Senior Officer Professional Development in the Australian Defence Force: Constant Study to Prepare

CATHY DOWNES
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SENIOR OFFICER
PROFESSIONAL DEVELOPMENT IN
THE AUSTRALIAN DEFENCE FORCE:
CONSTANT STUDY TO PREPARE*

Cathy Downes

* An officer...cannot learn his profession without constant study to prepare; especially for the higher ranks, because he then wants the knowledge and experience of others improved by his own - but when in a post of responsibility, he has no time to read, and if he comes to such a post with an empty skull, it is then too late to fill it.

Sir Charles Napier, 1844.

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ABSTRACT

For a number of years, a comparatively small, if at times intense, internal debate has been pursued in the Australian military profession as to the most effective, yet at the same time affordable, method of preparing officers for senior appointments. A great many of the tasks of senior officership have become more complex and more demanding. Many of the conditions under which these leadership functions must be performed are changing. Moreover, the evolving Australian defence strategy and developments in command arrangements of the Australian Defence Force (ADF) will in the future place senior officers in operational and strategic command of Australian forces and perhaps of allied formations, not as has previously been the case under the leadership of other allies.

This monograph seeks to set out the senior officer requirement for professional development. This objective is sought through an examination of the tasks of senior officership, and the forces of change which will influence the undertaking of those tasks; together these analyses form a dynamic concept of senior officership. This concept is then used as the foundation for the presentation and discussion of some eight options, including a model for a National Defence College of Australia which, singularly or in concert, may provide an appropriate and sensitive set of preparatory experiences for future ADF senior officers into the 21st Century.
Dr Cathy Downes is a Research Fellow (Department of Defence) in the Strategic and Defence Studies Centre, Research School of Pacific Studies of The Australian National University. Dr. Downes has held appointments as a John M. Olin Fellow at Harvard University's Centre for International Affairs and as a University Research Fellow at the University of Melbourne. Her major research interests include: Military Manpower and Personnel Management, Military Professionalism and Leadership, Defence Decision-Making and Officer Education and Training. Her publications include: Special Trust and Confidence: The Making of an Officer (London, Frank Cass, 1989); High Personnel Turnover: The Australian Defence Force is Not a Limited Liability Company (Canberra; The Australian National University, Strategic and Defence Studies Centre, 1988); with Desmond Ball (editors) Security and Defence - Global and Pacific Perspectives (Sydney, Allen & Unwin, in press, 1989), and Military Manpower - Military Effectiveness (London, MacMillan Press, forthcoming 1990). Dr. Downes has acted as a consultant for Headquarters Australian Defence Forces, and is a Fellow of the British 21st Century Trust and the Inter-University Seminar on Armed Forces and Society.
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Although the basic research for this monograph was conducted under an arrangement with Headquarters Australian Defence Force, the analysis and conclusions expressed herein remain those of the author and do not necessarily reflect the policies of the Minister for Defence, the Headquarters Australian Defence Force, or the Australian Department of Defence.
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PREFACE

Within the broader objectives of a period of research fieldwork in 1987, I was able to visit a number of officer education and training institutions and relevant directorates, and discuss with their staffs the issues of senior officer professional development. These visits included: the Higher Command and Staff Course of the British Army Staff College, Camberley, the Department of Air Warfare, Royal Air Force College, Cranwell, the Royal Naval College and Joint Defence Staff College, Greenwich, the Royal Military College of Science, Shrivenham, the École Militaire de Guerre, Paris, the National Defense University and Industrial College of the Armed Forces, Washington D.C., the Professional Officer Development Directorate of the Canadian National Defence Headquarters, responsible for the National Defence College of Canada, the RNZAF Staff and Command College, Whenuapai, and the US Army Command and General Staff College and School of Advanced Military Studies, Fort Leavenworth. These visits followed earlier ones to the US Air Force Air University, Maxwell Air Force Base, Montgomery, the US Army War College, Carlisle, and the US Naval War College, Newport.

In late 1987, I was invited by the then Director General of Training and Education Policy, Brigadier A. Hammett, to prepare a report on the requirements of senior officerhip and options for preparing future senior officers of the Australian Defence Forces (ADF). Over the course of research for the report, some 34 interviews were conducted with incumbents of the senior-most positions in the ADF. Discussions were also held with other senior officials of the Department of Defence and retired senior officers in Australia, the United States, New Zealand, Canada and the United Kingdom. The report was submitted to Headquarters, Australian Defence Forces in July 1988. Following review and comment in the Headquarters and Service Offices and visits to the Command and Staff College and Leadership Development School of the Israeli Defence Forces, Tel Aviv, the report has been refined and developed into this monograph.

Finally, although I dislike the insertion of caveats, I feel that it is necessary to raise one in the context of this monograph. Throughout
the text, the masculine form of address has been used. This does not reflect a lack of recognition of the changing level of participation of women in armed forces, but rather the fact that the current senior officer corps of the ADF is, almost in its entirety, male. However, if current trends continue and expand, this will not always be the case. Indeed, should the combat exemption be removed or sufficiently diluted, it is not an impossibility that women will assume the duties of senior command in the future. As there is little rational, if considerable emotive, argument as to whether the tasks of senior officership are gender specific, it is proposed that while the discussions in this monograph observe the realities of the contemporary situation, they are no less valid for an officer corps of the future which may have a different gender composition.

C.D.
Canberra, 1989.
INTRODUCTION

The Fates of Nations and Peoples

The military profession performs one of society's vital functions: the protection of society from external and internal threats to its physical security. To undertake this function, the professional group draws upon a generalised and systematic corpus of knowledge, skills and ethical precepts. The continued existence and status of the profession hinges on these two key elements. The consequences of failure or poor performance are immediate and far-reaching. There are few, if any, other groups in society whose activities hold the potential to bring down upon their fellow man unimagined levels of human and material destruction and devastation. Indeed, while perhaps necessarily dramatic, in war, and even in turbulent peace, the fates of nations and peoples can rest on the actions or inactions of members of the military profession. These characteristics explain and fuel the profession's commitment to the development and preparation of practitioners who are competent and effective in the performance of their professional duties. As Sir Harold Himsworth remarked:

In the professions, the standard of competence required to elicit public confidence is never ordinary. The needs to be met are too vital to survive the suspicion that the best has not been available.¹

These features also account for the predisposition of the profession to perpetuate, expand and improve the knowledge and skills base which is essential for the proficient performance of an increasing diversity of professional tasks.

For many professions, formal education and training experiences are limited primarily to the preparation of aspirants. Once qualified and recognised as such by the profession, the individual practitioner is expected to update his knowledge base and refine his skills voluntarily throughout his career. In contrast, education and training activities in the military profession have evolved to permeate

¹ Sir Harold Himsworth, "Change and Permanence in Education for Medicine" Lancet Number 2, 1953.
almost all levels of performance. This professional attribute has developed in response to the particular nature of the military task and the manner in which the military profession is organised to undertake that task. For example, the military skills and knowledge acquired to qualify for admission to the profession have a limited currency and relevance. Skill and knowledge requirements which are seen as essential to performance at one level of professional activity are only the prerequisites for the development of skills and knowledge needed to perform at a higher level. Because the military task is often performed infrequently and at irregular intervals, the military practitioner may spend most of his career service in preparation, rather than performance, of that task. Therefore, it is logical that a significant proportion of that preparatory activity should be given over to formal education and training experiences. Unlike most other professions, performance of the military task is a group enterprise and, structurally in order to perform it, the profession has evolved into a number of task specialities. Each speciality, within the broader whole, generates specific skill and knowledge bases which need to be acquired, either in part or whole, by the military practitioner. Finally, as already observed, the consequences of poor professional performance have proven such as to impel the profession to devote more resources and policies than in other professions and occupations to the preparation of practitioners throughout their professional careers.

While these reasons explain the greater commitment of the military profession to the preparation of its members, it is evident that the process of setting in place relevant education and training experiences is not as uncomplicated. Indeed, such programmes have only been set in place intermittently, often after a long and disputatious struggle between differing philosophies and views on the optimum method of preparation; between those practitioners who believe in the sufficiency of members acquiring professional competency through the osmotic transfer of knowledge and experience achieved by following the examples of others and on-the-job learning in a particular rank or task, and those members who believe that such methods are insufficient and inappropriate both for present and future practitioners in those ranks and tasks.

The rationale for preparatory experiences is at its most clearest and unequivocal for new entrants to the profession. Such experiences
are indispensable in transforming the civilian lay person into a qualified member of the profession, albeit in a novice status. However, the degree of certainty in rationalising further infusions of education and training declines at each successive step in the military career. The benefits and returns of such preparation are less tangible, while the costs - financial and time-wise in removing officers from their duties - are comparatively easy to document. Equally, the shortcomings of leaving the development of skills and knowledge to on-the-job training tend not to be revealed until something goes dramatically wrong.

The uncertainty and indeterminancy reaches a peak in the process for identifying and justifying the establishment of formal preparatory exercises for those destined for the senior ranks of the profession. It does so for a number of reasons. First, the parameters of successful performance at senior rank, and the types of learning experiences best suited to promote such performance are dependent upon the type of work to be performed.

Stamp et.al., in their development of Jacques’ Stratified Systems Theory of the organisation of work, put forward a model of seven qualitatively different levels of work. On the basis of their research, the tasks of senior officership, and the skills, knowledge and responsibilities inherent in those tasks, fit into the top four levels of work. These levels of work are characterised by tasks which take significant periods of time to bear results, which are concerned with the strategic design, development and modification of complex systems, and which demand increasing degrees of conceptual, synergistic and creative skills for successful performance.\(^2\) (See Figure 1, Stratified Systems Theory as Applied to a Military Organisation) As a consequence of these features, (particularly the fact that it may be a period of some years before the results of performance are known), it is difficult to measure clearly the full effectiveness of those performing at senior rank. Without such a measure, the ability to assess the

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<table>
<thead>
<tr>
<th>Time Span</th>
<th>Levels</th>
<th>Rank</th>
<th>Cognitive State</th>
<th>Functional Domain</th>
</tr>
</thead>
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<tr>
<td>50 years</td>
<td>VII</td>
<td>General</td>
<td>Creates complex systems and organises major resources. Extrapolates system needs.</td>
<td>Executive Domain - Operates in a nearly unbounded world environment, identifies feasible futures, develops consensus on specific futures to create, and builds required resource bases to whole systems which can function in the environment. Conditions environment to be 'friendly' to systems thus created. Creates a corporate culture and value system compatible with societal values and culture, to serve as a basis for organisational policies and climate.</td>
</tr>
<tr>
<td>20 years</td>
<td>VI</td>
<td>Lieutenant</td>
<td>Oversees complex systems and defines their relations with environment.</td>
<td>Organizational Domain - Individuals at Level V operate bounded open systems thus created, assisted by individuals at Level IV in managing adaptation of those systems within the environment by modification/maintenance/tuning of internal processes and climate, and by oversight of subsystems.</td>
</tr>
<tr>
<td>10 years</td>
<td>V</td>
<td>Major</td>
<td>Shapes complex systems.</td>
<td></td>
</tr>
<tr>
<td>5 years</td>
<td>IV</td>
<td>Brigadier</td>
<td>Transforms operating systems, shift from direct command.</td>
<td></td>
</tr>
<tr>
<td>2 years</td>
<td>III</td>
<td>Lieutenant</td>
<td>Extrapolates functional system trends, balances current/future requirements.</td>
<td>Production Domain - Runs face-to-face (mutual recognition or mutual knowledge) subsystems - units or groups engaged in specific differentiated functions but interdependent with other units or groups, limited by context and boundaries set within the larger system.</td>
</tr>
<tr>
<td>1 year</td>
<td>II</td>
<td>Captain</td>
<td>Defines direct work-planning and controlling aggregates of tasks.</td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>I</td>
<td>Lieutenant</td>
<td>Hands on direct work with things and people in task execution - shaping things.</td>
<td></td>
</tr>
<tr>
<td>1 day</td>
<td></td>
<td>NCO</td>
<td></td>
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**FIGURE 1: STRATIFIED SYSTEMS THEORY AS APPLIED TO A MILITARY ORGANISATION**
Introduction

preparatory needs for senior rank is severely handicapped. Equally, because the particular skills and qualities required by the senior officer are creative and conceptual, they are not discrete and easily quantified. Therefore, the development of such skills is not, to any significant degree, amenable to the Systems Approach to Training methodology which has provided a comforting legitimacy of undisputed measurement, efficiency and economy to many preparatory programmes.3

A second factor which engenders disagreement over the requirement, and how to, formally prepare officers for senior rank is the diversity of tasks in those ranks. While Stamp et al., defines a number of levels of work within the ranks of senior officership, an examination of that work also reveals the existence of a number of different types of work which involve distinctive qualities, work skills and preparatory experiences. For example, the tactics of bureaucratic game-playing, the leadership skills of democratic compromise and consensus-building, and the precise knowledge of resource and financial management and public administration of the senior executive manager are, in significant part, distinct from the leadership skills of bold risk-taking and the knowledge of the tactical, logistic and operational dimensions of the application of military force, required by the operational commander.

The range of tasks and levels of work, when matched with the expanding and deepening requirement for specialist skills and knowledge, raises a number of questions, which need to be resolved as part of the process of defining and establishing the senior officer preparatory requirement. For example, how relevant and responsive, now and in the future, is the generalist model of officer career development which reflects the philosophy that particularly in non-branch or non-corps appointments, "most officers can do most jobs; that the breadth of knowledge is more important than the depth of

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expertise"? Or what should be the optimal balance to be achieved between selection for promotion, career management and education and training in the preparation of the senior officer?

A third factor which influences the process of setting in place appropriate and effective preparatory experiences for senior officership is the inertia which is inherent in the status quo. Over a period of time, the profession, collectively and individually, has come to a broad, if ill-defined, consensus that the current efforts for preparing officers for a rank or task are insufficient. This insufficiency is identified through demonstrated inadequacies of performance, or through a recognition that the task itself, or the environment in which it is to be performed, has changed or in anticipation of how the task can be expected to change in the future. However, there is an unfortunate tendency to concentrate on the first of these concerns, i.e., demonstrated inadequacies in performance. This preference reflects a problem-solving approach to decision-making, which responds most effectively to cases for action when they are presented in the format of a "problem". Such an approach is founded upon a set of assumptions including the notion that problems have a solution and usually only one correct solution; that problems are "reducible to smaller, more tangible problems, susceptible to technical analysis in which the solutions become self-evident"; and that "the solution of the larger problem follows naturally from the solution to these smaller problems". The application of this problem-solving modus operandi to the issue of effectively preparing officers for senior appointments results in a reasoning that until the problem of inadequate performance is proven, there is no compelling logic to change the status quo.

This problem-solving approach has two other restricting effects upon the debate over improving senior officer professional development. First, it presumes that the very rank incumbents whose current performance is being identified as the cause for action will,

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4 Australian Army, Regular Officer Development Committee, Study Three - Career Management (Canberra, Commonwealth of Australia, 1978, Chapter 1, p.5, para. 108d.

without some hesitation or prevarication, question the very system which has elevated them to the positions they now hold. Second, in only addressing an issue when it identifies itself in problem terms, the approach ignores and precludes the validity of long-term planning and proactivity, or the initiation of action in anticipation of change. The notions of forward planning and proactivity provide an alternative rationale for action which, if taken, offers a reasonable probability that the issue under review will not degenerate to the status of a problem.

The operation of the problem-solving approach has been in evidence in the process of establishing the requirement for professional senior officer development in the ADF. For example, in 1984, General D.M. Butler, AO, DSO (RL), was asked to undertake a review of senior officer development with the objective of identifying any significant deficiencies in the preparation of senior officers. In 1985, the Director General of Training and Education Policy was tasked to undertake a Senior ADF Officer Training and Development Study and was required to "identify and quantify present deficiencies in the training of ADF officers which inhibits the performance of such officers...and to make recommendations as to how these identified deficiencies might be redressed".

For a variety of reasons, including an awareness that the "problem" approach restricted and distorted the range of options for change, the results of both reports were inconclusive, although the latter did lead to the formation in 1987 of a Steering Group on Senior Officer Education and Training in the Headquarters Australian Defence Force (HQ ADF). Follow-on initiatives have tended to concentrate on splitting the problem into more manageable sub-units, for example, the 1987-88 review of the Joint Services Staff College, which was tasked with redesigning the course to give greater

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6 This notion was also expressed by H.G. Gelber, A Programme for the Development of Senior Officers of the Australian Defence Force (Canberra, Australian National University, Strategic and Defence Studies Centre, Working Paper Number 119, 1986) pp. 17-18.


8 Department of Defence Minute Paper, "Senior Officer Development Study" (CDF 613/1986, 3rd September 1986).
emphasis to the study of war, particularly at the strategic and operational levels.9

Although facing this broad array of dilemmas, entrenched positions and practical difficulties, it is evident that there is a fundamental commitment within the profession to the setting in place of an effective and responsive preparation for future senior members of the profession. A vital tool in the process of constructing such a programme is the development of a concept of senior officership which reflects a comprehensive examination and understanding of the tasks and demands of senior officership. Moreover, the refinement of such a concept needs to take place within an analysis of anticipated changes to the nature of the roles of senior officership and the future environment in which such functions will be performed. The development and maturation of such a concept forms the basis of Chapters 1 and 2 of this monograph, while Chapter 3 explores a number of substantive options which, singularly, or in concert, may provide an appropriate and sensitive set of preparatory experiences for senior officership in the ADF into the 21st century.

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9 Senior Officer Education and Training Steering Group, Report by the SOETSG on Development of the Joint Services Staff College Course (Canberra, JSSC A513/1/9 Pt 3(2)).
CHAPTER 1

THE TASKS OF SENIOR OFFICERSHIP*

If any feature is universal to all tasks of senior officership, it is that of unusual authority. It is accepted that all officers have authority in a legal, and even personal, sense. However, in the main, it is an authority to carry out the directives, orders and initiatives of more senior officers. Each step up the career ladder brings a broader degree of discretionary authority to determine how the technicalities and spirit of those orders are translated into action. However, it is only when an officer reaches senior rank that the exercise of authority is given over, in significant part, to the definition of the parameters of action and the choice of action. Moreover, he is now responsible for the creation of an organisational climate and ethos, which extends beyond any one unit, in which orders for action can be most effectively interpreted and executed. Thus, while it is possible to describe and outline the particular nature of various tasks of senior officership, the canvas on which these pictures are painted is that of a personal philosophy of command authority and leadership, developed by the individual officer. This philosophy reflects a mental ordering of priorities, an agenda for action and a conception of goals in terms of self, subordinates and the organisation, and how these might best be achieved.

It is a difficult commission to distil satisfactorily the essence of the various tasks of senior officership in a manner which recognises both the particular as well as the general. For example, in identifying the tasks to be considered, there is always the risk that some commentators may find the list to be incomplete, while others may perceive it to contain peripheral and inconsequential roles. Accepting this, four key tasks have been selected which are seen to meet both general and particular criteria. They are: Operational Command, Strategy and Defence Policy Formulation, Senior Executive Management and Political Interface.

* Each Service has its own definition of "senior officer". For the purpose of this monograph, officers of the rank of Colonel(E) and above are regarded as senior officers.
The continuing reality of force as a principal instrument of conflict resolution in the relations between and within nations guarantees the primacy of the role of armed forces as war-fighting agents and the role of senior officers as battlefield, campaign and theatre commanders. The current focus of Australian strategic thinking is concentrated on the lower level of the conflict spectrum as the most plausible future threat to the peace and security of Australia. However, it is evident that even such conflicts would call for the employment of officers in these command roles. Moreover, in contrast to past experience where Australian troops have been subsumed under the leadership of allied officers, there are a number of credible scenarios where future Australian officers may be employed as operational commanders of Australian and also allied-nation forces in like-scale or larger off-shore conflicts in the region.

The task of operational command, simply put, consists of two parts: (i) the preparation of comparatively substantial formations of military forces and their weaponry and equipment for war-fighting, and; (ii) the act of deploying, committing and manoeuvring those forces in battle and throughout campaigns, in order to bring about a preferred political or national goal, be it the withdrawal, destruction or surrender of the opposing forces. In the conduct of this task, officers will be employed at the higher tactical, operational and strategic levels of war and other types of conflictual and non-conflictual situations.

In performing this task, the senior officer must cope with a decision-making environment dominated by uncertainties, random and chance events and a variety of interferences. Despite considerable advances in information and communications technology, the operational commander is, and in the future will be, required to make decisions on the basis of uncertain premises. To paraphrase Van Creveld, he will often be uncertain of the state and intentions of the enemy’s forces, uncertain about the factors which make up the
environment and uncertain of the state, intentions and activities of a proportion of his own force.\(^1\)

Inexperienced or untrained observers, operating under stress, may provide distorted, incomplete or inaccurate reports. Geographic factors such as distance from the equator, atmospheric conditions and distances between transmission facilities, degrade the ability to transmit data speedily from dispersed units to higher headquarters. The enemy, through tactics of disinformation, feinting movements, artificial and natural concealment, or electronic jamming of communications, will seek to mask his dispositions and intentions.

In the effort to overcome these limitations, considerable investment has been made in automating laborious, error-prone and time-consuming information collection systems. As a consequence, there is now the risk that a dearth of intelligence data can be replaced by an overabundance. In such circumstances, the operational commander can now be swamped in a mass of confusing, conflicting and, at times, irrelevant, information. Thus, instead of being blindfolded and searching his way towards a decision, he may be blinded by the intensity and profusion of lights provided to guide his path. Moreover there is an inherent vulnerability in the hardware of modern communication systems (telephone lines, switching centres, radar antennas, microwave receivers and satellites for example). This creates the possibility that, with little warning, a commander, coping with a dazzling plethora of information, can be returned as preemptarily to the darkness, should these systems fail through mechanical breakdown, natural disaster or enemy action.\(^2\) Finally, chance and random events - the unexpected downpour of rain which makes the river crossing impracticable, the break in cloud cover which reveals the enemy’s location, - have a habit of intervening to make a mockery of the sophisticated means available to the commander to impose increased certainty upon the battlefield.

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These uncertainties demand that those who are to successfully exercise operational command need to have developed a faculty to tackle and cope with such uncertainty. This involves the ability to identify the parameters, at least, of what is not known, to combine this information with what is known, to make credible deductions about the slippage points between knowns and unknowns, and to devise sets of options which allow flexibility of action or response. Van Creveld observes:

Although any commander worthy of the name will strive to maximize his knowledge concerning his own forces, the environment, and the enemy...ultimately that is not what war is all about. Rather, in armed conflict no success is possible...which is not grounded in an ability to tolerate uncertainty, cope with it, and make use of it.3

The commander must not only contend with the unknown, the unexpected and the untimely interpolation of fate’s gaggle of events, summed under Murphy’s dictum, if-it-can-go-wrong-it-will. Operational command can be likened more to a game of chess than solitaire. Decisions taken before and during a battle or campaign are made, in significant part, in response to the actions or inactions of the opposing commander and his force. If the operational commander is to avoid being caught surprised and unready, he must, even on the basis of imperfect information, seek to think ahead of his opponent, to predict his moves and second-guess his intentions.

Also, second-guessing the enemy’s intentions may take only slight precedence over predicting how his own forces and subordinate commanders will act. In this respect, the operational commander is like a dating service. He must match the talents of his commanders and their units against the nature of each mission - the fiery, aggressive leader to the chase, the more cautious, orderly-minded commander. Yet, a number of factors all tend to work against the operational commander having an intimate knowledge of the minds and characters of his subordinates. These include: the size of particularly mobilised armed forces, diffuse and specialist commissioning sources

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and career paths, and operations involving allies and joint undertakings.

In all operations, but particularly those with joint or allied aspects, the commander must also seek to prepare and execute his plans in a manner which takes account of the task priorities of all the military forces involved and the political sensitivities of allies as to the deployment and tasking of their forces. Because of technological improvements in communications moreover, commanders are more accessible to political leaders. Such leaders, historically, have proven unable to resist the temptation to advise, to question, to chivvy or to shackle their operational commanders. The commander must also cope with the added pressure that no longer need he wait for the passage of time and the military historian to judge his decisions. Increasingly, he must operate within the glare of international and national media attention, where his every action can be instantly, but not necessarily expertly, debated and criticised. On most occasions, these interferences are not only unwelcome; they add a further dimension to decision-making already made difficult by confusing, incomplete or suspect information.

The performance of operational command is influenced by the demands it makes upon the officer's own emotional, physical and mental resources and reserves. The operational commander must not only act in an environment which is, in varying degrees, uncomfortable, hostile and chaotic; he is also bound into the framework of his own emotions. He must carry, and not be weighed down by, the stressful knowledge that whichever course of action he chooses, people will be killed, maimed or made prisoner, and objectives may not be achieved. He must make decisions, despite a fear of the consequences, both personal and national, of failing to make the right choice. However much he may want to be "just one of the men", his position of ultimate authority and responsibility effectively isolates him. He must make unequivocal decisions on the basis of equivocal information, and he must do so in a confident manner which does not telegraph his doubts and concerns to his subordinates or the enemy. He needs, in other words, to be a consummate actor. Moreover, circumstances frequently contrive to rob the commander of much-needed privacy in which to rationalise his doubts, and touch up his facade of imperturbability - that calm courage in the midst of
tumult, that serenity of soul in danger [which]...is the greatest gift of nature for a commander. Unless the commander is successful in retaining a thinking and courageous colleague or devises another method of coping with stress, he must carry his burden of fears and frustrations alone.

At times, despite his rank, the commander will be called upon to expose himself to physical danger and discomfort, as a personal example when he judges the morale of troops require it and when the lack of information demands it. There is a physical and emotional cost to doing so. In accepting the privations endured by those under his command, he is no less immune to their physical effects. Fear, seasickness and dysentery can affect a person no matter how lofty a rank he holds, and bullets and bombs are equally non-discriminatory. Moreover, the application of technology has, to a great extent, neutralised the limitations on warfare imposed by the change in seasons and the onset of night. Operations can now be carried on in a sustained manner over lengthy periods of time. Under these circumstances, the commander must be able to fight the battle in spite of, and in awareness of, the debilitating effects of fatigue caused by mental stress and sleep deprivation.

Additionally, despite a number of high-mobility, high-intensity short wars over the last decades, there is no consistent


5 Rear Admiral Woodward, the British Naval Task Force Commander in the 1982 Falklands War remarked: "...there are lots of things you have to keep to yourself -you live with your responsibilities. I found my diary a great safety valve. You can get rid of the steam and hassle of the day and you feel better when you've done it...I think my diary was my main outlet for my feelings". Rear Admiral John Woodward, in Max Arthur, Above All Courage - The Falklands Front-Line: First Hand Accounts (London, Guild Publishing, 1985), p. 325.

6 The effects of sleep loss upon command functions include: errors of omission, decreases in the ability to focus on a task, short-term memory failures, slowed response times, degradation of the ability to reason logically, difficulties in understanding or articulating messages and increases in mood changes. See Major H. Thompson, "Sleep Loss and Its effects in Combat" Military Review Volume 63, Number 9, September 1983, pp. 14-23.
The evidence to suggest that the duration of conflicts in the future will be short. Indeed, it is evident that the employment of decentralised, protracted and variable-intensity strategies are becoming the norm in the use of force to support the achievement of political or theocratic goals. This development is recognised in the consideration of plausible conflict scenarios, undertaken in the 1987 Defence of Australia Policy Information Paper, which observes:

> Successive reviews of the strategic basis of Australian defence policy have noted the advantages an opponent might see in a campaign of sustained low level military pressure against Australia...Attacks could be widely dispersed and unpredictable. Relatively modest military pressure could oblige Australia to respond with quite disproportionate effort.

The adversary could, if he wished, sustain low level activity virtually indefinitely. For Australia, there would be the cost of undertaking a wide variety of operations and of maintaining forces at a high state of readiness...

> ...Operations would usually be joint and their conduct may require naval, air and land forces to deploy at short notice for sustained operations at a considerable distance from their main bases.7

In the event of a conflict taking such a form, operational commanders will be required to function under the physical and mental pressures of command for sustained periods of many weeks and even months.

> In order to perform effectively in the task of operational command, officers need to have developed certain skills, knowledge bases and talents. The accuracy and veracity of a definition of such attributes has obsessed and divided expert observers over the history of warfare. However, if a definition has to be settled upon, it is proposed that General (later Field Marshal The Earl) Wavell’s identification of key attributes be accepted. These include: physical

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and mental robustness, a spirit of adventure and determination to win, and a sound knowledge of the human and practical dimensions of war.8

The physical demands of command, already alluded to, make the obvious case for a commander who is physically fit and healthy and one who is aware of the limits of his own reserves and when they need to be replenished. For Wavell, a robustness of constitution needed to be matched by a mental vitality and resilience. His conception of the first encompassed a "fighting spirit" and a "spirit of adventure" - a drive and determination which could be transmitted to subordinates. The second quality involved a courage to take great risks for great gains and to take the costly and unpopular, but optimal, decision. Possession of these qualities in themselves, however, was not sufficient. For Wavell, the fighting qualities of the commander had to be soundly founded upon two bodies of professional knowledge - a knowledge of humanity, and particularly the human condition in war, and a knowledge of the practical dimensions of applying military force.

Understanding the human condition in war is, arguably, the most fundamental precept of military leadership. It is a comprehension of factors which affect how people will react in and out of battle and in other stressful situations. These include: physiological concerns such as fatigue, injury, hunger, exposure to the elements and disease. Psychological factors include: esprit de corps, the fear of wounds, death, failure and the unknown, the depression of defeat and retreat, or the momentum of victory. It is an awareness, gained through experience and study of self and others, of the physical and emotional limits of human endurance. It is this understanding which underpins a commander's intuitive sense of how to motivate people to perform at, and beyond, those limits.

This intimate understanding of human nature needed to be matched by a well-founded knowledge of the operational, tactical, logistical, technological and political parameters of the application of military force. Such a knowledge base is the reference point for all

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8 op.cit., General Sir Archibald Wavell, 1939, passim.
actions in preparing military forces to fight and in planning how to fight both battles and campaigns. Moreover, it is a knowledge base which is exorably growing in size and depth. Even at the tactical level of ground warfare for example, it was noted that Israeli Company Commanders in the 1982 Lebanon War were responsible for coordinating the effective employment of some 20 different kinds of weapons. When examined at the operational level, particularly given the increasingly integrated nature of warfare in terms of air-land, sea-air operations, this knowledge base is very substantial. In addition, implicit in Wavell's conception of a mastery of this technical knowledge base was the ability to creatively apply that knowledge; to draw on technical, administrative and tactical precedents and principles, but not be bound by them. For this, the commander requires an mind and character ready and prepared to see the potential of new tactics, structures, technologies and the possibilities for modifying and re-applying the old ones. While not necessarily, but quite possibly, the originator of new ideas, the operational commander needs to be able to set a climate within his command which encourages his subordinates to do so.

Strategy and Defence Policy Formulation

In the exercise of operational command, the senior officer is performing a role in which he is perhaps at his most independent. In the best of circumstances, he has received a clear political directive to achieve a given objective. The operational commander is the principal actor, supported by his subordinate commanders, in pursuit of that goal. In contrast, in the formulation of strategy and defence policy, the senior military officer is but one among many participants.

In this arena, the concept of strategy and strategy-making extends beyond those issues related to the conduct of operations in battle, campaign or theatre in war. This broader notion of military strategy defines the activities of the profession in peace and war and sets out how it will seek to meet the delineated needs of the nation-state as its client. Major Smith, in his study of Strategic Thinking and the Australian Military Profession, described this higher level of strategy as concerned with:
In this context, military strategy is not only an instrument by which defence and national security policy is implemented; it also influences the formulation of such policies. There is a substantial corpus of knowledge, both conceptual and factual, which the senior military officer as a strategist needs to have mastered if he is to join others in the development and articulation of effective military strategies which serve and contribute to national defence and security policies. These include: political, social, logistic, technological, geographic, financial and intelligence issues and information.10

The political dimension of strategy at this level is dominated primarily by those issues concerning the character of the relationship between the profession and the state, and the nature of political goals and their achievement by the use, threatened use, or non-use of military force. As a publicly-owned profession, the relationship with the representatives of its client, society, involves unique constraints. These concern, in a democracy, the subordination of the profession to the direction of national government. The constitutional, administrative and practical parameters of this constraint, and its influence upon the profession’s activities, need to be explored and clearly understood if strategies are to be evolved which are responsive to the needs of the client, as articulated (or even not articulated) by its representatives.

The exercise of this constraint, for example, influences the very manner in which the profession may go about its task. Over the last decades, societies, and their political representatives, in Western

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9 Major M.G. Smith, Strategic Thinking and the Australian Military Profession (Canberra, Australian National University, Strategic and Defence Studies Centre, Reference Paper Number 141, March 1985), p.29.

10 ibid., Major G.M. Smith, 1985, pp.34-51, passim.
democracies have become very sensitive to the use of military force in resolution of social and political problems. As a consequence, governments are more ambivalent about when military force can be utilised and are more stipulative as to how it can be applied, for example, insisting on the minimum use of force and the primacy of the rule of law. Equally, the tenor and standing of the relationships maintained between the governments and communities is a significant influence upon the analysis and development of strategic alternatives.

While military strategy in Western democracies is governed by the political objectives which it must serve, it is also determined in reference to a range of social variables. These include the attitudes, aspirations and will of society as the profession's client. Public opinion, in the past, has not assumed a prominent position in the policy deliberations of national security actors. However, increasingly, populaces are unwilling to lend unquestioningly their support or their sons to any cause which is not clear-cut in legitimacy and goals, and short-lived in operation. Moreover, this ambivalence of commitment and reluctance for self-denial can be effectively mobilised by the more articulate and politicised members of the community through access to the mass media. Perhaps the most subjective and mercurial of inputs into strategy formulation, the social dimension requires the serious consideration of strategy makers. There are too many historical precedents of the consequences of its subordination to permit its neglect in the formulation of strategic options and postures.

In addition to political and social will, the determination of strategy is influenced by a logistic dimension - the national capability, which is available, or can be made available, for the development, maintenance and support of military forces. This capability can be defined in human, infrastructure and industrial terms.

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The composition, availability and quality of human resources are essential components of the strategic debate. Different manning levels and force composition are associated with various strategic alternatives. For example, the manpower requirements inherent in a conventional defence strategy are distinct from those associated with a counter-insurgency strategy. The adoption of a mobilisation strategy only becomes credible if the maintenance of small cadre forces is supported by identified sizeable reserve forces integrated into a mobilised Order of Battle, with a fully developed mobilisation doctrine and regular activations. A strategy of deterrence is predicated upon the existence of a force of credible size under arms, maintained and exercised at a high state of readiness. There are manning factors which make certain alternatives preferable to others, such as the availability of the number of regular troops required to sustain a conventional war-fighting strategy, the willingness of the civilian economic sector to make available reserve forces in sufficient numbers to sustain a mobilisation strategy. Moreover, there are significant perceptual ramifications of mismatches when they occur between articulated strategy and the maintenance of particular manning configurations.13

Human resource issues of personnel extend to involve the civilian manpower pool available for military service and industrial production. These include for instance, concerns of conscription versus volunteer forces, male-female ratios, the demographics of age cohorts, regular-reserve mixes, general and technical educational opportunities and standards, and the proportion of eligible people involved in essential service industries.

How military operations can be undertaken and sustained is also governed by the resource status of a nation's infrastructure and industrial capacity. In the past, Australia has employed, almost by default, a strategy which has relied logistically upon the contributions of allies. However, the contemporary strategy of self-reliance is predicated upon the development of an Australian logistics support base. Such a base will place demands upon Australian industry,

The Task of Senior Officership

influences construction of infrastructure, particularly roads, railways, ports, tertiary services, telecommunications etc., across the nation's North, and creates a requirement for the prepositioning of defence facilities and accumulation of strategic war stocks. How these demands are met will determine the credibility or otherwise of this strategy.

The technological dimension of military strategy has assumed a place of prominence, both as an instrument of strategy and as an influence upon strategy formulation. While the search for a decisive superiority in warfare has encompassed manpower initiatives, (the mass armies of Napoleon, for example), and logistics infrastructure developments, (the Prussian railway system, for example), the most spectacular successes have come in technological innovation. The significance of technological developments in weapon systems extends beyond their utility as force multipliers within existing strategic postures, to influence the evolution of strategy itself. The relationship between the development of the strategic bomber aircraft and strategies for its employment, and the advent of nuclear weapons and the creation of nuclear deterrence strategies are cases in point.

Perhaps one of the most immutable influences upon strategic options is that of the geographic dimension. This variable encompasses not only factors of distance, terrain and climate, but also the location of strategic resources (minerals, water, oil, etc.), and choke-points and other areas of vulnerability. The permanence and substance of these geographic features have often influenced the assessment of the feasibility of alternative courses of action by strategists. For example, American inter-war military strategy was predicated upon the perception that the Pacific and Atlantic Oceans formed formidable moat-like barriers to an enemy wishing to threaten the United States - until Pearl Harbour.

The selection of defence and national security strategies in peace particularly, is dependent upon the ability and willingness of the nation to pay for them. In this regard the financial dimension is a factor of equal, and arguably greater, significance to that of military technology. As the costs of specialised research and development, capital procurement programmes and highly trained manpower bases have increased, strategists have needed to take a greater account of the
economic health of the nation to sustain the levels of expenditure inherent in supporting various strategic alternatives. They have also had to be cognisant of the mood of populates to accept or reject this consumption of public resources. This is particularly so in nations, such as Australia, where there is no accepted, immediate or obvious external threat against which military strategy, doctrine and forces can be specifically justified. In this circumstance, communities are more likely to measure their security in material terms, for example, employment opportunities, housing, living standards, provision of quality health care, education and community services etc., and see expenditure on the development of national security strategies and force structures as a contentious diversion of resources from society’s pursuit of its own well-being.

Finally, strategy formulation is predicated not only upon the articulation of the goals of national security, but also upon an ability to identify and analyse a variety of factors which will threaten, or contribute to, the achievement of those goals. In its many forms, this ability is the intelligence dimension of strategy making. It involves two types of activities: first, actions and practices aimed at acquiring comprehensive and timely information on the capabilities, vulnerability and intentions of declared or potential enemies, allies and neutrals; and second, the processes of analysis and interpretation of the information so gathered.

The corpus of knowledge associated with strategy and defence policy formulation is, without doubt, voluminous both in depth and breadth. It forms a significant component of the knowledge base of the military profession. Clearly, it is an impossibility for a single officer to have accumulated, and remain in touch with, the entirety of this knowledge base. However, the strategist needs to have developed particularly research skills and ability to identify and incorporate key contributions of specialist knowledge experts into his thinking.

Yet, for a number of reasons, the profession and military professionals have either been supplanted in the development and application of this knowledge, or have voluntarily withdrawn from participation in a key activity which defines both the profession’s authority and operation. As Smith observes:
...the Australian military has had little incentive to foster expertise in complex matters of strategy. The military of course has given advice to government when requested, but overall the profession has remained passive in the formulation of strategy and has addressed most of its attention to the implementation of decisions in a reactive manner. The profession has concentrated its efforts in developing expertise in the techniques of warfare rather than in helping determine the most appropriate national and military strategy to be adopted. The feeling within the military traditionally has been that they should be told what to do and then be allowed to get on and do it...14

In essence, the Australian military profession has confined the art of the general to the tactical and operational parameters of the battlefield. It has in part been dispossessed of, and in part has abandoned, its legitimate role to provide strategic guidance and advice to policymakers. As a consequence, it has been outflanked by civilian experts in technology, behavioural and administrative science, finance, international relations and strategy.

In quite properly defining combat as the greatest challenge of professional competence, the profession has tended to emphasise those activities which directly prepare and develop practitioners to meet that challenge. In so doing, it has tended to find virtue in the development of intellectual skills and knowledge only as they relate to the operational environment. As a result, the profession has not invested its resources or confidence, to any significant degree, in the development of practitioners as strategists at the national security level. The bureaucratic and hierarchic nature of the profession has also acted to discourage the development of the senior officer as a strategic analyst. The formulation of strategy rests as much upon the intellectual qualities of scepticism, independent inquiry, innovation and preparedness to challenge conventional wisdom, as it does upon the development of a broad knowledge base. To date, there have been few opportunities for officers to step outside the profession to refine and test these intellectual qualities. Moreover, if an officer exercises

such qualities within the profession without considered self-restraint, he risks coming into conflict with his superiors and the difficulties which the organisation has in coping with challenges to the *status quo*. Finally, the profession has been unable to participate fully in the strategy-making process because it has not yet resolved a series of internal bureaucratic divisions sufficiently to develop a unified framework of analysis into which all the dimensions of strategy can be effectively accommodated.\(^{15}\)

Senior Executive Management

Sir Arthur Tange in 1985 observed that "in the growing literature on defence management there is remarkably little on the way command is or has been exercised other than on the battlefield".\(^{16}\) Ironically, a great deal of what happens on the battlefield hinges on the effective, or otherwise, management of defence resources and assets, to recruit, train, equip, arm and support military forces for the battlefield. Therefore, the roles of the senior officer in defence management, while perhaps not as distinctive and potentially illustrious as that of operational command are nonetheless influential and indispensable. Senior executive management is, by necessity a generic term used to describe a broad class of senior officer roles, which in themselves are difficult to separate and treat independently of each other. However, as a method of ordering his analysis of senior officership, Colonel Lightburn in his study of Senior Officer Professional Development in the Canadian Defence Forces, identified five key roles within the realm of senior executive management: (i) providing military advice to political authorities; (ii) preparing military plans; (iii) framing the

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The task of preparing military plans involves the operational response to the articulation of military strategy and defence policy. It aims at designing, and planning for, the generation of suitable force configurations and operational doctrines to support the strategy which has been selected. The design of appropriate force structures is dominated by the process of identification, definition and analysis of capital equipment proposals to develop new capabilities or upgrade current weaponry and equipment. The task is complicated by the inherent difficulties in forecasting requirements and capability potential up to 10-15 years in advance which must be accommodated them within a five-year rolling plan. Another characteristic of the task involves the process of deriving accommodations between competing bids within the resource constraints of the defence budget. Military planning also extends beyond major equipment programmes to include, for example, the formulation of manpower utilisation plans, exercise and training schedules and the development of tactical and operational doctrines for the employment of various configurations of forces in particular conflict scenarios.

It is recognised that the senior officer will be supported in this task by staffs responsible for the detailed investigation and analysis which underpins such planning endeavours. Nevertheless, in order to be effective, the senior officer needs to have developed an in-depth understanding of the technical parameters of the profession's capabilities and deficiencies, and a knowledge of the state-of-the-art technological and managerial developments as they may apply to the profession's concerns. Equally, this planning task requires its incumbents to have a firm grasp of how external influences, such as resource limitations, industrial capacity, existing infrastructure, population demographics, etc., will impact upon the feasibility of various proposals and schemes. Finally, in the preparation of operational plans, the senior officer needs to have a knowledge base of the performance parameters and capabilities not only of his own

Service, but also those of the other two Services and those of potential allies, and how they can be effectively integrated in joint military plans and operations.

The *procurement* function of senior executive management tends to be one of the more specialised of this class of senior officer roles. In broad terms, it involves the supervision and management of substantial capital equipment procurement projects, with inputs into, or responsibility for, the definition of requirements, evaluation of options, specification of the preferred option, planning the project, obtaining government approval, tendering contracting, administering the contract, and handing over to the users. The skills and knowledge requirements which underpin successful performance in this role are specific and general. At the broader level, an officer needs to have acquired a strong technical and scientific education, supported by understanding and knowledge of the demands of the operational environment in which new equipment must function. Officers need to have also refined their intellectual skills of analysis, acuity and memory. In addition to specialist knowledge and skills in costing, specifications, operational analysis techniques, resource management, trialling, quality assurance and life-cycle maintenance and spare parts planning, the senior officer in procurement projects needs an understanding of how Australian and overseas industries and business function, how to work with industry and how to successfully supervise contractors and sub-contractors.

Given the recent developments in the export of defence equipment policy, it can be anticipated that procurement officers will also need to learn a range of commercial techniques aimed at increasing sales of equipment which will reduce the unit cost of equipment to the defence budget. Finally, another area of knowledge, potentially needed for the future, concerns the design and


management of collaborative procurement endeavours, and the optimal procedures and practices associated with such projects.

In almost complete contradistinction to the specialist function of procurement, the administration role of senior officership encompasses the management of a broad array of activities, resulting from the self-sufficiency of the armed forces both as an organisation and as a community. The ADF recruits, selects, trains, career manages, houses, clothes, and feeds its people, as well as employs them. Moreover, as the policy of civilianisation of military positions is pursued, senior officers are assuming responsibility for increasing numbers of civilian employees. The ADF, in association with the Department of Defence, maintains its own transportation system, communications network, supply operations, housing and land control, medical and educational services, repair and maintenance facilities and legal, financial and industrial wage-fixing systems. The variety of positions of responsibility which an officer may assume argues for the development of professionals who have acquired the skills of versatility, flexibility and resource management. Equally, it is evident that broad management backgrounds need to be supported and enriched by selective learning experiences designed to provide officers with an awareness of the specialist knowledge bases associated with a number of administrative types of positions.

As in most other executive functions, senior officers constitute one interest group involved in the framing of the defence budget and in the preparation of advice on defence management. Participation in the preparation of the Five-Year Defence Plan (FYDP), and responses to governmental budgetary processes, is predicated upon an awareness and understanding of the operation of a broad spectrum of budgetary, financial administrative, political and economic mechanisms and influences. For its part, the formulation of advice on defence management issues requires not only a knowledge of the imperatives and constants of military performance and the requirements of defence strategy, but also upon the array of social, political, financial, technological and economic factors which constrain the feasibility of policy options.

Policy advice is developed through a bureaucratic process in which the weighting, priority and consequences of these factors is
represented, challenged and resolved. The process is characterised by regularised bargaining, manoeuvring and coalition-forming by participants in various divisions and branches of the Department of Defence, and between Defence and other government departments, who wish to present and promote particular policy options. Mattingly and Walker describe the nature of this process:

...national security policymaking involves a struggle for power to control, and to influence those who control, national security decisions. It is the "art of the possible", the process by which the conflicting demands of various individuals and subunits in the national security apparatus are satisfied through compromise...national security policy emerges from a process of simultaneous conflict and accommodation among the multitude of participating professional groups, each with its own competing viewpoint. Policymaking means bargaining; negotiations are required and deals must be struck.20

To participate effectively in the process, the senior officer needs to possess an in-depth understanding and knowledge of the interplay of influences and motivations of various interest groups, other government departments, parliamentarians, the mass media and the public. Of equal importance is an awareness of, and adeptness for, participating in the bureaucratic practices and routines which substantially influence the ultimate character of policy advice and the manner of its presentation to appropriate political decision-makers.

Thus, the senior officer needs to have developed a set of leadership and organisational skills including for example, the ability to cultivate interpersonal networks and employment of tactics which augment influence, facilitate access to information, and isolate opposing interest groups. In this context, Sanders, in his guide for Pentagon officers, outlines some twelve bureaucratic strategems which are equally appropriate in the Australian milieu. These include: setting precedents, manipulating information, juggling deadlines, ordering studies, reorganising branches, sections etc., stacking the

alternatives, getting multiple advice, foreclosing options, running intelligence networks, building coalitions, and seeking outside advice.  

Many of these practices are seen as inconsistent with professional ethical standards of total honesty, disciplined responses to authority and self-sacrifice. The belief is that the profession should not have to participate in such "game-playing" to have its advice translated into policy; that its commitment to professionalism should be a sufficient assurance as to the correctness of that advice. For a proportion of officers, leadership styles which support and encourage the use of such techniques should be contemptuously dismissed as an anathema to the profession of arms. This view is expressed in many forms, for example, one officer observes:

The solution to the problem is not to develop a race of military bureaucrats who can "deal successfully with the demands of bureaucratic decision making"; it is to use the civilians in the Department to play the bureaucrat while the serviceman provides the essential guidance on requirements.

In the past, the profession has confidently expected its advice to be accepted unchallenged because of the profession's professed monopoly of expertise in military matters. However, starting from Tallyrand's now famous assertion that war is too important to be left to the generals, faith in the profession as the sole repository of expert advice has waned. It has done so because the prosecution of war has ceased to be limited in its effects and consequences to the actual combatants. As the magnitude and impact of conflicts, preparation for them, and efforts to deter them, have grown, the military professional has become but one specialist actor amongst many in national security policy making forums. Equally, because of the diversity of interests, and the financial, legal, administrative, industrial and political policy constraints under which the contemporary profession is required to

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operate, the identification and articulation of "essential guidance on requirements" as the sole basis for policy advice is not in itself sufficient merely because it is offered by military professionals.

At each level of staff work, military officers need to be increasingly capable of preparing effective cases for action, garnering the necessary support for what is proposed, answering the issues raised by other interest groups in the defence decision-making community, and if necessary, modifying proposals in light of the issues raised by such groups. These activities necessarily are supported by a particular style of leadership:

...successful professionals find they must...learn to persuade, to coax, to cajole, to bargain, to listen, and, yes, to charm. They must learn the fine art of log-rolling, horse-trading, and mutual back-scratching. In essence, successful military professionals learn another side of leadership, a side that most politicians have learned from the beginning. That side of leadership is more persuasive than directive, more receptive than responsive, more disposed to conciliation and negotiation than to insistence and demand.23

It can be argued therefore, that the leadership challenge posed by this task of senior officership is twofold. First, there is a requirement to recognise that different leadership styles are required for different working environments and to acknowledge the validity of each. Second, the senior officer needs understand components of each leadership style and to clearly delineate, in a personal sense, the circumstances under which the application of each is appropriate.

Political Interface

Perhaps the key feature of behaviour which has served to distinguish the professional military from the mercenary military is the adoption by the former of an apolitical stance. This political neutrality is seen as the principal method by which the military profession demonstrates its commitment to the notion of universalism - the tendering of professional advice and assistance without discrimination

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in terms of ideology, race, religion, age, financial circumstances, gender, etc. Equally, in denying a role in the political processes of the nation-state, the professional military, particularly in democratic societies, seeks to assure the citizens of such communities that they, rather a particular political entity or group, remain the profession’s client and focus of its loyalty; that although the profession holds a monopoly over the instruments of force, it will refrain from using that monopoly to manipulate, blackmail, threaten or displace the legally constituted political authority of the representatives of society.

Therefore, despite the truth of Clausewitz’s observation that war is the continuation of politics by other means, both the process of professionalisation and the desire of societies to assure themselves of the political impotence of their military forces, have combined to delimit the access of the military professional to the political process and his knowledge of how it functions and the effects of it upon his professional task. As Keegan observes:

... if soldiers were to be forbidden all part in the calculations of foreign or domestic policy, then they had to be taught a method of war-fighting into which calculation of the political effects of their doings came not at all. It was enough that they should know that war had political purpose and that wars which exceeded in cost the value that victory might bring were not politically worth fighting. That being the case, the texts on which pupil officers have been raised ... have preached a form of warfare that makes no room for political or diplomatic calculation at all. The commander’s purpose, they have been taught, is to deliver victory by the quickest and cheapest means he can find.26

This formula of war-fighting efficiency and political impotency may have proven successful in an era when wars were limited in scale, involvement and objectives, when there were few moral or ethical qualms over the legitimacy of force as a method to

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24 See Cathy Downes, "To be or Not to be a Profession: The Military Case" Defense Analysis Volume 1, Number 3, September 1985, pp.155-163.


settle disputes between nations, and when codified practices of behaviour, which denoted terms for the initiation and cessation of hostilities, were observed routinely by most parties concerned. However, these conditions, in whole or part, no longer prevail. It is no longer tenable for the military officer to hide behind the proclamation that, as Keegan put it, politics is none of a soldier's business. Equally, the opposite position of manipulative, or even coercive, involvement in the political process threatens the professional standing and continued legitimacy of the profession. However, the contemporary senior military professional, whether he finds the role personally distasteful, or shot-through with ethical contradictions, is a participant in the political process of the governance of nations. The role dictates that he find and function in the critical middle ground between abstinence and over-indulgence.

This dilemma is at its most pronounced at the senior most levels of the profession, defined in Stratified Systems Theory as the strategic level of work (see Figure 1). At this level, the senior officer is responsible for decision-making at the highest echelon of the profession and the representation of the profession and its interests in governmental, political, national and international arenas.

This task is the responsibility of the senior-most officers of the profession - in the Australian case - the Chief and Vice Chief of the Defence Force, and the three Service Chiefs of Staff. In light of the emphasis upon professional, and even national representation, in external political and military forums, a case can be argued for the inclusion of other officers who, also exercise a component of strategic command. In this category would fall senior officers who head Australian Embassy and High Commission Defence Liaison Staffs in overseas countries, particularly those of key allies, trading partners and potential adversaries. Another category of position, in which representation and liaison duties at the political and strategic levels forms the dominant function is that of officers appointed to head contingents of Australian forces committed to multi-national or United Nations formations. Such appointments may appear to be a hang-over from the forward-defence era, for example, the position of
Commander Australian Force, Vietnam. However, the possibility of acting with allies in the future (particularly in the Pacific region) should not be dismissed.

Three principal sets of activities are encompassed by this task of senior officership: (i) the determination of professional military advice and its transmission to governmental decision-makers; (ii) the liaison, interaction and representation of the profession, with external actors and agencies; and (iii) the provision of a buffer between subordinate commanders and those actors and agencies.

In the construction of policy advice, particularly that concerned with defence management, senior officers need to have developed a refined and complete conception of what the ADF should be capable of undertaking now and by some point in the future. This conception will inevitably be modified in the context of predictions as to what is financially achievable in resource allocation terms given the current and forecasted economic health of the nation and the political priorities for governmental expenditure. Moreover, such a conception, or some of its constituent parts, will also be revised in light of the personal and collective policy preferences of the Minister for Defence, the Minister for Defence Science and Personnel and the Cabinet.

It is these ingredients - a view for the future and an understanding of the realities of domestic and international economic and political realities - which provides the framework in which policy advice can be formulated. The process of decision-making on the nature of policy advice to be tendered to Ministers, is formalised in the main, through the Senior Defence Committees (principally, the Chiefs of Staff Committee, the Defence Force Development Committee, and to a lesser extent the Principal Subordinate Committee, the Consultative Group). As in other committee forums where options and alternatives are proposed and evaluated, the final advice outcomes, within broad constraints, are also a result of the interplay of personalities, and the relative power and authority which each actor brings to the process.

While decision-making at this level concerns all the strategic needs and requirements of the profession (and a good many lower level of work matters as well), of key importance is policy advice on the overall size of the defence budget, what it will buy, and on the break-down of allocations within that budget. In advising on the size of the defence budget and what it will purchase, senior decision-makers are faced with the difficult task of demonstrating in an undisputed fashion, the effects on capability of varying levels of funding. In a situation where defence and military strategy are premised upon credible, possible contingencies rather than an identified and quantified threat to national security, the task of portraying in unequivocal terms the consequences of reduced funding, for example in terms of numerical probabilities of winning or losing a conflict, is very problematical. Equally, in providing advice on the optimal resourcing priorities within the budget, judgements have to be made, on basis of incomplete and uncertain information, as to which areas of activity will not survive and are vulnerable without adequate funding, and which areas can be trusted to function, and for how long, with reduced and constrained funding.

Although determining resource priorities and putting the case for optimal levels of funding assumes a high profile in the provision of advice to government, the profession's leadership must also provide advice to Ministers and Cabinet on the availability and feasibility of military options in the event of national or regional crises and calls for military assistance, in the latter case for example, military training aid or peacekeeping duties. This advice needs to be based upon not only an knowledge of the exact capability and readiness state of ADF units, but also upon a broad understanding of the issue, its participants, their motivations and the national territories involved. Moreover, any resultant advice needs to be tendered in terms which are explicit and unambiguous to lay persons, as to the actions which are within the capability of the ADF to perform, its degree of readiness and sustainability, and a firm prediction as to the likely costs and consequences of committing units of the ADF.

In proffering both types of advice, the officers involved must also come to terms with the possibility, probability on a number of occasions, that such advice will be rejected outright, ignored or receive, at best, rhetorical support. How should the senior officer respond in
The event of his advice being so treated? Beneath this question lies a host of ethical dilemmas which cut to the heart of the subordination of the military to the authority of the State, for example, to whom is the greater loyalty owed - the political representatives of society, or the profession which may be ill-used by the policy chosen? If advice is rejected, what avenues for appeal are available to the senior officer? Does he have the right or the responsibility to "go public"? When are the stakes so not negotiable as to warrant consideration of the "omega argument" - the threat of resignation? These questions are best thought through prior to arriving at circumstances in which they must be answered.

The second set of activities encompassed in this task of political interface concerns representation of the profession in the political and military forums of other nations. In this role, incumbents are involved in initiatives which actively support the goals of Australian national security policy. Such initiatives include, for example, representation of Australian defence interests to political, governmental and military leaders and other opinion formers in the host nation, and the gathering and relay of information relevant to the military capabilities and intentions of that nation. The undertaking of these duties places, at times, significant demands upon the personal qualities of diplomacy and tact, but also of tenacity and patience, and upon the skills of analysis, assessment of information and judgement of people. Finally, such skills and qualities need to be supported by a well-developed knowledge and understanding of the culture, social and political systems of the host country, and a familiarity with the organisation of its military forces and defence bureaucracy.

Both in the domestic political and international context, the senior officer, as political go-between, provides an interface between those who issue political directives and those who must translate them into military action. As observed earlier in the discussion on operational command, modern communication facilities make it possible for political leaders to communicate direct with operational commanders to learn at the earliest moment of what is happening as it happens in a situation, particularly one which may involve their decisions being challenged, or demand further political action. It can be anticipated that the temptations to use such facilities will be even greater in the event of initiation of a conflict involving Australian
territory as predicated in the contingencies identified by the 1987 Defence White Paper. In these circumstances, it is the task of the senior-most leadership of the profession to field this compulsion for real-time information, to relieve the pressure on operational commanders to permit them to concentrate on carrying out the directives they have been given. Finally, senior officers, in acting as a conduit between subordinate commanders and the political leadership in a particular situation need also be cognisant of, and restrained in, their own demands upon such commanders for information.

The Constants of Senior Officership

The military profession is comparatively unique in the range of roles it expects its senior leaders to assume - military commander, executive manager, business entrepreneur, chief of staff, educator, industrial negotiator, diplomat, accountant and military strategist. Equally, it follows that few, if any, other forms of employment expect the breadth and depth of skills, knowledge and personal qualities of their senior members as does the military profession. The diversity of tasks and talents make it a difficult, but not invalid, exercise to distinguish a number of universal constants of senior officership. Such constants form one of the essential pillars of a senior officer concept which provides a source guide for the creation and maintenance of an effective and responsive preparation for senior members of the Australian military profession.

In the analysis of the various tasks of senior officership and the levels at which they are performed, a number of reoccurring features can be distinguished. These relate to differences in the type of work carried out by senior officers and to the environment in which they work and the influence they have upon it. They include, for example, the notions of unusual authority, and the pre-eminence of intellectual leadership at senior levels. Haythorn, Kimmel and Steinberg, in their literature search on research into senior leader job requirements, separate this grouping further into four constants: Decision-Making and Problem Solving; Interpersonal functions and Contacts within the
Organisation; Contacts Outside the Organisation; and Providing Structure.28

While decisions are made at all levels of professional activity, decision-making at senior levels, regardless of the particularities of the task, is distinguished by the notion of untransferable accountability. Decision-making at senior rank is also delineated by the type of decisions taken. An increasing proportion of decisions tend to relate to complex issues which are crucial to the functioning of the whole organisation or to significant or substantial parts of it. The exercise of authority is also more consciously dominated by the definition of the parameters of objectives and the selection of particular routes to its achievement. Less and less time is given over to implementing the directives of more senior officers without first contributing to the process of decision-making and implementation strategy development.

The issues for decision, which come to the attention of senior officers tend to have a lengthy gestation period between identification, gathering of information, decision, and implementation. Moreover, the results may not become known for some considerable period of time after action has been taken. This increases the components of risk, abstraction and uncertainty in decision-making at senior levels.29 To reduce and offset the levels of uncertainty and the effects of rapid change associated with decision-making, the senior officer needs to have developed a broadly-established and in-depth knowledge base. Added to this, is a requirement for the officer to possess, and have refined, the vital intellectual skills of effective time management and intuition, the latter of which Agor defines as:

...the ability to "see the big picture", to sense the possibilities and implications of any particular situation or potential decision by looking at the whole problem rather than each of its component parts. It is the ability to come up with a


29 ibid., William W. Haythorn et al., 1985, p. 53.
workable solution to a problem even when data for making that decision is inadequate or unavailable.30

On the surface, at least, senior leadership appears to be a more distant, isolated type of leadership to that exercised by lower level officers. However, examination reveals the extent of interpersonal contacts within the organisation which facilitate the exercise of command at senior rank. Particularly in executive management and strategy formulation, senior officers are continually involved in interacting with their staffs to gather or disseminate information and opinion, and with other decision-makers in committees, working groups, executive panels etc., to make proposals, argue cases and protect and advance the interests of their particular organisation. To be effective in this environment, senior officers need to have developed an ability to assimilate and analyse significant quantities of information and the personal skills of appraisal, negotiation and networking.

As the profession, particularly in peacetime, becomes less separated from its parent society in living and working patterns, and as it has been increasingly called upon to justify the amount of support (both financial and moral) it receives from that society, the level of contact with external organisations has expanded. Because the decisions made by senior leaders are of a magnitude to influence, and be influenced, by external agencies, contact with such people and institutions is a regular feature of all task environments of senior officership; the nature of the contact being as much effected by the circumstances under which interaction takes place (for example, peace, conflict or crisis), as the particular responsibilities of the senior officer. In this type of activity, the senior leader functions as a conduit between a part, or the whole, of the profession or defence organisation, and the external environment. He is a representative or advocate for his profession seeking, for example, to garner support, secure acquiescence, or dispel criticism of proposed courses of action. These goals are achieved through the creation of personal contacts across a broad spectrum of external groups, and the assiduous maintenance of these links by the senior officer.

30 Weston H. Agor, "Intuition as a Brain Skill in Management" Public Personnel Management Journal Volume 14, Number 1, p. 15.
The unusual authority of the senior officer, finally, encompasses the task of providing structure for the organisation he commands. This notion recognises that the senior officer, as a decision-maker, planner and organiser, seeks to mold, adapt and even create, organisations to facilitate the translation of his ideas and policies, and those of others, into action. To undertake these activities, the senior officer needs to have developed a range of skills of intellectual leadership. These include the idea of vision; of the senior officer being able to delineate, in his own mind, what the purposes of the organisation should be, what direction its development should take, and how to move towards that conception of a future organisation. James MacGregor Burns defines this skill of intellectual leadership as "the capacity to conceive values or purpose in such a way that ends and means are linked analytically and creatively and that the implications of certain values for...action and...organisation are clarified".

In building this conception of the future, the senior officer needs to have developed an ability to "see the big picture"; to build, synthesise and integrate the component parts of a future organisation, rather than rely upon the more usual style of reductionist, problem-solving thinking. This conception for the future, in turn, needs to be supported by an ability to communicate an understanding of it to subordinate staffs and to garner their enthusiasm, energy and commitment to its achievement. This can be done in a number of ways, for example, the establishment of an organisational climate which stresses the delegation of authority as well as work, the cultivation of initiative and the provision of easy access to the commander. Other methodologies include the creation and supervision of task-related teams whose members are selected on the basis of the optimal combination of qualities, background knowledge and skills.

Finally, the notion of providing structure to the organisation is an essential component of senior officership, particularly in


circumstances of rapid change and uncertainty. Vaill, in his study of high-performing organisations, outlines four types of changes which place significant demands upon the ability of the senior officer to provide leadership in this way: environmental demands and opportunities; organisational member needs, expectations, abilities and values; technology; and the impact of reorganisation itself. These changes, and others, form the basis for the following discussion of influences upon requirement for senior officer preparation.

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CHAPTER 2:

INFLUENCES UPON SENIOR OFFICER PREPARATION

The discernment and delineation of certain constants of senior officership can be seen as an end in itself. However, it also forms the foundation of a dynamic concept of senior officership. The second component of such a concept, from which its dynamism and resilience is derived, is the juxtaposition of these constants of senior officership with an analysis of specific forces of change which will influence the tasks of senior officership now and in the future. When fully developed, this concept serves to identify the requirement for senior officer professional development. It should also provide a guidance as to the optimal practices and programmes which can be developed to prepare officers for senior rank. Implicit in such a concept is a recognition that the methods and types of learning experiences which may have, in the past, proven sufficient and appropriate to prepare officers for senior posts in the military profession, may not necessarily meet the needs of preparing officers for the future profession.

The purpose of this chapter is to explore this second component of a concept of senior officership through analysing the forces of change which will influence the nature and demands of senior officership in the future. These include: changes in societal values, education, strategy and defence organisation, technology, levels of operational experience and personnel turnover, and budgetary and manning postures.

Changes in Societal Values

For significant periods of history, the military profession has tended to be separated from its parent society in a physical, ethical and behavioural sense. Indeed, the notion of a distinctive community as a defining characteristic of a profession finds its most fully developed
expression in the military profession. Thus, the separate community of the profession has been nurtured not only by broader societal attitudes but also by professional predilection. Parent societies have frequently adopted postures of indifference towards the military forces raised in their defence. For most societies, particularly in times of no discernible threat, the maintenance of armed forces has been seen as a disagreeable and contentious diversion of resources from a society's pursuit of its well-being. Yet, despite demonstrations of apathy and disinterest, most societies have tended to retain an acceptance of the importance and uniqueness of the professional task and the necessitude for certain attitudes and behaviour patterns which the profession maintains are essential for the performance of that task.

However over the last decades, a growing dissonance has emerged between the ethics and practices regarded by the profession as imperatives for effective performance of the professional task and evolving value systems in those societies. For example, the relationship between the citizen and the State has been transformed. Far from the French Revolutionary, and later more universally European, notion of military service as an obligation and right of citizenship, significant portions of contemporary societies have come to view "the State" as being responsible for their collective and individual well-being, as Haltiner and Meyer observe:

The mutual relationship which has existed in the past (rights by obligations) has now been reduced to a one-sided demand that the state operate as an organ at the service of its citizens.

The pursuit and protection of the political, social and economic rights of the individual has taken many forms; the most obvious of which being a rejection and questioning of traditional sources of authority and direction, be they national, employment, community or familial, in basis. As the subordination of individual needs and rights to those of

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1. See William J. Goode, "Community within a Community: the Professions" American Sociological Review Volume 22, Number 2, 1957, and Cathy Downes, "To be or Not to be a Profession: The Military Case" Defence Analysis Volume 1, Number 3, September 1985, pp. 147-172.

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the group, company, organisation or institution have been variously challenged and/or reversed, societies have become more pluralistic. Pluralism at a societal level is compounded by multiculturalism at a national level. Policies which supported the speedy and thorough assimilation of ethnic minorities into the dominance culture have been replaced by those which stress cultural diversity with a by-product of fragmented nationalism within nationalism. As a consequence of these trends, youth cultures have developed, and will develop further, which, to varying degrees, are anti-authority, egocentric, egalitarian and preoccupied with the achievement of self-goals and self-identity.

These social changes hold significant consequences for the future senior officer. For example, if the profession holds fast to those attitudes and ethics seen as essential for performance of the military task, it must be prepared to strip away the values of individualism and egocentrism held by its entrants, and replace them with those which are supportive of the professional activity. In so doing, professional leaderships must be prepared to cope with the consequences of a growing level of dissociation from the society from which it recruits and gains its prestige and legitimacy. Alternatively, if the profession acquiesces to external pressures to civilianise its value structure and preferred patterns of behaviour, an appeasing, albeit artificial, symmetry may be sustained with the parent society. However, the profession risks losing that part of societal prestige which is based upon the mystique of the professional task. More significantly, in adopting a value system which is, in significant part, dysfunctional to military activity, the risk of failing in the performance of the military task is increased.

To date, professional leaderships, in many cases, have found themselves on the defensive, either unwilling or unable to go head-to-head with the dilemmas raised by these societal trends. Yet, such changes cut to the core of professional legitimacy and autonomy. They raise questions which are tortuous and sensitive for the profession, such as that noted by Zoll:

If a culture becomes, in substance, an ethical Tower of Babel, then what sorts of moral guidelines exist for its guardians, those who are responsible for its defense? Are they to be
individual manifestations of this sprawling diversity? If not, to what ethical standard should they repair?\(^3\)

Another concerns the degree to which the profession should, or should not, be wholly representative, in demographic, educational, gender, and ethnic mix terms, of the society from which it seeks to defend; of how to identify, and then achieve, a force mix which does not bring down the burden of defence and potential self-sacrifice disproportionately upon particular groups in society, but which, at the same time, does not allow the goal of representativeness to impede or handicap the ability of the force to perform its professional duties.

The profession, now and in the future, will be unable to avoid responding to these issues. It will be the responsibility of the profession's leaderships to guide, indeed perhaps forcefully, the creation and maintenance of a military community self-image which is robust enough to accommodate such social change without being severely compromised by it. The ability of senior officers to perform this leadership role will depend, in good measure, upon the opportunities which they have had, prior to their appointments, to conceive, fashion and refine their ideas and convictions on these issues.

**Changes in Education**

The Australian military profession may not only be called upon to examine its ethical stances and patterns of behaviour in relation to those prevailing in its parent society. Trends in professional education, and in the education sector in general, will have a significant influence upon the profession of the future. These factors include: expansion of tertiary and postgraduate education in society, the impact of postgraduate courses of relevance to the profession, and the role of the profession in the development of its own professional knowledge base.

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\(^3\) Donald A. Zoll, "A Crisis in Self-Image: The Role of the Military in American Culture" *Parameters* (Journal of the US Army War College) Volume 12, Number 2, December 1982, p. 27.
Many in Australian society hold ambivalent views on higher education. The citadel-of-privilege notion is balanced by a realist belief that higher education is an essential passport to interesting, well-paid and challenging forms of employment. This valuation of education is manifested in three ways. More adolescents are being encouraged, and supported, in their efforts to complete secondary schooling in order to qualify for entry to higher education. This has, to a degree, been matched by enhanced efforts to meet the demand for vocationally-relevant tertiary educational opportunities. Finally, there has been a flow-on effect to postgraduate level education, with more professions and occupations encouraging their members to participate in specialist courses and further qualifications. This trend also recognises the growth which has occurred in the knowledge base of many forms of employment.

There are a number of implications for the Australian military profession and its future leaders. For example, the profession has, to date, held a unique position amongst the professions in its commitment to the continuing education and training of its practitioners. However, in the main, these courses have not been accredited outside the profession. In the future, the standing of the profession and its attractiveness to potential officer entrants may depend, to a degree, upon not only the provision of high quality undergraduate education, but also upon the availability of, and institutional support for, postgraduate education, which leads to a recognised higher-level qualification.

Within the profession many postgraduate university courses lead to specialist streaming of officers which can influence their prospects for selection to the senior most ranks. However, the level of technological, scientific and managerial complexity inherent in a growing number of senior positions may mean that a broad range of postgraduate qualifications will increasingly become recognised as official or unofficial promotion prerequisites. This will create increased pressure for the profession to expand the educational opportunities available to its practitioners. In turn, this will further challenge the viability of the omnicompetent generalist model which has formed the basis of career management and selection for senior rank.
Historically, there have been valid and proven reasons for the stress placed upon operational service as a key method by which people can gain valuable professional skills and knowledge. A carry-over from this approach has been the underestimation and disparagement of other methods of learning which develop different, but none the less relevant, skills and knowledge. In effect, "book soldiering" has often been dismissed as a poor substitute for practical experience gained from time spent in ships, with troops and on squadrons. However, there is a growing awareness that postgraduate education, either sponsored within the profession or outside it, is not a second-rate alternative to operational experience. But rather, if the ADF is to be successfully modernised and prepared for future conflicts, such learning experiences are an essential component of the effort to prepare officers to perform at senior ranks in a broad array of tasks. This recognition will need to be more broadly reflected in the level of institutional support for postgraduate education in the professional development of future officers, both in terms of opportunities for study and the management of officers careers.

The significance of postgraduate education should also be expressed in terms of its potential impact upon the professional knowledge base. While the profession has mandated that its members will participate in a variety of educational and training experiences, this has not translated into the development of a significant group of practitioners committed to the enrichment and advancement of the corpus of professional knowledge. Without such a body of professional researchers, the military profession has lost the initiative, both in the development of new knowledge and in the definition of the purposes to which professional expertise is to be used. In the absence a group of researchers in its own ranks to challenge conventional wisdom and advance the state-of-art in all aspects of professional activity, as noted earlier, civilian strategists, technocrats and bureaucrats have assumed a greater authority over the profession's knowledge base than the profession itself. This usurpation of professional expertise has resulted in a questioning of professional

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credibility in political and bureaucratic forums. If the Australian military profession is to regain control over the advancement of its own knowledge base, it must be prepared to develop its own researchers and teachers, and an educational institution which devotes a proportion of its resources to their training and activities. The Australian Army Regular Officer Development Committee recognised this fact in its 1978 report:

In a period when war is successfully avoided and its capacity goes untested, the profession can only be weakened from within unless it is officered by people who consciously study and challenge their art in breadth and depth.

Finally, senior leaderships will in the future preside over an officer and NCO corps which is more highly educated than has been the case in the past. As the pursuit of higher learning contributes to, and reflects, a growing specialisation of function, there will be a greater requirement for senior officers who may or may not themselves be specialists, to be effective in integrating the efforts of highly educated specialists who, as a consequence of their education, may seek greater autonomy and authority in their work activities.

Changes in Operational Service and Experience

Another factor which influences the role of formal education and research in the profession is the changing institutional memory of operational service and experience. For many nations, periods of peace remain those all too brief intervals between conflicts of one kind or another. Australia, in contrast, has been fortunate in that over 15 years have elapsed since components of its military forces were involved in war-fighting. From a societal standpoint, this is a wholly

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satisfactory circumstance. For the military profession, it creates certain difficulties. Over a long period of uninterrupted peace, the institutional memory of the profession, in terms of operational service, is eroded as experienced members complete their engagements. After most conflicts, operational service is spread comparatively evenly across the rank structure. However, as senior officers leave, and are replaced the experiences of their successors are restricted to a lower level of command and participation. Writing in 1978, General Sir Arthur MacDonald observed:

Most of our senior officers with command experience on active service obtained it at the equivalent of company or perhaps battalion level. In other words we are rapidly reaching the situation in which our admirals, generals and air marshals will have had comparatively little or even no operational experience.\(^7\)

Indeed, in the contemporary Australian Army for example, excluding those with UN or other peacekeeping service, less than 9% of the force has had operational experience.\(^8\)

In addition to operational service, there are a number of other experiences which make a unique and exponential contribution to the development of the senior officer, for both war and peace-time service. However, over the last decade particularly, there has been a contraction of the range and number of such opportunities, which include for example, independent command in assistance teams, or on United Nations or other peacekeeping missions, long-term training deployments and exercises overseas, and defence attache duties.\(^9\) These tasks place considerable demands upon the talents of the officer. Moreover they can serve to broaden his perspectives, increase his

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7 General Sir Arthur MacDonald, "The Development of Service Officers to Fill Senior Appointments" Australian Journal of Defence Studies Volume 2, Number 1, April 1978, p. 6.

8 Army Office, Minute Paper CPERS-A 640/87. The award of an operational service medal was the basis used for this calculation.

9 The levels of such experience, particularly in the Australian Army may increase given the current commitment of forces to Namibia and Iran-Iraq. However, in the Nambian case, the task is Corps specific and, in both commitments, the number of officers involved is small.
awareness of the international environment and help him to develop useful contact groups among other communities and military forces.

The decline in levels of operational service results in a smaller proportion of officers having had the opportunity to develop an understanding of the most stressful conditions of war. To date, the profession has always regarded such knowledge as invaluable in the undertaking of command appointments. Reduced experience in overseas deployments can contribute to an undesirable element of parochialism and non-awareness of developments in the international arena. Fewer members of the profession are able to participate in activities which, by their very nature, simulate or replicate a number of conditions which prevail in war and as such are a valuable source of preparatory experience. Also, there are fewer experienced members of the profession available to train the next generation of officers and to make relevant contributions to the development of policy advice.

The declining level of operational experience in the profession also makes more difficult the task of successfully predicting the nature of the next war and designing and developing a military capability which is responsive, sustainable and flexible. Sir Michael Howard, in his Royal United Services Institute Chesney Memorial Lecture, elegantly summed up this dilemma. A military officer in peacetime:

...is like a sailor navigating by dead reckoning. You have left the terra firma of the last war and are extrapolating from the experiences of that war. The greater the distance from the last war, the greater becomes the chances of error in this extrapolation. Occasionally...a small-scale conflict occurs somewhere and gives you a "fix" by showing whether certain weapons and techniques are effective or not; but it is always a doubtful fix...For the most part you have to sail on in a fog of peace until at the last moment...Then you find out rather late in the day whether your calculations have been right or not.10

Howard's analogy rests on the simple maxim that we cannot know where we are going unless we can see our tracks and know the

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direction from whence we have come. This is predicated on the relevance of past experience as a predictor of future events.\textsuperscript{11}

Any evaluation of the impact of declining levels of operational experience, however, also needs to be set against the fact that only a proportion of past experience may be relevant to future conflicts which may be different to those which have gone before. Technological, political and social change have routinely challenged the predictive value of past conflicts. Moreover, particularly in the air and sea environments, a substantial component of the conditions of operation which prevail in war, also exist in peace. In these instances, it is experience of conflict - a sub-component of operational experience - which has significantly declined. Finally, while military leaderships have applied operational service as a factor of determining weight in promotion and appointments, it cannot be justified as a \textit{sine qua non} for an increasing proportion of senior officer positions.

In awareness of these caveats, it is still a valid observation that as the levels of operational service in the ADF continue to decline, it is increasingly necessary to provide learning experiences which effectively prepare future senior officers to cope with the intellectual and physical demands of operational service. As the profession moves further from the benchmarks of past conflicts, there is also a greater demand for learning experiences which assist officers in developing their capabilities of analysis and extrapolation as to successfully predict the demands of future military employment and determine how the ADF should structured and prepared to meet those demands.

\textbf{Changes in Strategy and Defence Organisation}

Over the last 15 years, two sets of initiatives have brought about a distinctive shift in the role played by the Australian military profession in national security, military strategy and military policy formulation and implementation. These are first, the Department of Defence organisational reforms which initially created a unified Department with its core of mainly civilian policy staffs in Defence

Central, followed by an on-going process of centralisation of policy functions through the establishment of the Headquarters, Australian Defence Force, the creation of the appointment of the Vice Chief of the Defence Force and the expansion of the Headquarters. The second initiative has been the development of a national security strategy of self-reliance and the setting in place of operational command structures to support its military component. These include: the establishment of Joint Planning Staffs, the creation of the positions of Joint Force Commander Australia, and Land, Air, Sea and Northern Commanders, and operational command headquarters. A number of consequences flow from these developments.

The design and implementation of a national defence strategy which stresses self-reliance has served to alter the part played by contemporary and future senior officers in the formulation of strategy and doctrine, the procurement of military equipment, and the operational command of military forces. For example, as an increasing proportion of weaponry and platforms are being manufactured in Australia, rather than overseas, the supervisory and management functions associated with capital procurement projects and programmes is expanding. Moreover, the possibility of collaborative projects, increased Australian defence research and development and defence exports all portend an increasing knowledge and skills requirement for future senior officers in procurement appointments.12

The self-reliant defence strategy also has significant consequences for the operational and strategic command of the ADF. In contrast to past experience where Australian forces have usually been subordinated to allied command, in most future conflict scenarios it is envisaged that Australian senior officers will retain the operational as well as strategic command of the ADF, and could well assume operational command of allied formations in regional conflicts. Moreover, it is clear that, except in particular circumstances (for

12 A postgraduate course has been established in Project Management at the Darling Downs Institute of Advanced Education, Toowoomba. However, it is doubtful whether this will meet the requirement for officers educated and trained in this corpus of knowledge and skills. This is primarily because it can be expected that few officers so trained will be retained once they have completed their return of service obligations, as they will be eagerly sought by expanding defence industries.
example, UN peacekeeping duties), the operational employment of Australian military forces will involve more than one Service. Under these circumstances, the effective exercise of operational command for example, must be predicated upon a full understanding of the capability parameters and limitations of all Service units likely to be assigned to a particular theatre or type of operation.

As a consequence of the self-reliant defence strategy, there is now a clear requirement to prepare potential senior officers for command and staff appointments particularly at the operational level of war. The necessity for such preparatory experiences is reinforced by the fact that the conflict scenarios, identified as most likely to occur, will involve considerable political sensitivity and will frequently rely upon minimum use of force principles; both of which create unique difficulties and risks at all levels of command. Moreover, while knowledge and experience at the tactical level of war is recognised as a prerequisite for command at the operational level, it is not a qualification for such duties.

Although it is some fifteen years since the initial Tange reforms established a unified Department of Defence and the diarchic division of responsibilities, a process of rearranging portfolios, of balancing "competing centres of power" has continued unabated. These movements, for the most part, have tended to be realignments of positions, the creation and dissolution of coalitions of responsibilities; the exception perhaps being the creation of HQ ADF. Both through its inception and accumulation of roles and policy functions, the Headquarters has created a number of new positions for senior officers - Vice Chief of the Defence Force, Assistant Chiefs of the Defence Force for Policy, (ACPOL) Operations, (ACOPS), and Personnel, (ACPERS) for example. This growth has been qualitative as well as quantitative in terms of the varied and substantial demands of these positions. In this and many other respects, the Headquarters has outgrown its original conception as an operational planning staff for the Chief of the Defence Force. It has developed as a robust actor in the development of policy advice in defence and has generated a requirement for all its senior actors to be accomplished participants in the bureaucratic process of its formulation.
Challenges of Technology

Perhaps the greatest catalyst of change on the battlefield and in the peacetime programmes to prepare for future conflicts is that of technology. For Van Creveld, "war is permeated by technology to the point that every single element is either governed by or at least linked to it. The causes that lead to wars and the goals for which they are fought...planning and preparation and execution and evaluation; operations and intelligence and organization and supply...and leadership and strategy and tactics; and even the very conceptual framework adopted by our brains in order to think about war and its conduct - all are and will be affected by technology". That technology has altered irrevocably the character of war and peacetime endeavours is a matter of fact; that it will continue exponentially to do so is almost as certain. As such, the scope of predicted technological change will provide new and evolving challenges for senior officership in both war and peace, to which a preparatory response is required.

The ability to assess the impact of new technologies upon the preparation of military forces and future battlefields in Australia's case is handicapped by the lack of a clearly defined threat to our national security interests. However, two factors contribute a degree of certainty. First, the relationship of high intensity war with high technological sophistication is increasingly being associated with other intensities and types of war-fighting. Therefore, even if strategically Australia's military leaderships are tasked to prepare for "low-level contingencies", it is evident that these will involve the application of increasingly more complex and sophisticated technologies. Second, if as Van Creveld observes, war is permeated completely by technology, then arguably so too are the economic, political and social lives of whole communities, and the military profession is more and more influenced by change in these broader arenas. Certain trends can therefore be identified in light of these two conditions.

Regardless of the level of intensity, future "high-tech" battlefields will place heightened demands upon the intellectual,

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physical and leadership skills of all officers. For example, as noted in Chapter 1, increasingly sophisticated C³I systems will provide senior commanders and staff officers with a growing amount of information with which to make decisions. Yet, at the same time, increases in the destructive potential, rate of fire, range, accuracy and mobility of weapons are acting to reduce the time available in which to make those decisions. Although advances in artificial intelligence are predicted to address information overload dilemmas, the value of these systems hinges on the availability and accuracy of information which cannot be guaranteed given the inherent vulnerabilities of communications hardware.

While the decision to act or not to act remains essentially unchanged, the choices of how to act will become ever-more varied on the high-technology battlefield. The successful senior commander will be the individual who, because he understands the strengths and limitations of a continually expanding range of technologically complex weapon systems, can achieve the most effective synchronisation and integration of such systems for a given situation, and then rearrange and reconstruct the combinations for another task. The attainment of this synergistic effect will also be predicated on an ability to identify and define plans and deployments which most incisively use the weaponry concerned, as Murray observes:

...for the commander there is a dimension beyond technology; he must combine new technology with new and imaginative tactics. New technology must be a cause for rethinking existing tactics. This in itself is an intellectual and organisational challenge of considerable proportions.¹⁴

The application of technology to divine the intentions and actions of an opponent is equalled by its employment to provide the commander with the means to achieve greater knowledge about, and control over, the forces at his own disposal. While the mechanisms which facilitate control have become more sophisticated, the organisational formats through which such control is exercised remain

essentially unchanged. Under line-staff organisational structures, information is transmitted up the chain of command from forward units who, in turn, receive orders from higher staff and command echelons. Ideally, at all times, forward units should be in contact with command elements who have an understanding of where the tasking of each unit fits into the larger picture of the battle or campaign. Particularly in command at sea, such a system has always been challenged by substantial areas of operation and unreliability of communications. This led to a looser level of operational command, with individual ship commanders requiring a greater understanding of overall objectives in order to be able to decide and act, at times, independently of higher direction.

Despite, or even because of, advances in communications technology, it is less than certain that tight forms of control will be workable in future land and air battles as well as those at sea. For example, as the time available in which to take decisions is diminished, there will be less and less time to refer to higher headquarters for orders and direction.\(^\text{15}\) Moreover, in likely conflict scenarios involving land forces in defence of the North of Australia, unless an opponent seeks a confrontation with ADF units, the principal tasks will be those of search and location of the enemy and protection of points of vulnerability. A significant proportion of ground units, as a consequence, will likely be small in size, highly dispersed and mobile. The lack of certainty in communications terms, particularly for those in the medium-range, means that operational commanders will have to be prepared to share their understanding of the battle or campaign with junior commanders to a greater degree than has previously been seen as necessary.

Another characteristic of future high-technology battlefields which will influence the task of senior leadership concerns the maintainability and sustainability of military forces. In conflicts of both short and long duration, senior commanders and staff officers will be confronted by the operational, logistic and maintenance reality

that significant proportions of high technology equipment in battle are "more difficult to operate, less reliable, harder to repair, and there will be fewer replacement items because each item will cost more and therefore fewer will be purchased".16 As a consequence, senior commanders will come under greater pressure and stress in decision-making to weigh the risks of achieving success within a given resource profile against the necessity of carefully husbanding of resources for future and, at that point in time, undefined demands.

The challenges of technology which will influence senior command and staff work on the battlefield are matched by those which will affect senior leadership tasks in the peacetime preparation of military forces. For example, in the late 20th century, the application of technology has generated the division, sub-division and sub-sub-division of military tasks with an increasing degree of specialisation of endeavour and equipment. It has been argued that such specialisation undermines many of the traditional sources of authority which separate leaders from followers and which establish the authority of the leader to lead. Margiotta and Maccoby note that:

Technology is mastered by expertise, not rank, nor even experience. Authority based solely on rank is challenged by technology, which rewards knowledge and skill. Technology places greater reliance on persons who know a specialized repair or operating function well, and less reliance on masses of people who are moved together to take particular geography or terrain in the face of devastating fire.17

The leadership style change necessitated by specialisation goes beyond the more broader shift from authoritarian, autocratic leadership styles to those of a more democratic and facilitative character. Under the latter styles, the legitimacy of leadership is acknowledged through the possession by the leader of more information and skills than those to


be led. However, in the leadership of specialists, the generalist senior officer cannot claim such an authority. Nor can he rely upon his membership of a combat arm as an unquestioned legitimisation of his right to lead, particularly in a force with little or no warfighting experience.

The increasing proportion of specialists in a high-technology military force also changes the nature of the task of senior leadership. For example, the heterogeneousness of specialisation is reflected in the diversity of values, attitudes and behaviour patterns of people who are able to more closely identify the content of their labours with those of a variety of civilian occupations rather than the military task of warfighting. As Margiotta and Maccoby observe, technology has had:

...a traumatic, if ill-perceived, impact on military value systems, shared beliefs, and bodies of knowledge. The higher the level of technology, the more it must be supported by functional specialists who require little knowledge of warfighting, but who must be apt in hydraulics, electronics, instrumentation or avionics maintenance.18

Thus, in the leadership of specialists, the senior officer will be required increasingly to create an organisational climate which serves to integrate and synergise the work of often a variety of specialist subordinates. He will need to apply a leadership style which is less rigid in terms of chain-of-command direction, but one which at the same time ensures that his subordinates share a common vision of the military professional goals of the organisation.

The pace of technological change, (particularly in information technology), the proliferation of technological options which have military potential, the preference for operating at the frontiers of many technologies, and the expanding number of different technologies which are interrelated in individual weapon systems, collectively have increased the technical knowledge and skill requirements of a broader array of senior officer positions.19 This enhanced knowledge and skills

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18 ibid., Franklin D. Margiotta, Michael Maccoby, 1985, p. 94.
19 Commandant, Royal Military College of Science, Shrivenham, "The Philosophy for the Education of Officers in Military Technology" (Paper
base will be crucial in the strategy-making and force development arenas for example. Here, senior officers will need to be increasingly capable of contributing to debates on technology-capability trade-offs, and the preferred technology intensiveness of the ADF. These discussions concern the determination of effective policy responses to the escalation in costs of R&D and manufacture of high technology weaponry and equipment, and the magnitude of capability generated by small numbers of high-technology platforms and weapons versus larger numbers of lower-technology systems, within the parameters of the strategic tasking of the ADF. Equally, in weapons acquisition, as the ADF becomes more and more reliant upon Australian manufactured, and in many cases Australian developed, high technology weaponry and platforms, there is a greater requirement for senior officers to be highly informed and technically competent as buyers (project and program managers), and as customers (operational and logistics staffs).

The challenges of technology for senior officership will need to be addressed in how future officers are prepared for senior appointments. For example, successful performance of senior leadership tasks in a high technology military force will depend upon the future senior officer developing (i) skills of integrative as well as analytical thought, and (ii) a broader and deeper knowledge of, and confidence with, technological principles and the inter-relationships of different technologies. In turn, successful leadership of the specialists demanded by technology-intensive military forces, will be predicated on the development of a different type of generalist officer: not a jack-of-all-trades, but rather a master of more than one, and an officer who has had the opportunity to define and refine a leadership style appropriate to the group which he is to lead. This could entail, for example, institutionalising the de facto trend towards increasing career specialisation in non-corps and non-branch staff appointments to provide the officers with the confidence of an in-depth experience with a major staff area such as force development, personnel, logistics, training or materiel. Career specialisation initiatives will need to be dovetailed with the provision of structured opportunities for officers.

prepared for General Sir Hugh Beach, A Study of Education in the Army, Ministry of Defence, 18th December 1984).
to improve and update their levels of technical knowledge and refine and expand their intellectual and leadership skills.

Effects of High Personnel Turnover

Many of the factors which are influencing the nature of the tasks of senior officership and the future requirement for senior officer professional development are environmental, such as social, occupational, educational and technological change. However, other features, such as declining levels of operational experience, reflect changes in the characteristics of current and future senior officer cohorts. In this category also falls the effects of high personnel turnover. The recent and current high resignation rates of in the ADF are having, and will continue to have, a significant influence upon the character of the future senior officer population. Furthermore, even if resignation rates stabilise and decline in the immediate future, overseas experience demonstrates that the repercussions will effect the career and employment structures of the ADF for at least the next two decades. In terms of senior officer professional development, the consequences include: imbalances in career and employment structures, dilution of experience levels and limitations on formal preparatory efforts and participation.

High resignation rates, in conjunction with manning constraints and policies to reduce posting turbulence, have disrupted the regulatory principles which are used to govern career management in the ADF. These mechanisms include the requirements of branch and category structures, the policies of job rotation and the generalist officer concept, the criteria of qualification and time-in-rank for promotion, training course vacancies and individual predilections. The uneven spread of high turnover across ranks and corps/branches

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has produced promotion "black-holes" and blockages. For example, the concentration of resignations in the middle ranks of the officer corps has created smaller promotion pools in certain employment categories which will progress through the rank structure over the next ten to twenty years. An imbalance has been generated between positions to be manned and the number of officers in those ranks qualified to fill them. Without the ability to recruit laterally, the "black-hole" can only be reduced through promotion from below. This has a number of effects.

As the black hole cohort moves through each rank, there are fewer people in the selection pool for promotion. Thus, selectivity is affected and there is a greater chance that people might be promoted beyond their level of competence. Minimum time-in-rank provisions are established which reflect a continued reliance upon on-the-job learning and the need to consolidate skills and confidence in performance. However, in order to keep billets filled, more people are being promoted as soon as they have reached the minimum time-in-rank point or even before it. As a result, the breadth and depth of experience acquired by officers in affected branches and ranks is reduced. Moreover, so too are the number of reporting periods in each rank. If there is a continuation of more officers leaving than there are officers eligible for promotion to replace them, the black hole becomes cumulative and extends into the rank below and below that. For example, in the RAAF in mid-1988, there were 44 vacancies at Wing Commander level for General Duties pilots. However, only nine officers would be available in that year for promotion to fill these vacancies. In 1989, RAAF manpower planners estimated that the RAAF would lose 33 General Duties Wing Commanders. It was forecast that there would only be 16 officers promotable to replace these Wing Commanders, and only nine of those would be pilots.

If officers are kept to the minimum time-in-rank before being promoted, increasingly large numbers of key positions are left vacant. If officers are promoted early, down-line promotion bulges can be generated. When increased numbers of officers are promoted early, the pool of officers who have attained a rank which permits them to serve until the maximum retirement age of 55 years is expanded. Having attained such a rank at a comparatively young age, officers can be expected to remain in those ranks for a significant period of time,
thus effectively reducing the promotion opportunities for lower-ranked officers. This, in turn, has a spin-off effect for retention in that more middle-ranking officers may decide to resign because they see the opportunities for advancement and their changes of attaining rank with the entitlement to serve to 55 years being reduced considerably by reason of the longevity of the group ahead of them. As an illustration, in 1988, of the Army’s 45 Brigadiers, 27 still had at least five years to serve until retirement; of the 113 Colonels, 60 still had at least ten years to serve until reaching retirement age.

The requirement to fill billets left vacant by resignations and accelerated promotion combine to make it more difficult, in an increasing number of cases impossible, for officers to be released to attend career education courses. For example, both the RAN and RAAF have experienced considerable problems in releasing officers of appropriate rank, standing and branch to attend staff college training. In 1988, the RAAF Staff College had up to 30% of its course places for RAAF officers unfilled. When added to the requirement to have pilot billets filled for the Kangaroo ‘89 Exercise, there were insufficient numbers of RAAF pilots officers available in 1989 for staff training, and course was cancelled. Again, this situation has a number of implications for senior officer professional development. A proportion of officers who have the potential for senior rank are by-passing what have been identified as valuable and essential preparatory experiences. There are few successful ways available of later compensating for these missed opportunities. For example, the RAN and now the RAAF, are increasingly using the Joint Services Staff College (JSSC) as an alternative experience for officers who cannot be released to attend a Single Service Staff course. Under the 1987-88 review of the JSSC, significant portions of the course curriculum were to be devoted to the Staff Colleges. Thus, for the officer who does not attend staff college, the JSSC option will no longer provide an effective alternative.

The resignation situation also influences the Directing Staffs (DS) of career education courses. Accelerated promotion means that officers who are appointed as DS have themselves had fewer opportunities to develop the broader perspectives and experiences which they are expected to pass onto their students. Moreover, given that it is desirable to have high quality and high potential officers as DS, it is difficult to maintain continuity of staffing as these individuals
are the first to be considered for early promotion or to be required for an essential billet which must be filled.

Finally, a proportion of high resignation levels is being experienced amongst officers with the potential to attain senior rank. Because of their recognised potential, they have been appointed to positions which contribute to their professional development for senior rank and have been selected to attend long-term training courses for the same purpose. When such officers leave, the quality of the feeder pools into senior officership is effected, not only by their loss, but also by the fact that other officers who were perhaps only slightly less competitive, were denied access to career-enhancing training and appointments.21

Apart from the broadly-based imperative to achieve a steady-state of personnel turnover at substantially lower levels than those currently being experienced, the effects of high personnel turnover are such as to intensify the requirement for preparatory experiences for future senior officers. At a time when the performance of senior officer tasks is demanding greater knowledge and skills, a significant number of officers will not have had sufficient time or opportunities to develop, in essential measure, these qualities as they progress towards such ranks and appointments.

Budgetary and Manning Level Constraints

While high levels of personnel turnover have influenced the availability of people to attend career education courses, and officer career development in general, a key factor of equal and, arguably,
Influences Upon Senior Officer Preparation

greater significance for senior officer professional development is the budgetary and manning level constraints operating on the ADF. These relate to the shortfall between imposed manning ceilings and manning requirements, the insufficiency of authorised positions for long-term training, and the inadequacy of funding for career professional military education.

Almost every attempt to improve the education and training experiences provided for senior officer professional development have failed to hurdle the obstacle of the current manpower allocation equation. At present, the Authorised Average Strength (AAS) of each Service is less than the combined number of authorised positions to be filled, the number of people under pre-employment training, and the number of trained people unavailable for duty (people on leave without pay, in detention, on furlough, or awaiting discharge for example). This results in each Service carrying a burden of undermanning. In determining which posts are to be left vacant (or disestablished to reduce the distortion effect upon manpower planning), priorities have been set which respond overwhelmingly to the criteria of operational readiness and an interpretation of relevance guidance contained in the 1987 Defence White Paper. Areas of activity which do not contribute directly, or rather immediately, to operational readiness, including authorised positions for long-term training, are those which are selected to carry the bulk of the undermanning. Equally, these areas are vulnerable to further "salami-slicing" in each successive application of budget cuts or zero-growth policies and when manpower is required for higher priority manning tasks.

Because of the low priority of manning afforded to long-term training, initiatives to increase the number of authorised positions, or to assign people to fill positions are thwarted. The rationale which affords a low priority to the release of people to participate in long-term training also applies to the funding of such activities. The vote allocations for overseas training, for example, have not only received no uplift for the increasing costs of such courses, but have been routinely reduced. As a consequence, participation in a number of programmes has been abandoned and others reduced in levels and frequency of attendance.
The failure to commit sufficient funding to support senior officer professional development initiatives, and to allow for the availability and release of officers to participate in activities which would be generated, is degrading the quality and scope of the experience base of future senior officer cohorts. As with the consequences of high personnel turnover, this deterioration is occurring despite the fact that when these cohorts reach senior rank, the knowledge, skill and leadership environment and requirements of senior positions will be even more extensive and demanding than they are today.

A Concept of Senior Officership

The concept of senior officership which has been defined and developed here consists of two components; the first being a delineation of the specific and recognisable tasks of senior officership, which are identified as those of operational command, strategy and defence policy formulation, senior executive management and political interfacing. In the examination and analysis of these tasks, certain key defining characteristics of senior officership are highlighted. These comprise the features of: (i) untransferable accountability and authority; (ii) decision-making dominated by the needs of complex, multi-faceted and expensive organisations and projects; (iii) the provision of intellectual, moral and, at times, physical leadership of such organisations; and (iv) the ability to create effective organisational climates, to construct task-related teams of subordinates, and to develop and maintain interpersonal contact groups within and outside the organisation. It is predicated that these features are inherent in the tasks of senior officership, regardless of the period in which they are performed.

However, constants do not a concept make. In the same manner as the evolution of warfare consists of varying and unvarying elements, senior officership is a dynamic amalgam of change and constants. Therefore, the second component of this concept consists of identifying and examining a variety of forces of external and internal change which are influencing the parameters and intensity of demands of senior officer duties, and the environment in which the tasks of senior leadership are, and in the future will be, performed. At this
point in time, the factors of change which have been distinguished include: (i) the growing divergence of societal values, mores and behaviour patterns from those regarded as imperatives for the professional membership and functioning; (ii) the evolving patterns and demands for higher education both within the profession and society; (iii) the decline in levels of operational service amongst ADF members, and the increased requirement for compensating preparatory experiences; (iv) the expanding roles to be played by ADF officers in the formulation of military and national security policy and acquisition of advanced weaponry and platforms; and (v) the challenges of new technologies for operational command and senior executive management in both peace and conflict.

At the same time as these influences combine to increase and intensify the knowledge, skills and leadership demands of senior officership, the character of future senior officer cohorts is also changing. For example, with the introduction of the Australian Defence Force Academy, more officers in the future will be educated to baccalaureate standard. Yet, despite this improvement in one component of professional officer development, high resignation rates and budgetary and manning constraints ensure that a smaller proportion of officers who progress to senior rank will have participated in the variety of professional learning experiences which are regarded as essential for effective performance of contemporary senior officer tasks. Without significant improvements in senior officer professional development programs, they will almost certainly be insufficiently prepared to cope effectively with the future challenges and responsibilities of senior officer ship.
CHAPTER 3:
OPTIONS FOR A SENIOR OFFICER PROFESSIONAL DEVELOPMENT PROGRAMME

In our days we no longer believe in what Chatham called "Heaven-born generals". It is agreed that modern warfare is the offspring of science and civilization - that it has its rules and its principles, which it is necessary to thoroughly master before being worthy to command and that it is wiser to profit by such lessons of history, as taught in the work before us than to purchase experience by the blood of battlefields.

Colonel G.W. Cullum, US Army,
United States Service Magazine, 1864.

The concept of senior officership, which has been presented through the discussions and analyses of Chapters 1 and 2, recognises the incontrovertible requirement for substantial preparation for senior rank. In identifying the expanding intensity and scope of the knowledge, skill and leadership demands of senior officership in the future, it challenges the sufficiency of contemporary efforts to prepare officers for senior officer appointments into the next century. The adequacy of these efforts must also be set against the effects of the budgetary and manning constraints under which the ADF is operating. Finally, the efficacy of the existing set of preparatory experiences, to effectively meet the professional development needs for senior officers now and in the future, has been questioned in light of a variety of weaknesses which have been exposed in a number of studies of ADF senior officer professional development.

These shortcomings include: the limited number of places for ADF officers on, and the restricted relevancy of, overseas senior courses (the Royal College of Defence Studies, London or the National Defence College of Canada, Kingston, for example); the lack of a substantial, formal preparatory experience of similar standing to overseas senior courses in Australia; the deleterious consequences of attempting to upgrade the Joint Services Staff College (JSSC) course to substitute for this deficiency; the increased use of the JSSC as a compensating alternative for attendance at a Single Service Staff
Options for a Senior Officer Professional Development Programme

College; the significant length of time which elapses between the last substantial preparatory experience of JSSC and when an officer will reach general, air or flag rank; and the restricted and disjointed nature of attempts to prepare officers for operational command of joint and possibly allied forces.

In light of the requirement to substantially improve the nature and availability of preparatory experiences for senior officership and to consolidate such experiences into a recognisable and progressive ADF senior officer professional development programme, the purpose of this chapter is to identify and discuss a number of options for achieving these goals. Some eight types of experiences have been selected for consideration, which individually, or in various combinations, respond to the "requirements" guidance provided in Chapters 1 and 2, and which seek to address the weaknesses of contemporary efforts to prepare future officers for senior appointments in the ADF. The options range from the development of limited scope, vocationally-relevant courses of study to the design and construction of a National Defence College of Australia, comparable in standing to senior officer colleges in Canada, the United Kingdom and the United States.

Ad Hoc Courses on Specialist Subjects

It has been an oft-employed procedure to design and implement short-length, opportunity courses on specialist subjects when a deficiency in knowledge and skills is revealed, or where a requirement for new skills and knowledge is identified. Such courses can take a variety of forms, for example, the Professional Officer Development Directorate of the Canadian National Defence Headquarters, for example, operates two-week Senior Officer Symposiums on leadership and management which are attended by four officers in the rank of Colonel(E), 14 officers in the rank of Lieutenant Colonel(E) and six civilian members of the Department of National Defence. The Directorate also sponsors weekend National Security Studies Seminars and 4-day General Officer Seminars, the latter are attended by all officers promoted to one-star rank in the preceding year. An outline of the 1987 General Officer Seminar is provided at Annex A. More substantially, the US National Defense
University operates a six-week course - the Capstone course - four times a year for 25 officers newly promoted to the rank of Brigadier General. The course content focuses on the security environment; Chiefs, Doctrine, Joint Arena, Service perspectives; Joint Operations and Planning; National Security Environment (Office of the Secretary of Defence, Manpower, Logistics, Arms Control); Combined Perspectives (European and Pacific Area command visits); and Force Employment. The University also operates courses varying in length from three days to six weeks on Joint Command, Control and Communications Staff work, Joint Electronic Warfare Staff work, Reserve Officer and NATO Staff Officer Orientations and Computer Management.

This approach to learning has been employed in the ADF; for example, the Australian Army’s two-week Senior Officers’ Strategic and Operational Study Period, the Senior Officers’ Joint Warfare Study Period conducted by the Australian Joint Warfare Establishment (AJWE), or the RAN’s five-day Senior Officers’ Strategic Studies Course. The expansion of this type of activity has been proposed by HQ ADF and is currently under consideration. The concept put forward is for a two-part Higher Command Course consisting of a year-long external studies reading programme for officers identified as having potential for senior command, particularly the positions of Joint Operational Commander (Land, Maritime, Air and Northern) or Joint Force Commander Australia. The course would culminate in a two-week in-residence study period.

In most nations, such programmes form a logical, integral and dependent component of their senior officer professional development programmes. They are not usually regarded as stand-alone experiences or substitutes for key senior officer preparatory courses. Indeed, their content, in part, is predicated upon a student body which has already participated in more broader and intense learning

1 The Army in addition, arranges visit programmes for its senior officers with divisions and corps of a number of overseas armies, including those of the United States, Canada, the United Kingdom, Norway, the Federal Republic of Germany, Israel and Egypt. Also included in this category could be the annual Chief of the General Staff’s Exercise.

2 See Director of Individual Training Policy, "A Concept for a Joint Senior Officer Study Period" (DM 86/948, HQ ADF, Canberra, 30th May 1988).
experiences as a precursor to senior rank. Such courses seek to impart information for immediate use, rather than the development of intellectual skills which allow the officer to better order and assess new information whenever it is received. Again, frequently, it is assumed that such skills have already been internalised by course members.

Because such courses are short in length and tend to make only limited demands on, or take up spare capacity of, existing facilities they are recognised as cost-effective and inexpensive. Moreover, such programmes meet the criteria of the systems approach to training methodology with their emphasis upon vocational or specialist skill relevance. These courses seek to provide senior military professionals with a flexible mechanism by which they can learn of pertinent developments in the skills and knowledge base of the profession - changing technologies, advances in strategy and tactics, improvements in financial, procurement and manpower management structures and systems, developments in government policies and in international relations. They also serve to provide the newly-promoted senior officer with an orientation on the particular complexities and issues associated with various senior appointments. For example, a significant part of the US Defense University's Capstone course is given over to visits to the various formation Commanders-in-Chief to provide students with the opportunity to discuss with the incumbents the particular demands of their appointments. While such courses cannot be used to substitute for more broadly-based and lengthy senior officer education experiences, they are an essential part of any senior officer professional development programme.

Executive Exchanges

As discussed in Chapter 2, the self-reliant defence strategy, particularly in terms of the development of self-reliance in logistics and maintenance support, and the procurement of weaponry and platforms, has generated an increasing requirement for officers to have an in-depth understanding of how the Australian industrial and business sectors function, and indeed, how overseas firms and markets operate. Equally, as the functioning of the ADF has become increasingly regulated by the requirement to conform to the policy and
administrative edicts of other Government Departments, it has become more crucial for members of the profession to understand the organisational cultures, operating procedures and objectives of these Departments. This knowledge and understanding can, to some extent, be acquired through a formal course with visiting lectures and guided study etc. However, there is a more effective means by which officers can develop an experiential awareness and knowledge of the institutions and organisations with which Defence is increasingly coming into contact.

This mechanism is that of a programme of executive exchanges or appointments between the profession, commerce, industry, the Public Service and the Committees of the Federal Parliament. Under such a scheme, selected industries (particularly those with Defence relevance), and the Public Service (for example, the Departments of Foreign Affairs and Trade, Finance, Employment, Education and Training, Industrial Relations, Immigration, Local government and Ethnic Affairs, Land Transport and Infrastructure Support, Transport and Communications, and the Prime Minister’s and Cabinet Office), could be approached to identify appointments where an exchange could be effected with Service officers, for either a specified time (for example, one year), or for the undertaking of an agreed project. Another aspect of such a scheme could be the secondment of Service officers to act as advisers or assistants to relevant Parliamentary Committees including, for example, the Committees on Foreign Affairs, Defence and Trade, Employment, Education and Training, Industry, Science and Technology, ASIO, Public Works, and Public Accounts.

The success of such a scheme would depend upon rigorous co-ordination and co-operation, internally between Service career managers and manpower planners, and externally, with exchange departments and businesses. From an administrative perspective, there would be a requirement for a cell to be established in HQ ADF.

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3 The development and maintenance of expert knowledge of the Australian industrial and business sectors has been addressed to a certain degree through the Industrial Mobilisation Course which provides a broad overview of the capabilities and concerns of the sector. It is attended by some 12-15 officers per year. A description of the course is provided at Annex B.
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responsible for the identification of defence posts suitable for exchange and the assessment of selected posts identified by relevant departments and businesses. Where secondments rather than exchanges were proposed, compensatory manpower savings would need to be identified or a case for an increase in manning allowance would have to be successfully argued.

These administrative difficulties, however, need to be balanced against the benefits which could accrue from such a scheme. The possibilities and permutations of appointments are varied and valuable. For example, an executive exchange could be arranged between the Defence Industrial section of HQ ADF and the Defence Industrial Branch of the Department of Industrial Relations. An officer could be seconded to fill the vacant defence adviser's position on the Defence Sub-Committee of the Parliamentary Committee on Foreign Affairs, Defence and Trade. Such exchanges and secondments would not necessarily be set at any particular rank. The rank would be determined by the type of appointment, and the appointee on the basis of selected career specialisation, promotion potential and personal preference. Gains would not only be measured in the individual preparation of the potential senior officer, but also in respect of the enhanced ability of the profession and the Department to interact effectively with other Government Departments, industry and the greater community.

University Postgraduate Courses

Both within and outside the military profession, the last decades have witnessed in tertiary educational institutions the establishment and development of postgraduate courses in subject areas of relevance to senior officership. For example, the Royal Military College of Canada operates a graduate studies program leading to Masters Degrees in Arts, Science and Engineering (the courses of instruction for these degrees are listed at Annex C). The Royal Military College of Science, Shrivenham, through its link with the Cranfield Institute of Technology, confers Master of Science and
Engineering Degrees and a Masters of Defence Administration. The course content of the last degree is provided at Annex D. The School of Advanced Military Studies of the US Army’s Command and General Staff College operates a Master of Military Art and Science Degree programme and a curriculum overview of the degree is presented at Annex E.

Within Australia, the military profession has developed postgraduate level programmes of study at the Australian Defence Force Academy and has entered a co-operative venture with the Darling Downs Institute of Technology to provide postgraduate courses in project management. The course offerings of the Academy are outlined in Annex F. Civilian universities have, in the main, not invested in the development of postgraduate studies which could be regarded as of specific relevance to the generalist model of officer education and career development. The exception is the Australian National University’s Strategic and Defence Studies Centre which conducts a Master of Arts and Graduate Diploma program in Strategic Studies and provides supervision for doctorate-level research. The course outlines for this program is listed at Annex G. Further, it is believed that Deakin University’s School of Social Sciences will shortly be introducing a Masters programme in Australian Defence and Strategic Studies, following the external studies format of their undergraduate degree programmes. Collectively, these courses offer a small, but creditable, resource which the profession has come to make use of. For example, in 1988, there were some 22 military students undertaking the Defence Academy’s Master of Defence Studies and a further average of five officers were enrolled in the Strategic and Defence Studies Centre’s Masters and Diploma courses, either independently or with Defence funding.

For many members of the profession, the value, appropriateness and place of postgraduate courses in the development

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of the professional officer has not yet been convincingly established. For example, there is the less than salutary experience of postgraduate education in the US military where, in too many cases, such degrees have taken on the character of an unofficial, but almost mandatory, box to be ticked in an extremely competitive promotion system; the quality of the learning experience often has been a secondary consideration to the possession of the paper qualification. In contrast, in other nations, the undertaking of postgraduate training, particularly those courses with a scientific or technical orientation, has tended to restrict the promotion opportunities of graduates. In a generalist model of career progression, qualified specialists can type-caste themselves and have often been disqualified, as a consequence, from the mainstream promotion pool. Finally, there is the body of opinion which has viewed with concern the trend for an officer to spend an increasing proportion of his career in educational institutions and less and less time practising his profession. The difficulty in attending postgraduate training has been commented upon in the case of the high-flyer officer who is under pressure in each rank to complete a series of key appointments, identified as essential for the development of a broadly-based professional competence.

While these doubts persist, other influences and factors are coming to feature prominently which recognise the significance of postgraduate studies for the military officer, and more essentially for the potential senior officer. Investment in formal postgraduate training is a significant method by which the military profession (as do other professions) adapts to developments in its knowledge base. The profession’s activities are being, and will continue to be, dominated by an increasing level of technological and scientific sophistication. The traditional method by which a substantial proportion of professional expertise has been developed, through on-the-job learning, now involves an unacceptable risk of error resulting from inexperience and lack of knowledge. This is not to downgrade the value of lessons learnt by making mistakes. However, it is to observe that as an officer progresses in his career, his areas of responsibility and the consequences of error grow in equal measure. There is a recognised, if not always met, requirement for officers to undertake suitable training and education as a precursor to an increasing number of specialist, and a growing number of generalist military appointments. In this context, postgraduate training, either provided by the profession’s educational
Senior Officer Professional Development

institutions or by civilian universities, is assuming a more significant role in professional officer development.

In this regard, the Strategic and Defence Studies Centre’s Master of Arts and Graduate Diploma in Strategic Studies, the Defence Academy’s Master in Defence Studies, and potentially, Deakin University’s Master of Arts in Australian Defence and Strategic Studies are all programmes which can assist in meeting the need of the profession for generalist postgraduate-level education. Access to these programmes could be improved through the extension of funded places for officers, through enhanced levels of funding for the provision of academic staff and the issue of a statement of valuation aimed at increasing the levels of support and co-operation of immediate supervisors for officers who independently attend such courses on a part-time basis. These efforts would need to be followed up by a policy of effectively utilising graduates in later career appointments.

University Defence Fellowships

Over a ten year period, the Australian military profession has gradually, and to a limited degree, established a commitment to funding research opportunities for its members. This commitment has primarily been expressed through the Defence Fellowship Scheme, in the Visiting Fellowships established at the Australian National University’s Strategic and Defence Studies Centre, and more recently at the Defence Force Academy’s Australian Defence Studies Centre. Since its inception in 1978, the Defence Fellowship Scheme has awarded fellowships to some 30 Service officers and Defence public servants. A listing of Fellows and their research projects is provided at Annex H.

The Scheme has sought to select and has administered up to three or four fellows each year. Fellowship applicants must put forward a proposal for a research project which can be undertaken in an academic institution over the course of a year with extensions being granted to complete writing up the project. The Fellowships serve two principal purposes. First, they permit a very small number of officers to spend a year outside the profession, developing their analytical and
Options for a Senior Officer Professional Development Programme

research skills which may be used for the betterment of the profession on their return. Second, the Fellowship Scheme provides a limited avenue through which the knowledge base of the profession can be expanded. Under its auspices, officers have been able to examine various aspects of professional activity, and their conclusions are being, and will be in the future, of assistance to the profession. In this category could be included Doogan’s study on Administrative Law and its Effects upon the Defence Force and Department of Defence, Quill’s research into Ocean Acoustic Tomography and its Application to the RAN, Jans’ analysis of Military Professionals in Mid-Career, Quinn’s research into the Career Intentions and Expectations of Women in the ADF, Wood’s study of Preparation for War and Mobilisation, and Hayes’ research into the Propulsion of RAN Gas turbine Frigates with a Coal Slurry Fuel System.

However, despite these benefits, the record of the Scheme has been mixed, with a proportion of fellows not successfully completing their projects, and a number of others who have retired or resigned within a short time of their return to the profession. Moreover, in a number of years, there have been few applicants for the Fellowships and others, who have applied, have withdrawn when their Services have refused to release them for a year to undertake the Fellowship. While it is difficult to generalise, there are certain factors which have contributed to the variable performance of the Scheme. In some instances, officers have not progressed further in the profession because their fellowship year deepened their skills and knowledge in a specialist area which served to make them less competitive in the generalist promotion system. Moreover, the Services have not always found it easy to find appropriate niches and career streams for their academic researchers. As a consequence, despite having developed a specialist expertise, the officer frequently must be prepared to resume mainstream appointments which necessarily do not make use of his specialist talents except in the broadest of senses.

Awareness of the value of research opportunities in the preparation of individual officers, and to the profession as a whole, has been demonstrated in the establishment of the 18-month RAN Visiting Fellowship at Australian National University’s Strategic and Defence Studies Centre. The Defence Instruction (Navy) governing the fellowship is provided at Annex I. The Scheme aims at educating
officers in the field of strategic and defence studies, assisting the Centre through the provision of naval expertise, and producing published works to contribute to a more informed public debate on defence matters. Again, this Fellowship offers an officer in the rank of Lieutenant Commander/Commander the opportunity to undertake a relevant research project in an environment which is distinctive to that of the Services and Department of Defence. To date, three officers have participated successfully in the scheme. Recognition of the potential of the Fellowship programme has come through recent negotiations to expand the scheme to include Fellows from the Army and the RAAF.5

The Joint Services Staff College

The original purpose of the Joint Services Staff College (JSSC) was to provide a preparatory experience for Lieutenant Colonel(E) and Colonel(E) staff officer appointments in the Department of Defence and Single Service Departments, and later in Defence Central, HQ ADF and the Single Service Offices. This role is clearly identified in the training objectives established for the College which are listed at Annex J. However, over time and particularly in the last three years, efforts have been made to change the institution’s role and purpose. These have found confirmation in the 1988 endorsement by the Chiefs of Staff Committee of the Senior Officer Education and Training Steering Group’s (SOETSG) report on the JSSC Course.6 The aim of these efforts has been to change the task and standing of the JSSC, both because of a perceived inappropriateness of its established role, and in response to the failure of attempts to set in place an effective and distinct senior officer professional development programme. In effect, the reformers have sought to elevate and upgrade the JSSC curriculum to substitute for the lack of such a programme. This is reflected in the new Charter approved for the College which is presented at Annex K.

5 The Australian Defence Studies Centre in the Department of Politics, of the Defence Force Academy also holds the potential to provide a supportive environment for officers to undertake visiting fellowships.

6 Senior Officer Education and Training Steering Group, "Report on the Development of the Joint Services Staff College Course" (JSSC A513/1/9 Pt 3(2).
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It has been argued that an increasing proportion of officers who attend the JSSC have already completed tours on Defence Central, HQ ADF or Single Service staffs. For these officers, a course which is, in significant part, devoted to providing a knowledge of the processes for developing policy and managing resources is seen as redundant. This trend has been used to support the case that there is substantially less of a requirement for JSSC to prepare officers of Lieutenant Colonel(E) rank for such staff appointments. However, this is a reasoning premised upon the assumption that on-the-job learning is an adequate substitute for competent preparation. This assumption has been routinely proven invalid.

There is a consensus amongst qualified observers - military, defence civilian and academic - that most officers experience steep learning curves on taking up staff appointments in Defence Central, HQ ADF and the Service Offices. During this period, officers, through no fault of their own, are more likely to make errors through ignorance and lack of knowledge. Moreover, it is not at all certain that the learning achieved in these staff appointments is wholly beneficial. While the officer may gain an understanding of how the Defence bureaucracy functions, it is frequently a jaundiced and parochial view, based upon personal experience and hearsay evidence, which becomes entrenched. Also, it cannot be assumed that staff skills and knowledge acquired in the implementation of policy are an adequate learning experience for future appointments in preparation of policy advice.

If officers have come to attend JSSC after they have undertaken Service Office and Joint staff tours, this does not indicate that the JSSC as a staff course is redundant and can, as a consequence be relieved of much of this function in order to free time and resources for other projects. In fact, it is not the course aims, but rather the timing in an officer’s career when he is selected and undertakes the course, which has created a certain element of apparent, but not proven, redundancy in the JSSC. If officers are prepared for their staff appointments prior to being posted into such positions, there is every reason to expect that learning curves would be decreased, and officers would develop confidence in their capabilities sooner into an appointment with a commensurate improvement in their job performance and sense of job satisfaction.
As noted in Chapter 2, the knowledge base for staff work in the management of the financial, technical, establishment and human resources of the profession has expanded substantially, particularly for example in areas of defence industrial relations, defence-industry relations, resource management, planning, programming, budgeting systems, organisational and management and defence legal systems. Yet, the major emphasis of modifications made to the JSSC curriculum in the recent review was to establish a high priority for the study of the strategic and operational levels of war, not the subjects identified above. The importance of such a study, in itself, is not disputed; but rather its high priority and appropriateness in a staff course.

It is evident that the study of the strategic and operational levels of war in the JSSC course has been emphasised less to improve the JSSC as a preparatory staff course, than to permit the College to act as a credible senior-level development programme. This aim is demonstrated in the recommendation of the SOETSG's Report that the institution "should provide a broad, higher-level education in strategy and war studies and the international and national factors that affect strategic policy-making and implementation at the joint operational level", and that as the JSSC will continue to represent the last formal course for all but a few officers, the level of the course's content should be determined by reference to the skills needed for effective performance in appointments up to the rank of Brigadier(E).7

From the viewpoint of the creation of a genuine senior officer professional development programme and, indeed, the whole ADF career officer education system, this expansion of the JSSC curriculum, and elevation of its applicability, is a prejudicial and retrogressive step. It is prejudicial in that it entrenches a situation where JSSC is to be accepted as the highest formal preparatory course for almost all ADF senior officers. Such an acceptance discounts the collective and unanimous evidence of a series of reports and studies and the opinions of present and former senior officers, that the JSSC does not, and should not be permitted to, constitute the upper benchmark of Australian professional officer education. There is a broadly

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7 ibid., Report by Senior Officer Education and Training Steering Group on Development of the Joint Services Staff College Course, 1988, pp. 3-4, paras. 8d and 9.
Options for a Senior Officer Professional Development Programme

acknowledged recognition of what that benchmark needs to be. However, given a climate of financial restraint, and the processes of defence committee decision-making, it is understandable that such a type of officer education should be continually rejected as unaffordable and unattainable. In contrast, the upgrading of the JSSC was rationalised as a simple, inexpensive, incremental solution which also made advances in increasing the emphasis placed on preparing for the war-fighting role of the profession.

The consequences of this decision, however, need to be made clear. There is now an unfortunate temptation to offer up the revised JSSC as proof that a definitive, appropriate and matured senior officer preparatory course has been set in place, and that the requirement for senior officer preparation has been effectively met. As a consequence, arguments can be advanced that little further effort or resources need be expended to provide additional educational experiences for senior officers. The JSSC, accepted as the upper benchmark, has been, and will continue to be, used to lock out the development of an effective senior officer professional development programme.

The move to restructure and realign the JSSC is regressive in that the increased emphasis upon the study of the operational and strategic dimensions of war displaces, and will block off the addition of, materials for study which are imperative for successfully preparing officers for most SO1 appointments in Defence Central, HQ ADF and the Single Service Staff officers. Moreover, the subjects of study displaced have been off-loaded to the Single Service Staff Colleges for inclusion in their programmes. Again, this action reflects the policy that the JSSC is the upper benchmark for the ADF’s career officer education system. In response, lower-level courses are now expected to co-ordinate and develop their programmes to accommodate the evolution of the JSSC. This unilateral approach appears to consciously pass over the differing roles, aims, course lengths and student bodies of the Single Service Staff Colleges. As a consequence, the manner of action and the action itself, in fact, may serve to complicate, rather than cultivate, the integration of all levels of the ADF career officer education system.

Finally, the decision to upgrade the JSSC must be viewed in light of the ability of the revised course to perform the task selected for
it and by it. For example, although the emphasis on strategic and operational levels of war has been increased through compensating reductions in other subjects and changes in methods of instruction, it can be argued that the attainment of the educational goals of the course has been placed at risk by the course-load to be covered in a six-month time frame. Another fact to be taken into account is the increasing variability of the educational and professional backgrounds of students. As noted in Chapter 2, because of manpower demands, it is likely that Navy and now Air Force will continue, to greater and lesser degrees, to utilise the JSSC as an either/or option to attendance at a Single Service Staff College. Following the off-loading of subject matter to the latter Colleges, non-staff qualified officers will now be placed at an even greater disadvantage in their staff appointments and in comparison with their staff qualified counterparts when attending the JSSC. If the JSSC cannot meet its educational aims, then this places in doubt the ability of the College to successfully prepare officers for senior appointments which they may only come to some ten to fifteen years after completing the course.

In the analysis of other options for the creation of an effective senior officer professional development programme, different roles are premised for the JSSC which entail a complete reorientation in standing, purpose, course length and student body. However, if its current framework is pursued, the JSSC needs to grow to fill the role designated for it. Further consideration should be given to a number of areas, including the feasibility of lengthening the course, possibly to nine or even twelve months, and the expansion and upgrade of the teaching and research faculty of the College. Moreover, there is a requirement for all Services and the Public Service to adopt and employ standard selection criteria for attendance in terms of career potential and career streaming, completion of an appropriate Single Service Staff College course and previous professional experience including relevant Defence Central, HQ ADF and Single Service Office staff tours. Finally, while a somewhat pedantic issue, there is a need to recognise formally that, under the regime now set in place, JSSC is effectively not a staff course, and as such this should be reflected in a change in the title of the institution.
Senior Wing to the Joint Services Staff College

One method for resolving the dilemma of the JSSC's deleterious interfusion of joint staff and higher command courses is to examine more effective combinations of staff and higher command segments of a senior officer preparatory course; in this case, the potential for developing a Senior Wing for the JSSC. Under such a scheme, the JSSC course would be restructured and designed as the staff course and Junior Wing of the College. A Senior Wing would be established to operate a course developed around the politico-strategic dimensions of national security policy and the operational level of war. Notionally, each course could be set at six months in length with officers attending the Junior Wing staff course in the rank of junior Lieutenant Colonel(E) and the Senior Wing national security and strategy course in the rank of Colonel(E).

The establishment of a Senior Wing for the JSSC would have resource implications in two principal respects. Although Service Office staffs are being rationalised, the staffing requirements of the HQ ADF continues to expand. Even when this expansion stabilises, it can be anticipated that there will be no significant medium-term reduction in the required numbers of JSSC (staff course) graduates. Therefore, a Senior Wing course could not be accommodated in the current JSSC programme by removing one of the two courses conducted annually. The Senior course, therefore, would need to be carried in addition to the two staff courses. This would create a requirement for additional staff and teaching facilities. Moreover, because of the nature of the Senior course, the desirability of developing a teaching faculty of "subject matter experts" rather than "generalists", would become an indispensable condition. A second factor, with resource consequences for the creation of a Senior Wing to the JSSC, is the release of officers in the rank of Colonel(E) for six months to attend such a course. With the inclusion of a compensatory factor for resignations and retirement through senior ranks, the student body of such a course could notionally be set at 25 members - seven officers from each Service and four public servants or, alternatively, 24 ADF officers.

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8 ibid., Senior Officer Education and Training Steering Group's Report on the JSSC, Para. 37, p. 12.
Balanced against these costs, there are number of advantages to a Junior-Senior Wing Scheme for the JSSC, which make this option a flexible and cost-effective programme for senior officer preparation. For example, the Scheme would permit the development of the JSSC staff course to encompass the variety of subjects seen as significant in effectively preparing officers for SO1 staff appointments, and reducing the length and magnitude of learning curves experienced on taking up such appointments. Equally, the Senior Wing course would be free to concentrate on the extensive and intensive analysis of the strategic and operational levels of war, and the role and function of the profession in the formulation of national security policies and strategies. The separation and specialisation of function inherent in the Junior-Senior Wing concept allows for greater depth of study and coverage of subject matter. It has been consistently proven in officer education and training programmes, regardless of level, that single-purpose courses are more effective in achieving their objectives than those courses with multiple and competing roles.

The introduction of a course of preparation in the rank of Colonel(E) would ensure that the time period between preparation and appointment to positions requiring such preparation would be significantly less than is the case with the current JSSC format. The Senior Wing concept would also remove another element of inefficiency inherent in the present JSSC. Although it can be expected that the JSSC will train the overwhelming majority of high-flyer officers who have the potential for one-star and above rank, for a significant proportion of Lieutenant Colonels(E) and public servants, their career horizons are not so expansive. Yet, the JSSC currently proposes to prepare its students for appointments up to the rank of Brigadier. In contrast, only those with clearly demonstrated potential for one-star and above rank would be selected and undertake a course in the Senior Wing of the College.

By designing two separate courses, a more appropriate and responsive upper benchmark for the ADF career officer education system would be established. With such a benchmark in place, a more integrative phasing between Service Staff Colleges, Junior Wing joint staff courses, and Senior Wing national security and strategy courses could be facilitated. The requirement to devolve significant areas of subject matter to the Single Service Staff Colleges would be re-
evaluated. Moreover, in using the Senior Wing course as the highest formal course (apart from the overseas training places), a better numerical balance and progression can be achieved in the ADF career officer education system. This notion is schematically represented at Figure 2. Finally, the Junior-Senior Wing JSSC option has significant and sound potential for development in the future into a National Defence College of Australia of recognised standing.

**Overseas Senior Courses**

On average, and excluding opportunity places, six officers in the rank of Colonel(E) and Brigadier(E) attend overseas senior war or defence college courses each year at institutions including the Royal College of Defence Studies, London (RCDS), the National Defence College of India, New Delhi (NDC(I)), the National Defence College of Canada, Kingston (NDC(C)), and the United States Army War College, Carlisle (USAWC). Officers also participate in courses of between six and twelve months duration in other educational establishments including the United States National Defense University, the United States Naval War College, the United States Air War College, the United States Armed Forces Staff College, the Royal Air Force Department of Air Warfare, the Armed Forces of the Philippines Command and General Staff College, and the Royal Military College of Science. Attendance on overseas senior courses is further detailed in Annex L.

There is a perception which is widely-held that these courses, particularly the more senior of them, do not adequately meet the ADF's senior officer preparatory requirement. Two key issues are consistently identified. First, despite the elevation in applicability of the JSSC, over which significant reservations have been raised already, only six officers in any one year are undertaking a course of study of a level considered by current and former professional leaderships to be appropriate as the highest preparation for senior officership. The ADF currently has some 330 officers in the rank of Colonel(E) and over 150 one-star and above ranked officers. Second, in addition to a quantitative shortfall, the overseas senior courses have been criticised for the regional, national or alliance biases which are implicit or explicit in their programmes. Particularly as Australian strategic
CURRENT ADF CAREER OFFICER PROFESSIONAL DEVELOPMENT PROGRAMME

OVERSEAS SENIOR COURSES

JSSC

SINGLE SERVICE STAFF COLLEGE

JUNIOR STAFF COURSES/ADVANCED BRANCH/CORPS COURSES

BRANCH/CORPS SPECIFIC TRAINING

PRE-COMMISSIONING EDUCATION AND TRAINING

COLONEL/BRIGADIER(E)

LIEUTENANT COLONEL(E)

MAJOR(E)

CAPTAIN

LIEUTENANT(E)

OFFICER CADET/SECOND LIEUTENANT(E)

JUNIOR-SENIOR WING JSSC OPTION

SENIOR WING JSSC/OVERSEAS SENIOR COURSES

JUNIOR WING JSSC

SINGLE SERVICE STAFF COLLEGE

JUNIOR STAFF COURSES/ADVANCED BRANCH/CORPS COURSES

BRANCH/CORPS SPECIFIC TRAINING

PRE-COMMISSIONING EDUCATION AND TRAINING

COLONEL BRIGADIER(E)

LIEUTENANT COLONEL(E)

MAJOR(E)

CAPTAIN(E)

LIEUTENANT(E)

OFFICER CADET/SECOND LIEUTENANT(E)
postures mature and as Australia’s role in the Pacific region develops, there is a valid concern that such courses are of less relevance for ADF officers.

While there is a considerable consensus on these deficiencies, there is almost an equivalent level of agreement, again, amongst the past and present leaderships of the profession, as to the benefits which accrue from ADF participation in these programmes. There is a strong recognition that two factors combine to offset the judgment of irrelevance. In the first instance, attendance on an overseas senior course is regarded as a more substantial learning experience than a briefing session which derives its whole functionality from the content of the brief. Most courses match their informational role with one of providing a complete milieu in which the student may learn through interaction with peers and superiors, both inside and outside the profession; an environment removed from the unremitting demands of senior positions, where the student is afforded the opportunity to look beyond the immediacy of competing problems which characterise such appointments. In many respects, it is the provision of this environment which stimulates greater learning than that attained through the ingestion of facts which will, in any instance, date over time.

A second factor of the overseas senior course of importance for the effective performance of senior officer duties, is the contact groups which are built up both within the group of course members and with people who interact with the group. Although such contacts are disparagingly labelled as "old boy networks", the reality of the facilitation which they afford cannot be denied, particularly in terms of later ease of access and timely provision of information.

A third feature of overseas senior courses which contributes to their relevance is the very fact of the broad scope of studies encompassed in their programmes. While perhaps tied to regional, national or alliance perspectives, it is exposure to exactly these different perspectives which is of value. While accepting that Australia’s geography, climate and location impose comparatively distinctive demands upon military operations, which have few points of commonality with the European conventional battle scenarios, an unfortunate and limiting attitude has become widespread in many
sections of Australia which presumes that every problem has a uniquely Australian form. Its corollary is that there are few, if any, international precedents or experiences of relevance and therefore there must be a uniquely Australian solution to any problems. Because of this parochial view, different perspectives and practices are all too often not considered and solutions must be derived from costly home trials. The benefits which are seen to accrue from the overseas senior courses are summed up as providing:

...a unique forum for the exchange of ideas between the armed services of many nationalities, and promote understanding of their strengths and weaknesses. Moreover [they] afford a significant avenue for the adoption of overseas practices to guard against...prosaic and parochial approach[es] ...Most senior officers and public servants are too absorbed by their professional lives to reflect on wider issues or on alternative possibilities and in the course of the day have little time to read on subjects other than those of immediate concern...The need to develop and maintain external perspectives is invaluable.9

These advantages are considerable and are a counter to the view that some overseas senior courses are costly, non-productive sabbaticals, taken at the tax-payers expense. Indeed, it has not been proven in any conclusive sense that a student who is directed to "produce" essay after essay, regurgitating facts, has learnt more by his productivity than the student who, carefully guided but left essentially to his own devices, reads, reflects, but apparently has little tangible to show for his experience. In this regard, perhaps more than at any other level, the skills of senior officership are not amenable to quantification under a systems approach to training and should not be judged by its standards.

The variety of experience, exposure to alternative perspectives and viewpoints, development of valuable contact groups and opportunities for independent study and analysis will continue to make the overseas senior courses a vital, if diminutive in size,

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9 Navy Office, Service Paper for the Study Group on Senior ADF Officer Training and Development (N86/41488(1) CNP 940/86) of 31 October 1986, paras. 17-18, p. 5.
component of any ADF senior officer professional development programme. At present there appears to be extremely limited opportunities for increasing the number of ADF officers receiving such experiences. In almost all cases, institutions are placed under considerable pressure from many countries to gain places on their courses, which in turn affects Australia’s access. On a number of courses, however, Australia’s participation is guaranteed and facilitated by the negotiation of reciprocity arrangements whereby places are provided and/or fees are waived in exchange for access for officers of the host nation to Australian education and training institutions. The status of these arrangements has, at times, been, and is being, reviewed by overseas nations concerned with the apparent asymmetry of Australia’s input. This has arisen because of the course length and relevance of the Australian JSSC (its upgrade notwithstanding), and the current trend to charge full fees for many overseas students. In the future, Australia may find that its continued preferential and comparatively inexpensive access to many overseas senior courses in part threatened by its inability to provide places for overseas officers in an institution of comparable standing to those being attended by Australian officers in other countries, or to stave off demands that overseas students be charged full fees for the courses which are provided.

The National Defence College of Australia

Previous proposals for the establishment of a National Defence College of Australia NDC(A) have not necessarily foundered because the requirement for such an institution has been in doubt or dispute, but rather because the tendering of the proposals themselves proved to be ill-timed in political and/or financial terms. As a consequence, such propositions have been still-born, with little, if any, developmental study being undertaken to examine whether a feasible NDC(A) model can be created; a model which would not only effectively address the preparatory needs of senior officership, but do so in a manner which takes account of the sensitivities which have, in the past, defeated efforts to set in place this final component of the ADF’s professional military education system.
It is certain that such a NDC(A) model can be designed and effectively assessed against a set of pre-determined criteria. It is only after this analysis has been undertaken that responsible decision-making, to proceed or not, can take place. A model of an NDC(A) has been constructed. It is in no sense an ideal, but rather a feasible and practical proposition. The model represents one formulation of a number of ideas and premises. The particular ordering of its constituent parts is neither exclusive or immutable.

In this model, the National Defence College of Australia would be developed as an umbrella-type organisation. The College would have responsibility for two, and possibly three, sets of vocational and higher level education courses. The premier course of the model is the National Defence Programme. Two subordinate programmes have been devised: the Joint Services Staff Course and a series of Resource Management Courses. A diagrammatic representation of the model is provided at Figure 3.

Initially, the National Defence Programme (NDP) would be established as a one-year course for officers in the rank of Colonel(E) who have a demonstrated potential for a minimum of two-star rank. In later years of operation, the eligibility could be expanded to officers with potential for one-star appointments. Such officers would be joined by selected members of Federal, and possibly State, Government Departments, of equivalent status and potential, and by invited military officers, or even defence civilians, from a number of overseas countries, including Canada, the United States, the United Kingdom, New Zealand and other nations in the region deemed appropriate. The addition of such officers is of significant benefit in terms of the different perspectives they bring and the level of interaction Australian officers are able to achieve with their overseas and governmental counterparts. Moreover, the involvement of particularly British, American and Canadian, and even Indian, officers in the National Defence Programme would offer the potential to possibly expand, and more successfully negotiate, reciprocity arrangements for places on the RCDS, NDC(C), NDC(I), USAWC, US Air War College and US Naval War College. In this way, the number of ADF officers participating in educational experiences at this level could be further guaranteed and potentially increased without commensurate increase in expenditure other than that of additional
INSTITUTE OF HIGHER DEFENCE STUDIES
- NDC(A) Faculty
- Directing Staff
- Guest Practitioners
- Staff Officers from Defence

NATIONAL SECURITY STUDIES COURSE (NSSC)
- Length: 9 months
- Content: Political-Strategic dimensions of National Defence and International Security
- Student Body: Colonels(E)-High Flyers with potential for 2-star rank; Federal-State public servants and overseas officers of equivalent status and experience.

NATIONAL DEFENCE PROGRAMME

JOINT SERVICES STAFF COURSE
- Length: 3-6 months
- Content: Professionally relevant to appointments in HQ ADF, Defence Central and Service Office Staffs; Bureaucratic Policy Formulation; Defence Industrial Relations; Resource Management; PPBS.
- Student Body: Lieutenant Colonel(E) Selected for Canberra Staff tours.

RESOURCE MANAGEMENT COURSES
- Length: Variable (2 weeks - 2 months depending on sponsors' requirements).
- Contents: Variable depending on sponsors' requirements - financial administration training for Base Commanders; capital procurement project management for project staffs.
- Captains(E)-Colonels(E) depending upon Sponsors' requirement. APS attendance as per requirement. Defence Cooperation Programme participation as per interest.

HIGHER RESEARCH COURSE (HRC)
- Length: 3 months
- Content: Research projects to be agreed between Student, Department of Defence and Sponsor
- Student Body: APS Officers and Overseas Officers

HIGHER COMMAND COURSE (HCC)
- Length: 3 months
- Content: Operational Level of War, Heavy practical emphasis: war-gaming, hypotheticals, simex's
- Student Body: ADF officers on completion of NSSP (option for selected overseas officers to attend)

FIGURE 3: MODEL OF A NATIONAL DEFENCE COLLEGE OF AUSTRALIA
officers' salary and allowances. An option would exist to expand the student body by inviting participation from key defence industries.

Given these groupings, the student population of the NDP would be made up of a maximum of 36 members to include 24 ADF officers, six public servants and six overseas officers. The ADF component could consist of either up to eight officers from each Service or, alternatively, ten Army, eight RAAF and six RAN officers. Over time, it is anticipated that the size of the ADF student group would vary in response to a number of factors including, for example, pressures of manning availability.

Officers attending the National Defence Programme would all participate in the National Security Studies Course (NSSC) and then either the Higher Research Course (HRC) or the Higher Command Course (HCC). The National Security Studies Course is envisaged as a nine-month scheme of studies structured around the politico-strategic dimensions of national defence and international security. The principal teaching methodologies proposed include a visiting lecturers' programme, faculty lectures, guest practitioner-guided syndicate sessions, private study, an international crisis management simulation and visits to organisations and establishments in Australia and overseas. In the case of overseas visits, it could prove possible to co-ordinate sections of visit schedules with the NDC(C), NDC(I) and RCDS. On completion of the nine-month NSSC, ADF officers would proceed to the Higher Command Course, while overseas officers and Australian Public Service officers would undertake the Higher Research Course.

On the latter course, students would undertake three-month research projects on a topic to be agreed between the individual, the College, representing itself and Defence and the sponsoring Department. In order to provide guidance on suitable research questions, HQ ADF, Defence Central, the Service Offices and other departments and sponsors would be asked to regularly submit listings of issues and topics which, if tackled by research students, could contribute to the professional knowledge base or decision-making processes of the respective departments. The possibilities are substantial. For example, in co-operation with the Defence Industrial section of the HQ ADF, a NDC(A) Department of Industrial Relations
student could research improvements to allowance determination procedures. An officer of the Department of Foreign Affairs could inquire into the more effective utilisation of Defence Attache staffs in Australian embassies and high commissions. A Defence civilian from the Australian Defence Industries could examine ways in which the Australian industry off-sets programme could be improved. Provision could be made for flexibility in the length of time devoted to the research project on the basis of student aptitude and the potential benefits to be gained for the appropriate departments concerned from the completion of a larger project. Finally, the National Security Studies Course and the Higher Research Course, in combination, hold the potential for future accreditation as a Masters-level degree, possibly through an arrangement with the Australian National University, the University of New South Wales, or the Defence Force Academy, either through its current arrangement with UNSW or independently if its status evolves beyond that of a University College.

ADF officers could be provided with the option to participate in a research project or attend the Higher Command Course. However, it is anticipated that almost all ADF officers, on completing the NSSC, would proceed to undertake the HCC. Again, set at three months, this course would be designed to provide officers with a full and demanding preparation for command at the operational level of war. An option could exist for other regular and reserve officers, who may not have been selected for NDC(A) but who may well be expected to command brigade and equivalent-level RAN/RAAF formations in the event of conflict, to join the programme to undertake this course. The HCC would be divided into two parts. In the first, officers would be separated on the basis of Service to develop an full understanding and knowledge of the parameters of, and constraints acting upon, the exercise of operational command in their own environment. Proposed areas of study could include:

- **Foundation Studies** (developing the themes of firepower, mobility, command, strategic theory, logistics, technology and joint operations);

- **Operational Case Studies** (analysis and dissection of a small number of selected campaigns and battles);
Senior Officer Professional Development

- **Operational Concepts** (the development of war-fighting doctrine and command structures);

- **Future Battlefields** (mobilisation and conflict scenarios, future technologies and weapons capabilities); and

- **Command Studies** (command and leadership philosophies, command and staff relationships, command, control and communications).

Officers would come together for the second part of the HCC to place their evolving skills and knowledge in a broad joint operations perspective. This would extend beyond the usual standardisation function of jointery to ensure that officers in each Service gained a full understanding of the particular constraints acting upon the exercise of operational command in the two other environments. The course would be designed to be purposefully intensive and, in sections, demanding with the stress placed upon practical and simulated experience. As such, it is envisaged that the principal teaching methods would include high-level war gaming, guest practitioner-guided syndicate work, command post exercises of sustained duration, invited participant hypotheticals and battlefield tours.

The National Defence Programme would be taught and guided by members of staff of the Institute of Higher Defence Studies, established as an integral part of the National Defence College. The Institute would consist of four groups, including academic faculty members, directing staff officers seconded on completion of their NDC course, guest practitioners and staff officers from Defence. There is a requirement to provide a core team of teaching and research academics, appointed on limited tenure, three- five- or seven-year contracts. In addition to providing a continuity of institutional experience and knowledge, such a team would, by its careful selection and on-going publications performance, contribute substantially to the academic standing of the institution. They would also constitute the main focus for the development and review of course content on the programmes run by the College.

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10 Developed from interviews, Higher Command and Staff Course, Army Staff College, Camberley, 23rd-24th September 1987.
A second component of the Institute membership would be a directing staff of sufficient size to substantially conduct the Joint Services Staff and Resource Management Courses. This group would be augmented by members who had completed the National Defence Programme and who would form part of the directing staff for that programme. It has been represented that particularly for overseas officers, attendance on such a course would become more feasible in a career management and economy sense if the officer, on completing the one-year programme, could transfer, in the same rank or on promotion, to the Institute as a member of the directing staff for the second year of a two-year tour. From the College’s viewpoint, this would permit the comparatively inexpensive addition of a pool of directing staff, uniquely capable of infusing international perspectives in the programme.

The third staff grouping of the Institute is developed from the French practice of seconding high level officials from key government departments with national defence connections to their École Militaire de Guerre to provide, again, a unique source of experience which students can draw upon. The aim, as at L’Ecole Militaire, would be to seek to have up to three Australian Public Service officers of Senior Executive Service status attached to the Institute as guest practitioners for specified periods of time. In addition three more practitioners could be recruited from the ranks of retired military officers, defence ministers, or national defence related department officials. Such retired officers and officials could be provided with an appropriate honorarium, while negotiated salary-sharing arrangements with the department concerned, are a possibility for off-setting the costs of APS guest practitioners. This team of staff members would act as syndicate leaders on the National Security Studies Course and as research advisers on the Higher Research and Command Courses. The fourth grouping of staff members of the Institute would be composed of staff officers seconded from Defence and other relevant departments to conduct research projects required to support policy advice functions. In exchange for providing a base from which to undertake their research, these officers would make themselves available to the College to provide seminars in an occasional series on their work and

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11 This is a practice used by the Royal Air Force, for example, with the officers it sends to the US Air War College, Maxwell Air Force Base, Alabama.
thus contribute to the expertise available for students to utilise in the College. Equally, the student body would provide a wealth of practical experience which could be used by researchers.

Finally, it is anticipated that the Institute would be further assisted in the development and presentation of course material, particularly in the Higher Command Course, by the HQ ADF's Joint Exercise Planning Staff, war-gaming facilities of each Service, such as the Army War-Gaming Centre, and by staff members of the Australian Joint Warfare Establishment. The capacity of the Institute could be further enhanced through negotiated arrangements between NDC(A), the Defence Force Academy and the RAAF Staff College to share the expenses of bringing to Australia visiting speakers of high calibre and standing with unique insights and valuable perspectives to offer. While each institution would have a different type of audience, this could be dealt with effectively in the invitation to the speaker.

The second major course of the NDC(A) model is a Joint Services Staff Course. While cognisant of the process of review through which the current Joint Services Staff College has passed and the inclination to use the consequential endorsement as a shield against reform initiatives, the creation of a National Defence College would completely alter this situation. In the proposed model, the current JSSC course would be examined and reviewed against the upper benchmark of the National Defence Programme and the lower benchmark of the Service Staff Colleges programmes. The emergent Joint Services Staff Course would be set at between three and six months in length depending on the results of such an review, for officers in the rank of Lieutenant Colonel(E), selected for staff tours in HQ ADF, Defence Central and the Service Offices. Attendance could be scheduled to immediately precede the start of such appointments, so as to limit the degree of posting turbulence generated by attending the course. The Course would stress those subjects identified as relevant to the preparation of officers for middle and some senior (Colonel) staff and joint appointments. Such subjects could include for example: resource management techniques in capital procurement, manpower and logistics, financial administration systems, industrial relations, bureaucratic policy formulation, national and defence strategy formulation and international relations.
The third programme of the NDC(A) model would be the development of a series of resource management courses. It has been recognised that with the full introduction of the planning, programming and budgeting system (PPBS), almost all executive positions will become involved to some degree in PPBS functions. The requirement for a broader range of officers to have acquired skills and knowledge, needed in the effective assessment of financial and managerial implications of proposed actions and policies, will be increased. The NDC(A) would be tasked to develop, in conjunction with Service sponsors, a scheme of courses covering various specific and general aspects of defence resource management. The nature of the content would primarily determine the length of each course, and the sponsors’ requirement would determine the rank in which an officer would attend any particular course. Attendance on such courses would hold the potential to replace in part or total participation in defence resource management courses currently operated at the Australian Counter Disaster College, Mt. Macedon, at the Australian Administrative Staff College, Mt. Eliza, at the Australian Graduate School of Management, University of New South Wales, and at the University of Melbourne.

At this stage, it is not self-evident whether this scheme of courses would be most effectively accommodated as part of the postgraduate teaching effort evolving at the Defence Force Academy, or as part of a NDC(A). In the latter case, the operation of such courses on the NDC site would permit lecturers to contribute to the Joint Services Staff Course and they would also constitute an additional a source of expertise available to students undertaking the Higher Research Course.

The final aspect of the National Defence College model involves the effective integration of its courses into the greater whole of the ADF’s career officer education system and planned senior officer professional development programme. This integration can only be effectively achieved if consideration is given to harmonising and enriching the system’s courses in both lateral and vertical senses. There is a requirement to ensure that each course of staff and command training for the ranks of Major(E), Lieutenant Colonel(E) and Colonel(E) are progressive, cumulative and complementary. Equally, within each level of training, there needs to be a full co-
ordination of programmes and contributions. For example, in this category could be included the necessitude to expand and develop the RAN Staff College programme as a year-long staff and command course. The resource management and Joint Services Staff courses need to be effectively synthesised with the National Defence Programme, and in turn, the National Defence Programme needs to be aligned with its overseas counterparts. A profile of this integration is provided at Figure 4.

Each proposal to improve the system for preparing officers for senior rank involves resource implications, and perhaps most of all the NDC(A) option. The main factors in this context are: (i) the procurement of suitable accommodation and facilities for the College; (ii) the ability and preparedness of the Services to release officers to attend particularly the National Defence Programme; and (iii) the costs associated with staffing and supporting the operation of a NDC(A).

The determination of proper accommodation for the College would, in significant part, depend upon the area chosen for its location. In this regard, the most logical site would appear to be in Canberra. Reasons for this choice include: (i) the fact that the majority of appointments to which officers would proceed, on completion of a College course, are located in Canberra; (ii) the requirement to be located near to the seat of Government and relevant Government Departments; (iii) the economies which could be achieved through co-ordination and co-operation with the Defence Force Academy and the RAAF Staff College; (iv) the availability of a resource and lecturing network in the Faculties and Research Schools of the Australian National University and the Defence Force Academy; and (v) the requirement for a site of sufficient prestige and standing for a National institution.

The securing of premises for the College could, but need not, prove to be a prohibitive cost. There are number of site possibilities in
FIGURE 4: ADF PROFESSIONAL MILITARY EDUCATION SYSTEM WITH A NATIONAL DEFENCE COLLEGE OF AUSTRALIA
Canberra. For example, the Old Parliament House would be a serious contender. It meets a number of the needs of the College in terms of its location in Canberra, its proximity to the Parliament and Government Departments, and the physical prestige of the buildings. In using the Old Parliament House, demands would not have to be made upon the Defence budget for funding the construction of a separate set of facilities for an NDC(A) or to add further accommodations to existing buildings at the Joint Services Staff College or the Defence Force Academy, for example. Nor would the envisaged size of the College population make excessive space demands upon the Parliament House buildings.

Funding assistance would be required for minor modifications to certain interiors of the Old Parliament House for use by the College, to provide requisite teaching and learning aids, to provide resources for travel, and to maintain the buildings in appropriate style. However, offset against such demands would be at least two types of savings. First, if the JSSC course were to be restructured and aligned under the umbrella of the NDC(A), the operation of the Joint Services Staff College on the Weston Creek site would cease. If the property could not be used for another defence function, it could be sold and the resultant capital directed towards resourcing the NDC(A). The operations and maintenance budgets currently allocated to the Weston Creek facilities could also be redirected towards meeting the needs of the College. These resources would become available also if another unit took over the operation of the Weston Creek site, for example, the possibility of relocating the RAAF Staff College from its very temporary accommodations on RAAF Base Fairbairn. Second, other revenue savings could be achieved through the incorporation of a variety of defence resource management courses under the NDC(A) umbrella. In certain selected cases, this would save the fees charged for such courses, and in the case of Mt. Macedon courses, would

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12 The Defence Force Academy may appear at first sight to be a serious option. However, it is rejected here on the a number of grounds. First, overseas experience speaks against the collocation of junior and senior officer education and training programmes. Second, the Academy is developing its own programme of specialist postgraduate courses which should be allowed to evolve uninhibited by the broader needs of a National Defence College. Third, the, at least initial, prestige and standing of such a College will in part depend upon a distinct and distinctive location.
reduce expenditures incurred in transporting officers to and from that complex.

Creative proposals can be developed to assist in meeting a substantial proportion of the resource needs of an NDC(A). However, these proposals could only contribute to, but not provide totally, the resources needed to ensure that the institution could be successfully staffed and sufficient numbers of officers released to attend College courses, particularly the National Defence Programme. This issue is addressed in the concluding chapter.

The model of a National Defence College of Australia, presented here, offers a feasible, workable and responsive design for the establishment of a senior officer preparatory course of standing, capable of meeting flexibly the skills and knowledge requirements of current and evolving senior officer roles. It provides the logical, and in almost all respects optimal, apex for the ADF’s career officer education system and holds the potential to form the keystone of an ADF senior officer professional development programme for the future.
CHAPTER 4:

CHANGE IS NOT MADE WITHOUT INCONVENIENCE*

Patsy Adam-Smith in the final chapter of her book, *The ANZACS* begins it thus: "The enemy was down, the battle ended. In spite of their generals, the men had prevailed". From this start, a myth has grown and taken hold in the popular consciousness, that in times of conflict, the conservative, tradition-bound regular leaderships of the profession will give way to the innovative, creative and inspirational leadership of civilian volunteers and reservists who, like the men, will prevail. Yet, the reality of our contemporary world, and the world envisaged to exist in the future, rests on a regimen of come-as-you-are wars, exponentially expanding realms of sophisticated, complex technologies, political sensitivities over the application of military force and limited and constrained resources with which to purchase and sustain military capabilities. Given the stakes involves which, as was observed in the Introduction, extends to the lives and fates of peoples and nations, the requirement of constant study to prepare for senior officer ship is incontestable. Equally, a variety of factors of change, analysed in Chapter 2, demonstrate that the tasks of senior officer ship, and the environment in which those tasks will be performed now and in the future, are becoming more intense, more various and more demanding. Finally, the nature of future senior officer cohorts is changing. While some may be better educated, if the status quo remains essentially unaltered, an increasing proportion of potential senior officers will not have participated in learning experiences which are becoming even more crucial for the effective performance of senior leadership tasks.

These three fundamental conditions, and the weaknesses and shortcomings of current education and training programs, combine to challenge the sufficiency of existing methods of preparing officers for senior appointments in the ADF. In association, they generate a potent

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* *Quoted by Samuel Johnson, Preface to his Dictionary

argument for the requirement to make substantial advances and initiatives in how future officers will be prepared for such positions. Mattingley and Walker, in their discussion of national security decision-making observe that decision-makers operate under conditions of uncertainty with regard to the future consequences of their actions. As a consequence, there is a great temptation to make incremental decisions which reduce risks and costs. Moreover, being essentially pragmatic, they seek something that will work rather than the optimal method for resolving an issue. Such decision-making yields limited, practicable and acceptable decisions. Yet, as noted in the Introduction, there is a vital requirement for contemporary military professional and political leaderships to take decisions now which are neither incremental nor insignificant, if a progressive and responsive senior officer professional development programme is to be set confidently in place.

To assist in this task, the purpose of this chapter is two-fold: first, to examine each of the options developed in Chapter 3 and evaluate their potential contribution to an effective and broad-ranging senior officer development programme; and second, to discuss a number of the obstacles which exist to setting in place such a programme, and how these might be addressed.

Ad Hoc Courses on Specialist Subjects are an essential mechanism through which officers in the feeder pools to senior officership and newly promoted senior officers can be briefed and kept informed of pertinent developments in skills and knowledge base of the profession, including for example, changing technologies, advances in strategy and tactics, improvements in financial, procurement and manpower management structures, developments in government policy and in international relations. In this context, such courses are a valuable component of any senior officer professional development programme. The format put forward by HQ ADF in its proposal for a Joint Senior Officer Study Period, i.e., a schedule of professional readings followed by a short in-residence seminar period, offers the potential to fill this role in an ADF senior officer development programme.

A scheme of executive exchanges between the profession, commerce, industry, the Public Service and the Committees of the Federal Parliament would provide relevant, challenging, and broadening experiences for future senior officers. The benefits extend beyond that of individual preparation to include the spread of contact groups within industry and Government Departments and the availability in the future of officers who have developed an understanding of the practices and organisational arrangements in other occupations and bureaucracies. To establish and manage such a scheme would require the dedicated appointment of either two staff officers in a cell under the control of ACPERS in HQ ADF or three staff officers located in each of the officer postings and career management directorates of the Service Offices. The incorporation of an executive exchange scheme into a senior officer development programme is important in that it is a recognition of the role to be played by career management in the preparation of future senior officers and that preparation for senior officership is not restricted to the provision of an education course at the Colonels(E) rank.

The increased opportunities for officers to participate in university postgraduate courses, which have been generated by the creation of courses of relevance to the profession and the commitment to fund officers to attend such courses, must be sustained and if possible improved. Such expansion would be as much in response to the increasing demands of specialisation of work in the profession as to the broader preparatory requirements for senior officership. As such, the significance of these opportunities for senior officer development would depend upon what other preparatory experiences were included in a development programme. For example, if a National Defence College was to be established, attendance on university postgraduate programmes could be more effectively targetted towards meeting the specialist needs of the profession. If no senior-level officer preparatory course is set in place, the importance of university postgraduate courses, for generalists as well as specialist officers, would be significantly raised.

The value of research opportunities in the preparation of individual officers and to the profession as a whole has been recognised in the support for University Defence Fellowship Schemes. However, here again, such schemes cannot substitute for, or meet a
substantial part of the total requirement for senior-level educational experiences for senior officers. These Fellowships, particularly those established at the Australian National University’s Strategic and Defence Studies Centre, serve to expand the variety of senior-level preparatory experiences available to ADF senior officer cohorts. In this regard, they are as much a supportive component of a senior officer development programme, as they contribute to meeting the needs of the profession to refine and enrich its professional knowledge base.

The rationale for the recent modifications in the Joint Services Staff College curriculum and charter is understood. However, from the viewpoint of the creation of a progressive and effective senior officer professional development programme, the direction of these changes is regarded as prejudicial and retrogressive. Such modifications do not constitute a response of the magnitude and sophistication needed to meet the future requirement for senior officer preparation. Moreover, such alterations are not sufficient to permit the JSSC to assume the role of the upper benchmark of the ADF’s career officer education system. A number of reservations exist as to the ability of the institution in this form to achieve the educational and preparatory goals which it has set itself. In the absence of a move to establish a National Defence College-level senior officer course, there are a number of options available for developing the Joint Services Staff College to more effectively serve an appropriate role in the preparation of senior officers.

One such option is the establishment of a Senior Wing to the JSSC. The separation and specialisation of functions inherent in the Junior-Senior Wing concept allows for greater depth of study and coverage of subject matter, and permits a more logical progression of career education for ADF officers. Again, in the absence of the development of an independent National Defence College, such a concept offers a significant advancement in delimiting the JSSC course to serve a specific role in staff and joint training, and in identifying a separate and more relevant upper benchmark for the highest level of senior officer education in Australia. Moreover, the concept does not constrain further evolutionary development of its Senior Wing into a future National Defence College.
Despite the widely-based and strongly-held perception that the overseas senior courses do not meet the ADF’s senior officer preparatory requirement, both in a quantitative and qualitative sense, they are accepted as a significant contribution to a senior officer development programme. The real value of such courses lies in the nature of experience they provide. Through these courses officers are exposed to a broad range of different regional, national and functional perspectives on issues of mutual concern. Substantial and valuable contact groups are built up amongst course members and with people who interact with the course. Moreover, as with the University Defence Fellowship schemes, the overseas courses broaden the variety of experiences available to officers. For these reasons, such courses should continue to form a component of a future ADF senior officer development programme.

Executive exchanges, postgraduate university courses, defence fellowships, and senior officer study periods collectively provide a senior officer development programme with both breadth and depth in terms of experiences and opportunities. However, the element of progression in such a programme is provided in the development of a senior-level officer education course in Australia of the standing and status of those operated by the overseas senior war or defence colleges. This course can be most effectively provided in the context of a National Defence College of Australia.

The model presented in Chapter 3 of a NDC(A) centres around a senior officer preparatory course of standing, designed flexibly to meet the skills and knowledge requirements of current and evolving senior officer roles. It defines this senior course, the National Defence Programme, as the upper benchmark of the ADF’s career officer education system and clarifies the optimal role and purpose of the Joint Services Staff College in its Joint Services Staff Course. The model provides a framework for the development of role-specific training (such as in resource management) which would contribute to the profession’s capability to respond effectively to changing demands, in this area, upon its skill and knowledge base. In the development overall of that knowledge base, the institution offers a niche for dedicated military researchers, tasked with its improvement and enrichment.
In its National Defence Programme, the model also offers the opportunity for enhanced reciprocity arrangements with overseas senior courses and thus even indirectly can make a greater contribution to the professional development of senior officers. The Higher Research Course not only could assist officers in developing their intellectual skills of research, analysis and self-discipline, but could also make contributions to the knowledge base of the profession and the development of policy advice. The course also creates the opportunity for the NDP to gain university Masters degree accreditation. For its part, the incorporation and refinement of a Higher Command Course provides a vehicle for the development of a nucleus of operational commanders uniquely skilled to cope with the particular circumstances of operations in defence of Australia and Australian interests. With its emphasis upon all environments and the teaching methodologies of simulation, hypotheticals, and extended-stress exercises, it also provides a model which other military professions may be keen to adopt.

The Institute of Higher Research Studies is designed to be functional, of superior quality and affordable. These qualities are achieved through its features of the secondment to the Directing Staff of a small number of foreign officers who have completed the NDP, reliance on selected guest practitioners, economies to be achieved in visiting lecturers schedules through co-operation with the Australian National University, the Defence Force Academy and the RAAF Staff College and the non-tenured contract status of its cadre faculty members.

Each component of a senior officer development programme has resource and manning implications, which constitute substantial and formidable obstacles to the achievement of substantive progress. It is almost axiomatic that the option which holds the promise of the greatest advance should also make the greatest demands in terms of resources and manpower. However, revenue-saving and resource-generating initiatives, such as those outlined in Chapter 3, can go a considerable way in offset the resource needs of a National Defence College.

In terms of the manpower required for the staff and student body for such a College, and other schemes, certain policy changes can
be proposed. First, in terms of the establishment levels determined for the trained force-training force components of the ADF, long-term training positions are currently assessed as part of the trained force. When under-manning is to be borne or increased, in the trained strength force structure, it is spread amongst those positions given the lowest manning priority; this includes many long-term training billets. If such positions were transferred to the training force list, they would be more protected from various "salami-slicing" and budget reduction exercises.

Second, in March 1989, the Assistant Chief of the Defence Force (Policy) was tasked with undertaking a structural review of the higher ADF staff arrangements. One of the purposes of this review was to generate savings in the number of senior officer positions by rank in order to provide sufficient resources for salary restructuring. However, it is proposed that a comparatively small proportion of these savings could be diverted into creating a senior officer "working margin". This working margin would serve three purposes. First, it would contribute to the availability of officers to attend a National Defence College or JSSC Senior-Wing course. Second, a proportion of the Directing Staff required for such courses could be met from the working margin. Third, it could provide a small reservoir of officers who would be available to undertake defence and military policy relevant research tasks.

Finally, the provision of manpower to various functions is decided on a priority basis. The current Defence resource strategy and resultant allocation of resources places priority upon the procurement of long lead-time, expensive and complex items, in order to achieve an equipment, weaponry and platform modernisation of the ADF. Apart from the need to overcome the hump of obsolescence, created by a failure to commit resources to capital procurement in the 1970s, these resource priorities reflect the effort to match ADF force structure to articulated defence strategy. However, there are other long lead-time, expensive and complex items not encompassed in this resource strategy - amongst them, the effective preparation of the future ADF senior officer corps.

Initiatives such as the working margin and those identified in Chapter 3, could yield a significant proportion of the "working capital"
required to set in place a responsive and effective senior officer development programme, which would be based around a National Defence College set of courses and the provision of a supporting nexus of specialist currency courses, defence fellowships, university postgraduate and overseas senior courses and executive exchanges. However, the remainder of the resources, both in financial and manpower terms, for such a programme, can only be generated through a policy change to increase the priority attached to funding senior officer preparation. Apart from every other more important argument put forward, the commitment of resources made available by such a policy change, would provide significant and indeed indispensable returns on investment.

The senior officer corps is a *sine qua non* in the effort to modernise the Australian Defence Forces, to produce effective war-fighting capabilities and doctrines, and to develop responsive military and defence strategies for the future. The influence of this corps of officers extends further into the future and is of broader consequence than any single weapon system or platform which, even in current dollar terms, will most often cost more than the investment needed for the effective preparation for such officers.
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**ANNEX A:**

CANADIAN DEFENCE FORCES
GENERAL OFFICERS SEMINAR OUTLINE

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<td>(3) Strength and weaknesses</td>
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<td>VI.</td>
<td>Deputy Chief of the Defence Staff Operations</td>
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<td>(1) Normative Program</td>
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</table>
VII. Introduction to the Financial Presentation
(1) Financial Authorities
(2) PEMS and the Budgetary Structure
(3) Provision of Resources to non-DND Agencies:
   (a) The Inspection Function
   (b) The Need to Recover Costs

Chief of Financial Services

VIII. Dealing with the Media
(1) Director General Information Mandate
(2) Organisation
(3) Media Relations

Director General of Information

Day Two: Topic Speaker

I. Review Services
   (1) Background
   (2) Organisation
   (3) Functions
   Chief of Review Services
   (Audit)

II. Relationship with Government Departments and Foreign Governments
   Assistant Deputy Minister (Materiel)

III. The Financial Administration Act and its Relationship to DND Acquisitions
     Assistant Deputy Minister (Materiel)

IV. Relationship with Industry
    (1) Canadian
    (2) Foreign
    (3) Conflicts of Interest
    (4) The Second Career and its Impediments
     Assistant Deputy Minister (Materiel)
### V. DND Personnel Policy

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<tr>
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<tr>
<td>(1)</td>
<td>Introduction embracing military and civilian sectors</td>
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<tr>
<td>(2)</td>
<td>The Personnel Concept</td>
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<tr>
<td>(3)</td>
<td>The Personnel Structure and Manning the Forces; ADM(Per) perspective and the role of the General Officer</td>
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<td>(4)</td>
<td>External and Internal Influences - the Charter of Rights and Freedoms; Human Rights considerations’ the Privacy and Access to Information Acts; Official Languages; Budgets; Manning constraints</td>
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<td>(5)</td>
<td>Rewards and Discipline - Awards policy; discipline (support of policy and individual rights); The Grievance system</td>
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<td>(6)</td>
<td>Conclusion - the primacy of operations; Service requirements and individual needs; the Unified CF</td>
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### VI. Personnel Management

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### VII. Civilian Personnel Management

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### VIII. Labour-Management Staff Relations

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<td>(3)</td>
<td>Management rights and obligations</td>
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### IX. Union of National Defence Employees

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### X. Minister of National Defence Address

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### Day Three:

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<td>Environmental Perspectives and Issues</td>
<td>Commander MARCOM</td>
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<td>(1) Maritime Command</td>
<td>Commander FMC</td>
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<td>(2) Force Mobile Command</td>
<td>Commander AIRCOM</td>
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<td>(3) Air Command</td>
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<td>(2) Terrorism - Domestic/international Implications</td>
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<td>(3) Canada’s Intelligence Community</td>
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### Day Four:

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<td>(1) Stress Awareness and Management</td>
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<td>Associate Assistant Deputy Minister (Materiel) or Project Manager CF18 or Patrol Frigate</td>
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<td>The General as a Staff Officer</td>
<td>Vice Chief of Defence Staff</td>
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<td>Chief of the Defence Staff Address/Discussion</td>
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ANNEX B:

AUSTRALIAN DEPARTMENT OF DEFENCE
INDUSTRIAL MOBILISATION COURSE*

Aims: The aims of the Industrial Mobilisation Course are: a. to give members an understanding of those aspects of economic, industrial, defence, infrastructure and other related matters which affect our national security; and b. to encourage and facilitate communication, co-operation and mutual understanding between industry, the Public Service and the Armed Forces.

Objectives: To achieve the aims, the Course is designed to give members: a. an insight into the current status, future development and role of the Services; b. an appreciation of the development and diversification of Industry in Australia and its production capacity; c. an appreciation of the main determinants of our defence capabilities and the institutional framework within which national policies for industry and defence are formulated and implemented; d. an understanding of the co-operation which must exist between Government and Industry to provide industrial support to the Armed Forces; and e. an appreciation of the inter-relationship between Defence industrial capacity and the civilian economy.

Curriculum: The annual curriculum is divided into six sections:

Introduction: The basic problems of how industry is prepared to meet a national emergency, and the inter-relationships of the economic, legal and financial factors;

Natural Resources: A study is made of Australia’s natural resources, their quantity, type, availability and distribution, and the extent of the Nation’s self sufficiency. The matter of critical and strategic materials is discussed.

Secondary Industries: Production aspects of industrial output and future potential are considered. The limitations of Industry are studied and attention is focused on military industrial relationships

Public Utilities: The control and development of these important factors in the country’s economy are investigated.

Manpower: A study of the problems of industrial relations, military and civilian requirements and the effective utilisation and conservation of manpower is undertaken.

Defence Forces: The problems associated with providing material for the Services are given special consideration.

Course Structure: The Course is conducted annually in Victoria and New South Wales and a third course is programmed rotationally between South Australia, Queensland and Western Australia. All courses are part-time. The two longer courses commence in
February and conclude in October/November and comprise about 55 lectures and 53 visits to industrial and Service establishments and public utilities. Each course commences and terminates with a week-long residential symposium at a Service Establishment. Weekly lectures are normally held on Monday evenings with visits to industry generally on the Tuesday following the lecture. About once every six weeks, a longer visit (2 to 5 days) is made to industrial or mining sites.

**Composition of Courses:** The objective is to achieve a balanced course with membership being drawn from the Government, the Services and both the private and tertiary sectors. Various factors including syndicate composition, likely members availability and industry coverage has resulted in the composition for each course conforming with Industry/Commerce/Tertiary - 55%, Public Service (Federal and State) - 35%, and Armed Forces - 10%. Long courses in Victoria and New South Wales normally comprise 35-40 whilst the shorter courses are limited to 25-30 in membership.

* Source: Captain K.H. MacGowan RAN, Director, Industrial Mobilisation Course, Minute Paper Number 222, October 1986.
ANNEX C:

POSTGRADUATE COURSES OF INSTRUCTION AT
THE ROYAL MILITARY COLLEGE OF CANADA*

ARTS DIVISION

Department of English and Philosophy
(1) Canadian Poetry 1750-1914
(2) Selected 19th Century Canadian Authors
(3) Canadian Fiction
(4) Canadian Poetry 1915 to Present
(5) Eighteenth Century British Literature
(6) Nineteenth Century British Literature
(7) Twentieth Century British Literature
(8) Nineteenth Century American Literature
(9) Twentieth Century American Literature

Department of History
(1) International Colonial Rivalry 1848-1914
(2) Canadian Defence Policy
(3) Military History and Theory of War

Department of Political and Economic Science
(1) Economics of Defence

Interdepartmental Programme in War Studies
(1) The Theories of War from the 18th Century to Present
(2) War, Politics and International Relations
(3) Economics of Defence
(4) Civil and Military Relations
(5) Nuclear Technology
(6) Canadian Defence Studies
(7) Mathematical Logistics of Warfare and Management
(8) The Modern Transformation of East Asia
(9) Maritime Strategy and Naval Policy
(10) The Foreign Policies of the Soviet Union
(11) The Impact of Total War in the Twentieth Century
(13) Advanced Directed Studies
(14) Behavioural Science Applications to Warfare
(15) American Foreign and Defence Policy
Annexes

SCIENCE AND ENGINEERING DIVISIONS

Department of Mathematics and Computer Science

(1) Advanced Mathematical Topics for Engineers
(2) Tensor Analysis and the Special Theory of Relativity
(3) Numerical Analysis
(4) Theoretical Solid State Physics
(5) Linear Algebra with Applications
(6) Probability, Stochastic Processes and Theory of Queues
(7) Probability and Theory of Queues
(8) Introduction to Relativistic Quantum Mechanics
(9) Statistical Mechanics of Simple Fluids
(10) Deterministic Numerical Simulation
(11) Advanced Probability Theory
(12) Multivariate Statistics
(13) Formal Languages and Computation

Computer Science

(14) Patterns Recognition and Image Processing
(15) Introduction to Computer Systems
(16) Operating Systems Concepts
(17) Data Base Management Systems
(18) Computer Graphics
(19) Computer Simulation for Dynamics, Guidance and Control

Department of Physics

(1) Electromagnetic Theory
(2) Advanced Optics
(3) Advanced Topics in Physics
(4) Superconductivity and Applications
(5) Semiconductors
(6) Remote Sensing

Interdepartment Programme in Materials Science

(1) Stress Waves in Solids
(2) Principles and Applications of Acoustic Emission
(3) Principles of Optical Non-Destructive Testing
(4) Techniques of Materials Evaluation
(5) Macroscopic and Microscopic Aspects of Structural Failure in Metals
(6) Techniques of Image Enhancement

Department of Chemistry and Chemical Engineering

(1) Advanced Methods of Analysis
(2) Chemical and Nuclear Engineering Computations
(3) Special Topics
(4) Electrochemical Power Sources
(5) Air Quality Control
(6) Explosives and Explosions
(7) Nuclear Technology
### Senior Officer Professional Development

| (8) | Health Physics and Radiation Protection |
| (9) | Neutron Radiography, |
| (10) | Nuclear Detection and Measurement |
| (11) | Shielding for Nuclear Activities |
| (12) | Nuclear Applications in Engineering |

#### Department of Civil Engineering

| (1) | Structural Dynamics and Response of Structures |
| (2) | The Design of Multistory Reinforced Concrete Buildings |
| (3) | Plastic Analysis and Limit State Design of Steel Structures |
| (4) | Pavement Design and Construction |
| (5) | Airfield Planning and Design |
| (6) | Principles of Soil Mechanics |
| (7) | Advanced Foundation Engineering |
| (8) | Slope Stability and Earth Retaining Structures |
| (9) | Principles of Structural Stability |
| (10) | Advanced Reinforced Concrete Design |
| (11) | Physical and Chemical Treatment of Water and Wastewater |
| (12) | Biological Treatment of Wastewater |
| (13) | Sanitary Engineering Laboratory |
| (14) | Arctic Construction Engineering |

#### Department of Electrical Engineering

| (1) | An Introduction to the Theory of Statistical Communications |
| (2) | Systems, Networks, and Computation |
| (3) | Optimisation Methods in Control |
| (4) | Digital Communications |
| (5) | State Space Methods for System Analysis |
| (6) | System Parameter Identification and Adaptive Control |
| (7) | Secure Communications |
| (8) | Introduction to Programming |
| (9) | Advanced Radar Systems |
| (10) | Information Theory and Coding |
| (11) | Logic Design and Interfacing |
| (12) | Linear Feedback Control Systems |
| (13) | Real-Time Digital Computer Control Systems |
| (14) | Microcomputers: Architecture and Applications |
| (15) | Simulation |
| (16) | Real-Time Operating Systems |
| (17) | Introduction to Computer Systems |
| (18) | Power Electronics |
| (19) | Topics in Computer Engineering |
| (20) | Computer Networks and Protocols |
| (21) | Advanced Topics in Power Engineering |
| (22) | Software Engineering and Management |

#### Department of Engineering Management

| (1) | Engineering Maintenance Management |
| (2) | Advanced Reliability Engineering |
| (3) | Quality Control and Management |
| (4) | System Simulation |
(5) Production/Operations Management  
(6) Management Information and Decision Support Systems  
(7) Applied Multivariate Statistics  
(8) Mathematical Programming  
(9) Decision Analysis

Department of Mechanical Engineering  

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<td>Fluid Dynamics</td>
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<td>Fluid Dynamics-Compressible Flow</td>
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<td>Radiation Heat Transfer</td>
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<td>Heat Transfer II</td>
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<td>7</td>
<td>Convection Heat Transfer</td>
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<td>8</td>
<td>Structural Analysis of Composite Materials</td>
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<td>9</td>
<td>Applied Elasticity</td>
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<td>Mechanical Vibration</td>
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<td>11</td>
<td>Design of Feedback Control Systems</td>
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<td>Aspects of Vehicle Dynamics and Lubrication</td>
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<td>Combustion Processes</td>
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<td>Vehicle Engines</td>
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<td>15</td>
<td>Aerodynamics of Turbomachines</td>
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<td>16</td>
<td>Principles of Radiometry and Remote Sensing</td>
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<td>Fourier Transform Optics</td>
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<td>18</td>
<td>Permafrost Engineering</td>
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### ANNEX D:

**MASTER OF DEFENCE ADMINISTRATION OF THE ROYAL MILITARY COLLEGE OF SCIENCE, SHRIVENHAM***

#### PART ONE

1. Operations of the Services and the Defence Environment
2. Science of Defence Systems
3. Economic Environment
4. Finance, Accountancy and Managerial Economics
5. Techniques of Quantitative Analysis
6. Computing and Information Systems
8. Logistics and Operations Management

#### PART TWO

1. Defence Contracting
2. Industrial Marketing
3. Costing and Pricing
4. Defence Procurement Management
5. Reliability and Maintainability Programmes
6. Manpower Studies
7. Logistic Systems Management
8. Operations Management

#### PART THREE

1. Project

* Source: Royal Military College of Science, Shrivenham, Prospectus for Graduate Programmes in Master of Defence Administration (1987).
ANNEX E:

MASTER OF MILITARY ART AND SCIENCE DEGREE,
SCHOOL OF ADVANCED MILITARY STUDIES,
US ARMY COMMAND AND GENERAL STAFF COLLEGE,
FORT LEAVENWORTH.

The Advanced Military Studies Program is conducted in three phases. In the first phase, selected officers undertake preparatory courses during the second and third terms of their Command and General Staff Officers Course. Two courses are currently required: "Modern Military Thought" (a survey of major military theorists, conducted by the Combat Studies Institute), and "Military Classics Colloquia", (a survey of the evolution of the art of war from antiquity through the late 20th century, conducted by the School of Advanced Military Studies (SAMS).

Phase 2 is the Advanced Military Studies Course (AMSC) a 49-week graduate-level course focusing on tactical and operational theory and method. Graduates are awarded a Master of Military Art and Science degree on completion. Phase 3 is the continuation for officers of their tactical and operational education by service on the general staff of an active division or corps. During this internship the School maintains liaison with the graduate, periodically providing him with updated educational materials.

The AMSC curriculum, depicted schematically below, is designed as a progressive study of the conduct of warfare at the tactical and operational levels. The course begins with an examination of classical and contemporary military theory. This study requires students to develop propositions about how and why things happen in war and why certain kinds of decisions tend to produce certain kinds of results. The student then examines these propositions in the light of evidence drawn from military history, from extensive wargaming, and from participation in actual field exercises.

The bulk of this examination is conducted in three blocks. The first examines warfare at the tactical level, with a view to understanding the dynamics of combined arms operations in engagements and battles. The second and longest block addresses operational art - the design and conduct of major operations and campaigns. It includes analysis of a wide variety of campaigns; focused examination of major operational issues involving joint and combined forces; visits to joint headquarters on the eastern seaboard; and participation in wargames. Both blocks are enhanced by participation in a major NATO exercise on the staffs of Central Army Group and III, V and VII Corps. Staff training in NATO is followed by terrain walks over several European battlefields.

The student spends his final weeks in studying how a nation at peace prepares for war. In this final segment, current military developments are compared and contrasted with the Army's activities in the 1930s with a view to judging what additional efforts might be required to enhance the Army's combat effectiveness in a future conflict.
### ADVANCED MILITARY STUDIES COURSE

**ACADEMIC YEAR 1987-88**

(Schedule by Weeks)

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*First Term Monograph Due*

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*Second Term Monograph Due*

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Source: School of Advanced Military Studies SAMS Overview (US Army Command and General Staff College, Fort Leavenworth, Academic Year 1987-88) pp.3-4, 6.
ANNEX F:

POSTGRADUATE DEGREES, UNIVERSITY COLLEGE,
AUSTRALIAN DEFENCE FORCE ACADEMY.

Graduate Study Subject Descriptions

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<td>(3) Soil Mechanics</td>
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<td>(4) Soil Dynamics</td>
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<td>(5) Site Investigations</td>
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<td>(6) Pavement Materials and Design</td>
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<td>(7) Geological Engineering</td>
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<td>(8) Basic Finite Elements</td>
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<td>(9) Applied Soil Mechanics</td>
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<td>(10) Finite Elements in Structural Analysis</td>
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<td>(11) Advanced Structural Analysis</td>
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<td>(12) Structural Engineering Materials I</td>
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<td>(13) Reinforced Concrete</td>
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<td>(14) Prestressed Concrete</td>
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<td>(15) Structural Dynamics</td>
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<td>(18) Project Management: Administration</td>
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<td>(19) Project Management: Operation and Control</td>
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<td>(20) Project Management: Capital and Maintenance</td>
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<td>(21) Coastal and Ocean Engineering</td>
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<tr>
<th>Department of Computer Science</th>
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<tr>
<td>(1) Recent Developments in Information Technology, Survey of Operations Research</td>
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<th>Department of Electrical and Electronic Engineering</th>
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<tr>
<td>(1) Numerical Techniques in Electromagnetics</td>
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<td>(5) Optical Fibres</td>
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<td>(6) Introduction to Digital Image Processing</td>
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<td>(7) Digital Image Restoration</td>
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<td>(8) Machine Vision</td>
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<td>(9) Computer-Generated Imaging</td>
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(10) Speech and Image Coding
(11) Advanced Computer Architecture
(12) Microcomputer System Design
(13) Digital Communications
(14) Advanced Digital Systems
(15) Advanced Digital Signal Processing Techniques
(16) Digital Signal Processing in Practice
(17) Advanced Circuit Theory
(18) Information Theory
(19) Time-Series Analysis Techniques
(20) Advanced Control Systems
(21) Robotics
(22) Methods in Robust Control Theory
(23) Data Security
(24) Advanced Data Networks
(25) Advanced Very Large Integration Techniques
(26) Advanced MOSFET Semiconductor Theory
(27) Advanced Power Systems
(28) Power System Protection
(29) Special Elective
(30) Electrical Engineering Elective
(31) Project Report (Minor and Major)

Department of English

(1) Thesis
(2) Australian Literature Since 1960
(3) Australian Literary Movements and Controversies
(4) Victorian Autobiographical Narratives
(5) Twentieth Century Literary Theory
(6) The Two Hours traffique of our Stage: Medieval and Renaissance Drama

Department of Geography and Oceanography

(1) Strategic Geographical Issues in Australia's Neighbourhood

Department of History

(1) Australian Political History in the Twentieth Century
(2) The History of Australian Defence and Foreign Policy
(3) A History of Pre-Nuclear Strategic Thought
(4) Contemporary Warfare

Department of Politics

(1) Australian Defence and Foreign Policy: Contemporary Issues
(2) Legal and Moral Problems of International Violence
(3) The Vietnam War, 1954-75: American, Australian and Vietnamese Perspectives
(4) Strategic Studies: Nuclear Strategy since 1945
(5) The Politics of a Divided Society: Northern Ireland since 1968
Interdisciplinary Studies

(1) Sub-Thesis (Australian Studies)
(2) Sub-Thesis (Defence Studies)
(3) Australia Since 1901

* Source: Australian Defence Force Academy, University College, **Handbook**, (University of New South Wales, Canberra, 1988) pp. 115-126.
The Graduate Diploma in Strategic Studies is a 10-month full-time course or 22 months part-time work. The Master of Arts (Strategic Studies) Degree requires 12 months full-time work or 24 months part-time work. Both degrees require the successful completion of four subjects; of which one, strategic studies is compulsory. Students are expected to take at least two additional courses from the following three: Asia and Pacific Security, Systems and Quantitative Analysis, and Australian Security Planning. All students are required to select a fourth subject either from the three listed above or from the relevant post-graduate courses offered by the International Relations Department, the Law Faculty, the Peace Research Centre, or from anywhere else within the University. The main options are: Theories and Concepts of International Relations; International History Since the First World War; The Politics of International Economic Relations; and Peace and Security in the Nuclear Age. In addition the Master of Arts requires the successful completion of a sub-thesis of 15,000-20,000 words.

Strategic Studies

(1) The Causes of War
(2) Strategic Studies and its Critics
(3) The Non-Military Aspects of National Security
(4) The Grand Masters of Modern Strategy
(5) The Role of Intelligence in Government
(6) Revolutionary War
(7) Terrorism and Non-State Violence
(8) Developments in Conventional War and Military Technologies
(9) Introduction to the Superpower Strategic Balance
(10) Strategic Nuclear Systems and Concepts
(11) The Development of Strategic Nuclear Doctrines
(12) Concepts of Strategic Nuclear Defence
(13) The Development of Soviet Strategy
(14) The Development of US Strategy
(15) The Future of the Strategic Balance
(16) Crisis Management
(17) Nuclear and Conventional Disarmament I, II
(18) Security Issues in the Middle East
(19) Security Issues in the Persian Gulf
(20) The Definition of Strategic Priorities in Australia

Asian and Pacific Security

(1) Soviet Strategic Policies in East Asia and the Pacific
(2) US Strategic Policies in East Asia and the Pacific
Annexes 127

(3) Japanese Security Perspectives
(4) Chinese Security Perspectives
(5) Managing Tensions on the Korean Peninsula
(6) Conflict in Afghanistan
(7) Security Issues in the Indian Ocean
(8) Small State Security in the South Pacific
(9) France and Other External Powers in the South Pacific
(10) Papua New Guinea’s Security Perspectives
(11) Vietnam as a Regional Power
(12) ASEAN as a Security Community
(13) ASEAN and the Kampuchean issue
(14) The Philippines and the US Bases
(15) The Regional Role of the Great Powers
(16) Strategic Planning of the major powers in Asia and the Pacific
(17) Potential for Tension Reduction, Arms Control and Disarmament in East Asia and the Pacific

Systems and Quantitative Analysis

(1) History of Systems and Quantitative Analysis
(2) Systems Models and Decisions
(3) Data: Statistical Properties and Uses I, II
(4) Statistical Tests I, II
(5) Probability Concepts
(6) Probability Distributions I, II
(7) Replacement and Acquisition Analysis
(8) Transportation and Assignment Optimisation Techniques I, II
(9) Linear Programming I, II
(10) Queueing Theory
(11) Scheduling and Dynamic Programming
(12) Critical Path Analysis
(13) Decision Theory and Utility I, II
(14) Game Theory and Strategy Analysis I, II
(15) Simulation Techniques
(16) Defence Equipment Acquisition Processes
(17) Special Defence Topic
(18) Programming, Planning and Budgeting Systems.

Australian Security Planning

(1) History of Australian Defence Policy
(2) Nature of Australia’s Defence Environment: Physical, Human and Infrastructure Factors
(3) Military Perceptions and Capacities of Regional States
(4) Security Policy Issues in New Zealand
(5) The Defence of Australia I: Managing the Contingency Spectrum
(6) The Defence of Australia II: Australian Defence Strategy, Concepts and Methodologies
(7) ANZUS, Broader Australian-US Security Cooperation, Joint Defence Facilities and Australian-New Zealand Defence Cooperation
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(8) Security Cooperation in Southeast Asia, The Southwest Pacific and the Indian Ocean

(9) The Legal Basis for Defence Activity and Legal Issues in Defence of Australia Contingencies

(10) Defence Organisation and Major Decision-Making Processes


(12) The Contribution of Defence Science and Industry

(13) Security Planning in Middle States: Canada, Sweden, Switzerland, Yugoslavia, Indonesia, Singapore and the Role of Civil, Economic and Psychological Defence


(15) Comparative Processes of Defence Decision-Making

(16) Strategy, Operational Concepts and Command and Control in Low-Level Contingencies

(17) Joint Operations I: Air Aspects

(18) Joint Operations II: Maritime Aspects

(19) Joint Operations III: Ground Force Aspects

(20) War Games I, II

(21) Policy Dilemmas in Broader Contingencies: Offshore Territories, PNG, International Peacekeeping, Distant Theatres

(22) Regional Implications of Global War
### ANNEX H:

**DEFENCE FELLOWSHIP SCHEME - FELLOWS AND PROJECTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fellow/Author</th>
<th>Title</th>
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<tr>
<td>1978</td>
<td>Lieutenant Colonel S.N. Gower</td>
<td>Options for a Defence Technological Strategy</td>
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<tr>
<td>1978</td>
<td>Colonel D.K. Baker</td>
<td>The Requirement for Civil Defence as an Integral Part of a National Defence Posture</td>
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<tr>
<td>1978</td>
<td>Squadron Leader M.J. Rawlinson</td>
<td>Labour Turnover in the Technical and Equivalent Trades of the RAAF</td>
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<td>1978</td>
<td>Squadron Leader P.R. Rasmussen</td>
<td>Effects of Changes of School on the Secondary Education of Servicemen's Children</td>
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<tr>
<td>1979</td>
<td>Mr. J.C. King</td>
<td>Australian Defence Administration in Future Preparation for and during Conflict</td>
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<tr>
<td>1980</td>
<td>Mr. G. Jepps</td>
<td>Linearised Optimal Control and Applications to a Gliding Projectile</td>
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<tr>
<td>1980</td>
<td>Lieutenant Commander I.M. Speedy</td>
<td>Oil and Australian Security - The Future Fuel Requirements of the ADF</td>
</tr>
<tr>
<td>1980</td>
<td>Captain L.J. Hiddins</td>
<td>Survive to Live - An Analysis of Survival and its Relationship within Northern Australia</td>
</tr>
<tr>
<td>1981</td>
<td>Wing Commander N.C. Bleakley</td>
<td>Educational Prerequisites of Technical Trade Training in the Armed Services</td>
</tr>
<tr>
<td>1981</td>
<td>Major W. Graco</td>
<td>Characteristics of Competent Commanders</td>
</tr>
<tr>
<td>1981</td>
<td>Captain W.S.G. Bateman RAN</td>
<td>Australian Overseas Trade - Strategic Considerations</td>
</tr>
<tr>
<td>1982</td>
<td>Squadron Leader B.L. Kavanagh</td>
<td>Water Procurement in Australia's Arid Lands</td>
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<tr>
<td>1982</td>
<td>Lieutenant Colonel A.R. Howes</td>
<td>Transport and Australian Security</td>
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<td>1983</td>
<td>Mr. C.M. Doogan</td>
<td>Administrative Law - Its Growth and Impact on the Defence Force and the Department of Defence</td>
</tr>
<tr>
<td>1983</td>
<td>Mr. K.J. Hope</td>
<td>Sea-Keeping of Naval Ships</td>
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<tr>
<td>1984</td>
<td>Lieutenant Colonel N.A. Jans</td>
<td>Military Professionals in Mid Career</td>
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<tr>
<td>1985</td>
<td>Dr. D.A. Gray</td>
<td>Applications of Kalman Filtering Techniques to the Estimation of the Shape of a Towed-Array and Extensions to the Theory of Maximum Entropy</td>
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<tr>
<td>1985</td>
<td>Lieutenant A.J. Hinge RAN</td>
<td>Mine Warfare as Australia's First Line of Defence</td>
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<tr>
<td>1985</td>
<td>Mr. M.J. Millington</td>
<td>Integrated and Fibre Optics with respect to Ion-Exchanged Wave Guides</td>
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</table>
1986  Lieutenant Colonel J. Wood ARES (A Case Study on Preparation for War and Mobilisation)
1986  Mr. G.J. Klintworth (Post-Mao China - Its Modernisation and Security Implications for Western Pacific Including Australia)
1986  Miss A.F. Quill (Australian Participation in Ocean Acoustic Tomography and its Application to the RAN)
1987  Major K.E. Quinn (Women in the Armed Services - Career Intentions and Expectations)
1987  Major G.J. McKenzie (Optional Strategies for Production of Engineering Planning Bricks with Special Reference to Roads and Bridges)
1987  Flight Lieutenant C.M. Evans (The RAAF Inventory Today)
1988  Lieutenant T.R. Jenkinson RAN (Application of Artificial Intelligence Techniques to Sonar Signal Processing)
1988  Flight Lieutenant R.B. Heslehurst (Evaluation of Techniques for Damage Tolerance Assessment of Composite Aircraft Structures)
1988  Mr. F.N. Bennett (The Future Organisation, Manning and Management of Defence Materiel Procurement)
1989  Squadron Leader R. Sargent (RAAF Project Management and Systems Engineering)
1989  Mr. K. Granger (Strategic Military Geography of Australia’s Northwest)
ANNEX I:

DEFENCE INSTRUCTIONS (NAVY) PERS 20-1 - RAN VISITING FELLOW AT THE STRATEGIC AND DEFENCE STUDIES CENTRE

Introduction
1. As part of the program to provide officers with the opportunity to further their education in the area of strategic studies, the Australian National University (ANU) has established a position for an Honorary Visiting Fellow at the Strategic and Defence Studies Centre (SDSC). This instruction describes the Fellowship scheme and the arrangement for its administration.

Fellowship
2. The fellowship is for officers of Lieutenant Commander/Commander rank and is for a period of 18 months. The purpose of the Fellowship is to:
   a. further educate officers in the field of strategic and defence studies;
   b. assist SDSC through the provision of naval expertise,
   c. produce published works which should contribute to more informed public debate, and
   d. augment the good relationship between the SDSC and the RAN.

3. The Fellowship provides an opportunity for an officer to stand back and consider Australian defence issues outside the normal Service environment. As an Honorary Visiting Fellow, the officer will be a member of the research staff and will have access to all other members of the staff at the Research School of Pacific Studies. The experience gained from working with such highly qualified people should be invaluable in achieving the primary aim of the Fellowship.

Scope of Study
4. The subject to be studied will be proposed by the officer but must be agreed by SDSC and the Director General, Naval Forward Planning (DGNFP). It should be maritime in nature and relevant to Australia. Officers may prefer to study two or more shorter topics.

5. The officer’s course of study will be under the supervision of the Head of the SDSC, or a representative from the Head of the SDSC, in accordance with established academic criteria. This supervision will not prejudice the direction of the work, but will assist in clarifying the scope of the subject, provide direction to research and expose the officer to a range of arguments during his/her study. The officer will be required to give presentations during seminars at SDSC and participate in SDSC studies as directed by the Head of the SDSC.

Academic Qualifications
6. The Fellowship will not normally lead to the award of an educational qualification. However, depending upon the educational background of the candidate and the nature of the work proposed, it may be possible for the officer to undertake a
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postgraduate degree or graduate diploma. This must be agreed by the SDSC prior to the officer taking up the Fellowship. To undertake a postgraduate course of study, an officer will require tertiary qualifications acceptable for admission to the course in accordance with the rules of the ANU.

Selection
7. Fellowships will be notified approximately a year in advance by general signal and through the Weekly List of Officers' Postings. The next Fellowship will commence in January 1989. Interested officers should apply through the Director of Naval Officers' Postings and Appointments, providing an outline of the subject which they propose to study. Officers may contact the Director of Naval Force Development for guidance upon areas of research that are considered topical and suitable. The final selection will be made by the Chief of Naval Personnel in consultation with the Head of the SDSC.

Administration of the Fellowship
8. The selected officer will be posted to Navy Office for special duties with DGNFP but will work at the SDSC. Depending upon the nature of the research to be undertaken, the Director General Naval Warfare through DGNFP may be responsible for the supervision of the Visiting Fellow.

Access to Official Documents
9. Research is to be conducted from material in the public domain. No official information is to be used in final papers, discussion papers, essays or articles unless it is publicly available or may be made so after proper process of authorisation. Consequently, certain fields of study cannot usefully be pursued by a Visiting Fellow. If access to official documents is required then approval is to be sought from the Department of Defence (Policy Coordination Division, through DGNFP) for permission to have them made available for public access.

10. All work is to be submitted to DGNFP before publication for checking to ensure that it does not contain material prejudicial to the national interest on the grounds of security or sensitivity.

Public Comment and Dissemination of Information
11. Officers undertaking the Fellowship are to make themselves thoroughly conversant with the principles and guidelines on making public comment and disseminating information to the public that are laid down in DI(G) ADMIN 08-1 (Navy ADMIN 53-2). They must be conscious that, because their material will be published by the SDSC, any opinions expressed will have more weight and credibility than if published in professional magazines.

Disclaimers
12. A disclaimer is to be inserted at the commencement of each final paper, discussion paper, essay or article produced in conjunction with the Fellowship to the effect that the work in question represents the views of the author and not necessarily those of either the Department of Defence or the Minister for Defence.
Publication and Copyright

13. The Head of the SDSC will decide whether research conducted during the Fellowship is appropriate for publication. Defence Fellows are required to assign copyright to the Commonwealth in all final papers, discussion papers, essays, articles or any other material prepared as part of a Fellowship.

Conditions

14. The Visiting Fellow will receive full salary and other entitlements under current conditions, including associated personal allowances where these are appropriate. Funding for travel for field trips and miscellaneous expenses is to be approved by DGNFP. An allocation for such expenditure will be sought each year and administered by DGNFP. Equipment or books purchased by the Department of Defence for use by the Visiting Fellow remain the property of the Commonwealth and must be returned on completion of the Fellowship. Clerical and computing support is provided through the SDSC. Additional support may be requested through DGNFP.

15. The duration of the Fellowship will count as continuous service for normal entitlements including retirement benefits, leave and pay increments. No return of service is required as a result of the Fellowship.
ANNEX J:

PRE-1988 CHARTER OF THE JOINT SERVICES STAFF COLLEGE

The aim of the Joint Services Staff College is to provide selected military and civilian officers of Lieutenant Colonel rank or equivalent with an advanced education in preparation for senior appointments in the Department of Defence and in the Services. Military officers attending will desirably have completed a single-service staff college course or have staff experience.

Graduates of the College are required to:

a. comprehend Australia’s national objectives and the major factors which influence the formulation of Australia’s defence and foreign policies;

b. comprehend the machinery for the preparation of Australian defence policy and the process of government decision in defence matters;

c. apply those aspects of government policy which bear upon the defence and the security of Australia;

d. comprehend the defence administrative and operational organizations and their responsibilities for executing defence policy;

e. comprehend the activities of the three arms of the Australian Defence Force, and the government and non-government physical support upon which they depend;

f. evaluate Australia’s present and potential defence capabilities;

g. evaluate alternative methods of command and control, organization, logistic support and concepts of operations in joint activities in both the national and combined sense at various levels of hostility; and

h. comprehend modern management concepts.

Overseas students from selected nations are invited to attend each course.
Anncx K:

1988 CHARTER FOR THE JOINT SERVICES STAFF COLLEGE

Aim. The aim of the JSSC is to provide selected ADF officers of Lieutenant Colonel rank or equivalent with an advanced education in preparation for senior appointments, especially those involving command and policy formulation responsibilities in the ADF or Department of Defence at Colonel and Brigadier rank or equivalent (emphasis added).

Eligibility. ADF officers will have completed a single-Service staff college and will have staff experience. Equivalent Public Service officers from the Department of Defence and other relevant Departments may attend. Officers from selected overseas nations may be invited to attend the course.

Objective. The objective of the course is to ensure that potential senior officers of the ADF are able to evaluate the concepts and factors that are relevant to the provision of policy advice on national security, military strategy, force development, the employment of joint and combined military forces, and to the command and control of such forces at the strategic and operational levels of war.

Methodology. The course objective will be attained by providing an advanced educational programme that emphasizes individual research, writing and discussion in syndicate of three broad areas of study: Australia’s Strategic Environment, Strategic Policy for Australia and Implementation of Strategic Policy.
ANNEX L: PRINCIPAL OVERSEAS SENIOR COURSES ATTENDED BY ADF OFFICERS

<table>
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<tr>
<th>COURSE</th>
<th>DURATION</th>
<th>NUMBER AND FREQUENCY</th>
<th>RANK</th>
<th>REMARKS</th>
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<tr>
<td>Royal College of Defence Studies, London</td>
<td>12 MONTHS</td>
<td>One Officer per year</td>
<td>BRIGADIER-GENERAL</td>
<td>Standing invitation from US Army</td>
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<tr>
<td>National Defence College of India, New Delhi</td>
<td>12 MONTHS</td>
<td>One Officer per year</td>
<td>BRIGADIER-GENERAL</td>
<td>Standing invitation from US Army</td>
</tr>
<tr>
<td>National Defence College of Canada, Kingston</td>
<td>12 MONTHS</td>
<td>One Officer per year</td>
<td>COLONEL</td>
<td>Standing invitation from US Army</td>
</tr>
<tr>
<td>International Fellowship National Defense University, Washington</td>
<td>12 MONTHS</td>
<td>One Officer per year</td>
<td>COLONEL</td>
<td>Standing invitation from US Army</td>
</tr>
<tr>
<td>United States Army War College</td>
<td>7.5 MONTHS</td>
<td>One Officer every two years</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
</tr>
<tr>
<td>United States Air Force War College, Montgomery</td>
<td>7.5 MONTHS</td>
<td>One Officer every two years</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
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<tr>
<td>United States Naval War College</td>
<td>6 MONTHS</td>
<td>Two to four Officers per Course</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
</tr>
<tr>
<td>Master of Defence Administration</td>
<td>6 MONTHS</td>
<td>Two to four Officers per Course</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
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<tr>
<td>Royal Military College of Science, Shrivenham</td>
<td>6 MONTHS</td>
<td>Two to four Officers per Course</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
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<tr>
<td>Armed Forces of the Philippines Command and General Staff College, Granville</td>
<td>6 MONTHS</td>
<td>Two to four Officers per Course</td>
<td>COLONEL</td>
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<tr>
<td>United States Armed Forces Staff College</td>
<td>6 MONTHS</td>
<td>Two to four Officers per Course</td>
<td>COLONEL</td>
<td>May be Defence Rotational</td>
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</table>
SELECT BIBLIOGRAPHY

Books and Government Publications:

Australian Army, Regular Officer Development Committee, Study One - The Asset; Study Two - Education and Training; Study Three - Career Management; Study Four - The Future (Canberra, Commonwealth of Australia, 1978).


Downes, Cathy, Social, Economic and Political Influences Upon the Australian Army of the 1990s (Canberra, Australian National University, Strategic and Defence Studies Centre Working Paper Number 169, 1988).


Horner, D.M., Australian Higher Command in the Vietnam War (Canberra, Australian National University, Strategic and Defence Studies Centre, Canberra Papers on Strategy and Defence Number 40, 1986).


Lightburn, Colonel David, Senior Officer Professional Development (Ottawa, National Defence Headquarters, Chief of Professional Development Study for the Officer Professional Development Council, 30th April 1986).

Smith, Major M.G., Strategic Thinking and the Australian Military Profession (Canberra, Australian National University, Strategic and Defence Studies Centre, Reference Paper Number 141, 1985).

Stamp, Gillian, A Summary of Stratified Systems Theory (Uxbridge, Brunel University, Brunel Institute of Organisation and Social Studies, April 1985).
Stamp, Gillian, Further Consideration of an Approach to the Assessment of the Potential Capability of Officers for Higher Level Appointments (Uxbridge, Brunel University, Brunel Institute of Organisation and Social Studies, prepared for the Army Personnel Research Establishment, February 1984).

United States Army, Leadership and Command at Senior Levels (Washington DC Headquarters, Department of the Army, Field Manual 22-103, June 1987).


Articles:


140 Senior Officer Professional Development


Byron, Commander John L., "Warriors" US Naval Institute Proceedings Volume 111, Number 6, June 1985, pp. 64-68.


Cole, Commander Bernard D., "Train the Warrior, Educate the Officer" US Naval Institute Proceedings Volume 111, Number 1, January 1985, pp. 44-47.


Crowe, William J. Jr., "Senior Officer Education Today and Tomorrow" Parameters Volume 17, Number 1, Spring 1987, pp. 2-9.

Downes, Cathy, "To Be or Not to Be A Profession: The Military Case" Defence Analysis Volume 1, Number 3, September 1985, pp. 147-172.


Select Bibliography 141


MacDonald, General Sir Arthur, "The Development of Service Officers to Fill Senior Appointments" Australian Journal of Defence Studies Volume 2, Number 1, April 1978, pp. 3-11.


Marchello, Joseph, "Education for a Technological Age" Futures Volume 19, Number 5, October 1987, pp. 555-565.


Millar, T.B., "A Higher Staff College for Australia?" The Yolla (Journal of the Australian Joint Services Staff College Association) Volume 2, Numbers 8,9, 1983-84, pp. 11-12.

Schantz, Commander John M., "Who Will Fall on his Sword?" Joint Perspectives Volume 1, Number 1, Summer 1980, pp.42-51.

Scott, Fraser, "Training for the Procurement Executive" Journal of the Royal United Services Institute for Defence Studies Volume 119, Number 3, September 1974, pp. 52-54.


Turlington, John E., "Truly Learning the Operational Art" Parameters Volume 17, Number 1, Spring 1987, pp. 51-64.


Vermillion, John, "The Pillars of Generalship" Parameters Volume 17, Number 2, Summer 1987, pp. 2-17.


The aim of the Strategic and Defence Studies Centre, which was set up in the Research School of Pacific Studies in The Australian National University, is to advance the study of strategic problems, particularly those relating to the general region of the Indian and Pacific Oceans and South-east Asia. Participation in the Centre's activities is not limited to members of the University, but includes other interested professional and Parliamentary groups. Research includes not only military, but political, economic, scientific and technological aspects. Strategy, for the purpose of the Centre, is defined in the broadest sense of embracing not only the control and application of military force, but also the peaceful settlement of disputes which could cause violence.

This is the only academic body in Australia which specialises in these studies. Centre members give frequent lectures and seminars for other departments within the ANU and other universities. Regular seminars and conferences on topics of current importance to the Centre's research are held, and the major defence training institutions, the Joint Services Staff College and the Navy, Army and RAAF Staff Colleges, are heavily dependent upon SDSC assistance with the strategic studies sections of their courses.

Since its inception in 1966, the Centre has supported a number of Visiting and Research Fellows, who have undertaken a wide variety of investigations. Recently the emphasis of the Centre's work has been on problems posed for the peace and stability of Australia's neighbourhood; the defence of Australia; arms proliferation and arms control; decision making processes of the higher levels of the Australian Defence Department; management studies and the role of the Minister in Australia's defence policy making; and the strategic implications of developments in South-east Asia, the Indian Ocean and the South West Pacific Area.
The Centre contributes to the work of the Department of International Relations through its graduate studies programme; and the Department reciprocates by assisting the Centre in its research. A comprehensive collection of reference materials on strategic issues, particularly from the press, learned journals and government publications, is maintained by the Centre.

The Centre also conducts seminars and conferences which have led to several volumes of published proceedings.
### CANBERRA PAPERS ON STRATEGY AND DEFENCE:

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<td>by Neville Brown</td>
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<td>Low Level Conflict Contingencies and Australian Defence Policy</td>
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<td></td>
<td>by Tony Godfrey-Smith</td>
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An on-going debate within the Australian military profession concerns the most effective, yet affordable, method of preparing officers for senior rank. Almost all participants in this debate have agreed that the current senior officer development effort is fragmented, extremely restricted in coverage, and does not meet the needs of the profession. Despite this consensus, these weaknesses have not proven a sufficient catalyst for change. Until it can be proved that senior officers are inadequate and/or incompetent, it has been argued, there is no rationale of sufficient power to overcome the inertia created, in significant part, by budgetary constraints. However, this monograph argues that there are cogent and potent reasons change; for setting in place substantial and broad-ranging improvements in how officers in the future are to be prepared for senior command and leadership roles. These reasons are explained in the development of a dynamic concept of senior officership. This is followed by a discussion and analysis of some eight possibilities for improving and developing a responsive senior officer professional development programme, including the design of a workable and feasible model of a National Defence College of Australia.