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Front Cover: A Military Working Dog Specialist with his dog guarding the Comoro Airfield in Dili East Timor. Photograph by Sergeant W. Guthrie

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Australian Peacekeepers in East Timor. Photograph by Sergeant W. Guthrie
Personnel and the "Revolution in Military Affairs"

Dear Editor,

The ADFJ (Sep/Oct 00), devoted to the topic of the “Revolution in Military Affairs”, managed to encompass almost a full issue of 11 papers without specifically addressing strategic personnel issues. It was only in the closing contributions by Doctors Evans and Cheeseman that one finds acceptance that military capability and its development is primarily a “people” matter.

In one of its few mentions, “People” is grouped with “budget, acquisition and doctrine” as part of the “Technical” (!) dimension in a diagram of an ADO “Enterprise Architecture Model” (p. 9). In the accompanying text, however, Personnel gets even shorter shrift. The “technical” level, we are then told, is “made of the underlying processes including acquisition and budget”; no mention of strategic “People” issues. And in the article on “RMA – the ADF application”, the sole mention of personnel implications was that “It shall be necessary to recruit people who are Information Operations (IO) specialists” (p. 67).

Given that most of the contributors seemed to agree that we are facing an emerging military revolution, one driven by rapid advances in information technology and information-related technologies” (p. 3), it might have been thought that the personnel implications would be thoroughly and thoughtfully explored. The next battlefield is unlikely to be an extrapolation of what we have asked our sailors, soldiers, airmen and airwomen to deal with in the past; so how will we prepare them for those contingencies? Nor are traditional ADF organisational forms and cultural norms necessarily appropriate to the challenges of the new era: so how will we prepare the institution?

It might be surprising that personnel issues can receive such superficial attention in an era of great social change and where many civilian organisations are accepting that people really are their most important resource. Sadly, however, this is par for the ADO course. At the day-to-day administrative level, ADF personnel management ranks with the best, but its approach to strategic personnel management lags well behind what would be regarded as community “best practice”.

The ADF’s “competitive advantage” is not in its hardware, but in the skills and spirit of those who man it. So far, the ADF has been well served in this regard. But the personnel component of capability is a fragile quality, at risk in an age of economic rationalism and changes to career paradigms and employment opportunities in the community at large. There is much evidence that the personnel component of ADF capability is teetering on the balance between either continuing to be a strength and sliding into a close-to-unrecoverable crisis: between riding on a post-East Timor surge and declining because many members are close to being fed-up with the continued poor strategic management of ADF human resources.

I hope I am wrong; but this ADFJ special edition indicates to me just how far we still have to travel.

Nick Jans

A Bright Shining Lie

Dear Editor,

By chance last week I happened to place my copy of A Bright Shining Lie on the “Reading Shelf” ready to once again relive this “absolutely riveting” story of so long ago. I certainly agree with Alistair Pope that
it is both a disturbing yet fine piece of literature.

As a young captain on my second tour of Vietnam in 1971 I met Vann, albeit briefly, at General Fred Weyand’s HQ’s (11 Field Force Victor) and was left bemused by the man in real life. Having heard the stories I, like many held him in awe not only because of his length of service in-country but because of his achievements. At that time it would be honest to say that we knew that the War was not going well but here was Vann, a civilian, a survivor and so determined to fight on. His was certainly a defining presence at that time.

I agree with Pope when he comments that we have ruined the concept of the hero today. Putting everyone on pedestals causes us to neglect the real hero’s in our past and indeed in our midst. John Paul Vann was to me a hero in the real meaning of the word. He had it all. Ego, determination, presence, focus and the list goes on. Above all he did not want to leave country and let so many of the Vietnamese down. He, I am sure could see what was to come and what indeed did come to pass when it all ended. Above all he looked so unlike a hero. This I suppose is why he was such a defining individual at a time when real hero’s were in demand.

I congratulate Alistair Pope on an excellent review.

Kel Ryan
M y association with the Academy began in 1989, when I set out to examine, in a five-year longitudinal study, the process by which cadets become officers, with the proviso that I would not be concerned with the purely “academic” (i.e. University of New South Wales) components of that process. My study was intended to cover the cadets’ time at ADFA, their periods of post-ADFA single-Service training, and their first years as operational junior officers.

The subject group was a 10 per cent sample of the first-year cadet intake in 1989, selected randomly, but with regard for the Academy ratios of male: female; Navy: Army:Air Force; Engineering:Science: Arts; and membership of specific cadet administrative Divisions. They were to be interviewed twice yearly, in April and October, in each of the five years, as well as completing questionnaires on a number of occasions throughout the study.

All cadets were volunteers, approached confidentially by the researcher. The interviews, of approximately 45 minutes, were audio-recorded, with the cassette being given to the subject immediately after the interview for review and subsequent return. This strategy aimed to reassure the cadets sufficiently to encourage them to speak freely.

The interviews were also conducted in a venue to which cadets could go in the normal course of events, without attracting undue attention.

The first year of the project proceeded as planned, and generated substantial data on the Academy culture. However, late in that year, I was posted overseas for two years, which effectively aborted the long-term plan. When I returned from that posting, a variety of other commitments ensured that I could not resurrect the project for some years and, indeed, that I could not conduct it at all as originally intended. However, eventually, a sense of having expended such considerable effort for so little result led to a decision to replicate the 1989 study in 1998, to determine the extent of cultural change, if any, during the intervening period, and to account for that change where applicable.

**Transformation and Transcendence**

I will discuss specific differences between the Academy culture of 1989 and that of 1998 later in this article. However, firstly, the conceptual basis of that discussion needs to be articulated. Carl Jung [1964] described two enduring, but conceptually divergent, traditions in the processes by which humans’ transition from one stage of life to another,
e.g. from infancy to childhood, childhood to adolescence, adolescence to adulthood, unmarried to married, etc. These transitions are frequently marked by socially constructed rituals, designed to provide both public recognition of the transition and public reinforcement of the societal values underpinning it.

Transformation

In one of those traditions:

the novice for initiation is called upon to give up willful [sic] ambition and all desire, and to submit to the ordeal. He must be willing to experience this trial without hope of success. In fact, he must be prepared to die; and though the token of his ordeal may be mild ... or agonizing ... the purpose remains always the same: to create the symbolic mood of death from which may spring the symbolic mood of rebirth. [Jung in Leonard, 13]

This “transformation” model, as it is known, in which initiates symbolically “die” and are “re-born” has four key components:

1. The impetus for change is provided by attacks on former ways, former associations, and former status. The object is to convince the initiate that the former life is tainted, or deficient in some way.
2. The tactics employed are essentially to isolate the initiate from former associations, to deliberately disturb initiates’ equilibrium by introducing new and unpredictable activities and routines, to demand achievement of objectives which can only be achieved in concert with other initiates, and to create new associations of initiates that will replace former affiliations.
3. The individuals experience an initial period of intense value confusion, and anxiety about compliance, until they ultimately submit.
4. The desired end-state is expressed in terms of very specific orthodoxies, a heavy overlay of submission and resignation, and a marked reduction of autonomy and individuality, and is largely, if not wholly, communicated by former initiates. [Leonard, 25]

The 1989 rounds of interviews described an Academy that exhibited the following features:

Authority appeared to be routinely abused by those in possession of it. While all of the subjects accepted the need for the use of legal authority in a military organisation, their comments suggested that its use at the Academy was frequently gratuitous, and perhaps illegal.

Civilian values, attitudes and standards were considered anathema to the profession of arms. This prompted a sustained, if unsystematic, program of alienation of the cadets from their former ways and associations, which appeared to have achieved considerable success. It was accompanied by unsystematic, but persistent, attempts to rebuild them in acceptable forms.

Female cadets were generally considered by their male peers to have little right to be at the Academy. Both male and female cadets demonstrated the belief that this view received support, or at least acquiescence, from high levels in the institution. This was both the cause and the effect of their being routinely harassed, and sometimes assaulted.

The relationships between first and third year cadets were based principally on a combination of fear and frustration. The former was prompted by anxiety regarding the apparently random exercise of authority, and the latter by the belief that first year cadets’ performance would never be considered acceptable. The typical reaction by first year cadets was avoidance of interaction wherever possible.

The characteristic Academy sanctions were overwhelmingly negative, i.e. threat- or punishment-oriented. Since there appeared to be little concern for rewarding excellence, cadets had to content themselves with the avoidance of punishment.
As would be expected in Australia, and particularly in the Australian military, the notion of “mateship” was frequently talked about at the Academy. However, while the Academy created some impressive team spirit in a remarkably short time, there were serious concerns at some of the uses to which it was put, notably the suppression of individuality and the exclusion of some from the group.

The tradition was guaranteed to continue, because the predominant view during the October interviews was that, for all their complaints about the treatment meted out to them over the previous nine months, the first year cadets of 1989 were determined to inflict similar treatment on another junior course at the first opportunity, reflecting an acceptance of the system.

The values that cadets espoused in their questionnaires were usually at odds with those that they perceived to be espoused by the Academy. Significantly, few believed that personal integrity and leading by example were Academy priorities. More significantly, the disparities between individual and Academy priorities intensified between April and October, despite [perhaps because of?] the cadets having being exposed for a further six months to the Academy environment.

This finding was reinforced by the identification of a far more intense cynicism about the Academy in the October interviews than in their April counterparts. The existence of such obvious tension, over matters as central as the ethos of the profession, the satisfaction of whose requirements are the raison d'etre of the Academy, says a great deal about the Academy culture of those times. Either by negligence or design, that culture fostered such a serious ethical mismatch that cadets found serious difficulty in reconciling the institution with their very reasons for being in it. [Leonard, 90-91]

Transcendence

However, in another transition model altogether:

there is ... another kind of symbolism, belonging to the earliest known sacred traditions, that is also connected with the periods of transition in a person's life. But these symbols do not seek to integrate the initiate with any religious doctrine or secular group-consciousness. On the contrary, they point to man's need for liberation from any state of being that is too immature, too fixed, too final. In other words, they concern man's release from – or transcendence of – any confining pattern of existence, as he moves toward a superior or more mature stage in his development. [Jung, in Leonard, 14]

In the “transcendence” model:

- Former status, associations and relationships are recognised, and their maintenance encouraged.
- New associations, while encouraged, are not intended to displace former links, and are multi-focused, rather than singular in outlook.
- The rationale for new routines is explained, and the transition is conducted in a supportive, sympathetic milieu. Initiates are, therefore, less prone to confusion and anxiety.
- The desired end-state is the enhancement of autonomy and individuality. [Leonard, 25]

The 1998 rounds of interviews described an Academy that exhibited the following features:

- Nineteen ninety-eight began with authority used by the senior cadets in ways that were still authoritarian, but overlaid with an apparent concern for their subordinates’ welfare.
- No cadets commented on any perceived discrepancy between Academy and civilian values.
- Female cadets appeared to have achieved relative equality, and the absence of any significant harassment or discrimination was commented on freely by male and female cadets alike.
Changes to the relationships between the cadet “classes” in April 1998 showed signs of producing a leadership relationship based far more on mutual respect than on fear and intimidation. By October, this had become firmly established.

While disciplinary standards appeared to have been maintained, and punishments still regularly used, there was far more emphasis on rewards and incentives than in 1989, with the result that when punishments were administered, the fact that they were seen to be balanced by positive reinforcement of good performance seemed to enhance their legitimacy.

The importance of the group appeared to be as strongly promoted in 1998 as in 1989. The difference in 1998 was that it did not appear to be nearly as dependent on the subjugation of individuality. Cadets routinely commented on the critical role of the group, while insisting that individuality, and a surprising degree of autonomy, survived.

The 1998 intake’s view that later intakes should have the same induction experience as theirs corresponded with that of the 1989 intake. The difference, of course, was in their respective motivations. While the latter were dissatisfied with their experience, but still maintained the validity of imposing similar treatment on later years, the 1998 intake were satisfied with their induction, and were anxious to share that benefit with others.

The values that cadets espoused in their questionnaires were only marginally at odds with those that they perceived to be espoused by the Academy. Any disparities between individual and Academy priorities declined markedly between April and October. Indeed, on most measures, the two sets of values converged rather than diverged during that period. The only exceptions were in areas not considered important by the bulk of respondents. [Leonard, 113-114]

The Sources of Change

The Academy training culture of 1989 was dominated by the “transformation” model, whereas that of 1998 was characterised quite markedly by the “transcendence” model. Therefore, the fact that so dramatic a change could be achieved, especially given that other research suggested that little had changed at the Academy between 1989 and 1997, demands an examination of the processes at work between late 1997 and October 1998.

The changes to the Australian Defence Force Academy in 1998 gave the impression of being conducted in a comprehensive, carefully sequenced and timed, implementation program. Those responsible for the implementation were trained, and new arrivals were treated in ways that made them feel positive about the institution. Shortly after that, the major group of potential backsliders – the senior cadets – were stripped of their power and privileges and, hence, their ability to undermine the system.

Finally, the structure was drastically altered to both lessen any one individual’s, or group’s, ability to acquire power through the control of significant elements of the structure, and to lessen the susceptibility of their juniors to any one source of influence.

They [the changes] were designed to so embed the outcomes that there would be no turning back. They were predicated on the understanding that some people would remain unconvinced, and would have to be regarded as dispensable.

While the success of these strategies was remarkable enough, even more so was the fact that, in every sense, they represented a significant paradigm shift in officer education in Australia. Whereas the symbolic “transformation” model had dominated not only the methodology but also, and far more importantly, the mindsets that had determined its perpetuation, the Academy swept it away, and replaced it with one that challenged, even
thwarted, the foundations of the officer corps in Australia.

It challenged the paradigm founded on the notions that an officer cadet had to be purged of civilian ways, that former initiates were the sole “keepers of the flame”, that individuality was anathema to the profession of arms, and that obedience to authority transcended all other imperatives.

However, it did more than simply destroy. In the place of the original model, it introduced another that sat very comfortably with Jung’s “transcendence” model. In doing so, it finally paid more than lip service to the insistent demand that:

The new military needs soldiers who can use their brains, can deal with a diversity of people and cultures, who can tolerate ambiguity, take initiative, and ask questions, even to the point of questioning authority. [Leonard, 129-30]

Implications for ADF Initial Officer Education/Training

Readers will draw their own conclusions as to the relevance of the two transition models to the production of an Australian military officer. Undoubtedly, many will argue that we have done pretty well with the former officer training system, thank you very much, and that, if it ain't broke, then leave the bloody thing alone!

Clearly, however, if we consider the demands on military officers generated by the so-called Revolution in Military Affairs (RMA), the transcendence model sits far more comfortably with the leadership challenges thrown up by the RMA than does the transformational model. The RMA demands, inter alia, officers who can not only exhibit initiative, imagination and creativity, but who are also prepared to question orthodoxies, even to the point of insubordination, if necessary.

Sound familiar? Well, it ought to, because Australian military folklore is replete with examples that suggest that these characteristics have always been valued above conformity and orthodoxy in the Australian worldview! Indeed, the Gallipoli legend, so central to Australians’ sense of self, draws heavily upon the perception of fundamental contradictions between British and Australian views of leadership, the latter apparently far less bound by orthodoxy than the former. If that really is the case, one wonders why such fundamental changes as I have described to the professional preparation of military officers at ADFA should have been so long in coming!

BIBLIOGRAPHY

Squadron Leader John Leonard joined the Royal Australian Air Force (RAAF) in 1980 as an Education Officer, after 15 years as an educator at secondary and tertiary levels. He has worked in a variety of training/educational institutions, including the RAAF School of Technical Training, RAAF Officer Training School, RAAF Academy, RAAF College, Defence International Training Centre and RAAF School of Postgraduate Studies. He also spent two years in Bangkok as a Training Adviser to the Royal Thai Armed Forces.

More recently, he was Commanding Officer of No 21 (City of Melbourne) Squadron, a RAAF Reserve Squadron, from January 1997 until August 2000, when he transferred to the RAAF Reserve Staff Group.

His qualifications include a Diploma of Physical Education, Bachelor of Arts, Bachelor of Education, Master of Educational Administration, Master of Business Administration and Master of Arts (Honours). The MBA included major studies in Organisational Change, while the MEdAdmin and MA (Hons) involved research into officer cadet education at the RAAF and ADF Academies respectively.
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It is a leadership responsibility to create an organisational climate that supports and encourages Mission Command. The actions and decisions of leaders have a profound influence on organisational climate and consequently on the development of individual professional mastery and organisational performance. A climate based on the consistent application of Mission Command will result in more capable people who have the self-confidence and initiative to implement innovative solutions to the problems they face, regardless of the environment.

This article shows that in Mission Command the Army already has a tool, which if used appropriately and regularly, will produce a “concept-led Army where innovative concepts guide capability development”. The article briefly describes the principles of Mission Command and some perceptions of their application in a peacetime and operational environment. Next, it explains the relationships between Mission Command, professional development, creativity and innovation.

The Principles of Mission Command

In simple terms, Mission Command requires the commander to outline his or her intention in terms of what is to be achieved, then to allocate tasks to subordinate commanders and the resources they have to carry them out, and any constraints on their freedom of action to achieve their tasks. How the subordinate commanders achieve these tasks is entirely a matter for them.

The commander’s intention is the guide and underlying purpose for the subordinate commanders’ actions. While the immediate aim may have to be modified in accordance with changing circumstances, the higher intention remains and the commander closest to the leading edge of the conflict is responsible for taking the initiative.

The principles of Mission Command can be summarised as: trust, understanding, responsibility, and risk.

Mutual Trust. The need for a high level of trust and mutual respect between commanders at all levels is a key element of Mission Command. The superior must be able to trust that the subordinate will remain true to the
commander’s stated intention, and the subordinate must trust the superior will not give a task that cannot be achieved. This relationship can be summarised as:

The superior trusts his subordinate to exercise his judgement and creativity and to act as the situation dictated to reach a specified goal. And the subordinate trusted that his superior would support whatever action he took in good faith to contribute to the good of the whole.5

Mutual Understanding. Subordinate commanders must have a clear understanding of their superior’s intention so that as situations develop they act in accordance with those intentions, without requiring further direction from the superior. Central control in planning the purpose of the activity is maintained, but execution is left to subordinate commanders. The onus is on the commander to be clear in his or her intention, as it is the basis for making quick decisions that will achieve the intention despite changing circumstances. The thinking of subordinates should be:

When my superior gave me this mission he (or she) could not foresee this situation; so I will not follow an obsolete mission but will follow the intention of my superior.6

Mutual understanding contributes to unity of purpose in the collective action of the force, avoiding the fragmentation associated with decentralisation. However, action in these circumstances will be based on the previous development of a high level of professional capability and mutual trust.

Acceptance of Responsibility. A key element of Mission Command for subordinate and superior commanders is the notion of responsibility. Subordinates must accept responsibility for making quick decisions based on minimal and sometimes conflicting information, and then acting decisively.7

Superior commanders must accept that responsibility for conducting operations passes from them to their subordinates. Repeated and/or forceful intervention by a superior in the conduct of the operation, on the premise of avoiding mistakes, stifles independence and destroys the confidence of subordinates.8

Acceptance of Risk. In adopting Mission Command, the organisation accepts a degree of risk in the achievement of success. Subordinate commanders must have the depth of experience and professional capability to successfully assess the risk in attaining the goal. Superior commanders must accept that where there is risk, errors will be made. Punishment of errors without consideration of intention develops risk aversion in subordinates and undermines the foundations of Mission Command.

The Practice of Mission Command in the Australian Army

There are two broad organisational reactions to dynamic, complex and ambiguous environments:9 detailed planning or decentralised control.

The first is the stereotypical bureaucratic approach that aims to reduce uncertainty through advance planning. The key element is to ensure that close relationships are maintained between various levels of the command and control structure such that the relationships become part of the routine, so that every individual knows what to do in any situation. This process centralises decision-making, and places a high premium on gaining correct information from lower levels about local conditions.

The alternative is to decentralise command and control, effectively acknowledging that it is difficult to plan for the uncertainty inherent in conflict. This approach requires people who take the initiative and are prepared to take action. The superior commander places trust in the judgement of the subordinates. The problem with decentralisation is that it can lead to fragmentation in the organisation that reduces the superior commander’s flexibility to
directly influence the wider battle and possibly a loss of economy in effort.

Officers and soldiers describe their experience of the peacetime Army as bureaucratic. Descriptions of the command climate refer to the frustration of “micro-management”, perceptions that subordinates are not trusted to do the job for which they have been trained and the lack of attention given to focused development through experience. The following comments drawn from the Officer Attitude and Opinion Survey conducted in 1997 are indicative:

Army officers invariably claim to use directive control [Mission Command] but this often means that they set targets, goals and tasks and leave subordinates to get on with it within the available resources. There is frequently a “can-do” attitude which sees officers agree to do far more than their time and resources allow, which then demands super human efforts from the subordinates to achieve. This may be necessary sometimes but it should not be “ops normal”.

Lieutenant Colonel

The competing issues associated with change mean that there is a need for directive control [Mission Command] but a latent desire not to implement the philosophy.

Major

In many areas I feel that often issues of management swamp leadership. Even in senior ranks there seems to be a tendency for micro-management rather than directive control [Mission Command].

Captain

Paradoxically, a study of Army peacekeepers noted that they found the difference between command and control in a barracks environment distinctly different to that applied in the operational environment. They observed that operational necessity required the application of Mission Command. However, these officers were concerned that the transition from the bureaucratic climate of the barracks Army to the Mission Command environment of an operation was not seamless.

Operational deployment forces a change in the culture because people feel that it has to change. Remoteness of locality helps. This change in culture is initially disturbing to the individual, and has the potential to paralyse action.

Lieutenant Colonel

We had a lot more flexibility over there than we had back here. The military system imposes certain limits or restrictions on you, but over there you were given a job, and you did it how you saw fit. The consequences, if there were any, fell on your head. It seemed to bring out the best in people.

Captain

The principles of Mission Command are mutual trust and understanding, and the acceptance of risk and responsibility. These principles are the norm in an operational environment and the benefit to the individual was not lost on the peacekeepers. The following comment captures that sentiment:

People do grow at a personal and professional level. They are more confident in the skills they possess, and more aware of their potential. When they return to a peacetime military environment they feel constricted and restrained in realising their new potential.

The problems that stem from this should not occur. They should have the same opportunity to grow and develop in the peacetime Army as they find on deployment. The system, or bureaucracy should not be restricting the soldier in developing his or her talents, but it does.
We should be encouraging a level of personal growth and responsibility in everything we do.

Major Mission Command fills the middle ground between the lack of flexibility in the bureaucratic approach and fragmentation and loss of economy in effort associated with decentralisation. It captures the principles of decentralised operation but also provides a framework for implementation. However, to be effective it must be underwritten by a culture that supports the principles and encourages ongoing professional development and practice.

From a command climate perspective it is important that the transition between a barracks environment and an operational environment is relatively seamless. Consistent expectations of performance and execution allow officers and soldiers to quickly adapt to the many other demands posed in these environments. However, the other major benefit from practicing Mission Command as cultural norm is that it results in more capable people. As an everyday practice it results in personal growth, self-confidence and supports an environment of creativity and innovation.

Mission Command, Professional Development, Creativity and Innovation

Morris Janowitz observed that as modern armies adapted to the increasingly complex environment there was a move away from the exercise of authority based on status to authority based on morale. He argued that to be effective a morale-based system must have three organisational rules:

a. there must be no organisational rigidity, each soldier must be considered to be a potential officer;
b. there must be a concern with technical competence rather than rank; and
c. the commands must be explained.

These conditions have been advanced in the modern Army through a combination of the:

a. doctrinal acceptance of Mission Command as a command philosophy;
b. an emphasis on technical competence as a prerequisite for attaining rank; and
c. a doctrinal approach that recognises the need for small, multi-skilled units operating with greater self-sufficiency and manoeuvrability.

However, in the implementation of these changes there has been no concurrent attention paid to fostering or sponsoring the change in culture that is required to support and sustain these initiatives. Rather, the approach has been to continually restructure the organisation in the hope that the appropriate cultural norm will emerge. The result has been widespread understanding of the principles of Mission Command but little encouragement to apply them. The environment of continual restructure has resulted in an organisational climate that is characterised by employment insecurity and resource reduction on one hand and demands for increased output and individual commitment on the other. This operating environment is the antithesis of that required for exercising Mission Command.

Creativity and Innovation

In LWD1, Army has stated a desire to have a “concept-led approach” to fighting where “innovative concepts guide the development and application of military capability”. One way to achieve this end is to sponsor a culture of creativity and innovation that is based on the principles of Mission Command.

Creativity and innovation are consistently associated with organisations where:
a. decision making is decentralised,
b. subordinates have a degree of discretion over how their work is completed,
c. there is a flat structure with work teams that have specific tasks,
d. power and authority change with changing circumstances and individual skills and abilities, and
e. job definitions are fluid and are often defined through interaction with colleagues.

Clearly, the effective implementation of Mission Command will create a climate that has these features. That is, it will create a climate where creativity and innovation can occur. However, Mission Command, creativity and innovation are more than process – as one commentator on creativity puts it, “if creativity was a process, by this time its operation would have been reduced to formulas, recipes, which intelligence and method could apply to produce great art and great science”.18

Creativity and innovation are given freely by people who are motivated and committed to their organisation or immediate task. To be effective, the principles of Mission Command should be an inherent part of the organisation’s culture and everyday practice. Core values play a crucial role in focusing and motivating behaviour. It is the leader’s role to infuse the organisation with values and to serve as the role model of the behaviours required of innovation. If Mission Command is to be the Army’s command and control philosophy it should be taught, practised, rewarded and lived by all Army officers and soldiers. This is the operational environment described by some peacekeepers that contributes to the growth and capability of Army’s people. Unfortunately, it is not often associated with the peacetime Army.

Professional Development. Mutual trust in the application of Mission Command is derived from a long-term commitment to professional development through training, education and experience. Mistakes in this learning environment are an expected part of the learning process with students critiqued on the reasoning for their actions rather than the action itself. The aim is to develop leaders with self-confidence who would not hesitate to exercise their initiative.19

Field Marshal Erwin Rommel noted that battles (and wars) were won by “flexibility of mind, eager acceptance of responsibility, a fitting mixture of caution and audacity ...”.20 In the German Army of Rommel’s time this ability was underwritten by an ongoing commitment to professional military education and development that stretched an officer’s thinking beyond his or her current posting or next promotion. Education and development must provide the officer with sufficient context to be able to make meaning of complex social, political and technical situations and accept the risk (and therefore the responsibility) that is inherent in exercising professional judgement.

In an increasingly complex environment, Army’s leaders will become more reliant on the professional advice of officers who are technical experts in their field (as opposed to generalist staff officers temporarily manning positions). The balance between specialist and generalist officers is being questioned and this will have a direct impact on the nature of professional military education and development. Officers must avoid becoming too narrow in the culture of their profession or speciality as the requirement to remain flexible and adaptable enough to deal effectively with unfamiliar problems in an unfamiliar context will always exist.

This requirement is driven by the nature of war and supported by the philosophy of Mission Command. It should be a foundation principle of professional military education and development. In every way, education and development should stretch an officer’s
professional and technical knowledge such that he or she understands the reasons for their actions and has the self-confidence to apply their knowledge in situations where risk, ambiguity and complexity are the norm.

Conclusion

Mission Command is a complex command philosophy that to be effective must be accepted as a fundamental part of the everyday culture and climate of the Army. Education and training are the key elements to success in implementing this philosophy. However, the Army must provide an environment in which understanding, initiative and risk-taking are encouraged as a matter of course, not just when faced with unexpected circumstances. The philosophy of Mission Command delivers an organisational climate within which decision-making and action take place, but it is apparent that successful implementation is dependent on changes in culture and climate. It is based on professional development and adherence to core values. It produces confident officers and soldiers who willingly use their initiative in creative and innovative ways. It is as much a way of thinking as it is a way of doing.

Those who think auftragstaktik [Mission Command] is nothing but a way of wording operation orders have missed the point. Those who think they can introduce auftragstaktik from above or order it to be fostered within units are like the farmer who sows wheat in the desert. There is only one way to achieve auftragstaktik: You must ignore it. Instead, you must concentrate on building forces that are intrinsically characterised by independence, professional skills and confidence. In such forces, independent action will be a matter of course.

Brigadier General Karl Hoffman, German Army

10. In this article these comments are taken at face value as an indicator of the failure to apply Mission Command. An alternate interpretation is that Mission Command is a poorly understood philosophy within the officer corps. Mission Command is generally interpreted as a “loose” approach to command and control, however a more complete and accurate interpretation of the philosophy must include an assessment of the context and the resources available to the commander and the experience of the subordinates. For example, where the commander has experienced subordinates, the freedom of action allowed will be greater than when his or her subordinates are inexperienced. Consequently,
there is a “sliding scale” in the application of Mission Command that is driven by the subordinates experience. A similar case can be made for context. Some junior officers may believe that they are being “micro-managed” when in fact they are being managed within the limitations of their experience. If this is not the case then it is their responsibility to alert the commander to the issue.

15. Review comments on this article noted that while intent of this statement might be accurate, in practice most officer courses are “attend only” with virtually no testing of technical competence.

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Trooping of the Colours
That Dr Daniel Mannix, Roman Catholic Archbishop of Melbourne, and occasional prime ministerial gadfly, held a commission in the Army for forty-six years, is not well known, and while that length of service may not be a record, that he still held it at the time of his death in 1963, at age 99, probably is. Mannix’s military career had begun amid great controversy. As a leading anti-conscriptionist he could accept a large share of the credit for the defeat of the two plebiscites Prime Minister Hughes put to the nation, on 28 October 1916 and again on 20 December 1917, to make military service compulsory. His opposition to conscription led to frequent claims of Catholic disloyalty, mischievous accusations of a Kaiser-Pope link, and newspaper cartoons of Mannix in full ecclesiastical garb being decorated by a stern-faced Wilhelm II. Empire loyalists, Orangemen and many practising Catholics, not to mention Hughes and the Governor-General, Sir Ronald Munro-Ferguson, were demanding, variously for his prosecution, imprisonment and deportation on the grounds of treason. Hughes, through Lloyd George, even went to the Vatican to have Mannix silenced or assigned elsewhere. All to no avail and it was therefore ironic that the Australian Catholic Bishops voted unanimously for Mannix’s appointment as Catholic Chaplain-General, a position he accepted on 21 July 1917 and would hold for the rest of his life. He never saw his military responsibilities interfering with his other interests. As an Irish nationalist, he condemned what he saw as English misrule in Ireland, a position which did not endear him to the British authorities. When he arranged to visit Ireland in 1920, the Royal Navy intercepted the ship on which he was travelling before he could disembark, preventing him from reaching his homeland. The Chief of the Imperial General Staff, Field Marshal Sir Henry Wilson, also banned him from Liverpool, Glasgow and Manchester, cities with large Irish communities. The incident caused Mannix to remark, “Since the Battle of Jutland the British Navy has not scored any success comparable to the chasing of the Baltic from the Irish shores and the capture without the loss of a single British sailor, of the Archbishop of Melbourne.” Further, he quipped “The Royal Navy has taken into custody the Chaplain-General of his Majesty’s Forces in Australia”. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

No member of the Forces who has conscientious objections shall be compelled to answer any question as to his religion, nor shall any regulation or other order compel attendance at any religious service.
was being laid to rest in a vault in Melbourne’s St Patrick’s Cathedral on Sunday 10 November 1963.9

Mannix was a controversial figure. He had now twice beaten one Prime Minister, Hughes, and was now to deal with Robert Menzies, and again he would succeed because he was right. It was a long-running sore, a sectarianism institutionalised within the Forces, bearing on a minority, more or less tolerated even though illegal and unconstitutional, on which he now set his sights. In challenging an entrenched practice, Mannix resuscitated elements of religious bigotry reminiscent of 1916 and 1917. The outcome was worth the effort: a ceremony which should have a profound influence on the *esprit de corps* of a unit, would no longer be marred by resentment and crises of conscience.

Mannix had had a long-standing and principled opposition to ecumenical or joint church services. As a matter of conviction, at that time, Catholics were not to attend Protestant services.10 This was a position not always respected by military or civil authorities. On 18 September 1952 at RAAF Base Laverton, the then Hon. W. MacMahon, Minister for Air, on behalf of the Governor-General Sir William McKell, presented the Queen’s Colour to the Royal Australian Air Force.11 Embedded within this ceremony was an essentially Anglican service of the consecrating of the Colours.12 The question of the participation of Catholics led to some unpleasantness. Should they have failed to attend, their military superiors threatened Catholic cadets with prejudice to their future careers, airmen with disciplinary action and the Catholic Chaplain with accusation of violating his Oath of Allegiance.13 The ceremony went ahead with its Anglican liturgy despite the protestations of Catholics, at the express insistence of the Minister. Similar problems arose in civic ceremonies, when in Melbourne in 1953 it was proposed to conduct an inter-denominational service on 31 May in the Exhibition Building as a “citizens” Coronation Commemoration. This time Mannix could and would be uncompromising. The solution was “‘emasculated’ and ‘gutless’ and pleased nobody”. To remove the potentially divisive elements of the service, laymen ran it. Now another event was coming up, one of the highlights of the Royal Tour, a parade at Duntroon in the national capital. Set for 17 February the following year, the reigning monarch herself (and head of the Church of England) would present new Colours, replacing those presented by the Duke of York during a visit to open the new Parliament House in 1927. The significance of the occasion was unmistakeable, and something of a family affair: not only was the Queen following in her father’s footsteps but also the officiating cleric, C.L. Riley, Bishop of Bendigo, (also the Anglican Chaplain-General) whose father had consecrated those earlier Colours. Then there was Menzies whose abiding interest was to see everything run smoothly.

The issue at hand was that the Colour ceremony had been adopted from the British and since the Anglican Church was also the established or official church in England, the fact that a civil ceremony (the presentation of the Colours) embedded a Protestant religious service was legally acceptable. In a country whose Constitution explicitly forbade imposing any religion on anyone and with a Defence Act to reinforce that principle in the Forces, the British military order of service in the Australian context could only be a vexatious, provocative and above all an insensitive intrusion into the religious convictions of a faith which was over-represented, *per capita*, in the Australian Army. This presented a dilemma to Mannix. Should he threaten to jeopardise this pageantry in the name of sectarianism (which it was but clouded as such by its symbolism and its traditional character and many Australians valued those links back to Britain) or could he simply accept what was
after all, unconstitutional, by giving dispensation to the Catholics on parade, which he as Chaplain-General could. The first approach would be unpopular, a spoiler likely to bring great contumely on his office, on Catholics and on the Catholic Church. While no one was likely again to challenge his loyalty, as had happened in 1916-17, there were questions of form: nobody, including Mannix, wanted to upset the parade about which an *Age* reporter would later write, “It is doubtful if ever before has a ceremonial parade in Australia been carried out with such perfection.” But he could not betray his principles. Moreover, in view of his known and widely expressed opposition to combined services, he would need to keep his followers informed of his thinking on the matter. And the trick would be to convince all and sundry that he was not prepared to ransom a regal event of such significance to press his point, to avoid Menzies and the Government any embarrassment. And Mannix was well versed in constitutional proprieties.

While the Prime Minister was one of the country’s most renowned constitutional lawyers and entirely sympathetic with Section 116, his error was in not addressing in a timely way, what in the Catholic press, was referred to as the “conscientious difficulties of Catholic servicemen faced with military ceremonies combined with Protestant religious services”, which had been the subject of high-level discussion since the drama at Laverton. That the Colours ceremony at Duntroon would become an issue had been anticipated. A 24 May 1953 letter from Bishop John McCarthy, the Catholic Deputy Chaplain-General, that is, Mannix’s deputy, to the Catholic Chaplain at Duntroon, Jack Hoare, advised that the “blessing of the colours” was being investigated in Britain and America “as to the usual Catholic practices”, added that “the Bishops here have apparently decided against any kind of cooperation”, and that governmental intervention had been sought.

According to the *Argus*, Mannix had made it known six months before the Duntroon parade, that he would not give dispensation to the Catholic cadets to attend the parade. Clearly, the Government was procrastinating. Now, with the Royal Tour almost upon him, Menzies finally wanted the matter quickly resolved. Therefore, in January 1954 he wrote to Monsignor Fox, the Vicar-General, about Duntroon and three days later to the Archbishop himself apologising for the delay in dealing with the problem on the grounds of his absence at the Coronation. Making the point that Cabinet would discuss it the following week, Menzies told him he could fly to Melbourne afterwards to “have a purely private talk with you about it”. Menzies did go to Melbourne but met with John McCarthy, as Mannix was elsewhere. That resulted in an understanding: that it was now impractical to change the order of service given the timing, that Mannix be asked to give dispensation, and an undertaking from Menzies there would be no more Colour ceremonies of the type held at Laverton and due to take place at Duntroon. On McCarthy’s advice, Mannix was prepared to give the dispensation and at Portsea where he was holidaying, drafted a letter in reply to Menzies to that effect. McCarthy also despatched a copy of this letter to Hoare on 11 February, “against future developments”, a suggestion which in view of the subsequent controversy, was particularly prescient. On the same date Major General Ronald Hopkins, Commandant of the Royal Military College, wrote to Hoare telling him that the presence of a number of Catholic cadets was essential because of the positions they held on the forthcoming parade and expressed hope that their dispensation would be given “favourable consideration” because their “functions in the ceremonial drill are so important that the success of the various movements depends on them.” Given Hopkins’ concerns, it is reasonable to assume that one of the aims of McCarthy’s 11 February letter to Hoare was to
inform RMC by circumventing the official communications channel – Prime Minister to
Minister for Army and down to Duntroon – that the matter had now been resolved and
that rehearsals with Catholic cadets involved should continue.

Menzies had wanted to avoid public controversy; however, there was, according to
Mannix, a “leakage of information from Cabinet” that made the news on 9 February. The
press comments, as Mannix had feared, were giving the impression that he wanted to
embarrass the Queen. To deal with this, Mannix added a post-script to his letter, telling
the Prime Minister that in view of the adverse and unwarranted publicity, that he (Mannix)
with Menzies’ permission would give a copy of the letter to the newspapers the following
day because “Catholics should know firstly that an exceptional concession had been made, and
secondly why it had been made.” Mannix also wanted to counter claims that he wanted
to sabotage the Duntroon ceremony. However, on the following day, as more newspapers
were carrying a story of Catholic intransigence, he sent a telegram to Menzies from Sorrento
saying that he had no option but to issue an explanatory statement. Both the Sydney Morning Herald and The Age were telling their
readers that Catholic cadets at Duntroon had been informed by their Church that they could
not take part in the ceremony. This was now not the case but according to the SMH, the
Prime Minister would neither confirm nor deny he had met the chaplains while the Army
minister, J. Francis, would make no comment. The Melbourne Sun reported that Catholic senior public servants were withdrawing acceptance of their invitations to attend the
Duntroon ceremony. On 12 February, the matter reached the SMH editorial. Again the
paper took the stance that Mannix had forbidden Catholic cadets to participate. This was patently wrong. To make matters worse, the paper suggested that a cadet’s official
duties obliged him to attend and that Roman Catholics should try to respect the traditions of
the Army and the sentiment of the majority, not exactly words that would please Dr
Mannix. In fairness, the paper agreed that some decent compromise had to be found
because “Protestants and Catholics are both soldiers of the Queen.” The matter could have
been settled but Menzies who could easily have ended the speculation by simply admitting that
an agreement had been reached would not act: in reply to Mannix’s 10 February telegram
with another telegram, he implored the Archbishop not to make any press statement
until he (Menzies) had an opportunity to get in touch again. The next day Menzies sent
Mannix a letter deploring what the newspapers were saying and repeated his request to “avoid
any public controversy of a sectarian kind.” Mannix now acted. On 12 February he
telegrammed Menzies suggesting that “in view of deplorable publicity I cannot accept your
proposal. The obvious logical course is even at this late stage to abandon at Duntroon a
service you admit was indefensible at Laverton. Then there will be no further publicity.”
On Saturday 13 February, The Age printed Mannix’s letter of 9 February in full. And once
again Menzies was “unavailable” for comment.

Mannix’s letter hinting at a “solution” suggesting some form of compromise was too
much for some: in a letter to The Age, the Reverend A. Chrichton Barr from the Scots Church, Collins Street, predicted that the “end
of the road is obvious – turn over all religious
acts to the Roman church or cut them out all
together.” Barr was joined by The Rt. Rev. G.F. Cranswick, Anglican Bishop of Tasmania, who argued that while under British rule minors are protected, they have no right to
dictate to the majority. The requirements either of the Australian Constitution or of the
Defence Act did not apparently, figure. Even after Duntroon, Howard Sydney, Anglican
Archbishop of Sydney, wrote to Menzies predicting that if the Government surrendered
to the arrogant attitude of a minority section of the community, the practical effects would be to paganise important national functions in a professedly Christian country, a point shared by the Protestant Council of NSW (the Loyal Orange Institution of NSW was affiliated), which also saw it as a further step to the increasingly evident paganism in Australia, driven by a minority and “advanced by a man whose past record of disloyalty to the British Empire called upon his head the wrath of Prime Minister Hughes, Governor-General Munro-Ferguson and the Government of Great Britain.”

While the publishing of Mannix’s letter put to rest any concern about the viability of the Colours ceremony at Duntroon, it did raise the spectre of sectarianism and that was the price Menzies ultimately had to pay. The Duntroon controversy was for all intents over when Mannix wrote to Menzies again in a letter dated 16 February to elucidate his actions: the issue had been on the boil for well over twelve months long before the Royal visit was arranged; the Colours ceremony is most embarrassing to the Queen’s Australian Catholic subjects; and the press misrepresentation or “misunderstanding”, could not be ignored or go unchallenged. He had withheld publication of the 9 February letter at Menzies’ request for two days in which Menzies could have set the record straight. In closing he hoped the Duntroon function “will be everything that you desire of the occasion.”

There is another account of how Mannix dealt with the issue in Gilchrist’s book. In that, responsibility for dealing with Menzies was given to Monsignor Ken Morrison, the RAAF’s senior Catholic Chaplain. According to this version, Menzies had been hard to convince. “If I died as a black Presbyterian, could not Arthur Calwell get a dispensation to attend my funeral?” Morrison replied that he could. Menzies then asked what is the difference between that and the Colours ceremony. Morrison answered: “If you die as a black Presbyterian there is reason why you should be buried as a black Presbyterian, but there is no justification in this country, which has no established religion, to arrange this function in accordance with an Anglican formulary.” That convinced Menzies of the Catholic position. Morrison then took a legal expert, one John Davoren, with him to Portsea. With an assurance from Menzies that change would come, Morrison was able to successfully recommend to Mannix to take the pressure off individual Catholics by allowing them to attend the parade.

In his 9 February letter, Mannix made it clear that the dispensation given at Duntroon was to be for “this occasion only” and he meant it. On 2 March as “Melbourne basks in Royal enchantment”, another Queen’s Colour presentation was under way, involving only the Duke of Edinburgh, at the Flinders Naval Depot. Before the consecration of the Colours by the Anglican Chaplain, the order was given for Roman Catholics to fall out. More than 400 left the parade ground, formed up and prayed for the Queen with their own chaplain and then doubled back to their original positions.

The Duntroon controversy showed that there were still pockets of sectarianism, if not in the forces, then certainly on the outside. If Mannix’s assessment of a leak emanating from Cabinet was correct, then there were Ministers who were not sympathetic with Menzies’ feelings or intentions who were quite prepared to foment sectarianism. That Menzies even had to take such a matter to Cabinet in the first place says much about how emotive an issue it was. Perhaps his wish to deal with it quietly, even outside of Cabinet, may have arisen not just to avoid public discussion leading up to the Royal Tour, but not to be seen trucking with a Catholic Archbishop, or worse, and as Menzies knowledge of the Constitution would have told him he had little choice in the matter — ultimately he would have to go along with
Mannix — that in some quarters this obligation could be interpreted as nothing short of weakness, a surrender, a sell-out. It must also be recalled that at this time, the “Split” in the ALP was not in sight and Menzies had no need to appease Catholic opinion the way he would a year later.

In due course, the format of the Colours ceremony was restructured. Rather than separating the military and religious elements, the solution, and a most sensible one, was to involve three Chaplains-General or their representatives in the service: the Anglican, Roman Catholic and Protestant Denominations’, in that order, with the three always occupying the same relative positions on the parade ground. Each would in turn lay his hands on the Colour, and in order consecrate, bless and dedicate it. The new procedures would be introduced for the presentation and consecration of Colours to 2 Infantry Battalion, City of Newcastle Regiment on 15 April 1956. In the lead-up to this ceremony, which was to involve Sir William Slim and be the first for a CMF unit since World War II, the new format was still being contested. The Reverend Dr Malcolm Mackay, general secretary of the Australian Council of Churches, in a letter to Menzies, wanted a ceremony that was “more widely acceptable and departing less violently from long-established custom”. He challenged the Prime Minister’s pronouncement that the Chaplains-General had been unanimous in their acceptance of the new order of service and claimed that Roman Catholics “have received an undue measure of consideration to the detriment of the much larger Protestant community and the nation as a whole”. The Minister for the Army, J.O. Cramer however, stood his ground.

It is instructive to now consider that while Service drill and ceremonial publications provide the early and usually proud British histories of many of the customs associated with the Colours, why three Chaplains now participate in their consecration is not.

Curiously, it was suggested to Menzies afterwards that copies of the correspondence between he and Mannix over the Duntroon controversy not be given to other departments but be kept only in Menzies’ personal files. Mannix however had the two main documents, his letters of the 9th and 16th of February to Menzies along with his version of events, published in the Catholic press at the earliest opportunity.

On 4 March 1954, Mannix received a congratulatory telegram from the Queen on the occasion of his 90th birthday.

NOTES
2. Defence Act 1903–1912, Part X – Miscellaneous, s. 123B.
3. The literature on Mannix is vast, but unfortunately most of it is, as the historiography on Mannix himself, biased. (There was even considerable controversy surrounding James Griffin’s entry in the Australian Biographical Dictionary). A fair biography is that by Brennan, and another by Gilchrist. The most detailed account of his life (it includes Mannix’s diary entries while he was in Australia), but least reflective and entirely uncritical, is the hagiography by Ebsworth.
4. The legislation made no provision for the age retirement of a Chaplain-General.
5. Mannix believed his stance was vindicated because Australian soldiers in France themselves voted against conscription.
6. Wilson was later shot by two Irish ex-servicemen on the steps of his London home.
9. In gathering ideas for this article, I am deeply indebted to Bishop John Aloysius Morgan who was Catholic Deputy Chaplain-General at the time of the 1954 Royal Tour and who succeeded Mannix as Chaplain-General. In an interview, Bishop Morgan provided valuable insights into the role and organisation of the Chaplains-General and the conduct and liturgy of the Colour consecration ceremony.
10. This policy was liberalised in the Services, as elsewhere, following Vatican II, which transformed the liturgy, image and attitudes of the Catholic Church and made ecumenism acceptable.

11. Apparently, and ironically for an Air Force occasion, McKell’s aircraft, an RAAF Dakota had been unable to leave Canberra because of engine trouble.

12. The RAAF Chaplains involved were E.F. Cooper (Anglican), and R.C. Russell (Presbyterian). Both were serving as Principal Chaplains in Melbourne.

13. Gilchrist, op. cit., p. 208. Gilchrist here cites Mgr Ken Morrison, who was senior Catholic Chaplain in the RAAF at the time.


15. A biographer recorded that one of the first things Mannix asked for following his arrival in Australia was a copy of the Australian Constitution. See Frank Murphy, Daniel Mannix: Archbishop of Melbourne, The Advocate Press, Melbourne, 1948.

16. Although no reference to any ongoing talks appears in the correspondence between Menzies and Mannix held in Menzies’ personal correspondence files in the National Australian Archives (NAA), the background to the “Duntroon Controversy” including the two letters Mannix sent to Menzies appeared in most Catholic newspapers after the ceremony. See for example the 4 March 1954 edition of The Catholic Leader, p. 9 or that of 18 February 1954 (NB the day after the parade) of The Advocate.

17. Letter from Bishop McCarthy to Chaplain Hoare dated 24 May 1953. Army Historical Unit. Henceforth AHU.


19. Menzies to Mannix, 27 January 1954, CRS M2576/1, Item 112, NAA.

20. Letter from Bishop McCarthy to Chaplain Hoare dated 11 February 1954. AHU.


27. SMH, 12 February 1954, p. 2.

28. Telegram Menzies to Mannix, 10 February 1954, CRS M2576/1, op. cit


33. Howard Sydney to Menzies, 17 June 1954, CRS M2576/1, op. cit.

34. J.S. Hayes to Menzies, 30 November, ibid.


36. There is a lengthy legal brief on the Duntroon matter in the Menzies files in the NAA; however, neither its author nor origins are specified. It recommended the separation of the religious and military elements of the ceremony, by for example, consecrating the Colours in a church or churches, and conducting the presentation later. This had a precedent in Malta. It was not the solution subsequently worked out for the Australian military. CRS M2576/1, op. cit.

37. Gilchrist, op. cit., p. 211. In Morrison’s account, as told to Gilchrist, the 9 February letter was typed by the owner of the hotel at Portsea, which judging by its quality gives credibility to this version.


39. According to the legal brief in the Menzies records in the NAA (see Endnote 36), the falling out of Catholics from parade while the consecration was underway is also untenable under Section 116, because it differentiates. It also deems that the imposition of any religious observance by the military and that strictly speaking (as opposed to its acceptability), would have to include the consecration service as subsequently agreed upon by the Chaplains-General, to be unconstitutional, a point that should be borne in mind.

40. Bishop Morgan believed that within the Army, through the manner in which the Chaplaincy Branch was organised and the Chaplaincy positions distributed throughout Brigade and Battalion levels and amongst the three denominations, with representatives from each of the three readily accessible, and through the
necessities of working together especially in wartime, that in the exemplary and cooperative conduct of all Chaplains, sectarianism within the Army was a dead issue. Interview with Bishop Morgan, St Christopher’s Presbytery, Canberra, 10 April 2000.

41. Bishop C.L. Riley, Bishop Morgan and Reverend Brooke (representing the Protestant Denominations) jointly conducted the Consecration.

42. The full service can be found in any of the Service drill manuals, e.g. DI (AF) AAP 5135.002 Manual of Drill and Ceremonial and the Army’s Ceremonial Manual.

43. “Consecration of the Colours”, Department of the Army, Victoria Barracks, Melbourne, 7 March 1956, CRS M2576/1, op. cit.

44. Mackay subsequently entered Federal Parliament as Liberal MHR for Evans (1963-72), and served under McMahon as Minister for the Navy (1971-2). In 1956, he was minister at the Scot’s Church, Sydney.

45. ‘Colours Ceremony Change Sought by Church Leaders’, SMH, 12 April 1956.

46. In addition to Bishop Morgan, I am indebted for their assistance in preparing this article to Wing Commander (Chaplain) Paul Goodland who arranged for me to meet the Bishop, to David Wilson, Executive Officer Historical Records-Air Force and to Bill Houston of the Army Historical Unit especially for material from the RMC archives.

47. From a note of uncertain authorship in Menzies’ personal files.

BIBLIOGRAPHY


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Over the past decade both the Revolution in Military Affairs (RMA) and Information Operations (IO) have excited militaries worldwide in general and the ADF in particular. There are several causal factors which led to this interest in the RMA; it is useful to list these briefly to better understand the causes of, needs for, as well as the different perceptions of, the RMA. These factors include:

First, the collapse of the Soviet Union and its Eastern Bloc satellites. Remaining the sole superpower, the USA needed to formulate a post-Soviet Union, post-nuclear military strategy and an associated restructuring of its forces to match the security and defence requirements posed by the post-Soviet Union “New World Order”, including dealing with several new “rogue states” (generally ex-clients of the former Soviet Union) and with local and regional conflicts increasingly based on ethnic or religious differences.

Second, a wide spectrum of conflicts occurred: the 1990-91 Gulf War, several UN-sponsored Operations Other Than War (OOTW), even the recent “humanitarian war” in Kosovo. The Gulf War, conducted by a US-led Coalition against Iraq, was preceded by a precision strike air war which neutralised Iraq’s command and control (C&C) and surveillance systems, resulting in a short, high-tech 100 hour-long ground war (the “Desert Storm” phase) which annihilated Iraqi ground forces. The Gulf War has sometimes been called the “First Information War” and, by the then-US Army Chief-of-Staff, a “Knowledge War”;

A number of recent developments, several information – and computer-based, have led strategists to conclude that a Revolution in Military Affairs (RMA) is in the making. In particular Information Operations (IO) and related concepts are seen as being central to such an RMA. This article critically examines this proposition, describes the current views on forms of IO and assesses whether these satisfy RMA criteria or whether IO are an EMA (“Evolution in Military Affairs”). Additional forms of IO, including a linkage to Knowledge Warfare, are proposed which could better match the characteristics and outcomes of a true RMA.
services provided by the aggregate of systems under the (awkward) collective abbreviation, “C4ISTAREW”. In turn this has resulted in the recent, more refined concepts of “Network Centric Warfare” (NCW) or “Network Enabled Warfare” (NEW).

Fourth, this ubiquity of the PC and particularly its connectivity in LANs and, globally via the Internet, has led to three further major developments. First, the computer is increasingly a source of information (and hence also of disinformation) and a means of mass communications. Second, the workings of most sectors of modern societies rely now on computers and “critical information-based infrastructures” (such as power generation and distribution, transport communications, telecommunications, banking and finance, emergency services etc.). Third, both the global and national computer networks are increasingly significant enablers of national wealth creation. Consequently national information-based infrastructures are potential targets for individuals, organisations and states hostile to the national interest, who wish to inflict serious economic and societal damage to achieve some political, economic or military advantage.

Fifth, two consequences of the “Revolution in Business Affairs” (RBA) of the late 80s have been, (a) the (ongoing) review of core/non-core military roles and services and the resultant outsourcing of some of these to the private sector – for cost-cutting reasons and Defence budget economies; and (b) the increasing reliance on commercial quality COTS (Commercial-off-the-shelf) products and services, particularly IT-based. The consequences of this are increased vulnerabilities of key C4ISR processes and sub-systems due to IT-based COTS development and implementation by untrusted third parties, software implementation complexities not lending themselves to credible compliance to adequate standards and, increasingly, monopolistic, single-source suppliers.

Sixth and last, some philosophical underpinnings have been formulated, asserting that modern and successful societies necessarily are transitioning into “Information Societies” – from the earlier “Agrarian” and “Industrial” societies - and that accordingly, conflicts and war need to match the “age” in which they are conducted. Thus, kinetic, mechanical war in physical space is appropriate to the Industrial Age, and “information war”, conducted in cyber- or virtual space, is appropriate to the Information Age.

This recent confluence of geo-political, military, technological, societal and even philosophical factors has led some strategists to conclude that a dramatic change in military strategy and warfighting is necessary, giving those militaries that are recognising this, and reorganising themselves accordingly, a decided comparative advantages over those lagging – in much the same fashion that in the business sector, the prize goes to those that take rapid advantage of new innovative enabling technologies, new business processes and new organisations. Following the Revolution in Business Affairs, comes the Revolution in Military Affairs! A further consequent conclusion was that the central driver of any such RMA is information and associated IT-based processes and operations.

To assess this, particularly the importance - even the centrality – of information and information-based operations (IO) to the RMA, what constitutes an RMA needs examination. This article considers and discusses whether an information-based RMA is in fact in the making; what has, or needs, to be done for it to be a “true” RMA – as distinct from a natural “Evolution in Military Affairs”; and examines the promise and role of IO in contributing to – even enabling – such an RMA.
Characteristics of an RMA

The literature on the RMA is extensive, with (sometimes) widely varying viewpoints on the nature of RMAs and their characteristics. But most agree that “military revolutions”, to warrant the label, have several necessary components, namely:

1. technological change;
2. operational innovation;
3. organisational adaptation; and
4. systems development to integrate the above into an effective and efficient whole.

To this one should also add:
5. a demonstrated, successful “first use” in conflict by an innovative commander.

Individually, the above are necessary, but not sufficient, conditions for an RMA. Additionally, outcomes are required: gains and changes resulting from a candidate RMA, when applied in conflict, must be so fundamental and dramatic that they make previous key elements of military power obsolescent - weapons, doctrine, organisations, and the way conflict is conducted. Consequently it is a big ask for anyone to state with conviction whether this or that technological development or confluence of several new developments qualify as an RMA.

Hindsight, backed by factually-based outcomes of battles, campaigns and wars, and post facto analysis, make this possible. Consequently lists of past RMAs are common. But ante facto predictions of new RMAs are more difficult. This is the position of the current “RMA” predicated on IT-based technologies. An example of an a priori predicted RMA, that of air power and specifically strategic bombing, is a case in point: the similarities between the promises of strategic bombing and IT-based/Information Operations as military revolutions are strikingly similar.

The Cautionary Tale of Strategic Bombing, a Military Revolution

An earlier putative RMA, strategic bombing, provides useful and cautionary lessons for an IO-based RMA. In the early 20s, a number of visionary theorists, led by Italian General Giulio Douhet, proposed the formation of independent air forces as the lead arm of future national military forces, based on their observations of the impasse by, and slaughter of, mass armies bogged in trench warfare, and on some limited examples of successes of German bombing of England and on the use of aircraft on the Italian front in WWI. By hurdling over massed land forces locked in trench warfare, they argued, a strategic bomber force would attack the adversary’s most important war-making capabilities - industries, farming, communications and morale of civilian populations - creating mass disruption and panic among the population and Government. Victory would be swift and certain - after all, “the bomber would always get through”. Experience did not follow promise. The German Air Force during the Blitz on England in 1940, the “1000-bomber” raids by the RAF and the USAAF on German industry and cities, and the great USAAF air raids on Japanese cities neither broke civilian morale nor closed down any war industries. Only with the advent of the bomber as a long-range delivery platform for nuclear weapons did strategic bombing achieve its potential. Douhet et al., like many military prophets before them, saw the benefits only, ignoring the practical difficulties of long-range bombing, including, inter alia: accurate long-range navigation to the target, target identification in weather or at night, deviations from aim-points of free-falling, “dumb” bombs and so on. And, if strategic bombing was so efficacious as claimed, the development of counter-measures to strategic bombers (such as fighter defences, early warning detection (implemented in the event by surveillance radar), the development of air defence systems (such as implemented by the RAF by late 1939 and later by the Germans), and the later (electronic warfare) counter-measures, or their equivalents, should surely have been
anticipated. These were ignored by the prophets of strategic bombing; while the will and resilience of civilian populations in adversity and during continuous bombing, seem not to have been factored in at all.14

The similarities between the promises of strategic bombing and Information Warfare (IW) and Information Operations (IO) as military revolutions are striking and worth noting. First, strategic bombing and independent air forces extended conflict into the then-new, third dimension, aerospace; IW/IO are to be undertaken in the new, fourth, dimension of conflict, that of virtual or cyber-space. Second, the objectives of both strategic bombing and (strategic) IW are mass disruption to critical strategic, economic, and societal (infra) structures (see later). Third, the problem of precision targeting of, say, a specific factory in strategic bombing – and its difficulties which necessarily led to the less precise practice of “area bombing” – has its IO/IW analogies, namely the (current) difficulties of targeting precisely specific targets, be they individuals, specific computers or specific information. And last, there are the dangers of ignoring the certainty of adversaries developing and deploying defensive countermeasures to IW/IO, and not factoring such into IW/IO cost-benefit studies, as they were not, earlier, for strategic bombing.

Information Operations (IO) and its Components

There are numerous definitions of IO.15 At its simplest, IO are deliberate, integrated and coordinated information-centered activities and actions undertaken to achieve a military advantage.16 More formally, the ADF (interim) definition of IO is ... “actions taken to defend and enhance one’s own information, information processes and information systems and to affect adversary information, information processes and information systems”.17 The activities or actions include:

a. Targeting and exploiting or impairing an adversary’s information,18 information/C4ISREW systems and information-based military and defence business processes. Broadly these are offensive IO activities or actions.

b. Protecting our/friendly information, information/C4ISREW systems and information-based military and defence business processes from an adversary’s offensive IO activities and actions. These are defensive IO activities or actions.

c. Enhancing the quality of our/friendly information and the performance of our information/C4ISREW systems and information-based military and defence business processes, through effective information and knowledge management.

More recent considerations have extended the ADF IO role to protect and attack the key process of decision-making, thus: “IO consists of the systematic coordination of a range of information related activities to produce a planned or tailored effect on the decision making of an adversary and to protect our own decision superiority”.19 This casts ADF IO as the ensurer of Decision Superiority, a key ADF warfighting concept and a force multiplier, offsetting comparative disadvantages in force size or equivalence in weapons technologies.20 This ADF IO role differs somewhat from the US DoD envisaged role; there the key outcome of the effective conduct of IO activities is “Information Superiority”, a comparative and competitive advantage bestowed to the opponent who both practices IO more effectively and better utilises the resultant information advantage during peacetime, rising tension and during military conflict. Information Superiority is defined as “the capability to collect, process and disseminate an uninterrupted flow of information while exploiting or denying an adversary’s ability to do the same.”21 As seen later, Information Superiority is seen as central to the (US) RMA.

ADF IO is partitioned into three major categories or branches: IO-Offence, IO-Defence and IO-Support, which follow from the ADF IO
definition; each category has a number of component elements, as shown in Figure 1. The order of the component elements in each branch are such that offensive, defensive and support aspects of each component (e.g. Electronic Warfare (EW), Navigational Warfare, Psychological Operations (PSYOPS) etc.) align horizontally. The meaning of each component element in Figure 1 is self-explanatory and will not be defined further.

The IO components, EW, PSYOPS, Military Deception, Operations Security (OpsSec) etc. betray the paternity of IO. IO, in the first instance, are aggregated information-centred activities and actions that militaries have practised since the dawn of conflict – particularly deception, PSYOPS and OpsSec - augmented by newer computer network-centred and precision navigation activities, selected, coordinated, and deconflicted into an integrated whole, to provide synergised benefits to the conduct of military operations.

Different IO components are conducted in different dimensions or environments. For example, EW and NavWar are conducted primarily in free space (the “ether”) at the RF signal level: RF signals are intercepted, jammed, their sources located etc. “Destruction” and its associated physical and personnel security are conducted in physical, 3-D space. Computer Network Attack and Defence are conducted in cyber-space. Military deception is more complex: it can be undertaken in physical space (such as camouflage of military assets and facilities); in free space/ether (such as platform or facility signature modification); in (human) “mind”-space, for PSYOPS, disinformation etc; or in all dimensions, for integrated, grand deception.

The aforementioned underlines the fact that the above decomposition of IO into its constituent elements is only one of several possibilities; the decomposition of Figure 1 follows from the ADF IO definition. Other decompositions of IO include: by “proactive IO” and “reactive IO”; by Battlespace dimension or environment in which IO is conducted; by IO targets; by IO “weapons”;
and so on. Figure 2 captures some aspects of alternative decompositions of IO. In particular it brings out and emphasises the importance of the virtual “mind/decision” space as a legitimate and increasingly important dimension of current and future Battlespaces and of IO targets, both of which are not immediately apparent in or from Figure 1.

Types and “Flavours” of IO

IO are still evolving and hence it is not surprising that there are multi-views of IO and different “flavours”. It is convenient to consider the variants of IO from two aspects:

a. Battlefield IO in direct support of military operations;

b. Strategic IO and other forms of non-military forms of IO.

Battlefield IO in Support of Military Operations

**IO Component Warfare**

This is the ad hoc employment of IO components (EW, NavWar, PSYOPS, Military Deception, OpsSec, Destruction) in support of conventional military operations. With the traditional weak coordination and little or no attempt at deconfliction between the individual components, this flavour of “IO” is included under the rubric of “IO” for completion’s sake only.

**Information Enhanced Warfare (IEW)**

Information Enhanced Warfare is warfighting based on the coordinated use of C4ISTAR assets and OpConcepts linking sensors, decision-makers and response elements (“shooters”). It relies on precision surveillance, precision command and control (C&C), precision location and navigation, precision weapons, synchronised/precision manoeuvre, resulting in “precision warfare”. Information Enhanced Warfare is underpinned by Information Superiority (mentioned earlier), which delivers the right information, at the right time to the right people, in an assured manner. Other associated key concepts are “Shared Battlespace Situation Awareness” (the identification of patterns in the battlefield situation), “Battlespace Knowledge” (the extrapolation from Battlespace Situation Awareness of enemy intent and likely future situation), “Information Richness” (the quality of information relating to the Battlespace) and “Information Reach” (the degree to which
information is shared). Additional key concepts under development include Network Centric Warfare (NCW) or Network Enabled Warfare (NEW) which are the “translators of Information Superiority into Combat power” by linking information sources (sensors), decision-makers (C&C centres) and response elements (shooters) by means of networks (or by the earlier concepts of purpose-assembled “system-of-systems”).

The objectives and implementation of Information Enhanced Warfare is to support and complement conventional military operations: its metrics of effectiveness are higher enemy casualties, in a shorter time, fewer combat platforms, over a greater Battlespace area. It is currently the most favoured form of IO by US DoD and “the foundation upon which Joint Vision 2010 is to be built.”

Command and Control Warfare (C2W)

During military conflict, Command and Control Warfare is the targeting of, and exploiting and impairing of the adversary’s Command and Control (C&C) processes and C4ISTAR systems, assets and associated processes, while protecting own/friendly C&C processes and C4ISTAR systems, assets and associated processes from similar adversary actions. Effective C&C is a necessary – but by itself not a sufficient condition- for successful conflict outcome. Consequently an adversary’s C&C system is a high-value objective in its own right and as the associated processes, systems and assets are either information or IT-based and quite properly fall under the IO rubric, C2W can be considered as an IO in its own right. C2W evolved from C3I processes and systems, countermeasures (C3ICMs) and counter-countermeasures (C3ICCMs) of the 80s; was the IO “flavour-de-jour” of the early 90s; and now has been subsumed under general IO.

Military IO

Military IO are integrated, coordinated, synchronised and deconflicted Defensive-IO, Offensive-IO and IO-Support actions and activities undertaken during rising tensions and conflict, either in support of conventional military operations or as missions in their own right.

Military IO utilises all the IO component elements shown in Figure 1 necessary to achieve the (Theatre) Commander’s intent and the desired “end-state” in the Theatre Area of Operations.

Information Campaigns

Information Campaigns are the integrated use of mass media, Public Information, Civil Affairs, plain, old fashioned public relations and related “soft IO” measures to influence local and other stake-holder populations, particularly during Operations Other Than War (OOTW) to achieve the desired end-state in the quickest, efficient and effective way consistent with the OOTW Chief Authority. Operations may include peacekeeping or peace enforcement. Information Campaigns are an increasing and highly-leveraged activity for militaries. “Winning the hearts and minds” of local civilian populations who have been traumatised (earlier) by armed people in uniform is a delicate art, requiring knowledge of, and displaying sensitivities to, local culture, customs and immediate past history, while simultaneously being sensitive to other target populations, such as adversary, regional and world opinion, who will question the motives and interests the peace-keepers/enforcers are representing. Recent examples include the several conflicts in the Former Republic of Yugoslavia, and by the ADF, in East Timor and in the Solomon Islands.

Strategic and Other Non-Military Forms of IO

Information Warfare

Information Warfare (IW) is an omnibus term – often inexact – covering a wide
spectrum of hostile activities, predominantly targeting computer networks and information systems. It includes hacking activities, cracking (computer-based criminal actions), all the way to sophisticated, structured attacks on computer networks. Motives are varied: peer-pressure bravado, boredom etc. by hackers; monetary, or for other, gain by criminals; revenge and like malicious motives by disgruntled employees or insiders; industrial espionage or for competitive gain by or on behalf of competitor companies; achieving political objectives by issue-motivated groups, terrorists etc; intelligence gathering activities by Foreign intelligence Services; and so on. In cases where the targets are Government computer networks or information systems, “IW” is an increasing form of asymmetrical warfare against information-rich or computer network-rich nations.

**Infrastructure War**

Infrastructure Warfare are “random” or coordinated attacks by issue-motivated individuals or groups, terrorists or foreign states or their agents on a nation’s key or critical information-based infrastructures to create disruption, fear and like effects to achieve political, military objectives or extract some political gains. The target infrastructures include power generation and distribution, physical communications and traffic control (air, rail, road, shipping), telecommunications, electronic mass media (radio, TV), banking, ATMs, and finance, emergency and Government services and so on. Weapons can be computer-based, HERF (high-energy RF weapons) and “plain, ole” physical destruction. Infrastructure warfare is another potential future form of asymmetric warfare.

**Strategic IO/IW**

An extended form of Infrastructure Warfare, conducted by one state against another and targeting, in a synchronised and coordinated manner, a nation’s critical information-based infrastructures, to create mass societal disruption and gain a strategic advantage, even to forestall future or extended conflict (whence the term “electronic Pearl Harbor”). When the capabilities of two adversaries to conduct Strategic IW are similar (“symmetrical”), Strategic IW will have analogies with the nuclear arms race: IW deterrence, pre-emptive IW strikes, MAD (mutually assured destruction) of infrastructures and so on.

**“Soft War”, a Higher Form of Warfare**

A postulated form of non-physical and non-violent form of strategic IW which imposes one nation’s will on another nation through targeting its leadership and population, their perceptions, beliefs and decision-making processes, by influencing, manipulating and controlling the adversary nation’s information and information flows.

Figure 3. Application of IO Branches/Components across the Conflict Continuum
The objectives are to deter or delay hostilities between the two nations, or disrupt the preparation for such by the targeted nation. “Soft War” has the potential of being a higher, softer form of conflict resolution by conflict avoidance, or conflict delay, or conferring a benefit to the successful practitioner, by extending the preparation and mobilisation time if conflict appears to be unavoidable. Consequently it, if the capability for such is implemented, is a form of IO/IW which satisfies better the characteristics necessary to qualify as an RMA, than the previously described forms of IO.

Application of IO/IW

Figure 3, often reproduced, shows the conventional application of the various components of IO undertaken during the different phases of the conflict continuum. Thus both Defensive IO and IO- Support are undertaken continually in peacetime, during conflict and after, while Offensive IO is applied during rising tensions and during conflict only; the intensity of each IO component depends on the particular instant within the phase of the conflict continuum.

An important unintended consequence of Figure 3 however is the implicit association of IO/IW with conflict: each of the three branches of IO are presented as, and associated with, applying to or supporting military operations across the conventional conflict continuum only. The consequence of this is the conventional wisdom that IO/IW in all its aspects necessarily apply to and are undertaken during conflict only. More important, the potential of proactive IO/IW outside conflict does not readily flow from Figure 3, nor therefore, does the potential for any other new applications or creative roles for IO become immediately apparent.

Potential of IO to Manage Rising Tensions and Conflict

From Figure 4 which shows a typical “conflict intensity curve” and its dependence on the phase of the conflict continuum, both the costs of engaging in, and damage due to, conflict can be considered to be (approximately) proportional to (Conflict Intensity x Conflict Duration).29

However, due to a number of factors such as the ubiquitous presence of transnational...
media, of global media networks and their role in shaping of mass and world opinion, the increasing influence of NGOs,\textsuperscript{30} an increasingly interventionist UN and regional alliances such as NATO, increasing sensitivities to humanitarian values and, despite popular perceptions, the sensitivity of governments to all of the aforementioned, there is increasing popular aversion to physical destruction associated with conflict, and particularly to images in the mass media of dead civilians or soldiers in bodybags. Consequently there is universal pressure to minimise both the intensity of conflict and its duration – and simultaneously the overall cost of conflicts.

Only the irrational will argue with Sun Tzu’s maxim: “to subdue the adversary without fighting him is the acme of skill”.\textsuperscript{31} The national ends for conflict i.e. the “desired end-state”, are more important, than the means, of which engaging in (successful) military conflict is but one means. Figure 4 shows two possible conflict curves, both starting at the same “peace” start point and both terminating at the same end-state of residual (low)level/absence of conflict. The upper curve represents the achieving of the desired end-state through conflict. Implicit in this curve is the failure of diplomacy, possible ineffective mass media presentation of the issues, the sending of wrong signals to adversary leadership, or to their opinion-making elites or to the adversary’s population and so on. Or perhaps the “Information Campaign” that was mounted during rising tensions “to win the hearts and minds” of the adversary population, was poorly planned; or poorly targeted; or possibly not tried at all.

In comparison, the second/lower curve shows initially a rising curve corresponding to rising tensions, peaking and then rapidly trending towards the desired end-state. Conflict was avoided, as diplomacy was successfully engaged and implemented, an information
campaign effectively targeted relevant audiences and the media presented themes and messages successfully, all effectively coordinated and synchronised in a Softwar-centred campaign. This second curve is clearly more desirable: conflict has been avoided, physical damage and destruction avoided, dollar costs have been negligible. The assertion here is that the difference between the two possible courses of action (CoA) facing National Executive Authorities, conflict or Softwar, to achieve the end-state is the effective application of IO (of the “Softwar”-flavour) during the rising tensions phase, the region where actions - appropriate or mistaken - are highly leveraged. Another difference from the IO hitherto discussed is that “Softwar” needs necessarily be a whole-of-Government (WOG) approach and not related to Defence/ADF only. Yet another difference is that active application of IO would be in the rising tensions phase, even preceding this; this does not strictly accord with current views of the application of “Offensive IO” during rising tensions and during conflict only. Thus a better categorisation of IO may be “proactive-IO” and “reactive-IO” in lieu of Offensive-IO and Defensive-IO.

One deduction from the above is that the fuller potential of IO may be realised outside of conflict than during conflict; in other words, IO may have a more important and cost-effective role in managing rising tensions and in avoiding conflict than as a provider and ensurer of Information Superiority during conflict, even if it reduces the duration, or level of intensity, of conflict!

Figure 5 illustrates this point further.

The figure shows a potential conflict is in the making (time = “now”). Say, seven possible CoAs exist. CoA “1”, “3” and “4” have different IO strategies applied, in different mixes, at different times, with different intensities (i.e. different IO resources allocated). The IO applied for CoA1 is most effective, applied effectively during rising tensions; IO/“Softwar” is effective, conflict is avoided. For CoA3 and CoA4, IO is applied conventionally in support of military operations after conflict has broken out; the desired end-state is achieved but conflict costs and physical damage (indicated by the area under the conflict curve) are nevertheless substantial. CoA7 has no IO applied; not only is the desired end-state not achieved, the conflict is lost and damage and costs are excessive.

Figure 5 illustrates the potential of IO/Softwar. To give the concept more credence, the targets for IO/Softwar during pre-conflict/rising tensions phases need be identified and the feasibility of their successful impairment commented on. Such targets are the adversary’s information-centred political, Defence and military processes and associated decision-making used by the adversary during the pre-rising tension, rising tension phases and transitioning into the conflict phases. Without being too prescriptive, these could include: a coherent, consistent and truth-based set of themes relating to the pretext, or issue(s), which are shaping up as the potential casus belli, and their presentation to our advantage to the various target populations via public diplomacy, to the media and conflict-mediating international bodies; actions based on or targeting processes which enhance credibility of our capabilities and deter (or delay) the adversary’s processes directed towards conflict, to our advantage; actions based on or targeting processes which prevent, delay or impair the adversary’s formulating and selecting CoAs to our advantage, including the targeting by PSYOPS or other means of the adversary leadership and decision-makers and opinion-shaping elites; actions based on or targeting processes which prevent, delay or impair the adversary’s mobilisation to our advantage; actions based on or targeting processes which prevent, delay or impair deployment of the adversary’s forces to our advantage; and actions based on or targeting processes which, in general, buy
time to our advantage. There is a progression from “proactive IO” actions to “offensive IO” actions requiring appropriate Intelligence support to characterise the adversary’s processes, assess their robustness and vulnerabilities, and to match appropriate Softwar techniques against the indicated or known target process or system vulnerabilities so that the impact of their deployment matches the previously assessed and (previously simulated) predicted damage.

The “True” Role of IO: Defence and Military Business Process Impairment

Both what is being targeted by IO and the real objectives of IO deserve closer examination.

The previous section, in suggesting appropriate IO targets during the pre-conflict and rising tension phases, identified Defence and military processes and the associated, embedded decision-making as targets. On reflection this is commonsense and is even identified in the ADF IO definition ("...defend and enhance one own’s... information processes (and) affect adversary ... information processes ...”). A specific computer network or an information channel is not protected or targeted for attack because it costs say $XK to replace if destroyed or disabled but because, by destroying or disabling it, the military business process it directly supports is delayed or corrupted and further, by the “ripple effect”, it degrades or possibly unhinges the synchronisation between it and a number of other military business processes, degrading the quality, or possibly even the execution of a military operation which relied on the process which had been targeted by IO. (The benefit of degrading or preventing the effective execution of the adversary’s military operation clearly would be much greater than $XK; and the costs incurred by the adversary in planning and deploying for that operation would also clearly have been orders higher than $XK!)

The targeting – and defending – of processes as central to IO have been implicitly recognised in several flavours of IO. Thus in the C&CW flavour of IO, the objectives are to enhance the performance and quality of our/friendly OODA loops, while degrading the adversary’s OODA loops, thereby gaining a comparative Command and Control advantage; the OODA loop consists of several key sub-processes the critical one being decision-making - whence decision-making is often presented as the key target of IO. The more recent formulations of IO (such as Information Enhanced Warfare) to ensure own Information Superiority have, as the eventual objective, the underpinnings of NCW/NEW and their associated processes “to increase the tempo of operations, the speed of command and (to) achieve greater lethality and survivability”.

The assertion is made here that the targets for IO are wider than just decision-making processes or those that primarily ensure Information Superiority.

a. The targets for IO are an adversary’s political, defence and military business processes.

b. The objectives of IO are to impair or unhinge an adversary’s business processes while protecting our/friendly political, defence and military business processes from like actions by adversaries; and

c. Decision-making still remains the critical process, requiring to be protected by, and targeted by, IO. As decision-making is embedded in, and integral to, every business process it needs be differentiated from the specific defence and military business processes with which it is a part, since it is these major processes – and the decision-making within these – that are being targeted for impairment.

Military operations – or even wider still, the business of national Defence – consists of the carrying out of a number of “business processes”, supported by associated business
process support tools and facilities, directed, managed and coordinated by assigned and appropriately empowered military and officials/staff. A (business) process is a systematic series of actions or operations undertaken for some specified end; it necessarily includes decision-making within itself. Military business processes range from the simplest Standard Operating Procedure (SOP) to the single-Service and Joint Universal Task Lists (UJTL), which formalise the step-by-step activities necessary to plan and execute various military operations. Business processes embody culture, custom, organisation structure, doctrine etc and take cognisance of the support tools and infrastructure that the organisation relies on. Very importantly, business processes embody and reflect organisational knowledge. The rapidity of action, efficiency of execution and effectiveness of Defence and military operational outcomes is dependent on the knowledge contained in the business processes employed and in their executors, with knowledge encompassing training, experience, professional mastery, these in turn based on relevant, past military experience and lessons.

It follows that disrupting and unhinging an adversary’s military and Defence processes is a very high-value activity and, as now shown, the key objective of IO.

Figure 6 shows a representation (“architecture”) of the formulation process of military operations (the output at the top) through a sequence of high-level business processes, shown in a series of layers, each layer showing a number of related, constituent military business processes. (Similar layered diagrams for the management and conduct of Defence or the management and conduct of diplomacy can likewise be formulated). Underpinning this whole process is the “u-shaped layer representing the armed forces resources and the related information- and knowledge-sources available to them, the Defence Information Infrastructure (DII), the National II (NII) and the Global II (Allies etc.). The first layer proper contains the ISTAR
(Intelligence, Surveillance Target Acquisition and Reconnaissance) and relevant System-of-Systems processes and systems, provides the situation picture within the area of operations. The information and intelligence therefrom, through fusion, reasoning, and evaluation provides understanding of the situation i.e. “situation assessment” – whence the second corresponding layer. Given the resource constraints, ROEs (Rules of Engagement), desired end-state and so on, the collective of business processes labelled “Appreciation and Planning Processes” is undertaken, to select CoAs, undertake planning, and issue commands, orders, directive and tasking. These are then executed, in the top layer, as the military operations processes in an integrated, coordinated manner through appropriate battlefield warfighting business processes. Where not explicitly stated, each of the above meta-business processes consists of a numbers of separate military business processes, decomposable into “tasks” such as listed in UJTLs. The decomposition of the above military operations formulation process into the above four layers should be recognised as another instance of the universal OODA loop process, with the ISTAR layer corresponding to “Observe”; the Situation Awareness layer, the “Orient”; the Appreciation and Planning Processes layer, the “Decide”; and the Military Business Process Layer, the “Act”.

When selecting and targeting an adversary’s particular business process to impair or disrupt, the specific business sub-process sequence needs be identified and appropriate IO techniques executed in appropriate sequences and amounts. Some of these IO techniques are indicated against the corresponding process layer. The “starbursts” represent a degree of successful impairment; these propagate across from business layer to layer and aggregate the effect, so that the quality of the output, the aggregated military operations plan and, possibly, its ability to be executed, are impaired (indicated by the qualifier “quality of…”)

The potential of IO targeting critical adversary military business processes (and likewise adversary Defence and diplomacy business processes) across the conflict continuum phases need be accepted as the main objectives of developing and acquiring IO capabilities and using them operationally.

Military Business Process Impairment: A True Form of Knowledge Warfare?

Finally it is important to note that business processes embody the knowledge specific to the roles, functions and objectives of the organisations that employ them. Exploiting, impairing, disrupting or unhinging an adversary’s critical military businesses while protecting our military business processes from like adversary actions, through appropriate IO, is sensibly equivalent to attacking, exploiting impairing and disrupting applied knowledge-based processes. It follows that IO directed at impairing Defence and military business processes is a true form of “Knowledge Warfare”.

In Dibb (99) it is suggested that the ADF concept of “Decision Superiority” is enabled by “Knowledge Operations” (KO) analogous perhaps to the US concept of Information Superiority being ensured by IO, discussed earlier. The reasoning underpinning, and development of, this concept is not mature and the distinctions between KO and IO blurred. But it is suggested that Decision Superiority – and hence KO – “need to be paralleled by decision superiority at the national strategic level”. The concept of Knowledge Warfare proposed here, as conflict between adversaries exploiting, attacking, and defending each others’ military, Defence and diplomatic business processes across all phases of the conflict continuum, is consistent with “KO paralleled at the national strategic level”.

Since then, the ADF concepts of Decision Superiority and the “Knowledge Edge” have
been clarified. Making rapid and high-quality decisions is a necessary condition for conducting successful military operations. The ability to make such decisions depends on several factors:

a. Provision of pertinent, accurate information, information services and associated infrastructure;

b. Command and control structures and doctrine;

c. Appropriate leadership and command authority;

d. Level of education, training and professional mastery;

e. Decision-making and learning cultures of the organisation; and

f. Team cohesion and morale.

Militaries which have a comparative advantage over adversaries across this range of factors have a “Knowledge Edge”. And this Knowledge Edge directly facilitates and enables Decision Superiority.

Knowledge Warfare gives a focus for IO – whether called “Offensive” IO or “proactive” IO – to be planned and undertaken in its own right, targeting critical diplomatic, Defence or military business processes and their associated, embedded decision-making, during pre-conflict or rising tensions, including processes supporting preparation, mobilisation or deployment for conflict. And if conflict nevertheless breaks out, the better-developed forms of IO to support conventional military operations will still need to be available and operationally used.

The Intelligence Support requirements in characterising and validating the critical military, Defence and diplomatic business processes of potential or actual adversaries may take time and resources, as will analyses to determine their vulnerabilities and the matching of appropriate IO techniques to impair them. But by their nature, military business processes change far less frequently, and hence last longer. Although military business processes may, on the surface, have generic similarities and hence be capable of satisfying generic models, quality Intelligence on the key military business process of adversary decision-making is necessary, in particular on those culture-dependent methods of reasoning, inferring, deducting etc.

IO/Knowledge Warfare is ripe for further development but is outside the scope of this article.

**IO: A Cornerstone of an RMA?**

So, after describing the present and potential forms of IO, we return to the question: *Are IO a cornerstone of an RMA?* To answer this we apply the general characteristics required of an RMA, listed earlier.

Information Enhanced Warfare resulting in “precision warfare” and its associated variants, NCW and NEW with IO integral to them and primarily to ensure Information Superiority, do not qualify, in the opinion of the writer, as an RMA or as cornerstones of an RMA. The successful conduct of war has always relied on information to reduce the commander’s uncertainty regarding the battlefield situation, the intent of the enemy, or the enemy’s decision-making. Formalising and centralising the collection, assessment and distribution of information, and orders, directives and tasking by networking ISTAR and C&C assets and “shooter” elements is a natural evolution and utilisation of technological opportunities; these forms of IO more appropriately satisfy an “Evolution in Military Affairs” (EMA). IEW, NCW, NEW, Information Superiority and so on meet the RMA criteria of technological change and systems development, partly meet operational innovation, but have yet to demonstrate any significant organisational adaptation let alone the formation of a specialist “Information Corps” or equivalent to implement and conduct operations.

The several, various forms of Infrastructure Warfare and Strategic IW are postulated forms
of new forms of warfare. Discussions - in the professional literature - on these concern themselves with defences against these forms of warfare, rather than how to organise for, resource and conduct them.

However the remaining forms of IO, Command and Control Warfare, Information Campaigns and “Softwar” do qualify, - again in the opinion of this writer - as candidates for true RMAs, once they are better defined, developed and accepted.

• Each form and, in particular, the general “Softwar”, target a (or several) specific military business processes, and are extendable to target the wider Defence, diplomatic and OOTW business processes.

• Softwar, in particular, takes IO out of the limited choice “conflict box” and extends “proactive IO” across the whole conflict continuum, in particular, to the pre-conflict stages; and exposes Softwar’s potential for conflict management and conflict avoidance. It affords a nation a graduated response to developing crises or conflicts and more choices.

• Each of these forms of IO target “processes”, and not objects such as facilities, computers and networks, communications links, Information Systems, or even just information (although all of the latter may be targeted to achieve the higher objective of impairing the process they support).

• Each of these forms of IO minimises, potentially eliminates, physical damage or destruction, in keeping with popular expectations.

• Initially beginning with OOTW, effective Softwar will necessarily require a “whole-of-Government” (WOG) effort. Any future Information Corps/Regiment/ Battalion or equivalent to conduct IO/Softwar will likewise be drawn from necessarily appropriate WOG expertise and resources.

• Being about attacking, exploiting, impairing, disrupting and unhinging adversary, or defending friendly, business processes, which inherently contain the domain knowledge of the roles, functions and objectives of the organisations being targeted, these forms of IO qualify as Knowledge Warfare. Successfully implementing IO will increase our comparative military advantage and increase our (comparative) Knowledge Edge. Developing, acquiring capabilities, and organising militaries – or WOG entities – to plan and conduct Knowledge Warfare in the virtual space where such processes reside, qualifies as a RMA.

Figure 7 shows the bi-polar Clauzeitwitzian paradigm, that “war is mere continuation of policy by other means”. If traditional diplomacy, through its repertoire of persuasion, shows of force, threats etc. is not successful in avoiding conflict, then conventional or “kinetic” war, conducted in physical space, to

![Figure 7. Traditional ("Clausewitzian") View of War: War is a mere continuation of (a nation’s) policy by other means, leading to Limited Choices for Nations.](image-url)
achieve national objectives, often leading to disintegration of the adversary’s leadership and policies, results. A nation’s choices to pursue its national aims are thereby limited.

IEW, NCW, NEW fall into this traditional pattern. They provide modern, high-technology support to conventional, albeit precision, high-lethality kinetic warfare-based military operations.

Figure 8 illustrates the additional choices offered to nations with a future operational Softwar capability. The top layer, as in Figure 7, relates to impending crises being managed by diplomacy and supporting media and Information Campaigns. If diplomacy is not successful and tensions continue to rise, “pre-conflict phase” Softwar/IO is implemented (Layer 2), targeting adversary military and Defence business processes applicable to this phase (adversary’s mobilisation, transportation, pre-deployment etc. activities); possibly even – depending on the adversary’s societal, economic and infrastructures and own capability – implementing Infrastructure Warfare and Strategic Information Warfare.

Again if this phase of Softwar activities are unsuccessful, and conflict is imminent, the “conflict phase” of Softwar IO are implemented (Layer 3), attacking critical military and Defence business processes, such as C4ISTAR processes, and adversary Command and Control in particular (i.e. through Control and Control Warfare). Most likely, in parallel, conventional military operations (bottom, Layer 4) will be engaged in with Information Enhanced Warfare in its particular modern forms (e.g. NCW, NEW or their equivalents). The four levels of applying IO widen the choices open to nations with a Softwar capability to manage potential conflict. The level of sophistication, as well as public and world audience acceptance, rises from the bottom (conventional war with great

Adapted and augmented from J.J. Schneider, JFO, Spring, 1997.
physical damage, and human casualties etc.) to the top (diplomacy backed by media/information campaigns with little or no physical damage and few if any human casualties). Because Softwar/military business process warfare/ Knowledge Warfare offer the promise of not only degrading the quality of conventional military operations, but more importantly, offer the potential for managing rising tensions and even avoiding conflict, it does qualify, if it realises this potential, as a true RMA.

IO/Softwar/Knowledge Warfare: The Way Ahead

Accepting that IO/Softwar/Knowledge warfare as described above has the potential to be an RMA, and wishing to avoid the hyperbole of the early proponents of and independent Air Arm and Strategic Bombing, and the consequent mistakes (and arguably, national mis-investments in strategic bombing capabilities) what is a sensible “way ahead”?

First, comprehensive and objective analyses are needed, including:

- The feasibility of, and methodologies for, characterising key adversary military and Defence business processes.
- Formulation of an integrated IO/KW CONOPS, based on a WOG approach.
- Development of realistic, do-able and usable IO/KW planning process and support tools.
- Formulation of sound analytically-based and measurable metrics for each targeted business process.
- Evaluation of concepts using appropriate wargaming.
- Investigation, and as necessary, development of roles, responsibilities and functions for a Joint/WOG IO/Cyber Force.
- Formulation and joint development of Coalition IO/KW requirements.

Second, undertake the development and acquisition of an IO/KW capability, including:

- Undertake a census of ADF IO/KW assets
- Undertake costings and cost-benefit analysis of a phased IO/KW capability; undertake comparative tradeoff benefit/capability foregone for conventional capabilities.
- Develop a phased acquisition plan based on: IO/KW performance, phasing and schedule.
- Structure and test IO/KW under appropriate test and exercise conditions.
- Formulate strategies for and demonstrate credible IO/KW capabilities for deterrence to potential adversary audiences/decision-makers.

NOTES

1. “Humanitarian war” is fought not for national interests but for moral, humanitarian values; in the case of Kosho, to protect the human rights of the Kosovars.
3. C4ISTAREW: Command & Control, Communications, Computers, Intelligence, Surveillance, Target Acquisition, Reconnaissance and Electronic Warfare.
4. The objectives of NCW are “... to increase the tempo of operations, the speed of command and control and as a result, achieve greater lethality and survivability ...”. (“Information Superiority and Network Centric Warfare”, D.S. Alberts, OASD(C3I), US DoD, June 1999, slide 8).
5. The issue is further bedevilled by the grey areas of legal responsibility for the protection of what are sensibly private, or privately managed, infrastructures; the grey area of domestic law; non-existent international law in this area; and the changing nature of, and demands on, military aid to the civil power.
6. This in particular has been propounded by the futurist Alvin Toffler in his books, The Third Wave, Collins, 1980, Power Shift, Bantam, 1990. and (with wife, Heidi), War and Anti-war, Little, Brown & Co, 1993.
available on http://www-cgsc.army.mil/milrev/English/MarApr98/sanz.htm

8. For example, “Cavalry to Computer—The Pattern of Military Revolutions”, A.F. Krepinevich, The National Interest, 37, Fall 1994, pp. 30-42

9. ibid, lists, for example, ten RMAs, from the “cheaper” (i.e. more cost-effective) infantry, archers and pikemen, triumphing over the “expensive” armoured knight; to the recent “Nuclear Revolution”, a military shift so radical that the only “rational” utility of nuclear weapons was not as a new method to conduct war but to deter war!

10. Some figures provide useful comparisons. Over the 4-year period of WWI, Germany dropped some 280 tons of bombs over England, by Zeppelins and bombers. Some 1400 civilians were killed, 3400 wounded; material damage was some £3M. By comparison, historian Robert Hingham notes, the material damage in England due to rats was estimated at £70M per annum! (JL Stokebury, A Short History of Air Power, William Morrow & Co, New York, 1986, pp. 78).

11. Phrase used by England’s then-Prime Minister, Stanley Baldwin, in the House of Commons, 10 November, 1932. “... the man in the street (must) realise that there is no power on earth that can prevent him from being bombed. Whatever people may tell him, the bomber will always get through.” There were unintended PSYOPS consequences to this phrase which “... propagated the psychology of fear very widely among his countrymen (and) contributed to the British public’s initial acclamation of the policy of ‘appeasement’ of the dictators” (A Time for Courage: The RAF in the European War 1939-45, Terraine, J., MacMillan, NY, 1985, pp. 13).

12. Germany’s aircraft production reached its peak around September 1944, despite it being the RAF’s and USAAF’s highest priority between May 1943 and July 1944 (D MacIsaacs ed., The United States Strategic Bombing Survey, Garland Publishing Inc, 1976, Vol 1, pp. 16-18). The latter, a 10-volume work, with Vols 1-6 describing the bombing of Germany by the USAAF and RAF, and Vols 7-10, the bombing of Japan by the USAAF, lists by table, statistics, analysis, narrative and minutiae, the destruction of strategic, war-making and urban infrastructures, the costs to the Allied Air Forces in men, aircraft, and materiel, the exchange ratios etc. Despite this unrelenting and almost total destruction, Germany surrendered a week after the collapse of its political and military leadership, being pretty well totally overrun and its territory occupied by Allied land forces; Japan likewise surrendered about a week after the dropping of atomic bombs on Hiroshima and Nagasaki and the Soviet Union declaring war against her.

13. Night fighters, radar and GCI, integrated in the “Kammhuber Line”.

14. And seemingly forgotten again during the NATO bombing campaign against Serbia in March-May 1999.

15. This multiplicity of definitions is bedevilling the understanding, occasionally the acceptance, of IO.

16. We restrict ourselves at this point to the Defence domain.

17. “Provisional Guidance on IO in Defence”, (R), VCDF, Dept of Defence, Canberra, April 1999. The current US DoD definition is similar but excludes “enhance”. US single-Service and the UK’s definitions are longer and more detailed, as are those of other countries.

18. “Impair” covers the following: degrade, delay, disrupt, deny or destroy, singly or in combination.


20. ibid, pp. 1.


22. IO components elements shown in Figure 1 differ in some detail, mainly through the inclusion of Navigational Warfare, from those shown in Figure 1 in, “What Are Information Operations? Why Should I take Any Notice”, Brian Alsop, Australian Defence Force Journal, 140, Jan-Feb 2000, pp. 31-35.

23. Exemplified by the numerous, almost mandatory, quotes from Sun Tzu, strategic consultant and mentor to numerous Chinese emperors, c. 500 BC.


25. ibid, slides 55, 60, 68.

26. ibid, slide 5.


29. More correctly, the total (physical) damage, $D_t$, inflicted on the adversary is $\int C_i D_i dt$, where in the time interval $dt$, damage inflicted is $D_i$ with a replacement cost $C_i$; the corresponding Total Cost, $C_t$, of inflicting this damage is $\int K_i R_i dt$, where in the time interval $dt$, the resources used are $R_i$ with corresponding costs $K_i$, which takes into account capital costs, training costs, maintenance costs to date and, if applicable, opportunity costs. By evaluating these for each adversary, exchange ratios and other measures of (economic) effectiveness of the conflict can be derived. The difficult issue of costing public goods such as of national defence and national security and of sovereignty – at risk, reduced or lost if the war is lost – let alone of the dead, maimed, injured etc. is clearly not one for accountants or economists or of just dollars, only.

30. NGO: Non-Government Organisation such as Red Cross, World Vision, Amnesty etc.


32. The Observe-Orient-Decide-Act (OODA) loop is the fundamental human decision-making paradigm and governs our everyday decision-making and actions. It has many variants. “Orient’ corresponds roughly to “situation assessment”.

33. See Note 4.


36. ibid, pp 43.

37. op cit., “The Knowledge Edge and Information Operations”.

38. Militaries being militaries the world over!

39. Recognised as “cognitive mapping” and “providing the ultimate knowledge edge”, in Dibb (99), op cit., pp. 46.


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Job Rotation and Military Capability: Benefits, certainly – but is anyone counting the cost?

By Nick Jans and Judy Frazer-Jans, Management Consultants

Job rotation is a practice so ingrained in the military institution that its benefits are taken for granted and adverse effects are rarely questioned. There are, however, a number of reasons to question the benefits of this long-practised policy, at least in its current form. This article shows that job rotation carries a cost in terms of “foregone” job performance at middle and junior career levels. High rates of job rotation may be justifiable for some appointments, such as for unit or sub-unit commanders, but it is less viable for staff officers and for OR. This may negate at least some of the advantage gained from developing members by exposure to a variety of appointments and perspectives. A more thoughtful approach to using job rotation is needed.

Performance Improvement: the next imperative

The ADF is increasingly pressured to “do more with less” whilst adapting itself to the complex post-Cold War world. Up to now, the focus of change has been on efficiency and structural change. This has put great pressure on units and individuals. Many members probably feel that they are working harder than ever before and that they have reached their limits to improve; and they are almost certainly correct on the first point, if not the second. This, however, cuts no dice in the never-ending quest for organisational improvement. (And nor should it: the Services have as much obligation to deliver increasing value to the nation as any other public agency.) The next logical step for Defence therefore is to find different, innovative and “smarter” ways to manage individual performance, by re-structuring careers and by better management of the “softer” aspects of organisational behaviour.

This is the first of two articles dealing with ways of meeting this challenge. This article analyses how job performance is affected by the Services’ approach to job rotation. A second article will deal with performance management, in terms of how to develop and sustain organisational situations that are conducive to high performance (“high performance cultures”). Both articles will show that individual productivity can be significantly improved by “smarter” ways of managing human resources.

Job Rotation: benefits, certainly . . .

Job rotation is a practice so ingrained in the military institution that its benefits are taken for granted and any possible adverse effects are rarely considered. One telling indication of this is the paucity of serious studies, or critical comment, of how the job rotation affects professional effectiveness. Implicitly or explicitly, policy makers and scholars alike have accepted that developing military executives alongside combat leaders requires both a sophisticated military education system and job rotation to enhance an officer’s adaptability. And virtually all of the literature that exists is concerned with officers: perhaps it is assumed that the traditionally more stable Other Rank (OR) career pattern provides the rocks around which the fast-current officer streams flow.

In regard to Australian officers, the current rate of job rotation is high, and has scarcely changed in the last two decades. In the surveys
which provided the data for the study reported below, it was shown that officers routinely move about every two years, often with little continuity in their assignments except for their primary military speciality. Middle level officers in our first survey (major to colonel and equivalents) had occupied an average of six different appointments in the previous decade, not including long training courses such as staff college. And, contrary to what scholars might have assumed about OR, their job rotation rate is also high. More than 80 per cent of the Senior OR in our second survey had had at least three different appointments in the previous six years, with 25 per cent having had more than four appointments in that time. Over half of the Senior OR had been in their current appointment for less than a year and only 18 per cent were in the third year of an appointment.

Some disadvantages of high job rotation have always been acknowledged, especially in terms of family disruption. But the unspoken assumption is that these are outweighed by their career development benefits. The first of these relates to the military’s need to groom its senior officers for their undeniably complex roles. The complexity of a modern military institution is indicated by its hundreds of employment streams and jobs. In a modern business, a very large company might have several dozen different jobs, clustered around a comparatively few core employments; but most business would comprise fewer than ten. This complexity of function is further complicated by the scope of the roles that an institution like the ADF must be capable of performing, and the uncertainty of what, when, how, where and with whom it will do so. Nor are peacetime, peacekeeping and war distinct and separable conditions, so all forces must be able to operate within a “conflict spectrum”. The executive teams that lead such an institution plainly need better-than-average awareness levels of the component functions and how they interconnect. Because there is virtually no lateral recruitment into the most senior levels, the argument goes, most officers must begin to gain generalist skills in their careers from an early stage, in order to establish the pool from which the future commanders and policy leaders are drawn.

The second benefit of job rotation is also related to career development. Throughout their existence, the Australian Services have been characterised by “hollowness”. Hollowness, especially for the Army, pertains to the maintenance of an ostensible organisational structure that is actually not a reflection of its true size. Such organisations must be capable of expanding rapidly to meet operational liabilities; and this requires their officers to be competent in skills that are not necessarily performed in their normal duties (which are in themselves often quite broad). One way of giving them an expanded skill portfolio is to rotate them across a range of different jobs in which they will, at the least, develop an awareness of what they might have to do if such expansion is necessary. This has led to a highly structured career system based on well-ingrained policies and expectations that are difficult for a military culture to amend or discard. Thus the situation of the average experienced Service officer is somewhat analogous to that of a child playing with Lego: he/she is issued with the basic kit of blocks to play with, and must be also familiar with the “advanced kits” if needs be – but must generally use only Lego sets, without recourse to other play material like “mecchano” sets or plasticine.

Job rotation is also said to contribute to career satisfaction. The Services implicitly recognise the need to share the “good” and “bad” assignments, and there is a desire to give members and their families the variety of experience that has been a traditional benefit of Service life.

And, finally, the need to fill vacancies is in any case fundamental to an institution which attempts to maintain an “optimum” flow-
through of personnel and where prescribed retirement ages are comparatively low.\(^6\)

... but at what cost?

There are, however, a number of reasons to question the continuation of this long-practised policy, at least in its current form. The downside is that high rates of job rotation contribute to the stress on Service families, lead to expensive Service removals budgets, hamper the institution’s capacity for organisational change, and limit the contribution a member can make in each job in terms of day-to-day job performance.

The effect of job rotation on families, especially on partners’ employment/career prospects and children’s educational and personal development, has been a major issue in Service lifestyles for a generation or more. The emergence of “dual career families” as a middle-class norm has made paid employment for the partner economically and psychologically central to an increasing number of Service families. In the survey which provided the data for the study reported below, 43\(\text{ per cent}\) of the partners of middle-level Australian Service officers were in full-time paid employment in 1999 (compared to 31\(\text{ per cent}\) in 1989 and 1984). Half of the partners had post-secondary qualifications, almost double the level of 1984; and their career orientation is commensurately higher.\(^7\) However, the rate of geographic mobility of Service families had scarcely changed over the last 15 years, with about 60\(\text{ per cent}\) having been required to move at least twice in the previous five years. The number of officers’ partners indicating that they have a very good to good chance of getting an equivalent job if they were to relocate has fallen by about a third in the last 15 years (from 65\(\text{ per cent}\) to 41\(\text{ per cent}\)). Similar issues apply to the quality of the education received by children in Service families.

The second reason to challenge the continued high rate of job rotation is cost, primarily the cost of geographic relocation. A recent study in the Australian Defence Force found that, in an active duty force of 52,000, 40\(\text{ per cent}\) relocate annually, at an average cost of about $8,000 per relocation. When the costs of providing government housing are included, the average cost per removal more than doubles.\(^8\) It was inevitable that eventually such costs would be called to account, especially in times when (in Australia, at any rate) government budgets are under increasing pressure.

The third disadvantage of job rotation is its effect on the institution’s capacity for organisational change. Job rotation is intended to make middle level and senior officers more sensitive to the big picture and more adaptable but, paradoxically, it can also impede this. Arguably, the continual move from appointment to appointment breeds conformity and a reliance on standard operating procedures.\(^9\) Knowing that they have only a limited time to spend in an appointment, many officers are likely to follow the precedents that guided the previous incumbent and will be reluctant to initiate any significant program that would take more than about a year to see through. And with limited tenure in any one posting and thus a limited number of opportunities to make their mark, officers must make their impact quickly.\(^10\) In such career situations, it is hardly surprising that many give priority to the immediate and obvious issues, where outcomes can be readily measured and noticed by superior evaluating officers. After many years of following this implicit personal career strategy, many will find it difficult to move from the “tactical” mode of professional behaviour (involving operational activities and structural change) to the “strategic or building/improving” mode (involving strategic and cultural change) needed for more senior levels.\(^11\)

A recent article in the US periodical Defense News highlighted this issue.\(^12\) “This business [of] rotating officers every two or
three years... is not healthy for transformation”, according to the retiring head of Joint Forces Command. Most of the authorities quoted in the article maintain that even three years is too short, for an officer to get on top of the learning curve for the role, develop a strategy and a program, to overcome the lethargy and bureaucracy of the system and to signal to the bureaucracy that such proposals and transformations cannot be “waited out”. In fact, the article argues that, in order to drive through major changes in military organisations, senior officers must be placed in key positions for as long as a decade or more. The examples of the pioneers of naval aeronautics and nuclear-powered ships are cited in support of this argument.

The final reason to challenge the continued high rate of job rotation is its effect on job performance. The 1985 Careers in Conflict study – one of the very few that have addressed the performance effects of job rotation in the military – suggested that such effects are not trivial, especially for certain professional roles. The Careers in Conflict study indicated that, whatever their professional role, officers became increasingly effective as they progressed through an appointment term, with much of the first part of any posting being a “learning” phase. This particularly applied to Defence HQ staff appointments. In such appointments, performance levels were consistently below that of their counterparts in operational units. The study suggested, in fact, that many Defence HQ staff officers really gained little in terms of useful experience and contributed well below their potential.

Most of these issues have been raised as serious policy questions over the past two decades, but the effect on Service practices has been minimal. In the late 1970s and 1980s, two major Service studies did question the practice (particularly the Army’s Regular Officer Development Committee in the mid 1970s and the Navy’s Regular Officer Careers Study in the late 1980s) and even recommended some slowing of the rate of job rotation in mid career. In 1989, all three Services were directed to make greater use of three-year appointments and back-to-back postings, so that officers could use their skills more consistently and families have more stability. As the statistics above show, this has not worked out. It never really could, because it had to be grafted onto career systems that, among other things, required officers at middle and senior levels to get certain “experience profiles” to be competitive for promotion; this, in essence, required maintenance of the existing rate of job rotation.

The relationship between organisational effectiveness and job tenure is underlined by contrast with practice in other kinds of organisations. Business executives change jobs far less frequently than do military officers. The average for Australian senior executives, for example, is around five to six years in each significant job. The rate of job rotation in the corporate world is, if anything, slowing, because managers are perceiving that job rotation and organisational change do not sit well together. For example, the US corporation GE, long regarded as an exemplar of corporate change management, had “learned that rotating executives quickly through new jobs, long a proud practice at the company, created problems in new-product introductions, which go more smoothly when managers have long tenure”. A systematic study of “best practice” career development concluded that “a major assignment takes three years to master because on-line learning follows several distinct stages”: fixing the immediate problems; then, as experience heightens awareness of the “real issues”, addressing those which are more subtle; and with the final stage of consolidation.
The Study

Research Questions

This article addresses the fourth of the issues discussed above: whether and how job performance is affected by high rates of job rotation.

This article reports on the following two questions:
1. Do members who have spent relatively lengthy periods in a job out-perform those with less job tenure; and, if they do, is the margin enough to bother about?
2. Is a high rate of past job rotation a help, a hindrance, or neutral in enhancing job performance in subsequent appointments.

Sample and Method

The data were gathered by two questionnaire surveys: of 280 middle-level officers from all three Services (major(E) to colonel(E)) and of nearly 1300 Other Ranks and junior officers (defined here as being lieutenant/captain/major(E)) from all Services. The middle-level officers was divided into two “job type” sub-samples: those in Units and those on the Staff, of about equal size.

The key measure was a seven item Job Performance scale, in which members assessed their own effectiveness and performance, using 5-point response scales, of the “Strongly agree-Strongly disagree” type. Examples of the items include “I do my current job well”, “I am one of the better performers in my current work group/directorate” and “Overall, my work team produces high-quality services and outputs”. Scores on each item were summed and averaged to give a Job Performance score. Table 1 shows the details of the scale.

Most members rated themselves on the high end of most items, so the job performance ratings tended to be high. In the middle-level officer sample, 57 per cent scored at or above a mean of 4.00, with only 4 per cent scoring below 3. In the larger sample, the equivalent statistics for junior OR, senior OR, and officers were 32 and 8, 41 and 4, 21 and 5 and 47 and 5. In the middle-level officer sample, those in Units had markedly higher scores than those on the Staff: 69 per cent of the Unit sub-sample scored at or above a mean of 4.00, compared with 53 per cent of Staff officers.

Table 1. Performance Measure

<table>
<thead>
<tr>
<th>Items</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do my current job well</td>
<td>1=Strongly disagree; 5=Strongly agree</td>
</tr>
<tr>
<td>I am one of the better performers in my current work group/directorate</td>
<td></td>
</tr>
<tr>
<td>Overall, my work team produces high-quality services and outputs</td>
<td></td>
</tr>
<tr>
<td>I can deal with just about any problem that arises in my current job</td>
<td></td>
</tr>
<tr>
<td>The work I do in my current job is consistent with my overall professional background</td>
<td></td>
</tr>
<tr>
<td>How would you rate your performance in your current job?</td>
<td>1=Barely adequate, 5=Outstanding</td>
</tr>
<tr>
<td>How well has your professional training and experience prepared you for your current job?</td>
<td>1=Very poorly, 5=Very well</td>
</tr>
</tbody>
</table>

* Coefficient alphas: 0.75 for middle-level officers, 0.71 for junior officers, 0.69 for Junior OR, 0.74 for Senior OR.
Job performance has been statistically expressed in two ways. The primary comparisons – and the more powerful statistically – use the mean scores of the members in each category for each of the three job tenure zones (i.e. those in the first, second and third years of an appointment). In addition, a “Job Performance Grade” score was developed by allocating subjects to a top, middle and bottom third “grade” for each category, on the basis of the average Job Performance scores for the relevant category. For example, Unit and Staff officers had to score at or above 4.33 and 4.00 respectively on the Job Performance scale to be allocated to the “above average” grade. (Because of the small samples, we could not always find cut-off points on the scale for the respective categories that precisely allowed “one third-one third-one third” distributions. The percentages of those in each upper third/above average category are shown in Table 2.) Validity checks for both measures suggest that they effectively discriminate between levels of performance.20

Table 2: Job Performance by time in job

<table>
<thead>
<tr>
<th>Rank category</th>
<th>Time in job (months)</th>
<th>Job Performance mean &amp; SD for category/ Statistical significance/ N/ % “above average” in category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-12</td>
<td>13-24</td>
</tr>
<tr>
<td><strong>Junior OR</strong></td>
<td>Mean Job Performance score</td>
<td>3.60</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>309</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>% “above average” for each time-in-job level</td>
<td>25</td>
</tr>
<tr>
<td><strong>Senior OR</strong></td>
<td>Mean Job Performance score</td>
<td>3.82</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>% “above average” for each time-in-job level</td>
<td>23</td>
</tr>
<tr>
<td><strong>Junior officer</strong></td>
<td>Mean Job Performance score</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>316</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>% “above average” for each time-in-job level</td>
<td>34</td>
</tr>
<tr>
<td><strong>Mid level officer (Unit)</strong></td>
<td>Mean Job Performance score</td>
<td>4.06</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>% “above average” for each time-in-job level</td>
<td>28</td>
</tr>
<tr>
<td><strong>Mid level officer (Staff)</strong></td>
<td>Mean Job Performance score</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>% “above average” for each time-in-job level</td>
<td>30</td>
</tr>
</tbody>
</table>
Findings

Performance and appointment tenure

As would be expected, the longer a person spends in a given job, the better his/her performance in comparison with others in the same career category.

Table 2 has the details. Looking at the findings for junior OR in Table 2, for example, we find that those in their first year of tenure have an average Job Performance score of 3.60, compared with 3.90 for those in their third year. (The differences are highly statistically significant.) The likelihood of finding above-average performers rises substantially as one moves from the second to the third year of appointment tenure. For the junior OR category, 25 per cent of those in their first year of an appointment were in the top-third of performers for their job type, compared with 41 per cent in their second year and 49 per cent in their third year of the job. In other words, junior ORs in a third year of tenure are almost twice as likely to be performing at the above average level as their counterparts in the first year of an appointment.

The only category of the five where job performance does not improve with tenure is Unit officers: the statistics for this category look different but are not statistically significant (possible reasons for this non-effect are discussed below). For the other categories – middle-level officer Staff group and for OR and junior officers – the differences are statistically significant. Those in their second year score slightly higher than those in their first, with those in their third having appreciably higher performance levels. In the third year, it seems that the foundation of hands-on experience enables most members – through more skilled performance, more sophisticated perceptions of the area’s real issues, or both – to break through to a much higher performance level. At least in their own eyes, they feel more competent at and comfortable with what they do in their third year.

Figure 1 shows the comparisons of each category in the top Job Performance Grade

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Note: Differences are significant.
(i.e. performing at an “above average” level), for each year in the job. Except in the case of Unit officers, the chance of being “above average” increases appreciably as a member moves from the first to the second to the third year of tenure.

Few members reach the third year of an appointment, however. Only 16 per cent of middle level officers were in a third year. Similar levels apply to the other four professional categories.21

Table 3: Job Performance by career stability

<table>
<thead>
<tr>
<th>Rank category</th>
<th>Career stability</th>
<th>Job Performance mean &amp; SD for category/ Statistical significance/ N/ % “above average” in category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Med.</td>
</tr>
<tr>
<td>Junior OR</td>
<td>3.63</td>
<td>3.78</td>
</tr>
<tr>
<td>Senior OR</td>
<td>4.10</td>
<td>3.87</td>
</tr>
<tr>
<td>Junior officer</td>
<td>3.82</td>
<td>3.91</td>
</tr>
<tr>
<td>Mid level officer (Unit)</td>
<td>4.18</td>
<td>4.13</td>
</tr>
<tr>
<td>Mid level officer (Staff)</td>
<td>3.94</td>
<td>3.83</td>
</tr>
</tbody>
</table>

- Career stability levels for Junior and Senior enlisted, and Junior officers are based on the number of appointments occupied in the last 6 years: High=1 or 2; Medium=3 or 4; Low=>4. Mid level officers are similar, but the period was the last 10 years: High<5; Medium=5 or 6; Low=>6.
The former are returning to professional specialisations that were probably a continuation of those they held at an early stage in their professional careers; and most will be commanding either their unit or one of its subunits so they will usually have been chosen because of their past proficiency in more junior roles (i.e. we would expect that they will already be “above average” performers) and, equally importantly, having colleagues at all levels who are equally skilled.

**Performance and career stability**

To investigate the relationship between an officer’s performance and past rate of job rotation, we compared the performance of members across three levels of career stability: “High”, “Medium” and “Low”. For Junior and Senior OR, and Junior officers, these categories are based on number of appointments occupied in last 6 years: “High” career stability meant having occupied 1 or 2 appointments, “Medium” was 3 or 4 and “Low” was greater than 4. Mid level officers were treated in a similar fashion, but the career period was the last 10 years: “High” stability was fewer than 5 appointments in this period, “Medium” was 5 or 6, and “Low” was greater than 6.

Table 3 and Figure 2 show the results of this analysis. For Senior OR and mid level Staff officers, those with the highest employment stability out-perform those who had had many different jobs in the previous 6 or 10 years. For Junior officers and mid level Unit officers, career stability does not affect current performance. For Junior OR, there appears to be an optimal level of career stability: those who had had 3 or 4 jobs in the past 6 years perform best. (This might reflect a tendency to choose the better performers from this category for special career development that includes job rotation assignments.)

**Summary of findings**

Do members who have spent relatively lengthy periods in a job out-perform those with less job tenure? The analysis shows that
performance rises slightly between the first and the second year of an appointment, but that the small minority who stay for a third year significantly out-perform their colleagues. The only exception to this is for the middle-level officers who command units and sub-units: their performance levels are high throughout their appointment tenure.

Is the performance margin enough to bother about? Given that those few members who reach a third year are about twice as likely to perform at “above-average” levels than their colleagues in their first year, the answer is an unequivocal “yes”.

Is a high rate of past job rotation a help, a hindrance, or neutral in enhancing job performance at mid and senior career levels? For some career categories, job performance appears to be enhanced by employment stability. For others, higher rates of job rotation may be justified as an investment in future performance within those fields.

Discussion

Imagine

This study suggests an important opportunity for the ADF in its management of organisational effectiveness. A considerable investment in human capital is simply not being exploited in terms of the superior individual and organisational performance that the ADF needs right now. ADF members are unusually well-skilled by community standards. More sensible job rotation policies – perhaps with more emphasis on the quality rather than the quantity of successive assignments – would use these talents better, for the benefit of both individuals and organisation. With appropriate changes, a situation could be created where “above average” performance became “normal”.

OK for some streams, less so for others?

High job rotation may be justifiable for sub-unit and unit commanders, in that the performance-degradation cost is low compared with the benefit of developing mastery in the military’s core business. It is not surprising that the differences in middle-level Unit officers’ performance across time in job are not so marked. But few of the “performance-conducive” conditions that apply in units apply to other roles. Since this is unlikely to be actually an indication of members’ true abilities, it follows that the “performance edge” in Units is due to career and organisational circumstances.

This performance edge is very much related to the pervasive “bias” in career management towards much more care for postings for the primary military specialisation than for other employment fields. Career managers would never think of appointing a non-Seaman to captain a ship, a non-infantryman to lead an infantry battalion or a non-pilot to command a fighter squadron; yet they seem quite comfortable with the notion of appointing officers without formal qualifications and experience to senior roles in the various non-operational programs – and then moving them to another staff area two years later.

The remarkable thing is how well most Staff officers cope; but “cope” may be about its extent in the majority of cases. Few would claim to be a master of his/her craft. Most are placed in a situation almost the opposite to that associated with Unit appointments. Many lack experience in their Staff field – a situation exacerbated if (as often happens) their boss and their colleagues are similarly inexperienced. The career officer, as he/she moves through a succession of increasingly senior staff appointments, is like a sportsman whose primary sport is rugby, but who is then required to captain a soccer team, followed by coaching in hockey, finally taking over executive management of the
The findings are less equivocal for Other Ranks. Those few who continue into a third year out-perform those in the first year by a considerable margin and those in the second year by a lesser but still significant margin. Less than half of Senior OR in our survey had been in their current job for more than a year, and their performance was substantially superior to those of their colleagues whose tenure was shorter. Senior OR who had changed jobs frequently in the previous six years are out-performed by those with greater career stability. Given the ADF’s reliance on these personnel as the “bedrock” of unit effectiveness, such a finding should be cause for concern.

For junior officers, performance also tended to improve with job tenure. However, their past rate of job rotation did not affect their job performance. This suggests that career development by job rotation is a viable policy for junior officers, as long as they spend at least two years in each appointment.

**Time spans of discretion and tipping points**

The current practice of frequent officer job rotation with little continuity of specialisation apart from “primary” employment might be acceptable for a stable organisational environment, but it is hardly conducive to effectiveness and adaptability in an era of turbulence. In his classic study of executive behaviour, Jacques argues that a leader’s desired tenure is a function of a job’s “time span of discretion”: the period it would take for a wrong decision to be noticed as being wrong or, alternatively, the delay between making a decision and getting feedback on its outcomes. Junior military leadership roles have a time span of discretion of, at most, a few weeks, so a junior officer can learn much in a year and thus may be moved reasonably frequently to the mutual benefit of individual and organisation. The time span of discretion at the top of the organisation, in contrast, can often be measured in years; and hence senior officer tenure should be of commensurate duration.

But a slower rate of job rotation need not apply for all members in all employment streams. Organisational effectiveness would almost certainly be improved if, say, twice as many members were able to remain in their jobs for a third year as do now. Surely such is attainable. In this way, ADF career managers could take advantage of a social phenomenon known as “tipping point” theory, which posits that organisational change tends to develop slowly and then come in a rush, after reaching a “tipping point” or critical mass level. If ADF career patterns gave members more opportunities to reach a third year in more appointments, the improvement in overall performance would provide a “tipping point” mechanism for both unit and staff employment. This would have significant flow-on to many aspects of organisational behaviour: to improvements in command and staff effectiveness and teamwork; to careers where a consistent and challenging corpus of work awaits at all stages; and to a favourable overall effect on organisational productivity, innovation, corporate management, morale, middle level officer job satisfaction, and the job satisfaction and commitment of all members. (The process by which unit capability is enhanced by greater leadership competence is the subject of our next article (see footnote 1).

**The challenge**

None of the above necessarily negates the policy of using job rotation as a career development strategy. Indeed, it is difficult to imagine how middle and senior officers and ORs could be developed without it. But these results suggest that a more thoughtful
approach is needed. It surely makes little sense to prepare officers and OR for senior ranks by methods that hinder the contribution that can be made by the teams of these very same senior people. Business “best practice” is moving away from high rates of planned job rotation. Whilst the ADF has no need to ape the practices of business, it does have a responsibility to apply the same kind of thinking to the issue as has plainly been done in the corporate world. In the post-Cold War era, the professional effectiveness of the ADF is more important than ever. If high job rotation is degrading performance, it deserves to be taken seriously as a policy question and not simply taken as an un-addressable “given” of Service life.25

NOTES

1. This second paper has been submitted to the ADFJ. In the meantime it can be found on the web at www.sigmaconsultancy.com/papers.

2. The analyses on which this article is based were derived from ADF surveys in 1999 and 2000. In mid 2000, changes to senior officer policy on job tenure were announced that are likely to result in longer times-in-job for Service Chiefs. This does not, however, yet apply to middle-level officers who are the subject of these studies. Hence the issues raised in this article remain relevant.


5. Hollowness is still very much as part of the Army make-up, as the JSCADT report reminds us with its recommendations.

6. This was the main argument used by senior officers to sink the recommendation for “secondary streaming” by the Army’s Regular Officer Development Committee in 1979 and by the “Facing Up To the Future” study a decade later. (See N.A. Jans, and J.M Frazer-Jans, “Facing up to the future: proposals for career/personnel issues to assist in staffing the ADF in the 1990s and beyond”. Report to the Chief of the Defence Force.)


10. Ulmer, op. cit.

11. ibid.


18. The survey had a 67 per cent response rate, with equal representation from each Service. Officers were randomly selected for inclusion in the survey, according to a stratified sampling scheme. Questionnaires were delivered and returned by mail. See Sigma Consultancy, 1999, The Services Officers Professional Effectiveness Study (consultancy project for the Head of the Defence Personnel Executive).

19. The survey was administered in supervised sessions of a number of unit locations around the country. See Sigma Consultancy, 2000, Posting Turbulence Review Team Project Survey.
20. We developed a number of indications of the validity of the Job Performance scale. Firstly, Job Performance correlates strongly with rank: by comfortable margins in each case, Senior OR outscore Junior OR and major(E) outscore more junior officers ($F=17.00$, $p<.0000$). Secondly, Job Performance Grade correlates strongly with personal assessments of marketability. This applies to all rank categories. For the total sample, for example, among those with a mean score of 3 (out of 5) for marketability, 29 per cent were in the “top-third” Job Performance Grade, compared with 46 per cent of those with a mean score of 5 for marketability ($\text{Chi-square}=68.70$, $df=8$, $p<.000$). Thirdly, Job Performance correlates with educational level (but only for junior OR): among those without post-secondary school qualifications, 27 per cent were in the “top-third” Job Performance Grade, compared with 43 per cent of those with post-secondary school technical or tertiary qualifications ($\text{Chi-square}=14.66$, $df=4$, $p<.005$). Finally, for middle-level officers, 45 per cent of those who had attended staff college were in the “top-third” Job Performance Grade, compared with 29 per cent of those who had not ($\text{Chi-square}=10.24$, $df=2$, $p<.006$); and 43 per cent of those with advanced degrees were in the “top-third” Job Performance Grade, compared with 33 per cent of those with first degrees only ($\text{Chi-square}=10.00$, $df=4$, $p<.04$).

21. This may explain why these performance degradation effects have not been fully acknowledged by senior policy makers. Because only a small minority move into a third year, those who have had few “third years” would not have experienced any feeling of “performance breakthrough”. And this would especially apply to senior policy makers who, in the main, will have been groomed for senior rank at an early age and may have had a higher job rotation rate than the average officer.

22. Three-quarters of officers in the two surveys had at least a bachelor’s degree (on top of their military professional qualifications) with nearly half of middle-level officers having advanced degrees. One-third of OR in the survey had post-secondary qualifications, with 5 per cent having a bachelor’s degree.


25. A model to follow, for example, is the US Army OPMSXXI policy of allocating officers to specialist streams at mid career and then employing them largely in those streams. The Australian Army is in the process of adopting a similar practice in the near future. In fact, Australian military career managers have an advantage over their American counterparts in that they are not constrained by law (the US Goldwater-Nichols Act) to equip officers with a given career “profile” as a prerequisite for senior employment.

Dr Nick Jans is an academic and management consultant whose work in the past 15 years has been largely concerned with strategic human resource management and organisational capability. He is a Principal of Sigma Consultancy, an Australian firm which specialises in strategic and organisational research. Sigma’s clients have included businesses and government agencies in many countries, including the US, Australia and New Zealand.

Ms Judy Frazer-Jans is the Managing Principal of Sigma Consultancy. She has been the producer or co-producer of a number of studies for the Commonwealth SES, the Australian Taxation Office, ASIO and National Australia Bank, together with a decade of similar studies for the ADF.
Books


Reviewed by Bruce Turner, Royal New Zealand Naval veteran of the Korean War 1951–1953 (Frigate HMNZS Rotoiti, F625)

It is a privilege to be asked to review this fine book, one of a number by a distinguished Australian war historian, George Odgers, a Korean War veteran.

The author brings great expertise and in-depth knowledge of the Korean conflict to this book.

Right from the outbreak of the war in Korea when Australian Army and RAAF units on occupation duty in Japan joined the conflict, Australians played a distinguished and notable part in the Korean War. Eighteen thousand Australians served in Korea, Army, Navy and Air Force. The statistics tell their own moving story, 341 Australians lost their lives. Seven hundred and eighty-five were awarded decorations.

The writing is descriptive, the illustrations support the text very well while the statistics provided guarantee the book will always be a worthwhile book of reference. The names of all those Australians, their Army, Navy and Air Force Units are all given.

Together with the recent dedication of the Australian Korean War memorial in Canberra, this book will go some way I hope to recognise the service of Australian veterans of the “Forgotten War” (Korea). It is a book I think all Korean War veterans and their families would wish to own.

Highly recommended. An excellent book.


Reviewed by Flight Lieutenant (Retired) H. S. Brennan, RFD JP

This book, which could be called a text book, is the story of, and development of the F22 fighter aircraft which began back in the 1980s and goes through to the present day. One of the principal objects of the exercise was to create a jet fighter which could exceed the speed of sound in level flight without the use of afterburners and could project a very slim outline when in flight. In this area it resembles a scaled down version of the stealth bomber, it carries two jet engines which makes for the aforementioned speed and projects a very slim outline when in flight.

Throughout the book, reference is made to many very senior American servicemen who were involved in the make up of this project. Each chapter or section deals with a certain aspect of the ultimate design of the aircraft in complete detail, in my opinion nothing has been left out, there being eleven chapters or sections containing information in great detail of certain parts of the aircraft together with lots of block diagrams and numerous photos in each chapter to give the reader as much information as possible. However, no results of a service nature such as ultimate speed or armament are given, possibly because the object of the exercise was to develop a modern fighter which would out-perform any other comparative...
aircraft of other nations not friendly toward the United States.

The last section of the book is devoted to four appendices which cover a brief history of the advanced technical fighter through to source selection, concepts and lessons learned. As I said above, this is a text book on aeroplane manufacture and has been written to try and explain the numerous problems which arise and from experience how to solve them before the actual aeroplane is built and test flown. One shudders to think just how much money and materials have gone into developing the prototype F22. The book contains numerous block diagrams which to me were complicated to understand but to anyone trained by today's technical university as the author and his compatriots were, it is all very simple.


Reviewed by Roger Marchant

Tom Frame, Rector of Bungendore and RAN (retired) is a man of parts, well known to those interested in Australian naval history.

This, his fifth book to do with naval affairs, offers the reader two honourable approaches to historical subjects – revisionism supported by hard evidence (Anzac landings), and the revelation of worthy subjects that otherwise would remain largely uncelebrated (AE2) or unremarked (the RAN Bridging Train).

Of most general interest is a fascinating reconsideration of possible reasons for Commander Charles Dix's agonised shout at Anzac Cove: "Tell the Colonel that the damn fools have landed us a mile too far north!" Dix was Senior Naval Officer in charge of the 12 steam pinnaces that towed the first parallel lines of boats to the Gallipoli shore on 25 April 1915. However, he was on number 12, the northernmost steamer, whereas the officer in charge of navigation, Lieutenant Commander Waterlow, was aboard pinnace number one.

So what went wrong? Did Waterlow lead them all astray and in doing so assure the soldiers of a confused and disorganised landing in the wrong place? Or were there other reasons?

Frame comprehensively refutes the "unknown current" theory and offers others in its place, principally that the guideship for the fleet, HMS Triumph hove to in the wrong position (although perhaps “on station”) and that the 1875 charts in use by the RN were up to half a mile in error. Other inviting possibilities are discussed but are discarded as unlikely. Sufficient detail regarding the non-existence of a current (the author himself tried to find it in 1990) is included, as is a full discussion of map and chart error.

I don't think the last word has yet been said on the debacle (if so it was), but any challenge to Frame’s thesis will need to be very well worked out.

Many people know something of the Australian submarine AE2. Many more will be enthralled by the story detailed here – what she tried to do, the panic she caused the enemy by forcing the Dardenelles, her demise and, not least, the personality of her captain, Lieutenant Commander Henry Stoker.

The RAN Bridging Train, which was part of the landing at Suvla Bay, had as its responsibilities the very quick replacement of destroyed bridges and construction of new crossings, a role first identified on the Western Front as a need for engineering units when the fighting became bogged
down. The Train comprised horse drawn vehicles loaded with pontoons.

Just as the invasion at Suvla itself, the story of the Bridging Train is long, confused and remarkable. Frame deals with the contemporary myths surrounding the exploits of the unit, but includes Charles Bean's observation to the effect that the Bridging Train “...cut off from their own force...made a harbour at Suvla Bay”. After many adventures the Train was eventually disbanded under dubious circumstances.

Nobody really knows who was first to hit the beach at Anzac. Without doubt, though, the Bridging Train was last to leave. Something to be proud of, particularly as each member had volunteered for duty (as reservists the RAN Brigade could not be compelled to serve overseas).

_The Shores_ is a most satisfying book, perhaps best as a good read. There is plenty of “burrowing” but to good effect as Frame demonstrates that Gallipoli belongs not only to the boys in khaki.

**THE MEKONG** by Milton Osborne, published by Allen & Unwin, 294 pages, including 24 pages of notes and indexes.  
_Reviewed by Alistair Pope_

Although I have an interest in both history and geography and read extensively on both I thought it unusual that someone would write a book on the Mekong River. Why this thought occurred to me is probably for the very reason the author himself ascribes to the Western lack of interest in the region: the Mekong was remote from the English-speaking world and therefore its exploration by Europeans (particularly the French) was ignored. In comparison to the Nile (and the oft publicised search for its source by Richard Burton and other explorers) and the Amazon, with the romance of simply being the greatest river of all, the exploration by Europeans was late and desultory. In fact, it was not until 1994 that the actual source in Tibet was finally settled. This adds to the curiousness because, although the Mekong River is populated by civilised peoples for most of its length, it was not properly explored and mapped until a French Expedition travelled its length in the late 1860s – less than 150 years ago and long after more remote great rivers had been fully explored! In fact, the Mekong would probably have remained in the shadows of European and Australian consciousness had it not been for the prominence and strategic significance of its delta during the war in Vietnam. As a result of that conflict, everyone still knows its name, even if they know little about the river itself.

The Mekong is a giant on a world scale. It rises in Tibet, is a prominent river in southern China, the central feature of two countries, Laos and Cambodia, and is of great economic and geographic significance to the southern tip of Vietnam. It is one of the world’s great rivers and supports a large population along its banks and tributaries. For cons, long before the arrival of the first European explorers, the Mekong provided a fertile economic base for the rise of several civilisations among the communities who settled along its length. These communities used the waterway for travel and trade and as a source of abundant food. Only the great falls at Khone on the border of Cambodia and Laos prevented the Mekong from also being one of the great inland waterways, navigable from the sea to the former capital of Laos, Luang Prabang. But it is a seasonal river which also has a significant rise and fall between the wet and the dry
seasons, resulting in an ever-changing series of navigable channels as the fertile silt is annually washed from the hinterland to the sea, once more building and extending the delta as the water exits through the river's many mouths in Vietnam.

Osborne has had a fascination with the river extending over more than four decades, since he first glimpsed its majesty from a plane taking him to Cambodia in the early 1960s. His love of this river has engrossed him in a study of its history from the earliest times to the present. But the key to enjoying this book is in appreciating his description of the early French explorations of the river through to the end of the Indo-Chinese wars of 30 years ago. He has studied and researched this period thoroughly and is able to bring it to the reader. The author is so close to the people whose exploits he studied that he brings them alive. So many admirable and brave men, risked everything to explore this great river and open to the wider world the regions through which it meanders. Their explorations were intended to bring trade, development, religion and the “benefits” of French colonial conquest to those along its banks. It is easy to condemn their attitudes now, but those were different times and different views held sway. For the esoteric idea of the glory of France and her Empire men willingly gave their lives on the Mekong.

For much of its length the book recounts the history of the French colonial expansion into Indo-China and their use of the navigable lower reaches of the Mekong to facilitate access to the principalities they wished to control. The motivation of the French was that of their Age, the age of colonialism. While the “Great Game” for the control of the North-West Frontier in India was being played by agents of Russia and England (and documented in adventure story form by Kipling and others of his ilk) the Prime Minister of France, Jules Ferry was moved to declare that “nations without colonies were dead” and that the failure of France to vigorously pursue an active policy of colonialism would see “Germany in Cochinchina, England in Tonkin, in other words the bankruptcy of our rights and hopes” (Page 131). Apart from the possible economic benefits that may accrue from controlling foreign territory, there was the almost sacred duty to bring to the “less civilised” peoples of the world France's mission civilisatrice. There is no doubt that the river and the French aims of this fascinating period of history are inextricably linked. Osborne describes them well and makes it an enjoyable read.

More recently the population growth and uncontrolled exploitation of the river and the forests along its banks have seen a marked and noticeable degree of degradation along its length. After thousands of years of sustaining great civilisations the health of the Mekong as a sustainable provider of food and resources is now in doubt. So much damage in such a short period of time is staggering! However, it seems to be the way of the world at present and a problem that goes far beyond the Mekong River alone. Proposals for numerous dams, blasting of navigation passages through the gorges and rapids, more bridges, etc. – all seem to be geared to making the river even more productive and useful to mankind. But this may not prove to be the case. Many environmental and long-term economic questions concerning the effect of these changes are not being asked, far less answered. The blasting of the Mekong’s rapids in China and Laos could deepen the
channels and cause the faster emptying of the upper reaches of the river during the wet season, causing considerable and highly detrimental flooding in the delta a thousand kilometres downstream. The effect on the fish population on which so many people are dependent is another unanswered question. Dams pose the biggest threat of all as they may control not only the flow of the river, but may cause river levels to drop too low in the dry seasons to sustain downstream agriculture at its present levels of productivity. It seems the lessons of the Aral Sea are either unknown to the latest generation of bureaucrats or are seen as being of little relevance in advancing the careers of individuals with a personal stake in promoting these developments, irrespective of the cost. Who today knows the name of the architect of the Aral Sea disaster?

Along the banks of the Mekong civilisations have risen and fallen, but then life has always been uncertain and turbulent in Asia. But, as Osborne says, after thousands of years, for the first time it is the future of the river itself that is uncertain. Osborne’s book is informative and enjoyable to read – he brings its characters and its nature alive. It is a well-researched book and adds to our knowledge of a region well worth the time and effort to understand. I have but one major criticism, there is no definitive map of the complete river. A National Geographic style map may have added to the cost but would have been an immense boon to the reader and a great reference. The history of the Mekong River is a specialized subject and some would be bemused by this book as it is not everyone’s ideal present. But, for a couple of people in my circle of friends it solved the Christmas present problem.