

The Decline in the Management of Defence and Defence Capability Development, Acquisition, Preparedness, and Sustainment

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Executive Summary

The structural failures seen currently within Australia's Defence bureaucracy, including those evident in the capability acquisition organisation, go back to the Tange days and the unfettered power given the civilian Defence Department bureaucracy to 'reform' the Services and the higher defence machinery as it wished. The penultimate outcome of that reorganisation has simply been to maximise bureaucratic power and then to 'keep the Services in their place'.

Since then, Governments of both persuasions as well as Parliaments have stood aside and willingly ignored the continued abuse of bureaucratic power, seemingly uncertain as to how to respond, or afraid to make a move.

A review of the various submissions made to Defence Reform Reviews, Parliamentary Committees and successive Defence Ministers, covering the full gamut of Defence Matters, shows this to be the case.

The result has been to erode the professional development and management of

Australia's Military Services, to place Australia's Defence Industry, particularly the Aerospace Industry, in jeopardy, and to impact adversely the National security.

The problems that Defence/DMO have been allowed to create and perpetuate over time will now make Australia largely irrelevant, both on the regional and international stages, for the next three or more decades, since it will be:

- *unable to muster or project any significant and demonstrable deterrent military power;*
- *unable to contribute as a leading nation to regional security arrangements;*
- *unable to pull its full weight in concert with international forces or in support of bi-lateral security treaties and arrangements;*
- *made wholly dependent upon foreign companies for the availability and sustainability of its major military capabilities; and*
- *lack any real measure of self-reliance.*

If this situation is to be brought under control and reversed, then:

- *the higher Defence machinery has to be reviewed and modified so that military matters come again under skilled and professional military officers;*
- *the Services have to be reorganised to enable them to exercise command and control over those functions critical to their responsibilities for the specification, acquisition, operation and support of their force capabilities.*
- *the Services must also be retrained to regain the skills and competencies they need to achieve professional mastery of the capabilities they operate and support; and*
- *capability development, sustainment and acquisition must become the primary drivers for all defence planning. The focus on financial management and outsourcing, invariably to the detriment of these primary drivers, has to be changed.*

In particular, DMO must be reorganised to replace the current 'generalist', pseudo-business-like management processes that are at the centre of all current, past, and potential capability analysis, selection, acquisition, and support failures. This should be done by drawing upon the skills and competencies of carefully-selected Service officers (serving and retired), Defence Industry, and DMO. This task is not one that will respond to outsourcing to perceived civilian management 'experts' who have no background of experience in military matters, military system technologies, or Service requirements.

There is also an urgent need to stop the current practice of simply adding more layers of review and bureaucratic process whenever 'reform' is attempted. There must be a return to first principles to get the organisational structure and accountabilities correct, and then re-introduce sound policies, systems and procedures before any improvement in the management of Australia's defence capabilities can be expected.

Above all (and most importantly), the vitality of this 'first principles' approach and the resulting reform processes must, as control theory dictates, include a 'negative feed back loop' to keep things in check and on track.

This 'feed back loop' should be integrated into this approach, as well as the resulting processes and the activities of those who are to implement them, but, from a governance perspective, must be independent of them.

As with all such 'feed back loops', both those providing the function and the function itself should not have or be seen to have an executive role or power over the Executive Level of Governance that undertakes and implements this approach and the resulting reform processes, in this case the Department. Their role should be a reporting one, under the authority of and to the Directing Level of Governance, which in this case is the Minister of Defence, as well as to the Oversight Level of Governance, in this case the Parliament.

The core objective is to embed a self-sustaining and effective system of management and good governance.

Valuable lessons may be learned from our cousins across the Tasman who have re-organised their Defence Organisation along the lines proposed, and are now reaping the benefits. Any criticism of New Zealand's overarching strategic policies as an estoppel to studying how they have re-organised to re-skill and re-master their military would simply be a direct reflection of the very things that ail Australia's Department of Defence today.

A similar reflection may be seen in the manner in which senior Defence officials, in 2005, treated Australia's then most senior General Officer, with current field command experience, upon his return from the highly successful execution of his international command duties in Iraq.

Finally, it is important to recognise that the reasons behind the continued decline in the management of Australia's military capabilities may also be seen in most, if not all, Western nations, especially in the UK and USA; the latter now facing a breakdown in the management of its defence capabilities that is driving a wedge between Congress and the Executive. What is happening in the US is of critical importance to Australia for two main reasons:

- *Firstly, it highlights the inevitability of what will happen when a Defense Department considers that it is no longer subject to legislative (Congressional) control and direction. That is, it has been allowed to become a law unto itself, due to a lack of good governance oversight.*
- *Secondly, it warns of the emergence of a US which, if it accepts decisions taken by its Department of Defense without it having followed proper process, will in essence be pursuing a strategy of unilateral disarmament. The US will, in effect, be surrendering its traditional air dominance capability. As a result, it will be unable to exercise the independence of military and diplomatic action that it has enjoyed in the past. Its Army, Navy, Marine, and Air Forces will have to operate under the continual threat of a potentially hostile air environment. The protection of its own forces, as well as those of its friends and allies, especially Japan and Australia, can no longer be guaranteed.*

The future faced by Australia will carry many challenges, both diplomatic and military; challenges that can be met with confidence only if government and parliament combine to restructure Australia's Defence organisation, re-value the Services, and reimpose proper governance within and over defence matters.

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- **Core Problems with Defence Management in Australia**
 - **The Two Prime Causes**
 - **The Organisation and Decision Process**
 - **The Lack of Critical Skills**
 - **The Operational Impact**

- **The Causes and Impacts of Skills Deficiencies**
 - **Within the Bureaucracy**
 - **Within the Services**
 - **The Management of Capability Acquisition**
 - **Background**
 - **New Capability Management**
 - **Overview**
 - **The New Zealand Experience**
 - **On Risk Management**
 - **The Two Faces of Risk**
 - **On Project Management**
 - **On Defence Industry Teamwork**
 - **Spreading the Problem**
 - **The Next Major Failure?**
 - **The Air Warfare Destroyer (AWD) Project**
 - **Skills in Science and Technology Support**
 - **Review of ANAO DMO Major Projects Report 2007-08**
 - **Future Prospects for DMO?**
 - **The Management of Defense in the United States**
 - **The Underlying Reasons for Management Failures**
 - **Summary**
 - **Endnotes**
 - **Annex A INTEGRITY**
 - **Annex B REFORMING DEFENSE DECISION MAKING**
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Core Problems with Defence Management in Australia

The crisis confronting Western defence organisations is well exemplified by developments in the US over the past two decades.

"Since 1990, the GAO (US Government Accountability Office) has designated DoD's (Department of Defense's) management of major weapon system acquisitions as a high risk area. Congress and DoD have continuously explored ways to improve acquisition outcomes without much to show for their efforts." (Highlights of GAO Report – 07 – 310).

Unfortunately, a very similar situation has been allowed to develop within Australia's Department of Defence and its Prescribed Agency, the Defence Materiel Organisation (DMO), and for very much the same reasons. More unfortunately, the situation is common to most, if not all, Western nations, again for much the same reasons.

The cumulative effects of these common failures now impacts directly on the maintenance of Western, particularly US, military deterrence for the maintenance of peace, but this dramatic appears to have been be ignored in all afflicted nations.

At the highest level, there has been a deep intrusion of bureaucratic behaviour into all areas of military preparedness, operations, and support under the guise of promised better responsiveness, efficiency, effectiveness or economy. In Australia, control and support of the Services have been vested in a bureaucracy adopting a '*pseudo business process based organisational construct more applicable to large, complex civilian organisations, using a shared service provider model*'. The highly skilled and efficient, effective, responsive and economic Service policies and systems that had evolved over many decades have been replaced by this model, without any recognition of their inappropriateness for military purposes, the different needs of the three Services, or the impacts upon Australia's Defence Industry, its military capabilities, or even national sovereignty. These factors are still largely

ignored by Defence, Government, and by the Parliamentary oversight process.

Furthermore, an overwhelming focus upon 'Jointery', and the formation of a Joint HQs to manage all Australian military initiatives, has reduced the three Services to being simply service (force element) providers for both military and civil operations. The fundamental tenets (and core capabilities) of land, sea and air power have been downgraded dangerously. The resulting distortion, confusion and conflict are now seen clearly in the poor quality of the higher level policy and decisions coming from both Defence and the Services over the past decade or more.

In Australia, the adverse impact of these changes on the professional military competencies of the three Services, particularly the two high technology Services, as well as the ethos that once characterised them, has been deep and pervasive^[1]. The Services have been downsized and de-skilled to the extent that Australia's strategic planning, force structure, and capability development, procurement and sustainment functions are ill-advised, disjointed and in disarray. This will leave Australia in an extremely vulnerable position which, if not corrected, will lead to sustained military mediocrity and strategic irrelevance over the next three or more decades.

The Two Prime Causes

The Organisation and Decision Process

Australia's current defence organisation can hardly be said to provide more efficient, effective, responsive, or economic capabilities than the organisation that preceded it. Reviews, reports and inquiries into a wide range of problem areas have flowed at regular intervals, but without detectable improvement. Most have resulted only in additional layers of bureaucracy and added processes, not better management.

The principle reason why this is so, and will remain so, is that all reviews, reports and investigations have been constrained to accept the current organisation and its reason for being as a fixed and unquestionable baseline, whereas the problems arise primarily from the inherent unsuitability of a top-heavy, politicised bureaucratic organisation to manage military matters in detail and in a competent manner.

Since Tange^[2], Defence, and later DAO/DMO, have been characterised by a lack of disclosure, an unhealthy reaction to criticism (real or perceived), an inability to accept facts and adapt to changing circumstances, and an unwillingness to recognise and accept the root cause for its failed decisions and their impacts on Australia's defence capabilities. This is due primarily to the inherent and irreconcilable conflict of interest that must inevitably exist between vague and changing political/bureaucratic decisions and pragmatic military management imperatives.

Many of the attitudes and behaviours that have been allowed to develop within Defence are more characteristic of an oligarchy rather than a government department devoted to supporting the Services, Government, and the security of the Australian people.

Robert Michaels^[3], a political sociologist and economist, noted the trend for bureaucracies to evolve to become oligarchies. His observation describes well the path that Defence has trodden since Tange. This trend, as described by Michaels, if unchecked, must inevitably erode good governance; the very same general concern voiced by Prime Minister Rudd before his election victory.

General Sir Michael Rose, former Adjutant-General of the British Army, in appraising the effects of the structural changes imposed upon Britain's Services, reported that Britain has

witnessed the most catastrophic collapse of its military ethos in recent history. It was vital, he said, to retrain and recover; in particular, the Army needs its own jurisdiction, administration, discipline, ethos, and all those things have to be different from civilians and outside their meddling^[4]. Australia's Services need similar changes if the adverse consequences of our Defence reorganisation are to be corrected.

One professional UK military officer, who had to remain anonymous for obvious reasons, wrote of the UK MOD (in part):

"I am often asked why the MOD makes so many strange decisions and seems to care so little about the welfare of its personnel. People are surprised to read about expensive computer systems that fail to pay members their proper salaries – or pay them late. Some are shocked by the apparent dumping of severely wounded personnel from Afghanistan and Iraq into civilian hospital wards, remote from their regiments and families, or the massive contracts for systems that are delivered late and don't work properly, or the strange failure to publicise genuine successes and minor victories achieved 'against the odds' in Afghanistan and Iraq.

Most people still believe that the MOD is a military organisation. It is not. It is an organisation dominated numerically, culturally and structurally by civil servants and consultants, many of whom are unsympathetic to its underlying purpose or even hostile to the military and its ethos. You just have to spend a few days at the MOD before you realise that the culture is not just non-military, but anti-military."

More recently, we have the RAF Chief, Air Chief Marshal Sir Glenn Torpy, predicting a controversial takeover of Royal Navy Air Power, which will include the STOVL version of the Joint Strike Fighter planned to operate from the Navy's two proposed new aircraft carriers. Increasing friction has also arisen between the Service Chiefs as a result of Army criticising Navy's planned two new aircraft carriers, and the possibility of Army losing its air power to Air Force^[5].

The RAF Chief sees the reason for this takeover of naval air as being:

"Resources and finance drive you to rationalisation. The general public demand and deserve value for money and if that means that we have to rationalise, that is what we have to do. We'll see further consolidation; it is an inevitability as we try to make ourselves as efficient as possible." That is, the driving force for the changes suggested are solely a saving in cost supposedly perceived by the general public, not driven by capability requirements or military effectiveness.

There are at least two potential disasters lurking in this type of thinking:

- Firstly, the assumption that consolidation equates to greater efficiency in providing required military capabilities is false. Consolidation should be considered only on a case-by-case basis and be accepted only following proper analysis against established capability requirements and planning.
- Secondly, there is a clear conflict between force planning and maintaining required capabilities, and the pervasive impacts of a change in force structure to achieve unspecified perceived 'efficiencies' by 'consolidation' purely through economic objectives. It is a case of money alone driving force structure, even if it distorts force both structure and service competencies, whereas money should be considered and managed as only one of the many resources required to develop and maintain the force structure and military capabilities required to meet well-defined current and future threats. Nothing has been put forward as to how these changes will be made, what their effects will be upon the capabilities and morale of the Services involved, or what the direct and indirect costs of the exercise will be.

As with so many departmental changes, this seems to be another case of taking a decision along vague bureaucratic lines, while leaving the Services to fix or just live with the multitude of adverse effects.

There are two main areas where Defence bureaucracies fail consistently to recognise critical dependencies of military organisations:

- Firstly, in not comprehending the need for, or the role and importance of command and control.
- Secondly, in not understanding the importance of high morale built on strong ethics and ethos. Morale in all three Services has been eroded in almost countless ways, but the cumulative impacts of these wounds have been studiously ignored by both Government and Defence. The importance of integrity, which became an early victim of Defence reforms throughout Western nations, including Australia, was well expressed by US Marine Corps General Charles C. Krulak in 2000. His address to the US Joint Conference on Professional Ethics is included at Annex A.

In summary, the primary cause for the decline in Defence management in Australia lies in the entirely inappropriate departmental and service organisations introduced by and since Tange, coupled with the adoption of improper and ineffective administrative processes rather than sound management structures.

The Lack of Critical Skills

The second major cause underlying Defence management failures is the loss of critical specialist military skills and competencies, especially in the fields of operational analysis and professional technical expertise, both within Defence and each of the three Services, but particularly within the Navy and RAAF.

The loss of skills and competencies across the Services has been aggravated severely by a consistent failure throughout Defence/DMO to adopt and follow proper management process throughout all phases of capability planning, acquisition, preparedness and support.

As an example of the extent to which the RAAF has been de-skilled, it should be recalled that, before 'reform', the Service possessed the following critical support skills:

- Managed, and manned its operational squadrons such that they were able to focus wholly upon their operational capabilities and readiness whether at home or deployed
- Managed and manned four major Maintenance Squadrons that provided direct support for the major operating elements – Bomber, Strike/Fighter, Transport, Rotary Wing and Maritime.
- Manned and managed three major Aircraft Depots which focussed on the major maintenance of front line aircraft and the diverse technologies inherent in their systems.
- Manned and managed No 1 Central Ammunition Depot which controlled all explosives ordnance, including guided weapons.
- Carried out comprehensive Engineering and Maintenance regulatory functions, particularly in airworthiness and maintenance efficiency.
- Planned and managed all major repair and overhaul arising for aircraft, engines, repairable items and other technical equipment, at RAAF facilities and at contractor facilities, both in Australia and overseas.
- Assessed and, in conjunction with the Supply Branch, procured and managed the technical spares and other equipment needed to support RAAF operational and maintenance programmes.
- Planned and managed the capability enhancement and life extension programmes for all aircraft and other systems.

- Planned and managed the introduction of new capabilities, ensuring that they were properly specified and supported fully from the time of their introduction into service.
- Monitored the performance of all technical support elements through feed-back loops, ensuring that timely corrective management action was taken when needed.
- Manned and managed the Engineering and Field Training Schools through which personnel were trained on the systems that they would support.

The maintenance squadrons safeguarded the independence of RAAF operations by providing the span and depth of skills and capabilities needed to support their dependent squadrons, whether operating from home or when deployed. The aircraft depots, in turn, developed and maintained the deeper level engineering and maintenance skills needed to support both operational units and maintenance squadrons, as well as build the knowledge base necessary for planning and managing capability enhancements and the selection, specification, and introduction of new capabilities. This system also provided a steady input of skilled engineers and technicians into Australia's Defence Industry.

Though spent quite differently today, in real dollar terms the Defence Budget of the 1980s, as a proportion of the Commonwealth Government Budget, is little different from the dollars spent on Defence today.

The Operational Impact

While this analysis has tended to emphasise general management and acquisition aspects, the defence reform and other programs have also resulted in a marked decline in the professional mastery of the RAAF's Air Staff. Pre-reform, Air Staff officers gained sound and practical management experience through a wide range of command appointments. They also worked with the specialist supporting branches, and so understood the critical interdependencies involved in maintaining a common, Service-wide aim, whether at Air Force Office, Command, Base, or Unit levels.

However, the 'gutting' of the RAAF's capabilities, together with the current Air Force Office and Force Element Group structures, have reduced dramatically the span and depth of Air Staff officer professional and managerial expertise. This decay has been evidenced in most, if not all, air power capability plans and decisions taken over the past decade or more.

As a result of this lack of operational experience, other than in support of small Army tasks, lofty dissertations by senior Air Staff officers on air combat are painfully limited, both operationally and technically; buoyed by highly optimistic, asymmetric assessments of operational advantage coupled with unrealistic and inflated kill probabilities for their weapons. Far too much seems to stem from manufacturer / project office *Powerpoint* marketing presentations rather than robust, independent, professional analyses.

While the impacts of Defence Reform on the professional mastery of the RAAF's Air Staff are beyond the scope of this paper, they beg a robust and honest retrospective analysis.

In the final analysis, the RAAF's skills base and system of management, pre-reform, maintained a very high level of operational preparedness, robustness and flexibility, as well as an equally high level of national self-reliance.

Today, the RAAF's skills and competency base starts and stops at the lowest level – simple force element operation and flight line maintenance. Generalists, both service and civilian, now take control of all Service and Defence matters, and provide input to Defence plans at all levels, from that very low base of skills and experience.

The Causes and Impacts of Skills Deficiencies

Within the Bureaucracy

At the highest level, that is, at the Ministerial/Departmental (Secretary) level, there has been no recognition of the need for professional military skills and competencies; indeed there is an adversity to having any such skills within the Department. This is a characteristic common to most government bureaucracies, both in Australia and overseas. Subject matter experts are not welcome at this level as they complicate bureaucratic/political decisions, and are often seen to lack the required vagueness, flexibility and compliance needed to politically protect the Department, the Minister, and Government.

As a result, an unbridgeable gap has developed between policy decisions and their implementation, with the first victim being good governance. Within Defence, civilian staffs at this level are seen (as opposed to their military colleagues) as being *'generally more readily able to tolerate, and even be comfortable with unclear lines of command, divided authority, and open-ended guidance or ambiguous instructions. They also tend to be willing to offer judgements and opinions on the basis of less hard data than their uniformed colleagues, and to accept that outcomes can't always be readily predicted or easily influenced.'*^[1]

Such civilian staffs now take decisions critical to Australia's defence capabilities, and recommend to government specific courses of action, but see no need or place for any specialist professional military skills or competencies in their thinking. They do not understand military matters and are not interested in learning them; nor are they willing to account for the consequences of their decisions. Decisions, once taken, are immutable and must be defended to the end so that a charge of having made a mistake can not be levied.

In doing so, decisions soon become obsolete and detached from reality.

The professional operational and technical expertise necessary to drive sound force structure analysis and decisions, as well as support the operational and technical analyses central to ensuring sound weapon system specification, evaluation, comparative analysis, selection and procurement, is nowhere to be seen, yet all critical capability decisions continue to be taken at that level.

While Defence may state that advice is provided by 'subject matter experts' (such as the Services, CDF, DSTO, and Contractors), the fact remains that these entities have also been de-skilled, and made 'generalists'. As a result, the bureaucracy does not have even the minimum knowledge base to understand what is going on, be able to formulate the questions they should be asking, especially of contractors, or comprehend and evaluate the information that they are given.

With such a lack of professional military skills and competencies within the Department/DMO, it is hardly surprising that the advice that has been given to government and parliament should prove to be deficient, or that governance of the Department should be equally difficult and deficient.

The failure of governance was evidenced recently by Defence Procurement Secretary Combet taking upon himself the role of Departmental apologist for a series of failed projects at a Defence Industry Conference held in June. Similarly, Defence Science and Personnel Minister Snowdon, standing in for the Minister for Defence at the same conference, in his keynote address, defended lax acquisition performance allegations. Surely their job is to ensure good governance, not to become apologists for Departmental failures.

Within the Services

The second area where critical skills and competency sets are now deficient lies within the three Services, especially Navy and RAAF, the two Services most heavily dependent upon the professional operation and management of high technology weapon systems. All three Services had evolved effective, efficient and economic systems for the planning, procurement, operation and support of their weapon systems, particularly the RAAF which was acknowledged widely as having world class operators and world class engineering, maintenance and supply support managers and processes.

It is important here to note the span and depth of the professional skills and competencies that the RAAF had developed. Anders Ericsson, in his studies into the characteristics common to those who achieve superior performance, identified starting young, 'deliberate practice' (a term he adopted to describe the focussed application of the mind to learning) and critical feedback (which relates to having constructive feedback that enables a person to develop his capabilities), as central to success. In effect, he reinforced the old-fashioned values of faith in hard work, taking responsibility, and stretching oneself. Importantly, he noted that it takes about ten years of deliberate practice to become truly proficient^[6]. The role and importance of focussed learning is confirmed by Norman Doidge, M.D., in his studies of the plasticity of the human brain^[7].

Against Ericsson's research findings, the RAAF of the pre-reform era scored highly in all respects. It started people young, some at 15 years of age, it developed them well through thorough training and education, and it provided continuous feedback, both formal and informal, so that members knew where they stood and what was required of them for their further development. It also acknowledged, perhaps unconsciously, the ten year proficiency 'rule' seen by Ericsson. In project management, for example, those doing the logistics support detail (such as spares assessment, and repairable item and inventory management) had about ten years experience. Those involved with management of the major elements of a project had about twenty years experience in management as well as a sound understanding of the technology involved, while those at the higher planning and management level had about thirty years of wide-ranging management experience, as well as operational or technological expertise.

However, these skills and the systems that supported them were simply swept aside as a result of:

- the imposition of the DER/DRP/CSP Programs, which down-sized and de-skilled the Services at all levels, with little thought for the adverse effects that must follow;
- the introduction of a General List, against which officers of and above the rank of Group Captain were promoted, thus cutting off Service specialist skills at that level;
- the erosion of professional military ethos as a consequence of the Defence organisation preferring the promotion of military bureaucrats to the higher levels of Defence management rather than military professionals;
- the loss of the Services' Support Commands and the creation of a Defence Acquisition Organisation (DAO), replaced later by the Defence Materiel Organisation (DMO), to manage all new capabilities, and later in-service support on the grounds that the Minister of the day did not want 'two separate acquisition organisations'; and
- the deterioration in professional military thinking and writing.

The single-minded, bureaucratic imposition of the CSP was particularly destructive. The program failed to recognise the critical dependencies of the Services – those functions that, if not under direct command and control of the Service Chief, have the ability to impact directly Australia's military readiness, responsiveness, sustainment, and operational flexibility. The loss of control of these critical dependencies has led directly to the dramatic reduction seen in

operational, technical, and management skills and competencies within all three Services and within Defence/DMO.

The result has been a widespread and pervasive loss of the operational, technological, and management expertise necessary to drive both Service and Defence policies, plans, and programmes. In general terms, the lack of robust operational requirements analyses, as well as the technical skills, competencies and processes central to new capability acquisition, is seen across all three Services. In the RAAF, for example, their loss has been reflected in poor decisions and advice on, for example:

- the unnecessarily early retirement of the F-111 force, based upon a range of unsupportable claims by the Defence organisation;
- the 'bailing out' of the then Minister's improper and faulty Super Hornet aircraft purchase, coupled with a blind acceptance of all manufacturer's claims, even where they were not supported by the facts, or even by simple, professional common sense;
- the unquestioning acceptance of the Joint Strike Fighter decision and the subsequent unqualified acceptance of all manufacturer and project office claims and statements made in the face of highly critical analyses and reports emanating from local analysts and US governance oversight bodies;
- the biased and unsupportable statements made in respect of even well demonstrated capabilities of the F-22 Raptor fighter;
- the continued poor and unprofessional management of Australia's new air power capabilities; all
- aggravated by a lack of professional military thinking and writing that now pervades the Service^[8].

These examples and others are covered well in the evidence given before the JSCFADT Inquiry into ADF Air Superiority in our Region^[9].

In short, the adverse effects of downsizing, deskilling, outsourcing and the dependence upon 'generalists' to manage specialist functions, all degrade force readiness, availability, and sustainability, as well as the quality of the professional military input to Defence/DMO plans and programmes.

While this analysis focuses principally upon the 'how we got to where we are', there is a need for complementary, detailed studies in order to identify the manner in which the current situation may be reversed. That is, how best to expand and deepen the numbers and professional expertise of those Service personnel involved with the intermediate support (sustainability) of combat units, as well as those involved with new capability specification, development, acquisition, and support. However, these two areas of study must await a firm political commitment to meaningful change – change based upon what is best for our fighting services, rather than what is best for the Defence bureaucracy.

The Management of Capability Acquisition

Background

Prior to the DER/DRP/CSP, the RAAF, for example, was able to introduce new capabilities and supporting systems to time, cost, and capability, and supported fully at all lines of maintenance (both in-Service and within contractors) from the date of introduction. Project teams were drawn from across the Service with the appropriate span and depth of operational and technical/supply skills, and disbanded when the project was finished. The RAAF thus had in place at all times a constantly evolving skills and competency base that kept pace with

operational and technology changes, it was thus able to support capability acquisitions without great stress ^[1].

While these skills and competencies were gutted by the reform process, some had filtered into the Defence and DAO/DMO organisations during the 1990s where they helped to develop sound project management systems and processes. However, these processes started to unravel about 1995 under inappropriate, destructive and arbitrary Ministerial edicts. The deconstruction of due process, with the loss of its underlying integrity and openness, followed quickly. In particular, the Common (Project) Management Method (CMM) designed and introduced in response to a recommendation from the ANAO in 1997 was abandoned abruptly, with 'Project Directors' being nominated who reported directly to USDM (under Secretary Defence Materiel) for all direction and guidance, thus bypassing due process.

The system of due process, built up by dedicated and skilled staff, was abandoned. However, having dispensed with due process, Defence/DMO were flying blind, as it is only through due process, backed by appropriate skills and competencies, that visibility and control of the factors that go to make up risk, as well as those technology factors that impact upon schedule, cost, and capability, can be obtained. The Defence/DMO reaction was to focus wholly upon process while trying to control that element of project management to which they were most politically sensitive – schedule. Cost and capability thus came a poor second and schedule became unmanageable. However, as sound process was replaced by flawed process, the only recourse available to Defence/DMO was to throw money at problems in an attempt to meet unrealistic schedules. The results of this may be seen clearly in the ANAO's DMO Major Projects Report 2007-08.

As a result of these changes, there was now no viable process for competitive tendering and tender evaluation. This impacted all projects, leading to the JSF decision where Australia was committed without a contract and with no fall-back negotiating option. The lack of due process was soon exploited by a clever JSF marketing strategy, which was followed by a similar strategy that resulted in the Minister's unilateral decision to purchase the wholly inadequate Super Hornet against no credible requirement.

Throughout this period of replacing due process with flawed process, those who questioned Ministerial or Under Secretary edicts were ostracised, many of these critics remain in the wilderness to this day, while those who complied with the edicts prospered. Caught between a Defence leadership lacking any understanding of the Services and their needs, or the technologies involved, and characterised by intimidation and an abhorrence of bad news, and a department lacking any culture of public accountability, critical specialist skills and competencies were by-passed, swept aside, or allowed to wither. From 1999-2000, all projects fell into the management vacuum that was created. Elizabeth Proust, in her review of Defence management, reported upon the avoidance of accountability entrenched within the Defence organisation.

Herein lie the reasons behind the continued mismanagement of Australia's Defence procurement, as reflected in the ANAO's Major Projects Report, and there will be no relief until the required skills and processes are restored to ensure visibility, control and accountability. The Services have to be re-capitalised so as to regain the professional expertise and competencies that they have lost, and due process re-imposed.

New Capability Management

Overview

On 27th November 2008, the Australian National Audit Office (ANAO) released its Defence

Materiel Office Major Projects Report 2007-08. The report, covering nine major projects, was the first of a continuing series of reviews into the status of Defence acquisition projects, and was aimed at 'improving transparency and public accountability in major defence procurement'.

From about 1999/2000, the Defence acquisition organisation has been mired in ongoing public controversy over its mismanagement of major capability projects. Failed projects have cost Australia billions of dollars, while others have either not been delivered on time or have not provided the capabilities needed by the Services. Visibility of what was happening and why has been hidden behind a Defence Media smokescreen, supported by overly-optimistic and often ill-informed, untested, and misleading statements by Defence bureaucrats and senior Service officers.

A review of the ANAO Report gives rise to concerns that the acquisition methodology now employed is wholly inadequate and its continuance will only ensure that current deficiencies will not only persist, but deepen. As discussed earlier, the primary causes for this were sown around 1995 and matured in 1999-2000 when long-established and successful project management policies, systems and procedures were discarded in favour of a project management approach that focussed upon faulty process and schedule to the detriment of cost and capability.

The analysis that follows summarises the root cause behind the deficiencies revealed in the ANAO Report. The findings see an urgent need to reform the higher defence machinery to reduce political/bureaucratic intrusion into areas where the Service Chiefs carry sole accountability and, in particular, to reorganise and re-develop the operational, technical and management skills and competencies that once resided in the Services.

Without these changes, Australia can look forward only to a further de-skilling of its Services and its Defence Industry, a continued withering of service capabilities and morale, a surrender of control of Australia's military capabilities to foreign companies reporting to foreign boards of management, and decades of much reduced military capability and independence of operation. In the extreme, this situation carries a risk to Australia's sovereignty.

The New Zealand Experience

Of all the Western nations to encounter problems with the management of their defence departments, only New Zealand has reorganised its defence organisation starting from first principles, and is now reaping significant returns. New Zealand's services have been reorganised and re-skilled so as to re-establish their professional mastery, and an effective system of governance oversight established.

The New Zealand experience has much to teach Australia in how a department can be rescued and an effective system of management and good governance can be designed, implemented, and entrenched. No doubt Defence will try to argue that New Zealand's strategic policies are different from Australia's and so their solutions are not appropriate. However, any such response should be seen simply as confirming the departmental fault lines identified in this analysis.

Likelihood	Consequence				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost certain	H	H	E	E	E

Likely	M	H	H	E	E
Moderate	L	M	H	E	E
Unlikely	L	L	M	H	E
Rare	L	L	M	H	H

Legend:

- E- Extreme level of risk (Immediate action required by Executive and Directing Governance levels, i.e. do not proceed with activity until this level of risk is reduced)
- H- High level of risk (Executive Management attention required)
- M- Moderate level of risk (Able to delegate to Implementation Management Level with ongoing Executive Management oversight)
- L- Low level of risk (Able to be managed through routine procedures)

Table 1: Risk assessment process and associated template of AS/NZS 4360:2004 (P.A. Goon).

On Risk Management

With protestations of 'very confusing' and 'enormous complexity', avoidance of risk is a common thread woven through DMO's responses in the Project Data Summary Sheets that form part of the ANAO Major Projects Report 2007-2008.^[12]

The causes and impacts of this ubiquitous view of risk, risk management and the risks themselves, however, are nowhere qualitatively, let alone quantitatively, addressed. There is little evidence of any informed and professional understanding of risk in projects, the risk management processes required to address them, or the difference between risks and technical problems.

The term 'risk' does not, as feared by Defence/DMO, mean negative things. Risks, properly managed, are opportunities to excel. When not properly managed, risks will migrate to and materialise under a contract by reason of a preceding failure to identify, analyse, and manage operational or technical risks in the manner prescribed by modern day Risk Management technique to prevent them from becoming problems. Such risks, and the problems that arise when / if risks do materialise, have to be controlled tightly throughout all phases of a project – from need to satisfaction – but this requires skills and competencies not seen in Defence/DMO.

The key to being a risk-savvy, smart buyer and a risk-savvy, smart maintainer is a sound understanding of the technologies involved. In the absence of such expertise, the less than scrupulous contractor / supplier will always have the advantage.

The *Australian Standard on Risk Management (AS/NZS 4360:2004)* is recognised internationally as one of the best, that is, 'world's best practice'. It has been adopted as the basis for the over-arching *International Standard on Risk Management (ISO 31000 Risk management -- Principles and guidelines)*. Given this, Defence/DMO should have in place very sound risk management processes.

However, Defence/DMO, being first and foremost bureaucratic organisations, seem uncomfortable with their performance being measured, and especially being measured on a continuing basis. They have thus avoided effective risk management, which depends upon continuous performance measurement. However, not having the necessary processes in place, or the skills and competencies required for the management of those processes, the achievement of outcomes has been shown to be inadequate, leading to consistently poor capability, cost, and schedule results.

Risks that are not treated early in a project will only increase, as will the cost of rectifying underlying problems (i.e. defects), as the project advances through each of its phases. For this reason, the project design, development, test and evaluation (T&E) phase, and the production phase should always be discrete, separated by 'go--no-go' decision points (such as milestones). This is not to say there cannot be some overlap or jointness between the activities within each phase, but in any such approach there are additional risks that also need to be managed.

The management of the Joint Strike Fighter Project in Australia presents the best case study of a complete failure of risk management by the Department. In the Joint Strike Fighter (JSF) Project, Australia has been advised that these phases do and will continue to overlap to an unprecedented degree, with only 17% of test and evaluation tasks being actually subjected to flight testing. This has driven risk to the project much higher. The recent decision by Secretary of Defense Gates to 'ramp up' the JSF Program will merely bring inevitable catastrophe forward in time and, taken with his concurrent decision to cease further F-22 production, he has also upgraded the risk to US global air dominance.

As a direct consequence of the gross overlapping of the JSF design/development, T&E and production phases, some 500 aircraft are planned to be built and sold to customers, including Australia, before ground and flight testing have been completed. That is, the aircraft allocated to Australia, coming from an early production run, will be at the extreme high end of the capability risk scale, as well as the high end of the cost curve.

Both DMO and the US DoD have been warned continually of materialising risks with the JSF Project, both by independent analysts and through a series of US Government Accountability Office and other governance reports. These warnings have all been ignored, with the result that these risks have snowballed to the point where the project itself is at risk of complete failure.

Criticism in both countries has been ignored, muzzled, or subjected to coercion. Rather than ask core capability, cost and schedule questions and demand clear and supportable answers, DMO has merely accepted the high pressure and more than often misleading media announcements orchestrated by the JSF Project Office and the manufacturer, with DMO expressing only '*satisfaction with the answers provided*'. In addition to not warning Government or the Australian people of the rapidly escalating levels of risks associated with the JSF Project, DMO has not even heeded the risk hazards protocols contained in its own *Verification and Validation Manual (ENG) 12-0-0001*.

Some of the serious risks inherent in the JSF Program, made inevitable by the overlapping of the Design/Development, T&E and Production Phases, are now materialising.

US civil action is currently being taken under the *Federal False Claims Act*, in that the Lockheed-Martin software development process, its quality control and its compliance evaluations for the F-35 and other programs are alleged to have not complied with specified requirements^[10]. A similar action is also in train under the same act in regard to the stealth coating applied to the F-22. This action arises from alleged false claims, false statements and false records made by Lockheed-Martin to the United States Air Force (USAF) during production of the "F-22 Raptor" (F-22)^[11].

Both cases raise two major areas of concern for Defence/DMO:

- Firstly, they raise the dangers inherent in accepting at face value statements made by manufacturers in respect of the status of critical requirements. All critical requirements must be validated independently by the customer's Project Office. Unfortunately, this

demands an operational and technological expertise that is not evident in the Services or Defence/DMO.

- Secondly, both F-35 and F-22 Project Offices seem to have failed to identify that critical requirements were not being managed and recorded as specified. While it is important to determine how and why this happened, the question must be asked as to what other critical areas may not comply with specified requirements.

Finally, Defence/DMO's concept of risk management was re-interpreted around 2005-06 to an ethos of 'de-risking projects', seemingly in an attempt at a wholesale avoidance of all risks associated with in-service support. This required the capability manufacturer to provide all in-service support, except for the very lowest level of flight line servicing. Critical engineering, maintenance and supply support management has also been passed off to the Prime Contractor.

Under this concept, Australia's front line military capabilities will be plugged into overseas-controlled facilities over which Australia will not have adequate visibility or control. Such contracts will only further entrench de-skilling of the Services, degrade Australian control of its military capabilities, and spell the end of the remnants of Australia's Aerospace Defence Industry. Government policy in relation to the need for a robust local Defence Industry to assure self-sufficiency is not being considered, and the potential for eventual compromise of Australia's sovereignty is real.

The concept and use of 'de-risking' of contracts in DMO are both wholly inappropriate for the management of risk in any military operational, engineering, or logistics activities where requirements must be driven by fully and carefully specified objectives.

The final risk with all of DMO's 'de-risked' projects, when they fail, will always rest with the customers – Australia's defence forces who have to fight with the equipment, or fight without it, and the Australian people who have to pay for it.

The Two Faces of Risk

While Defence/DMO both exhibit an unhealthy lack of appreciation of risk, its importance and how it should be managed, contractors also have to assess and manage risk in dealing with their customers.

If a customer has demonstrated a high level of skill and competence in managing the operational, technical, and project aspects of his contracts, as demonstrated by a history of having projects come in on time, cost, and schedule, without resort to contractual or legal redress, the total project risk to the contractor will be low and this will be reflected in his price.

On the other hand, if a customer shows little competence in operational, technical, or project management activities, or has a record of costly delays to which he contributed, then a contractor is bound to add a significant component into his price to treat this 'customer risk'.

Some contractors, long-experienced with such customers, see 'customer risk' as an opportunity to financially gouge Defence and, thus the Commonwealth, using bidding, contractual and legal techniques born from such experience. Far too often, the inflated price Australia is paying reflects predatory contractors taking advantage of an inept procurement bureaucracy.

Australia's Military Services were once recognised as highly informed and competent customers because of their professional skills, competency and knowledge base, but with the de-skilling of the Services and the introduction of less than successful project management

methodologies, this reputation has largely been lost.

On Project Management

Similarly, instead of adopting proven, internationally-accepted project management standards, DMO has evolved its own Standard of Complex Project Management - well titled in that it promotes a strange mixture of chaos theory and elitist ethos and attitudes. As a result, the simplest project management processes have become unnecessarily complex. The adoption of Australian and International Standards on Project Management would have avoided this unnecessary complexity and its consequential cost.

The reasons behind DMO's adoption of an inappropriate Standard of Complex Project Management may be traced, as follows:

- DMO, as well as the Department of Defence as a whole, is focussed upon process rather than outcomes - capabilities that satisfy fully-specified, unambiguous requirements. However, the processes being used have been 'dumbed down' or simply ignored following a series of inappropriate 'reforms', the de-skilling within the Services as well as DMO, and the appointment of people to management positions who lack the required knowledge, skills and competencies. Within this environment, what may have started out as being sound and appropriate process has been replaced by flawed and inappropriate process developed by, or on the advice of, non-experts lacking a focus upon capability outcomes.
- The result has been the evolution of a web of processes that are unsuited to the task of achieving capability outcomes in an efficient, cost-effective, and rigorous manner; outcomes that satisfy the original, specified requirement, or that which has evolved over time in keeping with the strategic directives of government.

The adoption of the flawed Standard of Complex Project Management may thus be traced to the flawed approach to project management that has been allowed to become entrenched within both DMO and the Department.

On Defence Industry Teamwork

Teamwork is defined generally as working cooperatively to achieve a common aim, usually by pooling skills, competencies and experience. Defence makes much of its Team Australia concept, which is largely given lip service only. DMO's supply and support contracts will lead eventually to the loss of important Small and Medium Enterprises (SMEs), not the creation of local capabilities able to provide self-reliance.

However, there will always be an underlying conflict of interest between Defence and its contractors that must be managed skilfully and intelligently, particularly when the contractor is a major foreign prime answering to a foreign Board of Management and its shareholders. In such cases, any contractor conflict of interest will be resolved in favour of the Company Board and its wider business interests. Caveat emptor becomes critical. Team Australia has much potential to develop Australia's small and medium enterprises, but realisation of that potential requires sound operational, technical and management skills, and a depth of commitment not seen within Defence, so the potential of Australia's SMEs remains undeveloped and untapped.

As one long-experienced Defence contractor observed:

"DMO's talk about teaming arrangements with industry is illogical. The basic concept of a team is a group striving to achieve the same objective (goal). The primary task of any company is to maximise its long-term profits for the benefits of its shareholders; the CEO is judged and paid on the basis of how well he does that. The DMO's responsibility is to provide Defence with the required capabilities, while ensuring that the taxpayer gets best value for money. These

objectives are fundamentally different, so how can there be effective 'teaming'?"

Though the details of the full answer are beyond the scope of this paper, these words provide some insight as to what the answer is.

Where the development of the answer starts, in part, is that 'form over substance' and hollow words are no substitute for the substance of a pragmatic and well managed contract.

All Defence contracts must proceed from a common customer/contractor detailed and agreed understanding of the operational requirements and the technical standards that have to be met.

They cannot be simply the ill informed wants of one party to the contract, expressed in draconian fashion and based upon a culture of risk avoidance, over those of the other.

That is, there must be a meeting of the minds of fairly equal skills and competencies capable of managing professionally specified operational and technical requirements over the life of the project.

Spreading the Problem

At Page 49 of the ANAO Report, Para 1.7, DMO discusses the challenges it faces in meeting its contribution to the five percent efficiency dividend demanded by government, and states that a significant portion of this will come "through a determined effort to achieve 'cost of ownership' savings across its sustainment programs. These savings will be delivered in consultation with Capability Managers by reviewing servicing schedules for equipment, examining platform usage patterns and rates of effort, reviewing how they do business and the subsequent demands placed on the supply chain. As well as introducing performance based contracts for in-service support work undertaken by industry."

The potential for severe damage to Service capabilities, including the areas of battleworthiness, airworthiness and seaworthiness, are many and varied and are not within the competence of DMO to either qualify or quantify. We will see only a further bleeding of DMO's management deficiencies into the in-service support area. In effect, the proposal makes DMO, which has no accountability, a driver of engineering, maintenance, and supply standards throughout the Services. DMO's proposal also highlights the importance of keeping project management and in-service support management at arm's length.

The Next Major Failure?

The Air Warfare Destroyer (AWD) Project

The planned AWD Project is seen as critical to Australia being able to control the sea lanes in our region, while providing security for the movement of personnel and materiel through our region and beyond.

Regrettably, operational analysis of the rapidly evolving regional and global air power and missile threats that will arise over the next few decades indicates that these expectations are overly optimistic. Managing the project in the face of this in the threat baseline will present challenges that Defence/DMO are ill-equipped professionally to handle. The project will also face the same range and type of unresolved management problems that have been identified in the ANAO Major Projects Report.

Not surprisingly, the only solution seen by Defence/DMO has been to establish yet another

layer of review and process; the establishment by the then Minister of an *Air Warfare Destroyer Alliance Principals' Council* to:

"Provide strategic oversight, governance and issue resolution for the Air Warfare Destroyer Alliance and the Alliance Project Board."

The Board will comprise five members under the chairmanship of Mr Mick Roche, formerly USDM, with three members from Defence/DMO and two from industry. It is not seen what special skills and competencies this group possesses that will redress the inherent lack of operational, technical and management skills within Defence/DMO, or what it can actually contribute meaningfully to a successful project.

Skills in Science and Technology Support

Before the Defence reform process, the Defence Science and Technology Organisation (DSTO) provided a spread of high quality, professional support to the Services. For the RAAF, these ranged from the close, joint management of the structural and fatigue problems unique to the military aircraft operated by the RAAF, and expert advice on fuels and lubricant technology, current and future operational analysis and research, cockpit ergonomics and human factors analysis, and advice across a wide range of scientific and technological disciplines related to both current and future needs of Australia's air power. DSTO's reputation worldwide was high.

With the imposition of the reform process, DSTO also suffered down-sizing and de-skilling much along the lines of the Services. Functions that drew upon, and depended upon, the scientific and technology base built up within DSTO over decades were outsourced. As with the RAAF, staff left the organisation, often the brightest professionals, to work for a contractor, while others, disillusioned, simply left to work in other fields, especially academia. This immediately cut the pipeline that had traditionally topped-up the knowledge and skills base that resided within DSTO, while continuing to drain the pool of skills that remained.

The loss of DSTO's skills base, and the impact of its becoming merely another function to be 'managed' along commercial lines by a Defence Department having no science or technology awareness, was displayed in the quality of the evidence given before the JSCFADT Inquiry into Australian Defence Force Regional Air Superiority (2007), and earlier hearings on air power matters. Statements on the F-111's fatigue status, the costs to retain in service, the cost and availability of critical spares, and so on, were simply unsupportable, lacking entirely in any scientific or technological basis of fact^[9].

As one long-experienced DSTO member put it:

"The move to outsourcing has been happening for some time. When this was confined to routine workshop/manufacturing support it made some sense, although I can remember wind tunnel models that took twice as long to make and cost at least 150% of what they would have, had they been built 'in house'. When outsourcing moved to the engineering and scientific level it gradually reduced the pool of expertise available to DSTO.

In the aerodynamics area the writing was on the wall some time ago when we were told that in future the RAAF would be relying on the aircraft manufacturer for all stores clearance work. This of course will limit the RAAF in the source of the weaponry available to it. I believe that the outsourcing of structural and fatigue management to the aircraft companies is a dangerous path to be taking...the RAAF will be at the mercy of these companies, putting it in the same position as any third-world country."

The new Chief Defence Scientist seems to have been selected well in regard to his professional

competency, but he may find his pressures coming from other than scientific/technology challenges. Firstly, DSTO now forms part of a Defence bureaucracy that possesses no scientific or technology awareness, and does not wish to develop any. DSTO is merely another 'business activity' that must be managed along 'business lines', especially in the outsourcing of its functions. In keeping with the Department's pseudo-commercial management practices, the DSTO will now come under a *DSTO Advisory Board*. As advised by the Minister's Media Release:

"This is a highly qualified and experienced group of experts who will provide advice on the DSTO research program in line with policy and relevance to Defence capability."

However, the ability of the 'experts' recommended by Defence, and approved by Parliament on Defence's recommendation, to provide guidance and direction to DSTO gives cause for concern when measured against what would be expected in the way of qualifications and previous experience. Of the Chairman and the six Members, three have no science or technology qualifications and no experience in Defence or military matters. The remaining three have held past or hold current positions within the Defence bureaucracy, but have no science or technology qualifications.

It is thus difficult to see just how *'this highly qualified and experienced group of experts'* will be of any useful assistance to the Chief Defence Scientist in the management of his scientific and technology duties. The Board is only 'dressing' and merely adds another eight people into the overheads of the bureaucracy. It will not redress the loss of skills and competencies within the Services, Defence Industry, or the Defence/DSTO organisation.

Review of ANAO DMO Major Projects Report 2007-08^[12]

The nine major projects covered by the ANAO Pilot Report have been analysed in an effort to establish the root cause for the problems being encountered in the management of major projects, rather than the mainly symptoms offered by DMO in the Project Data Summary Sheets that form the core of the Report.

The factors identified, which are common to the majority of the projects, are summarised as follows:

- Firstly, the great majority of the projects started out and proceeded without an appropriate skills and competency base, and without the systems and processes required for sound project (including risk) management. Without these, the projects failed continually to identify risks and operational and technical problems, and so it was impossible to manage risks and problems in a timely manner.
- Secondly, a wholly inappropriate acquisition methodology was adopted, one which called for the unquestioning acceptance of contractor statements in a bid to offset the absence of organic skills, competencies and proper management processes. The primary focus of this methodology was on process that became increasingly flawed, an approach guaranteed to lose visibility and control of all three core project management objectives – capability, schedule and cost.
- Thirdly, the failures were compounded by the adoption of an inadequate and misleading concept of risk and its management, and the use of a unique 'Complex Project Management' philosophy rather than established international standards with their integrated performance measurement requirements.
- Fourthly, the move towards total contractor support for major weapon systems will reduce further the skills base of the Services and of our Defence Industry capabilities. This policy makes Australia dependent for its critical military capabilities upon foreign

companies operating as monopoly suppliers, answering to foreign boards of management and their shareholders, a parlous situation that has never been permitted to happen before.

Future Prospects for DMO?

Despite critical Australian National Audit Office reports and strong criticism from the Joint Committee of Public Accounts and Audit, Defence/DMO remain in denial and totally resistant to needed change. The organisation can only voice the excuse of its projects "*being large, complex systems integrations...They are very complex. I would hope that over the next five or 10 years of this report (the ANAO Major Projects Report) you see a transition where things do not happen anymore, or we mitigate some of those risks*".^[19]

So, in about a decade, DMO may be able to show some improvement in the management of its major projects. With its history of failures, and with no current prospect of change for the better, DMO is a key Defence organisation demanding fundamental and pervasive change that must go back to first principles. The functions of DMO are far too critical to be left to drift on as they are.

The Management of Defense in the United States

The many lessons to be drawn from the management of Defense and capability acquisition in the US demand deeper analysis.

During the mid-1980s, the US Congress decided that its Department of Defense and its Defense Procurement Organisation were broken and so a range of reforms were undertaken under the Goldwater-Nichols Act of 1986.

However, Defense, political, lobbyist, and contractor intransigence combined to block real change, so the problems persisted and inevitably became worse. The problems seen with major capability acquisition in the US today have become entrenched by a failure of good governance, a product of a too-cosy relationship between major capability manufacturers and the Pentagon, the Department of Defense, and the polity. Today, the accumulated mess of poor governance has been left to a new President to clean up. Regrettably, repeated statements and numerous decisions produced by Defense Secretary Gates do not give any confidence that the need for real change has been acknowledged, let alone started.

At one US House Committee hearing into Defense and Defense procurement, frustrated Committee Members charged contractors with outright deception, their sole objective being to make money. Underperforming weapons they said were being hawked that were overcharged and not delivered on time.

There is now a marked tendency, both here and in the US, for Defence Departments to blame the contractor for problems that they encounter with their projects. However, it is important to recognise that critical management deficiencies also exist on the part of customers, particularly customers working from within government bureaucracies that contribute significantly to, and indeed aggravate, problems with projects through their lack of expertise, lack of openness, and failure to follow due process.

On 30th January 2009, John Young, acquisition chief at the Pentagon, wrote to the Secretary for Defense giving his Office's assessment of the reasons behind the failures reported frequently by the Government Accountability Office, as well as other government oversight bodies. The principle reasons behind the perceived project failures, as seen by Young, together with the real reasons, may be summarised as follows:

Problem (Cause)	Comments
1. Artificially low cost estimates at the start of the program to get it accepted (the 'bait').	The project office must have the skills, competencies and processes to enable it to analyse the system configuration, identify operational and technological areas for problems and risk, evaluate these, and use its experience to generate a 'best cost' estimate. These skills and competencies are also invaluable in testing all contractor claims regarding cost, schedule and capability. If a project starts poorly, then it is likely to continue that way.
2. Excessive performance requirements.	The project office must have a firm Statement of Operational Requirements and a supporting Technical Requirements Specification before proceeding, and must establish a tightly disciplined requirements change process.
3. Too little understanding of the design.	The project office must have a skills and competency base appropriate to the operational and technological (including integration) characteristics of the project, supported by the relevant risk and project management processes. It is folly to proceed without these.
4. Immature technology.	The project office must have even higher skills and competencies in those areas where the technology is immature so that it can ask the difficult questions and be able to evaluate the answers professionally.
5. Complexity in development and integration.	Complexity is not a bar or an insurmountable challenge. Complexity simply requires skills in the process of technical and functional deconstruction of the whole into elements that can be managed with low risk along standard lines up to the point of integration where system integration skills come to the fore. Having the appropriate skills, competencies and processes makes complexity quite manageable.
6. Optimistic schedule.	Optimism will always be a characteristic of bureaucracies and project offices that do not have the skills and competencies to construct and quantify the Project Work Breakdown Structure, and so construct realistic schedules.
7. Fluid program strategy.	This is a product of inadequate skills and competencies, aggravated by a lack of process and/or inappropriate bureaucratic/political decisions.
8. Poor status at the point where development and production start.	This usually occurs from a combination of inadequate skills and competencies, often driven by arbitrary political/bureaucratic decisions aimed at hiding unpleasant facts and avoiding accountability. Shifting developmental work into the production phase, assisted by the creative accounting identified by the GAO, has been developed into a fine art by the JSF manufacturer. This project should be used as a case study of how not to manage a project.
9. Runaway requirements changes.	See Item 2 above.
10. Reductions in the number of systems required.	This more often occurs in response to budgetary decisions. The Services have to reduce the number of weapon systems they can afford to keep within budget restraints. However, this merely increases the unit cost and further reduces the affordable number, and so the cycle continues. A project that has reached this point is in dire trouble.

Table 2: PRINCIPAL REASONS FOR PROJECT FAILURES

Young did not propose any changes to the US Defense acquisition process, concluding that there is reason for confidence in the Department's procurement process, and that somehow the widespread difficulties listed all lie outside the Department and its control.

This is the type of response characteristic of bureaucracies which, by nature, are extremely self-serving, highly sensitive to any criticism, and careless with the facts when they are unwelcome. The situation seen in the US is fundamentally the same as that now seen in Australia, and other Western nations, for much the same reasons.

Importantly, Mr Young's 'reasons' are only symptoms of deeper problems, identical to those put forward by Australia's DMO. He fails to recognise the core problems of:

- a lack of the required skills and competency base within the Services and in Defense and its procurement organisation;
- a failure to analyse the evolving threat capabilities that must be met;
- a failure to specify capability requirements fully and accurately;
- the failure of Defense and its procurement organisation to follow what are well defined and well established project management processes;
- a lack of visibility and failure to comply with the findings of governance audits, particularly by the GAO; and
- the presence of too many contractors and advisors working within the Defense Department and its procurement organisation who came from major Defense Industry Contractors; contractors and advisors who carry far too much baggage that influences their decisions and advice.

In both the US and Australia, the skills and competency base that existed within the Services, and enabled them to manage efficiently the procurement of their capability requirements over many decades, have been eroded and sidelined to the extent of sacking those military and civilian professionals who voiced concern over the way that their country's capability development and force structure were being mismanaged. Until that skills and competency base is rebuilt, and takes a central role in defence planning and procurement, the problems that are now endemic to most Western Defence Departments will continue to degrade both National and Western capabilities and impose an unnecessarily high security risk and cost.

In reviewing progress with Goldwater-Nichols Act reforms, the Centre for Strategic and International Studies saw a need to strengthen Congressional oversight and to transfer acquisition programs back to the Service Chiefs who are legally responsible for supplying capabilities^[13].

The same recommendations apply to Australia – better governance is needed as well as the return of capability acquisition to the Services where fundamental accountability for establishing and maintaining military capabilities resides.

Unfortunately, the US DoD has now demonstrated that it is far more broken than first thought. This was evidenced by the strange and indefensible positions on the future of US air power taken jointly by Michael Donley, Secretary of the Air Force, and General Norton Schwartz, Chief of the Air Force, on 13th April 2009. That both parties were subject to coercion must be considered a strong probability in view of the dramatic away from long-held, analytically-based, calculations of USAF capability requirements that their new position reflects. In addition, it must be remembered that both their predecessors were sacked by Secretary Gates, seemingly for holding and voicing opinions that were contrary to those held by the

Secretary and his advisors.

The hurried 're-writing' of the US strategic basis of its air power by Secretary Gates and his advisors, in an attempt to make his decisions on budgetary cuts to air power a little more plausible, reflects only a dangerous detachment from reality. This 'cooking of the books' is seen often in Western defence bureaucracies when they are faced with inexplicable conflicts between capability requirements and flawed arbitrary policy/procurement decisions.

The dogged and unsubstantiated stand taken by Secretary Gates and his departmental advisors has ignited a bitter division between Congress and the Defense Department executive, and now drawn the President into the mess. One senior House representative put it as follows:

"It is not a Democrat or Republican thing at all, but rather a Congress versus the Executive in terms of who is in charge. The Defense Department is there to execute. We cannot allow the executive to run roughshod over congressional responsibility. They need to learn who is in charge. The Congress is."^[14]

The Gates proposal for the future defence of the US, if bulldozed through, will be implementing unilateral disarmament on the world stage in that the US will be abandoning its traditional, world-wide, air dominance capability and will concentrate upon small Global War on Terror roles. As a result, the US will be unable to balance or contain the military capabilities of emerging nations or give substance to its numerous treaties that provide for the protection of its friends and allies.

It remains to be seen whether the Department of Defense will control America's defence strategy, policy and direction or Congress. Much depends upon the answer, so Australia should follow this evolving situation most carefully.

More detailed discussion on the situation that has developed in the US is covered well in 'Gate's Epiphany', an article authored by retired Air Force Lieutenant General McInerny and retired Army Major General Vallely, both highly-experienced and respected professional military officers.^[15]

The Underlying Reasons for Management Failures

Over the past two decades or more, the efficiency, effectiveness, and cost effectiveness of the defence departments and the procurement arms of most, if not all, Western countries have been found wanting. As a result, the deterrence and military capabilities of those countries have now been eroded, singly and jointly, to the point where the balance of military power is shifting away from them. This has been particularly so in the US.

The continuing decay in the management of US military capabilities has been the subject of a long line of reports which have resulted in little, if any, improvement. During the mid-1980s, the US Congress determined finally that the Department of Defense was broken and that the situation could not be allowed to continue.

Despite bitter resistance from the Department, and more than four years of congressional hearings, studies, and analyses, the Goldwater-Nichols Department of Defense Reorganisation Act of 1986 was finally passed. That the situation has only continued to deteriorate since then, points to failures entrenched deeply within the Department of Defense and its procurement arm, as well as within the US system of governance.

The US *Centre for Strategic and International Studies (CSIS)* began reviewing progress with

the changes required by the Goldwater-Nichols Act from 2004. Since then, CSIS has provided a steady flow of reports which have identified the factors that have singly or in combination continually hindered real progress.

The reports compiled by CSIS thus provide a valuable insight into a governance and management environment that has been unable to reform the Department of Defense, unable to introduce the core changes needed to ensure proper visibility, control, and governance of the nation's military capabilities. Importantly, the reports draw upon data developed by the Department of Defense, the Department of State, the Office of Management and Budget, the Congressional Budget Office, the Congressional Research Office, and the General Accountability Office, all part of the US system of governance.

This analysis will review three recent CSIS reports which bring together well the key fault lines that run through the US Defense and interfacing military, commercial, and government organisations. Apart from scale, most of these faults can be identified in the great majority of Western defence organisations, including Australia, and carry the same consequences.

Report 1: A Poisoned Chalice? The Crisis in National Security Planning, Programming, and Budgeting, 23 April 2008.^[16]

This report highlighted:

"The crisis in US national security planning, programming, and budgeting is not the fault of any one Administration, and has often been shaped by the mistakes of the US Congress and key military commanders. It has accelerated sharply over the past eight years. There is no clear or coherent plan, program, or budget that reflects the fact the nation is at war and no credible mix of force plans, modernisation plans, and procurement plans for the future" (Synopsis).

"...the planning, programming, and budgeting for the combination of the Afghan War, Iraq War, and the Global War on Terrorism have been badly mismanaged since 2002, and there is no plan for the future ." (Uncosted, Unplanned Set of Wars, pp 42-65)

"The broader problems in planning, programming, and budgeting have been shaped by many factors, but one is decoupling the efforts to define US strategy and goals from the creation of specific force, modernisation, and readiness plans to implement them." (The QDR and Strategy Implosion. No Real Force Plans, Budgets, and Path for Modernisation, pp 66-81).

"The US has also made cut backs in force size and military manpower, as well as career civilians, that current efforts to increase Army and Marine Corp end-strength only begin to address. The strains of over-deployment on a relatively small total volunteer force already threaten the ability to recruit the proper mix of force quality and quantity." (The Defense Manpower Affordability Issue, pp 86-99.)

"The Department's current baseline budget projections for operations and maintenance costs make no allowance for ongoing wars and are little more than absurd. There is also no clear plan, program, and budget for dealing with the growing 'reset' problem of coping with wartime losses and wear." (The Operations, Maintenance, and 'Reset' Crisis, pp 105-109.)

"These problems are so permeating in every service, and affect so many critical programs, that it is brutally apparent that the Department has no real-world spending plans, and is indulging in a liar's contest in terms of costs, the timelines for major programs, their probable effectiveness, the numbers it can actually procure, and the force trade-offs between modernisation and force cuts. It certainly means a need to establish far more realistic

standards for estimating program costs, schedules and deployment times, and effectiveness, far tighter standards of program management, and far tighter control over the kind of changes in specifications and design that do so much to raise cost and increase program delays.” (The Modernisation and Procurement Crisis, pp 110-135.)

Report 2: America’s Self-Destroying Airpower, 23 February 2009.^[17]

This report *“examines the impact of a crisis in aircraft procurement on tactical, strategic, and enabling capabilities of US air power.”*

“Almost every major aircraft development program is in sufficient trouble to raise serious questions about the ability to maintain and modernise the overall fleet of US Air Force, Navy, and Marine Corps aircraft. Replacements are stuck in a morass of procurement and development problems, cost explosions, and rifts within the Department of Defense.”

“These problems are compounded by the fact that there are now fewer program alternatives if any key aircraft program runs into trouble. They are also compounded by the systematic underestimation of technology risk, growth in performance requirements, the use of failed methods of cost analysis, and the pressure to ‘sell’ programs by underestimating cost and risk. All have combined to push air modernisation to the crisis point.”

The report summary stated:

“No military service currently demonstrates that it has leaders that can create affordable procurement programs. Every service has, to some extent, mortgaged its future by failing to contain equipment costs, and by trading existing equipment and force elements for developing new systems that it may never be able to procure in the numbers planned.”

“Instead of rigorous leadership at the level of Secretary and Chief of Staff, there is an ill-concealed struggle to solve the problems in a failed procurement system by either raising the defence budget or somehow getting more funding at the expense of other services and programs. The US defence procurement system has effectively become a liar’s contest in terms of projected costs, risk, performance, and delivery schedules. Effective leadership is lacking in any of these areas. In both ship building and military aircraft manufacturing, the services have become their own peer threats.”

Report 3: Reforming Defense Decision Making-Taking Responsibility and Making Meaningful Plans, 11 March 2009.^[18]

This report starts by making the following two important observations:

‘The formal challenge to this conference is to transform the way the Department of Defense does its business. The danger is that it implies that what is needed is yet another approach to organisation or process, and not a return to first principles.’

‘In the last half century I have seen one attempt after another to solve the Department’s problems by reorganising or changing the way it does business, and by layering yet another new process or level of review over the existing ones. At the end of it all, I believe we now have the worst run department in our history.’

As this report contains the most succinct evaluation of what ails the US defense organisation, and as the points made are, in most respects, applicable to Australia and other Western nations, a synopsis of the report has been included at ANNEX B.

As discussed in the body of this analysis, the problems seen over the years with defence management and equipment procurement in most, if not all, Western countries largely follow those identified by Professor Anthony Cordesman.

Important Lessons from Report 3

The presentation to the US National Defense University cited in Annex B includes a number of subjects that should be of serious concern to Australia and other Western nations. These have been highlighted. In particular, the presentation starts by warning of the danger inherent in current approaches to transforming the way the US DoD does business in that they imply that what is needed is yet another approach to organisation and process, not a return to first principles. Attempts over the past decades have only layered yet another new process or level of review over the existing ones.

This mirrors precisely what has happened under the bureaucratic control of Australia's military services imposed since 1974. Almost invariably, the recommendations of the interminable reviews and inquiries that have been conducted under tight control of the Department, have added only further layers of review within the bureaucracy, accompanied by additional processes. Any suggestion of a return to basic principles, or the adoption of sound management practices, has been rejected.

If an organisation is to be effective, it must be structured so that it achieves its aims in the most efficient manner, with each organisational unit having clear accountabilities. Given a sound organisational structure, policies, systems, and procedures (ie, processes) must be put in place to ensure that the functions and objectives of the organisation are clear, concise, focussed, integrated, and have a complete unity of direction. These activities form the directive function of sound management.

The organisation's management system is then closed by means of a control function which, through various feedback loops, monitors continuously the performance of all functions, taking timely corrective action when required. Procedures/process are thus important, but are not a means in themselves, and they cannot achieve organisational aims in isolation. They must exist only within a sound organisational and management structure, appropriate to the functions of the organisation, and be subject to continual monitoring and control to ensure good governance.

It is quite clear that, as in the US, neither Australia's military services nor its Department of Defence is now organised or managed along sound lines. Hence the need to return to basic principles to get the organisational structure and accountabilities correct and then introduce sound management practices before any improvements can be expected.

The Australian Department of Defence is currently involved in further wide-ranging change, which is described in the Defence publication *'The Strategic Reform Program, Delivering Force 2030'*. This programme (at page 4) has as its major driver for reform: *'Government is seeking greater accountability and transparency in the way Defence manages its budget, and expects the best possible advice on which to base its capability investment decisions'*.

This neatly shifts the focus for what will eventuate to government and its need to 'save' money, avoiding the fact that all the reform reviews were conducted within Defence, and are thus based upon Defence's demonstrated inability to manage properly any of its functions. The document then goes on to identify a number of areas of activity where change (perceived cost savings) is proposed, all of which have a far greater potential to further debilitate the Services and hence Australia's security than do any good.

Savings in costs in each area of activity have already been calculated; it is now up to each

area to live within the reduced financial means allocated to it. The main question that arises is: *Who is measuring the impacts of all that must flow from these cuts on Service capabilities, especially upon Service capabilities, morale and ethos, and how?* The document consists largely of those sweeping assumptions, wishful thinking, and impossible objectives that are characteristic of Defence documents. They read more like a marketing exercise rather than a sound management review.

These characteristics also flow into DMO's recent document '*Invest in Defence Capability – Defence + Industry Conference 2009*'. This states DMO's two goals as being *delivering projects and sustainment on time, on budget, to the required capability, quality, and safety; and make DMO more business like, accountable, and outcome-driven.*

The current structure of DMO, its focus upon 'business methods' rather than professional military analysis and robust project management methodologies, and its focus upon process rather than capabilities and cost, together with its lack of critical operational and technological expertise and failure to follow due process, have, since its formation, dictated against it achieving any of its stated grand goals.

Returning to the Strategic Reform Program, this will be headed by a Defence bureaucrat having no background in military matters, with the rank of Deputy Secretary. On top of the Departmental Reform Team, the Government (note government holding responsibility again) will establish a Defence Strategic Reform Advisory Board to be chaired by an independent professional. The membership will include the secretaries of the Departments of PM and Cabinet, Treasury, Finance, and Defence, as well as the CDF and the CEO, DMO.

Again, we see yet another layer of review and process by a group that can contribute little, if anything, to ensuring that Australia's military capabilities are being managed properly and our Services have the capabilities, skills, and competencies needed to ensure Australia's security in accordance with government requirements and the expectations of the Australian people.

The Strategic Reform Program thus starts primarily from a cost saving objective, not from what the Services need to do their job. After some 30 years of continual 'reform' by the Defence bureaucracy, we are left with a thin, de-skilled, non-professional, poorly managed, part time, military that is becoming more a disparate collection of mercenaries than the highly cohesive, well-trained, professional and competent, high-morale Services with which the Australian public have identified and relied upon with confidence in the past.

This Strategic Reform Program carries a real danger of further reducing our current poor military capabilities to the extent that governments should think twice before invoking the ANZAC spirit, for our military has been allowed to decay radically since Tange; our professional ANZAC military values have been largely stamped out, coerced, or seduced out of existence.

Summary

The current structural failures seen within the Australian Defence bureaucracy, not just those evident in the current capability acquisition organisation, go back to the Tange days and the unfettered power given the civilian bureaucracy to 'reform' the Services and the higher defence machinery as it wished.

The results have eroded the professional management of Australia's Military Services, impacted National security, and placed Australia's Defence Industry, particularly the Aerospace Industry which provides a major part of Australia's self-reliance, in jeopardy.

The problems that Defence/DMO have created and perpetuated will now make Australia largely

irrelevant both regionally and internationally over the next three or more decades:

- unable to muster or project any significant or demonstrable deterrent military power;
- unable to contribute as a leading nation to regional security arrangements;
- unable to pull its weight in concert with international forces or in support of bi-lateral security treaties and arrangements;
- made wholly dependent upon foreign companies for the availability and support of its major military capabilities, and
- lacking any real measure of self-reliance.

If this situation is to come under control and reversed, then:

- the higher Defence machinery has to be reviewed and modified so that military matters come under professional military officers. Civilian intrusion into military matters has to cease;
- the Services have to be reorganised to enable them to exercise proper command and control over those factors critical to their responsibilities for the specification, acquisition, operation and support of their force capabilities;
- the Services must also be retrained to regain the skills and competencies they need to achieve professional mastery of the capabilities they operate and support; and
- capability sustainment, development and acquisition must become the primary drivers for all defence planning. The focus on financial management and outsourcing, almost invariably to the detriment of these primary drivers, has to be reversed.

In particular, DMO has to be reorganised to replace its current 'generalist', pseudo-business-like management approach with the professional operational, technological, and management skills and procedures that capability development and acquisition tasks demand.

There is also an urgent need to halt the current, common practice of simply adding additional layers of review and process as an answer to Defence/DMO management problems. There must be a return to first principles so as to get the organisational structure and accountabilities properly aligned and then introduce sound management policies, systems and processes before any improvement can be expected. Robust management feed-back loops are critical to ensure that management is effective and good governance is embedded.

Great care, however, will need to be taken to ensure that reform stems from what the Services need to discharge their responsibilities, and that the required balance of operational, technological, and management skills and competencies are nurtured and applied, not what is most comfortable for the bureaucracy.

Finally, it is important to recognise that the reasons behind the continued decline in the management of Australia's military capabilities may also be seen in most, if not all, Western nations, especially the US. All involved with defence matters should study closely and learn from what has happened, and is still happening in those nations, and take the steps needed to avoid blindly repeating such mistakes.

Endnotes

[1] APA Analysis 2008-10, Rebuilding the Warrior Ethos.

[2] Tange. Sir Arthur Tange, Secretary, Defence of Defence, during the Whitlam Government. He was instrumental in persuading the Minister for Defence, Lance Barnard, to disband the Departments of Navy, Army, Air and Supply and bring those functions under central control of the Department of

Defence.

[3] Robert Michaels, 'The Iron Law of Oligarchy', 1911.

[4] 'Washington's War', Michael Rose.

[5] Sean Rayment, Defence Correspondent, 'Takeover of Royal Navy Air Power', Telegraph Co.UK, 7 June 2009.

[6] Dr K. Anders Ericsson, University of Stockholm, Sweden, 1976. 'Cognitive/Development Faculty and Expert Performance' and 'Deliberate Practice – an Updated Excerpt from Ericsson (2000)'.

[7] Norman Doidge, M.P., 'The 4 Brain That Changes Itself', Scribe Publications, 2007.

[8] APA Analysis 2009-03, The Decay of Military Thinking and Writing.

[9] APA NOTAM, 5th November 2007, Analysing The ADF Air Combat Capability – On the Record.

[10] Case: CV-07-06385 R (CWx), in the United States District Court for the Central District of California, Western Division.

[11] Case: 1:06-cv-00013-RLF-GWC. Document #36. Filed 05/26/2009 in the United States District Court for the District of the Virgin Islands, St Croix.

[12] Australian National Audit Office Defence Materiel Office Major Projects Report 2007-2008, 27th November 2008.

[13] APA Analysis 2008-01, Is This the Future of Australia's Military Capabilities.

[14] Rep. Neil Armitage, D-Hawaii, 'F-22 Fight Divides Gates, US Lawmakers', Defense News, 18 June 2009.

[15] Tom McInerney and Paul Vallely, 'Gates Epiphany', *Human Events.com*, (www.humanevents.com), 24th June 2009.

[16] Anthony H. Cordesman, 'A Poisoned Chalice? The Crisis in National Security Planning, Programming, and Budgeting', 23 April 2008, Centre for Strategic and International Studies (CSIS).

[17] Anthony H. Cordesman, and Hans Ulrich Kaeser, 'America's Self-Destroying Air Power: Becoming your own Peer Threat', 23 February 2009, CSIS.

[18] Anthony H. Cordesman, 'Reforming Defense Decisionmaking - Taking Responsibility and Making Meaningful Plans', 11 March 2009, CSIS.

[19] Evidence given by DMO before the Joint Committee of Public Accounts and Audit, Thursday, 19 March 2009, Page PA11.

Annex A INTEGRITY

Address by Marine Corps General Charles C. Krulak at the Joint Service Conference on Professional Ethics, (JSCOPE) 2000, 27th January 2000

Introduction.

JSCOPE is a Joint Services Organisation that has been in effect for some 20 years. They meet regularly to talk ethics/values/leadership. I gave that address yesterday in Washington..., with a 'header' and a 30 minute Q&A. It had students from all services academies plus officers from General/Admiral to ensign/2nd Lt.

Address.

We study and we discuss ethical principles because it serves to strengthen and validate our own inner value system. It gives direction to what I call our moral compass. It is the understanding of ethics that becomes the foundation upon which we can deliberately commit to inviolate principles. It becomes the basis of what we are; of what we include in our character. Based on it, we commit to doing what is right. We expect such commitment from our leaders, but most importantly we must demand it of ourselves.

Sound morals and ethical behaviour cannot be established or created in a day, a semester, or a year. They must be institutionalised within our character over time. They must become a way of life. They go beyond our individual services and beyond our ranks or positions. They cut to the heart and to the soul of who we are and what we are and what we must be; men and

women of character. They arm us for the challenges to come and they impart to us a sense of wholeness. They unite us in the calling we know as the profession of arms.

Of all the moral and ethical guideposts that we have been brought up to recognise, the one that, for me, stands above the rest, the one that I have kept in the forefront of my mind is Integrity. It is my ethical and personal touchstone.

Integrity as we know it today stands for soundness of moral principle and character, uprightness, honesty. Yet there is more. Integrity is also an ideal, a goal to strive for, and for a man or woman to 'walk in their integrity' is to require constant discipline and usage. The word integrity itself is a martial word that comes to us from an ancient Roman Army tradition.

During the time of the twelve Caesars, the Roman Army would conduct morning inspections. As the inspecting Centurion would come in front of each legionnaire, the soldier would strike with his right fist the armour breastplate that covered his heart. The armour had to be strongest there in order to protect the heart from the sword thrusts and from arrow strikes. As the soldier struck his armour, he would shout 'INTEGRITAS' (IN-TEG-RI-TAS) which in Latin means material wholeness, completeness, and entirety. The inspecting Centurion would listen closely for this affirmation and also for the ring that well kept armour would give off. Satisfied that the armour was sound and that the soldier beneath it was protected, he would then move on to the next man.

At about the same time, the Praetorians or Imperial Bodyguard were ascending into power and influence. Drawn from the best 'politically correct' soldiers of the legions, they received the finest equipment and armour. They no longer had to shout 'Integritas' to signify that their armour was sound. Instead, as they struck their breastplate, they would shout 'Hail Caesar', to signify that their heart belonged to the Imperial Personage, not their unit; not to an institution, not to a code of ideals. They armoured themselves to serve the cause of a single man.

A century passed and the rift between the legion and the Imperial Bodyguard and its excesses grew larger. To signify the difference between the two organisations, the legionnaire, upon striking his armour would no longer shout 'INTEGRITAS', but instead would shout 'INTEGER' (IN-TE-GER).

Integer means undiminished, complete, perfect. It not only indicted that the armour was sound, it also indicted that the soldier wearing the armour was sound of character. He was complete in his integrity; his heart was in the right place; his standards and morals were high. He was not associated with the immoral conduct that was rapidly becoming the signature of the Praetorian Guards.

The armour of integrity continued to serve the Legion well. For over four centuries they held the line against the marauding Goths and vandals, but by 383 AD. The social decline that infected the Republic and the Praetorian Guard had its effects upon the Legion.

As a 4th Century general wrote: "When, because of negligence and laziness, parade ground drills were abandoned, the customary armour began to feel heavy since the soldiers rarely, if ever, wore it. Therefore they first asked the Emperor to set aside the breastplates and mail and then the helmets. So our soldiers fought the Goths without any protection for the heart and head and were often beaten by archers. Although there were many disasters, which led to the loss of great cities, no one tried to restore the armour to the infantry. They took their armour off, and when the armour came off, so too came their integrity." It was only a matter of a few years until the Legion rotted from within and was unable to hold the frontiers. The Barbarians were at the gates.

INTEGRITY. It is a combination of the words INTEGRITAS and INTERGER. It refers to the putting on of armour, of building a completeness; a wholeness; a wholeness in character. How appropriate that the word integrity is a derivative of two words describing the character of a member of the profession of arms.

The military has a tradition of producing great leaders who possess the highest ethical standards and integrity. It produces men and women of character; character that allows them to deal ethically with the challenges of today and to make conscious decisions about how they will approach tomorrow. However, as I mentioned earlier, this is not done instantly. It requires that integrity becomes a way of life. It must be woven into the very fabric of our soul. Just as was true in the days of Imperial Rome, you either walk in your integrity daily, or you take off the armour of the 'INTEGER' and leave your heart and soul exposed; open to attack.

My challenge to you is simple, but often very difficult. Wear your armour of integrity; take full measure of its weight; find comfort in its protection. Do not become lax, and always, always remember that no one can take your integrity from you. You and only You can give it away!

The biblical Book of Practical Ethics, better known as the Book of Proverbs, sums it up very nicely: "*The integrity of the upright shall guide them: but the perverseness of transgressors shall destroy them.*" (PR 11:3)

Annex B REFORMING DEFENSE DECISION MAKING

Cited from: Anthony H. Cordesman, 'Reforming Defense Decisionmaking - Taking Responsibility and Making Meaningful Plans', 11 March 2009, CSIS^[18]

SYNOPSIS

- 1. *The formal challenge of this conference is to transform the way the Department of Defense does its business. The danger I find in this title is that it implies that what is needed is yet another new approach to organisation or process, and not a return to first principles.***
- 2. *In the last half century I have seen one attempt after another to solve the department's problems by reorganising, by changing the way it does business, and by layering yet another new process or level of review over the existing ones. At the end of it all, I believe we now have the worst run department in our history.***
3. All of our services face a crisis in their force plans and procurement plans. We are killing force structure to try to buy more weapons. We face critical problems in terms of manpower numbers, the balancing of our active and reserve forces, and our deployment cycles. We talk about civilian partners as if this was something new, rather than something we had in Vietnam and lost in the decades that followed. And, we are not funding them in our budget.
- 4. *We talk of 'jointness', but the reality is that each service is involved in an existential battle for resources against the others.*** We have gone into two wars with no clear plan for conflict termination or for stability operations. We have then tried to manage wars through supplementals in the absence of long-term plans, tried to decouple military operations from nation building, and been so slow to react to the growth of the threat to Afghanistan that we are now losing a war we once thought we had decisively won.

5. Some of this can be blamed on what may have been the worst national security team of the postwar era. As someone who thought Robert McNamara represented the nadir in defense leadership, I have to give Donald Rumsfeld credit for being the epitome of a micromanaging bully who scattered snowflakes like dandruff, and with about as much effect. I also have a horrifying sense of déjà vu when I compare McGeorge Bundy and the Rostows to Cheney and our recent national security advisers. There is far too little difference between the 'neoconservatives' of Iraq and Afghanistan and the 'neoliberals' of Vietnam.

6. *The truth is, however, that the problems we face are part of a defense culture that has been building for a long, long time. No one administration or party is responsible, nor is any one group of leaders-civilian or military. It is partly the legacy of cutting too rapidly in reaction to the end of the Cold War; and it is partly the result of a culture of accommodation, process, and consensus that buries decisions and issues in endless studies and reviews.*

7. *Let me suggest that we do not need more reviews, task forces, contractors, processes, or paperwork.* What we do need is to create a level of accountability that forces the civilian and military leaders of the Department to take personal responsibility, and that this should be based on a return to three key principles:

- *The first is that there are no good intentions; only successful actions.*
- *The second is that no improvement in process can compensate for decisive and timely leadership.*
- *The third is that any meaningful strategy must be based on detailed force plans, procurement plans, program budgets, and measures of effectiveness.*

8. *The simplest of these principles is that there are no good intentions, only successful actions.*

9. When I first came to the Pentagon almost exactly half a century ago, it was obvious that nothing we did by way of excuses or good intentions would compensate for another Korea, for a failure to compete in the Cold War, or for what already promised to be a high-risk venture in Vietnam.

10. It did not matter what rank a civilian had or how many stars an officer had achieved. It did not matter how nice they were or how good they were to their staff or their troops. We had plenty of failures, and plenty of inadequate leaders, but the cost was clear and so was the standard of performance for anyone with serious rank or authority. Only one thing you do counts; the success of your actions during your tour of duty.

11. ***Let me put this simply.*** It does not matter a damn what Secretary Gates or Admiral Mullen try to do. It does not matter how difficult the circumstances were, are, and will be. The same will be true of every civilian from director and deputy assistant secretary up, and -- devalued as military rank is becoming -- of every officer with the rank of major general or above. ***There is only one test: what did you do that served the broader national interest of the U.S. successfully during your tour of duty. Not your party, not your ideology, not your service; and not your program.***

12. We have virtually forgotten this standard; to the extent we ever set it or tried to enforce it. No one writes a merciless epitaph for a Secretary or Chief of Staff who failed, no one compares their actions to the list of key tasks they had to perform.

13. **This brings me to the second principle: no improvement in process can**

compensate for decisive and timely leadership.

14. When I first came to the Pentagon, one of the more charming maxims of what then were called 'iron majors', was that 'a fish rots from the head down'. Their biology was faulty, but the principle was clear. ***Nothing happens without decisive and timely leadership.***

15. ***In the decades that have followed, we have come to operate under a different principle. If you have the perfect process, you do not have to take hard decisions as early as possible – in fact, you can defer them indefinitely by having more studies, review boards, contractors, and then accepting every problem as an exercise in creative accounting or claims about improved performance or unpredictable problems. You 'go along to get along'. You defend your program, your service, your area of turf. Analysis is more a tool of advocacy than making hard choices – often to the point where it becomes what Mark Twain used to call a liar's contest.***

16. ***The worst example is procurement. It did not take vision to see that each service was headed for a situation where defense planning had become the equivalent of a fight for resources where the service that died with the most toys 'won'.*** I have no idea as to whether Steve Kosiak was right when he estimated last summer that the cumulative overrun of military procurement and RTD&E was reaching \$25 billion a year. Work by the GAO and CBO make this seem all too credible based on the procurement plans in FY2007, and it is now clear that the only option is either major delays, major cuts in procurement goals, major cuts in forces – or some awkward combination of the three.

17. ***The fact is, however, that the warnings were being sounded more than a decade ago. In fact, the problem was clear by the mid-1990s.*** It was also clear that budgets essentially were 'no war' or 'no major contingency' budgets and that force cuts were already being made that raised major questions about the adequacy of the all-volunteer force. We claimed to have two major regional contingency strategies, and it was clear that we would have problems with one – unless it could be as quick and decisive as the first Gulf War in 1990-1991.

18. ***There was, and is, a school of thought that believed we could solve these problems through technology: through the most extreme versions of the 'revolution in military affairs'. There was another school who saw the solution in terms of greater efficiency through better processes; a school whose thesis seems to be that with the right process you can do more and more with less and less until you can do everything with nothing. What there was not, however, was hard, timely decisionmaking and honest efforts at cost projection and cost containment.***

19. ***Year after year, our top civilian and military decisionmakers came and went letting the underbudgeting of procurement, force plans, and manpower grow.*** We then found ourselves fighting 'long' wars that we took years to fully deploy and budget for, each year asking for supplementals that tacitly assumed we would win in the next year. We were slow to react in Iraq, and took until FY2007 to seriously budget for Afghanistan. In fact, we used the totally predictable inability to precisely predict the cost of war to create a nightmare of unrealistic annual baseline budgets, half thought-out supplementals, and pointless Future Year Defense Plans (FYDPs).

20. And, if this sounds like hyperbole, let me remind you of what our current secretary of defense said about defense acquisition – just one of the major challenges we face – in testimony to the Senate Armed Services Committee on January 27, 2009:

21. ***"There are a host of issues that have led to where we are, starting with long-standing systemic problems.***

22. *-Entrenched attitudes throughout the government and particularly pronounced in the area of acquisition: a risk-averse culture, a litigious process, parochial interests, excessive and changing requirements, budget churn and instability, and sometimes adversarial relationships within the Department of Defense and between DoD and other parts of the government.*

23. *-At the same time, acquisition priorities have changed from defence secretary to defence secretary, Administration to Administration, and Congress to Congress – making any sort of long-term procurement strategy on which we can accurately base cost next to impossible.*

24. *-Thus the situation we face today, where a small set of expensive weapons programs has had repeated - and unacceptable - problems with requirements, schedule, cost, and performance.*

25. **Since the end of WWII, there have been nearly 130 studies on these problems – to little avail.** I mention all this because I do not believe there is a silver bullet, and I do not think the system can be reformed in a short period of time – especially since the kinds of problems we face date all the way back to our first Secretary of War, whose navy took three times longer to build than was originally planned at more than double the cost.

26. We gave weak enemies time and the initiative, we pretended there were no major out-year implications, that reset would not result in much of the equipment having to be fully replaced or abandoned, and that we could let the real cost of military pay and benefits rise by 45% between 1998 and 2009 without jeopardising our existing strength levels – much less our ability to increase them to the levels we really need.

27. Let me give those here at NDU a challenge. Once this conference is over, take a list of senior civilians and military officers over the past 16 years. Examine each as a case study, and write a list of how many hard, timely decisions each made. How many really difficult trade-offs? How many courageous exercises in timely, hard decisions? How many study groups, reviews, etc., that actually led to a clear, decisive decision made in the national interest and not that of politics, ideology, or a given service. Ask then, is the problem process or leadership?"

28. **This brings me to the last of my three principles: Any meaningful strategy must be based on detailed force plans, procurement plans, program budgets, and measures of effectiveness.**

29. If God really hates you, you may end up working on a Quadrennial Defense Review. The most pointless and destructive planning effort imaginable. You will waste two years on a document decoupled from a real world force plan, from an honest set of decisions about manpower or procurement, with no clear budget or FYDP, and with no metrics to measure or determine its success.

30. If God merely dislikes you, you may end up helping your service chief or the Chairman of the Joint Chiefs draft one of those vague, anodyne strategy documents that is all concepts and no plans or execution. If God is totally indifferent, you will end up working on our national strategy and simply be irrelevant.

31. **Quite seriously, I have no idea where we lost sight of the fact that policy planning, concepts, and good intentions are not a strategy.** The secretary used to issue an annual posture statement that justified the budget request in terms of detailed force plans, procurement plans, and at least some tangible measures of progress. The chairman issued his own statement and views – sometimes explaining and sometimes dissenting. For a while,

there were even crude attempts at an annual net assessment.

32. ***Now, strategy seems at best to be the conceptual underpinning of our defense posture and at worst a series of phrases and buzzwords that often seem to contribute nothing.*** The United States simply cannot afford this, particularly at a time when a domestic and global economic crisis may last for at least several years, and when it faces another future crisis in paying for entitlements like Social Security, Medicaid, and Medicare.

33. ***Is \$533.7 billion in FY 2010 and 4.2% of the GNP enough? Enough for what? Our most recent QDR is a morass of half thought-out ideas – many calling for further study or otherwise deferring tangible action. We don't have a force plan. We don't have a clearly defined, defender-wide procurement plan. We don't tie the QDR to end strength goals that are clearly defined and costed. We haven't provided meaningful budget figures because the QDR is not tied to the FYDP. We haven't set clear goals to be achieved. We have no metrics.***

34. ***As for service strategies,*** it is nice to know that the Army still intends to fight on land, the Air Force is concerned with the air, and the Navy and Marine Corps still have something to do with water. At the end, however, ***our service strategies are little more than badly written, service-specific pleading and the 'strategy' advanced by the Chairman is simply a badly written request for more.*** They do not include a force plan, manpower plan, or procurement plan. There is no public program budget. ***There is no standard for measuring success.*** Like the QDRs, they come and go and fade into pointless oblivion.

35. ***Worse, there is no clear alternative. When a series of panels were set up to actually review key issues in the last QDR, they seemed to produce nothing.*** We could write a FYDP with less than 20 people in systems analysis in the early 1960s. Now we still have a FYDP that is little more than a crude input budget that is not tied to any key mission area that is not directly relevant to our strategy documents to truly challenging trade-off analysis by PA&E or OSD comptroller. We are fighting two demanding wars – which we call 'long wars'. None are in the FYDP, whose details remain classified for reasons that simply do not exist except to cover up its lack of meaning and content.

36. ***Would we be where we are today if we forced the department to tie its strategy to plans and budget, if we demanded metrics, if we required a public annual accounting, and if we held our top leadership fully accountable? Can any change in process or business practice make up for this failure? The answer is no.***

Putting Pressure Where Pressure is Due.

37. Every military audience has heard the cliché in military instruction that, 'First, we are going to tell you what we are going to tell you. Second, we will tell you. And third, we will tell you what we have told you.' I will spare you at least the last third of that formula. I think, however, the punch line is clear. We can't afford to go on the way we have been operating. We can't afford to waste the world's best military on the world's most mediocre leadership and try to keep solving our problems by throwing money at them. ***Every man and woman in uniform deserves better, and for that matter so do all of our allies and every American taxpayer.***

