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**AIRMEN, AIR DEFENCE AND THE FUTURE: A CASE
FOR NEW EMPLOYMENT STRUCTURES IN THE
RAAF**

By

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About the Author

The ...

INTRODUCTION

The defence organisation must ensure that the talents of all members are optimally utilised and that employment and advancement will be determined strictly upon the abilities of individuals to perform the tasks required.

Defending Australia, 1994 Defence White Paper

The development of appropriate employment structures and the optimisation of technology and personnel within the ADF has, in recent times, become one of the most prominent issues to be addressed by leaders of the Defence organisation. While the concept of considering personnel to be valuable assets is widely endorsed, there is a common perception that this is, as yet, little more than an academic exercise. During a series of presentations to RAAF personnel in October 1998, the Chief of Air Force, Air Marshal E.J. McCormack, supported this assertion and expressed his own concerns that the simple acknowledgment that personnel are of primary importance would continue to be regarded as purely intellectual rhetoric unless supported by action. This action must begin with the development of employment structures that accommodate far greater levels of personnel utilisation, and allows a better application of the skills and knowledge available to the Air Force through its personnel resources.¹

The ADF is currently undergoing an unprecedented level of reduction and reorganisation. The pressing need for change, driven by demands for greater efficiencies, the pressures of an informed and egalitarian society, increasing

educational standards, lifestyle expectations, perceptions of service and, not least, the changing nature of military technology, are recognised. However, this knowledge must precipitate fundamental changes to the way in which military organisations, particularly Air Forces, do business, to avoid the risk of compromising operational integrity. This is because an Air Force is not simply a collection of aircraft and weapons systems. An Air Force is a human organisation.

The RAAF will succeed or fail in its stated objectives because of the quality of its personnel. Their training, motivation, morale and professionalism are indicative of the organisation's ability to fight and to win. This assertion is borne out in the latest version of *The Air Power Manual*, which lists professional mastery as the most important priority for the successful application of air power.² But professional mastery cannot be achieved by a machine. It is a human quality.

Background

This paper has been developed as a result of the 1997 CAF Airman Fellowship. That study, titled *In the Dark: the Future Role of Airmen in Air Defence*, addressed these very important issues of appropriate utilisation of personnel, structural relevance and the need to better integrate personnel and technology in the technologically challenging operational environments of the next millennium. The subject of the 1997

¹ CAF Presentations to RAAF Personnel in the Canberra Area, October 1998.

² *The Air Power Manual*, 3rd Edition, Air Power Studies Centre, Canberra, 1998, pp 5-6.

Airman Fellowship has also been included as a case study to support one of the key issues on the agenda of the CAF's 1998 Strategic Planning Conference.

The basic premise of this paper is to establish a relationship between the proposals outlined in the 1997 Airman Fellowship, and the need for the RAAF to review and improve its workforce structures to produce clear and substantial increases in effectiveness while lowering costs. In this way, the validity and impact of these proposals may be assessed from a broader perspective. This study also supports the assertion that current employment structures must be changed to exploit the changing characteristics of the workforce so that improvements in performance can be realised.

This proposal clearly identifies the need to change the structure in order to accommodate higher levels of performance and efficiencies with a reduced personnel resource pool.

Another important consideration is the impact that the current program of technological expansion and acquisition within the air defence environment will have upon personnel structures. Other influential factors include the outcomes and directives arising from both the Defence Reform Program (DRP) and the Defence Efficiency Review (DER). Additionally, the positive experiences gained through previous initiatives and restructures within the RAAF, such as the technical trades restructure and quality management programs, have also provided an impetus to seek more efficient employment practices.

Environment and Structure

To better understand the proposals outlined in this paper, a brief description of the operational environment and employment structures within the ADF Air Defence System (AADS) is appropriate. The current AADS organisation is the contemporary manifestation of the Australian air warning radar organisation that was originally developed shortly before World War II. While the technologies and capabilities of that war-time radar network have evolved significantly with time, the primary focus of the operational environment remains air and electronic surveillance. The other primary function of the organisation, developed as an off shoot of radar technology, is aircraft control.

The training and employment of personnel within the AADS was developed, and has evolved, in line with the requirement to perform the two operational functions of surveillance and control. The two operative specialisations employed to perform these tasks within the AADS are the Air Surveillance Operator (ASOP) mustering and the Air Defence Controller (ADCON) category.

While technology and capabilities have improved since the first radar organisation was established, the employment structure within which AADS operational personnel function has changed little. Essentially, air surveillance personnel are still employed as non-commissioned airmen, while air defence controllers are commissioned officers.

This structure perpetuates a demarcation of functions upon the basis of rank that was developed in the early 1960s. This was a period of unprecedented technological

growth for the RAAF. The purchase of the supersonic Mirage fighter aircraft and new radar systems were a significant technological leap for an Air Force that was, at that time, still using radars and aircraft developed in the late 1940s.

During that period, the RAAF was hard-pressed to attract suitably qualified personnel to operate this new equipment. One measure implemented to induce high calibre personnel to the Air Force was the creation of the Air Defence Control Officer category. This strategy asserted that the career benefits of commissioning as an officer in the RAAF would compensate for the lower comparative salaries then available in the Australian services. While this strategy was appropriate for that particular circumstance, the commissioned status of air defence controllers has become a permanent fixture of the operational environment. As air surveillance personnel have remained a non-commissioned specialisation, the situation now exists where the two primary functions of the AADS surveillance and control, are demarcated by rank.

The validity of this current demarcation of function on the basis of rank should be reconsidered. Particularly, the question of how the personnel and skills available to the AADS may best be optimised should be answered. This need for greater efficiencies and a more effective utilisation of personnel within a technologically complex environment, has assumed an even greater urgency with the impact of programs such as the Defence Reform Program and the Defence Efficiency Review.

New Methods for a New Organisation

With the recent establishment of the Surveillance and Control Group, the RAAF has introduced a 'new' organisation with a unique set of existing and projected capabilities for its warfighting repertoire. Central to the ongoing development of this new capability area will be the personnel currently employed, and those targeted for employment, within the AADS. This includes both officers and airmen. While the acquisition of technology to meet the demands of RAAF and ADF surveillance requirements is currently proceeding more or less according to plan, there are a number of options available for the development of the operator resources required for this organisation that have, as yet, not been considered.

Comparisons and Validation

Comparative assessments made between the air surveillance operator mustering and the air defence controller category indicate a high level of commonality in training, operational competencies, post-graduate development, operational employment, aptitude and educational qualifications. This commonality and duplication of employment are at odds with the current employment structure within the AADS, which demarcates the functions of aircraft control and air surveillance through a rank-based dichotomy. This employment rationale is maintained despite the extensive amount of data available to support a more flexible and practical approach. This data includes the following facts:

- a. Air surveillance operators have the capability to successfully undertake controller training, as evidenced when the competencies of the air defence controller category and the air surveillance operator mustering are compared.

- b. The operational environment within which both specialisations function is common, and is reflected in the near identical post-graduate training programs for AADS operative personnel.
- c. Air Surveillance Operator SNCOs and Air Defence Junior Officers currently have greater than 60 per cent employment commonality, and compete for the same supervisory and management development opportunities.
- d. Sixty-five per cent of air surveillance operator graduates have attained the same level of educational qualification as air defence officer graduates, and in some individual cases those educational standards are far higher.³

Precedent

A number of precedents exist outside of the RAAF where enlisted personnel perform aircraft control tasks. A review of aircraft controller employment within the RAF, USAF, US Navy, and the other services of the ADF indicates that all of these services currently employ, or have recently employed, non-commissioned personnel as aircraft controllers. These precedents illustrate the practicality and efficacy of this employment option. The experience of the RAN is significantly relevant. Currently, the RAN employs non-commissioned officers, equivalent to RAAF corporals, as anti-submarine aircraft controllers. Recently the RAN has taken the decision to employ senior non-commissioned officer fighter aircraft controllers.

These Navy personnel will be drawn from the combat systems operator category, the RAN equivalent of the air surveillance operator mustering, and it is anticipated that they will be trained by the RAAF within the AADS. This arrangement with the Navy will see air surveillance operators supporting the air defence controller training of their RAN counterparts, but denied similar opportunities to undertake that training themselves. On this basis alone, there is a need to reconsider the employment of air surveillance operators as aircraft controllers within the RAAF.

The RAF

While these precedents provide qualitative evidence of the viability and effectiveness of employing non-commissioned personnel as aircraft controllers, it is the motivation behind the development of these employment strategies that has a particular significance to the RAAF's current circumstances. This is especially true of the RAF. The RAF air defence environment was the organisational model upon which the wartime Australian radar organisation was based. In many ways, the current environment still exhibits that structural and organisational ancestry.

Developments within the RAF air defence environment, however, have meant a substantial departure from the traditional employment practices that might be

³ DI (AF) AAP 2341.101-M, *Occupational Specifications and Skills Assessments, Air Surveillance Occupation Group*, DI (AF) AAP 6800.001, *Classification of RAAF Occupations – Officers – Air Defence Category, Average Educational Qualifications for Airmen – ASOPs (PAF) for the period 1/1/89 to 17/3/97, Review of Air Defence Procedures and Personnel Practices, Occupational and Training Analysis Report: Air Defence Officers, Occupational and Training Analysis Report: Air Surveillance Operators.*

expected to exist in an Air Force that is commonly perceived to be less egalitarian in its ethos than the RAAF. While the RAAF employs only commissioned officers as fighter aircraft controllers, the RAF has long had a non-commissioned aircraft controller program in place.

Today the RAF relies heavily upon its non-commissioned fighter controllers as the mainstay of the RAF's aircraft control capability. This situation developed because the RAF air defence environment, like the AADS, was faced with a vigorous program of capability upgrade and equipment acquisition, including Airborne Early Warning aircraft. It was apparent that the number of air defence officers available to operate these new capabilities was insufficient. Interestingly, the first option assessed by the RAF was not an expansion of the air defence officer category, but a more practical utilisation of the skills and capabilities already extant within the RAF Air Surveillance Operator mustering. As a result, SNCO air surveillance operators are now commonly employed as Airborne Early Warning mission crew and fighter controllers.

This 'in-house' option was considered for a number of important and practical reasons. Firstly, the long-term costs incurred by training and employing SNCOs would be lower. Secondly, the career focus of SNCO controllers would be operational whereas officers were developed to progress through the managerial structure of the RAF Air Defence Environment. Also, the RAF considered that the employment of air surveillance operators in a wider range of operational functions would provide air surveillance operators with career diversity, and the RAF Air Defence environment with a more diverse workforce that could be employed in a variety of roles at short notice. This would also offset the shortfalls in officer recruitment.⁴ Finally, it was anticipated that SNCO controllers would provide a stable and continuous level of expertise as aircraft controllers. These considerations have been validated operationally.⁵ This is supported by the reports of RAAF air defence personnel who have served, and are still currently serving, with the RAF air defence organisation as part of an ongoing exchange program.⁶ The practicality of this strategy must not be lost on the RAAF where, in the current efficiency driven climate, any option that produces enhancement of capabilities and reductions in numbers of personnel is preferred.

Another recent innovation within the RAF air defence environment concerns the commissioning of senior non-commissioned officer controllers. Those non-commissioned controllers who attain the rank of warrant officer now have the opportunity to be commissioned in the air defence branch as flight lieutenants without any requirement to attend officer training school. They simply exchange warrants for commissions.⁷ In developing this program, the RAF has removed a major disincentive to personnel considering commissioning from the ranks and is taking advantage of the professional abilities developed by experienced senior non-commissioned officers. The major benefit to the RAF air defence organisation through the development of a

⁴ Details provided by Sergeant D. O'Connor, after an exchange tour with RAF Air Defence and AEW Squadrons during *Longlook 98*.

⁵ Comments by Squadron Leader Willmshurst-Smith, RAF, Executive Officer 114MCRU, 25-27 March 1997.

⁶ E-mail from Flight Lieutenant M. Cowell (RAAF), 8 Squadron RAF, and Squadron Leader N. Dewar (RAAF) former exchange officer with RAF Sentry Squadron, dated 6 November 1998.

⁷ Information provided by Squadron Leader N. Dewar, 6 November 1998.

‘seamless’ career program is a more efficient utilisation of competencies, knowledge and experience across a broader range of operational functions.

USAF and US Navy

Non-commissioned aircraft controller programs within other organisations such as the USAF and US Navy are proving equally effective and practical. Reports indicate that the enlisted controller F/A-18 tactics program with the US Navy is at least as well advanced as the programs currently in place in the AADS. This program is run entirely by non-commissioned officers.⁸ The USAF employs enlisted airmen as both fighter aircraft controllers and air traffic controllers. The effectiveness of this program can be appreciated in the scale and extent of employment available to enlisted personnel in these areas. Aircraft controllers in the USAF are predominantly non-commissioned personnel.⁹

The experience of the other services of the ADF and overseas Air Forces highlights the inconsistency of current RAAF policies that restricts employment as aircraft controllers to commissioned officers.

The Case for Tradition

Despite being recommended in the 1992 Officer Corps Structure Review,¹⁰ the employment of airmen as air defence controllers in the RAAF has not been seriously considered or supported. In rejecting the recommendations of the OCS Review and to ensure that this demarcation of functions persists, some traditional arguments are often put forward. One such argument suggested that the advanced technology utilised in the performance of the aircraft control function has a level of complexity that requires a standard of competence and ability not extant within the non-commissioned ranks. Another argument infers that aircraft controllers must be commissioned to facilitate the award of reasonably competitive rates of pay and allowances. Yet another argument insists that the development of a non-commissioned aircraft controller capability will restrict the development of commissioned aircraft controllers. One line of reasoning actually contends that because aircraft controllers have to interface with pilots, they must retain a commissioned status.¹¹ These arguments can be assessed individually.

Technology and Competence

There is no disputing the fact that the technology utilised in the conduct of modern air warfare is extremely capable with a proportionate level of complexity in its operation and maintenance. However, any suggestion that the skills and abilities required to operate that technology are exclusive to commissioned officers is misguided. Such a suggestion is contrary to the nature of employment within the RAAF, and contradicts

⁸ Reported by Squadron Leader D. Eggins after an exchange tour with the US Navy.

⁹ USAF, Airman Specialty Codes (AFSCs), references AFVA 36-212, dated 30 April 1998. Also AFMAN 36-2108 *Airman Classification Structure Chart*, effective 30 October 1997, Command Control Systems Operations Enlisted Specialisations and Aircrew Operations Enlisted Specialisations.

¹⁰ *Report of the RAAF Officer Corps Structure Review*, 1992, Chapter 8, Annex A, pp 8-18, 8-19.

¹¹ 41WG 1206/3/P3 (20), *Report of the Officer Corps Restructure Review – Air Defence Category*, dated 25 May 1992, pp 1-3.

the Air Force's dependence upon highly educated and skilled personnel at all levels to operate, maintain and repair technologically advanced equipment. This is particularly true in the air defence environment where both officers and airmen are trained and employed in the same environment using exactly the same equipment.

Remuneration

The argument to retain commissioned rank for the purposes of remuneration was valid when the categories of air defence controller and air traffic controller were established nearly four decades ago. In effect, these two 'new' specialisations, along with the airborne electronics analyst category, were introduced to induce suitably educated people into the RAAF at a time when competition for appropriately qualified personnel was high. Officers were paid more than non-commissioned personnel and although the salaries were not as high as those available in the private sector, the career development opportunities available to RAAF officers were considered a compensatory benefit.

This employment strategy ensured that the RAAF was able to recruit a cadre of personnel capable of operating complex equipment and new technological capabilities. The recruitment process developed at that time was, as stated, appropriate for the social, educational, and economic environment of the day. However, the changing nature of the economy, the impact of market influences upon the job market, and a continuing increase in general education standards now provides the RAAF with a greater pool of educated and capable applicants. Why then, does the requirement for aircraft controllers to hold a commission continue to be upheld? This is a particularly pertinent question when considering that the air defence category, a specialisation with a purely military focus, is not subject to attrition in response to the demands of a competing civil market, as is the case with specialisations such as the air traffic control or pilot categories.

The suggestion that the air defence category must remain an exclusively commissioned specialisation purely to satisfy remuneration considerations is also challenged by recent and ongoing changes to ADF pay structures. Intended ADF salary and award reforms include the development of a three tiered pay structure within which remuneration will be based upon a number of elements. These elements include individual skills, range of responsibilities, attraction and retention requirements, and a simplified allowance structure for specialist competencies. The three-tiered structure will consist of: a Trades-Based group (from aircraftman to sergeant), a Command and Management Group (from flight sergeant to wing commander), and a Higher Command and Management Group (from group captain to air vice-marshal). This system focuses primarily on the possession of skills and competencies, with rank being a secondary consideration. As such, the new structure promises sufficient flexibility to provide remuneration in line with an individual's skills and therefore will allow the RAAF to transcend the limitations of an award system based predominantly upon rank.¹²

¹² *The Key: Defence Personnel Executive Newsletter*, Number 1, August 1997, p 2.

Career and Capability Development

The suggestion that the development of a non-commissioned aircraft controller capability within the RAAF will impinge upon the development of commissioned aircraft controllers is inconsistent with the evidence of existing programs in other military organisations. Further this perception fails to appreciate the far more damaging consequences of rank stratification and promotion stagnation within an all officer structure which was evident in the air traffic controller category in recent times.

The need for leadership and managerial development in the RAAF is undeniable. All personnel recruited as officers are promised opportunities to develop managerial and leadership skills. This is an implicit undertaking in the terms of employment outlined in *The Classification of RAAF Occupations – Officers (DI-AF 6800.001)*. However, satisfying these expectations in an employment category with a limited number of executive positions will be a very difficult, if not impossible, task. This will be even more difficult in the RAAF post-Defence Reform Program, where accommodating the career prospects of officers in non-flying categories is considered to be a very real possibility.¹³

Logic suggests that the utilisation of senior non-commissioned officers as aircraft controllers will enhance the development of overall aircraft controller capability. While this will reduce the requirement for commissioned controllers, it will not negate it. Those commissioned controllers that are recruited and employed in the RAAF will be afforded greater career flexibility and opportunities to advance into limited executive positions, thereby reducing the probability of career stagnation.

Just Between Us, Officer to Officer

The final claim, that the maintenance of commissioned status is a pre-requisite for interfacing with pilots, is absurd. Is it a question of competence? No, as stated earlier, all officers and airmen in the air defence organisation operate the same equipment in the same environment. The need for competency, at all levels, is driven by the requirements of the technology currently used by the RAAF, not the rank structure. Indeed, is it a question of rank or authority? No, if this were the case, all officers employed as aircraft controllers would be required to hold an equivalent or superior rank to any pilot operating within a controlled environment.

This claim fails completely to appreciate the reality of contemporary air operations. In the course of normal operations, RAAF aircrews accept guidance and information from a variety of aircraft control services that may commonly be provided by non-commissioned personnel from other branches of the ADF, or by civilians who have no rank equivalence. The same argument must then be applied to all the other RAAF specialisations that interface with pilots. On the basis of this argument, all flight engineers, loadmasters, aircraft technicians, safety equipment specialists and many other personnel should be commissioned.

¹³ Stephens, Alan, 'Taking Care of Business: The RAAF and the Defence Reform Program', *Asia Pacific Defence Reporter*, October-November 1997, p 28.

Rank Versus Ability

In assessing the arguments against the employment of non-commissioned aircraft controllers, where does the question of rank override the requirement for competence or ability? When the current standards of non-commissioned personnel are considered in relation to the higher demands for performance and increased requirements for efficiencies, it emerges that the arguments against functional rationalisation are based upon traditional rather than logical grounds. This current demarcation of functions on the basis of rank cannot be upheld on the grounds of competence or abilities. Neither is this dichotomy supported by the employment practices of the other branches of the ADF or military organisations throughout the world.

The current aircraft control employment structure is based on traditional precedent rather than functional efficiency. In light of the current spate of reforms, reductions and demands for greater efficiencies, and considering the high standard of personnel now being recruited for service in the Air Force, it could be suggested that maintaining a dichotomy based upon rank has more to do with the perpetuation of traditional class based status, rather than the development of capability. This perception is not limited to the air defence environment.

Why Change?

While the scope and scale of the recommendations concerning traditional employment in this paper are limited to a specific operational area, the broader implications are evident. Future employment structures for all ADF members must consider the impact of changes in technology, social trends, improved education standards and increasing demands for performance with limited resources.

The need to develop such structures is particularly compelling in an organisation where the differentiation between officers and other ranks is becoming increasingly difficult to maintain.¹⁴ The standard of personnel and the quality of professional training available ensures that airmen can lead as well as follow and officers can follow as well as lead. This is particularly evident at the senior non-commissioned and junior commissioned officer level, where, in many cases, both groups compete for the same supervisory and managerial responsibilities.

The concepts of cross-traditional employment within the AADS operational environment also have the benefit of proven successes within the ADF and other military organisations. That they work is irrefutable. Further, these types of changes are achievable in the very near term. The implementation of a non-traditional employment structure within the AADS should be viewed as a very important and necessary first step, a precursor for the development of new and relevant employment structures within the RAAF.

The leaders of the RAAF are accepting the challenges of the next millennium. The recent CAF decision to reduce the officer corps by 20 per cent, and pass the tasks of

¹⁴ Cheeseman, Dr Graeme, 'Alternative Futures', *Testing the Limits: The Proceedings of a Conference Held By the Royal Australian Air Force in Canberra, March 1998*, Shaun Clarke (ed.), Air Power Studies Centre, Canberra 1998, p 75.

this group into the airman force is a significant and clearly demonstrable indication.¹⁵ This decision also illustrates the concern at senior levels over the perception amongst the non-commissioned ranks that the airman force is bearing a disproportionate amount of the DER/DRP burden. Again, this concern emphasises the criticality of optimising the employment of all personnel to ensure that capability and personnel are developed concurrently and productively, rather than separately and inefficiently. The need to develop the 'One Team Air Force' has never been more important.

What are the Advantages?

The effective utilisation of all of the RAAF's personnel resources is the key to capability development; this is the concept that will underpin the future development of the AADS, the RAAF and the ADF. In considering the cross-traditional employment of air surveillance operators the potential benefits must be assessed. The AADS will achieve improvements in efficiency and productivity and the development of a strong team environment. Additionally, a real reduction in operational manpower requirements will be achievable, as will cost efficiencies through the reduction in training duplication and separated training programs. There will be exponential improvements in personnel utilisation and retention and scope for greater operational capability. The potential outflow and impact of these benefits upon other capability areas cannot be understated.

Another significant but less discernible benefit of this proposal will be the positive affect upon morale within the air surveillance operator specialisation. Morale, as well as being one of the ADF's principles of war, has been identified as the single most important factor affecting all RAAF and ADF personnel throughout the change management programs of the last decade. While the air surveillance operator mustering is not affected by personnel reductions as much as some musterings in the RAAF, there are some significant morale issues that continue to plague the organisation. These problems are largely attributable to the lack of challenging employment opportunities, under utilisation of skills potential and, most recently, a demarcated approach to the acquisition of new capabilities such as AEW&C. These problems are part of the 'operator culture' and have been identified in a number of previous reviews. As the quality and capabilities of the personnel recruited into the mustering continues to improve, these problems are being exacerbated.¹⁶

Is There a Really a Problem?

The dilemma that exists within the developing AADS is twofold. Firstly, the AADS is committed to an aggressive program of equipment upgrade and capability acquisition. Capability development will depend upon the availability and commitment of suitably qualified personnel. The estimates for establishing an operational level of capability with the new equipment currently being acquired are largely predicated upon an expansion of the personnel base, particularly air defence controllers. However, current recruiting statistics and Directorate of Workforce Planning and Coordination

¹⁵ Chief of Air Force Advisory Committee Minutes of the Meeting Held at Canberra on 27 August 1998, Item 11, para c., Directive to DGPP-AF.

¹⁶ *Review of Air Defence Procedures and Personnel Practices*, April 1991, *Occupational Survey Report Air Surveillance Operators*, June 1993, Dr Leonie Ryder, *Work Related Attitudes of Air Surveillance Operators*, November 1990, *Number 41 Wing Review Team Report*, March 1991, and *ASOP Through 2000 Review* 1998.

projections indicate that the air defence controller manning levels required to achieve expected capability will not be attained at current rates of recruitment, training and separation.

Maintaining an adequate level of recruiting inertia is extremely problematic in the air defence controller category. In fact, in 1998 the recruiting shortfall was 25 per cent below target requirements, and, as yet, only a handful of applicants have been interviewed for placement on the air defence control officer courses scheduled for 1999.¹⁷ This shortfall can be attributed to a relatively high failure rate on the aptitude assessment. One, informal strategy to offset these shortfalls is to encourage members of the air surveillance operator mustering to apply for commissioning in the air defence category. This is an appropriate approach, given the similarities in training, employment, competencies and aptitudes, between the air surveillance operator mustering and the air defence controller category. However, while employment as an aircraft controller is well within the capabilities of most members of the mustering, and not without its professional appeal, the traditional barriers, difficulties and disincentives associated with commissioning from the ranks discourages many of those personnel targeted from considering this option.

The problems associated with attracting and retaining personnel, as detailed above, are significant. However, the AADS must also deal with the effects of poor morale and a damaging workplace culture that is primarily the result of employment structures that are not relevant to the calibre of personnel within the environment. These issues can be addressed with a single, simple strategy.

Within the AADS, the cross-traditional employment of airmen represents, at least, a partial solution to both of these problems. Employing air surveillance operators to perform aircraft control functions as part of career diversification and multi-skilling will allow the RAAF to significantly reduce the requirement for specialist aircraft controllers. Further, this employment opportunity will enhance the career opportunities available for members of the air surveillance operator mustering and will, as a result, act as a considerable inducement to remain with the organisation.

The employment of airmen as air defence controllers will also help to offset air defence officer recruiting shortfalls. Further, reducing the number of officers required as aircraft controllers will facilitate more flexible career development opportunities for those officers who are recruited and employed in the aircraft controller capacity. This will help to avert the possibility of career stagnation that was recently evident within the air traffic control category, for example. Additionally, the employment of both officers and airmen as aircraft control operatives will provide a broadly experienced and skilled resource pool from which the RAAF's future battlespace managers can be developed.

Air defence control in the RAAF is currently considered as an independent specialisation in that air defence officers are recruited to perform only a limited and focused range of tasks. Viewed from the perspective of workforce optimisation, maintaining a separate specialisation, purely to conduct a single function in a multi-

¹⁷ RAAF Recruiting Statistics – AEA, ASOP, AIRDEF, Defence Recruiting Organisation, 20 November 1998.

functional environment, is neither effective nor efficient. In reality, the aircraft control function is one of many functions undertaken by personnel in the AADS. Placed in this 'operational' context, air defence control can and should be considered as one of a number of competencies that are taught and performed within the air defence environment.

Conceivably, aircraft controller training for air surveillance operators could be conducted in much the same way as the training required for employment in Over-The-Horizon-Radar (OTHR) and Tactical Air Defence System (TADS) environments. Or, similarly, the same way that the training required to perform data link management and other operational functions are conducted, as post-graduate training, over and above their core competencies. Ideally, air surveillance operators trained as aircraft controllers would add the air defence control skill to their operational competencies, rather than committing themselves to a career centred on that one task. Aircraft control would be one of the operational competencies acquired through the course of multi-skilling and career development.

The resultant benefits of a program of cross-traditional employment and skill rationalisation will extend beyond the immediate AADS operational environment. The RAAF and the AADS will, as stated earlier, derive greater flexibility to develop capability, to optimise manning requirements and workforce utilisation, to mitigate against the problems associated with career development, realise greater training and cost efficiencies and solve recurrent morale problems at a minimal risk to the organisation.

Amalgamation and an Operational Trades Restructure

The concept of cross-traditional employment is not only appropriate between officers and airmen. The potential for employment across the barriers of non-commissioned specialisations is also a very important possibility. Indeed, a program of this type – the Technical Trades Restructure (TTR) - has already been implemented within the RAAF. The potential for the amalgamation of disparate but related operational specialisations under the auspices of the single surveillance organisation, in a program very similar to the TTR, is a concept that deserves consideration.

Essentially, this would be an Operational Trades Restructure (OTR). Initially, the OTR process would involve the integration/amalgamation of the air surveillance operator and airborne electronics analyst mustering. As part of the OTR, all personnel would be recruited and trained as surveillance operatives and then streamed into a range of operational specialisations within the RAAF electronic surveillance environment. Subsequent development of the OTR would involve the integration of the broader range of operational specialisations within the RAAF, and possibly the ADF.

An OTR system would support the development of a broad pool of operative resources within a structure that allows them to specialise or diversify their skills base in accordance with career aspirations, personal ambition and service requirements. Additionally, all personnel would be employable across the range of core functions within the various surveillance environments which will facilitate posting diversity. This will also provide the RAAF with the ability to generate operative resources for

specific capability areas as and when required from the common resource group with a minimum working up period.

Feasibility

To assess the feasibility of the OTR concept, a general comparison of the aptitude and employment standards,¹⁸ training requirements, and operational competencies of both the air surveillance operator and airborne electronics analyst mustering was conducted. The results of this comparative analysis illustrated the high level of commonality between the two mustering. While these mustering are currently separated by virtue of their specific surveillance environments, the relative complexities of both environments and their 'technical' competencies are similar.¹⁹

Further, the acquisition of 'generic' surveillance technologies and the duplication of common operational functions within each environment will provide opportunities to consolidate the training of both specialisations in a number of areas. Specifically, this consolidation will include common training in sensor system management, electronic warfare and tactical data systems. The long term implications of increasing technological commonality within the single surveillance force element group will provide scope for the integration of both mustering into a single electronic surveillance category.

The OTR concept should not be regarded as an attempt to advantage or increase the status of one group at the expense of another. This is a traditional mindset that will limit the development of personnel and operational capabilities. Rather, this program should be viewed as a necessary and practical option for providing those electronic surveillance personnel, with the opportunity to develop professionally, while satisfying the operational needs of a leaner more capable RAAF.

In the longer term, this program should be expanded to include the air defence, air traffic controller and other commissioned specialisations. This is a logical extension of the OTR concept that will become increasingly practical with the convergence of educational standards, operational competencies and technologies within the surveillance force element group. The development of multi-specialty employment categories will be an attractive and effective option for an ADF that has an ongoing obligation to reduce personnel numbers while increasing its capabilities and efficiency.

Optimise or Die

The optimal utilisation of the skills available to the RAAF and the ADF is no longer a conceptual option for the development of new capabilities. It is fast becoming an imperative simply to maintain current levels of capability. The development of larger,

¹⁸ Ryder, Dr Leonie, *Air Surveillance Operator Selection, The Relationship of Psychological Test Scores and Other Variables to Performance on ASOP Courses 27-3/95*, February 1996, and RAAF *Airborne Electronics Analyst Selection: The Relationship of Psychological Test Scores and Other Variables to Performance on AEA Course Nos. 1-1/91*, April 1992.

¹⁹ *Syllabus of Ground Training, Jindalee Radar Operator*, Graduation Requirements, Course Terminal Objectives, *Syllabus of Training AEAP3C Initial Conversion Course*, AEAP3CINIT, Section 1, Graduation Requirements, Course Terminal Objectives, both dated 1997.

more expansive operational categories is a feasible and viable alternative to current employment strategies. Some personnel may feel a great deal of angst and frustration, threatened by the thought of their musterings or specialisations being restructured or amalgamated. Operational jobs and careers, unlike those in the support trades, are not being threatened. On the contrary, in the post DER/DRP environment, more is being asked of the operational specialisations. These additional demands for capability will be impossible to satisfy unless alternative solutions are considered.

The RAAF cannot afford the luxury of maintaining separate specialisations and musterings, with their separate training and career management structures, to operate in a single, albeit diverse and expansive, operational environment. While the need for specialist operative resources must be appreciated, overspecialisation in an Air Force that is committed to the reduction of its personnel base and the increase of efficiencies, should be avoided at all costs. The penalties accrued through too much overspecialisation include the establishment of critical dependencies within specific capability areas that are vital to the operational objectives of the RAAF. These dependencies then become weaknesses that can impede overall effectiveness.

Developing a Fighting Force

While the reorganisation of workforce structures within the RAAF must generate greater efficiencies, the changes to be considered must also satisfy the implicit obligation to maintain and develop warfighting capabilities. To this end, changes to current employment structures must support the development of a fighting force that is not only technically proficient and efficient, but also socially, culturally and morally relevant to the community it serves and for the tasks it is expected to perform.

Technology has changed the equipment, the capabilities and the expected functions of modern air forces and the roles of air power. Similarly, the nature of the conflicts and wars in which contemporary air forces are, and will be, expected to fight have changed through the influences of technology and societal development. The ADF and the RAAF particularly must champion the drive for efficiencies and the optimisation of resources at every level. Such is the reality of political demands and national expectations. The ADF is, by international standards, small but extremely capable and well equipped, adept at exploiting the capabilities of the weapons systems, platforms and technologies it possesses. To maintain a qualitative edge, the ADF must become equally adept and innovative in optimising the employment of its personnel to the benefit of all.

Considered in relation to long term cultural and structural change within the RAAF, the changes recommended for application within the AADS operational environment are relatively small and should be implemented as part of a much broader and far reaching strategy. While it is clear that a flexible employment structure is a desirable end state, such a dramatic reorganisation may only realistically be achieved through the progressive and successive implementation of incremental changes. This evolutionary rather than revolutionary approach is required because these changes must be cultural as well as organisational.

In many ways this process of change began with the establishment of new institutions and training programs such as the Australian Defence Force Academy (ADFA), the

Airman Education and Training Scheme (AETS), the Officer Education and Training Scheme (OETS) and the implementation of the TTR among others. While each of these programs is generally considered individually, the long term, cumulative effect upon the RAAF will be quite dramatic. Whether intentionally or otherwise, these programs are affecting the culture of the RAAF at all levels, and will continue to do so.

Developing Professional Mastery

As a result of these programs, the RAAF is training and producing smarter, more confident and capable personnel at all levels. These personnel are now assuming positions within the RAAF through which they are able to influence their workplaces, environments and the organisation. The training they receive provides them with the competencies required to identify their strengths and abilities, as well as those of their peers, and to apply their skills more effectively. The program of professional military education in place at OETS, AETS and ADFA, and supported by RAAF doctrine, ensures that all personnel at all levels are now able to develop a much broader appreciation of the Air Force, its roles, functions and objectives.

While this commitment to the ongoing development of leadership and management training and education programs is evident, the RAAF maintains two separate structures to manage its personnel – the Directorate of Personnel Airmen (DPA), and the Directorate of Personnel Officers – Air Force (DPO-AF). As a result, the situation exists where these two personnel organisations are duplicating the training required to produce individuals with common skill sets.

In a recent, progressive change, both the officer and airmen training and education programs have been brought together under the functional authority of RAAF College. But even with this change the management and leadership training of officers and airmen is still conducted separately. This is despite the basic leadership and managerial competencies of senior non-commissioned officers and junior commissioned officers being similar. The extent of functional overlap at this level with its resultant potential for organisational disruption should be regarded as another reason to consider structural realignment. Nowhere is this overlap more evident than within the AADS where senior non-commissioned air surveillance operators perform over 60 per cent of the primary tasks identified for air defence officers in addition to the managerial and leadership functions common to both groups.²⁰

The similarities in training, the depth and extent of organisational knowledge, higher demands for performance and the expectation that personnel at all levels must accept increased responsibilities, makes differentiating the workforce on the basis of rank difficult. However, the current employment structure, and the demands of two separate personnel management entities, ensures that, in the workplace, individual functions, tasks and responsibilities are still, largely, apportioned according to rank. In effect, the Air Force is training and producing personnel to function in an environment that has yet to be realised.

²⁰ DI (AF) AAP 2341.101-M, *Occupational Specifications and Skills Assessments, Air Surveillance Occupation Group*, DI (AF) AAP 6800.001 *Classification of RAAF Occupations – Officers*, para 301-315.

As the number of these most recent graduates of the RAAF's training and education programs continues to grow and fill positions of responsibility, the drive to change the employment structure of the RAAF will similarly gather momentum. When this compelling internal desire for change is added to those external forces already exerting tremendous pressure to reorganise, change becomes even more imperative. If the structures within which personnel are employed fail to evolve in line with their changing workplace environment, any benefits derived through the professional development of the workforce may be ephemeral. In the worst possible scenario, levels of motivation, morale and personal commitment may drop. As a result, efficiencies may not be realised, and capabilities may be reduced or lost.

Conclusion

While the AADS operational environment and employment inconsistencies provide the background for the issues discussed in this paper, it is the applicability and relevance of these issues in a much broader context that is really being highlighted. These options for the rationalisation of employment commensurate with competence are valid no matter what the specific environment is, be it operational, engineering, administrative or logistic.

The question at the very heart of these issues concerns the capacity of existing structures and employment practices to support a modern, highly educated, highly skilled workforce. The boxes within which RAAF personnel once fitted so neatly, are no longer big enough. Is it simply a matter of creating bigger boxes, or is a completely new strategy required? Whatever decision is finally taken, it must be the right one, for in the air power business, it is too late to reorganise once the shooting starts.

The issues raised in this paper have also attempted to highlight the validity and the inevitability of structural change. In the 1994 Defence White Paper, it states that the ADF's approach to the use of service personnel must adapt in response to changes in our social and strategic circumstances. It was also suggested that this adaptation must involve significant organisational and cultural change if optimal efficiencies are to be gained.²¹ Subsequently, the leaders of the Defence organisation, and personnel at all levels, have accepted this ethos and have been compelled to implement reforms that, while difficult, are politically and economically necessary. Change will not only continue but will become a part of the service culture.

Embracing the changes that are on the horizon will not be easy or without risk. It will certainly be a challenge. In the short term some sacrifices may be necessary to ensure long term gains. The temptation to revert to traditional perceptions of organisation, structure and order will at times be great. However, the realisation of an innovative vision will require the implementation of innovative reform. The RAAF must be visionary in its outlook and innovative in its development. It simply cannot afford not to be. The consequences of failure are too great.

In closing, it is appropriate to reflect upon the handover ceremony that marked the final official duty of the previous CAF, Air Marshal L.B. Fisher, and the first official

²¹ *Defending Australia*, 1994 Defence White Paper, Australian Government Publishing Service, Canberra, 1994, p 58.

responsibility of the current CAF, Air Marshal E.J. McCormack. A poignant aspect of that ceremony was the presence of the most junior member of the Air Force, Aircraftman Recruit G.O. Roberts, with the two most senior members of the RAAF. Bringing these personnel together was a very apt and symbolic reminder that the RAAF is 'one team', separated by rank, but united in vision. Unity and commitment to a united vision must be the link that bonds all RAAF personnel and fosters professional mastery. The final arbiter of an individual's worth is not the rank displayed on sleeve or shoulder, but the commitment, competence and passion that they bring to the service. It is these qualities that must be nurtured and encouraged in an environment that has as great a commitment to the development of personnel, as it does to the development of technological capabilities.