Regional Air Power Workshop
Darwin
23 to 25 August 1994

Edited by Gary Waters and Mark Lax
RAAF Air Power Studies Centre

REGIONAL AIR POWER WORKSHOP

DARWIN

23 - 25 AUGUST 1994

Edited by Gary Waters and Mark Lax
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<td>DSTO</td>
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<td>PKO</td>
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<td>PNGDF</td>
<td>Papua New Guinea Defence Force</td>
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<td>POE</td>
<td>Point of Entry</td>
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<td>Prisoner of War</td>
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<td>QRF</td>
<td>Quick Reaction Force</td>
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<td>Research and Development</td>
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<td>RPV</td>
<td>Remotely Piloted Vehicle</td>
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<td>WPNS</td>
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<td>ZEE</td>
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OPENING ADDRESS

Presented by Group Captain Gary Waters
RAAF Air Power Studies Centre
Royal Australian Air Force

Ladies and gentlemen, good morning and welcome to our second Regional Air Power Workshop to be held here in Darwin. When I put the idea of last year’s workshop forward to the Chief of the Air Staff, Air Marshal Barry Gratton, I expected it to be a one-off affair, but the success of last year’s session prompted me to go back to the Chief with a recommendation for another workshop this year. I might add he did not take much persuading.

He has asked me to pass on his warm welcome and best wishes to each one of you, and to ask the non-RAAF officers to convey his appreciation to your respective Chiefs for allowing you to attend this week. He also apologises for not being here to welcome you personally, but graver matters take him overseas - amongst others, Farnborough, our Lead-in Fighter project and our Airborne Early Warning and Control project.

While last year’s theme saw the RAAF explaining the way it conducts business and all speakers were from the RAAF, this year we move towards a far different theme, where Air Marshal Gratton has invited each of the Air Forces to present their views. In addition and lest we become too insular, we have also asked our Australian Army and Navy colleagues - Lieutenant Colonel Brian Hewitt and Captain Jack McCaffrie - to discuss current cooperative activities, and for Ms Di Johnstone from our International Policy Division of Defence to set a foundation for our discussions by explaining current Australian policy, especially with regards to regional cooperation.
Now, while our theme is regional cooperation, I ask that you do not limit yourselves to that - we are all interested in the diverse experiences of our various services, and whether in your presentations or during the discussion period, I invite you to expand on where your service has been and where it sees itself going in terms of broader developments.

You have the program in front of you - it is indicative of what I hope to cover and the broad timings, but we do not need to tie ourselves rigidly to it. Time permitting, I will certainly call on Pete Criss to talk on a few force development projects; Group Captain Al Crowe to talk on the latest AUSINA exercise (probably in concert with my session last thing tomorrow); Group Captains John Kindler, Geoff Lee and Dave Dunlop to talk on Pitch Black 94; and Wing Commander Ric Casagrande to touch on some of the more pressing air law matters. Amongst the publications I have brought to distribute is a book written by Ric on Operations Law for Air Commanders - I think you will find it most enlightening. I also have copies of our latest edition of air power doctrine (that Mark, Ric and I finalised this year), the proceedings from last year's Darwin Workshop and the October 1992 Conference called 'the Qualitative Edge', some brochures on the RAAF and the F-111 force, and our two latest working papers from the Air Power Studies Centre.

I will now ask Wing Commander Mark Lax to brief us on the basic administrative arrangements for the week and when he has finished, I would like each of us to briefly introduce ourselves. I will start and then we will move to my left - clockwise around the room.

Thank you.
REGIONAL AIR POWER COOPERATION

Presented by Group Captain Gary Waters
Director of the RAAF Air Power Studies Centre
Royal Australian Air Force

INTRODUCTION

In October 1992, the RAAF convened a milestone conference in Melbourne with the object of discussing air power from the perspective of cooperation in the preservation of security for the Asia-Pacific region. Conducted under the title of 'The Qualitative Edge', the conference included speakers from senior levels of the regional air forces and academia, providing a forum not only for intellectual exchange, but also improved communication on the professional and personal levels. This conference was an important step in encouraging further development in regional cooperation.

In the wake of the success of 'The Qualitative Edge', the RAAF sponsored a regional air power workshop in Darwin from 24 to 26 August 1993 with the express purpose of further strengthening regional ties and promoting a wider understanding of air power. This workshop was attended by officers from the RAAF and regional air forces at the Group Captain level - the day-to-day practitioners of air power within the region. Discourses on key air power issues were delivered by the RAAF officers and discussion amongst all participants followed, the regional aspects being emphasised where possible. One of the prime objects of the workshop was to determine the areas where regional cooperation in the use of air power could be further developed.

1 This paper was co-written by Doctor John Mordike of the APSC.
This paper draws on the presentations by the RAAF officers, with appropriate acknowledgments, and identifies the areas for further development in future regional consultations on air power. In doing so, it should be recognised that this process is only at its beginning and, therefore, the possible areas for future cooperation are only mapped out in broad outline. Further consultation and work will be required to give sharper focus to the issues before a commitment to any undertakings could be expected. Given the complexity of proceeding on a multi-lateral basis, any future developments will be gradual and only proceed at a pace and to an extent sanctioned by the political leadership of regional nations.

Emphasising the inchoate state of regional cooperation on air power issues, it is acknowledged that some observations in this paper arose in the general discussion which followed each presentation at the Darwin workshop. While it is not possible to acknowledge individual contributions to these free-ranging discussions, the names of the participants are listed at the end of this paper.

**SETTING THE SCENE**

One of the priorities of Australia’s foreign policy, as articulated by the Minister for Foreign Affairs, Senator Gareth Evans in December 1989, was the need to develop a positive relationship between Australia and its regional neighbours. He described the process of achieving this as ‘comprehensive engagement’, a process which would see Australia interacting and involving itself within the region on a broad front. One important object of this process would be 'protecting Australia's security through the maintenance of a positive security environment in our

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2 Based on Air Commodore P. Nicholson’s presentation to the workshop and the subsequent discussion.
region'. In this way, Australia would encourage and support the development of a community of interest in regional security.

In the four years following Senator Evans' statement, there have been several regional initiatives introduced under the banner of confidence and security building measures. For example, Australia has ensured a degree of regional consultation on defence policy issues, in particular the development of the Strategic Review 1993. This is an example of the policy of 'transparency' which is designed to inform regional neighbours of the process of defence policy development and its rationale, thereby establishing a basis of understanding and confidence within the region. While there are obvious limits to 'transparency' in the defence deliberations of all nations, the universal adoption of such an approach could do much to encourage a sense of shared interests in promoting regional security.

On a more practical level, the possibility of establishing multi-lateral air power exercises would appear to be a prime subject for future development. To be effective, however, there would need to be a high degree of commitment from each participating nation, otherwise the training objectives would be limited and further developments unlikely. Multi-lateral exercises are especially complex because, at the practical level, issues such as safety, rules of engagement and standard operating procedures are paramount. Establishing the basic framework for such exercises is therefore difficult, but they are the very essence of regional cooperation in the defence arena and, therefore, should be seriously considered. To begin with, it may be more prudent to select existing exercises and regional arrangements and build on them rather than to attempt new undertakings on a larger scale. This is one way of gradually overcoming the complexities while containing the costs. It is an attractive approach because all nations need not participate in the one exercise at the same time, provided that common
objectives are laid down at the outset. This introduces the opportunity for planning and control of the exercise on a multi-lateral basis with only two or three participating nations at any one time. Such an approach has worked in the past for the United States and allied forces in COPE THUNDER and RED FLAG exercises. In this way, the groundwork for more ambitious regional defence developments could be established.

Keeping in mind the objectives of regional cooperation in exercises, there are several broad questions which should be asked from an air power point of view. For example, what are the ways of training and exercising together, including such things as visits and exchanges? How might regional air power cooperative arrangements work? What are the ways of contributing to one another’s air power development? How do we build regional cooperation vertically through deeper interaction and horizontally through more participants? What are the regional roles for air power?

In an attempt to begin to answer these questions and to define the directions for future cooperative developments, certain key air power activities need to be examined and discussed. These activities may be considered under the broad headings of air defence, fighter operations, strike operations, reconnaissance, maritime air and airlift operations, as well as operational support and research and development.
KEY AIR POWER ACTIVITIES

Air Defence

Air forces throughout the region realise that if an air force cannot maintain the security of its assets then the potential for gaining the initiative in any conflict will be diminished considerably. Therefore, air defence is a key air power issue.

Air defence does not have to be purely reactive, and in being proactive, it would depend on overlapping information to allow the timing and tempo of operations to be set. In this, there are three general sources of information which need to be coordinated:

- Long-range sources, which can be vague, generally involve intelligence, Over-The-Horizon Radar (OTHR), space sensors and reconnaissance by maritime patrol aircraft.

- Medium-range sources, such as microwave (MW) and three-dimensional sensors. This involves MW radars (eg surveillance), Ground Based Radar (GBR), space sensors, airborne systems, such as Airborne Early Warning and Control (AEW&C), and Electronic Support Measures (ESM).

- Close-range sources, such as individual weapon systems (including point defence weapons). Typically, this involves Surface-to-Air Missile (SAM) systems and fighter Airborne Intercept (AI) radars.

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3 Based on Group Captain K. Clarke's presentation to the workshop and the subsequent discussion.
Information from these sources assists an air defence commander in managing airspace; moreover, it covers a wide range of activities that help the air picture develop. A layered approach to sensors is critical such that each overlaps and results in an integrated and interdependent system that includes communications. Indeed, all regional nations possess intelligence systems, MW radars, ESM, and weapons systems; however, only Singapore has an AEW capability.

Scarce resources emanating from budget constraints dictate that a better way of coordinating each nation's sensors should be found, not only for national reasons, but importantly, regional ones as well. Currently, all nations use sensors which overlap extensively with one another's. The aim should be to streamline these sensors for co-ordination on a regional rather than a national basis, especially in the case of long range sensors. Not only does the region need to know what is happening in its airspace, but it must also be able to manage that airspace effectively and economically. In doing so, the use of civil aviation sensors should be considered. Traditionally, military and civil aviation sensors have been segregated. Each nation now needs to examine and, perhaps, integrate its co-ordination of all national sensor assets before work can begin on regional co-ordination. International Civil Aviation Organisation (ICAO) agreements help procedurally for civil/military integration, but that integration could be improved technologically through the automatic passing of information - both civil and military.

Close-range systems are not held on short-term responsiveness around the clock due to high operating costs. Obviously, resource aspects need to be matched against the potential and likely threat. While air forces agree that there is a need to be able to run 24-hour operations if necessary, if there is no clear threat in the short-term, there should not
be any reason to conduct 24-hour operations for extended periods. All regional nations need to ease the cost of close-range sensors.

MW radars have limited scope. They simply cannot cover the breadth of national areas within realistic financial limitations, not even in the case of the geographically smaller nations of Brunei and Singapore. The vast expanse of a nation like Australia poses special problems for which innovative solutions have been sought. At the end of World War II, Australia had 136 MW radars; today the nation has three. Much better coverage is sorely needed. Even AEW&C, once acquired, will not provide 24-hour coverage. However, by 1996/97, Jindalee Operational Radar Network (JORN) long-range cuing data will help considerably. Yet, as significant as its contribution will be, it will not fulfil all requirements.

All of these information systems are important because they are a vital aid to the decision-making of the Sector Air Defence Commander (SADC). It is essential that he should have all relevant systems under his control, including SAMs. Accordingly, SADCs must know the whole process, have a technological understanding of the systems, and an awareness of the regional as well as national issues. Procedures, rules of engagement, and international law, including Law of Armed Conflict, need to be understood as well.

Key functions of a SADC should be as follows:

- Define own centres of gravity, including both strengths and weaknesses.

- Define how each centre of gravity will be defended. The SADC will never have enough resources to stop sector or national airspace from being penetrated.
• Match force with force and possess the ability to concentrate force to match that of the attacker. In other words, have an ability to achieve decisive results.

• Initially, the attacker would determine the tempo and cycle of operations; hence the SADC must be prepared to be reactive initially.

• Air superiority is necessarily limited in duration; hence the SADC must define the time and geographic limits, and aim to minimise both.

• Manage all elements of the system, recognising that there are many disparate elements that do not operate together over a 24-hour period until a crisis occurs.

• Be able to conduct a 'what-if' analysis to reduce ad hoc decisions. Here, technological expertise becomes vital. The SADC must get inside the enemy's decision cycle.

• Recognise that the real difficulty is in managing information and that most of the information has a limited lifespan; hence the right information at the right time is essential.

• Possess an ability to relate all decisions to information availability and timing. Additionally, proactive planning is needed to ensure assets can be positioned in time and be ready to operate.

• Possess an ability to link air defence with offensive operations.
Through these functions the SADC develops the air picture. The question of knowing whether something is usual or unusual and having an ability to react to the unusual are the keys. Recognition of typical activity helps nations understand when the unusual occurs. This is especially relevant for drug trafficking, illegal immigrants and illegal fishing.

As regional civil systems move towards use of secondary radar only (for economic reasons), problems can be expected for airspace management. This underscores the need for better integration of civil radars into overall military cuing systems and vice versa. Knowledge of civil air routes and military access to civil data will improve the effectiveness of the SADC.

Specific areas for regional cooperation emerge quite readily from the above, and include:

- long-range cuing of intelligence, and management of regional systems;

- integration of national civil/military systems;

- assisting each other to relieve paucity of MW sensors;

- enhancement of the Integrated Air Defence System (IADS) to improve passing of a combined air picture.
**Fighter Operations**

There are some fundamental issues concerning fighter assets in regional air forces. The high cost of acquiring and maintaining current fighter aircraft immediately limits the number of aircraft; each regional air force has a smaller number of fighters than it would like. One constant consideration is whether a larger number of technologically inferior fighters should be procured instead of a small number of highly capable fighters. It also means that regional air forces are motivated to procure quality assets which will last a long time. Accordingly, attrition management assumes high priority and risks in operational training tend to be minimised. But the limited number of assets also makes defence alliances more attractive.

Traditional fighter roles are conducted across the full breadth of air power capability, involving counter-air operations, strike and firepower support for surface forces. With a limited number of fighter assets the question of multi-role capability is pertinent. Yet control of the air must have primacy with aircraft capable of both offensive and defensive operations. This means that the centre of gravity of regional air forces could well be their tactical fighter forces (TFF), and, for this major reason, the siting of bases will be critical.

There are four main areas for regional cooperation in fighter operations:

- Information exchange (especially in commonality of equipments, systems and Standard Operating Procedures);

- Training (with a two-way flow of benefits in bilateral arrangements);

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4 Based on Group Captain (now Air Commodore) A. Titheridge's presentation to the workshop and the subsequent discussion.
exercises (with Australia’s expanse of airspace, Delamere range, and Darwin as a Forward Operating Base (FOB) or air head);

operations (although this is the most difficult and probably not possible in a multi-lateral sense in operations short of combat).

The caveats for improved cooperation include:

- politics,

- capabilities (this will be less of an issue as capabilities become better-matched and all nations obtain fourth-generation fighters), and

- third party agreements (with countries that provide the aircraft and weapons).

In the main, there are two clear areas for improvement. First, for the short-term, improved bilateral arrangements should be pursued. Second, and concurrently with the first but with increasing emphasis, multi-lateral arrangements should be pursued for the long-term. The IADS model provides a sound starting point and the focus of attention has centred around the Five Power Defence Arrangements (FPDA). But there are other areas of cooperation that exist already and that could be extended. For example, CHURINGA, THAI BOOMERANG, Indonesian airman-to-airman sessions (including limited flying operations), WILLOHs (with RNZAF), and so on. There should be little doubt that streamlining of forces and efficient but still effective training will be fundamental to all regional air forces in future, and TFF cooperation has much to offer. Flying exchanges are a real possibility, although as mentioned earlier, third-party limitations may have to be negotiated.
Within the region, each nation has limited resources, large areas of interest and a threat which is difficult to define. Hence, appropriate military capabilities include multi-role fighters, force multipliers and good intelligence. The vexed question of multi-role versus single-role is especially relevant for regional nations, with an increasing requirement to consider specialisation in order to extract the most from expensive aircraft and human limitations. However, maintenance of multi-role capabilities within diminishing budgets poses significant problems in preserving the depth of specialised capability across the full breadth of roles.

Possession of multi-role aircraft does not mean necessarily that all aircrew need to be trained in all roles. There is a need for balanced judgment, and the level of multi-role capability of regional air forces may influence the level of tactical cooperation that can be achieved, particularly on a multi-lateral basis. Yet there is concern that the quest for multi-role capability could lead to reducing numbers of assets; a problem arises if all aircraft are needed in the one role at a particular time. In such circumstances, the multi-role capability of the aircraft may be of little benefit. It may be more important to consider development of a capability for multi-mission performance (ie conducting training in several roles on the one mission). This raises the training issue because it could mean that particular crews may have to be as capable as possible in several roles.

This point raises the question of whether crews need to train to the highest possible level, or should all aircrew be normalised to a level below the optimum. Alternatively, should only part of the force be trained to the optimum standards, and the others normalised. This poses problems of elitism and 'the first eleven' syndrome. The answer may well be to look to role-emphasis within multi-role squadrons. Yet this in itself poses difficulties. As the numbers of flying hours reduce,
the emphasis on training must be to multi-mission operations. Perhaps, there is a pressing need to focus on primary and secondary roles so that peak performance in one role can be maintained. The possibility of changing primary and secondary roles periodically for aircrew could also be explored.

In terms of multi-lateral fighter exercises such as increased participation in COBRA GOLD (Thailand) and PITCH BLACK (Australia), the following cautions are sounded:

- An immediate move to multi-lateral exercises will not produce returns that might be anticipated.

- More can be achieved at the bilateral level due to the greater degree of commonality of interests and hence the propensity to maximise returns.

- Development of pilot skills can be best achieved through bilateral training/exercising.

However, the important issue for regional cooperation is not one of improving tactical fighter skills but of improving organisational skills. Indeed, we are probably extracting the best in pilot skills already through bilateral arrangements. But, organisationally, we may need to move quickly to multi-lateral arrangements. Mutual training benefit becomes essential within constrained resources and hence considerably more planning would be needed to extract the most benefit, especially as more parties are introduced to an exercise. Increased participation in exercise planning by nations not actually engaged in the particular exercise would enhance transparency of the exercise and boost organisational skills at the same time.
In other words, the emphasis should be on planning in a multi-lateral environment, and on operating in a bilateral one. Tactical value would be maximised and organisational value would be enhanced significantly. As an example, RED FLAG involves six or seven different forces, with specific national objectives which vary.

Whenever AAR and AWACS operate, the potential should always be examined to use them cooperatively. For example, the Australian F-111s use US tankers whenever possible, and aircraft of regional nations have used RAAF B-707s.

The notion of force packaging and planning under a multi-lateral arrangement, has the greatest prospect for cooperation, but would require detailed campaign and exercise planning. Importantly, for some nations, it would be better to develop understanding of planning intricacies through exercise control staff and sub-sets of exercise planning staffs in the first instance.

There is great training value to be gained from operating against dissimilar forces. An ability to operate together is one thing and the use of the same aircraft-type provides regional air forces with an ability to operate against one another. But what of different aircraft, tactics and doctrine? These will be other areas of cooperation that will need to be examined in the future.

**Strike/Reconnaissance Operations**

At the outset, regional nations need to ask themselves what constitutes a strike/reconnaissance capability and how do they exercise that capability? First, weapon systems are integral (and this includes

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5 Based on Group Captain D. Dunlop's presentation to the workshop and the subsequent discussion.

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aircraft, systems, personnel, logistics, etc) and aircrew train on weapon systems constantly. Unit training is undertaken on a daily basis, and this probably constitutes the best means for bilateral cooperation. Second, the weapon system must be brought into action, but how often is this practised? This is probably the level where multi-lateral cooperation begins. Third, aims and guidance are needed for weapon use, but again how often does the military involve politicians and strategic headquarters (such as HQADF) in operations? It is easier to bring the many parties together at the CPX level where resource constraints do not impact to the same extent as in actual operations.

In a combined operations sense, where many units have to operate together, the situation becomes very complicated. Where this happens, the following issues need to be addressed:

- Objectives should be set at the operational level.

- Intelligence should involve exercising the whole intelligence system, which is rarely, if ever, achieved.

- Weapon-to-target matching is essential but requires well-trained personnel, who simply do not exist in sufficient numbers.

- The employment concept must be known to all concerned, as this is the best way of using resources to achieve higher-order objectives.

- Headquarters must be able to task all operations, with consequent implications for trained manpower.
• Planning must be done at the tactical level where crews work out how best to achieve the objective and are also responsible for execution.

• Execution is obviously the crux of combined operations as basic expertise will determine any likelihood of success.

• Feedback is fundamental to improve the way of doing business and affects the preceding seven points.

The methods for closer cooperation can be examined in terms of the three capability points mentioned above (training, operations and high-level guidance). The maturity of IADS has allowed it to cover all three points, including the political aims and guidance. However, concern has been expressed that young pilots and battle commanders are the only ones who gain from IADS training. Perhaps IADS needs to encompass more higher-level planning and involvement of all support systems, including logistics and administration. Furthermore, it could be expanded to involve land and naval elements as well. However, there is currently, a good level of political involvement in IADS exercises.

The possibility could be pursued of combining IADS and STARFISH for instance; although the problem would be that both focus on the tactical level, with only minor intrusion into the operational level. In general, exercise planning tends to involve ensuring the success of the exercise rather than gaining experience in broad campaign planning. Thus, the real question must be asked of how do we exercise the necessary operational level planning capability? At the same time, we must address the problem that use of a combined IADS/STARFISH exercise for operational planning purposes may compromise achievement of the
tactical objectives of the individual exercises. Certainly, tactical benefit from exercises does need to be maximised.

There is a clear need for improved operational level planning, but that may have to be achieved through other means, such as a CPX. Similarly, attempts to improve strategic level planning and decision-making through existing tactical exercises would probably prove fruitless. It is doubtful that the grand-strategic, military strategic, operational and tactical levels will ever be activated adequately in the one exercise. The possibility of exercising higher-level planning through CPXs is attractive and could be extended to include logistics and other support.

However, a note of caution is sounded. Any simulation or CPX runs the danger of losing its links with reality; this may be compounded through lack of compatibility between participating air forces in procedures, equipment, training and doctrine. A viable alternative may be to use exercise controllers from several nations to participate in bilateral exercises. A pool of qualified exercise controllers would thus be developed and could provide on-going expertise for controlling and also exercise planning. There would also be the potential for solid feedback loops to be established. Current experience is that exercise controllers are invariably in short supply. This alternative would provide benefit to all nations from the exercise, not just those with tactical forces participating. There would still be a longer-term need to establish a CPX for campaign planning.
Maritime Air Operations

Maritime operations offer probably the best short-term means of enhancing regional cooperation in an air power sense. The RAAF’s maritime tasks/roles encompass surveillance, Anti-Submarine Warfare (ASW), maritime strike, mining, intelligence collection, fleet support and Search and Rescue (SAR). The roles of surveillance and intelligence collection accord with the earlier notion of determining which activities are usual and which are unusual within the region. The P-3C provides long-range rapid response for surveillance and intelligence collection. Coastwatch provides a good adjunct in policing the Australian Fishing Zone, administered as it is by the Australian Customs Service.

There are several current operations which enhance regional cooperation. Solania patrols, which support the Foreign Fisheries Regime, are conducted around PNG, Solomon Islands, Cook Islands, Tonga, Kiribati, Vanuatu and Western Samoa. Operation Gateway from Butterworth, Malaysia, covers the Indian Ocean and South China Sea from Sri Lanka to the Spratly Islands with the object of detecting illicit operations and collecting information. These operations are undertaken because it is important for nations to know what is happening in their areas of interest, to be able to identify targets of interest, and to exchange information. A mature capability for information exchange may lead to reductions in duplication and hence more cost-effective regional security. It has been important to know of foreign warships and submarines in the area, to be aware of ships carrying arms or military vehicles, and to identify improved capabilities in foreign shipping.

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6 Based on Captain A. Crowe's presentation to the workshop and the subsequent discussion.
The current level of regional maritime air involvement can be gauged from activities such as Australia's history of working with the United States Navy at Sangley Point in the Philippines, the many nations in Exercise KAKADU (from Darwin), Indonesia in NEW HORIZON (from Darwin), Malaysia and Singapore in STARFISH (Butterworth), and Brunei in PENGUIN (from Butterworth). GATEWAY is probably the best vehicle for improving cooperation between Australia and Malaysia, and could be extended to foster broader regional cooperation.

Each nation needs to identify what it can do for the region and what it needs from the region. This two-way flow is essential for better understanding which in turn will lead to improved cooperation. For example, ASW is a possible area for regional cooperation. ASW involves a lot of effort for little return. The skills are volatile and expensive to maintain. However, with many submarines now coming on to the market, an ASW capability is necessary for regional security.

Malaysia's interest in the maritime arena is new and primarily concerns briefings, information gathering, and specific flying training. Formal information exchange programs exist between Australia and Malaysia, with some of the information being passed to other nations. While this could be expanded, there will always be difficulties in passing mutually-gathered information from a bilateral arrangement to a third party. The Maritime Information Exchange is a contributory network of regional nations for navies and may be able to be extended to maritime air operations in the future.

While the formation of a Maritime Surveillance regime has been mooted in several areas and has certain appeal, Australia would have to drop current tasks to take on tasks associated with the regime, and that would affect current bilateral arrangements and possibly national security tasks. There is also another problem with such regimes, and
that is in the field of command and control (C2), where RAAF P-3s may
be assigned to a supra-national organisation which may have
responsibility for tasking.

The question of increased cooperation invariably means more tasks and
we must ask ourselves how do we do more with such limited numbers
of assets, and if we lose control of some of those assets then the
problem is compounded. Sharing of fisheries information through
Solania patrols for instance could be extended, perhaps as the model for
broader surveillance cooperation. Placing personnel on other nations'
aircraft is also a possibility as more nations become involved in
maritime surveillance and the desire for closer cooperation and
transparency increases. Certainly, joint surveillance operations are
becoming more prevalent on a bilateral basis.

In a maritime sense, training has greater propensity for success in
multi-lateral arrangements than does operations. Additionally, the
multi-lateral view is very much at the operational (and perhaps
strategic) level, while the bilateral view centres on the tactical level.

**Airlift Operations**

The size of Australia, overseas sources of supply and the deployability
focus of the ADF all lead to significant demands on airlift. Resource
constraints make it even more difficult. Furthermore, there are many
transport requirements that cannot be met through civil aircraft and
hence military airlift becomes essential.

Almost 40% of the RAAF's total flying effort is consumed by airlift. In
the past 12 months (1993), activities have included:

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7 Based on Group Captain S. McAlister's presentation to the workshop and the
subsequent discussion.
• support tasks such as the 1993 election, commitments to Somalia and Cambodia;

• humanitarian tasks such as earthquake relief in Indonesia and cyclone relief in the Solomon Islands and Fiji;

• overseas exercises with Indonesia (AUSINDO), Singapore (CHURINGA), Canada (FINCASTLE), Thailand (NIGHT PANTHER) and RIMPAC in Hawaii; and

• domestic exercises such as SWIFT EAGLE (at Shoalwater Bay), BULLSEYE (Richmond), PITCH BLACK and ACES NORTH (Darwin/Tindal).

From a cooperation point of view, the RAAF’s Air Lift Group (ALG) is very familiar with the operating environments of regional nations. ALG currently has bilateral arrangements with Singapore, Malaysia and Thailand, involving air drop development work. Although ALG does not have a current Low Altitude Parachute Extraction System (LAPES) capability, one could be acquired over several months with appropriate training.

Operational Support

There is an important aspect to the generation of air power that is often overlooked. The platforms (airfields) from which aircraft are launched and to which they are recovered require essential services for domestic and other administrative and logistics support. Requirements for support are made more difficult when operating from deployed locations, and even more so from bare bases and FOBs.

8 Based on Group Captain R. McLennan’s presentation to the workshop and the subsequent discussion.
The RAAF has addressed this issue through the formation of an Operational Support Group (OSG), whose current roles are to be able to:

- activate bare bases,
- establish Point of Entry (POE) airfields,
- deploy Radar Reporting Posts (RRPs),
- establish and maintain evacuation handling centres (especially overseas), and
- establish staging bases (including outside Australia).

OSG's two main elements are operations support (including telecommunications and logistics) and airfield defence. Telecommunications support is provided through VHF, UHF, HF radios; navigation aids, tactical Air Traffic Control (ATC) radars, mobile ATC, field telephones and intercom facilities. The logistics element (known as 1 OSU) prepares and activates bases; however, it is not manned fully and requires augmentation. Regional use of 1 OSU may be a real possibility.

Air bases require protection; hence deployment sites from which air operations are generated, need to be protected/defended. Airfield Defence Squadrons (AFDS) offset the increased vulnerability of airfields at forward locations. Base Combatant Personnel (BCP) provide some of the necessary protection; the concept of BCP means that every person at a deployed location has a requirement to protect their own work area. AFDS essentially provides inside perimeter defence (with Army units providing outside the wire protection).
However, this is a flexible arrangement. A Quick Reaction Force (QRF) element of AFDS allows rapid response to incursions within the airfield perimeter. AFDS uses ready reserves which has been quite successful.

Bare bases provide fuel storage, accommodation, electricity and hangarage. Ground Support Equipment and Materials Handling Equipment are not provided and have to be transported from established air bases. The OSG equipment package is tailored to support a specific operation, and a variety of packages can be provided. Once again, this flexibility underscores the suitability of OSG as a candidate for regional cooperation.

A skeleton structure exists within OSG which provides support for generic operations and can be modified for specific sets of operations (with personnel in southern bases being shadow-posted to fill specific positions at bare bases when activated). Respective Commanding Officers must ensure that personnel are trained and ready for deployment to nominated bare bases; although this has yet to be finalised. An important point is that the organisational structure and specific job should be familiar to each person, only the environment will be different and personnel will be trained in that environment. This environmental training involves water management, conservation of personal energy, fieldcraft, general survival and self-preservation skills. In addition, these personnel receive ground defence training, and weapons training.

There is a need for the region to have a clear idea of how it wants to operate and how the necessary support may be provided. A requirement to deploy for peacekeeping operations (PKO) may result in regional nations seeking assistance from the OSG to activate a bare base. As mentioned earlier, OSG is a good candidate for cooperation, but once a base has been established, the strength of the OSG is in its
ability to leave in order to set up another base as required. This may mean that any cooperation would depend on personnel from regional nations being shadow-posted and augmentation from southern RAAF bases. Any shadow-posting north for RAAF personnel would lead to degradation of support capability in the south. This tends to be an issue which is often treated lightly.

Research and Development\(^9\)

The RAAF’s Aircraft Research and Development Unit (ARDU) could have a substantial role in fostering regional cooperation. Its tasks cover four main areas:

- Operational enhancement (enhancement of weapons systems, such as modifications for improved EW capabilities and carriage and release tasks).

- Modifications to aircraft or systems (these will not increase operational capability but will improve effectiveness).

- Materiel acquisition support (when acquiring major capital equipment, this affords a capability to compare aircraft, equipment, systems, etc and to plan for and carry out acceptance testing).

- Problem solving (provides information to RAAF decision makers by quantifying problems, testing and evaluating solutions before the whole fleet is modified for example).

\(^9\) Based on Group Captain N. Ford’s presentation to the workshop and the subsequent discussion.
The generic test flying categories occur during manufacture, acquisition and in-service phases of aircraft, weapons and systems. ARDU’s involvement is mainly in the second phase and concentrates on Development, Test and Evaluation (DT&E). However, Operational Test and Evaluation (OT&E) fits more within the Force Element Groups, although ARDU does provide advice on methodology.

In a regional sense, the DT&E capability for acquisition of high-technology systems and the ability to provide advice on methodology for OT&E makes ARDU an important contributor to cooperation in the future. The problem-solving ability assists the in-service phase as well, and this too will provide a possibility for future cooperation. In some instances, efficiency and effectiveness improvements may have greater utility as nations keep older systems in-service longer and adopt update programs as a standard feature. This probably enhances the importance of regional cooperation through organisations such as ARDU.

Test pilot training is a perennial problem for all regional nations, especially in obtaining positions. It is expensive to train test pilots overseas (costing Australia about $1 million per pilot). After training, the RAAF tends to hold the test pilot (TP) for no longer than four years due to career progression/promotion/etc. It is worse for some nations in that the TP may not even exercise his new skills. Australia is looking to obtain more value for that million-dollar training. One method is to bring TPs back to ARDU as squadron leaders (ie the pilot undergoes TP training, spends four years as a flight lieutenant at ARDU, takes up another posting, and returns to ARDU later). A second option would be to use civilian TPs, keeping them for 10-15 years after training.
The potential for regional nations to post their TPs to ARDU would seem a good candidate for cooperation, especially if that TP could not exercise his skills in his home country. In situations where regional nations acquire the same aircraft, weapons and systems as Australia, there would be scope for closer cooperation at ARDU. There may also be a possibility of training TPs in the region - this would be very expensive to set-up and may not be possible. The question of customising TP training more and thereby reducing costs associated with training every TP to the same level needs to be addressed. That is, air forces could focus on core skills and improve on those skills subsequently.

SUMMARY

It is evident that closer cooperation within the region would entail a conscious decision to enhance the flow of information between nations at the tactical, operational and strategic levels. This could be developed within the range of air power operations discussed in this paper: air defence, fighter, maritime air, airlift and strike reconnaissance operations. Similarly, cooperation could be extended to areas of operational support and research, development, test and evaluation.

A blend of bilateral and multi-lateral methods for achieving improved information flow is at the heart of improved cooperation for air forces. In this, tactical training and exercising will be best accomplished through a series of bilateral arrangements. However, in terms of broad campaign planning (in particular force packaging), exercise planning, and exercise controlling, scope exists for substantially increased cooperation through multi-lateral arrangements. In other words, as we move from the tactical level, through the operational to the strategic level, the 'cooperation continuum' moves from a bilateral to a multi-
lateral focus. Development in this direction should be the broad goal of further discussions amongst air power practitioners within the region.

There is a need to place greater emphasis on, and development in, the organisational aspects of training and exercises. In particular, it is considered that, in addition to exercising combat skills, IADS has the scope to offer more training and development of 'higher level' organisational skills. One important prospect for enhanced cooperation lies in the vital areas of logistics support and sustainability. These also provide a focus for further discussion within the region with the object of producing multi-lateral support arrangements for the improved conduct of air power operations.
STRATEGIC REVIEW 1993

Address by Ms Di Johnstone
International Policy Division,
Department of Defence

I have been asked to address you on the Australian Government's Strategic Review 1993 which was released on 21 February 1994.

Before I do, and on behalf of International Policy Division, I would begin by saying that I welcome this opportunity to address so many representatives of regional military forces. I am also pleased to have the opportunity to share and debate with you some of the ideas we in Australia have been developing for closer engagement with regional countries in defence and related areas. We expect that this workshop will provide practical suggestions about ways to take forward our interest in regional defence engagement, without commitment as to particular policy outcomes. Specifically it will be an opportunity for us to share with you information about our current activities in the region, to indicate our initial thinking about how we might best enhance our engagement with the region, and to seek your responses.

However, my task now is to discuss Strategic Review 1993 (SR93). I will outline the main issues and outcomes of the Strategic Review by walking you through a series of questions and answers and then open the floor for questions.

What is Strategic Review 1993?

SR93 is a strategic guidance document and represents the Government's most recent strategic guidance.
It does not stand alone. It is one of a continuum of defence planning documents. In recent years these have included the 1986 Dibb review of Australia's Defence Capabilities, the 1987 Defence White Paper, the 1991 Force Structure Review, and Australia's Strategic Planning in the 1990s (ASP90).

ASP90 was initially not intended for a wide distribution, or as a public document. However to meet public pressures for information about the basis for defence planning and to allow a wider distribution of this within the Defence Organisation, ASP90 was declassified some three years after it was written.

In the case of SR93, immediately after Government endorsed the guidance, this was produced in an unclassified version. This is now the standard guidance document for the defence organisation.

SR93 is part of a review process that ensures that our defence approach is relevant to our needs.

SR93 assesses the changes in the global and regional strategic situation since the end of the Cold War; looks forward 3-5 years; and provides guidance to the Defence organisation about the implications of the strategic outlook for

- Australia's strategic relationships,
- Defence policy,
- ADF commitments, and
- The development of defence infrastructure and industry.
The 1994 White Paper is currently being drafted and we expect it to be released by the end of the year. This will continue the process of review.

I'd like to stress early that the Strategic Review merely gives a snap-shot look at our current strategic outlook. It identifies trends that may affect Defence planning but it does not provide detailed guidance on force structure issues. Indeed it sets the scene for the 1994 White Paper - which will go on to develop guidance on force structure and capability issues.

Why did we do a Strategic Review?

We regularly review our strategic environment - about every three to four years. The last strategic review undertaken was in 1989 - Australia's Strategic Planning in the 1990s.

Of course since then, there have been significant changes in the global strategic balance.

- The most dramatic change has been the demise of the Soviet Union and the end of ideologically based confrontation between East and West.

- There has not been such dramatic change in Australia's nearer region: but shifts in the broader Asia-Pacific strategic environment may have significant longer term consequences.

Who was involved in its drafting?

The SR93 team included civilian and military elements, and was directed by a steering group (headed by Deputy Secretary Strategy & Intelligence and the Vice Chief of the Defence Force). It included
representatives of Department of Foreign Affairs and Trade and Prime Minister and Cabinet. The consultation process included a wide range of areas within Defence and other Government Departments.

The process also included, for the first time, consultations with regional countries. The review team visited all the ASEAN countries, except Brunei (for whom the timing did not suit). It also visited New Zealand and Papua New Guinea. This sent a strong signal to these countries about the sincerity of our aims to be more open with the region on strategic issues and processes.

I would mention here that it is this very process of openness on strategic and defence planning processes which we are keen to encourage between the countries of the region. We see the sharing of limited military information, such as through the publication of documents like SR93 and Defence White Papers, as a useful regional trust building measure.

**What is the difference between SR93 and the White Paper?**

The Strategic Review has a 3-5 year time frame. The White Paper will have a time frame of 10-15 years.

Although there is some overlap between the issues covered by the two documents, essentially the White Paper is expected to build upon the Strategic Review to develop longer term policy direction for the Defence Organisation.

The White Paper will translate strategic guidance into force structure and capabilities. Specifically, it will:
• Explain how our overall Defence posture needs to evolve to meet the demands of developments in our strategic circumstances over the next 10-15 years.

• Outline how the key elements of our Defence posture, including our national defence capability, regional relationships, alliances and support for global security, will evolve to adapt to the circumstances following the end of the Cold War, and

• Describe the practical steps necessary to implement our defence policy, including in areas of personnel, industry and defence science.

It will explain to the Australian people the Australian Government’s long-term defence planning. It will also ensure that our neighbours understand the basis of our defence strategy and acquisitions policies.

**How do we see the new strategic situation and what does it mean for Australia’s security outlook?**

As you well know, the end of the Cold War has greatly reduced the risk of global conflict including global nuclear war. The changes to the global strategic environment, and to the European security outlook have been immense.

As a post-Cold War document, SR93 deals with a more complex security environment than did previous strategic guidance. Before I begin, I had better explain the terminology that we have used.

SR93 uses Australia’s ‘region’ or ‘wider region’ to refer to the Asia-Pacific including the subcontinent, Southeast Asia, Northeast Asia and the Southwest Pacific. It uses Australia’s ‘nearer region’ to refer to
Southeast Asia, the Southwest Pacific and the nearer reaches of the Indian Ocean.

While developments in the wider region may affect our longer term security outlook, it is developments in our nearer region which remain of most immediate interest to us. Fortunately for us and our neighbours, it is our nearer region that has been least affected by the dramatic changes in the world strategic environment since the late 1980s.

Within the Asia-Pacific region, we see the key factors of change as including:

- The force modernisations underway in many countries in the region:
  - The basis for regional force structuring has altered. ASEAN countries are less preoccupied with nation building and internal security, they are looking towards more conventional capabilities to secure their national interests, including their maritime resources.
  - Regional nations are modernising naval and air capabilities. These modernisations reflect both the growing prosperity in the region and a refocussing of their defence priorities.
  - While there is an arms build up, this does not constitute an arms race - but there is some potential for competition to undermine sound strategic judgment and distort force structures.
The United States' role over the next decade as the world's only superpower and the part the United States will play in the stability of the Asia-Pacific region:

- The US will play a different and less dominant role in the region - especially in Southeast Asia.

- At the same time we see the continuation of a major US strategic role in the Asia-Pacific region as of major importance to Australia and our neighbours, and along with other regional countries we welcome US assurances of a continued effective military commitment to the region.

- Being realistic however, it appears to us that continuing domestic economic difficulties and post-Cold War restructuring and refocussing, will put pressure on US external commitments, including in the Asia-Pacific region.

- We see US forces as being likely to be smaller, more flexible and mobile, and based in or nearer to the continental United States.

- We expect the focus of US regional commitments to be North Asia.

- We see the maintenance of the US' strategic relationship with Japan as a critical element in the regional security outlook.
We see the pressure in the US for 'burden-sharing' increasing and we judge it will be increasingly important that regional countries, including Australia, maintain the capacity for their own defence.

The extent to which the United Nations and emerging regional groupings can become more reliable agents for promoting peace and stability, addressing and resolving the growing list of international security problems:

- In the case of the UN it is inadequately resourced to handle its commitments at the moment, let alone to strengthen its machinery for preventive diplomacy and peace building. The UN will find it increasingly difficult to cope with the demands placed on it.

- In our region, an underlying factor in the positive regional strategic outlook has been the success of ASEAN as a grouping.

- Indeed, there is a growing recognition in the region of common strategic interests and a positive trend towards a regional security community. This has been reflected in the establishment of the ASEAN Regional Forum (ARF) which met at ministerial level for the first time in July.

- We are an enthusiastic supporter of the ARF. We see it as the principal 'first track' (ie. official) mechanism for discussion of regional security issues, and for practical initiatives to improve regional security.
At the ARF meeting, we made some practical suggestions about possible trust building measures which might be considered by regional countries. We were encouraged that this approach gained a generally positive response from other regional countries.

A number of possible trust building measures are to be considered during the period prior to the next ARF meeting; these include measures relating to nuclear non-proliferation, peacekeeping cooperation including a regional peacekeeping training centre, exchanges of non-classified military information, maritime security issues, preventive diplomacy, and participation of all ARF countries in the UN Register of Conventional Arms.

Prior to the next ministerial meeting, and with Brunei as the current chair of ASEAN, it seems likely that there will be workshops and seminars to deal with some of these issues.

It has also been very encouraging to see in our region, the growth of unofficial or 'second track' mechanisms which have produced useful ideas for advancing regional security - ideas which have been carried forward in the official processes.

- How China, Japan and India develop their strategic policies and power in the medium and long term, the impact of their policies on Southeast Asia, and the way regional countries respond:

- To a considerable extent this will be affected by their perceptions of the US role.
The possibilities for proliferation of weapons of mass destruction and ballistic missiles:

- Weapons proliferation is one of the major issues facing the international community. It is indeed a paradox of the post-Cold War world that, whereas the remote but frightening risk of global nuclear war between the superpowers is gone, there is now greater concern about the continued spread of nuclear, chemical and biological weapons.

- Efforts to prevent proliferation of weapons of mass destruction will be a major issue on the international agenda: Australia's priority will be to keep these weapons out of our nearer region.

The Korean peninsula, which we see as an area of substantial change over the next decade and as a potential trouble-spot:

- We are encouraged that the recent agreement between US and North Korean negotiators over the nuclear issue provides some hope that the issues underlying this dispute can be resolved and resolved peacefully.

- We see the need for North-South contact to make substantive progress on reducing tensions on the peninsula.

The future impact of economic interdependence and changing trade alignments on relationships, and whether this will produce stability or new tensions:
We have seen signs of both a positive and a negative trade influence: the success of APEC has been a positive force; at the same time disputes between trading partners on trade issues can produce results which go far beyond the economic relationship.

- The economic dynamism of Asian countries, which on balance increases the stability of Australia's nearer region, but also if sustained over the longer term, will bring changes in our relative national strength.

- Continuing economic and social problems in the Southwest Pacific.

- Continued instability in the Middle East.

**Given this strategic outlook, has there been a need to change Australia's Defence policy?**

Our starting point is that Australia's strategic environment remains relatively benign.

In essence, the end of the Cold War has had no immediate profound effect on the strategic circumstances in the Asia-Pacific region which are central to Australian Defence policy.

SR93 has identified no specific source of potential military threat to Australia or its interests.
However, there are new complexities and uncertainties which we need to take into account. The end of the Cold War provides no basis for reduction in Australia’s Defence effort.

Without blowing our own trumpet too much, it would be fair to say that the policies we have had in place for some years have prepared us well for the changes flowing from the end of the Cold War. Many countries are now facing changed strategic circumstances which require new defence approaches based on self-reliance, regional emphasis and a non-threat specific military strategy. Australia has long based its defence policy on these factors.

While major changes in our defence posture are not required, there will be some changes of emphasis. Broadly, these are that we will more actively engage with our regional neighbours and continue the recent higher level of Defence support for international security efforts, while working to maintain the considerable benefits of the alliance relationship with the US.

So, what are the main elements of the defence approach outlined in SR93?

In terms of policy responses to our current strategic outlook, priorities for Australia’s Defence will be:

- continued centrality of the strategy for defence of Australia;

- increasing regional engagement;

- sustaining the US alliance;

- an expanded role in global security; and
• an improved national capacity for defence.

I'll briefly outline what each of these elements involve.

**Centrality of Defence of Australia**

The strategic assessments in SR93 confirm that the central focus of defence policy should be the defence of Australia. This meets the Government’s fundamental responsibility to the Australian people. At the same time, forces developed for the defence of Australia are also able to contribute effectively to wider global and regional security and to enhancing our status as a regional partner.

Our strategy for the defence of Australia remains one of defence-in-depth, as first outlined in the 1987 White Paper. This strategy and our force structure planning, give priority to meeting credible levels of threat, by presenting an adversary with a comprehensive array of military capabilities capable of independent defensive and offensive operations in the air-sea gap to our north and throughout Australian territory:

• Under defence-in-depth, emphasis is given to clearly focused intelligence and surveillance operations and to having highly mobile and capable forces which can deal with hostilities quickly and on our own terms. The capabilities for these roles determine the ADF’s overall force structure.

• Accordingly, we will continue to place priority on developing capabilities able to detect, track and target the adversary, mount maritime and air operations in the air-sea gap, and undertake offensive strike and interdiction missions. We will continue to
require mobile land forces able to defeat hostile incursions at remote locations.

**Increasing Regional Engagement**

Australia's security is inextricably linked with the strategic stability of the Asia-Pacific region. A dominant theme of Defence policy will be increasing defence engagement with the region, with a growing focus on Southeast Asia.

At the bilateral level this will take three forms:

1. **Strategic partnership with Southeast Asia** with the highest priority for Indonesia, Malaysia and Singapore. Reflecting our common strategic interests in regional security and stability, our defence relations with the nations of our nearer region will be characterised by, among other things, a more common approach to regional strategic and defence issues, more frequent joint activities, a closer relationship between military forces, and closer collaboration on defence science and industry matters.

These new patterns of defence relationships with Southeast Asia will both improve Australia's security environment and help to strengthen the security of our nearer region. There will be no single formula for every partnership. Each relationship will need to develop at a pace with which both countries are comfortable.

Strategic Review 93 deals in detail with relationships which we are seeking with each of the countries of Southeast Asia. However, I will specifically mention the relationship with Indonesia.
As we say in SR93 more than with any other regional nation, a sound strategic relationship with Indonesia would do most for Australia's security. We will be seeking new opportunities to extend this, including further bilateral dialogue on strategic issues and greater content in bilateral policy and operational exchanges. Personal contacts are particularly important in developing closer defence relations with Indonesia and priority will be given to training and activities which foster long-term contact and understanding at all levels. These will include exchanges of observers, study visits, combined exercises, and placements on courses at our various colleges.

2. **Strategic commitment to the Southwest Pacific**, emphasising a continuing close alliance relationship with New Zealand, continuing strategic commitment to Papua New Guinea, and maintaining our levels of involvement with the small island states at about present levels.

Australian and New Zealand (NZ) security interests closely coincide, although public perceptions of security issues sometimes differ widely. NZ officially recognises that a threat to Australia would constitute a threat to its own security. The establishment of Closer Defence Relations (CDR) with NZ helps foster a close defence relationship over the longer term. This is designed to ensure mutual understanding of long-term planning, and to maximise interoperability, complementarity, and cost-effectiveness.

So far as the issue of NZ’s participation in ANZUS is concerned, we need to monitor closely changes in the NZ-US relationship. In SR93 we have pointed out that the limitations on NZ participation in multilateral exercises and on provision of intelligence products

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to NZ resulting from NZ’s policy on nuclear ship visits, impede the development of a fully effective Australian security relationship with NZ.

In the case of Papua New Guinea (PNG), we intend to maintain strategic commitment to PNG, but in a way that develops PNG’s ability to look after its own affairs. The PNG Government is re-orienting its security forces, including the PNGDF, more towards maintaining national integrity, law and order. Defence assistance in this process supports our strategic interest in a more stable PNG.

3. **Constructive contact with major Asian powers.** In recognition of the growing power and influence of Japan and China, Australia will gradually expand a modest level of defence contact with these nations - such as through low-key official meetings and limited training opportunities.

In the multilateral environment we are strong supporters of the regional security dialogue process and we intend to foster and participate actively in first and second track processes.

We will work with regional countries to produce effective trust building measures to enhance regional security. We are especially keen to see a regional seminar on possible trust building measures held in advance of the next ARF meeting.

We would also encourage defence and military participation in ARF processes. In the first place, many of the most important trust building measures under discussion are defence-related and defence/military officials should be involved in these discussions. We see defence/military participation as bringing together defence and foreign
affairs officials to produce a realistic and integrated approach to such measures. We believe it would also provide a basis for military and defence organisations to accept and implement trust building measures which are eventually agreed by the ARF.

We also see such participation as a trust building measure in itself - developing relations between regional militaries and networks of personal contacts which will encourage understanding.

We will participate in relevant second track processes and encourage other regional defence organisations to do likewise.

**Sustaining the US Alliance**

Our alliance with the United States remains very important to Australia both for its contribution to regional security and its support for our self-reliant posture through the bilateral relationship.

The mutual obligations under the ANZUS treaty remain the foundation of our defence relationship with the US.

Within this enduring framework, we expect the nature of the relationship to evolve. For Australia, the relationship remains of very considerable value, both as a source of practical support in areas such as science, technology and intelligence, and for its deterrent value, as any potential aggressor would need to take account of US commitments to support an ally like Australia.

As Australia's and the US' respective strategic outlooks and policies alter following the end of the Cold War, we will need to work harder to maintain the benefits of the defence relationship, and to ensure that the United States sustains its engagement in the region.
Expanded role in Global Security

As a means of improving Australia's own security, Australia will need to continue to contribute defence resources to promoting more effective global security mechanisms, especially through the United Nations (UN).

This will include increasing our contribution to a more effective UN headquarters and organisation, and maintaining an appropriate level of commitment to peacekeeping. However, it will not be possible to meet all requests, and funding of these operations should not place in jeopardy capabilities for the defence of Australia or activities to promote partnerships in the region.

Forces designed for the defence of Australia provide flexibility to contribute to peacekeeping tasks. This has been amply demonstrated by our commitments over the last 18-24 months, but our resources will not permit us to meet all requests for Australian participation in peacekeeping. Multilateral security operations in our own region will have a greater strategic importance for Australia because of their more direct contribution to our own security. This will be a major factor when considering the size and duration of our commitment, although each proposal for peacekeeping will be reviewed on its merits.

Defence will increasingly contribute to national efforts to encourage transparency in regional planning processes and to control the spread of destabilising weapons. Weapons of mass destruction have so far been absent from Australia's nearer region, and it is a national priority to ensure this remains the case.
Improved National Capacity for Defence

A key priority will be the harnessing of national resources to achieve the most cost-effective defence effort.

This will involve better coordination of civil and military resources especially at the strategic policy level and with civil defence agencies. We see defence and civil agencies consulting on contingency plans and major equipment proposals. Defence will need to work more closely with the civil sector - especially in Defence Industry - to make better use of wider national resources for Australia's defence.

Defence's requirements from the civil sector should be defined more clearly. Civil Defence planning and operations should be conducted in close operation with the ADF through established civil-military coordination processes (which should be exercised during peacetime).

What is the role for Defence Science and Industry in Defence self-reliance?

The development of our Defence Science and Industry are important elements in our defence capability. Without support from defence science and industry, the sustainability of our combat support capabilities would be quickly eroded. We must develop Australian industry's ability to support and maintain defence force equipment, and where appropriate, to make the equipment in Australia.

What does SR93 say about industry support for the ADF capabilities?

Australian industry has an important role in supporting major ADF capability areas. These include:
• C*: which is adapted to the Australian environment is fully integrated and secure,

• Intelligence: including high levels of operational availability on a continuous basis and timely distribution to a range of users,

• Surveillance: Defence needs an advanced capability adapted to the Australian environment, with advanced facilities to integrate and analyse information from various sources,

• Weapons platforms and combat systems: Support is a high priority,

• Munitions: Defence will look for a mix of local and overseas sources of supply, together with stockpiling, and

• Logistic support: Defence will look to maximise use of the civil infrastructure.

Industry's significance will increase as Australia seeks greater self-reliance and increased defence cooperation and stability within the region. But self-reliance does not mean self-sufficiency. There are limits to the extent that Australia can divorce itself from overseas support particularly in important aspects of new and complex technology.

Complete self-sufficiency would be unachievable and would divert resources at the expense of capability. Australia will continue therefore to pursue cooperative international science and industry programs that enhance our technological and industry capabilities in support of our national interests.
Finally, what does regional engagement mean for Australian Industry?

Australia's defence relationships with regional countries - and in particular with Southeast Asia - can assist in opening up a range of areas for defence industry.

They can facilitate the development of logistics cooperation, technology development and sharing, and collaborative projects to build on our significant infrastructure performance. Collaboration with the region may also provide significant commercial advantages to Australia. Furthermore, such sharing may also help to strengthen regional security. Australia could become an industry and technology base for the region. This would improve the compatibility of Australian and regional defence systems and prospects for a greater degree of interoperability.

Our concept of national strategy for defence still requires further development. The White Paper will provide more specific guidance in this area.

CONCLUSION

In conclusion, the most fundamental defence responsibility remains providing for the defence of Australia. At the same time, engaging more with the region, and continuing our increased commitment to multilateral security activities, promotes our continued security by fostering a regional strategic environment which is favourable to our interests, and which benefits the region as a whole.

In addition, maintaining our strong alliance with the United States both provides important benefits for our self-reliant defence capability, and
encourages a continuing US commitment to the security of the Asia-Pacific region.

Together, these elements of policy provide us with the defence posture with which we can confidently look forward to dealing with the strategic challenges of an increasingly complex and uncertain strategic environment.
DISCUSSION

There was discussion of Australia’s strategic partnership with the ASEAN countries and the potential for increased industry, trade, scientific and political cooperation between regional countries.

It was noted that Australia’s regional defence engagement was part of a broader Australian strategic approach to the region.

- This strategic partnership provided a basis for enhanced military-to-military contacts with regional countries in many areas;

- The range of defence activities which Australia undertook with regional countries could be extended to give relationships more depth and develop a mutuality of interests - thus producing partnership between equals; and

- Australia’s alliance relationship with the US served both Australia’s own national interests and those of security and stability in the region. It was noted that most regional countries are keen to keep the US militarily engaged in the region even if they will often not say so publicly. Australia’s alliance relationship helped to keep the US engaged in the region. Notwithstanding the importance Australia attached to this alliance, and similar strategic interests with the US, Australia’s defence approaches to regional countries were dictated by Australia’s own interests. This meant there would be times when Australia needed to draw a clear distinction between Australia’s approaches and those of the US on regional issues.

The point was made that Australia needed to be patient about evolving comfort zones in the region on closer cooperation on defence and
security issues. In pursuing regional defence engagement, Australia should ensure it did so at a pace with which regional countries were comfortable. Australia might need to be cautious about pushing too hard. The relationship between Australia and Singapore was clearly a strategic partnership, based on mutuality of interests and benefits.
AIR LAW AND
THE LAW OF ARMED CONFLICT

Presented by Wing Commander Ric Casagrande
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INTRODUCTION

The mission of air forces is to fly and fight. To carry out this mission air force personnel need to know and understand the legal regime which affects air operations. After the Gulf War General Colin Powell reinforced this point when he stated that 'decisions were impacted at every level, (the law of war) proved invaluable in the decision making process.' The war was fought by coalition forces and their mutual recognition of the law of armed conflict has implications for air forces operating together.

The aim of this paper is to introduce some basic legal concepts which impact on air operations. This paper will cover:

• definitions of air law terms,
• history of air law,
• the Chicago Convention,
• air navigation issues, and
• rules of aerial warfare.

The legal regime which affects air operations is closely related to both the international law of armed conflict (which regulates the full spectrum of armed conflict) and the important body of law, known as, the law of the sea.
DEFINITIONS

First, let us define some of the terms integral to an understanding of air law.

**Air Law** - That body of law governing the use of airspace and its benefits for aviation, the general public and the nations of the world. The major sources of air law are:

- multi-lateral and bi-lateral treaties,
- national domestic law,
- contracts between international agencies and companies, and
- customary international law.

**Airspace** - There is no authoritative definition as to the boundaries of airspace. The international practice is to recognise the uppermost boundary as being somewhere between the lowest altitude at which a satellite remains in orbit and the highest altitude at which an aircraft can fly. Consequently, the uppermost boundary is generally recognised as being somewhere between 50 and 80 kilometres above the earth's surface.

**Aircraft** - In the 1944 Chicago Convention an aircraft is defined as any machine which can derive support in the atmosphere from the reactions of the air other than the reactions of air against the earth's surface. This definition includes:

- fixed wing and rotary wing aircraft,
- airships,
- gliders, and
- balloons.
It does not include hovercraft, cruise missiles or rockets.

**HISTORY**

Since man first started exploiting the third dimension - the air above the surface of the earth - regulations have emerged to control its use. In 1784, the balloons of the Montgolfier brothers disturbed the local populace. As a result, the local authorities passed laws restricting the times during which the balloons could be used. Additionally, after balloons were used in the US Civil War for military purposes, the potential of air power was recognised. As a result, the French in the 1890s called for restrictions on the military use of aircraft.

Despite the provisions of the Hague Convention of 1897, which forbade the dropping of bombs from balloons, and the draft Hague Rules of Air Warfare of 1923 which attempted to place restrictions on aerial warfare, no firm set of rules emerged to provide practical and authoritative guidance to military airmen. Consequently, the following issues arose during wars in which air power played a role:

- limits on air bombardment,
- definitions of legitimate military targets,
- the status of civil aircraft,
- which laws of armed conflict (LOAC) were applicable to airmen, and
- determining when airmen were *Hors De Combat* (out of combat).

These issues gave rise to great controversy in relation to the lawful and moral boundaries on the use of air power. While some customary international law developed, it was only after Vietnam that the international community addressed that part of the LOAC relating to air
power. This resulted in 1977 in two Protocols being added to the 1949 Geneva Conventions.

**The Chicago Convention**

Because the international community recognised the benefits of civil aviation and the need for some international controls, negotiations were entered into and, in 1944, a comprehensive code entitled the Convention on International Civil Aviation (Chicago) was agreed upon. This multi-lateral treaty provided a set of fundamental guidelines for the control and development of international civil aviation. Signatories of this convention have grown from the original 50 to include almost every nation in the world.

The Chicago Convention developed some fundamental principles and concepts. The following is a list of some of these:

- every nation has complete sovereignty over its own airspace;
- a basic distinction exists between civil and state aircraft;
- the convention applies only to civil aircraft;
- there are established freedoms of air navigation over areas not subject to territorial sovereignty;
- civil aircraft can transit through national airspace without specific clearance, though landing rights for scheduled services may be subject to bi-lateral agreements; and
• the International Civil Aviation Organisation (ICAO) is the single international controlling authority for international civil aviation.

The Chicago Convention also set out some basic rules regarding national sovereignty. These included:

• no aircraft may enter national airspace without permission. Permission may be specific, for example diplomatic clearances for a flight, or general, for example, permission granted under a treaty;

• every aircraft must identify itself in another nation’s airspace;

• any aircraft in another nation’s airspace must obey all reasonable orders;

• control by a territorial state cannot expose aircraft and occupants to unreasonable danger; and

• subject to state laws, nations should allow an aircraft to enter its airspace in an emergency.

State Aircraft

State aircraft are not subject to the restriction of the Chicago Convention and cannot take advantage of its provisions. As a consequence, they are not subject to ICAO rules and procedures. Examples of state aircraft are military aircraft, customs and police aircraft, and VIP and mail carrying aircraft. Because state aircraft are not covered by the Chicago Convention, they must have diplomatic clearance to enter another nations’ airspace. The basic rule for state
aircraft is that they must conduct themselves with due regard to the safety and welfare of other air users. However, as a matter of policy and practice, most military aircraft obey ICAO procedures for safety reasons, unless mission requirements dictate otherwise.

Military aircraft must be distinguished from civil aircraft. They are required to have visible external military and national markings. Military aircraft are generally regarded as those aircraft crewed by military personnel, registered on a military aviation register and destined to form part of the armed forces in conflict. There are specific provisions relating to the status and protection of medical aircraft in Additional Protocol One. Only military aircraft can engage in combat operations.

**AIR NAVIGATION ISSUES**

As discussed previously, state aircraft need diplomatic clearance to transit through another nation’s airspace. This means that aircraft have no right of innocent passage over territorial waters, like the rights all ships enjoy. Other than this, the freedom of air navigation can be exercised by all aircraft over the high seas, exclusive economic zones (EEZ), air defence identification zones (ADIZ) and flight information regions (FIR). FIRs are areas established by ICAO and are administered by national air traffic control authorities. They establish no sovereign rights, and state aircraft are not subject to control within them.

Nations can and do intrude into other nations’ airspace. Some can be justified, others cannot. Some examples of justifiable intrusions are as follows:

- intrusion based on duress or emergency; and
• for national self defence eg. overflight of Cuba in 1962; and
  Israel's flight into Entebbe to rescue Israeli nationals.

It is important to note that the Israeli attack against the Osirak nuclear reactor was justified on the basis of pre-emptive self defence, however, this claim was not generally accepted by the international community.

**RULES OF AERIAL WARFARE**

Rules of aerial warfare have been slow to develop. However, those now in existence are detailed and wide ranging. Unfortunately, the area is plagued by controversy. It is beyond the scope of this presentation to give a detailed analysis of these rules; however, it is important to introduce the three fundamental concepts of aerial targeting. These three concepts are:

- Humanity;
- Military Necessity; and
- Proportionality.

These are the building blocks of LOAC.

Humanity recognises that there are limits to the methods and means of warfare. On humanitarian grounds certain targets are afforded special protection. This means they cannot be attacked unless certain conditions apply. Civilians and civilian objects are not subject to attack, nor are religious and cultural sites, hospitals, medical personnel, and military forces who are out of combat (for example, POWs, units who have surrendered, the injured and shipwrecked). The Geneva Convention and the Additional Protocols establish a body of law which sets out the protection given to these individuals and objects.
LOAC recognises that, in the pursuit of military objectives, the legitimate use of force may cause incidental injuries and collateral damage. Accordingly, the following guidance is crucial:

- combatants can use that amount of force needed to achieve a military objective,
- such use of force cannot be prohibited by LOAC,
- there must be the least possible expenditure of life feasible in the circumstances, and
- the force used must be able to be regulated by the user.

Accordingly, military necessity recognises that lives will be lost and damage inflicted to private property, but such loss of life and damage must be incidental to the military mission. These LOAC concepts accord with three Australian principles of war: selection and maintenance of the aim, concentration of force, and economy of effort.

Proportionality is the requirement to balance humanity and military necessity. Military necessity cannot justify all use of force, for example, indiscriminate attacks are never justified. There are absolute boundaries. An air commander, when planning an attack, must weigh up the consequences of the attack with the value of the objective to be achieved. That is, the amount of death and destruction caused must be proportional to the military advantage anticipated. For example, it would be wrong to level an entire city simply because it had a few soldiers garrisoned there. However, it would be acceptable to specifically attack the barracks or any factories which manufacture weapons in the city. Additional Protocol One provides specific guidance
on all of these issues. Commanders have a heavy responsibility under LOAC, one which has been universally accepted by the nations of the world.

CONCLUSION

As the mission of air force is to fly and fight, it is important for members of military forces to know and understand the legal regime which affects air operations. This paper has introduced some of the basic legal concepts applicable to air operations, focusing on fundamental air law principles, the Chicago Convention as it controls civil aviation, and basic LOAC principles which affect air operations. The intent here is to merely provide an introduction and not an exhaustive analysis of this area of the law. Accordingly, if readers have any further queries, they are encouraged to contact a qualified legal adviser.
DISCUSSION

The following issues were clarified:

- Sovereign airspace was generally 12 nm though some nations, like Singapore, still adhered to 3 nm.

- The Law of the Sea Convention will come into effect in November 1994.

- Military aircraft can penetrate controlled airspace without clearance; their only legal obligation is to fly with 'due regard'.

- 130 nations have ratified the 1977 Additional Protocols, including Australia, NZ and Brunei. Most other regional nations have signed but not ratified. The US is reviewing its position and the UK has indicated that it will ratify the Protocols very shortly.

- There will be issues related to legal interoperability if a combined force consists of nations which have differing positions on the Additional Protocols. An example of such a combined force was the coalition assembled to fight the Gulf War. General Horner has said that these issues were resolved and did not present any major obstacles.

- The management of Rules of Engagement is critical to the control of force used and the necessity to ensure legal boundaries are not crossed. Australia did this successfully during the Gulf War.
REGIONAL AIR POWER COOPERATION - A SINGAPOREAN PERSPECTIVE

Presented by Lieutenant Colonel Shae Toh Hock
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INTRODUCTION

The end of the Cold War has not brought peace, but merely a greater hope for peace. Even this hope is resting on shaky foundations as old conflicts endure and new ones emerge. The transition from a bi-polar to a multi-polar world has ushered in a period of greater uncertainty as the much talked-about 'New World Order' is still struggling to find its shape in the midst of intensified ethnic-religious violence, civil strife and threatening international hot spots. The on-going troubles on the Korean peninsula and in ex-Yugoslavia, and recent conflicts in Rwanda and Yemen for instance, should convince one not to take peace for granted.

The Asia Pacific region - to which Australia, New Zealand and ASEAN belong - is blessed with a relatively more peaceful environment and healthy economic growth. However, there remain existing and potential troubles which nations in the region must make a conscious and concerted effort to resolve or contain. Territorial disputes, historical suspicions, politico-economic friction and big-power differences are all possible sources of conflict if they are not properly managed. The competing claims over the Spratlys, the US-Japan trade disputes and Sino-US differences over human rights and trade issues are potentially destabilising. Another cause for concern is the reduction in the US military presence - which has been a factor of stability - in the Asia Pacific region.
Let me draw three valuable lessons from the most recent Gulf War to lead into my discussion on the role of air power in regional cooperation. The three lessons are:

- Peace must not be taken for granted;

- Air power is a crucial factor in determining the outcome of modern warfare; and

- A multi-lateral cooperative effort can be effective in resolving international conflicts.

Firstly, the plight of Kuwait has demonstrated to the world that nations can neglect their defence only at their own peril. We in this region would do well to treat defence seriously for our own security. Secondly, Operation Desert Storm has again underscored the decisive advantage air power can have in modern warfare. The development and constant upgrading of our air power should be one of our foremost concerns in national defence. Thirdly, the consensus and cooperation among the Allied forces added much weight to their legitimacy and effectiveness in resolving this international conflict. Should there be any serious conflict in this part of the world, effective and expeditious resolution would require the cooperative and concerted effort of several, if not all the nations in the international community.

REGIONAL COOPERATION FOR PEACE AND STABILITY

Peace and stability is what every nation in the region desires for national economic development and the furtherance of its people's welfare. This desirable state of affairs however can never be achieved through the effort of a single nation; it would require a common
commitment to peace, a cordial approach to inter-state dealings, and a cooperative spirit in managing tensions and conflicts.

Although the Asia Pacific has been beset with numerous wars and conflicts in the past, it also has an encouraging history of regional cooperation which augurs well for continued cooperation and stability. That Australian soldiers staked their lives to fight against the Japanese in Burma, Malaya, Singapore and the Pacific during World War II shall always be remembered. Equally commendable is Australia’s effort in Vietnam to help stem the tide of Communist aggression in the Cold War era.

More recently, what the ASEAN nations and Australia did to broker the peace in Cambodia is worthy of our mention. Through our collective effort, we kept the issue alive in international forums, which finally led to the signing of the Paris Peace Accord in 1992. We also contributed peace-keeping troops and administrators, under the auspices of the UN, to help organise and monitor the 1993 elections. In addition, technical and financial assistance are still being rendered to assist Cambodia in its economic reconstruction.

The present state of regional cooperation is indeed heartening as we see continued military cooperation in the form of the Integrated Air Defence System (IADS) under the Five Power Defence Arrangements (FPDA) and a cross-cutting network of bilateral and multilateral exercises, exchange programs, courses, visits and workshops. In the political realm, we note the significance of ASEAN’s external dialogues and the ASEAN Regional Forum. Economically, the Asia-Pacific Economic Cooperation (APEC) group serves as an important forum for discussing economic issues and forging greater economic cooperation among its members. Over time, this network of multifaceted cooperation has built a strong bonding not only between states and governments, but between
societies and peoples as well. As our economies are increasingly intertwined by rising levels of trade, investments and joint development programs, the future of our nation and that of the region have become inseparable.

REGIONAL COOPERATION AND SINGAPORE

National and Regional Resilience

From the security viewpoint, these realities have convinced us that national and regional resilience are highly complementary if the will to forge cooperation is strong. We also believe that our resilience can be enhanced through an emphasis on air power both in the context of national defence and regional cooperation. A strong national defence deters foreign aggression. Similarly, a region of cohesive states, each with a credible defence force, strengthens regional security and stability.

The force modernisation or arms build-up that we are presently witnessing in this region should not therefore be seen as an arms race which might threaten regional security. Rather, it should be regarded as a positive sign of the countries’ commitment to constantly enhance national and regional resilience. Malaysia is upgrading its air force by procuring new generation fighters like the F-18s and the MiG-29s. Thailand is acquiring a second F-16 squadron and Singapore is acquiring a full F-16 squadron. The acquisition of these new assets will stand us at the cutting edge of weapons technology and better prepare us to deter aggression and protect peace in the region.
Singapore's Defence Policy: Total Defence, Deterrence and Diplomacy

The foundation of Singapore's national resilience rests on three key elements. They are total defence, deterrence and diplomacy. Total defence means every Singaporean must contribute to the security of the nation. It also means defence is a multi-faceted effort involving the military, political, social, economic and psychological spheres.

Deterrence involves building up and maintaining a credible defence force for the purpose of dissuading potential aggressors from attacking Singapore. This defence posture is well captured in the 'poison shrimp' or 'porcupine' analogy, where aggressors can expect unacceptable self-destruction should there be any attempt to invade the island. Deterrence is the ideal and most realistic security option which allows us to maintain a balance between our commitment to non-aggression and our preparedness to vigorously prevent or expel any aggression should it ever happen.

Defence and diplomacy are two sides of the same coin in Singapore's defence policy. While defence serves to deter aggression by potential belligerents, diplomacy seeks, builds and maintains friendship with other nations. Singapore is committed to the principle of making as many friends as possible in the international community. We believe peace can be maintained through peaceful cooperation in the pursuit of common interests and through the use of peaceful means for defusing tensions and resolving conflicts.

Total defence, deterrence and diplomacy, though seemingly separate and distinct in nature and function, are in fact closely related and inextricably linked. Total defence translates into total preparedness by the entire nation to defend the country's national sovereignty. This
total approach is indeed a great deterrent in itself where any potential aggressor can expect to contend not just with the military, but with the entire moral weight of the nation as well. Diplomacy is also a form of deterrence in that the enemy must take into consideration the likely support of Singapore’s friends and the censure of international organisations of which Singapore is a member.

Air Power in Singapore’s Defence Policy

The Gulf War has demonstrated beyond a doubt that the side with superior air power has a clear advantage over its opponent. In fact the potential and potency of air power was already clearly manifested in the Asia-Pacific during World War II, where we saw the shocking air raids over Pearl Harbor, the incredible sinking of the Prince of Wales and Repulse, and the complete reliance on carrier-based aircraft in the Battle of the Coral Sea.

With the rapid advance in weapons technology, the lethality and effectiveness of air power has also grown by leaps and bounds. No wonder air power often receives top priority in a nation’s military build-up or force modernisation as it is seen as a force multiplier which has the speed and firepower to respond quickly and damage effectively in modern warfare.

The necessary centrality of air power in defence is even more obvious and understandable for small countries like Singapore. Singapore’s small land area of 620 square kilometres simply offers no strategic depth or sanctuary for us to retreat, regroup and retaliate. Given the speed of modern warfare, the reaction time available will be extremely short, especially if you consider that a fighter aircraft can fly across the entire island in less than three minutes. It is obvious that only air power can meet the high demands of speed and firepower.
Moreover, given our small population base, we can only afford to maintain a small peacetime force. For this small force to be effective, it must be capable of reacting quickly and mustering sufficient firepower to confront the enemy. In view of such realities, only a vigilant and effective air force can enable us to do this: airborne early warning aircraft and long range surveillance radars are needed to give us that crucial lead time to react accordingly; fighters to intercept attacking aircraft away from the island before they strike; and the ground-based air defence artillery systems as the last line of air defence.

**Air Power in Regional Cooperation**

Inherent in air power are some special characteristics which make it a particularly suitable platform for promoting regional cooperation and maintaining regional peace.

Not least, modern air power, characterised by the use of precision weapons, has made it possible to more accurately hit where one wants to - thus avoiding any unintended damage to civilian life and property. Greater firepower, in both qualitative and quantitative terms, which can be delivered from the air also means the minimisation of troops and casualties. These attributes in relative terms would perhaps make the use of air power more politically acceptable, both internationally and domestically.

If you are agreeable that air power indeed offers the best possibility for regional cooperation, you would also agree with me that each nation must not only build up its capabilities and stay prepared; the air forces of this region must also make an effort to promote mutual understanding and develop workable norms for operating together, should the need arise. This can be achieved through joint training
exercises, and through many other forms of military cooperation and exchanges.

It is indeed encouraging to note the high level of interaction and cooperation among air forces of the region. RSAF on our part has provided the use of its support infrastructure and facilities at Paya Lebar Airbase for periodic detachments from RAAF, RMAF, RNZAF, RAF and USAF. We also have made provisions for RMAF and TNI-AU to use our A-4 and F-5 simulators - which represents one good way of optimising training resources in the region. The joint development of training facilities, best exemplified by the Slabu Air Weapons Range and the Air Combat Manoeuvring Range undertaken by Singapore and Indonesia on a cost-sharing basis, represents yet another way of achieving synergy in regional cooperation.

Seriously constrained by the lack of local airspace, the RSAF is most grateful to many friendly nations which have been providing us with valuable opportunities and support for our training, in particular Indonesia, Australia, Thailand, Brunei and the United States. More recently, the agreement with the RAAF for us to establish a Flying Training School in Pearce promises a significant enhancement to RSAF pilot training. Participation in joint exercises like IADS ADEX, THAI-SING, ELANG INDO-PURA, PITCH BLACK and COPE TIGER offer excellent opportunities to develop an understanding of one another’s operations, and establish some common norms for joint missions.

**Suggested New Areas of Cooperation**

The clear evidence of tremendous benefits which can be derived from cooperation should urge us to continue to build on existing arrangements and explore new areas for our joint pursuit of common interests. Let me highlight two important areas where we can intensify
our cooperation. They are in technical cooperation and peacetime joint missions.

First on technical cooperation, this may include joint R & D and defence industrial cooperation. We need to keep pace with technology in order to stay ahead. Joint R & D and defence industrial cooperation are good ways of sharing knowledge and optimising resources in the development of new capabilities - which can range from hardware improvements to software upgrades.

Secondly, joint humanitarian or relief missions is another way of displaying goodwill and manifesting the concrete benefits of cooperation. We were glad to be of service to the Philippines following the Mount Pinatubo eruption by sending relief supplies through airlift to the victims in need. Our participation in UN missions in Kuwait and Cambodia involving the use of air assets further testify to the need for mutual assistance in times of crisis. Joint search and rescue arrangements are another potential area for enlargement. The bilateral SAR agreements Singapore has with Malaysia and Indonesia have been in existence for some years now with a good record of successful joint missions. Similar arrangements may be considered by other countries which are proximately located.

Safety is a major area of concern in which countries can share knowledge and experience. Lessons learnt from incidents in one country can be shared with others to prevent similar mishaps.

Regional cooperation has come a long way and air power has consistently played and will continue to play a vital and leading role in its development. To date, bilateralism remains the modus operandi. I am of the view that whilst bilateral exercises remain relevant and useful, there are benefits which we can derive from greater
multilateralism. For a start, multilateral exercises can promote greater mutual understanding and move us forward in regional air power cooperation.

However, I must caution that multilateralism should be seen as a complement to and not a replacement for bilateralism. While we move into greater multilateral cooperation, we should by all means maintain an appropriate level of bilateral interaction to reflect the unique relationship we have with one another. Moreover the movement to multilateralism has to be a gradual one, in the course of which bilateralism will continue to play a significant role in regional cooperation.

In addition, I must stress that the regionalism we are advocating is by no means a closed and inward-looking one. Just as a nation cannot thrive on its own, a region cannot secure peace and prosperity on its own accord in this modern global village. We should continue to keep extra-regional actors engaged in our regional affairs and we should support the efforts of international organisations in a common pursuit of global peace and welfare.

CONCLUSION

In conclusion, let me emphasise that the unpredictability of international relations does not allow us to take peace for granted. In our view, building and maintaining a credible national and regional resilience is the best form of deterrence and defence. We have long recognised the crucial role air power can play in underpinning that resilience, and we are confident that continued cooperation in this area will take us to greater heights of friendship and secure for us a more stable and peaceful region.
DISCUSSION

The question of use of all arms during peacetime joint operations was raised. Singapore is often constrained because of Constitutional limitations. These restrict the deployment of national servicemen overseas; a significant point since 80% of the force are national servicemen. The most likely contributors to regional peacetime operations would be RSAF helicopters & some fixed wing assets. These would likely be small in number and would probably be manned and supported by regular servicemen.

Singapore has a number of bilateral arrangements, which reflect its need to train in other countries eg. US, Thailand and Australia, because of airspace limitations on Singapore Island.

The group discussed the future of IADS and the consensus was that IADS exercises were becoming more sophisticated with major ADEXs running back-to-back with STARFISH Exercises. There was a possibility of seeing more C² tested in these exercises and they would hopefully grow in the future.

Additionally, Singaporean R&D staff and Australia's DSTO representatives had held talks and were working together on common research topics eg. communication systems and technology applicable to the aerospace industry.

The region needed to develop an indigenous air capability as at the moment, everyone was too dependent on the US. To have true air power an air force needed to have the ability to generate air power from its own industrial base.
To achieve this, there was a need to develop a regional economic community, as at the moment, most air power related technology comes from outside the region and could not be reproduced. The region could take a long time to catch up and all nations, including Australia, could not achieve complete self reliance in the short term.
THE AUSTRALIAN ARMY AND REGIONAL COOPERATION
- SECURITY THROUGH PARTNERSHIP

Presented by Lieutenant Colonel Brian Hewitt
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INTRODUCTION

One of the central tenets of Australia's national security policy is our interest in a secure and stable region. For the major part of this century, Australia has pursued this interest in regional security through security arrangements, first with the United Kingdom and subsequently with the United States. The overriding objective was to stem potential threats before they could reach Australia.

Following the end of the Second World War, Australia played a more important role in the Asia-Pacific region, while remaining a part of the Western alliance. This role involved making a significant contribution to the development of Southeast Asian states, including support for Indonesian independence in the 1940s, assistance to Malaya during the Malayan Emergency, and comprehensive support to regional development through the Colombo Plan. During the 1970s and 1980s, Australia's foreign policy moved towards a more mature understanding of Australia's place in the Asia-Pacific region, and focused on a more self-reliant approach to national security within a framework of alliances.

As we move towards the 21st century, Australia will continue to have a strong interest in a secure and stable region. Enhancing the security of

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1 My thanks to Major Grant Cavenagh for his considerable assistance in the preparation of this paper.
the region has long been an important element of Australia's foreign policy: it will, in future, assume even greater importance in our defence policy.

Developments in the Asia-Pacific region have implications for Australia's security, as we see ourselves very much a part of that wider region. A community of interest between regional countries on regional security issues is developing quite fast, and Australia aims to participate actively in this emerging strategic community. Through cooperation with and between all regional states, a secure environment can be promoted in which regional nations can develop and prosper without power bloc interference or military competition.

Australia's approach to the Asia-Pacific region will vary according to our specific interests. For example, in Southeast Asia, Australia will be looking to a form of strategic partnership. Partnerships with Southeast Asian nations will reflect our shared strategic interests, and should result in greater mutual benefits. In the case of the Southwest Pacific, where the nations are smaller and generally less developed, we will pursue a policy of constructive commitment. With major Asian powers we will pursue a policy of constructive contact.

The aim of this paper is to discuss the Australian Army's involvement in the Asia-Pacific region and to suggest ways that might contribute to the further building of trust and confidence in that region. The paper represents neither Army, Defence nor Government policy.

**AUSTRALIA AND THE ASIA-PACIFIC REGION**

The Asia-Pacific region is not homogenous. National differences can inhibit the speed at which cooperation is able to develop. For the foreseeable future, bilateral relationships will be favoured over
multilateral arrangements, although, as the regional dialogue process
develops, there will increasingly be an interest in multilateral
approaches. Australia’s approach to regional security, however, should
build on the important links that already exist with neighbouring
countries, with the realisation that there is scope to extend these links
and to pursue other initiatives. All aspects of national economic,
diplomatic, cultural and security policy should be brought to bear in a
coherent manner. The 1993 Strategic Review (SR93) and the
forthcoming Defence White Paper provide guidance for ADF regional
engagement. In addition, they contribute to an understanding of
Australia’s defence and foreign policy goals for the region by providing
comprehensive information on Australia’s defence policy and military
capabilities.

In the case of Southeast Asia, SR93 identified specific areas which
could provide opportunities for development. These areas include:

• developing sound strategic relationships;

• seeking new opportunities to deepen relationships, based on a
  comfortable development pace and mutual benefits;

• developing further bilateral dialogue on strategic and policy
  issues;

• greater operational exchanges, including observers and
  combined exercises; and

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2 Existing links include the Asia Pacific Economic Cooperation forum (APEC), Closer
Economic Relations with New Zealand (CER), ASEAN Observer Status, FPDA, Closer
Defence Relations with New Zealand (CDR), The Defence Cooperation Program and
special assistance to Papua New Guinea.
developing personal contacts with priority being given to training activities that foster long-term contact, particularly at the more senior military official levels.\(^3\)

In the case of the Southwest Pacific, we will focus on supporting national stability and development. We will encourage Southwest Pacific nations to see Australia as a natural strategic partner. We have a strong interest in the stability of Papua New Guinea, given its proximity to the Australian mainland, and the fact that of all the Southwest Pacific nations, it has the only land border. SR93 expressed concern that the smaller island states might have difficulty in managing their fragile economies, infrastructure and environment.\(^4\) These are areas where Defence can provide constructive assistance to develop a sound strategic relationship.

**DEFENCE RELATIONSHIPS**

Initiatives to further develop defence relationships with the region include joint defence planning, project management, systems innovations, training, and collaborative equipment procurement projects. Planning is also under way to increase combined exercises, personnel exchanges and access to Australian training facilities. In addition, coordinated maritime patrols, data sharing and increased levels of exposure through experience in combined operations in United Nations sponsored, and other multinational, activities are assisting this process. Australia possesses well-developed skills and capabilities in all of these areas, as well as a developed industrial support base with significant capabilities for scientific and technological research and development. Collaborative equipment ventures and defence related export enhancement schemes will improve the compatibility of regional


\(^4\) Ibid. p 13.
defence systems, while enabling Australia to achieve its aim of security in and with Asia.

With the focus of many Asian countries away from internal security and towards external defence and the protection of economic exclusion zones, some countries are seeking assistance in the development of their military forces and the further definition of defence capabilities to satisfy these changed national requirements.

Australia already has active programs of bilateral exercises and joint operations with Malaysia and Singapore, and a similar program is being developed with Indonesia. Singapore conducts pilot training from RAAF Base Pearce in Western Australia and will also continue to conduct land exercises in Queensland. Australian naval, land and air forces deploy regularly to Malaysia, and the two countries have established the Malaysia Australia Joint Defence Program (MAJDP) as a means of progressing defence links based on mutual strategic benefits and a concept of partnership.

In support of its regional security policy, Australia undertakes Defence Cooperation with the ASEAN countries, Papua New Guinea, and the smaller countries of the Southwest Pacific (including Fiji, Solomon Islands, Vanuatu, Western Samoa, Tonga, Kiribati, Tuvalu and the Cook Islands). Activities under this program complement other defence cooperative arrangements and activities in the region including ADF ship and aircraft visits and senior level consultations.

**AUSTRALIAN ARMY COOPERATION**

The Australian Army's strategic plan identifies the promotion and strengthening of links within regional associations and alliances as one of its key goals. This goal was developed with Government and ADF
guidance and an appreciation of the foreign policies of regional nations. The goal reinforces the long-standing links Army has with New Zealand and the United States under the ANZUS alliance, with Malaysia, Singapore, New Zealand and the United Kingdom under the Five Power Defence Arrangements (FPDA) and with New Zealand under Closer Defence Relations (CDR). It is a positive statement of Army's commitment to pursuing a strategic partnership with Southeast Asian nations and a strategic commitment with Southwest Pacific nations. The goal suggests that Army should reach out into the region to establish greater and deeper cooperation with regional nations, but it offers no priorities for this cooperation. These priorities will be developed so that optimum use is made of Army manpower and financial resources. The key mechanism for Army to implement these policy objectives has been through Defence Cooperation. Most Defence Cooperation tasks involving the Army fall under the broad headings of joint operations, joint projects, advisory and consultancy assistance, training, combined exercises and exchanges.

Defence Cooperation is a practical means of enhancing cooperation between defence forces of regional countries by providing a mechanism for dialogue, the exchange of views, and military training and development. Some of the desirable by-products of Defence Cooperation are increased transparency, the development of common outlooks on issues and policies, the development of interoperability between the defence forces of the region and a better understanding of the factors and special requirements necessary to develop each country's security policies. Defence Cooperation also complements the network of bilateral regional security initiatives, thus enhancing the prospect of addressing regional security issues on a multilateral cooperative basis.
Within Defence Cooperation, the Australian Army is committed to playing a significant role in regional engagement. Our aim is to build security through partnership in projects which will be beneficial to the region and Army has a strong track record in its dealings with the region.

Defence Cooperation offers further opportunities to develop these relationships, not only in Southeast Asia, but also in the Southwest Pacific.

In Southeast Asia, the Army's emphasis is on personnel exchanges and training. The majority of personnel exchange positions are filled by Army, both by Australia in regional countries, and by those countries in Australia. In the Southwest Pacific, where Defence Cooperation is primarily project-oriented, the Army is involved in projects which contribute to island infrastructure development.

More than 100 Army personnel are currently involved in providing, administering, and executing Defence Cooperation support. Training is an important facet of Defence Cooperation, as it provides an opportunity for Army to influence the capability of regional armies. Currently the Australian Army trains over 400 students annually on specialist courses. These students originate from 18, mostly regional countries. In addition, significant collective training takes place through cooperative training exercises with regional countries.  

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Southeast Asia

Malaysia. Australia has a well developed relationship with Malaysia due to long-standing defence links, such as the FPDA. Bilateral activities are coordinated under the MAJDP. This program, established in 1992, is designed to ensure that our Defence Cooperation proceeds within the bounds of mutually agreed priorities. The relationship is developing as equitable levels of cooperation are achieved. Traditionally, Army-to-Army cooperation has been the major defence linkage between the two countries.

Cooperative Army activities include exchanges, attachments, and training at a variety of Australian institutions such as the Land Warfare Centre, Canungra and the Royal Military College, Dunrobin, and Australian Army instructors at the Malaysian Army Combat Training Centre (PULADA) and at the Malaysian Armed Forces Staff College. Study and training visits are arranged annually and include attendance at Staff College, and training in artillery, engineering, and basic military skills. Bilateral exercises include SOUTHERN TIGER - a battalion level exercise, and HARINGAROO - a company level exercise held with the Australian Rifle Company based at Butterworth.

Singapore. Australia’s relationship with Singapore has historically been close, manifested in the FPDA, but it has moved even closer as strategic interests have developed. Cooperative defence activities have broadened and diversified, while remaining based on the premise of mutual benefit through cooperation. These activities are facilitated through the Joint Australia-Singapore Consultative Group (JASINC). Cooperative Army activities include the triennial company level Exercise MATILDA, senior level visits, the use of training areas, personnel training and study visits.
**Indonesia.** Australia’s relationship with Indonesia, across the spectrum of national activities, has shown steady development, recognising the sensitive issues that exist and the different strategic foci of each country. One reason for this is the development of personal and professional relationships between the defence forces, which serve to increase understanding of different cultures and approaches to similar problems. Within the growing and diverse range of defence activities conducted across the three Services, Army’s interaction includes senior officer visits, special forces exchanges and exercises, hosting Indonesian observers at Australian land exercises and exercise planning conferences, professional training for Indonesian personnel, attendance at Staff College, survey and mapping activities in Irian Jaya, and logistics cooperation.

The most prominent Army activities have been combined exercises with ABRI. These exercises concentrate on troop exchange, familiarisation and cross training. Small arms range practices, medical training, water and rope work are some of the training activities that have been pursued. Indonesian participation in exercise KANGAROO 95 will further strengthen this relationship.

**Thailand.** Australia’s Defence Cooperation activities with Thailand commenced in the 1960s. Defence Cooperation in the early years mainly involved transfers of equipment but the focus has evolved to concentrate on personnel development activities such as individual and group training, exchanges, study visits and work experience attachments. A large proportion of the contact with the Royal Thai Armed Forces is Army-to-Army due to the prominence of the Army in Thailand. Training encompasses a wide range of activities including command and staff courses, skill and professional development courses, basic officer training, NCO military skills and technical training.
**The Philippines.** Defence Cooperation activities with the Philippines have been conducted for more than 10 years. More recently, the focus has moved from materiel projects to personnel development activities such as individual and group training, study visits and work experience attachments. Through Defence Cooperation, Australia conducts a wide range of training courses including officer management training, officer military skills and professional development courses, postgraduate study at the Australian Defence Force Academy and NCO technical trade training and apprenticeship courses.

**Brunei.** Cooperative Defence activities with Brunei began in May 1984. Since then, the defence relationship has developed rapidly. Brunei has increasingly utilised Australia as a regional source of support for training and military expertise. Activities have focused mainly on Royal Brunei Armed Forces training and exercises in Australia. Training activity includes attendance by Bruneian personnel on training and staff courses across the three Services; exercise activity consists of reciprocal company-level exercises and a series of patrol boat exercises.

**Cambodia.** Following on from the large Army commitment to the United Nations Transitional Authority in Cambodia (UNTAC), Army has been providing communications and engineer support to the Cambodian Mine Action Centre (CMAC) to assist in the massive mine clearing task. This continued Defence Cooperation should be the forerunner of a longer-term defence cooperative arrangement.

**Visits.** Army places importance on dialogue and opportunities for understanding that result from increased interaction between regional Armies and their representatives. In the financial year 1992/1993, more than 91 Australian Army personnel of all ranks visited ASEAN countries, the majority of visits being to Singapore, Malaysia and Indonesia. This program of visits and dialogue will be continued and
enhanced on a reciprocal basis as a positive and constructive means of developing long-lasting professional relationships.

**Southwest Pacific**

**New Zealand.** Australia and New Zealand have a close relationship dating to the turn of the century, which has been enhanced recently with the formal establishment of Closer Defence Relations (CDR). The purpose of CDR is to ensure mutual understanding of long-term planning, and to maximise interoperability, complementarity and cost-effectiveness. Army activities with New Zealand cover the full range of individual and collective training, interoperability coordination, and exercises.

**Papua New Guinea.** Support to Papua New Guinea is an integral part of Australia’s commitment to develop PNG’s ability to manage its own affairs. PNG receives one third of Australia’s defence assistance funding and we contribute twenty percent of PNG’s defence budget. Army provides most of the Defence Cooperation personnel Australia commits to PNG. This includes fifteen exchange, nine loan and seven Defence Cooperation personnel, and the formed units of No12 Chief Engineer Works, No11 Chief Engineer Works, the Army Support and Administrative Unit and 8 Field Survey Squadron. Infantry sub-unit support is also provided from time-to-time for minor tactics training. Current projects include Army assistance to Police stores accounting, engineering assistance, the provision of psychologists to assist with post trauma counselling at the University of PNG, and the conduct of trade courses.

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6 SR93, op cit. p 29.
7 Ibid. p 30.
**Island States.** In Pacific Island countries, the Defence focus is on supporting capabilities which will enhance national stability, development and economic security. SR93 emphasised that cooperation should concentrate on consultation, advice, security force development and training, and maritime surveillance. A survey of Army's recent contributions to meeting these objectives allows an appreciation to be gained of the extent of Army support to the Southwest Pacific. Let me examine five specific cases:

a. **Solomon Islands.** Army activities include the provision of engineers to design, manage and construct a patrol boat base in Honiara, explosive ordnance disposal training and removal of World War II ordnance, and medical team assistance.

b. **Vanuatu.** Army has conducted a wide range of cooperative activities with Vanuatu including the construction of Santos Barracks, training courses including stores, radio, NCO and military skills training, and developing a communications link between the islands.

c. **Fiji.** Army activities conducted with Fiji include the provision of engineers for the design and construction of the National Coordination Centre, conducting engineer courses, and conducting leadership and coaching skills courses.

d. **Kiribati.** Army engineers were tasked with the design and construction of the National Coordination Centre as well as constructing a Patrol Boat Workshop.

e. **Tuvalu.** Army has been requested to provide engineer support for the design and construction of a workshop in Tuvalu.

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*Ibid. p 31.*
PROSPECTS

In relation to the role of the military in further developing regional security, defence analysts including Dr Des Ball from the Australian National University, have argued that Australia's Defence Forces could be doing more to ensure a stable and secure region. It has been suggested that visits of senior Australian Defence officials and ADF officers to the region could become regular events; that greater numbers of officers and other personnel could be brought to Australia for professional development and technical training, and that Defence Cooperation could be used to provide graduate education and training in strategic studies and defence planning for young officers from the region. He also suggested that there is scope for increased ADF involvement in regional exercises.\(^9\) Army is assessing these proposals as part of regional engagement.

Fostering Shared Strategic Interests

There exists substantial scope for fostering an appreciation of shared strategic interests through building personal and professional relationships which allow the exchange of ideas and increased understanding. This is occurring across a range of activities and continues to diversify as the mutual commitment to regional security is realised.

Regional Peacekeeping

Countries within the region may play a more active role in future United Nations and other multinational peacekeeping efforts. UNTAC was a

\(^9\) Ball, D. *Building Blocks for Regional Security: An Australian Perspective on Confidence and Security Building Measures (CSBMs) in the Asia/Pacific Region*, Strategic and Defence Studies Centre, Research School of Pacific Studies, ANU, Canberra, 1991. p 49.
demonstration of the willingness of regional countries to commit forces to assist in the resolution of a regional dispute. Australia’s experience in peacekeeping has provided the impetus for the development of the ADF Peacekeeping Centre at RAAF Base Williamtown in NSW, which has been established as a wing of the ADF Warfare Centre. One of the educational objectives of the Peacekeeping Centre is to familiarise selected personnel "...and members from regional nations in the factors affecting national participation in UN and multinational peacekeeping operations."\footnote{11}

**Language Skills**

A key factor which affects much of the progress in Army-to-Army Defence Cooperation is language skills. A limitation to cooperation with the diverse countries of the region is the inability to communicate effectively in the language of the country concerned. In recognition of this, the Chief of the General Staff, Lieutenant-General John Grey, released a policy in April 1993 that put in place measures to improve regional language skills among Army officers. The policy\footnote{19} states that, from 1 January 2001, 'officers with a regional language skill will be preferred for promotion to Lieutenant Colonel. Those without the necessary aptitude to attain language proficiency will be encouraged to undertake complementary studies in Asian culture.' The acquisition of foreign language skills by officers, and the development of more substantial programs for training NCOs, will be major steps towards

\footnote{10} The need for a peacekeeping training facility was raised in a Departmental Paper, 'Peacekeeping Policy: The Future ADF Role' in 1992. The Paper identified the changing nature of peacekeeping operations and acknowledged that there was a need to provide additional training on peacekeeping. The ADF Peacekeeping Centre was subsequently established as a wing of the ADF Warfare Centre in January 1993. *ADF Peacekeeping Centre Brief*, 5 April 1994.

\footnote{11} Ibid.

increasing the depth of cooperation and understanding between Australia and regional countries.

**Joint Operations and Projects**

Joint operations and projects which utilise military skills to achieve results, should continue to be supported, particularly where there are practical, beneficial and measurable outcomes.

**Advisory and Consultancy Assistance**

The level of training of Australian Army personnel means that they are well-qualified to provide advice on, or assistance in, a wide range of land force and para-military problems. It is important, therefore, that we continue to provide personnel for these tasks on an as-required basis, on the understanding that they can be absent from their normal tasks, the cooperation can be funded, and it is of sufficient priority.

**Training/Study/Exchanges**

The Australian Army already participates in many cooperative training activities, but participation is limited by the availability of resources. Further opportunities for development include professional middle-to-senior level military training, such as attendance at Australian Staff Colleges; cooperative language training, possibly through the use of reciprocal training teams; reciprocal study and familiarisation visits addressing areas of shared military interest; specialist management training; and NCO development courses. In addition, formalised Army personnel exchanges have proved to be a successful way of developing contacts, sharing information and developing an environment in which discussions can take place. These should continue.
Combined Exercises

Combined land exercises have potential in drawing regional countries together and in building mutual confidence. These exercises, involving soldiers from different countries, working together to conduct land exercises, are a clear reflection of the depth of the relationships. It must be appreciated, however, that these exercises are complex to establish and expensive to run.

CONCLUSION

Army has a role to play in enhancing regional security by utilising its professional skills and the natural contacts that can develop between military personnel. This, however, should occur in concert with Defence priorities and within a carefully constructed framework that emphasises equality, mutual understanding, recognition of each country's special circumstances, flexibility in adapting to changing situations, and consideration of the benefit that Australia will derive from the activity. This process of enhancing regional security should be undertaken incrementally, drawing on the special skills and knowledge of each country's defence forces.

Recent strategic developments in the Asia-Pacific region provide a positive basis for increased opportunities for peace and stability. Regional nations have demonstrated a real commitment to enhancing regional security; there is a growing appreciation of the importance of working together to build confidence and cooperation as a means of achieving security, stability and continuing economic development. There is also a recognition that this process cannot be rushed. The development of a true sense of confidence and trust will require the continued effort of all involved. The Australian Army, as part of the
Australian Defence Force team, will be a part of this process through to and into the 21st century.
DISCUSSION

A general point was made that there was little Army Aviation input in regional cooperation. The Blackhawks had the capability to be used for regional cooperation efforts, though they had their limitations. Army Aviation visibility tended to come from high level visits eg. the Land Headquarters annual visit to the region.

On the question of training, the Northern Australian training area was seen as a good vehicle and opportunity for combined training.
REGIONAL AIR POWER COOPERATION
- AN INDONESIAN PERSPECTIVE

Presented by Kolonel Ronggo Soenarso
Tentara Nasional Indonesia - Angkatan Udara
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INTRODUCTION

Promoting stability in South East Asia has long been one of Indonesia’s primary concerns. Together with the other ASEAN member countries, Indonesia maintains a positive strategic stability and security environment in this region. In recent years, ASEAN people have very much enjoyed the fact that compared to any other region in the world, the security situation in this region has been relatively favourable. This level of stability enabled ASEAN countries to focus on economic and social development in order to promote the living standards of their people. Due to its achievements, especially in the last decade, ASEAN has since flourished to become one of the world’s most successful regional organisations.

Despite the success in promoting stability and developing economic cooperation, most of ASEAN countries still pay less attention to their internal defence matters. The desire for growth and prosperity seems to overshadow the need to develop their own defence posture and capability.

Air power, as a component of defence forces, requires more resources compared to any other component. The limitation of resources becomes an important factor in the development of an Air Power in ASEAN. A country with a small GNP is likely to have lots of problems in operating and maintaining an Air Power. In this situation, cooperation with any other country might propose a solution.
INDONESIAN DEFENCE POLICY - AN OVERVIEW

The conceptual foundation of Indonesia’s State Defence and Security Policy is the view of the Indonesian people regarding peace and war, which is stated as:

- The Indonesian people love peace but they love more their freedom and their sovereignty.

- For the Indonesians, war is an inhuman act since it is against human values.

- The solution of conflict should always be achieved through peaceful means.

- War is the last resort and should only be waged if all peaceful solutions have been tried and failed.

- War will be waged only if we are forced to defend the freedom of the nation, its sovereignty and national interests.

- If possible, the national territory will not become the arena of battle.

Learning from past history and experience, the Indonesian people have a strong belief that Indonesia is able to defend itself, using its own force and capability. From our struggle for independence, we inherited a tradition that became one of our important values in conducting State Defence and Security. That very important value is the implementation of Total People’s War, which involves national potency. The experience in conducting Total People’s War is used as the foundation for developing and implementing the State Defence and Security System,
which is now known as ‘Sishankamrata’, an acronym for ‘Sistem Pertahanan Keamanan Rakyat Semesta’ or ‘Total People’s Defence and Security System’.

Total People’s Defence and Security is a national defence and security effort in totally mobilising national resources and infrastructure. Total People’s Defence covers the activities, preparation and the utilisation of the whole people and national territory, including all capability found on and in it for defence and security. Total People’s Defence has a total characteristic of the subject, object and method, with the Indonesian Armed Forces as the core force and the people as the basic force, to face the threats in all forms and manifestations. Using this concept of Total People’s Defence and Security, Indonesia develops its national resilience.

National resilience is the dynamic condition of a nation, including tenacity, sturdiness and ability to develop force to face and cope with threats. These threats may come from internal or external sources, and either directly or indirectly endanger our national identity and integrity, as well as the nation and state life. This definition leads to a view that national resilience signifies the self preservation of the nation and the state of Indonesia. National resilience is indeed a multidimensional concept, consisting of political, economic, socio-cultural and military aspects. These aspects are related one to another in many ways and everything influences everything else. Indonesia believes that the development of national resilience will in turn enhance regional resilience.

As stated in ‘Sishankamrata’, the Indonesian Armed Forces of ABRI (Angkatan Bersenjata Republik Indonesia), is the core of the total defence system. In peace time, its posture should be professional, effective, efficient and modern, and should be capable of exercising its functions to deter and take initial action against any threat.
To carry out its function, ABRI developed a 'multi-layer defence strategy' of force engagement. Multi-layer defence is started from the outer layer up to the inner layer, and that keeps the enemy facing risks all the way through. These layers are:

- The **first layer** is what we call a 'buffer defence zone' located beyond the exclusive economic border zone (ZEE) and includes the air above it.

- The **second layer** is the main defence zone planned as a decisive operational zone, that is from the ZEE down to the territorial sea and includes the air above it.

- The **third layer** is the resistant zone located in our territory, including national sea territory and air above it.

This force engagement strategy is similar to Australia's 'Defence in Depth'.

The development of ABRI is basically directed toward the implementation of this multi-layer defence strategy and also in the pursuit of national resilience, which in turn will have an effect on the promotion of regional resilience. Since Indonesia's sovereignty extends over a very large and geographically diverse island archipelago, capability development to exert national authority becomes more complicated. From one point of view, the development of a defence posture needed to satisfy the very minimum requirement can be misinterpreted by other Governments in the region. But the development of these defence capabilities will be dependent on the economic capability of our country.
The annual budget allocation for ABRI is around 1.6% of GNP or 13% of the state budget. Some 60% of ABRI’s routine budget is spent on personnel. With this resource available, ABRI’s development is still oriented towards capabilities appropriate to national defence and internal security. The acquisition of new weapons systems is mainly to keep up with new technological developments.

REGIONAL DEFENCE COOPERATION

The rapid political and economic growth of Southeast Asia encourages all ASEAN member countries to take the necessary steps to secure their own strategic interests. Also, the emergence of ideas to promote regional self-reliance as a means of protecting common strategic interests from external threat, is often pronounced.

Indonesia realises that the regional strategic environment has an influence on its national development, so that is has to maintain a close relationship between its own development and that of ASEAN. Indonesia’s national resilience, developed by strengthening national capabilities, will enhance regional resilience and vice-versa. For Indonesia, regional resilience means the resilience of Southeast Asia as a region, developed by strengthening its cooperation and solidarity in various fields of common interest. The cooperation that now exists among ASEAN member states, and its successful results, should not undervalue the possible cooperation with any other country in any other region. With the same pattern of thought regarding national resilience and regional resilience, the resilience of a broader region will have a positive effect on the countries involved.

Regarding defence and security cooperation, ASEAN countries seem to be very careful in jointly discussing a formal and multilateral scheme. The people in Southeast Asia are diverse ethnically, socially and politically, so that there exists ‘socio-political barriers’ for harmonising
so many differences in defence perception. As prerequisites for having a formal discussion on defence and security, there has to be common grounds on defence policies and also common perceptions about threats. So far, these do not exist among ASEAN countries. Besides that, the ASEAN spirit is unlikely to lead to an idea of having multilateral defence and security arrangements. Knowing that there is no real threat common to all ASEAN members, formal multilateral defence cooperation arrangements seem to be unnecessary. The Indonesian view regarding the form of defence and security cooperation is in line with that of ASEAN.

For Indonesia, defence and security cooperation with any other country should be devoted to promoting national and also regional resilience, leading to the maintenance of peace and stability. Such cooperation should be used as confidence building measures and have a significant contribution to the strengthening of overall relations between the countries involved. The benefits from such cooperation have to be enjoyed by the people, and enable a better mutual understanding of the fundamental features of their respective political and social systems. Senator Robert Ray stated in his visit to Indonesia at the beginning of August, that people involved in cooperative activities will be 'friends for life' and problems that may arise later could be resolved 'between friends'. To facilitate the benefits accrued, the cooperation should be long term. This is the nature of defence cooperation that ABRI is pursuing.

The existing defence cooperation between Indonesia and any other country is in the form of a bilateral relationship and is not arranged under a formal institution. This simple form of cooperation is easier to manage and the benefits could be directly drawn by the people involved. In most cases, bilateral relations enable faster identification of one country's needs related to the other country's capability to support. This type of defence cooperation is likely to be the best option for ABRI
in terms of preserving its national identity and securing its own strategic interests. In a wider scheme, regional cooperation can be built using bilateral links as the foundation.

**AIR POWER COOPERATION**

As stated in the Basic Guidelines of the Indonesian Air Force 1992, the role of the Indonesian Air Force is as enforcer of state sovereignty and law in the air, and together with the other components of state defence and security forces, to defend the integrity of national territory. Similar to any other Air Force in the world, the Indonesian Air Force has a high demand on resources for carrying out its role. The economic infrastructure of the state is not capable yet of providing full support to the Air force. Hence, priorities in operating and maintaining the Air Force have to be set up annually to cope with budget constraints.

The rapid development of aerospace technology requires the Indonesian Air Force to take special measures to keep up. The quality of manpower resource is still under the normal standard of the Air Force. These problems should be solved simultaneously to enhance the readiness of the Air Force. One of the steps taken for solving these problems is by cooperation with other countries. Such cooperation is indeed in line with the overall state policies on defence and security cooperation.
The cooperative activities may include the following:

- **Combined Operations**, especially in limited air defence and maritime surveillance.

- **Combined Exercises** in areas such as airlift/air drop, maritime surveillance, sea/land interdiction, air cover and limited air defence.

- **Exchange of Personnel** for training such as Command and Staff Course, operations and technical.

- **Logistics** such as aircraft/component maintenance, maintenance engineering, common source of supply, automated logistic management, etc.

- **Science and Technology** such as consultation, exchange of information and coordinated research.

In South Asia-Pacific, the RAAF is considered to be the most powerful as well as the most experienced Air Force. The Australian people should be proud of it. To a certain extent it is appropriate for Australia to take leading steps towards a formulation of regional air power cooperation, suitable to the political and economic conditions in this region. Australia should be willing to share its experience and capabilities with other countries, after all, a stable country in Southeast Asia would be good protection for Australia.
CONCLUSION

The management of air power requires a high allocation of national resources. This economic aspect tends to be the decisive driving factor in supporting air power.

Cooperation proposes an alternate solution in the development of an air power capability. Indonesia has a strong belief that defence cooperation is a way of promoting national and regional resilience as well. However, judging by the socio-political conditions in this region, Indonesia regards a formal and multilateral arrangement for defence cooperation as unnecessary.

Bilateral cooperation is the best solution for ABRI and this includes various fields of defence activity. This cooperation should have a mutual benefit in promoting the capabilities of both parties. To promote regional cooperation, one can use bilateral arrangements as the basis.
DISCUSSION

The discussion focused on Indonesia's formal alliance relationships and involvement in some multi-lateral exercises. Examples provided were seen as confidence building measures, and included common surveillance arrangements such as the agreement in place over the Timor Gap area. While this may not be extended in the near future there was some possibility that it could be extended at a later date.
REGIONAL AIR POWER COOPERATION
-A NEW ZEALAND PERSPECTIVE

Presented by Group Captain John Hamilton
Assistant Chief of the Air Staff - Programmes and Projects
Royal New Zealand Air Force

INTRODUCTION

I bring you greetings from the land to the east. I must admit that I was a bit dubious about facing the Australian contingent after the result of the Bledisloe Cup rugby game last week and it has been made worse by the continual stream of Australians receiving gold medals at the Commonwealth Games. But we are not here to talk about competition; we are here to discuss cooperation between our services.

May I thank the Royal Australian Air Force and the Air Power Studies Centre for the invitation to come to Darwin. From my point of view, some very important messages have been made by the other speakers during this workshop and many are very applicable to New Zealand and the RNZAF. I congratulate the Royal Australian Air Force for organising the workshop; it is a great concept and it is most valuable and enjoyable.

This get together has also allowed me to catch up with some faces I haven't seen for a while and to swap stories. Kevin Meta from Singapore spent time in New Zealand on exchange flying the Skyhawk; he is a familiar face. I had Angus Houston teach me to fly the Iroquois the Australian way with No 9 Squadron at Amberley in the early 1980s; during that time I also came across Des Long then at No 12 Squadron and Dave Dunlop was with the F-111. I then spent a year with John Kindler in Britain at the RAF Staff College at Bracknell. Then like most
of us here, I have also enjoyed numerous contacts with others from the regional air forces which are represented here.

I have been asked to cover regional air power cooperation from the New Zealand perspective. I am going to begin by quickly outlining the basis for New Zealand’s security strategy and defence policy. I will then highlight what it is the RNZAF contributes to New Zealand’s Defence goals before moving on to discuss the cooperation we enjoy with other forces in the region. I will then finish with my view of some of the challenges ahead; the challenges which need to be addressed if the cooperation we currently enjoy is to be effective if we should ever have to be put to use in a combined operation.

NEW ZEALAND DEFENCE POLICY

The last full review of New Zealand’s defence policy was completed in 1991 and since then it has had regular re-assessments each year. Like most countries’ efforts in these things, the Review looked at New Zealand’s strategic situation, and defined our security interests; it set the Government’s defence policy goals and derived a strategy to attain them.

There are a number of important factors in New Zealand’s strategic situation which I think are important Determinants of how we Kiwis meet our security needs. New Zealand is usually down in the bottom corner of most maps except those produced in Wellington. But no matter how you draw the map you can see that New Zealand is remote. We are remote from threats and we are remote from our trading partners. We are remote from our traditional friends and allies and those sharing similar views. Our immediate environment is dominated by the Pacific Ocean. Other than Australia, our neighbours are small Pacific island nations. New Zealand is a small country. Its population is
a little over 3.5 million. The economy is largely based on agricultural production; we do not have large quantities of mineral wealth. We have to export and trade to prosper but the terms of trade in the commodities which we produce well, can vary. What it comes down to is that New Zealand is not a wealthy nation! We spend something like 1.6% of GDP on defence although I suspect that figure is inflated because the GDP is increasing and the amount allocated to defence has been cut during the last few years.

Having said that, we are lucky. There is no direct threat to our security. Even within our immediate region, security problems are more internal security issues rather than security concerns driven by outside forces. We do not have an immediate threat which the Services are expected to counter. Instead we look to the nation's broad security interests.

The Government of New Zealand has formulated four outcomes for defence planning:

- The maintenance of New Zealand's sovereignty and the development of its national profile;

- The promotion of New Zealand's exclusive national interests;

- The stability of the area of New Zealand's direct strategic interest (specifically Australia, Southeast Asia and the South Pacific); and

- The ongoing promotion of world peace and international stability.
The armed forces are therefore seen as an effective part of New Zealand’s foreign policy and Defence is expected to contribute to achieving New Zealand’s objectives.

Our Minister of Defence summed up New Zealand’s position recently in The New Zealand Defence Quarterly. He said:

'Our position in the Asia-Pacific region defines our security issues. Geography has linked us forever to Australia. A threat to them is a threat to us. Policy differences show that our concerns are not identical, but it is important that we coordinate our defence capabilities with our closest friend.

Beyond that our main priority is - I think has to be - contributing to the security of the wider region. Nearly three quarters of our trade moves within the Pacific Basin, and all our exports cross it. Serious instability in Southeast Asia or further north would directly affect our prosperity. For our Asian partners, too, trade and security are two sides of the same coin. If we want to benefit from the growth of the region, we have to be prepared to make a credible contribution to its security. We have done so for more than half a century and are now reaping the advantages.'

That message was conveyed again during the Australian-New Zealand Ministerial meeting held here in Darwin just a few weeks ago.

The security strategy adopted by New Zealand in 1991 is referred to as self-reliance in partnership. It might sound like an oxymoron so I will explain. The self-reliance part of the strategy requires New Zealand to have an independent national level of capability which is sufficient to cope with immediate national concerns. For contingencies which are
beyond that capability, the strategy relies on friends and allies to assist (the partnership component of the strategy). The strategy therefore provides for the circumstances which are beyond our national means but are such that they call for New Zealand to be involved because interests coincide.

A small country, with limited resources has to set itself realistic goals. the aim in New Zealand's current circumstances is to maintain defence forces which satisfy the term 'credible minimum'. It means that the forces have to be the minimum we need to meet our essential security interests, but they have to be sufficient to reassure our neighbours and allies that we are capable of meeting those needs. That is, they have to be seen as being credible, as well as being the minimum that can be sustained fiscally. Now clearly exactly what constitutes the 'credible minimum' is the Government's decision based on its judgment of the risk and affordability. In general terms, New Zealand's forces are structured so that they are sufficient to deal with small contingencies which may arise in the region and are capable of contributing to collective efforts further afield.

I have now outlined the strategic drivers which influence New Zealand's defence policy and I have outlined our strategy of 'self-reliance in partnership' and covered the concept of the credible minimum force. I will now move on to look at how these come together in terms of force structure for the RNZAF.

Even a quick look at the map shows that New Zealand's position means that our forces must focus primarily on the maritime environment. The primary task of the maritime forces is to deter potential aggressors against New Zealand territory and sovereignty including those island nations to the north which we have statutory responsibility for. For that to be effective, the force has to show that it has the ability to
detect, identify, track, intercept and if necessary engage the intruder. Air power and the RNZAF play a significant role in meeting this requirement.

**WHAT NEW ZEALAND OFFERS**

The primary emphasis in the RNZAF is on maritime operations using the six P-3 Orions for surveillance and anti-submarine warfare. The area we want to cover is large. It stretches from the Antarctic in the south to north of the equator and from Southeast Asia to the eastern parts of the Pacific islands. The task covers surveillance, ASW, resource protection and intelligence gathering. In addition, it includes responding to calls for search and rescue. Not surprisingly, after something like 25 years, our Orions are now getting a little tired both in the structure and in the capabilities of their sensors. We have a major project commencing this year to re-wing all six Orions to extend the life of the fleet by 20 years. We are also at the early stages of defining a project to upgrade the older sensors and data handling system. We have been watching the development of the RAAF Orion program with much interest. Once in place, these two projects will not only ensure we have an affordable maritime capability into the next century but will also promote interoperability and cooperation in this very large maritime region.

The A-4 Skyhawks form the second string in the air contribution to maritime operations through their use in maritime attack. The Skyhawk’s secondary role is in interdiction and close air support tasks orientated to operations ashore. They are not employed as air defence fighters; they carry Sidewinders for self-protection only. The Skyhawks were purchased in the early 1970s and added to in the early 1980s with aircraft purchased from the Royal Australian Navy. In 1987 all 22 aircraft went through an upgrade program which put on new wings and
upgraded the nav-attack system. At the same time the aircraft were equipped with the Maverick B and G missile primarily for the maritime attack task. The aircraft are going well. We know it can be bettered and we are also very aware of its limitations in performance and the weapons we have for it. However, it is in keeping with the Government’s philosophy of maintaining a credible minimum defence force and from their point of view it is sufficient. The RNZAF operates two Skyhawk squadrons. No 75 Squadron is based at home in Ohakea and No 2 Squadron is based in Australia, at Nowra where it provides training for the ADF and carries out all our operational conversion for the type. This arrangement is a good example of the cooperation that exists between the two forces and we are now in the very early stages of exploring the possibility of enhancing the agreement to perhaps take on more activities.

If maritime operations are the front runners in the RNZAF’s force structure, air transport forces must be second. In order to do anything in the region we rely on air transport support provided by the two Boeing 727s and the five C130 Hercules. That is not just from an air force point of view, the support is also needed by Army and the Navy. The two Boeings provide the strategic lift. If you are not familiar with them, they were acquired in 1981 from United Airlines and are 100 C models. They have a combi fit with a cargo door on the front left side which allows them to be rigged for both passengers and freight. They have served us very well and as long as we can get away with the noise they make, the RNZAF is likely to continue to keep the Boeing in service for some time to come. Obviously they do not meet our total life requirement; but then whose fleet does?

The Hercules are used as both strategic and tactical transports and again we do not have enough of them to satisfy the projected demand. As an example of the schedule they operate, today we have all five
Hercules and the two Boeings tasked and no back up! There is one in Rwanda, two deploying the Skyhawks to Korat in Thailand as a lead up to Exercise VANGUARD; two Hercules are deploying Army equipment and Iroquois to Exercise SWIFT EAGLE in northern Queensland and both Boeings are deploying personnel to Exercise SWIFT EAGLE.

It is worth noting that when you come to put a proposal such as sending the Hercules to Rwanda to the Government, one aircraft can look like a very small, almost insignificant, contribution and especially when it is compared to the large efforts put up by others. But if you consider it as 20% of the force, it begins to take on a different perspective and to those of us involved, a far greater significance.

At a lower level, the RNZAF operates nine Andovers in the tactical role as well as for internal route flying including VIP. It was three Andovers which formed the backbone of New Zealand’s contribution to the US led Unified Task Force based at Mogadishu in Somalia at the beginning of last year. These transport deployments are seen as being in our interest. As a member of the United Nations, New Zealand wants to be involved in international efforts which aim to provide stability and reduce suffering.

The RNZAF is responsible for all helicopter operations in the New Zealand services. We operate 14 Iroquois for Army support and provide the training and maintenance for the Navy’s Wasps on board the frigates. Like the other roles, the helicopter capability is modest; we do not have very many of them, they take on a variety of tasks and if we had an unrestricted budget, we would probably be better equipped.
REGIONAL COOPERATION

That then gives you an idea of the air elements of the RNZAF that could be available to contribute and participate in air operations in the region. I hope you can see from that that the force structure is in keeping with New Zealand's strategic environment and very much in tune with the government's policy direction as far as resources and capabilities are concerned. I will now turn to the question of the level of cooperation we in New Zealand currently enjoy. In doing so we need to focus on two levels of cooperation:

- The first is related purely to operations and operational training; and

- The second aspect is the degree of cooperation that exists in the area of logistics and basic training.

I think it is probably fair to say that New Zealand tends to be a 'taker' or consumer in those activities involving exercising and operational training, and a provider or producer in the second where we can provide good engineering and basic trade training.

The RNZAF needs, and perhaps even craves, contact with forces that have higher levels of capability, much larger scale and more sophisticated equipment. When you take a look at New Zealand's capabilities as I have just outlined and compare that to some of our neighbours, you will understand how this feeling comes about. We don't have to go too far to find far more sophisticated capabilities. Contacts with others in the region helps us to keep up with the play in developments and thinking in doctrine, tactics and procedures. We use the contacts to assess our own standing particularly in standards of flying and to modify our procedures and thinking. We have become
very good at digging out the best opportunities and will go to extraordinary lengths to take part. I can remember Air Marshal Funnell saying in the foreword to the RAAF Air Power Manual that the Australians were doctrinal beachcombers; well, I think the RNZAF are better at the beachcombing than they are!

I do not intend going through all the combined exercises and activities in which we take part with our regional partners. Instead I will pick out some of the highlights.

To begin with, we have a number of treaty obligations to meet in the region. For New Zealand I think there are four main issues. At the top in my list is the special relationship between New Zealand and Australia. This relationship is the cornerstone of our security policy. Next is FPDA and the way in which Britain, Australia and New Zealand are brought together with Malaysia and Singapore. Third on my list would be New Zealand’s constitutional obligations for the defence of the island nations to the north of us in the Pacific, the Cook Islands, Niue and the Tokelau; and lastly the ANZUS alliance is ‘inoperative’ and is likely to remain that way until New Zealand makes some concession to allowing nuclear powered vessels into our waters and agrees to the ‘neither confirm nor deny’ policy.

Turning now to the working level where there are numerous good examples of the style and scope of regional cooperation. Each of our air force roles has at least one major exercise period each year in which our crews get involved with their counterparts from the region.

In the maritime role our Orions exercise with the Royal Australian Navy and No 92 Wing on ASW exercises here and at home. Each year the Orions take part in Exercise STARFISH and we also enjoy being able to base P-3’s out of Singapore or Malaysia from time to time for patrols in
the area. The patrols that we conduct in the Pacific are coordinated with Australian authorities to ensure that resources are not wasted. Our Orions are regularly tasked to conduct patrols of the areas around Fiji, Vanuatu, the Solomons, the eastern parts of PNG, sometimes up as far as the Marshall Islands, and across to include Kiribati, Samoa and the Cook Islands. Resource protection flights in particular are coordinated by the Forum Fisheries Agency based in Honiara. On top of these tasks, New Zealand picks up the responsibility of providing search and rescue coverage for the Fiji Flight Information Region and that large expanse of ocean.

I mentioned earlier that we have the six Skyhawks of No 2 Squadron based at Nowra providing training for the Royal Australian Navy and other elements of the ADF. It was Skyhawks from Nowra which participated in Exercise KAKADU here last year and we look forward to repeating that again next year. The Skyhawks of No 75 Squadron also exercise over here with Australia's F-18s at RAAF Base Williamtown on Exercise WILLOH which is a bilateral squadron exchange with alternate venues. With a bit of luck, the RNZAF Skyhawks may get to use the range at Delamere. Each year the Skyhawks go through the annual migration (or is that a pilgrimage?) to Southeast Asia to take part in the FPDA exercises. As we speak, the deployment is making its way north through Darwin. This year we are deploying to Korat in Thailand to exercise with the Royal Thai Air Force on the air combat manoeuvring and instrumentation range and then go back to Paya Lebar in Singapore to take part in Exercise STARFISH and the ADEX.

The deployment is an excellent opportunity for us, and I hope the other participants, to train and to exchange ideas. To this end, the squadron tries hard to get involved with the locally based squadrons. As an example, Thailand recently expressed an interest in looking at our maritime attack procedures with a view to seeing if they might be
suitable for use with the F-5. These are most valuable deployments but there is more that can be done. It is something like ten years since we have exercised with squadrons from Indonesia but this year the Skyhawks are spending a night in Surabaya and we are exploring the possibility of having the A-4s spend more time in Indonesia in future exercise programs. Closer to home we are just finalising an air-to-air refuelling agreement with the RAAF which will formalise our Skyhawks bidding to use the RAAF tankers and open up new experiences.

On the transport side, the Hercules and Boeings make extensive use of facilities in Australia and Singapore as a normal part of their operations. So much so that perhaps we tend to take it for granted! Nevertheless it is a crucial part of our efforts and we are grateful for the support we receive from the various bases involved. To balance the books our facilities are available for those who wish to come our way! And some do! Each year the RNZAF hosts Exercise SKYTRAIN which is a tactical airdrop training period in which both Hercules and Andovers participate. In the past we have had Hercules from Singapore take part and Thailand has had observers with us. To put the training to the test, the Hercules take part in the BULLSEYE airdrop competition which involves us with Australia, Canada and now the UK. The Andovers join up with the RAAF Caribou for a similar competition called Exercise SHORThaul. Close to home there have been other examples of cooperation; our Hercules that deployed to Africa last month was fitted with cockpit armour on loan from RAAF Base Richmond. The three Andovers we had deployed to Somalia this time last year were detailed to provide support to the Australian Army’s 1 RAR once US forces had left the area and to fill the gap in air transport support in-theatre.

In reviewing the levels of cooperation that take place amongst our units I have found that the transport role seems to be involved the least. I
can only conclude that this is because they are heavily involved with deploying other exercise participants around the region and do not then have the time or capacity to take part in individual exercises themselves. However, judging by the enthusiastic way in which they tackle the few tactical exercises we do have available, I am sure they would leap at other opportunities if they arose.

A similar comment can be applied to the Cinderella of many Air Forces, the helicopter role. Our Iroquois exercise with the Australian Army and in the past, have been involved in training exercises with the Malaysian Nuris and much further back with Singaporean helicopter pilots. Again there seems to be some scope in this area.

I will now branch out to look at the RNZAF's position with respect to the second area of cooperation, that involving training and support. You will recall that I said that I thought New Zealand was a ‘taker’ or at least appears to be a ‘taker’ in the area of exercises and operational training. It is not all take. I think it is fair to say that we have established a good reputation for providing excellent training, at a good price across a range of disciplines, both for aircrew and support personnel. New Zealand has also established a good reputation for aircraft maintenance in the service facilities as well as those offered in the commercial community.

The RNZAF has recently acquired the Macchi MB-339C as its advanced training aircraft and as a lead-in to the Skyhawk and the attack role. We have long prided ourselves on the standard of flying training we produce. In the past we have provided flying training for Malaysia and Singapore and we are currently looking at our ability to provide helicopter training for Singapore. We are at a very early stage in looking at whether we can provide some jet lead-in training on the Macchi for
the RAAF as their Macchis are phased out and a replacement aircraft is brought on stream.

In a joint agreement with the RAAF, all Kiwi navigators and air electronics operators are trained at Sale with the RAAF. This has allowed us to dispose of the three F-27 Friendship aircraft we had dedicated to navigator training and as well as reduce infrastructure costs, it has enabled us to extend the scope of the training given to navigators and systems operators.

All three New Zealand services offer training under a Mutual Assistance Program. We have had students from Malaysia, Thailand and Indonesia come down for training on some quite specific equipment or aircraft system. It is a program which works well. We provide staff training for PNG, the Solomons, Brunei, Malaysia and Thailand and we have recently begun a staff course exchange program with the RAAF at the Squadron Leader level to supplement our long standing attendance at Australia's Joint Services Staff College.

**CHALLENGES**

As I have gone through the various activities in which the RNZAF is involved, I have mentioned that gaps exist in capability and I have suggested some areas where more could be done. These then are the challenges I think we face as we develop cooperation even more.

If we were ever called on to put together a combined force, its success would rest almost completely on the level of interoperability. You could argue that that is pretty self-evident but I think you could find all sorts of examples where interoperability is not the best and therefore could foul up an operation. Tactical procedures would seem to be a case in point. Communications in all its guises would have to be another and I
am sure we could drag out others. Like the rugby game, we all need to
to be playing with the same set of rules.

It is obvious that there are wide disparities amongst the forces
represented here. There are differences in the logic used in force
structure; there are differences in the emphasis placed on particular
roles and disparities in capabilities between forces within a role. If this
thing is going to work, and there is compelling evidence to suggest that
it is in all our interests to have it work, then we need to take into
account the differences that are out there and use them to best
advantage. Using the rugby analogy again, you have to have a range of
skills available; it would be a poor spectacle (and no doubt doomed to
failure) if we were to field a team of Richard Loe's, all forwards and no
backs.

The challenge of understanding each other's capabilities, strengths and
weaknesses is important. If we don't, we run the risk of magnifying the
differences and disparities. We need to plan to make use of each other's
abilities in a complementary way and that can only be done by
understanding what is available. This sort of forum and the range of
cooperative exercises and training that currently take place is crucial to
getting a better understanding of each other's concerns, problems,
capabilities and working out or suggesting improvements. No one force
has the answer.

All of us can identify the resource constraints that our Services face. I
think we can also easily acknowledge the resources that are required to
promote regional cooperation. It is easy for us to identify the benefits
that it produces, but to make it work we must be willing to participate,
willing to bend a little perhaps, offer our own particular expertise up for
scrutiny, and above all show a willingness to participate and cooperate.

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Loe is a controversial New Zealand Rugby player.
CONCLUSION

New Zealand is in a unique position. We are probably the only nation in the world that is surrounded by water with no one within 2,000 kilometres of us. Even then, the neighbours are to all intents and purposes, friendly. Competitive yes; both on and off the field; but nonetheless basically friendly. That unique geo-political situation is an important factor in how Kiwis see themselves and how they view the rest of the world. It formulates how we view our security needs and how best we think to provide for our defence. Importantly, it tends to determine how much of the nation’s wealth the electorate is prepared to devote to Defence.

Remember that New Zealand’s prosperity is based on agricultural production. Trade is the basis of the nation’s wealth; without it we would wither. It is therefore in our interests to promote stability and prosperity in those areas in which we trade. So despite the apparent security afforded by the isolation of the bottom right hand corner of the Pacific Ocean, the reality is that it is in New Zealand’s interest to be involved in promoting stability in the region and elsewhere.

Air power offers a most effective way of contributing to that goal of regional stability. It is responsive, mobile and visible. It can be offensive, defensive or essentially neutral depending on the task. For New Zealand, the RNZAF can provide a modest range of capabilities. Cooperation enables us to bolster our capabilities and in some cases perhaps even ease the burden carried by others. Cooperation is in our interest and is considered to be part and parcel of our ‘self-reliance in partnership’ security strategy.

Regional cooperation is working well for the RNZAF but we are never averse to exploring new avenues. This period in Darwin helps in that
process and as I said earlier, I thank the Royal Australian Air Force for taking the lead on the topic with workshops like this. We in the RNZAF look forward to more.
DISCUSSION

The discussion began with the question of conducting combined surveillance operations in the South Pacific. Coordinated patrols were already undertaken to some extent but there is the possibility of going further. The difficulty was in reconciling the need to carry out two types of patrol - resource policing on behalf of others against national tasks. It was agreed that while there was scope for cooperation there could be differences in national taskings. At this stage information was being exchanged about patrols, but not in all cases.

While there was general acceptance of the need for a Defence Force in New Zealand there has been an image problem. In the past, aspects of defence have been presented in a flippant manner and there has been little intellectual debate. There was a need to raise the profile of the Defence Force and such things as the Company deploying to Bosnia was expected to help in this regard. The danger was that if too much emphasis was placed on Peacekeeping Operations and regional activities, the Defence Force could end up as a coast guard type of organisation.

Regarding Australian - New Zealand Closer Defence Relations (CDR), the general response was favourable but there had been some missed opportunities. Some of these related to a failure to coordinate on equipment matters and others were missed exercise opportunities, mainly due to planning difficulties.

The RNZAF was limited to 10 exchange positions and therefore every effort was made to maximise the benefits. The approach has been to have one exchange for each air force role; eg. one with the RAF, flying Jaguars.
REGIONAL AIR POWER COOPERATION - A BRUNEI PERSPECTIVE

Presented by Major Zainal Haj. Harun
Royal Brunei Air Force

NATIONAL DEFENCE POLICY

Brunei's national defence policy is not yet fully established. Its military forces provide a very limited capability, centring on the core defence concept. This concept has been formulated in concert with Singapore and hinges on the ability to provide basic defence of Brunei 'for a certain period of time'.

There is a planned expansion of the Services, but this is in the very early stages. National defence is underpinned by a policy of bi-lateral alliances and treaties. There are two in particular, with the UK relationship being the strongest. In addition, the relationship with Singapore is significant. The relationship with Malaysia is also a sound one, and there is the future possibility of Brunei's involvement in FPDA. The relationship with Indonesia has yet to be established but may not be far away.

ROLE OF AIR POWER

Air power will enhance the effectiveness of Brunei's surface forces. The role of air power is still at an early conceptual stage. Currently, the priority is in developing an air defence capability, specifically through national concepts, a national control centre and an early warning capability.

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1 At the time of printing, the paper was unavailable. This condensed version was produced from notes taken at the time (Eds).
For the future, Brunei's acquisitions in relative order of priority are likely to be:

- Maritime Patrol aircraft (CN-235).
- Transport aircraft (CN-235).
- Fighter (likely to be from the UK and possibly Hawk).
- Medium Lift Helicopters.

In terms of exercises and training, Brunei is currently involved as follows:

- Pilot and technical training with the UK.
- Specific training and certain exercises with Singapore.
- Assistance from Australia with respect to helicopter selection.
- The likelihood of common training with Malaysia on the Hawk. Conducting a helicopter championship for ASEAN - this involves examinations, ground planning, navigation exercises, and precision operations. The principal aim is to establish dialogue and to engender professional development.

Brunei intends to develop a new air base by 2005, but before that there is likely to be a period of uncertainty, especially after 1997 in respect of the redeployment of British forces from Hong Kong (when it returns to Chinese rule).

The main security concerns involve:

- Being small, Brunei feels susceptible to external threats.
- The significance of Brunei's offshore resources are such that any effect on them will lead directly and immediately to national security issues.
- The lack of defence assets, especially Maritime Patrol Aircraft. Currently, there is no capability beyond 100 nautical miles from Brunei.
DISCUSSION

Brunei has announced purchases which include the Hawk 100 and Hawk 200 from the UK. Malaysia has offered a training package for the aircraft and discussions are being conducted on logistic support.

Brunei was considering Cougar or Blackhawk for acquisition in 1996.

The Indonesian CN 235s should be delivered next year. There is a possibility that a CN 235 variant will be Brunei's Maritime Patrol Aircraft (MPA). Irrespective, Brunei is seeking some type of MPA by about 1998. Additionally, Brunei was sharing Maritime Patrol information with Singapore and also holding discussions on the issue with Malaysia.

Work has started on some new air bases to provide the infrastructure.

Brunei's 1994 Helicopter Championship to be held in November was discussed, including its format and timing. The competition is held every two years, builds on friendships made with regional forces and is very popular. Singapore, Malaysia and the Bruneian Army compete over three days in competition centred on precision flying events. Brunei would like to see this event hosted in other regional nations on a rotational basis in the future. There may also be a possibility of extending it to include helicopter forces from other regional nations.

Being a small country anything can be seen as a threat, therefore, the government tries to play an active diplomatic role and through this, build friendship.
REGIONAL COOPERATION
- AN RAN PERSPECTIVE

Presented by Captain Jack McCaffrie CSM
Director General - Maritime Studies Program
Royal Australian Navy

INTRODUCTION

In this paper regional cooperation in Asia-Pacific will be taken to have the broadest possible meaning: encompassing all RAN activities within the region which contribute in some way to the development of maritime forces in the overall pursuit of regional security and stability. It will also include RAN activities conducted in Australia for the benefit of regional navies.

At the outset the point must be made that for the RAN such cooperative activity is not new. We have had significant influences in the formative stages of some regional navies, Malaysia's especially, and since the 1950s at least, we have been virtually ever-present in Southeast Asia, visiting, exercising with and supporting the navies of that sub-region. Our commitment to the other sub-regions has been somewhat less consistent over the years. At present, however, there can be no doubting our commitment to the South Pacific, nor our desire to cooperate more with South Asian navies, in line with our physical and resource limitations.

There also needs to be recognition that notwithstanding the RAN perspective, some at least of our activities are conducted in conjunction with the RAAF - recognition of the inherently joint nature of our operations. That point has been highlighted in some recent joint activities involving the Air Power Studies Centre and the Maritime Studies Program.
THE NEED FOR REGIONAL COOPERATION

The paper will concentrate on two themes: the need for regional cooperation, and how the RAN contributes to it, and will look briefly at issues for the future.

Post-Cold War Developments

One of the most significant factors underpinning the RAN’s desire for regional cooperation is self-interest drawn from the 1989 Foreign Policy Statement of Australia’s Foreign Minister Gareth Evans. In this statement, he identified Australia’s approach to the region as comprising ‘comprehensive engagement’ with Southeast Asia and ‘constructive commitment’ with the South Pacific.¹ A significant part of that effort does involve the ADF and for a number of reasons, predominantly historical and practical, the RAN is to the fore.

The effects of the end of the Cold War and the associated relaxation of superpower tensions have been widespread and manifest especially in the upsurge of regional tensions and conflict. While no such conflict has erupted in Asia-Pacific there are certainly tensions and issues with the potential to deteriorate.² The effects have also been manifest in the virtual elimination of the former Soviet Union as a military and especially maritime power in the Pacific, at least for the time being. A recent report refers to further significant military cuts to the Pacific Fleet. The stabilising US presence is also in some doubt, not so much in Northeast Asia but in the rest of the region, and despite denials the now smaller USN will have great difficulty meeting expected commitments.

Regional Tensions

The outcome of this reduction in superpower maritime force presence might well be more perceived than real if, as may have been the case, the actual reliance on it was less than was popularly supposed. Since the end of the Cold War this has seemed to be the case and despite the predictions of a power vacuum there has been no evidence of any regional or extra-regional navy leaping in to fill the gap left by the superpowers. On the other hand there can be no doubt either, that some nations, especially in Southeast Asia, do feel more vulnerable to regional uncertainty and the force modernisation plans of their neighbours.

The uncertainty shows itself in tensions over a variety of issues; boundary disputes, offshore resource claims, territorial disputes and illegal trafficking in people and goods. Whether or not there is an arms race, there is undoubtedly a major effort underway to upgrade maritime forces throughout the region and because it is accompanied by less transparency than would be considered ideal, neighbours are not always comfortable with it. Southeast Asia especially is riven with maritime boundary disputes, many of them long standing and apparently unamenable to resolution. Offshore resource claims and their territorial implications, exemplified by the Spratlys issue in the South China Sea are potentially the most conflict prone issues in the region and although the illegal movement of people and goods is not necessarily a constant problem, it has the capacity to emerge in any part of the region and to do so as a major problem.

Given this exposition of regional problems, the capacity of the RAN to deal with them or in any way to contribute to their resolution is

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admittedly limited. But the contribution will be no less welcome for that, noting the potential for cooperative efforts by regional maritime forces to secure peaceful outcomes. The need for cooperation is already evident in maritime dispute management processes in the Indian Ocean and in the South China Sea. In the Indian Ocean, for example, the Indian Navy is predominant and India prefers to deal with its maritime boundary issues involving Bangladesh on a purely bilateral basis - to the disadvantage of the smaller nation. Likewise, in the South China Sea, ASEAN nations continue to maintain territorial claims against each other and against China, and with few signs of a regional multilateral approach to resolving the issues.

Regional tensions are also evident in Northeast Asia where the Korean Peninsula continues to provide a focus for instability. There are also long standing suspicions between the Koreas and Japan, uncertainty as to China's maritime ambitions, and the prospect of a future revival of the Russian Pacific Fleet. All this goes on in the shadow of a predominantly maritime American military presence and the questions as to its future commitment in the region. The capacity of the RAN to influence or even contribute to maritime cooperation in Northeast Asia is extremely limited. The complicating issue, however, is the extent to which we are linked to the region by trade and so have vital interests at stake there.

Finally, in the South Pacific while the need for naval cooperation is equally great, the rationale is quite different. Maritime security in that region is much more an economic resource based issue, involving the protection of vital fish stocks. But, it also involves environmental security for the micro-states in the face of global warming and its potential to destroy some of these island nations. The RAN is more capable of contributing in this region than in any other and recent activities do reflect this.
The Arms Buildup

One of the issues of particular note in Southeast Asia is the extensive maritime forces upgrade currently in progress. It comprises not only modernisation of existing capabilities but more significantly the introduction of new ones. Thailand is purchasing an aircraft carrier and a small number of AV-8B aircraft to operate from it.\(^4\) Malaysia and Singapore have expressed interest in purchasing submarines\(^5\) and Singapore is introducing an ASW capability.\(^6\) While Indonesia and the Philippines are not engaged in the modernisation effort to anything like the same extent, they are undoubtedly watching the moves of their ASEAN partners with some interest.

The modernisation of regional maritime forces is an activity of concern to most if not all of the ASEAN partners because as some commentators often suggest, the threat to the region is still perceived to be an internal one.\(^7\) This originates in the suspicions lingering from post-colonial times, and Confrontation for example. Consequently, there is an element of reactive arms purchasing in the overall modernisation process. The RAN has good or very good relations with all regional navies and so can play a part in helping to reduce suspicions and building confidence and stability in Southeast Asian maritime affairs.

Regional Traditions

Regional traditions highlight yet another need for regional cooperation from a naval perspective. The tradition of security relationships

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\(^4\) The Straits Times, 16 December 1993.

\(^5\) The Straits Times, 5 May 1993 and 31 March 1994.

\(^6\) The Straits Times, 5 May 1993.

especially within Southeast Asia is based on bilateral ties. This is an outcome of the way in which many gained independence and the ructions which followed, including the Malaysian-Indonesian Confrontation in the 1960s which also involved Singapore. The consequence of this has been a reluctance to engage in multilateral relationships because of the perceived sense of their being aimed at some unnamed threat.

But, for real progress to be made in regional security, multilateral relationships must be developed. Only in this way will the suspicions and latent fears begin to disappear. Only in this way will regional military forces (maritime forces in particular) come to see the capabilities of their neighbours as contributing to security rather than complicating it. The ability of navies, worldwide and over many years, to operate together without infringing on the territory of other states suggests that in Southeast Asia too, navies and the associated maritime air elements could well be at the forefront of efforts to establish sound multilateral relationships.

**Risk Reduction**

Much has been said and written about the "arms race" in Southeast Asia, referring to the substantial modernisation and expansion of maritime force capabilities in the region. The issue is not whether the activity represents an arms race in the classical sense, but whether it stands to contribute to regional security and stability or otherwise. That said, there are signs that the process is not as benign as regional nations would like to have us (and themselves) believe. Malaysians have questioned the motives of Thailand in purchasing an aircraft carrier and STOVL aircraft. Singapore responded to Malaysia's

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purchase of F/A-18 and MiG-29 aircraft by considering (but subsequently rejecting) an order for F/A-18s instead of the F-16s previously sought.⁹

Even without these new capabilities there are already some quite sophisticated weapons systems in service in regional maritime forces and despite the earlier claim for navies being able to operate together in international waters, there are waters in Southeast Asia where maritime operations will need ever greater degrees of coordination if they are not to result in clashes of interest if not of some more material sort.¹⁰ Here too then, there is scope for cooperation among the regional navies and so scope for the RAN to play a part.

**Environmental Protection**

Environmental protection is becoming a significant maritime issue in Southeast Asia, especially in the context of the potential for serious damage to accompany any accident in the Straits of Malacca. The issue does extend beyond this localised matter, however, to encompass safety and issues like oil spills and management of water quality throughout Southeast Asia.¹¹ The need for naval cooperation will emerge from the capacity of some of these problems to extend beyond the maritime boundaries of the state in which they originate, and the associated

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¹⁰ Far Eastern Economic Review, 11 August 1994. p. 18. The article is one of many dealing with the complexities and contending claims associated with maritime boundaries in the South China Sea.
¹¹ Desmond Ball and Commodore W.S.G Baleman, "An Australian Perspective on Maritime CSBMs in the Asia-Pacific Region". A paper presented at a Workshop on Naval Confidence Building Regimes for the Asia-Pacific Region, organized by the Peace Research Centre, Australian National University, and ISIS Malaysia, and held in Kuala Lumpur, Malaysia 8-10 July 1991. p. 16.
difficulty in coping with the problems and apprehending those responsible for them.

Similar difficulties attend the management and protection of offshore resources in the region. Apart from the well known problems with the Spratlys and resource exploration and extraction in the South China Sea there are many other, sometimes minor, disputes relating to boundaries and territory with resource implications (fish, oil or gas) and in which naval cooperation would assist in reducing tensions and ensuring equitable access to resources.\(^\text{12}\)

**Illegal Activities**

Illegal activities with a maritime dimension are rife in Southeast Asia. They include piracy, illegal movement of people and smuggling of goods such as drugs. Some cooperation between naval and other maritime forces in the region has already been evident in the reduction of the incidence of piracy in the Malacca Straits area.\(^\text{13}\) But, even here cooperation was limited to a set of bilateral agreements between Singapore, Indonesia and Malaysia rather than an integrated multilateral approach. Given the extent of the problem, and the Philippines provides a salutary lesson:\(^\text{14}\) multilateral naval or maritime cooperation is essential for any real progress to be made here.


\(^\text{13}\) The Straits Times, 22 June 1993.

\(^\text{14}\) The Straits Times, 23 June 1993. p. 14. The article refers to the annual loss to the Philippine economy of S$3.1 billion as a result of illegal activities at sea.
HOW THE RAN CONTRIBUTES TO REGIONAL COOPERATION

Maritime Confidence and Security Building Measures

One RAN activity with a confidence building dimension is its Maritime Studies Program (MSP) through which the RAN has been engaged in the regional security dialogue over the last four years. Its contribution has included a significant number of papers at conferences in the region dealing with matters including; Sea Lines of Communication security, maritime cooperation in the South Pacific, law of the sea, maritime security issues in Southeast Asia, maritime security issues in the Indian Ocean and the development of Maritime Confidence and Security Building Measures (MCSBMs) in the region. Many of these papers have been published within the region and have thereby helped to generate and spread ideas on these important issues. Further, the MSP has conducted conferences and seminars in Australia on similar issues and has published the proceedings of them. The most recent conferences had the themes of 'Maritime Change: Issues for Asia' held in 1991 and 'Australia's Maritime Bridge into Asia' held in late 1993.\(^{15}\)

Navy's contributions in these forums add to the overall cooperative effort in several ways. Firstly, they provide scholars, officials and military leaders in the region with an understanding of the RAN's views on regional security issues - even if it is an informal or unofficial view. This goes some way to providing the transparency demanded in Dr Des Ball's "building block" approach to Confidence and Security Building Measures.\(^{16}\) Secondly, they allow an admittedly small group of naval


\(^{16}\) Desmond Ball, Building Blocks for Regional Security: An Australian Perspective on Confidence and Security Building Measures (CSBMs) in the Asia/Pacific Region.
officers to become familiar with regional security thinking and thereby to enlighten the Navy overall on such matters. Most importantly, however, they permit an exchange of views and therefore help to build understanding and confidence within the region. I feel bound to mention, too, that the MSP through Commodore Sam Bateman, was involved in the development of the "building block" approach to CSBMs, as acknowledged by Dr Ball.\textsuperscript{17}

MSP also contributes to regional cooperation with its series of biannual courses - Junior Officers Maritime Studies Periods - which brings together naval officers from Australia and the region along with Australian officials involved in aspects of maritime policy or operations. A small number of Australian Army and Air Force officers also attend. These two-week study periods provide an opportunity for all participants to become familiar with the full range of maritime issues confronting Australia. They also give the opportunity for regional participants to put their views on issues of concern to their countries. Although this all happens at a relatively junior level the ability to extend understanding at this level is considered important, as is the capacity of the study periods to enable contacts to be made which could be of use at some later time. The Study Periods are well supported by our own International Policy Division and by DFAT, as well as by the regional navies.

MSP helps the Navy cooperative effort also through its now formal presentation of maritime and air power strategy modules in Malaysia and to a lesser extent the Philippines. The Malaysian commitment, in conjunction with the RAAF Air Power Studies Centre, includes a two week module to the Armed Forces Defence College and opportunity

\textsuperscript{17} Ibid., pp. xvii and xviii.

\textit{Canberra: Strategic and Defence Studies Centre, Research School of Pacific Studies, Australian National University, 1991. p. 29.}
lectures to the Staff College and to the officers at the Royal Malaysian Naval Base Lumut. Now in its third year, this commitment under the Malaysian Australian Joint Defence Program aims to give students a good understanding of the principles underpinning the use of maritime and air power in peace and war so that those principles can be applied in a Malaysian context. Very recently a much abbreviated version of the module was given to the Philippine Armed Forces Command and General Staff College and it could result in a request for further more formal presentations. Neither the Malaysian nor the Philippine commitments are intended to be permanent ones: a desired outcome apart from the direct imparting of knowledge is to foster the development of organisations like APSC and MSP in those countries. The secondment of visiting fellows to both APSC and MSP (more occasionally) also contributes to this aim.

The final point to be made regarding MSP’s contribution to naval cooperation in the region relates to the development of our Strategic Maritime Information System (SMIS). This is a computerised database containing a range of information relating to the Asia-Pacific area, including: commercial shipping movements, trade patterns, individual vessel data including photographs, environmental data, maritime boundaries and long term safety items, and other data such as incidents of piracy or any other illegal activities which may be considered useful.

Navy’s aim is to encourage regional maritime forces to contribute information to the database on the topics listed above so that a comprehensive regional surveillance picture of the all important merchant shipping traffic can be established. Ultimately, the system should allow individual maritime forces to feed general information into the central database and extract a regional picture from it while having a capacity also to retain some sensitive information within their
national databases. SMIS data could be complemented by naval staff assessments, with such assessments exchanged as views on significant trends.\textsuperscript{16}

The whole project also has as an aim the building of confidence which should come with a sharing of information; itself not sensitive but clearly the result of national surveillance capabilities. One regional country has already shown some interest in the SMIS and we will be presenting a briefing on the system at a Malaysian Institute of Maritime Affairs conference in Kuala Lumpur in December 1994.

Another element of our regional cooperation effort with a confidence building dimension, although totally separate from the MSP, is the now well established Western Pacific Naval Symposium (WPNS). With meetings held biennially since 1988 the WPNS aims to increase naval cooperation in the Western Pacific by discussion of maritime issues. As an Australian Naval initiative the Symposium has tried to take advantage of the growing realisation that the region is one of almost unparalleled complexity, with some of the world's busiest shipping routes, a number of vital choke points, many disputed boundary claims, two of the world's major archipelagoes and microstates which generate huge exclusive economic zones.

From the first Symposium there was agreement as to the potential for cooperation and fairly ready identification of likely issues. They have since included; protection of trade, dialogue on law of the sea, environmental pollution and multinational naval cooperation on matters as diverse as narcotics trafficking, piracy, search and rescue.

peacekeeping and disaster relief. Consistent with this approach has been a recognition of the need for some common WPNS doctrine and documentation to permit better communications and understanding at sea. And as a further aid to building confidence there has been an emphasis on increasing the size and complexity of exercises undertaken by members. The immediate aim of this move was to improve each navy's understanding of the capabilities and strengths of the others.

There have been several specific initiatives of the WPNS. Among them has been the establishment of a series of workshops held annually to develop new initiatives and to help progress Symposium proposals. Among Workshop projects now underway is the Maritime Information Exchange Directory (MIED). This directory aims to be a reference manual for ships operating in the waters of other WPNS members and facilitates reporting of matters of interest like piracy, illegal fishing or marine pollution. It relies on navy-to-navy communication rather than on coastal radio stations which initially proved less effective.

Other initiatives under development include:

- a replenishment at sea handbook incorporating the ship layout and procedures for WPNS ships and hopefully leading to Refuelling at Sea (RAS) exercises when each navy is comfortable with the procedures.

- a WPNS Tactical Signals Manual to be used in bilateral or combined exercise of Symposium members.

- WPNS Command Post Exercises which will allow all navies to participate, regardless of the restrictions some may experience in fleet steaming time.
The next WPNS Symposium will be held in Malaysia in November this year. Because of the efforts already made by all participating navies the prospects for another successful symposium are good. Likewise, the prospects of greater cooperation and understanding among the navies of the Western Pacific must also be encouraging - a tribute to the work of the RAN and other regional navies.

**Exercises**

While exercises among regional navies are undoubtedly confidence building measures the RAN was encouraging them and participating in them long before CSBMs became an accepted issue in Asia-Pacific. To reinforce a point made earlier, our participation has often been jointly with the RAAF and less frequently with Army. In earlier times some of these exercises were conducted under the South East Asia Treaty Organisation (SEATO) banner and to be fair, while they represented a form of regional cooperation, they were conducted primarily with the navies of major powers like the US and Britain. Since the early 1970s with the establishment of the FPDA in 1971 and the establishment of navies in the relatively newly independent regional states the focus of the RAN's efforts has changed.

As the various exercises conducted by the RAN with regional navies represent one of the most visible manifestations of our regional cooperation it is worth reflecting on the main ones, if only briefly.

- The STARFISH Series, begun in 1980 under FPDA, is one of the most important exercises and is the largest regional exercise in which the RAN participates and has as its objective the development and practice of combined maritime and air doctrine procedures for the FPDA navies and air forces. The STARFISH
series has become bigger and more complex over the years, and in 1992 involved 36 ships and 45 aircraft. Navy also participates in the Integrated Air Defence System air defence exercises.

- The KAKADU Series begun in 1993 using the concept of Fleet Concentration Periods to bring the maritime forces of a number of regional countries together. The objectives are to enhance stability and security through graduated ship work-up programs designed to improve preparedness and interoperability. At present this is the only forum in which ASEAN navies participate in something approaching multilateral operations, but much work remains to be done before true multilateral exercises become commonplace. The next KAKADU exercise will take place in 1995.

- Although it takes us further afield there is an element of regional cooperation too in our participation in the biennial RIMPAC Exercises. Although it is used to help maintain interoperability with the USN the exercises also feature participation by Pacific Rim navies including those of Japan, Canada, and most recently South Korea.

- There are several other smaller exercises which also contribute to the RAN's regional cooperation efforts. They include the NEW HORIZONS exercises with Indonesia, the PENGUIN Series with Brunei, TASMAN SEA 87 with Singapore and AUSSIAM 90 with Thailand. The importance of the bilateral events is that they

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31 Ball, op. cit., pp. 41-47.
allow close relationships to develop between the navies involved and also provide chances for the navies to assess their own performance levels against regional neighbours. They also encourage the regional navies to extend their own bilateral exercise programs. For example, Singapore has begun exercising with India, as has Indonesia.\textsuperscript{22} The RAN, too has conducted some exercises with the Indian Navy in recent times. In the South Pacific a significant event was the holding of MANTAS 90, a multinational exercise hosted by the Vanuatu Government.\textsuperscript{23}

- As a kind of footnote to the list of exercises, mention should be made of the fact that the RAN conducts informal exercises with many regional navies when passing through their waters. Called PASSEXs,\textsuperscript{24} they tend to be low level bilateral events which help to develop interoperability and raise operating standards, but are important mainly for their symbolism.

As suggested above, the South Pacific is not ignored in this process, although the nature of the region and the maritime forces in it dictate that the kinds of exercises are quite different. The RAN, and particularly the Patrol Boat Force is very active in the area and in a typical year will conduct about nine exercises and provide about 120 ship days there. The emphasis in our South Pacific exercise activities is placed on fisheries surveillance and policing techniques.


\textsuperscript{24} Ball, op. cit., p. 47.
Defence Cooperation Program Activities

Some of the activities already mentioned take place within the DCP but there are others which need to be recognised. Perhaps the most public of these has been the South Pacific Patrol Craft (SPPC) project which has seen the transfer to South Pacific maritime forces of 19 patrol craft optimised for the relatively limited resources of these countries and the fisheries patrol tasks which are so important to them. The RAN’s contribution to the project included management of it and subsequent assistance towards support and operations of the craft. The importance of this project and its associated activities cannot be overstated because of the dependence of South Pacific nations on marine resources for their economic well being. Army is also playing a part in the Project; constructing shore facilities for support of the SPPCs.

The RAN’s regional cooperation efforts under the DCP also take in training and educating of regional naval people in a variety of fields - although not all of it takes place under that program. Our contribution takes in technical and general training as well as specialist areas like hydrography.25 Further, regional navies are always well represented on our Staff Courses. There are also associated personnel exchanges which provide exposure to different cultures as well as to the different operating regimes of the navies of our region.26

Surveillance, Patrol and Other Operations

While the RAN maintains a presence in the Indian Ocean, Southeast Asia and the South Pacific virtually continuously there are some specific operations worthy of note. For the precedent it may set and the

26 Ball, op. cit., p. 40.
example it provides to the region generally the regime of joint patrols of
the Timor Sea Zone of Cooperation is most significant. The joint patrols
conducted by Indonesian and Australian maritime forces take place in
an area of the Timor Sea in which there was a gap in the agreed
boundary between Australia and Indonesia. The importance of the
agreement comes from the expectation of substantial hydrocarbon
reserves in the area.

The range of joint activities which will involve the navies of both
countries includes surveillance, security measures, search and rescue,
hydrographic operations and protection of the marine environment.
Expectations on both sides are that the agreement will lead to close
cooperation and understanding between the defence forces of Indonesia
and Australia through contingency planning for the security of offshore
installations and the conduct of routine surveillance and security
operations. Nevertheless, the satisfaction should be tempered by the
knowledge that the arrangement is temporary and that Portugal has
taken the matter of jurisdiction in the area to the International Court of
Justice.

Although mentioned in another context already the RAN’s hydrographic
surveys in the region do contribute substantially to regional
cooperation. For example, there is a formal international agreement
with Papua New Guinea for the charting of its waters. Additionally,
the RAN Hydrographic Service also assists neighbouring South Pacific
countries with surveys, equipment and advisers (under the DCP).

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27 Ball, op. cit., p. 54.
28 ibid., p. 57.
29 ibid., p. 58.
30 Maria Pennisi, "Hydrography: How Important Is It To Australia?" in Australia’s Navy
1990-91, p. 65.
Undoubtedly, other examples of Navy's contribution to regional cooperation could be found, and this paper does not claim to be exhaustive in its treatment of the subject. Still, the preceding examples have given an impression of the nature and extent of the contribution, and of its capacity to influence regional security and stability.

ISSUES FOR THE FUTURE

Any consideration of future naval activities which could contribute to regional cooperation clearly must be dealt with in light of existing Government policies and how they might develop. It must also take account of physical limitations of RAN capacity and developments in the region. In this respect there is little likelihood of Australian foreign policy emphasis on Southeast Asia and the South Pacific diminishing, for reasons primarily concerned with our economic well being. Consequently, we can expect that the present pattern of regional deployments will continue, together with the emphasis on bilateral and multilateral exercises with regional neighbours.

What might change, however, is the emphasis of the DCP. As Southeast Asian countries benefit from continuing strong economic growth their capacity to contribute more to their own defence will continue to grow. It may be therefore, that the RAN's DCP related activities will shift to those countries - either in Southeast Asia or further afield - more in need of assistance. Recent RAN discussions with Cambodian naval authorities could be a pointer to this. Similar activities could also feature more strongly in our relations with Indian Ocean countries - at least those countries relatively near to us.

As the regional security dialogue develops in Southeast Asia, especially through the ASEAN Regional Forum, there may also be a need to review some of the existing defence arrangements. If this were to occur it
would impact on the RAN's exercise program; changing the focus and membership of some of the multilateral ones for example. The regime that comes to mind first is that associated with the FPDA. Indonesia has been a consistent critic of its exclusion from the Arrangement\textsuperscript{31} while Singapore and Malaysia have called for a strengthening of the FPDA.

Finally, there must be a realisation that the RAN is not a big navy and does have limits to its capacity to contribute to cooperation in the region. While activities in support of cooperation continue to contribute to the RAN's own capabilities little change need be expected to them. Indeed, as regional navies become more sophisticated there is every chance that the RAN will gain increasing value from its interaction with them. This said, however, there is little scope for any significant increase in this kind of activity.

CONCLUSION

The region in which Australia's strategic interests lie is relatively settled, compared with some other regions in the world. Nevertheless, as the paper has pointed out there are issues within the region with the potential for tension or conflict which provide great scope even for a relatively small navy like the RAN to help build regional cooperation. The paper has also pointed out that in the way of navies throughout the world the RAN has continued to contribute strongly to regional cooperation; especially in Southeast Asia and the South Pacific.

The RAN's activities have ranged from intellectual and material contributions to the security dialogue, to the provision of training and education opportunities for the people of other navies and of course to

\textsuperscript{31} Ball, op. cit., p. 72.
the sponsoring of and participation in regional maritime exercises. As far as one can tell for the immediate future, the present pattern of cooperative activities is likely to continue. Changes to it are most likely to come with the growth of a multilateral approach to regional security and with it greater regional cohesion - itself evidence of success in Navy's approach.
RAAF OPERATIONAL SUPPORT GROUP

Presented By Group Captain Rick Jones
Commander Operational Support Group
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INTRODUCTION

Operational Support Group (OSG) is one of the five force element groups within Air Command and is dedicated to supporting the projection of air power at the tactical level. It could be tasked to support air operations in an Area of Operations (AO) that could extend from Learmonth to Townsville. The group is unique - it is the linchpin of support operations and does not have any aircraft in its order of battle. Support is the essence of OSG's operations, while the other Force Element Groups (FEGs) apply air power. Support operations include all air base services, communications and ground defence.

Within the AO, support for operations may be required at:

- Unmanned, unactivated bases;
- Civilian airfields known as forward operating bases; and
- Undeveloped airfields that provide a point of entry into an AO.

This extensive capability also allows the group to be tasked to provide:

- Assistance to the civil community in the form of natural disaster relief;

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- Aid to the civil power; and

- Contribution to multinational security operations.

**OSG Operations**

To expand on those introductory words and provide a comprehensive explanation of OSG's operations, the presentation will explore the following:

- History,
- Roles,
- Mission,
- Raison d'être,
- Organisation and capabilities,
- Activation process, and
- Command and control.

**History**

Tactical Transport Group (TTG) was the forebear of OSG. As the name implies, TTG provided short range tactical air transport using rotary and fixed wing aircraft. In 1991 Air Force’s rotary wing assets were transferred to Army and the fixed wing aircraft were assigned to Air Lift Group (ALG). TTG was left with no aircraft but retained the crucial roles of combat logistics support for forward operations and ground defence.

These roles justified the need for an organisation within the RAAF dedicated to operational support because the potential for deployed operations was increasing apace. RAAF Base Curtin had just been commissioned and construction of a third bare base was planned (RAAF
Base Scherger), near Weipa. OSG was formed in February 1991 to provide operations support and ground defence for operations conducted away from home bases.

**Roles**

The substance of OSG's operations lies in the CDF's Preparedness Directive (CPD) which prescribes tasks and readiness notice. The focus is on *support* which underpins most of OSG's tasks. A fairly literal translation of the CPD as it applies to OSG includes:

- Support for ADF plans which may involve mainland and offshore contingencies;

- Simultaneously support air and other operations conducted from a bare base and point of entry (POE) airfield;

- Provide airbase support services at a second bare base and POE;

- Vital asset protection which includes the ground defence of airfields;

- Provide logistic support for up to three deployed radar reporting posts;

- Operate an evacuation handling centre; and

- Provide a tactical air task communications net for Tactical Air Control Parties (TACPs) in support of division and brigade operations.
Mission

OSG's mission statement encapsulates strategic guidance, published in Strategic Review 1993, the CPD and the Air Commander's personal directive to the Commander OSG. The mission statement is:

*To support air and other designated forces operating Forward*

Designated forces refers to joint and combined forces and may range from supporting the Army at a POE airfield to supporting multinational forces conducting peace support and security operations in a foreign country.

Raison D'Être

The raison d'Être for OSG is immutable - the combat qualities of the fighting elements directly reflect the quality and effectiveness of support functions. The group's roles and tasks are as diverse as flying operations demand and furthermore, they must be executed with the same degree of decisiveness that is expected of those air operations. Hence, the organisation and capabilities of OSG are structured and developed accordingly.

Organisation and Capabilities

OSG comprises two wings: Operational Support Wing (OSW) and Airfield Defence Wing (AFDW). OSW undertakes the corporate tasks and draws together the personnel and materiel resources required to support deployed operations. AFDW is the combat element that protects air operations conducted from forward bases.
OSW has two units: Air Transportable Telecommunications Unit (ATTU) and No 1 Operational Support Unit (OSU). Let me briefly describe their function.

**Air Transportable Telecommunications Unit (ATTU)**

ATTU is a highly specialised technical unit which provides a wide range of communications and electronic support to Air Force and Joint activities. The unit deploys sophisticated radar, airfield air traffic control facilities and communications equipment across Australia and overseas to support those activities. ATTU is involved in almost every exercise which has a tactical or forward operations and communications phase.

The unit is highly specialised and is maintenance and training self-sufficient. However, the unit does not have sufficient organic manpower to meet more than minor exercise commitments and relies on contingency augmentation personnel. The basic strength of ATTU is about 120. Additionally, ATTU maintains a short notice airlift capability and can also self-deploy by road.

**No 1 Operational Support Unit (OSU)**

1OSU is the other unit in the Wing and is located at RAAF Base Townsville with the Group's headquarters. The Unit maintains the RAAF’s expertise and equipment for activating forward bases, operating an Evacuation Handling Centre and supporting other operations prescribed in the CPD.

Another of 1 OSU's primary roles is the mobilisation of the Contingency Airbase Wings and the activation of bases required to support deployed forces. During the mobilisation and activation processes some key
personnel from 1OSU may go forward to assist with the establishment of support services at the forward base. These personnel would return to 1OSU when the establishment of those services is completed and the base is at 'steady state' or Operational Level of Capability (OLOC). To permanently commit 1OSU staff to forward operations would dismantle the Group's capability to mobilise and activate follow-on forces. The mobilisation and activation processes will be addressed in detail later in this paper.

1OSU has also developed a system of caching. Long lead time and non-perishable items are prepositioned and secured at the bare bases to reduce the demand on transportation when these bases are activated. Prepositioning also reduces response times and overcomes supply shortfalls in local infrastructure. Caches of support equipment are held at RAAF Base Learmonth and RAAF Base Curtin to support base populations of about 1000 personnel for 90 days.

An Operational Facilities Flight (OFF) has recently been formed within 1OSU to undertake facilities maintenance tasks, particularly at the bare bases. Detachments of the OFF are located at RAAF Bases Richmond, Townsville and Tindal.

Unique to 1OSU is the operation of an Evacuation Handling Centre (EHC) for airlift evacuation operations. A requirement may stem from dissident or terrorist action or a general breakdown of law and order in a foreign country. An EHC may be established to coordinate, control and administer evacuees. The group has the capability to conduct a Services Assisted Evacuation where the host country can guarantee the security of the operation.

In this situation medical, transport and communications support may be provided. Where the guarantee of security cannot be given, ground
defence forces, either Army or Air Force, may be involved in a Services Protected Evacuation. The principle of an EHC could be applied to a civil emergency or natural disaster in Australia.

The task of supporting the entry and exit point at an airhead with the required airbase services also falls within 1OSU's charter. Standard operating procedures that apply to bare bases and point of entry airfields are easily adapted to the EHC. The constrained establishment for the EHC has been struck, so the activation is basically a matter of determining which elements are required and preparing and equipping them for the task ahead.

**Airfield Defence Wing**

AFDW is the combat element of the group that is responsible for protecting airfields, assets and installations from a ground threat. AFDW is comprised of three elements:

- No 2 Airfield Defence Squadron (AFDS) - Permanent Air Force;
- No 1 Airfield Defence Squadron - Ready Reserve; and
- A rifle flight within No 23 Squadron.

No 2 AFDS is a rapidly deployable fighting unit that is responsible for close defence, surveillance, quick reaction and some patrolling tasks to protect airbases, assets and installations. The unit is well equipped and can operate down to half sections without compromise to communications and firepower. 2 AFDS is also capable of providing depth to the airbase defences, normally the role of Army, by undertaking surveillance, patrolling and possibly limited manoeuvre operations to fix and destroy enemy forces.
Ground defence operations in the Joint environment often provoked vigorous debate on command and control issues, which have now largely been resolved. A recent Joint review of doctrine agreed that the base commander should be fully responsible for the ground defence of his airbase and any allotted Tactical Area of Responsibility (TAOR).

Additional defence assets, primarily Army elements, may be assigned to the base commander under operational control to assist in the task of defending the base (TAOR). The review also favoured moving away from the very prescriptive doctrine of dividing ground defence into zones because it proved inflexible particularly when applied to airbases in northern Australia. The determination of ground defence tasking and co-ordination should be the purview of the base commander and his appreciation and planning processes, with assistance from HQ AFDW - the Air Force's centre of expertise for airbase ground defence. The base commander would exercise his command responsibilities for ground defence through the Ground Defence Operations Centre (GDOC). Army ground defence forces would be encouraged to collocate their headquarters with the GDOC.

1 Airfield Defence Squadron

1 AFDS, the Ready Reserve unit, has a cadre staff of 16 Permanent Air Force personnel to conduct field training for the ready reserve Airfield Defence Guards (ADGs). The mature Ready Reserve scheme will provide an additional 180 trained ADGs - although a figure of 450 has been mentioned recently.

1 AFDS is based at RAAF Base Tindal and conducts the six months field training component of the one year of full time training. A ground defence flight has also been established at No 23 Squadron at RAAF Base Amberley which has been used as a fourth rifle flight for 2 AFDS,
as it did for Exercise K92. The flight is expected to be transferred to the Ready Reserve to form a third Airfield Defence Squadron (3 AFDS) by the end of this year.

**Ground Defence Philosophy**

Despite these formidable ground defence assets, OSG is not structured for nor is it capable of, seizing airfields from enemy forces.

The Rapid Deployment Force (RDF) would first secure the airfield with OSG following on in a phased operation. In the initial phase, AFDW will relieve-in-place those elements of Army that are conducting Vital Asset Protection (VAP) and then continue to maintain the security of the airfield and its assets. OSG will then deploy an Air Base Wing that has been tailored to meet the specific support requirements into the relatively secure Forward Operating Base or POE to establish the support services.

Ground defence is essential to prevent enemy ground forces from slowing or disrupting the rate of effort of air operations. The aim of ground defence is to support and shield the conduct of air operations and its measure of success is the number of effective sorties flown from the base... Not the number of enemy killed or captured. This philosophy is somewhat different to that of conventional defensive operations which generally aim at inflicting sufficient casualties on the enemy to enable the defender to go onto the offensive.

That explains the 'why OSG exists' and 'what is OSG' section of the paper. The following description of the activation process will fit those elements into the hierarchy of OSG's operations and illustrate 'how' the support infrastructure is established at the forward bases.
Activation Process

Air Headquarters has set operational level guidance for forward air base support in respect of manpower and organisational structure that the support elements or units should take. Three levels of support have been identified:

Level 1

Mobility and flexibility are the essential elements of the level 1 support organisation. Minimal manpower has been allocated to this unit as personnel will work 12 hours on primary duties and four hours on Base Combat Personnel (BCP) tasks each day without any days off. This work routine would only be sustainable for about two weeks. The Constrained Establishment for Level 1 is 103, which is capable of supporting a deployed force population of about 150. A level 1 organisation should only be deployed to a relatively secure location because the numbers of personnel available for BCP duties could not provide adequate key point defence. An option is to assign an AFDS for ground defence but this would require a higher level of activation because the basic Level 1 organisation does not have the spare capacity to support additional forces.

Level 2

The level 2 structure has been designed to provide the full complement of airbase services at the forward base. The working routine is a 12 hour day, eight hours primary duty and four hours BCP, with one day off in ten. The organisation requires 350 personnel to support a deployed force of about 250. The ratio of support and operational personnel is disproportionate because the establishment of full airbase services has a high initial manpower cost. However, further increases
in operational activity would not proportionately increase the support organisation. Level 2 support is sustainable for up to six months and could accommodate a low level ground threat. The base commander could expect to have an AFDS assigned to him for ground defence.

**Level 3**

Level 3 is an expanded version of Level 2 and contains additional personnel to meet the increased demands on the base infrastructure created by doubling the operational force from one and a half to three squadrons. The support organisation requires 463 personnel who will provide a stable, long term support platform for a base population of up to 1200. A Level 3 organisation is expected to be as resilient as southern bases, although somewhat leaner in manpower, and may require up to two AFDS for ground defence. At this level of activation the base commander could also expect to have a battalion assigned under his operational control.

**Deployment Manpower**

OSG has the corporate expertise to activate and establish forward support services. Additional manpower, vehicles and equipment are required to physically man and equip these contingency organisations which lie dormant until an operational requirement initiates their activation to the appropriate level. Four contingency units have been formed:

- 324ABW - nominally tagged to RAAF Base Curtin,
- 325ABW - nominally tagged to RAAF Base Learmonth,
- 326ABW - nominally tagged to a POE airfield, and
• 327ABW - nominally tagged to a second POE airfield.

Personnel are tagged for duty in the contingency units through a system of shadow postings. Manning the contingency units is not a matter of just scrambling together personnel who are available to go forward. Each post in the contingency units has been cross-referenced to a post within permanent units. For example, the base commander at RAAF Base Richmond may have six cooks who are annotated as contingency augmentation manpower for 324ABW. When that unit is activated, those personnel would move forward as part of the contingency manpower requirement.

**RAAF Active Reserve**

The RAAF Active Reserve (RAAFAR) may also be called upon to assist. The role of the active reserve is gradually acquiring a sharper focus to provide a surge capability for the Air Force. Some reserve personnel have been identified and trained for specific operational support roles. Reserve personnel may also backfill vacancies at southern bases caused by PAF personnel moving forward.

**Training**

A vital component in preparing personnel for forward airbase operations is training. A course has been developed to train individuals in field and survival-to-operate skills in forward locations. This training is initially intended for all contingency personnel and then may be extended across the whole Air Force population. All contingency personnel should be trained before deploying forward. The syllabus for the training course is very broad and includes:
• Field catering,

• Tactical communications,

• Manual supply procedures - because electronic support is generally not available in the forward areas, and

• Battle damage repair.

This training is conducted at RAAF Base Townsville by 1OSU and is fundamental to OSG using the Air Force's scarce manpower resources to maximum effect to support forward operations.

As a preliminary to this training, commanders are required to ensure that their contingency augmentation personnel are at Minimum Level of Capability (MLOC) and meet any additional requirements such as inoculations, passports, health and fitness standards and additional training.

Parent units incur a considerable impost in meeting the preparedness requirements for contingency augmentation personnel which exacerbate busy daily routines at the main operating bases. The competing priorities for time and manpower may become the Achilles heel of the shadow-posting system.

Other difficulties have also been encountered. OSG is responsible for mobilising the shadow-posted personnel but has no control over their level of basic training. If personnel are not at MLOC prior to mobilisation, valuable time is consumed on basic training at the expense of developing corporate skills, teamwork and esprit de corps. A cultural change with the appropriate focus on forward operations and
ground defence should resolve this issue and establish a standard MLOC for all shadow-posted personnel.

Resources

Activation of the bare bases relies on resources dispersed (and used in normal day-to-day operations) throughout the Air Force. These bases provide facilities such as fuel storage, accommodation, limited hangarage, operations centres and electricity generating equipment. Other essential support items such as mechanical handling equipment, vehicles, refuelling tankers, runway sweepers, and aircraft ground support equipment has to be moved to the bare base when it is activated. This movement is normally by road, and convoys to RAAF Bases Learmonth or Curtin can take between seven to ten days from southern bases. An alternative to reduce transport costs and deployment times is to purchase extra ground support equipment and specialist vehicles that can be permanently positioned at the bare bases, but current financial limitations have almost closed that option.

Permanently locating this equipment and vehicles at bare bases also introduces another complicating factor - maintenance. Maintenance personnel would have to be periodically deployed to the bare bases to maintain this equipment which adds to normal operating costs - in both manpower and finance.

Logistics

At first sight, the task of establishing airbase support services at forward bases is an immense task borne solely by OSG. Fortunately, that perception is not absolutely correct. Where possible OSG will use local infrastructure support, especially for critical consumables and services such as fuel, rations, liquid oxygen, telephone and landlines,
and sanitation. Some of these services are supplied under dormant contracts that are activated in conjunction with the forward base. Fuel is probably the most critical consumable for air operations and the rate of effort determines quantities required. Fuel is supplied to RAAF Bases Curtin and Tindal by road - the road trains have a capacity of about 100 000 litres and rely on the main routes remaining open. Contractors require maximum notice to meet demands during periods of high consumption such as Exercise PITCH BLACK.

At this point I would like to flag a concern that the procedures for the forward delivery of stores and equipment are not practiced sufficiently between the Services. Despite the general division of responsibilities as laid down in Australian Defence Force Publication 2, the procedural aspects of those policies need to be defined and practiced at the operational and tactical levels. Greater emphasis needs to be placed on the delivery of stores forward, the procedures applying to gaining access to the logistic support force conduit, and how the delivery of single Service stores will be controlled and managed. The logistic process consistently appears low in the priority of exercise objectives.

I will leave you to contemplate how you would resupply RAAF Bases Curtin and Scherger. You must consider several requirements. First - fuel. You should be mindful that the resupply quandary may be complicated by port facilities at Broome, Port Hedland and Weipa that could be used to support Curtin and Scherger, not being secure. At high rates of effort, fuel consumption could be about 400 000 litres per day, or about four road trains' worth. Personnel requirements also extrapolate into large quantities. In addition, two brigades (about 6000 troops) may be operating in the AO in addition to the Air Force personnel at the bare bases and POE airfields. Alone, the resupply for personnel is a sizeable task which is increased by several orders of
magnitude when aviation fuel requirements are factored into the logistics equation.

The logistics quandary is shared by OSG and the Army's Logistic Support Force (LSF). Basically, OSG would prepare to support deployed operations for 30 days with first and limited second line support. The LSF would follow on with second through to fourth line support.

**Command and Control**

The Commander OSG is responsible to the Air Commander Australia to plan and prepare for operational base support, including ground defence, to deployed single Service RAAF, joint or combined forces. Commander OSG is also the Air Commander's principal adviser on all matters relating to the provision of operational support for forces operating forward of their home bases. These tasks and responsibilities may be undertaken in situ, at the Group's Headquarters in Townsville, or at Air Headquarters when the Air Commander forms his Battlestaff.

**Command of Contingency Units**

The command and control arrangements for the contingency units are unusual. The OSG task is essentially complete once the unit has been activated, personnel mobilised and the required support services put into place. These initial processes are completed under command of Commander OSG and bring the ABW to OLOC or steady state. Command is then passed to the base commander who, under current arrangements, would report direct to the Air Commander or Joint Force Commander. Commander OSG does not have any command responsibilities for the ABW while it is at OLOC and supporting forward
operations. When the airbase is no longer required, the base commander would return command to the Commander OSG, through the Officer Commanding OSW, who would deactivate the contingency unit, replenish the caches and secure the base.

C² arrangements for the airfield defence squadrons are similar. Airfield defence squadrons remain under command of Commander OSG during the activation and de-activation phases and are assigned under operational control to the base commander for ground defence.

The activation process occurs without Commander OSG managing the preparation and routine maintenance of the bare bases during non-exercise periods. The responsibility for caretakership and ongoing maintenance rests with the Officer Commanding 321ABW at RAAF Base Darwin. When Commander OSG activates the base, the concurrent responsibilities for the maintenance and serviceability of the base becomes a little cloudy.

CONCLUSION

OSG is the element that allows the Air Force to rapidly mobilise, expand and deploy in the event of a contingency. Even a cursory glance at strategic guidance and the avenues of approach to the Australian mainland provide reasonably clear indication that the north holds most potential for possible future military operations. The sheer size of the likely area of operations demands reach, mobility and preparedness - key determinants in the development of OSG's capabilities.

The Group's missions and role have been structured accordingly. The limitation of not having the organic manpower to support deployed operations has been partly relieved by a shadow posting system that tags personnel to the support organisations. OSW, the group's
corporate workhorse, trains and prepares personnel for their operations support functions. AFDW, the combat wing in the Group, has the capacity to protect forward operations from disruption or destruction by enemy ground forces.

OSG is the linchpin of support for the application of air power through forward operations.
REGIONAL AIR POWER COOPERATION
- A PHILIPPINES PERSPECTIVE

Presented by Colonel Jose V Balajadia
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INTRODUCTION

The growth and development of air power in the Philippines was one protracted odyssey. For a long time, American administration in the Philippines before World War II could not quite make up its mind as to whether the islands would have an organised military air arm or not. As history has shown, the nation paid heavily when World War II erupted.

It has been said that the God of War builds as much as he destroys. This is particularly true of the Air Force, for it was war and the threat of war which provided the impetus for air power development in the country.

HISTORICAL PERSPECTIVES

The genesis of military aviation in the Philippines started on 17 March 1917 with the approval of the Militia Act 2715 which established the Philippine National Guard (envisioned to include an aviation unit) with a complement of 15 officers and 135 enlisted men. None of the Filipino pilot trainees however saw action during World War I.

Word War II

The outbreak of World War II in the Pacific rim caught the Philippines by complete surprise.
Almost 12 hours after they bombed Pearl Harbor and crippled the American Pacific fleet, the Japanese attacked the unprepared Clark Field, destroying all 18 B-17s, 56 P-40s and P-35s, and 26 other aircraft on the ground. This finished the Far East Air Force (FEAF) in the Philippines as an effective force for both offence and defence. Its destruction had virtually sealed the fate of the Philippines.

The success of the Japanese operations in the Philippines far exceeded the expectations of the Japanese High Command. The comparative safety of the Japanese troops from air attacks proved the effectiveness of their air offensive and the soundness of preceding ground operations by air operations designed to gain control of the air.

The Philippine Army Air Corps' 6th Pursuit Squadron commanded by Captain Jesus A Villamor, was about the only intact fighter squadron left in the FEAF after the first day of the war. It had 12 P-26s in service.

Nevertheless, six P-26 pursuit planes with Capt Villamor in the lead, engaged the Japanese in aerial combat and succeeded in shooting down "zero" fighters. In another dogfight over Batangas Field two days later, Capt Villamor and another pilot engaged the enemy once more. The Japanese lost a bomber and a fighter in this aerial encounter, but PAAC also lost Lieutenant Caesar Base, the first Filipino pilot casualty of World War II.

The Postwar Era

I will describe two rebellions which affected post-war air power development in the Philippines. These are the Huk and Kamlon rebellions.
Firstly, HUKBALAHAP. The ratification of the Bell Trade Act, the Military Bases Agreement, and the Military Assistant Pact by the Philippine Congress in 1946, retained the US colonial prerogatives in the country. It also gave rise to an underground movement called Hukbong Mapagpalaya sa Bayan or HUKBALAHAP communist movement. The Huk found a fertile recruiting ground among the impoverished masses of Central Luzon, who were demanding a fairer land tenancy system.

The Huk Rebellion was an opportunity for the government to tap the firepower of the fighter units. The Mustangs were harnessed together with the other aircraft of the PAF to fight the insurgents. Missions ranged from psychological overflights on known Huk territories to actual air support missions.

On a full-scale military offensive against the Huks, the Philippine Air Force (PAF) flew 2,600 bombing sorties against Huk targets. The Mustangs practically obliterated Huk-influenced lairs with machine-gun fire and napalm bombs. In six-months, Military Intelligence arrested some 15,000 people.

The campaign against the Huks introduced anti-insurgency into military tactics. During these campaigns, the defence concept of dividing the country into four Military Area Commands was implemented. In addition, the campaigns underscored the importance of air mobility and the advantage of forward deployment of air assets.

The second uprising was the Kamlon Rebellion. In 1949, as the Government was busy putting down the Huk rebellion in Luzon, insurgency was already making its presence felt in Mindanao. This incipient restiveness was, however, nipped in the bud when P-51 Mustangs conducted punitive campaigns against the rebel leader
Tawan-Tawan and his armed bands. The campaign had also created an atmosphere of distrust and enmity between Christians and Muslim brothers.

The stage was thus set for the rise of an armed initiative led by Hadji Kamlon, the 'Robin Hood of Muslimlandia'. He controlled smuggling between Jolo and Borneo, and seized over 4,000 hectares of land from their legal owners.

The Armed Forces were once again called to "pacify" the area. General Headquarters organised Jolo Task Force (JOTAF) to deal with the problem. A series of PAF air attacks using the Mustangs were launched against enemy lairs. Bombs, rockets, and machine-gun fire rained on Sulu. With characteristic ferocity, they fought back. Their hatred for the PAF pilots was such that every low-flying aircraft was fired at.

The campaign against Kamlon continued unabated in the succeeding months. But this group had the perfect cover in the thick jungle. Adding to the advantage was the easy access to countries outside the Philippines due to the proximity of our distant islets where these groups could be offered sanctuary. A series of patrols on the sea lanes in southern Mindanao and Sulu were conducted, as well as reconnaissance missions, air strikes, and support of the ground troops. H-19 Sikorsky helicopters were also flown to help evacuate casualties and transport troops to the front lines, and fighters conducted strafing runs.

The conduct of armed air patrol missions demoralised the outlaws; it denied the dissidents mobility. The relentless air attack missions proved devastating for Kamlon and his followers. In 1955, Kamlon and his followers surrendered to the Government.

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PRESENT APPLICATION OF AIR POWER

The role of air power is inherent in preserving national security. The Philippine Constitution mandates the Armed Forces of the Philippines as responsible for the protection of the Filipino people and the state, upholding the sovereignty and defending the territory of the Republic against its enemies. This role is even more crucial in an insular and archipelagic country like the Philippines with its vast airspace to defend, large maritime areas to patrol and widely dispersed territory to secure.

However, in 1987, the government shifted its thrust from regional stability to internal security thus relegating PAF’s external defence role to the background to pave the way for an intensified counterinsurgency campaign. The PAF directed that most of its manpower and resources were to build up towards this role. Efforts were directed mainly against insurgency movements which devoured a large slice of PAF funds due to the peculiar difficulties of these different conflicts.

Significantly, the pull out of the US forces from the country further stripped the Philippines bare of an external defence capability because we mainly depended on the American presence for effective counter air. Air power in the Philippines was mostly applied to counter-insurgency campaigns.

Combat related applications of our land based air power were strike, combat air support, reconnaissance and airlift. To effectively execute these tasks, forward operating units called the Composite Air Support Forces (CASF) were created throughout the three geographical areas of Luzon, Visayas and Mindanao. These support forces are collocated with landing strips which are used as operational bases for a variety of fixed and rotary wing aircraft such as the OV-10s, MG-520s, S-76s, and
UH-1Hs for follow-on reconnaissance and strike sorties. Air assets in the CASFs provide airlift for rapid reaction forces and infiltration teams, medical evacuation, resupply and special logistics operations.

Admittedly, the PAF has lagged behind in terms of modernisation and technology upgrades to assets. The Philippine Air Defence System is at present in a state which equates to a severely degraded air power capability.

Heavier in the air arena though is the PAF’s ultimate service to the Filipino people. It has harnessed air power to save lives and to bring relief to distressed regions. The PAF made itself readily available for search and rescue operations, reconnaissance, relief missions, emergency airlift, cloud seeding and significantly, counter terrorist missions.

In the present Philippine setting, a refocus on national defence posture is being pursued. To realise this shift, a modernisation program over the period 1990-2001 is already in place, primarily to acquire modern assets and equipment to strengthen the PAF capability. The program not only addresses requirements for internal and external defence but also considers the role of the PAF as a partner in national development efforts.

On the global scene, trends show that many countries are becoming more dependent on United Nations-recognised alliances for collective security and as a regional shield against acts of aggression by a hostile state. The PAF for one believes that a well tailored regional cooperation scheme is essential to deter direct confrontation or full scale escalation to war.
We, therefore, look forward to participating more actively in regional cooperation among air forces in areas of information exchange, training, mutual exercise, monitoring borders and establishment of common rules of engagement as we attain the modest modernisation of our Air Force.

CONCLUSION

Application of air power in the Philippines is unique. It is limited to a conflict where enemy air is not a threat. The absence of opposing enemy aircraft is clearly an advantage, however light attack counter-insurgency aircraft are considerably vulnerable to small arms fire because of their low speed. The peculiar characteristics of counter-insurgency warfare makes it difficult to deal with. Insurgent forces rarely present a clearly identifiable target. Such forces, although generally out-manned and out-gunned, usually operate in small fighting units whose main defences are concealment and mobility. Their movements are quick and often in close proximity to civilian groups, using them either as shields or protectors. The use of air power to be effective in this type of conflict requires accurate target intelligence and reliable communication between the Forward Air Controllers, ground troops and strike aircraft.

The PAF not only used air power on a relatively larger scale than in the past, but it has also attained a certain degree of expertise in the application of the basic employment principles of its air power for over two decades in the counter-insurgency role. Additionally, the PAF has discovered the essence of the other side of air power. Being a calamity and disaster prone country, the Philippines has extensively utilised air power in a more humane way. Missions such as air evacuation, search and rescue and relief operations in distressed areas have been typical of the Air Force's application of air power.
DISCUSSION

The workshop further discussed the organisation of the PAF's Composite Air Support Forces structure. These comprised 12 regions with provinces plus the national capital. There were six area commands with a tactical commander (usually an army officer) and each had three components.

Organisation of PAF

The PAF was organised thus:

```
Headquarters PAF
   |
No # Air Division
   |
   CASF
   |
Aircraft Assets
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Modernisation Program (1990-2001)

The PAF is undergoing a modernisation program which seeks to acquire modern assets and equipment. This program addresses the Philippine Government's internal and external defence requirements and will consider the role of the PAF in national development. As indicated in recent media articles, early warning and air defence systems are a priority. The Philippines Senate recently passed a new law authorising modernisation of the Defence Forces.
The relationship between the Philippines and the US was discussed. At present, a mutual defence treaty with the US still exists but there is little activity except for the existence of a Board for discussions. This arrangement may lead to more exercises and training opportunities.

The sensitive issue of regional information exchange was discussed as were other cooperative activities. The general feeling was that information exchange had the potential to offend neighbours and cause misunderstanding; hence it needed to be treated with considerable circumspection. However, there may be scope for some bi-lateral or limited multi-lateral cooperation activities. Examples of such activities already included visits by PAF officers to APSC to carry out work as fellows. The PAF is very keen to encourage this activity and has created an Office of Special Studies which has already seen links forged with the APSC. OSS will develop doctrine, a syllabus for an Air Force staff course and explore the possibilities for civil/military interface.

Regarding the civil/military interface, the President was encouraging more civil/military cooperation and use of common facilities. He had written a book which was a study of this subject.
REGIONAL AIR POWER COOPERATION
- AN RAAF PERSPECTIVE

Presented by Group Captain Gary Waters
Director of the RAAF Air Power Studies Centre
Royal Australian Air Force

INTRODUCTION

This paper aims to provide an overview of RAAF involvement in regional cooperation activities. It does this by using the Strategic Review 1993 as its foundation, in order to extract the broad guidance for RAAF activities. It then examines the logic behind the need for regional cooperation, before discussing specific current activities in which the RAAF is engaged. There are also three related issues which need to be addressed, to set in context the requirement for closer cooperation. These encompass the potential catalysts for conflict within the region, modernisation of regional air forces, and the potential to use air power more in peacekeeping operations. The paper restricts itself to discussion on Australia, New Zealand and the members of ASEAN.

DOMESTIC ISSUES

Strategic Review 1993

The Australian government announced in its Strategic Review 1993 (SR93) that enhancing regional security will receive increasing attention for the rest of this decade. The government recognises that a secure and stable region will inhibit the development of threats to Australia. Of course, this applies to all nations in the region, and it is obvious that the governments of New Zealand and the ASEAN countries are also focusing on enhanced regional security.
In following its strategic interests in the broader region, Australia seeks a strategic partnership with South-East Asia, strategic commitment to the South-West Pacific, constructive contact with the major Asian powers, and sustainment of its alliance relationship with the United States.\(^1\)

Australia's defence objectives in South-East Asia have been listed as:\(^2\)

- To enhance the capacity of the region to exclude potentially hostile influences that could threaten Australia's security.

- To reduce the potential for misunderstanding and tension by promoting sound strategic assessment and force structuring processes through an increased security planning dialogue.

- To assist the development of effective self-defence capabilities, including defence science and technology.

- To improve interoperability in key areas such as communications.

- To establish a significant defence industrial base in Australia for logistics cooperation, technology sharing and collaborative equipment projects.

- To maintain and develop the Five Power Defence Arrangements (FPDA) as an example of successful regional cooperation.

- To support a stable maritime regime that permits free passage through focal areas and choke points.

\(^1\) *Strategic Review* 1993, p. 21.

\(^2\) *ibid.* p. 23.
To support a continued commitment by the United States to the region.

In terms of specific priorities, SR93 outlines the need to treat each member of ASEAN differently. For example, in developing closer defence ties with Indonesia, training and activities that foster long-term personal contact and understanding should receive priority. Such activities could include exchanges of observers, study visits, combined exercises and attendance on military courses.3

The Malaysia-Australia Joint Defence Program is a clear indication that Australia seeks to base its defence links on mutual strategic benefits and the earlier-mentioned concept of partnership. Exchanges in joint planning and policy development, and cooperative work in strategic planning, organisational development and science and industry projects are likely to be expanded.4

Establishment of advanced air training facilities in Australia by Singapore signals strong commitment to cooperation by both nations. Closer engagement is likely to occur in aircrew training, exercises, strategic policy development and defence science. As well, joint industry and science ventures could be a real possibility in the near future.5

Operational exchanges, cooperation on strategic guidance, financial planning, operational analysis, and research and development reflect the increasing levels of cooperation between Thailand and Australia. The relationship could be improved even further through closer cooperation in defence industry and logistics.6

3 ibid. pp. 24-25.
4 ibid. p. 25.
5 ibid.
While the relationship with the Philippines is in an embryonic form, this will change now with the positive developments in the Philippines' internal situation and the withdrawal of US forces and decline in their aid. As the Philippines turns its view outwards to encompass external security and regional issues, the links with Australia will become closer.\textsuperscript{7}

Projects and activities in which Australia and Brunei have mutual interests will be the likely scope for future cooperation.\textsuperscript{8} That may expand as Brunei receives into its inventory aircraft such as the Hawk advanced trainer and CN-235 maritime patrol aircraft.

The security interests of Australia and New Zealand have always closely coincided. A threat to either nation would be construed as a threat to both, and each would support the other should either face a military threat. Establishment of formal Closer Defence Relations (CDR) between the two countries will ensure mutual understanding of long-term planning, maximum interoperability, complementarity and cost-effectiveness. However, a fully effective security relationship with New Zealand is impeded through the limitations placed on New Zealand's participation in certain exercises that involve the US.\textsuperscript{9}

\textbf{Regional Cooperation}

Costs of defence necessitate husbanding of resources, sharing of resources and greater cooperation, all on a regional scale. There will be greater emphasis on maritime and air assets to protect regional nations, especially off-shore territories, fishing zones and gas/oil/mineral deposits.

\textsuperscript{7} \textit{ibid.}, p. 26.

\textsuperscript{8} \textit{ibid.}

\textsuperscript{9} \textit{ibid.}, p. 29.
Countries throughout the region share a similar air environment, in that distances are large, air resources are limited and the threat is low. This must impact on broader air power cooperation. Moreover, air doctrines are similar, in terms of small numbers of aircraft, attrition management and the need for reach. And we all share long lines of communication.\textsuperscript{10}

The region as a whole will need to be more adaptable as it responds to a rapidly changing environment. One of the characteristics of air power is adaptability, and that adaptability will foster closer defence cooperation. Similarly, closer defence cooperation is likely to lead to improved adaptability in the air power capabilities of regional nations.

As witnessed in Desert Shield and Desert Storm of 1990/91, adaptability of coalition forces can be enhanced through common equipments, practices and procedures.\textsuperscript{11} But even without commonality of equipment, interoperability can be pursued, especially in terms of procedures. Procedural interoperability may even be more important than equipment commonality.

Interoperability will be enhanced through the many cooperative activities the Royal Australian Air Force (RAAF) has undertaken with regional allies. This in turn will improve the adaptability of the regional air forces, although it must be emphasised that this is not all one-way. It would be instructive now to examine some of those cooperative activities.


\textsuperscript{11} See Gary Waters, Gulf Lesson One - The Value of Air Power: Doctrinal Lessons for Australia, APSC, Canberra, 1992, p. 138.
RAAF Cooperative Activities\textsuperscript{12}

Of prime note is FPDA, involving Malaysia, Singapore, New Zealand, United Kingdom and Australia. FPDA was formed in 1971, and provides a framework for exercises, exchanges, training and discussions.\textsuperscript{13} Additionally, the Integrated Air Defence System (IADS) contributes to the air defence of Malaysia and Singapore. The RAAF plays an important role in IADS and currently provides the two-star commander, as well as other staff.\textsuperscript{14}

The major maritime exercise STARFISH is conducted under the auspices of FPDA (involving as it did some 42 aircraft in 1992). Another exercise - CHURINGA - involves F/A-18 deployments to Malaysia (ten to twelve weeks) and Singapore (four weeks), and also involves C-130s and B-707 tankers. F-111s have also deployed since 1975.

RAAF P-3C Orions fly patrols in South East Asia, such as GATEWAY (a joint maritime surveillance program between Malaysia and Australia). The RAAF is also involved in BURBAGE patrols in the Indian Ocean which are used to position aircraft in Butterworth for GATEWAY. As part of BURBAGE, the aircraft overfly major shipping routes in the Indian Ocean. As well, the RAAF has conducted Exercise PENGUIN with Brunei.

The Royal Malaysian Air Force (RMAF) undertake C-130 air drops and low-level navigator training at Richmond. Approaches have also been made for

\textsuperscript{12} Many of these activities were discussed by Air Marshal Barry Gratton in his opening address to an air power conference in Canberra in March 1994. See Alan Stephens (Ed), \textit{The War in the Air 1914-1994}, Air Power Studies Centre, Canberra, 1994, pp.3-4. Other activities are discussed in \textit{Defence Annual Report 1993-1994}, AGPS, Canberra, 1994, pp.138-140.


\textsuperscript{14} \textit{Ibid.}
assistance with the prospective F/A-18D buy (in particular, a fact-finding mission), and the possibility of the RAAF providing operational and technical training on the Caribou has been explored. The RAAF also conducts navigator training for the RMAF.

Singapore has had aircraft detachments at Darwin, Amberley, and Williamtown. Flying training for the Republic of Singapore Air Force (RSAF) has begun at Pearce in Western Australia. The first 16 aircraft and 150 personnel arrived in late 1993 (this will rise to 30 aircraft and 400 personnel, including dependants). Additionally, Singapore used the Delamere Range regularly during 1993 and used the Shoalwater Bay training area in October 1993. Australia and the US participate in a major air defence exercise in north Australia each year. Known as PITCH BLACK, the exercises since 1992 have also involved Singapore.

PITCH BLACK 94 involved RAAF F-111s, F/A-18s, a C-130 and a B-707; USMC AV-8s, F/A-18s and EA-6Bs; and RSAF A-4s, F-16s, F-5s and E-2Cs. The air defence element involved blue defending forces operating from Tindal, and orange attacking forces operating from Darwin and Curtin. RAAF Control and Reporting Units, a radar surveillance unit, operational support unit, airfield defence unit, and an electronic warfare squadron were also exercised. The Australian Army also participated, with forces from Air Defence, Aviation, Cavalry and Special Air Service regiments. Not only do participating nations validate tactical and operational procedures, but they also enhance interoperability among one another.

Special Australian-New Zealand exercises are conducted such as TASMANEX, which is a maritime strike, anti-submarine warfare, and

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16 See Australian Defence Report, August 4, 1994, p. 12 for a more detailed account of the activities planned for PITCH BLACK 94.
surveillance exercise. The RAAF and Royal New Zealand Air Force (RNZAF) also participate in WILLOHS exercises, involving fighter aircraft. The RNZAF undertakes navigator training in Australia and currently provides fleet support for the Royal Australian Navy, operating A-4s from Nowra, with deployments to Williamtown. RNZAF A-4 Skyhawks will begin using RAAF AAR aircraft and the RAAF is exploring the possibility of using the RNZAF to conduct lead-in fighter training on Macchi 339Cs for a short period. The RAAF and RNZAF also practice tactical resupply and short take-off and landing procedures in Exercise SHORTRAU.

KANGAROO exercises have been conducted regularly by the Australian Defence Force (ADF), and in future, more regional involvement is likely. The KANGAROO series will now be held every four years, with the next scheduled for 1995, and K-95 will have wider regional involvement than in the past. The KOOKABURRA series - involving much smaller exercises and more regional involvement - will be conducted in between KANGAROO exercises, also every four years. The first one is likely to be conducted in 1997.

Australia, New Zealand, Canada and the United Kingdom participate every year in an anti-submarine warfare competition known as FINCASTLE. In 1993 and 1994, the RAAF's No 11 Squadron won the trophy.17 Aircrews track and locate a target submarine, then using all the aircraft's sensors, launch a simulated torpedo attack. Apart from the training value, it is also an effective forum for discussing ASW tactics, techniques and technology.

The Air Standardisation Coordination Committee (ASCC) makes a positive contribution to interoperability between Australia, the United States, the United Kingdom, Canada and New Zealand (in terms of combined operations, logistic support, and exchange of equipment and information).

17 The trophy takes its name from an RAF Coastal Command gunner who was killed in action in 1943 - Sergeant Nairn Fincastle Airde-Whyte.
It may be possible to expand the notions of ASCC further in future to include a regional standardisation regime.

In conjunction with CHURINGA deployments, the RAAF participates in THAI BOOMERANG. This exercise first occurred in 1992 at Korat where the RAAF used a basic Air Combat Manoeuvring Instrumentation range. The object of the exercise is for the RAAF and the Royal Thai Air Force (RTAF) to practice dissimilar air combat tactics. AUSTHAI exercises have been conducted involving Thai F.27s/ Nomads and RAAF P-3Cs, where the main aim is combined ASW training with the Australian and Thai Navies. The RAAF has also conducted navigator training for the RTAF in the past. Joint special operations are also conducted in the Night Panther series of exercises, which include tactical air transport missions.

Airmen-to-airmen talks have been conducted regularly with Indonesia, with reciprocating visits. RAAF F/A-18s and Indonesian Air Force (TNI-AU) F-5s flew together in 1993 in Exercise ELANG AUSINDO. Also, during the AUSINA exercise in 1993, Indonesians flew in RAAF P-3Cs and RAAF personnel flew in Indonesian Nomads for the first time. AUSINA 94 involved crews planning and debriefing activities together, and common procedures were developed and information exchanged. There was also an exchange in 1993 between a No 36 Squadron C-130 crew and a TNI-AU crew, which involved tactical transport flying and airdrops. RAJAWALI AUSINDO 94 involved RAAF C-130s and a platoon from 3rd Battalion working with the TNI-AU to provide tactical air transport training. Finally, NEW HORIZON 94 involved RAAF P-3Cs, F/A-18s and F-111s in combined maritime training with Indonesian maritime forces.

Further afield, the RAAF conducts patrols in the Southwest Pacific such as SOLANIA, in which exclusive economic zones are patrolled for fisheries surveillance.
In the past, the RAAF has conducted pilot and technician training for the Papua New Guinea Defence Force.

Cooperation has also been achieved in terms of improved transparency through published doctrine, lectures, and workshops. For example, the RAAF published its doctrine in 1990, and earlier this year released its second edition. In 1993, the Air Power Studies Centre (APSC) visited Singapore, Indonesia, and Malaysia, and was visited by delegations from Thailand, Malaysia and a team from IADS. In addition, two colonels from the Philippines Air Force studied at the APSC (for two weeks each), as did one RNZAF squadron leader (for twelve months). This year already, two Malaysian lieutenant colonels have visited, and additional officers from the Philippines and Malaysia are expected early next year. The APSC conducts an extensive lecture program to Armed Forces Staff and Defence Colleges throughout the region. In this respect, the APSC has visited Malaysia and the Philippines this year.

In addition to the increasing closer relations between the APSC and regional air forces, other RAAF education institutions have been and continue to be involved in providing places for regional air force personnel. For example, the Command and Staff Course at Fairbairn and the Basic Staff Course at Point Cook regularly offer places, and personnel from regional countries have been included on certain supply and explosives training courses. In addition, the Defence International Training Centre at Laverton provides an important opportunity for overseas personnel to understand the Australian culture, prior to undergoing specific courses.

In 1992, the RAAF hosted a regional conference in Melbourne, entitled 'The Qualitative Edge: A Role for Air Power in Regional Cooperation'. Following the success of this conference, the Inaugural Regional Air Power Workshop was conducted in Darwin in 1993, followed by this the second workshop in 1994.
REGIONAL ISSUES

The rapid change that has swept this region has introduced a wave of prosperity, but has also brought with it a more heavily-armed region. An uneven spread of economic development and quite vocal territorial disputes could lead to instability in the region. A recent analysis highlighted certain potential 'catalysts for conflict' in this regard. These include:

- Exclusive economic zones (out to 200 nautical miles, with overlapping claims, disputed sovereignty, and differences in interpretation).

- Marine pollution.

- Depletion of critical fish stocks.

- Spratly and Paracel Islands in the South China Sea, with the former disputed by China, Taiwan, Malaysia, Brunei, Vietnam and the Philippines, and the latter disputed by China and Vietnam.

- The Kurile Islands dispute (involving Kunashiri, Etorofu and Shikotan) between Japan and Russia. Russia currently occupies the three islands, which Japan claims as sovereign territory.

- Senkaku Island (East China Sea) is disputed between Japan and China.

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• Land border disputes (Vietnam with China and Cambodia, Burma with Thailand and Bangladesh, India with Pakistan and China, Malaysia with Thailand).

• Vietnam disputes undersea boundaries with Malaysia and Indonesia.

• Malaysia disputes Pulau Batu Putih Island in the Straits of Johore with Singapore, and islands in the Celebes Sea, off Sabah, with Indonesia. These islands include Sipadan, Sebatik and Ligitan.

• There are also insurrection or secessionist movements in a number of countries.

• As well, there are competing sovereignty claims between China and Taiwan, and divided sovereignty exists on the Korean peninsula.

One principal area of concern must be the number of choke-points in our region, bearing in mind that some 75% of the region's Gross Domestic Product is accounted for by maritime trade. Sea lanes link the Pacific and Indian Oceans, provide the hub of northern routes to Japan, China and Russia, and the southern routes to Australia and New Zealand. These are critical to the region's economic prosperity and political stability.\(^\text{19}\)

The Straits of Malacca for example could be blocked by mines, submarines or exposed to environmental disasters. And what of the new aircraft emerging in the region and on its periphery, with long-range missiles that extend effective areas of operations hundreds of kilometres from home bases? Air-to-air refuelling, all-weather, night capabilities, as well as improved acquisition and targeting systems and precision guided

\(^{19}\) Greg Ansley, 'The Arming of Asia', p. 2.
munitions provide a powerful offensive capability, which could threaten maritime trade.\textsuperscript{20}

In determining the level to which Australia can pursue its national policy of 'regional engagement' set within the context of the regional issues just mentioned, it should be mindful of certain conclusions reached by Razak Baginda in two recent articles.

First, economic development throughout the region has resulted in all regional nations wishing to maintain regional stability and this will see increasingly greater desires for participation in confidence and security building measures.\textsuperscript{21} Hence, Australia does share economic and security concerns with the region, and any cooperative measures should be embarked upon in terms of equal partnership.

Second, the upward trend in weapons acquisitions in the region should be viewed in the context of a genuine need to modernise equipment which, in some cases, dates back to the 1950s. Since the outlook is for continued economic growth, this process of modernisation is likely to continue. The trend will be to nations developing their own defence industries, with joint ventures and technology transfer becoming the norm. Cooperative development projects by regional nations could see considerable improvements in local industries, which will, in turn, lead to closer cooperation between defence and the military.\textsuperscript{22} Hence, not only should the ADF consider the military dimension of closer regional cooperation, it should also consider the closer involvement of Australian defence industries.

\textsuperscript{20} \textit{Ibid}, pp. 2-3.


\textsuperscript{22} See Razak Baginda, 'The Defence Forces of the ASEAN States', in \textit{Armada International}, No 2, Apr/May 94, p. 56.
Modernisation of ASEAN Air Forces

As the ASEAN countries modernise their air power capabilities, there will be increasing scope for closer cooperation between them and Australia and New Zealand, especially in terms of exercises. Brunei has indicated it will order 16 Hawk Mk.100 advanced trainers and three CN-235 maritime patrol aircraft, the latter from Indonesia. Indonesia is likely to have 32 CN-235 aircraft operating as military transports and maritime patrol aircraft by the year 2000. These will complement the existing Boeing 737-200s, C-130MPs and GAF Nomads. A total of 54 F-16s should be operating by 2000, some armed with the anti-shipping Penguin missile. Indonesia already has 12 F-16s, acquired in the late 1980s. Similarly, some 54 Hawks could be operating by the end of the decade, replacing the A-4s.

Malaysia has ordered 18 MiG-29s23 and 8 F/A-18Ds, and is likely to acquire up to 28 BAe Hawk Mk.200 air defence/ground attack aircraft (with the Hawks replacing the A-4s). Five to eight Mi-35 helicopters may also be acquired. PC-9 trainers may be procured to replace the existing PC-7s. Four recently-acquired Beech Super King Air B200Ts currently provide coastal surveillance. An army aviation corps is also likely to be established to support units operating in Sarawak and other remote jungle areas (such as the Thai-Malaysian border), as well as on disputed islands in the South China Sea. A Martello radar defence system is also likely to be in operation by 1995, with fixed bases at Bukit Puteri (Terengganu) and Bukit Ibam (Pahang), and a mobile base at Labuan (Sabah).

The Philippines is likely to acquire more light, armed helicopters, Siai-Marchetti S.211 trainer/light attack aircraft and OV-10 Broncos. There is also speculation that the Philippines may acquire six to eight F-5A/B

23 The 18 operational MiG-29s include 16 MiG-29S single-seat versions and two twin-seat versions. The aircraft may be fitted for in-flight refuelling, and will probably have improved engine supportability, avionics and radar. Malaysia will also acquire a further two aircraft for use in technical training. See Jane's Defence Weekly, 18 June 1994, p. 14.
aircraft from South Korea, for use as interim trainers (until more advanced-trainers are acquired); and that 18 Kfir fighters may be obtained from Israel and a squadron of 18 L-39ZE strike/trainers from the Czech Republic.\textsuperscript{24}

Singapore's strong air power capability, which includes airborne early warning aircraft and remotely piloted vehicles, will grow stronger. Eighteen additional F-16s will be acquired,\textsuperscript{25} the A-4s have been upgraded substantially, an F-5 upgrade package is being developed, and laser targeting pods for the F-16s are also under development. As well, Singapore maintains AEW and RPV capabilities, with the E-2C Hawkeye and the Israeli Malat Scout, respectively.

Thailand is seeking 18 additional F-16s (for a total of 36) and has ordered 20 PC-9s. Four new C-130s were bought in 1993, and more are likely, as are medium transport aircraft such as the C-222. Four E-2Cs have been ordered for delivery this year. The Navy has under construction a 15,000 ton helicopter carrier and has six Sea King Mk.42s on order. It is also looking for US Navy A-7E Corsairs and possibly US Marine Corps AV-8B Harriers. The Army too is expanding its helicopters, seeking some 100 armed UH-1H types, with the likelihood of 20 Bell 212s as well. Thailand is modernising its sophisticated fully-automated, centrally-controlled IADS over central Thailand, which may be expanded to cover northern and southern Thailand as well.\textsuperscript{26}

Increasingly, all air forces in the region will look to use simulators to maintain aircrew training levels, while reducing costs. By the turn of the

\textsuperscript{24} Jane's Defence Weekly, 18 June 1994, p. 17.


\textsuperscript{26} Unless indicated otherwise, the figures in this section have been compiled from Ansley, p. 4 and P. Lewis Young 'Looking Outward: Southeast Asian Air Forces Gear Up For External Threats', in Armed Forces Journal International, February 1994, pp. 26-28.
century, air exercises will be conducted in an electronic warfare environment, increasingly in a combined and joint setting, and force development emphasis will be on improved air- and ground-based radars, support equipment, and other systems designed to enhance the capabilities of combat units.\textsuperscript{27}

Professor Des Ball has argued that 'there is a significant degree of consistency in the acquisition programs'.\textsuperscript{28} For instance, nations are concentrating on:\textsuperscript{29}

\begin{itemize}
  \item national C\textsuperscript{3} systems,
  \item national intelligence systems (both strategic and tactical),
  \item multi-role fighters for air-to-air and maritime attack roles,
  \item anti-ship missiles,
  \item modern surface combatants,
  \item submarines,
  \item electronic warfare systems, and
  \item rapid deployment forces.
\end{itemize}

\textsuperscript{27} See also P. Lewis Young in Armed Forces Journal International, February 1994, pp. 26-28.


\textsuperscript{29} ibid.
Peace Operations

In a political sense, there will be pressure on the RAAF and other regional air forces to examine their potential for peacekeeping/peace enforcement roles in the near future, and in this the notion of graduated use of air power has some utility (e.g. surveillance, reconnaissance, deployment, airspace restrictions, offensive probes, electronic countermeasures, precision strike).

Should the military circumstances in a peacekeeping area of operations deteriorate rapidly, the responsiveness of air power to provide air defence over surface forces or to prosecute precision air-to-ground strikes could be called upon. Depending on the circumstances, air forces could be asked to provide a wide range of activities to peacekeeping. In terms of traditional flying operations the air forces may have to provide:

- enforcement of no-fly zones;
- visual identification of transgressors of ceasefire or other peace agreements;
- precision strikes against weapons stockpiles or command, control and communications nodes of warring factions (including against targets that could affect friendly ground forces);

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30 ADF doctrine on peace support operations has been released recently in a peacekeeping pamphlet, which will be formalised as Chapter 35 of ADFP1. Just prior to publication of these Darwin Workshop proceedings the editors were informed that the ADF would adopt the term 'Peace Operations'.


• airlift, reconnaissance and surveillance for disaster relief (firefighting, environmental disasters) or for humanitarian assistance (especially famine relief and refugee evacuation);

• tactical airlift and reconnaissance for peacekeeping forces (possibly of other participants);

• airborne command post or liaison platform;

• airlift and surveillance to assist ground forces in border enforcement operations and in combating civil disorder;

• surveillance and reconnaissance in maritime observation operations (especially in enforcing economic embargoes);

• survey (aerial photography);

• Search and Rescue; and

• operational logistics support, especially in terms of deployable base support units, telecommunications units, airfield defence guards, military police and police dogs, and mobile air transport units. In the case of RAAF deployments, integrated logistics support (including maintenance, engineering and supply) would have to be deployed as well.

CONCLUSION

The Australian government's view is very much towards increased regional cooperation. Such cooperation cannot be on Australia's terms only, but must be in terms of mutual partnerships. For the time being, such partnerships will likely be on bilateral bases. As regional nations
determine that the pace of cooperation needs to be accelerated, Australia should be in a position to move ahead with those views.

While the Australian Navy, Army and the RAAF have been engaged in regional cooperation for many years, the focus has changed in recent times. There is now more involvement, at different levels, for longer periods, of greater intensity and openness, and that is likely to continue, possibly at a growing rate, and is likely to involve local defence industries more and more.

The benign nature of the region's current strategic environment should not obscure the fact that there are several issues that could lead to conflict, and these need to be managed carefully. But they need to be managed in a cooperative sense, not with one nation trying to force a solution or force the adoption of its values.

Force modernisation of ASEAN air forces should not be seen by Australia or New Zealand as threatening, but as an opportunity for closer and more meaningful cooperation and interaction of the various military forces. In our case, we need to focus on the air forces, and determine what form that cooperation might take in the future. It may well be that the first test of that cooperation will be in peace operations.
DISCUSSION

The UK role in FPDA was discussed at length. Of those FPDA countries represented, the general consensus was that the group would like to see the UK remain involved as they are still influential in the region and have shown commitment. The UK commitment could however, be less after the return of Hong Kong in 1997.

Regional cooperation activities of the various Force Element Groups were discussed. Air Lift Group activities include: Exercise SHORTRAUL after SWIFT EAGLE, BULLSEYE which will be in New Zealand next year, NIGHT PANTHER in Thailand, a Special Forces exercise. Maritime Patrol Group just completed an AUSINO exercise and while this was a small activity compared to others it was of significant value. P-3s currently support Malaysia's patrol boat activities where they are constantly engaged in maritime surveillance and surface plotting.

It was important for regional members to understand each other's capabilities. The lack of knowledge and the disparity in capabilities has been a major barrier to cooperation in the past. Having aircrew in each other's aircraft helps to overcome these barriers and already MPG have developed Standard Operating Procedures for Nomad and Orion cooperative work and transferred real time intelligence to the patrol boats. Clearly, these small steps could eventually lead to greater levels of cooperation.
CLOSURE

Presented By Group Captain Gary Waters
Director of the RAAF Air Power Studies Centre
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Thank you one and all, for making this such a successful workshop - it certainly bears testimony to the continuing sense of common regional identity and cooperation which has been evident in dealings among our regional air, naval and military forces over the past few years. I would like to praise you all for contributing so willingly and so openly to the workshop. Of particular note have been your individual country presentations on regional air power cooperation. The papers presented have been substantial contributions and provided the impetus for our frank discussions. The papers from IP Division, Navy and Army also provided balance as well as adding a broader perspective to our discussions. An operational flavour has been provided through discussion on the recently concluded PITCH BLACK Exercise, and on recent airlift and maritime regional cooperation activities. In addition, we have covered the concept of operational support, and received an overview of air law and the law of armed conflict.

The RAAF field experts have brought their expertise to the discussion as well as their knowledge of recent RAAF activities. The Canberra participants have provided guidance on current Defence and RAAF policy, developments in air power doctrine, force development, developments in air campaign planning and recent initiatives in regional activities. When coupled with the presentations from our regional guests this expertise has provided the catalyst for a broad and wide ranging interchange of views on the role of air forces in contributing to regional peace through cooperation.
This cooperation can cover the areas of combined training, exchange of information and expertise on technology and logistic support, as well as increased exercise opportunities. One of the points made was that such cooperation should be at the pace set by individual nations and should not be dictated by Australia. As a general rule, bi-lateral cooperation is viewed more favourably than multi-lateral arrangements, although a continued commitment to FPDA in its present form is considered desirable.

While high level visits are important, because they provide forums where combined activities can be endorsed, our general perception is that activities at the lower levels would lead to greater cooperation. We have identified a number of activities in this vein, including aircrew exchanges, more sophisticated exercises, incorporation of operational level planning and logistic support for common equipments. All of these we regard as possible, provided trust is established in the first place. Collectively, we have agreed that this workshop is akin to a second track mechanism which contributes to the trust building process.

The role of the US in the region has been discussed by a number of speakers. We received an outline of Australia’s alliance with the US, as well as an update on the state of New Zealand-US military relations. All speakers see the US presence as an important stabiliser in the region. While there are a number of potential flash points in the region, we have each commented that our respective nations have no discernible threat and recent acquisitions are designed to bring military forces up to date so they can play their legitimate role in safeguarding national interests. In addition, these more modern capabilities provide further opportunities to strengthen regional resilience as well as exercise and interact with regional neighbours.
This workshop has provided opportunities for informal discussion on matters of common interest and a number of proposals have been made. The information exchanged, proposals made and friendships built are the intangible benefits of the CAS workshop. Indeed, these benefits have the potential to outweigh the significant tangible success of the workshop. I thank our visitors for expressing their gratitude to the RAAF for taking this lead and creating the chance for regional air power cooperation to develop. While a number of the RAAF officers were present last year the majority are participating for the first time and thus have made new contacts and been exposed to the ideas of regional air forces working in a cooperative environment. Given the success of the workshop and your whole-hearted endorsement, I will be recommending to CAS that we hold another workshop in 1995.
In August 1993, the RAAF convened a milestone conference in Darwin with the object of discussing air power from the perspective of cooperation for the preservation of security for the Asia–Pacific region. Conducted under the title of the 'Regional Air Power Workshop', the forum included participants from senior levels of the regional air forces, the ADF and Department of Defence. It provided a forum not only for intellectual exchange, but also improved communication on the professional and personal levels. This workshop was an important step in encouraging further development in regional cooperation.

While the previous theme focussed on the way the RAAF conducts its business and all speakers were from the RAAF, in 1994, the 'Regional Air Power Workshop' moved towards a far different theme, where the then CAS, Air Marshal Grathon, invited each of the Air Forces to present their views. In addition, International Policy Division, the Australian Army and the Royal Australian Navy perspectives were also presented.

Building upon the success of the first workshop, this, the second 'Regional Air Power Workshop', built upon the framework established in 1993. Significantly, five international speakers presented their country’s view of regional defence cooperation and presented stepping stones for future cooperative ventures.

This publication is an account of the proceedings of the workshop. It is intended as a record for participants as well as being a basis for further developments in similar forums in future years.