADF Warfare Centre**

- 1.1 The first Defence establishment visited by the Defence Sub-Committee was the ADF Warfare Centre (ADFWC), a lodger Unit on RAAF Base Williamtown. The sub-committee was met at their aircraft by the Base Commander, Wing Commander Ian Farnsworth, and the Commandant of ADFWC, Air Commodore Dennis Green. On arrival at ADFWC, Air Commodore Green briefed the sub-committee on the role and functions of ADFWC, including its role in the development of joint doctrine, joint training, joint and combined exercises, the evaluation of Defence exercises, and the role of the ADF Peacekeeping Centre. The brief also outlined the planning for Exercise Crocodile 03.
- 1.2 The ADFWC is a joint unit established to study, develop, teach, promulgate and provide advice on Australian Defence Force joint and combined warfare doctrine, procedures and tactics. This includes advice on administrative support of operations, education for individuals, group training, exercise management and control, and wargaming. It has about 80 ADF personnel, as well as a small number of APS and contracted staff, and an annual budget of around A\$1.2M. The ADFWC's key sections include Exercise Wing, Simulation Section, Training Section; whilst the ADF Peace Keeping Centre also resides within the ADFWC complex.

## Exercise Wing

- 1.3 Exercise Wing provides the Commander Australian Theatre an avenue to enable him to exercise operational elements and headquarters of the ADF. Credible circumstances are exercised such that the force's strengths and weaknesses at the operational and tactical levels of war are revealed, pertinent doctrine is tested and the staff planning processes at all levels are evaluated.
- 1.4 Exercise Wing undertakes the planning and execution of a wide range of exercises across the Strategic and Operational level of the Australian Defence Force. These exercises are designed to test the processes and decision making of Headquarters staff ranging from Australian Theatre down to Northern Command and the Deployable Joint Force Headquarters. A series of exercises are also conducted to test our links and processes with other nations in our region and around the world.
- 1.5 Exercises include Kingfisher and Crocodile as well as the more operational exercises such as Rainbow Serpent and Satria Bhakti. Activities also include the Northern Trilogy exercise testing the staff of Northern Command, and the Tendi Run series evaluating Australian Theatre, Northern Command and Deployable Joint Force Headquarters. The major exercise for 2003 is Crocodile 03. Planning for this combined exercise commenced early 2001 and is the major Australian/US exercise for the year.

Figure 1.1 A number of typical platforms used in CROC series exercises



## Simulation Section

- 1.6 Simulation Section provides a method to simulate the entire range of Headquarter processes. The Joint Operating Simulation System (JOSS) replicates messaging, command support environments and tools by linking to the Joint Theatre Level Simulation (JTLS) through the Joint Command Support System (JCSS).

## Training Section

- 1.7 Training Section is structured to provide general education and job-specific training in the concepts of joint warfare. Approximately forty courses, seminars or study periods are run during the year, reaching more than two thousand participants. The training program covers three broad joint warfare categories: Core, Specialist, and Overseas. The core courses are the building blocks of all joint training conducted and are usually prerequisites for the specialist courses. Considerable support is given to the conduct of overseas courses in the region or sponsored overseas students in Australia in support of the ADF's regional engagement initiatives.

## Australian Defence Force Peacekeeping Centre

- 1.8 Australia has a long and proud history of helping to keep peace in many of the world's trouble spots and, since the end of the Second World War, the ADF has contributed to over thirty peace operations. This contribution, and the professionalism of the ADF, has earned the respect and admiration of Governments and individuals throughout the world.
- 1.9 In 1992, the Australian Department of Defence acknowledged the increasing complexity of peace operations and identified a need to provide additional doctrine and training. Consequently, on 25 January 1993, the ADF Peacekeeping Centre was established as part of ADFWC.
- 1.10 The Peacekeeping Centre is manned by the Director, a Wing Commander equivalent (05) on a rotational basis and a Squadron Leader equivalent (04) Staff Officer from each service, all with recent Peace Operation experience.
- 1.11 During the brief, the sub-committee discussed a number of issues including:
- the nature of environmental planning, and the requirement to obtain the Minister for Environmental and Heritage's approval for the conduct of major military exercises,

- the conjoint nature of environmental and exercise planning and the mitigation strategies implemented to lessen any significant impact on the environment from ADF training activities,
- the proactive approach being taken to consult and obtain the support of environmental interest groups, and
- the impact of major exercises on local communities.

## Surveillance and Control Group

1.12 The sub-committee moved from the ADFWC to Surveillance and Control Group (SCG) Headquarters situated in the Eastern Regional Operations Centre (EASTROC) where they were met by Air Commodore David Peitsch, AM, Commander SCG, and Warrant Officer Scott Chenery, Warrant Officer Disciplinary of SCG. Air Commodore Peitsch briefed the sub-committee on the role and functions of SCG, including its mission, scope of operations, current priorities and new developments.

Figure 1.2 Members with Air Commodore Peitsch, Commander SCG



- 1.13 Formed in September 1998, the SCG is responsible for conducting effective surveillance and tactical control in support of, and as an integral part of, an expeditionary force. It consists of a Headquarters as well as No. 41 and No. 44 Wings.
- 1.14 Formed in 1943, No. 41 Wing provides air surveillance and counter air control in support of expeditionary forces and consists of the following Units:

- No. 2 and No. 3 Control and Reporting Units (CRU),
  - No. 114 Mobile Control and Reporting Unit (114MCRU),
  - No. 1 Radar Surveillance Unit (1RSU), and
  - Surveillance and Control Training Unit (SACTU).
- 1.15 No. 44 Wing formed in November 2000, and is the designated Air Traffic Control (ATC) Wing which provides the tactical airspace management and air traffic control capability to support expeditionary forces. Fixed base capability consists of 11 ATC flights located in Darwin, Townsville, Amberley, Richmond, Williamtown, Tindal, Edinburgh, Pearce, East Sale, RAN Air Station Nowra and the Army Aviation Centre at Oakey.
- 1.16 SCG provides Battlespace Management which involves positive control of the air environment and is achieved through the Aerospace Battle Management, Aerospace Management and Early Warning and Control roles.

## Aerospace Battle Management

- 1.17 The RAAF provides management of operating airspace through coordination of offensive air and defensive air and ground assets. This role is achieved through the networking of surveillance information sources including fixed and mobile Control and Reporting Units, over-the-horizon radar and tactical and domestic air traffic control radars. The Control and Reporting Units provide focal area surveillance that supports effective application of defence systems such as ground based anti-aircraft weapons and counter-air aircraft. Airborne Early Warning and Control aircraft will form part of this capability.

Figure 1.3 JORN over-the-horizon radar receiver antenna array



## Aerospace Management

- 1.18 RAAF Air Traffic Control detachments provide aerospace management of tactical and non-tactical airspace for safety and efficiency reasons. RAAF Air Traffic Control works closely with civil Air Traffic Control and other Aerospace Battlespace Management agencies to deconflict airspace users. RAAF Air Traffic Controllers provide air traffic services for all ADF military and joint user aerodromes.

Figure 1.4 Tactical air traffic control facilities



## Airborne Early Warning and Control

- 1.19 Airborne Early Warning and Control (AEW&C) provides extended range for detection of hostile strike forces and control of allied counter-air aircraft. The platform will supplement other battlespace management information sources. The RAAF is planning delivery of four AEW&C aircraft around 2006-07 which should be capable of detecting fighter aircraft at a range of at least 300 km. In addition, the AEW&C aircraft will be capable of being aerial refuelled, will have an advanced surveillance radar, identification friend or foe (IFF) system, an expanded passive surveillance system, and a highly effective self-defence capability.
- 1.20 During the brief, the sub-committee discussed a number of issues including:
- SCG's role in the Defence of Australia and its contribution to the security of the immediate regional neighbourhood;

- the difficulties associated with personnel retention in the face of strong competitive market forces, particularly for Air Traffic Controllers, Electronics Engineers and Communication-Electronics Technicians; and
- the rapid evolution of technology, the lead times associated with major capital acquisition, and the apparent need for an integrated approach.

Figure 1.5 Airborne early warning and control aircraft



## RAAF Base Williamtown

- 1.21 Following the brief at SCG, the sub-committee was met by Wing Commander Ian Farnsworth, the Base Commander, and given a windscreen tour of the major infrastructure developments taking place at RAAF Williamtown. The committee were shown the new site and building works for No. 2 Squadron (2SQN) AEW&C Aircraft, as well as the new Headquarters for No. 76 Squadron.

## Development of RAAF Williamtown

- 1.22 Currently, RAAF Williamtown is in Stage 1 of a major redevelopment involving major works to establish the facilities for the AEW&C aircraft, engineering services upgrade (including power, water, sewerage, communications), airfield pavements, ordnance loading areas, explosive ordnance areas, aircraft refuelling facilities and fuel farm, and childcare facility.
- 1.23 RAAF Williamtown has been continually redeveloped as the need for a permanent fighter base has grown. Within the next 12-18 months, 2SQN

equipped with AEW&C aircraft will be situated at RAAF Williamtown. This has necessitated major development and an extension of the base, with many buildings being replaced with hangars for 2SQN aircraft and their associated maintenance facilities.

- 1.24 The economic impact of RAAF Williamtown on the local community is quite significant. The Base has a population of some 2,500 staff (1,800 military) with an annual salary of around A\$125 million, whilst operational expenditure is somewhere in the order of A\$42.1 million per year. The Base is estimated to have contributed some A\$1.25 billion into the local economy over the years from contracts and redevelopment, which is still ongoing. Defence Housing Authority has purchased A\$19.2 million of housing acquisitions and expended some A\$1.24 million in local maintenance contracts.
- 1.25 During the brief, the sub-committee discussed a number of issues including:
- security of the Base in the current heightened threat environment,
  - Base redevelopment,
  - urban encroachment and aircraft noise issues, and
  - the future of Salt Ash Air Weapons Range.

## **No. 381 Expeditionary Combat Support Squadron**

- 1.26 Following the windscreen tour of RAAF Williamtown, the sub-committee was met at No. 381 Expeditionary Combat Support Squadron (381ECSS) Headquarters by the Commanding Officer, Wing Commander Mark Kelton. The sub-committee was provided with a brief on the history of the squadron since its formation in 1998, its deployable nature and its roles within the ADF combat power model, as well as its inter-relationships with RAAF Williamtown and the various Service Provider Groups, and concluded with a summary of where the squadron fits within Combat Support Group.
- 1.27 In addition, opportunities were provided to speak with 381ECSS personnel recently returned from operational service. Of note, a number of these members returned from leave to be available to meet the committee and share their operational experiences. At the conclusion of the brief and meeting with the military members of 381ECSS, the sub-



committee was provided the opportunity to inspect an F/A-18 Hornet fighter aircraft.

- 1.28 381ECSS was formed at RAAF Williamtown in May 1998. The Squadron motto, 'Lead the Way', reflects the expeditionary nature of the Squadron and its role as one of the first Air Force units to deploy in a contingency to support military operations.
- 1.29 The range of support services provided by 381ECSS on forward deployment include:
- security,
  - fire fighting and prevention,
  - ground defence,
  - physical fitness training,
  - aircraft arrestor systems,
  - aircraft refuelling,
  - transport maintenance,
  - general engineering,
  - administration,
  - communications,
  - logistics,
  - explosive ordnance demolition, and
  - catering.
- 1.30 When not training or on deployment, these extensive support services are provided to RAAF Williamtown in an arrangement with the Base Commander and Combat Support Unit, Williamtown.
- 1.31 Since its inception, 381ECSS has assisted in a number of significant ADF activities including:
- OP WARDEN (The ADF involvement in the International Force in East Timor. On 15 September 1999 the UN Security Council adopted UN Resolution 1264/99, under Chapter VIII of the UN Charter, authorising the immediate deployment of an Australian led International Peacekeeping Force to East Timor.);
  - OP GOLD (The Defence support to the Sydney 2000 Olympic and Paralympic Games.);

- OP GABERDINE (The ADF's logistic, stores and engineering support to the onshore management of unauthorised arrivals, including logistics support to offshore processing centres.);
- OP RELEX (This is a program to detect, intercept and deter vessels carrying unauthorised arrivals from entering Australia through the North-West maritime approaches. The current OP RELEX II contribution includes one RAN frigate, one Air Force P3C and an Army Transit Security Element supported by Coastwatch and Customs.);
- OP GUARDIAN (The ADF operation to provide support to the Commonwealth Heads of Government Meeting (CHOGM) held over 6-9 October 2001 in South Queensland.);
- OP SLIPPER (The ADF contribution to the International Coalition against terrorism.);
- OP BASTILLE (The ADF's forward deployment of personnel and equipment to the Middle East. The purpose of the deployment was to:
  - ⇒ increase diplomatic pressure on Saddam Hussein, and
  - ⇒ to ensure men and women of the ADF had the opportunity to acclimatise to conditions in the region, exercise with other coalition forces and prepare for a potential conflict should a diplomatic solution not be found.); and
- OP FALCONER (Australia's contribution to the international coalition of military forces enforcing Iraq's compliance with its international obligations to disarm. Some ADF remain in the Middle East to support the transition from combat operations to the coalition provisional authority under OP CATALYST.).

Figure 1.6 381ECSS on deployment



- 1.32 During these operations, 381ECSS personnel were heavily engaged in a range of support activities including defence aid to the civilian community, the activation of bare bases, support to various UN peace keeping missions, support to border protection, support for the coalition force activities in the War on Terrorism, as well as direct support for the War in Iraq.

Figure 1.7 381ECSS member marshalling a C-130 Hercules transport aircraft on deployment



- 1.33 During the brief, the sub-committee discussed a number of issues including:
- the high operational tempo experienced by the Unit since 1999, and
  - manning and morale.