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Air War in the Gulf

Dear Sir,

In Group Captain Waters article “Conclusions for Doctrine from the Air War in the Gulf”, a number of assertions were made as to the lessons to be drawn from that conflict. While I take issue with a number of points raised in the article, the most disturbing is his argument that strategic attack theory (bombing) was validated by the war. Group Captain Waters states that in any future war a strategic air campaign should be conducted, with strategic airpower directed at the base which allows a nation to wage war. Included in this strategic base is the civilian infrastructure and “national will”, attacks upon which are supposed to be capable of producing a paralysis in the enemy’s ability to wage war. These sentiments are classical Douhet, and ones which form the basis for an independent, centrally controlled airforce which does... “not always have to operate in support of other forms of military power” (Page 39 of the article).

The problem with Douhet’s theory is that we have yet to see a convincing historical example of his claims, especially where a paralysis of the national will has occurred as a result of strategic bombing. The two previous large scale campaigns of strategic bombing (World War Two strategic bombing of Germany and the Linebacker series in Vietnam) served to illustrate how allusive is the concept of a centre of strategic gravity when embodied in the civilian population or the civilian infrastructure. Despite localised weakening in German morale after the Hamburg and Dredsen bombings, support for the Nazi regime saw the war concluded only by land warfare in the streets of Berlin. The Linebacker raids have often been credited with drawing the Vietnam War to a conclusion through the application of politically unrestricted strategic bombing. Whether Hanoi halted the conflict in 1972 for political advantage or because the morale and infrastructure of their state was being destroyed is still being debated, what is clear is that support for the regime remained sufficiently strong for Hanoi to conclude the war on its own terms in 1975.

Despite a concerted and selective campaign against the civilian infrastructure of Iraq and its leadership, there is no firm evidence that the core of the population supporting Saddam’s Regime pre-war were sufficiently motivated by strategic bombing to force a conclusion to the war. The national will of Iraq to resist a strategic air campaign and prosecute a war has been no different from other peoples subjected to aerial attack since 1914. Indeed, like other populations, often the will to resist is strengthened by the accidental (Gulf War) or deliberate (British Area Bombing in WW2) civilian deaths associated with strategic bombing against civilian infrastructure. Given the dubious historical success of strategic bombing in war, there is sufficient evidence to conclude that the RAAF should conduct parallel air campaigns (tactical and strategic) in any future war as implied by Group Captain Waters. While an air campaign searching for the enemy population’s centre of strategic gravity may provide justification for the continued existence of an independent strategic strike force and the service which supports it, in the light of available historical evidence such a tasking by a small airforce like the RAAF is a misemployment of a limited military asset.

I.R. Finlayson
Major

Air Power Doctrine

Dear Sir,

Major General Butler’s concern over the support aspects of the RAAF’s Air Power doctrine (Letters, ADFJ, No. 98) appears to me to stem from his apparent unwillingness to accept my strongly worded contention that the air commander should not, will not, can not, must not, be given the authority to withhold air support or “to change arrangements, easily and without warning”. To allow him to do so would be equally as wrong as giving the ground force commander, for his exclusive use, his own organic air power.

Air power support to any particular operational commander, be he land, sea or air, can never be guaranteed. This is not because of any doctrine, but because of the fact that air power is both expensive and flexible, and there will never be enough to meet all demands. The allocation of air power, and other scarce resources, must rest with the overall commander, who is responsible for the total war situation, including the ground war. He is the one to allocate air power support as he deems fit, not the air commander, or the ground force commander.

Norman Ashworth
Air Commodore (Ret.)
The RAAF Needs a Regiment

Dear Sir,

I was saddened to read FSGT Hadfield’s response to an article by SGT Brasher relating to the formation of an RAAF Regiment. The finale of that letter indicates the depths of emotiveness felt by many members of the RAAF over the issue of base defence. As to whether a dedicated Regiment is required is a policy/planning decision. However, its existence or lack thereof does not change the responsibilities of all airmen and officers in the RAAF in relation to ground defence.

The Army can provide limited protection to the outer zone of RAAF airfields. This is a fact made very clear to me as a participant in a TEWT which included the defence of a northern airfield. The fact that the unit designated to protect that airfield could only allocate a Company minus to the outer zone of a 20 mile perimeter bounded on two sides by the sea, strongly reinforced in me the belief that an independent ground defence force will always have a place in the RAAF. However, as stated by FSGT Hadfield, in these times of financial constraint, that force is limited and it is unrealistic to think that each RAAF Base will have a specialist standing force for ground defence. Who then will do that task in time of increased threat?

The saddening aspect of the FSGT’s letter was the attitude he displayed towards RAAF Airmen and Officers receiving training in basic military skills. The skills I particularly refer to are those necessary to defend RAAF establishments. Granted, the role of technical staff is to keep aircraft in the air. However, the function of all RAAF personnel is to protect and maintain RAAF assets. The two requirements are not mutually exclusive. We are all “airmen” first and our trade specialisation second. As threat levels increase the initial resource that must be released prior to the deployment of the limited ADG SQN assets must come from Base manpower. As a person who would be drawn from that manpower I would much rather be trained in basic skills (and some more advanced training) than thrown to the wolves so to speak. Every member of the RAAF has a role in the Base Combatant Force of their unit. Whether they are utilised will be the subject of prioritising their primary task against the base defence needs. This may mean that technical personnel will be among the last called out, but when the need is great enough called out they will be. Therefore, every RAAF member (yes, women included) should be trained in basic infantry skills, in particular those necessary for defensive operations within the perimeter. And no, I’m not Arnold Schwarzenegger or Chuck Norris. Nor am I a Ground Defence Officer. I am only a realist. If the attitude of the Officers and SNCOs of the RAAF in relation to ground defence is epitomised by FSGT Hadfield’s emotion over this issue, then our junior airmen must and will reflect it. Why is militarising the RAAF so abhorrent a thought to so many of its members? We are different to our civilian counterparts because we may be required to fight. Therefore, we are all required to prepare. Green Exposure should be a requisite for every member of the RAAF up to and including SQNLDR. I would even venture that all Officers must do the Unit Defence Officer Course. A few days investment in organisational security. Perhaps, even these courses do not go far enough?

R.P. Rodgers
Flight Lieutenant
The United States and Modern War Lessons in Political Control and Clausewitz's Theory of War

Major A.K. Murdoch, RAE.

Introduction

"The American tradition had always been that once our troops are committed to battle, the full power and means of the nation would be mobilised and dedicated to fight for victory — not for stalemate or compromise."1

War's very objective is victory. . . In War, indeed there can be no substitute for victory."2

Douglas MacArthur.

When Douglas MacArthur wrote these words in reminiscence of the Korean War, he probably gave little thought to Carl Von Clausewitz's analysis of the nature of war, written nearly one 170 years earlier. Nonetheless, Clausewitz would have recognised MacArthur's Korean War of stalemate and compromise and may have described it as a situation in which the political object will almost be the sole determinant,3 but where the political objective will not provide a suitable military objective.4 Clausewitz's great insight was to identify the political objective as the primary modifier of war's theoretical tendency to absolute violence, always dominant over the military means. Given the variance between MacArthur's military and Truman's political objectives, Clausewitz would likely have predicted MacArthur's frustration and his eventual downfall.

Clausewitz's analysis can also encompass MacArthur's call for total victory in Korea, but only if total victory were both the political and military objective. Even so, MacArthur's understanding of total victory would have been anathema to Clausewitz, for MacArthur was calling for the military objective to masquerade as policy and usurp its role. Clausewitz recognised that confusion of the military and political objective could allow war to be waged for its own sake, thereby becoming "something pointless and devoid of sense".5 In MacArthur's opinion, war had a place separate to politics; as he told the US Senate, "when all the political means failed, we then go to force".6 MacArthur wanted war only, to use Clausewitz's analogy, as "the terrible battle-sword that man needs both hands and his entire strength to wield" rather than Clausewitz's preferred light, handy rapier sometimes just a foil for the exchange of light thrusts and parries.7

Armed with Clausewitz's insights, MacArthur may have better understood his last war's proper place in overall US policy. For in many ways Douglas MacArthur, military genius, decorated hero and national icon, was caught up in a great experiment; as a pre-eminent world power the US was learning how to impose political will on military means. Central to this learning process has been the search for balance between these often competing factors. The experiment did not begin or end in Korea. Each of the US's 20th century wars has contributed lessons, but MacArthur's experience in Korea was both a crucial step and a turning point in this process. Chinese intervention forced the US to learn that war is an essentially political act and the military means can range along Clausewitz's spectrum of conflict, from war of extermination down to simple armed observation.8 No longer would the full power and means of the nation be mobilised and dedicated to fight for victory, as a matter of course, in America's wars. Limited wars were forced on the US by events and it has taken nearly 40 years, and defeat at the hands of a third world country, for the US to learn to fight limited war well.

The course of this experiment was not pre-mediated; few long term national experiences are. Nonetheless, the US has steadily moved away from doctrines of total military victory, adopted in the World Wars and championed in Korea by MacArthur, to the less robust, more complex objectives of the Gulf War. The result has been an increasing predominance of political will over military affairs. Generals Norman Schwarzkopf and Colin Powell were products of this process, as were George Bush and Dick Cheney. Their Gulf War was fought by overwhelming force, supported by the weight of American public opinion, for strictly limited political and military objectives. It seems that all involved understood the primacy of policy objectives. War was one, unfortunately essential, part of a complex political process. This "mature" understanding of war as an instrument of policy seems a far cry from MacArthur's messianic dictum of total victory.

However, the effectiveness of the mature result of this experiment is questionable. Total war against Japan was a success. By comparison, limited wars in Korea and Vietnam were demonstrable military and
The US and Total War — The World Wars

"The President and the Prime Minister... are more than ever determined that peace can come to the world only by a total elimination of German and Japanese war power. This involves the simple formula of placing the objectives of this war in terms of unconditional surrender by Germany, Italy and Japan."  

Franklin Delano Roosevelt.

Roosevelt's quest for unconditional surrender in World War II (WWII), like the war itself, had its genesis in US experience in World War I (WW I). WW I approached Clausewitz's "complete, untrammelled, absolute manifestation of violence, a war which threatened to usurp the place of policy the moment policy had brought it into being". President Wilson took the US into this maelstrom with lofty policy aims, espoused in his fourteen points address to Congress in January 1918. But WW I had become a test of military will and for the European powers at least, policy was consigned to a supporting role. Flushed with a victory inspired by fresh US manpower, Wilson was to find that the US did not yet have the influence to impose its policies on post-war Europe. His efforts to do so were hindered by an intransigent, isolationist Congress, which refused to ratify US membership of the Wilson-sponsored League of Nations. Without the US, the League was doomed. Sadly, the concessions that Wilson made to gain agreement to the League also left the Treaty of Versailles fatally flawed. In Raymond Aron's view, "The Allied victory of 1918 had been sterile because... the English and American governments did not want to defend the status they had helped establish". By withdrawing into isolationism the US abandoned the policy for which it had fought and consigned its military effort to Clausewitz's reviled "something autonomous". WW I thus became a war without purpose, other than allied victory.

WW II confirmed the sterility of US and allied victory in WW I. From the Casablanca conference of January 1943, Roosevelt's policy of unconditional surrender was the central tenet of American and Allied policy. The desire for total victory resulted from the curious American assessment that war came because Germany had not been compelled to admit her absolute defeat in 1918; such misconceptions would be fixed this time around.

The terms of total victory were argued among the big three: Roosevelt, Stalin and Churchill. The allied Chiefs of Staff were given clear policy direction: win and win quickly. This seemed to match Clausewitz's dictates. Policy rested in civilian hands and determined the military means. However, WW II demonstrated that political direction requires more than merely cloaking an essentially military objective — total victory as policy objectives. In Clausewitz's terms, the US had confused the ends with the means:

"The original means of strategy is victory — that is tactical success; its ends, in the final analysis, are those objects which will lead directly to peace".

By failing to frame objectives for peace, Roosevelt let loose the dogs of war. Fast destruction of the enemy's armed forces was the imperative to which conduct of all operations was subordinated. A war of constant escalation resulted, fought as Clausewitz's "war of extermination" on some fronts and culminating in the use of nuclear weapons.

As supreme commander of allied forces, Eisenhower's considerations were primarily military. Ray­mond Aron argues that the level at which Eisenhower operated was inappropriate:

"The manner of achieving victory inevitably influences the course of events. It was not a matter of indifference in 1944 whether Europe was liberated from the east, the south, or the west. It is no use speculating on what would have happened had the English and American armies landed in the Balkans... It remains a mistake, on the theoretical level, that the American decision was dictated by the exclusive concern to destroy the major part of the German army and that consideration of the political consequences of one method or another was regarded by Roosevelt and his advisers as an un-warranted intrusion into the realm of strategy".

The USSR made no such mistake and the US found its victory in Europe nearly as hollow as in WW I. Nazism had been crushed and victory won, but to what end? Communist subjugation of Eastern Europe...
and 40 years of confrontation followed. Certainly, the US implemented great initiatives like the Truman Doctrine and the Marshall Plan, reflecting US idealism and her inability to withdraw from Europe as she had 30 years earlier. However, these measures were a response to the failure of policy, rather than continuation of an homogeneous war policy.

Unconditional surrender was more successful in Japan. MacArthur found new ways to achieve the rapid, complete victory required of him. “Island hopping” provided the speed, and the nuclear bomb the completion. Japan surrendered in the face of the ultimate military violence; fire bombing and nuclear destruction. Total victory sought and found its absolute means. Ironically, out of total war came a peace that fulfilled the most ambitious US desires. The Japanese military was broken; democracy entrenched; and capitalism, Japanese-style, found a new and vibrant home. Free from direct interference from the USSR, and to some extent from the US, MacArthur was able to express the US idealism championed earlier by Wilson. In Japan the US showed what they, alone, could make of total victory.

The US used the same strategy in two theatres of war, only to gain different results in each. This too, is in accord with Clausewitz, who recognised that:

“War is more than a true chameleon that adapts its characteristics to the given case. As a total phenomenon its dominant tendencies always make war a paradoxical trinity composed of primordial violence, hatred and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason alone”.

Clausewitz stressed the need to balance this triad, which he summarised as the people, the army and the government. War’s changing nature results from interplay between the three. The US could never expect two different wars to respond to similar policies, particularly in the light of contrived Soviet intransigence in Europe. Grouping Germany and Japan under the policy umbrella of total victory suggested that US policy was inadequate in one or the other theatre.

The US learned more from its failures in Europe than from its successes in Japan. Europe exposed total victory as a barren policy, too narrowly focussed to assist the transition from war to peace in a complex political environment. The US would not again embrace victory at all costs. Even MacArthur, architect of its success in Japan, would soon find that the US would not trust the political acumen of generals heavily involved in the battle, at the expense of the peace.

The US and Limited War — Korea

“We had entered the Korean war because we were afraid that to fail to do so would produce a much graver danger to Europe in the near future. But then the very reluctance to face an all-out onslaught on Europe severely circumscribed the risks we were prepared to run to prevail in Korea.”

Henry Kissinger.

Kissinger’s statement summarises the US and MacArthur’s Korean dilemma. This was not like any war in MacArthur’s experience. This was war limited by policy constraints, and he and his nation were poorly prepared to fight it.

The Korean war did not start out as either a dilemma or a limited operation. The North Korean invasion of the South caught the US off guard, but Americans knew how to respond to blatant aggression. The US Secretary of State, Dean Acheson, stated the US’s interim war aims: the military mission was to crush the armed forces of North Korea; the political objective was a unified, free and democratic Korea. MacArthur had nearly achieved the military objective and the political objective seemed within grasp, when the situation changed.

Chinese intervention brought the dilemma referred to by Kissinger. If the US wanted to defeat China, the war had to be carried into China. If so, there was no guarantee the US would win against China’s superior numbers. If winning was possible, the US assessed that the USSR would attack in Europe, where the armed truce following WW II was already precarious. Either choice directly contravened US interests. Therefore, the US could withdraw from Korea or modify its political objective for a unified Korea. It chose the latter and sought to regain the status quo, against the strident demands of a MacArthur still focused on very different circumstances.

This choice did not sit easily with the US; she toyed with the extremes, either wanting to abandon the struggle or escalate the war before digging in to enter a contest of wills with China. The resulting war was unpalatable; the military objective to meet the new political objective was stalemate and men fought and died merely to force the Communists to negotiate. Over the next two years, the US wearied of this sour contest. In his book Korea, written with the advantage of the Freedom of Information Act, Joseph Goulden suggests that the end of the war came when Eisenhower leaked plans to use strategic and tactical nuclear bombs directly against China.
Circumstances had conspired to force the US into Clausewitz’s “limited war”, tailoring the political objective to the militarily achievable, then modifying the military objective to the politically desirable. In Clausewitz’s words:

“Sometimes the political and military objectives are the same... In other cases the political object will not provide a suitable military objective. In that event, another military objective must be adopted that will serve the political purpose and symbolise it in the peace negotiations”.

With limited objectives came limited force: Clausewitz suggests that “... the belligerent is again driven to adopt a middle course... (and) act on the principle of using no greater force, and setting himself no greater military aim, than would be sufficient for the achievement of his military purpose”. In Clausewitz’s terms, Korea was a US success; limited military force had gained a limited political object. Later, some American analysts would agree. Colonel Harry Summers of the US Army War College was tasked to review what went wrong in Vietnam. In reviewing lessons from earlier wars, Summers said this about victory in Korea:

“Because we were suffering from a kind of hubris as a result of our overwhelming WW II victories, we saw our limited victory in Korea as some kind of defeat. In so doing we drew precisely the wrong lesson from that war. Instead of seeing that it was possible to fight and win a limited war in Asia, regardless of Chinese intervention, we again... took counsel of our fears and accepted as an article of faith the proposition that we should never again become involved in a land war in Asia”.

Thus the US left Korea without any true understanding of Clausewitz’s “balance”. The Korean stalemate could have been broken by US escalation or withdrawal. Either required a varied political objective; but US strategic thinking was paralysed by fear of escalation. The missed lesson was that more flexible political objectives could have allowed wider military options. Unable to be flexible, the US had to embrace stalemate and its consequences and learn to see limited results as victory. Similar paralysis of strategic thinking would haunt the US in Vietnam.

Harry Summers Jr.

In Vietnam, the US confronted a new dilemma. Summers’ analysis of the conflict’s lessons begins with these words: one of the most frustrating aspects of the Vietnam war from the Army’s point of view is that as far as logistics and tactics were concerned we succeeded in everything we set out to do. Success followed military success, yet the US position steadily deteriorated over the course of the conflict.

The conventional military wisdom has been to trace this failure to the politicians and the American people; the politicians nerve failed and the people failed to support the war. Both did occur and in the end contributed to US defeat. However, Summers argues they were symptoms, rather than the cause of failure. From the beginning, the American military failed to comprehend the true nature of the war. Vietnam was not a counter-insurgency war; North Vietnam’s aim was conquest of the South, and therefore “counter-insurgency operations could only be tactical, no matter what we called them” because the insurgents were merely a screen.

Summers suggests that the US had to adopt the lessons of Korea to win. The political objective was to contain North Vietnamese expansionism and encourage a free and democratic South Vietnam. The military objective should have been to stop North Vietnamese infiltration south. Once infiltration was contained, the South Vietnamese should have been left to solve internal problems themselves, free from North Vietnamese and US interference, as the Koreans had done. To stop infiltration, Summers suggests that the US could have defended the 17th parallel and the Cambodian border, or carried the war into North Vietnam, both options similar to those canvassed in Korea.

Summers’ analysis is both accurate and unfair. Political limits on military freedom of action and force levels removed either of Summers’ conventional options from consideration. Counter-insurgency operations forced the US to become entwined in Vietnamese internal affairs, which were increasingly repugnant to a media-informed US population. The War lost support. Thus, policy forced the military to a strategy which could never retain popular support. Attempts to remedy the situation by direct Presidential involvement in conduct of the war only made things worse. Clausewitz’s triad of military, government and people was ignored. The US left Vietnam, as it had Korea, without having come to terms with Clausewitz’s “balance” between the politically desirable and the militarily achievable.
The US and Limited War —
The Cold War

“No war that actually happened was ever analysed as intensively as this war that did not.”

Lawrence Freedman.

The Korean and Vietnamese wars were fought against the background of the US’s most limited war; its 45 year conflict of armed observation against the USSR. Conceived in Allied victory in WW II, this war was fought at the other end of Clausewitz’s spectrum of conflict. Although Korea and Vietnam may be seen as manifestations of it, the Cold War was fought without direct conflict. This was primarily a war of policy, with large military forces adopting a passive, supporting role. It has been spectacularly successful for the US, bringing the destruction of communism, the near complete political dissolution of the USSR and the end of Soviet military superpower status. To Clausewitz, this limited war was as valid as wars of extermination and infinitely preferable. Given that Clausewitz’s absolute warfare could follow escalation of the Cold War, it is difficult to imagine a more proper use of military force, or a more attractive result. This first tangible US limited war victory resulted from a finely judged, patient, and long term balance of political objective and military means. Its success changed the environment in which the US would fight its bloodier wars, setting the scene for one of the most impressive feats of US arms.

Getting it Right — The Gulf War

“Saddam Hussein’s Invasion of Iraq . . . sparked the first major international conflict of the post-Cold War era. Operations Desert Shield and Desert Storm presented the most important test of American arms in 25 years. The victory was impressive and important; it will affect the American military and American security interests in the Middle East and beyond for years to come.”

Dick Cheney.

US victory in the Gulf War was impressive indeed. In victory, Dick Cheney noted that the foremost of five general lessons from the war was that “decisive Presidential leadership set clear goals, gave others confidence in America’s sense of purpose, and rallied the domestic and international support necessary”. Given the US’s woeful record of providing political direction for war, Cheney’s comments are more than mere sycophancy. President Bush and his civilian planning team of Cheney and James Baker provided explicit policy direction to the military. This control was finely judged and the meddling of Vietnam was avoided without allowing the military juggernaut building in the Gulf to create its own agenda.

President Bush framed US national policy objectives, which essentially sought the pre-war status-quo within three days of the Iraqi invasion, and did not change them throughout the war. Removal of Saddam Hussein, occupation of Iraq, unconditional surrender, or creation of a new Iraqi political order were never on Bush’s explicit agenda.

Drawing on clear political direction, Cheney and Colin Powell were able to frame supporting military objectives. The first US objective was to deter Iraq from continued aggression. While this was being achieved, the US led the UN to adopt resolutions allowing the use of force to ensure Iraqi withdrawal. Having gained international sanction for the war, Bush then sought and gained approval from his own Congress, which allowed the use of force if diplomatic and other peaceful means failed. Bush also appealed directly to the American people, enunciating clearly US policy objectives and communicating effectively his outrage at Iraqi aggression. Cheney and Colin Powell then framed US military objectives for the offensive war. These were:

- neutralisation of the Iraqi command authority’s ability to direct military operations;
- ejection of Iraqi forces from Kuwait and destruction of Iraq’s offensive threat to the region, including the Republican Guard in the Kuwait theatre of operations;
- destruction of known nuclear, biological and chemical weapons production and delivery capabilities, to include Iraq’s known ballistic missile program; and
- assistance in the restoration of the legitimate government of Kuwait.

Balance between Clausewitz’s triad of people, military and government was complete.

This thoughtful, almost mechanical approach to the provision of policy direction demonstrated the extent to which the US had learned from its defeat in Vietnam. In the intervening years, smaller military adventures in Grenada and Panama had demonstrated again the need for clear policy on the one hand, and decisive military action on the other. The US military convinced its masters that the politician’s place was to provide the framework within which the military would operate, not to run the war from the White House. US politicians had responded; in 1984 Secretary of State
Caspar Weinberger laid down criteria for the use of military force. Weinberger's tests were:

1. The United States should not commit forces to combat overseas unless the particular engagement or occasion is deemed vital to our national interest;
2. The commitment should only be made with the clear intention of winning;
3. It should be carried out with clearly defined military and political objectives;
4. It must be continually reassessed and adjusted if necessary;
5. It should have the support of the American people and their elected representatives in Congress; and
6. It should be a last resort.\(^{32}\)

These tests were met to the satisfaction of the Congress and the full power of the US military, uninhibited by Vietnam style constraints on freedom of action, was loosed on Iraq. The build up was impressive, preparations exhaustive and military victory complete. But victory was complete only in terms of the policy objectives. General Schwarzkopf was not allowed to pursue Iraqi forces beyond the limits imposed by policy, even though he patently had the means, and apparently the desire, to do so. The US stuck rigidly to the tasks it had set itself and which had been approved by the UN. The status quo was restored, but the aggressor was only partly punished and outwardly unpertinent. After the US's self-imposed cease fire, Saddam continued to revile the US and its allies, while promptly embarking on a campaign of genocide against the Kurds. Flushed with victory, the US nearly repeated its WW I sacrifice of policy in its eagerness to disengage from the war.

The world watched US military victory on CNN television. There was no doubt who had won, however, the utility of the victory was not immediately apparent to much of the US and the world; why was Saddam, the source of the problem, allowed to remain at large? What was the point of the exercise? Bush responded by pointing to his policy objectives, which had been met to the letter. Ironically, having provided clear policy guidance for a limited war and thereby kept control of an eager and victorious military, the US found itself in a position where victory threatened to set the plight of the Kurds. Clearly, Bush believes the solution to the region's problems lies with diplomatic, not military action. Whether this is a correct decision will have to await the judgement of history, and we will never know what may have been. That this is a proper decision, at least in Clausewitz's terms, is beyond doubt. Policy was framed, legitimised and held sway over war. In the Gulf War, the US found the balance between policy and military objectives it sought throughout the 20th century.

### Conclusion

"At this point our historical survey can end. Our purpose was not to assign, in passing, a handful of principles of warfare to each period. We wanted to show how every age had its own kind of war, it's own limiting conditions, and its own peculiar conceptions . . . It follows that, every age must be judged in the light of its own peculiarities." \(^{34}\)

Carl von Clausewitz.

As Clausewitz implies, historical analysis of war teaches the diversity of the phenomenon. This is so for US military history. In experimenting with modern war, the US has fought wars of total victory in the World Wars, and wars so limited to be hardly recognisable as war at all, in the Cold War. It has dabbled between the ends of Clausewitz's spectrum of conflict, in Korea, Vietnam and the Persian Gulf. It has had diverse political motives for fighting, from the ill defined and imprecise motives of Vietnam to the clinically framed, clearly articulated policies of the Gulf War. In the course of this experiment, the US has steadily learned how to impose political control over its considerable military. It has sought, and found, the balance between limited political aims and war's tendency to absolute violence. Its choice of limited victory in the Gulf War, when total victory could so easily have been gained, clearly demonstrated the mature result of the lessons the US has learned: the US has embraced Clausewitz's view, that military means respond to political end and shunned MacArthur's narrower doctrine of total victory.

Given the relative success of its experiences of war, the reasons for the US's choice are not immediately
apparent. Its WW II experience in Japan suggested that unconditional surrender can work; its experience in Europe post-WW II suggested the opposite. The Cold War showed the efficacy of limited wars; Korea and Vietnam demonstrated that they can be a wasted effort. The Gulf War is recent, but seems to suggest that the US has found the formula to fight limited war well.

The reason for the US’s choice lies in the very diversity of its conflicts. Only Clausewitz’s view, that “war is merely the continuation of policy by other means” 
provides the necessary flexibility for a modern power to conduct its affairs. If the US invariably adopted doctrines of total victory, war would lose its utility. Total victory was patently unachievable in the Cold War. Without limits on military means, the result of conflict between nuclear superpowers is unthinkable. Clausewitz teaches that policy is the most important limiting factor. If this were not so and military force were autonomous, we would only be analysing nuclear holocaust. As Clausewitz says, “a theory, then, that dealt exclusively with absolute war would either have to ignore any case in which the nature of war had been deformed by outside influence, or denounce them all as misconstrued”.

In other words, a doctrine of total victory can only describe the proper place of war by ignoring most examples of it. The US’s modern experiment with war shows that a nation’s diverse needs dictate war’s proper purpose to be policy’s means, not its master.

NOTES

2. ibid., p.404.

8. ibid.
13. J. Wheeler-Bennett and A. Nicholls, op. cit., p.56.
15. R. Aron, op. cit., p.27.
18. ibid.
20. ibid.
24. ibid., p.89.
25. ibid., p.1.
26. ibid., p.91.
30. ibid., p.1-1.
33. Clausewitz, op. cit., I:1, p.87.
34. Clausewitz, op. cit., II:3, p.593.
35. Clausewitz, op. cit., I:1, p.87.
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The Philosophy of Total Quality Management

By Lieutenant Colonel C.W. Ferndale, RA Inf.

Introduction

There are many indications in the market place and in literature of the increasing levels of global trade and rising public expectations of quality and value in both goods and services. Examples can be seen in the Pappas Carter Report and like reports. Firms, industries and whole countries are finding that international competitiveness is necessary for long term economic survival. Without the ability to compete economically and meet customer expectations, firms are failing. The result is a sharpening focus on increased productivity and on the quality of output in both public and private sectors. This begs the question: what is meant by “productivity” and “quality” and how do they relate to organisations? The question is of particular interest to Army (and to the Department of Defence) as the “productivity” of an Army and the “quality” of service to the nation may be difficult to bring into sharp focus.

This focus is becoming more critical as Army and Defence are required to be increasingly competitive in order to retain a responsible share of the Federal budget to provide for the defence of Australia.

There is strong support for the notion that productivity and quality improvement is the role of management, and that a paradigm shift in management thought is required in order to achieve them for Australia. Total Quality Management (TQM) is increasingly being accepted on the global scene as the management philosophy most likely to succeed in achieving this shift, utilising a focus on quality to raise productivity.

A New Meaning of Quality

It is essential that “quality” be understood and the meaning be agreed to within an organisation before the TQM philosophy can be properly assessed.

While the Concise Oxford Dictionary defines quality as the “degree of excellence”, there is a variety of definitions among practitioners and theorists. Quality need not necessarily have the meaning of “best” in any abstract sense. To industry, for example, it may mean “best for satisfying certain customer conditions”. There are, however, many approaches to the notion of quality, and I would like to raise a selection of them.

Juran (1988: 2.8) quotes quality as being “fitness for use”, noting that this definition has not achieved universal acceptance. He states that of the multiple meanings given to the term “quality”, two tend to dominate. These are:

• quality consists of those product features which meet the needs of customers and thereby provide product satisfaction, and
• quality consists of freedom from deficiencies.

Juran also provides other definitions that are useful in understanding quality. He defines a product as the output of any process, and a customer as someone who is impacted by the product, whether internal or external to an organisation. The outcome may therefore be expressed as the product plus a measurement of customer satisfaction.

Ryan (1989: 3) defines a quality product as one “which meets the needs of the marketplace”, and notes that those needs are not likely to be static. Taylor (1989: 472) discusses quality, and, separately, quality in the measurement sense. He defines quality as the totality of features and characteristics of a product, process or service that bear on its ability to satisfy stated or implied needs. In the measurement sense quality is the probability that the values of the characteristics of a service or product will lie within specified limits, and impart to the product or service the ability to satisfy given needs.

Ross (1988: 1), whose main interest is in the area of design engineering and the reduction of variance, also argues for quality being measured in terms of the characteristics of the product. Product characteristics describe their performance relative to the requirements or expectations of the customer. Examples of this are the fuel economy of a car (or the endurance of an armoured vehicle), and the breaking strain of fishing line (or the trip wire of a flare). Because product...
characteristics degrade over time, the quality of the product is said to be related to the loss to society caused by that product degrading throughout its life cycle. A truly high quality product will therefore exhibit minimal loss of characteristics over its life cycle.

Lovelock (1988: 229) defines quality as "the degree of excellence intended, and the control of variability in achieving that excellence, in meeting the customer's requirements". This incorporates three components: design quality (the intended degree of excellence), conformance quality (minimising variance), and fitness of design (meeting the anticipated consumer need). This definition is intended to refer to quality of service rather than of manufacture, as this is Lovelock's focus. This tends to highlight the absence of any universal definition of quality, and indicates the differences evident between types of industry, and between individual approaches to the concept of quality.

Crosby takes the pragmatic view that if a product is made according to the specifications provided, and meets the required tolerances, that product is of high quality (Ross, 1988: 3). This approach, while perhaps technically correct, omits consideration of the customer's requirements. Ross argues that true quality cannot be present if the specifications used for provision of the product do not meet the expectations of the customers.

There are also simpler versions. Edosomwan (1988: 179) defines quality as "fitness for use in terms of the ability to process and produce with less rework, less scrap, minimal downtime and high productivity". Oakland (1989: 3) says that quality "is simply meeting the requirements". AVCO Financial Services, as an example of a service industry, defines quality as "anything the customer says it is". These definitions allow broad scope for interpretation, and while they do not (so far) provide a convenient basis for analysis, they indicate how the matter of quality may be translated at the operational level.

This variety of related definitions indicates that there is no absolute state of quality in the sense of a grade, or class, of product. The new meaning of quality is best summed up by the definition advocated by Sprouster (1984: 25) and others, and generally attributed to Deming:

"Good quality does not necessarily mean high quality. It means a predictable degree of uniformity and dependability at low cost with a quality suited to the market."

Quality is therefore related to what can be achieved as acceptable to all parties. Thus it invokes the notion of optimality rather than maximisation. This has significant ramifications for general management and demands cognisance in any management philosophy.

A review of the abundant literature on Quality reveals that many countries and organisations use different names that refer to the same fundamental approach, or to elements of it. A clear definition of TQM is therefore difficult to isolate. Feigenbaum (1983: 6), for example, defines Total Quality Control as:

"... an effective system for integrating the quality development, quality maintenance, and quality improvement efforts of the various groups in an organisation so as to enable marketing, engineering, production, and service at the most economical levels which allow for full customer satisfaction."

While this may be a satisfactory operational level concept, it lacks the strategic implication associated with TQM.

Lovelock (1988: 234) refers to important advances in the quality management area through concepts of Statistical Process Control (SPC). He refers here to the statistical tools such as control charts and pareto charts, but offers no thread to draw the use of these tools together in common with other elements to constitute an identifiable management philosophy. Some progress is made in this direction by Clements (1988: 1) who attempts to look beyond SPC, describing it as "gateway technology". Clements sees SPC as a philosophy of continuous improvement in an easily identifiable sense, items are measured and better materials or processes are adopted to work towards optimum measurements. The result is still less than an overall management philosophy.

SPC is taken a step further by Hradesky (1988) who advocates Productivity and Quality Improvement in a twelve step process. This process emphasises the need for integrated planning for the implementation of SPC, the five ingredients of which are:

- statistical techniques,
- problem-solving techniques,
- productivity and quality improvement leadership and attitudes,
- quality planning, and
- a systematic approach.

Although the requirement for an organisational culture change is acknowledged as a necessary ingredient, Hradesky does not take this vital element any further.

TQM has been also called Company Wide Quality Control (CWQC), or Total Quality Control (TQC). TQC is often used in ways that emphasise the statistical tools of quality control, as distinct from the all encompassing notion of a corporate philosophy, of which the
use of such tools is but one part. The common thread is, however, the concept of “totality”, whereby the control or management of quality is a feature of all aspects of the organisation.

Quality Assurance, another of the approaches to ensuring quality products, differs from quality control. It consists of activities such as inspection, intending this to apply to the quality of the output of elements of the organisation that are separate from the inspectors (Taylor, 1989: 18). TQM, on the other hand, involves each element of an organisation improving its own quality and productivity.

Juran (1988: 6.23) introduces the concept of Strategic Quality Planning, which he renames Company Wide Quality Management (CWQM). He provides detailed discussion and prescriptive guidance on a wide range of quality aspects, which tends to adopt the theme that true quality enhancement requires the commitment of the whole organisation. The key implication here is the integrated involvement of all elements of management. This holistic approach has become a key element in the development of a management philosophy based on quality.

TQM as described by Oakland (1989: 14) is an approach to improving the effectiveness and flexibility of organisations as a whole. It is essentially a way of arranging and involving the whole organisation, for, to be truly effective, all parts of it must work properly together. Every person and every activity affects, and in turn is affected by, others.

The largest organisation in the USA, the Department of Defense, has adopted the following definition of TQM:

“It is both a philosophy and a set of guiding principles and practices that represent the foundation of a continuously improving organisation. It applies quantitative methods and human resources to improve the material and services supplied to an organisation, all the processes within an organisation, and the degree to which the needs of the customer are met, now and in the future. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach focused on continuous improvement.”

As an Australian example, the Foley Report (DITAC, 1987: 23) looked on quality as “the subjective and objective attributes of a product or service which satisfy customers’ expectations and perceptions at the time of purchase and during the usable life of the product or service”. The advantage of this approach is that it allows consideration of three constituent elements: purpose or function of a product, specification of that product, and how it conforms to its purpose.

### Quality From an Historical Perspective to 1945

Regardless of a contemporary definition, quality has been sought by societies since earliest times. One of the 282 laws of Babylon, for example, under King Hammurabi in 18 BC, required subjects giving poor service or unequal value in trade to satisfy their customers by correcting these deficiencies (Taylor, 1989: 13). The first real concern for quality, however, began to emerge around 1000 AD with the craft guilds. These required apprenticed training time and evidence of ability before a master craftsman gained recognition. These guilds related only to production industries and helped assure quality of product by demanding quality of worker. At the same time there was no concept of standardisation of product. The product of a silversmith, for example, was guaranteed to be silver, and also to be unique, by virtue of the hallmark on it. This identified the product with the man, thus identifying that key ingredient, the pride of the individual in his work.

This guild approach was taken a step further in the 14th century. A guild of leather merchants assigned to a skilled leather worker the task of moving among the stalls of the tradesmen to examine products being made to ensure they were up to a minimum standard. Thus began the institutionalisation of a control/inspectorate concept in manufacturing, the beginnings of jointed incrementalism in early commercial management. It is worth noting that this era was also noted for the absence of human rights and modern versions of personnel management practices. This relativity is addressed elsewhere in this paper.

Instructions on important measurements and some details on inspection were recorded in France in the 16th Century, related to the making of weaponry (Carrubba and Gordon, 1988: 3). Production at this time was still by individuals and many one-of-a-kind articles resulted. Standardisation in the making of armour and weapons was, however, being introduced in the 18th and early 19th centuries. For the manufacture of muskets in America, Eli Whitney introduced the concept of inter-changeability which required development of metal working tools, the examination of the properties of materials, and the documentation of measurements, tolerances and processes. This was, in fact, the beginning of quality control; the emergence of “assurance sciences”.

In contrast to the guild system, in the earlier part of the industrial revolution product integrity suffered from
the effects of increasing social mobility, low levels of education, and the transition in the oversight of quality to a foreman, or similar appointee. This led to the responsibility for quality being devolved to an inspection function. Within the management concepts of the time, this approach was deemed to be relatively successful, in so far as it was accepted as an improvement.

As the 20th century industrial revolution brought the complications of mass production and automation, the output speed of machinery was replacing the skill of the craftsman. At the same time Frederick Winslow Taylor's scientific management was being developed and put into practice and, as measurement of the production function was expanded, this allowed advances in quality control. In as much as this era saw the first serious attempt to gain control over the whole process of production, it can be considered a direct forebear of the quality movement.6

Dr Walter A. Shewhart, of Bell Telephone Laboratories in the USA, created the roots of TQM when he first applied statistical control charts to the control of quality in the production lines at the Western Electric Company. His first papers appeared in 1924, and the December 1949 Fortune listed him among the original developers of the Quality Control movement. Application of these charts slowly gained currency in mass production industries with Western Electric adopting them in the 1930s. The next significant use of the charts was related to artillery ammunition at Piccaninny Arsenal early in World War II. Their implementation was greatly aided by US Government production policies applied during that war. These policies required quality control applied to war stocks to ensure field performance from a military operations perspective, as well as fiscal integrity in US Defense contracts demanded by the financial strain of prosecuting the war.

Largely as a result of scientific and social developments catalysed by World War II, quality was in high demand after 1945 because the nature of product consumption had changed.3 This is exemplified by the developments in such fields as aeronautics, food processing, electronics, communications, education, transport, and the amount of public sector spending due to the conduct, effects, or cessation of the war. The early 1950s saw the transfer of Quality Control principles to major centres outside the USA. In the mid 1950s two Australian firms, AWA Ltd and Plessey Australia Pty Ltd, sent representatives to the USA to study, and to bring to Australia, the new methods of economic manufacturing management. In the same period the US-financed Japan Productivity Centre took many Japanese businessmen to the US to study manufacturing and management methods. This greatly aided the transfer of these concepts to Japan.

The assurance sciences, as they became known, have been greatly assisted by the role of the military and by military products. In the early days, the need for weaponry spearheaded the fundamental beginnings of the assurance sciences. Later throughout its growth, the assurance sciences were continually pushed ahead through the concern of the military. Standards, specifications, and engineering and statistical techniques were encouraged and developed specifically by the military to address the problem of product integrity. Commercial products contributed to this growth, but in the military the need was more critical, and at key times was accorded the necessary support by governments.11 In the Australian Department of Defence this growth was illustrated by the evolution of the Weapons Research Establishment in South Australia (now DSTO Salisbury), and other elements of the organisation that have since been renamed or restructured.

During the development of the assurance sciences it became clear that the human element is the key to ensuring productivity and quality. Whatever approach is adopted the concept is the same, that is to get all workers to have pride in their work, and commitment to it, as in the days of the master craftsman.

The Japanese TQM Connection

In 1946, the Japanese Government Department of Science and Technology authorised the establishment of a non-profit scientific and educational foundation called the Japanese Union of Scientists and Engineers (JUSE). JUSE deals with research and development, education and promotion activities of management based on the statistical control of quality and productivity. It has grown to be the international centre of Total Quality Control knowledge, training and promotion (Sprouster, 1987: 30).

The proliferation of technological advances that had their genesis in World War II highlighted the need for quality control. They also created in their wake requirements for reliability and maintainability as additional disciplines. Since the reliability of a product or a piece of equipment is influenced by the quality of its design, the quality of the material used in its production, and the quality of its maintenance, there is a close interrelationship between the concepts of quality control, maintenance, and reliability (Banks, 1989: 11).

The development of TQM as it is understood today is closely linked to the development of statistical quality control. Precise origins are not clear, but there is a traceable and generally accepted link to the post-
war reconstruction era in Japan, and the work of Deming, Shewhart and Juran.

Deming visited Japan in 1947 and 1948 to help with the census and other statistics-based tasks. In 1949, he was invited to return to teach the Japanese about statistical methods (Deming, 1986: 487). His first eight-day course on statistical control of quality was in Tokyo in July 1950, for 220 engineers (out of 600 applicants). This was soon followed by talks to influential industry leaders. In the same year Kaoru Ishikawa began his studies of quality control concepts, and expressed his surprise that the methods developed by Shewhart were not being used extensively in the US (Banks, 1989: 11). The difference between how the Americans and Japanese were taught statistical quality control methods was that in Japan, Deming addressed the upper echelons of general management, whereas in the US he was addressing engineers and workers (Messina, 1987: 102). The Japanese were receptive to Deming’s lectures since their companies were embarking on the recovery path after World War II and had an opportunity to seek a quality reputation higher than they had before the war. US companies, on the other hand, had been financially successful without the use of statistical methods. Anecdotal evidence may suggest that the automobile industry in the 1950s, for example, was quality conscious. It is likely, however, that such efforts at controlling the production process were aligned with quality assurance to meet the company specifications, rather than with the concept of quality as discussed here. The USA was not always “quality successful” (Ryan, 1989: 14).

The Japanese use the noun "Kaizen" ("an improvement [of, on, upon]; betterment; amelioration; a change for the better") in the context of quality improvement. Correct syntax applies this noun to an organisation or a process, it is not applicable in a personal sense, nor to an individual. The Japanese therefore have a unique way of describing the result required from TQM. This is in contrast to the English language which allows some ambiguity in this context. This situation may contribute to confusion in teaching and learning when relating the Japanese word to a western environment. Its use by Blakemore (1989), for example, and unpublished documents from several TQM workshops and seminars in Australia, attempt to apply the Japanese term in a simplistic way in a western context.

Deming pursued his mission in Japan with vigour and for his efforts was decorated by Japan as well as having the singular honour of the JUSE naming their highest Quality award after him. This is the prestigious Deming Award which is eagerly sought by Japanese organisations, and for which entries are encouraged by JUSE and the Ministry for International Trade and Industry (MITI), as an incentive for national productivity and as an adjunct to government economic policies.

### Later Developments

Following successes by Japanese industries using the quality approach there was a relative hiatus in global development. This was largely as a result of misappropriation of Japanese strength in the area of quality control and the growth experienced by western industries. As advances in transportation effectively reduced distances and advanced global trade, issues of international competition became more important and more obvious.

Feigenbaum (1983: 16) describes the 1960s as the era of total quality control. Only when firms developed a specific decision-making and operating framework for product quality, effective enough to take suitable action on the quality control findings, did the firms obtain genuine results in better quality and lower costs. This emphasises the optimality approach over that of maximisation. “Real” costs had to be distinguished from “accounting” costs. Thus all elements of an organisation, not only the quality control department or equivalent, had quality control responsibilities. Each element therefore had a role in guaranteeing quality. At the same time the concept of zero defects was developed in the Martin Marietta Corporation in the US by Crosby, as a result of efforts to eliminate defects in missile construction during the space race. This idea achieved its objectives through worker motivation and involvement (Banks, 1989: 14).

In 1962, Quality Circles evolved in Japan. These more thorough education of supervisors, who, in Japan, are considered to be the liaison between management and workers. Quality Circles involved discussion of quality control issues and self training in quality control techniques. The 1960s saw two other developments in the USA of importance to the growing Quality movement. These were:

- The introduction of several Quality journals servicing the assurance sciences. It is interesting to note that the targeted clientele included “managers and engineers” (ibid). This range of journals has continued to expand.
- Advances and modifications were made to legal requirements for product liability and user safety. These are demonstrated by the emergence of such vocational fields as Consumer Affairs and occupational Health and Safety..
In 1976, Kaoru Ishikawa described the uses of cause-and-effect diagrams, soon also known as fish-bone plots or Ishikawa diagrams. These are a formalised technique for the listing and consideration of factors that have a direct bearing on a particular quality problem to be solved.\(^6\)

Other technologies at about this period also influenced management thought and development. Taguchi promoted his contribution to the use of statistical methods for product design improvement at about this time (the Taguchi Loss Function), based on his 1953 work (Banks, 1989: 16).\(^7\) Also in the 1970s, the implementation of various statistical control methods was enhanced by the use of computers. Computer Aided Quality (CAQ) represents the totality of the application of computers to quality control, able to operate from the same data bases as Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM).

The major shifts in the Quality Movement can therefore be described in the following terms:

- the inclusion of consumer considerations, that is, the addition of “marketing” to the corporate inventory. This is exemplified by the success of Volkswagen cars as a product for the people; and
- the increase in international competitiveness. This was fostered by advances in transport, communications, the study of languages, the increase of world-wide organisations such as the UN, the growth of disparity between economic levels (rich and poor nations), and the economic effects of large wars (started by those of World War II).

By the 1980s, the complete Quality picture was so diversified that an appropriate umbrella concept was required. Feigenbaum (1983) describes this as the sixth step in his quality control evolution. As total quality control has come to have a major impact on management and engineering practices, it has provided the foundation for the evolution of Total Quality Control organisation-wide, and, therefore, Total Quality Management. In contrast to the earlier era, statistical quality control techniques are now available for most, if not all, required functions. The problem now confronting organisations is how to ensure adherence to quality control procedures. A major trend in the 1980s has therefore been towards Quality Management, particularly the human relationships aspects, concentrating on training and leadership. Quality Management recognises the importance of the broad systems issues of any organisation, and seeks effective ways to integrate the efforts of large numbers of people with large numbers of machines and huge quantities of information. Hence it involves systems questions of significant proportions, and a systems approach is inherent in the concept of Total Quality Management.

Banks (1989: 17) describes two types of faults that develop and the responsibility for them:

- faults that lie within the sphere of control of the management (faults of the system); and
- faults that lie within the sphere of control of the workers (faults of the individual).

In this Banks agrees with Juran (1988: 22.19), who attributes 80 per cent of all faults to management of the system, with 20 per cent attributed to operators in the system. This seemingly disproportionate role of management is reasonable when considered in terms of quality management covering the product and service life cycle, from product conception through production to customer service. Feigenbaum (1983) extrapolates this point to the area of business management strategy, to show how the concepts are necessarily complementary for a successful organisation.

### Summary

A definition or description of Quality depends on the relationship between what is required and what is provided, and the value placed on the outcome. It is generally accepted that quality needs to be agreed, not simply measured by a universal yardstick. Producing quality outcomes appears to be the key to organisational success in the perpetual battle for resources, regardless of whether those resources are staff, budget allocations, markets or material assets.

The theory of TQM relates to Quality, not only in operational management, but also in the context of the continuing enhancement of Quality as an integral part of the management of an organisation. TQM relates to process. It is not a program, nor is it a project, rather a philosophy which guides the whole organisation and the elements of it. As such it must be expected that TQM would take considerable time to implement in an organisation. Thus, while TQM may be regarded as a means rather than an end, it is, however, also the desired state sought. TQM can therefore be regarded, particularly during any lengthy implementation period, as an end towards which the organisation strives. TQM may therefore demonstrate characteristics of:

- a goal of strategic planning,
- a process for strategic planning,
- a source of techniques to assist planning, and
- a process whereby aspects of strategic planning can be implemented and perpetuated.

The importance to the Army of such links with the strategic aspects of management deserve further atten-
tion. These aspects will be addressed in future articles that will explore the potential of TQM in the context of the Australian Army.

NOTES

2. This is evidenced by the extent of Federal Government programs and private sector interest in pursuing these topics. Some of these are mentioned in this and subsequent papers.
4. From a Total quality management Institute presentation by AVCO on the AVCO TQM experience, Canberra, 21 Sep 90.
5. While the origin of this ‘definition’ is not known, it appears in many papers given by Deming, and is quoted by him in his video tape series on TQM. There are difficulties with using this as ‘the’ definition, this aspect will be discussed later.
7. Kevin Foley, Chairman of the Committee of Review of Standards, Accreditation and Quality Control and Assurance, reporting to the Department of Industry, Technology and Commerce (DITAC) in 1987. At that time Foley was Professor of Economics and Director of the Centre for Quality Management at Bond University.
8. Science is considered to be a branch of knowledge dealing with a body of facts systematically arranged and showing the operation of general laws. It implies the capability of measurement and replication.
9. One perspective on TQM is that it represents the latest approach to gaining a more complete control of processes within organisations. This aspect is discussed in a later paper.
10. Some examples. 1950s commercial airlines became concerned with electron tube reliability, 1954; US military studies revealed maintenance costs for complex systems were 1/3 of total maintenance and 1/3 of total personnel. 1957; US DoD report required reliability testing of products.
11. For a detailed history and evolution of quality control see Banks, 1989; Chap. 1.
12. Several people with the name Ishikawa appear in the literature. Kaoru Ishikawa is noted for his development of the cause-and-effect diagram or fishbone chart), and is acclaimed as the “father of Quality Circles”. He studied under Deming in the 1950s.
13. Interesting comments on the early days of post-war industrial reconstruction in Japan, and the influence of particular American and Japanese individuals, are in Hopper (1985).
15. These will be addressed in a subsequent article.
16. Interesting comparative uses of the Taguchi Loss Function can be found in Ross, 1980, Chap 1 (other Taguchi techniques are in other chapters).

REFERENCES


Lieutenant Colonel Clint Femdale is an infantry officer. He enlisted in the CMF in 1964, was commissioned in 1968 and has served with the ARA since 1969 in a variety of regimental, staff and training appointments. He has served with the Royal Australian Regiment, 1 PIR, HQ PNG Defence Force, Joint Services College of PNG, in Israel and Lebanon as a UN Military Observer, at OCS Portsea and Army Office. He is a graduate of the Army C&SC and holds the degree of Master of Public Administration, and a Graduate Diploma in Administration, from the University of Canberra. He presently serves as S01 OPS on the Headquarters of the 4th Military District in Adelaide where he has a key management role in the restructuring of ADF and DoD organisations for Central Region under the Defence Regional Support Review.
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Logistics — Integral and Vital

By Major A.A. Murray, RAOC.

"Administration is a function of command."
"An Army marches on its stomach."

Introduction

The above truisms aim to reinforce the integral nature of logistics to military operations. A posting to the Royal Australian Regiment and two years in the all-Corps environment of the Royal Military College have led me to conclude that there is a lack of appreciation, especially among junior officers, of the importance of logistics. The aim of this essay is to remind readers that logistics is an integral and vital aspect of military operations.

Twenty Years of Peace

On 29 February 1972, D Coy Gp 4 RAR/NZ departed Vietnam, ending the deployment of Australian combat units to that theatre of operations. Since then, units and individuals have served with various UN forces while other individuals have served with Coalition forces on operations in the Gulf War. Despite this we have essentially seen 20 years of peace.

From a short, but well known lament the following quote springs to mind:

“logisticians . . . sink resentfully into obscurity in peace. They deal with facts but must work for men who deal in theories. They emerge during war because war is very factual. They disappear in peace because war is mostly theory.”

What follows will no doubt strike a chord with many readers:

“Resupply, the Platoon Sergeant will look after that.”
“You’re just a civvy in uniform.”
“Pogo, get some time up at the sharp end” and
“I wouldn’t know about the rear echelons.”

Although often banter or jest, these statements reflect an attitude that some hold as gospel. This suggests to me that there are a few misconceptions prevailing in our peacetime Army on the role of logisticians and the nature of logistics. To shed some light, the above statements will be explored using historical examples.

Definitions

The words administration and logistics are neither synonymous nor interchangeable. The Manual of Land Warfare (MLW) has a quite different definition for each. Administration is: “the management and execution of all military matters not included in tactics and strategy; primarily in the fields of logistics and personnel management.”

Administration is all encompassing and includes logistics. So what is logistics? In short it is: “the science of planning and carrying out the movement and maintenance of forces.”

The MLW goes into more detail, but this will suffice. Logistics is only a part of administration, hence we have the term (and title) “pers/log” for dealing with all of administration. This essay will focus on logistics and from the definition of logistics it becomes obvious why RACT, RAAOC, RAEME and AACC are called the logistics corps. The movement of forces falls into the domain of RACT, while the maintenance of forces is the province of the latter three, if maintenance is used in its widest sense.

But it does not follow that only members of these corps should be concerned with logistics because, from the truism above, administration (which includes logistics) is a function of command and command is common to every corps.

Resupply, the Platoon Sergeant will look after that

Is this delegation taking logistics for granted or is it another way of saying “what is logistics?”

A simple way to make sense of logistics is to look at it in terms of “lines of support”. Doctrine provides for four lines of support. Most of us understand the phrase first line ammunition, ie, the ammunition a soldier carries with him/her. The same applies to first line support. It is the support “available from within a unit from its own resources.” The Platoon Sergeant is a link in the first line support chain which goes back to the units Q store, transport platoon and technical support elements. First line support is an all-corps responsibility. In an infantry battalion the truck drivers and storemen are RAINF!
Second and third line support is provided to combat units by logistics units within an Area of Operations (AO). Second line is "provided to units and formations by . . . elements organic to a formation", eg, the divisional transport squadrons. These are Land Command units who operate 10-15 km behind the Forward Edge of the Battle Area (FEBA), possessing mobility consistent with the supported force. Working on the principle of "soldier first, technician second" basic soldiers'ing skills such as digging, patrolling, sentry and pickets are as essential to them as they are to an infantryman. On top of this, these units retain the skills to ensure the formations movement and maintenance needs are satisfied. On operations a brigade may consume up to 400 tonnes of supplies per day. The demands placed upon second line logistics units mould a distinctive character within these units. To dismiss a combat supplies unit as no different to a logistics battalion is as erroneous as dismissing an infantry battalion as no different to a recruit battalion.

Third line support is introduced into an AO if the size of the force or length of the Lines of Communications warrant it. These units "are not organic to formations and are normally located in the Communications Zone", once again they are Land Command units and they retain specialist skills to support less frequent activities, eg petroleum operators, vehicle storeman, air dispatchers and drivers of double articulated vehicles. These units provide interface with the Main Support Area which is the final line of support.

Fourth line refers to "support provided to organisations outside the AO", eg, static units such as Moorebank Logistics Group. These units provide support to an AO via second and third line units and in peacetime provide the majority of support directly to units in barracks. Fourth line units are under command of Headquarters Logistics Command and are the units where significant numbers of civilians are to be found.

### You're Just a Civvy in Uniform

This structure is all too rarely understood, and its ability to satisfy the demands of the supported force all too often taken for granted. In a peacetime Army, exercises are generally conducted on the basis of guaranteed logistic support — the availability of rations determines the length of the exercise. Rarely are junior officers confronted by a situation where logistics have failed altogether and they are still required to achieve a mission. One weakness identified in the Iraqis by the British during the Gulf War was that their officers were used to planning operations based on unhindered resupply . . . taking logistics for granted.

Because of their skills (and sometimes because of their attitude) members of the logistics corps are cussed at by others as being civilians. Does this mean that within the Army there are two clubs, those who are the warriors and those who are suspended somewhere between John Citizen and John Rambo? I hope not. Members of the logistics corps are not just civilians in uniform, they are an integral part of the total force, contribute to the capabilities of a force and provide vital advice in all phases of operations conducted by a force.

In late 1990, Britain announced it would send its 7th Armoured Brigade, the "Desert Rats", to the Gulf. As well as its two armoured regiments, infantry battalion and field regiment, the brigade drew on its division's resources for immediate logistic support. As an integral part of the total force were "elements from the Transport Regiment RCT, Field Ambulance RAMC, Ordnance Battalion RAOC, Armoured Workshop REME . . . and Royal Military Police Company". Further third line support units were also added to this force, bringing the strength of the brigade group deployed to over 6000 personnel.

In Afghanistan, the Soviets learned a sobering lesson on how logistics troops contribute to force capabilities. "The Soviets did not have career cadres of NCOs and enlisted men in repair units . . . (instead) they depended on conscripts serving only two years. They did not develop the special expertise necessary to deal with the service and combat repair problems typical of operations. This lack of skilled and experienced manpower meant many added repairs had to be sent to repair depots at the rear. It also led to a fair amount of equipment being abandoned". Fortunately the Australian Army's apprenticeship programme and on-going trade skills training provide a capability which will prevent similar experiences in future Australian military operations.

On the staff of both brigade and divisional headquarters, logistics corps representatives (complementing the operations staff) provide a flow of information and advice during all phases of operations. The importance of the logisticians involvement was highlighted by a statement attributed to the current DCGS in May 91: "the logistician has to come in very early in the planning process. A good logistician with a good commander will create a great deal of flexibility in terms of operational planning". As low-level operations expand the size of unit AOs this representation will be equally vital at the unit level. In infantry battalions an Ordnance Corps officer holds the position of 2IC Administration Company. This position will increase
in importance as a provider of information. A case could also be argued for increasing these types of positions in combat units, thus extending the flow of advice to the commander down to the unit and sub-unit level.

Writing of the Gulf War, a previous CGS expressed just how integral logistics is to the total force and its capabilities, saying: “A land battle in the desert . . . called for long range planning, superb co-ordination and timing, first class communications, pin point accuracy, high speed manoeuvring by ground forces and, above all, well executed logistics”.

During the Gulf War, an Iraqi Scud missile, landing on a United States Army logistics unit, killed more soldiers than most combat units lost during the entire deployment. In war, where is the sharp end?

In early 1944, a significant battle took place in Burma. It has become known as the Battle of Admin Box. Slim was to call this battle the turning point in the Burma Campaign. A force of 8000 Japanese troops encircled a British Divisional Administrative Area (DAA). The troops within, mainly clerks, storemen, cooks, medics, Indian labourers and mule handlers, were ordered to dig in and hold out until relieved. In the first 48 hours, one and a half infantry battalions, two squadrons of tanks and two batteries of artillery filtered into the position to bolster its defence. Nevertheless, if every man from mule handler to cook, storeman to clerk, had been free to take his place there would still not be enough troops to provide an unbroken line around the perimeter. The Japanese attacked repeatedly over a period of 19 days. Conditions became deplorable with food, ammunition and medical stores in short supply. “On the moonless night a few hundred yelling Japanese broke into the Box and over-ran the main dressing station crowded with wounded, the surgeons still operating. The helpless men on their stretchers were slaughtered in cold blood, the doctors lined up and shot”.

Apart from being an admission of ignorance, this statement reflects a poor appreciation of operations likely to be conducted in the future.

Administrative areas will be the target of enemy activities, because they are so lucrative. While the logistics units can act to provide a degree of security, it must be remembered that time spent on such activities is time spent away from their primary or technical function of movement and maintenance. To prevent this reduced efficiency, a call may be made on combat units to provide escorts or to protect administrative areas.

The Soviets learned of the need to provide escorts in Afghanistan. “Soviet convoys represented lucrative targets to the Mujahadeen and served as the weak link in the Soviet logistic system. This increasingly led the non-combat soldiers will fight with determination and will contribute to the victory.

Because of the threat of similar occurrences on the modern battlefield, security is an important consideration for logistics units. Members of the logistics corps train in the techniques of sector defence — manning strong points, sending out clearing and fighting patrols, ready reaction force drills and the siting and placing of obstacles. During K89 in the Northern Territory, the DAA was repeatedly probed by enemy forces requiring effective reaction by the units within. It should be noted that because of the distance from the FEB, the enemy forces likely to be threatening these units will be reconnaissance and specialist troops, equivalent to our SASR.

If the location of the sharp end is blurred in war, where is it in a peacetime army? I consider those members who are on call to respond to life threatening situations, on a daily basis, are at the sharp end. They include the SASR counter-terrorist team, RAAOC explosive ordnance disposal personnel and RAE fire fighters. If other hazardous activities, in a peacetime Army, are analysed, once again members of the logistics corps are well represented — RAAOC parachute riggers are involved in parachuting; RAEME tradesmen and RAAOC petrol operators support Army aviation; RAEME, RAAOC and RACT officers serve with UN contingents; RACT and RAAOC personnel conduct air dispatch activities; and finally RAEME and RAAOC personnel comprise significant numbers of all mechanised and armoured units and are integral to their performance.
Soviets to build up fire bases and strong points along all major supply routes.” They deployed an airborne battalion to protect the Salang Tunnel.\(^5\) The MLW series recognises this need and in relation to Rear Area Security states quite clearly: “provision must also be made for mobile protection of major convoys using the road and rail Lines of Communications. Protection would be provided from elements of field force units”\(^5\).

During the course of the Battle of Admin Box the combat units which filtered back into the Box in the first 48 hours were used to bolster the defence and constitute the ready reaction force. In one significant engagement, Japanese forces over-ran the forward trenches held by the gunners. A hastily organised counter-attack was defeated causing the defence commander to deploy his ready reaction force. Using brilliant infantry/tank co-operation, a company of the 2/West Yorkshire and a squadron of Dragoons retook the gunner’s position.\(^7\) This emphasises the value of combat multipliers, ie tanks in the defence of administrative areas. In the MLW series it is not specifically stated, but there should be no doubt, that for high value or vulnerable areas, where protection is beyond the means of the logistics units, combat units will be allocated this task. During the Gulf War, the British warned additional infantry battalions to be prepared for deployment. Their tasks were to be vital asset protection and prisoner of war handling.

Successful Logistics Contributes to Success in Battle

The elements of combat power are firepower, manoeuvre and morale. Logistics contributes to each of these.

The flow of ammunition to the gunline, the rifleman and the tank troop is dependent upon a supply system secure enough to survive the shocks of war and flexible enough to sustain the volumes required at the time and place required. “Iraqi guns fired over 400 rounds per day in checking the Iranian breakout of Faw in early 1986”.\(^8\) Their logistic system, based on the Soviet “supply push” model, was capable of massing the stocks required to achieve this firepower.

Manoeuvre is directly related to equipment serviceability. A simple repair and recovery system co-operating with combat elements will achieve very high rates of serviceability. In Afghanistan, the Soviets found their repair system, within combat regiments, too rigid. The system of evacuating equipment to a repair point in the rear proved too slow. “More and more repair assets had to be deployed forward on an on-call basis”.\(^9\) This eventually reduced downtime. Supply is also critical to manoeuvre. As the Germans learned in the Ardennes in 1944, when the flow of fuel stops, so do your vehicles.

Morale is the unsung partner in the combat power trilogy. The Gulf War demonstrated the virtue of high morale. Many of the Iraqi conscripts, war weary after the years of conflict with Iran, had no stomach for the fight. “The first Iraqi POWs (captured by the British) were taken by a small unsuspecting Royal Signals detachment who, a little worried, saw 70 armed Iraqi soldiers advancing close towards them: heavily outnumbered and hastily preparing to fight, they were then rather relieved to find that the Iraqis only wanted to surrender”.\(^10\) The Iraqis had suffered ceaseless aerial bombing, their supply lines were cut and many had received only scant food for weeks.

Without successful logistics we have neither firepower, manoeuvre and morale. This is why administration is one of the ten principles of war.

Conclusion

For those who believe logistics is only of secondary importance and assert such views as “logisticians are just civvies in uniform”, it is hoped that this historical exploration of all four statements has shed some light. Twenty years of peace has resulted in a diminished appreciation of the importance of logistics, especially among junior officers. The lessons from past conflicts — the Burma campaign, Afghanistan, Iran/Iraq, the Gulf War — serve to remind that logistics is an integral and vital aspect of military operations and will remain so into the future.

NOTES

4. RAAMC can also be included as a logistics corps but will not be further considered in this essay.
5. Australian Army, op cit, p.xxi.

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Ready Reserve Training at the 1st Recruit Training Battalion, Kapooka, 1992

By Lt C.T. Connolly, Lt M.K. Craze, and Lt C.W. Massy.
Compiled by Lt C.H. Burton

On 17 July 1992, the 1st Recruit Training Battalion Kapooka opened its gates to the first of the Ready Reserve (RRes) recruits to begin training.

Like all things that are new or spell change, the RRes was viewed with some trepidation and uncertainty. This, coupled with its seemingly rapid implementation, generated an opinion that the RRes may prove to be an unsuccessful attempt at combining the Regular Army and Reserves.

From the initial stages of its inception it was apparent the RRes recruits would be different to any cross section of ARA recruits previously trained at Kapooka. The RRes scheme was aimed at school leavers and made more attractive by the Education Assistance Scheme (EAS) and the Job Search Assistance Scheme (JSAS). There was also the question of what was the basis of their motivation. Would it be a desire to serve their country and be a soldier, or to obtain the financial security of the EAS or JSAS during financially difficult times.

Although the RRes recruits generally had a higher education level, this did not automatically mean they would become superior recruits. There was found to be no significant difference in their ability to assimilate training.

However, despite any perceived or actual differences between ARA recruits and RRes recruits, the training was exactly the same. The course was conducted to the same program, to the same standards, and with the same emphasis on regimentality and military discipline.

The recruit training program at Kapooka is divided into three stages. Stage one (weeks 1-4) is a particularly steep learning curve for the recruits. A recruit must overcome the difficulties of leaving the security of home and entering a totally new and demanding environment. The recruit is taught new skills daily, such as drill, barracks routine and discipline, navigation, personal administration, communications training, weapons training and first aid.

From day one of pre week (induction week) the recruit instructors (RI) are with the recruits for approximately 16 hours each day. With the induction procedures — the cutting of hair to number 2 standard, initial fitness testing, taking of individual photographs, and the compilation of personal documents, the RIs enforce upon the recruits a basic quality required in all soldiers: a sense of urgency.

The training program is designed to develop the new skills learned by the recruits in a logical sequence. As mentioned, the training the RRes completed was identical to the ARA, except for some minor differences. Because the specified period of service for the RRes is five years, they are not entitled to the long service benefits or education benefits designed for the ARA. As a result, not all personal administration lessons were relevant for the RRes. In addition to this, they were the first recruits to be trained with the F88 Austeyr rifle at 1 RTB.

Another difference between ARA recruits and Ready Reserve recruits was the way in which they were allocated to their Corps. Unlike ARA recruits, who were allocated their Corps while at 1 RTB, RRes recruits were Corps batched upon enlistment. However, if a recruit proved unsuitable for the corps he or she had been batched into, re-allocation would occur. The negative aspect of Corps batching was the removal of competition for the preferred Corps.

Traditionally the majority of ARA soldiers joined the army for common reasons; either to serve their country, a desire to be in the military to ensure a secure future, to develop a sense of ‘mateship’ in the spirit of the ANZACs or to experience excitement and adventure to name a few. Some RRes recruits joined for these reasons, however, a significant number of the RRes joined for the EAS and the JSAS. The EAS would entitle them to receive financial assistance to study at tertiary level for up to four years after their twelve months full time service. The JSAS allows $1,000 towards job search agencies and consultancy fees on the completion of the twelve months full time service.

Upon march in, when questioned, the majority of recruits agreed that they had joined the RRes to enhance their own personal careers rather than to become a soldier in the Australian Army. This raised the question of motivation, and whether they had the correct mental attitude to succeed at 1 RTB, and in the Australian Army. However, this anticipated lack of motivation did not become an issue of any significance. In retrospect, it was noted that as time spent in training increased, recruits who initially had no desire
to join the ARA were contemplating transfers to the
ARA if the opportunity became available.

The RRes still had to achieve the same results, reach
the same level of fitness and pass the same examina­
tions as ARA recruits. Any negative preconceived
ideas about the RRes that may have been held were
proved false. In addition, RRes training has shown that
anybody, no matter what background or previous ex­
perience, can succeed at 1 RTB, provided they have the
right mental outlook. The nature of training at 1 RTB
inspired loyalty, mateship, and a desire to become an
Australian Soldier, amongst recruits. Hence the training
of RRes recruits at 1 RTB can be considered an achiev­
able and highly successful exercise. Of the 1074 RRes
recruits that marched into 1 RTB, 955 successfully
marched out. All of the 955 recruits successfully met
the same standards required of any ARA recruit. Not
only can they proudly stand head and shoulders above
their civilian counterparts, they can stand beside any
regular soldier and be counted as an equal.

By Thomas M. Meagher, US Legislative Assistant.

The world has just witnessed one of the greatest operations in military history. Allied ground, air and naval forces utterly defeated a supposedly battle-hardened Iraqi Army of 500,000 men in roughly seven weeks of one-sided combat. Total US combat related losses in manpower amounted to less than 150 men; the Iraqis are estimated to have lost 100,000 killed.

While the Allies, in particular the US, rejoice over the outcome, the stark reality of the situation is that within the next five years the US will be faced with reacting to a similar threat with a greatly reduced force structure and industrial base. Budget deficits and the desire to focus on domestic programs are creating intense pressure to cut costs at the Department of Defense. The choices to be made between now and 1995 will be of grave importance to a world order maintained by US political, economic and military power.

The purpose of this article is to explore the options available to the US in the areas of security policy, force structure and equipment modernisation and how the choices to be made will influence friend and foe alike. By looking at force posture statements and budgetary inputs, an attempt will be made to analyse the future capabilities of US forces in the year 1995.

President George Bush laid out a blueprint for future US policy in March of 1990. Under this "emerging defence strategy", the US must be able to:

1. Exercise forward presence in key areas.
2. Respond effectively to crises.
3. Retain the national capacity to rebuild forces should this be necessary.
4. Maintain an effective deterrent.

These objectives must be met in the context of a rapidly changing strategic situation. The 1991 Joint Military Net Assessment outlined a number of concerns to US policy makers. Among them were the "Second Russian Revolution", the rapid pace of German reunification, a unified European community, the resumption of ancient quarrels unrestrained by competing superpower blocs, emerging democracies, particularly in Eastern Europe, the rise of new agendas such as that of Iraq that threaten a new era of peaceful international cooperation and an information explosion that has changed the tools of national influence.

Five implications for long term US defence policy become readily apparent as a result of this examination:

1. First, the Warsaw Pact officially ceased to exist as a military organisation as of earlier this year. The withdrawal of Soviet troops continues from Eastern Europe and the resulting power vacuum has created serious questions about the continued relevance of NATO. Proposals have been floated about speaking to the replacement of NATO by an organisation based on the Commission on Security and Cooperation or perhaps the Western European Union. Whether the US would consent to participate in such an organisation or a purely political NATO seems unlikely.

2. Secondly, the Russian ability to project conventional power beyond its borders will continue to decline. That decline could be part of an improving relationship with the West or as an adjunct result of the failure of the Russian economy to meet the basic needs of its people. In either case, the Russian military will be as affected as the domestic institutions in the country.

A record number of draftees, particularly in the Baltic states, failed to report for duty during the past year.

3. CIS Muslim populations continue to grow at a faster rate than native Russians with serious implications for Russian force structure. Lastly, the technological advances unveiled by the allied forces are apparently forcing a re-evaluation of the traditional Russian emphasis on quantity versus quality.

3. Thirdly, the military, as one of the three major institutions in the country along with the Communist Party and the KGB, is actively participating in the political turmoil engulfing Russia today. The uncertainty about developments in Russia will have a significant effect on US planning.

Fourth, while Russian ability to threaten Western Europe has been degraded as a result of troop disengagement agreements and economic stress, they still retain a strong strategic capability. That capability is being modernised at a rate consistent with earlier Soviet policy and does not appear to be constrained in any significant manner by available resources. US intelligence believes that at least five or six new Russian long range ballistic missiles are currently under development. The Russians continue to modernise their strategic defence capabilities as well.

Lastly, the prospects for arms control are now in doubt. While, as was mentioned earlier, the Russians continue to withdraw troops from Eastern Europe, serious and unresolved differences have arisen. Recent press reports speak to a Russian desire to slow down
the pace of withdrawals, although this may be as much due to a lack of available housing in the CIS for returning troops as to maintain some influence in Eastern Europe. Three Army divisions were reportedly reclassified as naval infantry in order to exempt them from the terms of the Conventional Forces in Europe (CFE) Treaty requirements and large numbers of armoured vehicles withdrawn behind the Ural Mountains were not being destroyed as part of the CFE agreement. No progress on a Strategic Arms Reduction Treaty (START) has been made in recent months.

The uncertainty in Russia is compounded by the re-emergence of regional instability. While the Far East and Africa have always been unstable, the Soviet withdrawal from Eastern Europe and the advent of democracy has helped spark internal disputes in virtually every former member of the Warsaw Pact.

With these considerations in mind, the Secretary of Defense has concluded that:

"The US continues to need forward-deployed forces in key regions, as well as crisis-response forces to respond quickly and effectively to threats to US interests globally. The US will need robust naval forces that enable us to exercise our world role across the oceans that divide us from Allies and trading partners. Lastly, we need an offensive nuclear capability along with a strategic defence against tomorrow's missile threats.

"In every category, it is apparent that in the years ahead we will need to strengthen our technological edge. Of grave concern is the proliferation of nuclear weapons and the means to deliver them. By the year 2000, it is estimated that at least 15 developing nations will have the ability to build ballistic missiles — eight of which either have or will have, or are near acquiring, nuclear capabilities. Thirty countries will have chemical weapons and ten will be able to develop biological weapons as well."

To support the US ability to respond to these threats of the future, a number of Central Military Strategic Concepts have been formulated. The principle of Crisis Response Through Power Projection presupposes maritime superiority and the need to ensure the unimpeded transit of the air and sea lanes, assured access to space and the assistance of other nations to facilitate vast deployments. The importance of this principle was fully demonstrated during Operation's Desert Shield and Storm when US and other allied forces were able to operate and resupply with virtual impunity.

Forward Presence provides visible deterrence, preserves regional stability and crisis-response capability.

Forward presence is exemplified by the actual stationing of forces in foreign countries, rotational deployments and security assistance programs. As an example, while the strength of US ground forces will decline in Europe, it now appears that a limited presence will be maintained in the Middle East. While the nature of this presence is yet to be determined, rotational deployments and some actual stationing of forces seems inevitable.

Reconstitution requires the US to maintain the capacity to rebuild a large, effective defence capability as a result of ongoing force structure reductions. The ability to reconstitute forces becomes highly dependent on maintaining infrastructure, stockpiling of critical materials, protection of the defence industrial base and investment in basic science and high payoff technologies. The ability of technology to offset quantitative inferiority was perhaps the major lesson the Persian Gulf.

Collective Security Agreements coordinate common security interests; codify commitments, roles and responsibilities; enhance joint doctrine interoperability and provide integrated command structures. The development of indigenous military capability through these programs has proven to be far more beneficial to US interests than the actual intervention of US forces on the ground.

### Army Force Structure Changes

With this framework in mind, one can look at the four services and evaluate how each plans to respond to the changes in US strategic policy. The service most affected from both a mission and budgetary standpoint is the Army. Carl H. Builder in his trenchant study, The Masks of War: American Styles in Strategy and Analysis, argues that of all the services, the Army's first priority has remained the battle for Central Europe, that is, a battle designed to take advantage of the large investments made in armoured fighting vehicles, helicopter mobility and firepower.

Yet, it may be argued with considerable justification that this orientation on Europe proved to be of ultimate value during the recent Persian Gulf conflict. For the first time since World War II, the Army was provided the opportunity to fight the war it had been training for. In Korea and Vietnam, the doctrinal emphasis on road-mobile heavy forces ran counter to what was in both cases essentially a light infantry conflict. The Persian Gulf provided a foe equal or superior in numbers, supposedly battle-hardened, with modern equipment and well-versed in Russian tactics.
Unlike Korea or Vietnam however, air power and technology proved to be decisive on a tactical and strategic level. Iraqi forces could not hide in dense jungle nor could fixed site hard target facilities such as nuclear, biological and chemical production assets be defended with any great degree of success.

In sum, the success of the Air-Land Battle doctrine, with its emphasis on initiative, agility, depth of operations, and synchronisation of combat power at critical points on the battlefield validated to a large extent what the Army had been arguing all along: quality of personnel and equipment, realistic training, and sufficient logistical support could overcome a more numerous, less technologically advanced foe.

For 45 years, the Army’s strategic roles have remained largely unchanged. The Army maintains combat ready ground forces — armoured, light and special operations — for crisis response and other immediate requirements worldwide. Forward presence has been provided by units based abroad in areas of vital interest to the US as well as CONUS. These forces have been backed up by units able to reinforce forward deployed and contingency forces. The first units to reinforce have been active component divisions rounded out by reserve component combat brigades. The second group of units consists of fully structured reserve component combat divisions for follow on reinforcement.

Ironically, in the midst of the Army’s most successful operation since World War II, it faces some of the most drastic force structure reductions ever seen in peacetime. Originally, the force structure of five corps and 28 divisions was set to shrink down to a four corps, 23 division force by 1995. Current plans now call for a reduction to a four corps, 22 division force structure by 1993. European forces will be reduced to a one corps, two division structure from its current two corps, four-and-one-third division structure.

A contingency corps consisting of five divisions will be maintained in the US backed up by a reinforcing corps of four divisions. A sustained reinforcing corps of eight divisions will also be based in the US. Three divisions will be maintained to handle the Pacific theatre.

By 1995, the Army envisions five active divisions — armoured, light and special operations — for crisis response and other immediate requirements worldwide. These forces will be supported by an early reinforcing force of three active divisions rounded out by National Guard combat brigades and a follow-on reinforcing force of six Army divisions. Two cadre divisions fill out the remaining force structure along with the requisite combat support and combat service support units.

The key question being asked by civilian leaders in the administration as well as those in Congress is whether the force of 1995 would be able to handle Desert Storm as well as the force of 1991 did. While any answer would be highly speculative, the Army has outlined five conditions critical to the success of the smaller forces. These include the provision of sufficient strategic sea and air lift, the right proportions of active and reserve units, the correct mix of forces (armoured, light and special operations), adequate sustainment stocks and high quality personnel.

Under these conditions, the Army has re-evaluated its strategic roles. To begin with, the dissipation of the Warsaw Pact in April 1991, has meant that the world has become a less secure place. As the CIS continues to withdraw from Eastern Europe, old territorial disputes have been revived.

Moreover, as was seen in the Gulf, armies outside of the NATO/Warsaw Pact organisations possess rapidly increasing technological sophistication. Lastly, from a resource standpoint, the US cannot afford to maintain forces on the ground in every potential trouble spot throughout the world.

Similarly, the Russian withdrawal from its former spheres of influence has lessened the requirement for large standing forces in the NATO theatre of operations to deter a short notice attack. The corollary to this development is that the requirement for rapid reinforcement has diminished. While this is a welcome development, in the event of a reversal of these Russian policies, the ability to reconstitute forces becomes of paramount importance. This requirement will place an additional burden on the mobilisation apparatus in the US.

The economic deterioration of many Third World countries, along with an explosion in terrorism and drug trafficking, has created a new set of roles for military forces, particularly special operations units. The use of technology and manpower in these roles will only increase in the next decade.

Arms control is once again in vogue as a means of insuring stability at lower levels of confrontation and force structure. While the Russians have begun wavering on implementation of the CFE agreement, they still are withdrawing troops. As long as the Russians continue to adhere to the CFE provisions, the US Army will continue to build down forces in Europe, although some of these forces may ultimately wind up deployed to the Middle East as a part of a UN peacekeeping force.

A series of coordinated modernisation plans, some twenty in all, have been developed to support this new emphasis. Four plans in particular are worthy of further examination. The Army Technology Base Master Plan serves as top/down guidance to all Army base
organisations and provides the link between the Defense Technology Strategy and all other modernisation plans. The plan emphasises development in basic research that will translate into the operational equipment of the future.

The Army Aviation Master Plan provides the framework for the development of rotary wing warfighting assets. Key components of the plan include the initial operational fielding of the Light Helicopter armed reconnaissance aircraft in Financial Year 98; continued production of the UH-60 and CH-47 and other modified aircraft to support special operations forces; modification of the OH-58D helicopter with an interim armed reconnaissance capability and modification of 227 AH-64 Apaches into the upgraded AH-64 Longbow variant armed with fire and forget Hellfire capabilities.

The Armoured Systems Modernisation Plan outlines current thinking for future heavy and medium armoured forces. The four variants in the plan, all mounted on a common heavy chassis, are: the Block III tank to replace the M1 Abrams series tank; the Advanced Field Artillery System, superseding the M109 self-propelled Howitzer; the Combat Mobility Vehicle, in place of the current Combat Engineer Vehicle; and the Future Infantry Fighting Vehicle which will replace the Bradley Fighting Vehicle.

Two medium-weight variants are also planned based upon the Bradley chassis. The Line of Sight Antitank system will replace the Improved TOW vehicle, currently fielded on a M-113 chassis. The Future Armoured Rearmament Vehicle-Ammunition will replace the M-548 ammunition carrier. In addition, the Army is looking to replace the M-551 Sheridan, currently deployed with the 82nd Airborne Division, with an armoured gun system suitable for airborne, light and motorised units.

The Armour-Anti Armour Modernisation Plan is designed to upgrade all forces and weapons tasked with defeating enemy armoured units. In addition to incorporating doctrinal changes, the plan emphasises hardware advances in lethality and protection of the main battle tank, in kinetic and chemical energy projectiles, and in armoured vehicles.

for a significant shift in its current force structure. The Secretary of the Navy’s Posture Statement for FY 92/93 outlines four major implications of change for US naval policy through the mid-1990s:

Economic interdependence — a global economy requires a worldwide military presence to protect lines of communication and major trading routes. While isolationism might be politically attractive, economic ties make such an approach impractical.

New Political Realities — US access to bases worldwide will be more limited in the future, although areas previously off limits to American forces might be more available. As a result, sea-based forces will play a more central role during the early phases of any future crisis.

Different threats — the Navy, like the rest of the military, will become more heavily involved in law enforcement related activities such as counter-terrorism and narcotics trafficking. Third World adversaries now possess state-of-the-art weapons, including nuclear, biological and chemical capabilities. Without the overwhelming Soviet presence in certain parts of the world, these areas may be even more susceptible to conflict than during the Cold War.

Uncertainty — timing, location and identity of threats will be uncertain. To deal with this changing strategic situation, the Navy has opted for replacing ships on a less than one for one basis, although follow-on replacements will be more capable. Likewise, the Marine Corps will shrink, although it too will bring more capable systems on line to compensate for the loss of manpower.

Current force structure plans call for a reduction in fleet strength to 477 ships in FY 92, 464 ships in FY 93 and 451 ships in FY 95. Five force structure elements are driving reductions:

- 12 operational aircraft carriers (and one training carrier);
- enough amphibious ships to lift two-and-one-half Marine Expeditionary Brigades;
- three smaller Marine Expeditionary Forces;
- 18 Trident SSBNs;
- an appropriate balance of other ships including about 150 surface combatants.

The Navy postulates that with a 451 ship fleet, naval forces can accomplish the following missions:

- sustenance of between two and three carriers forward deployed for presence and immediate crisis response;
- keep 14 SSBNs deployed at all times;
- keep between two and three amphibious ready groups, each with embarked Marines, on station;
- provide 25 to 30 surface combatants for forward presence;

Navy Force Structure Changes

As the world’s pre-eminent maritime power, the US has traditionally relied on naval presence as its forward line of defence in most parts of the world. Like the US Army however, the US Navy is girding itself
• sustain these deployments indefinitely, using about 30 per cent of all forces forward deployed;
• tailor forces for specific operational and political circumstances;
• quickly change geographic disposition;
• form carrier and amphibious strike forces and respond to emerging crises within one to seven days;
• sustain these levels for a prolonged period of time while providing a real quality of life for sailors and marines.15

**Air Force Structure Changes**

The US Air Force, like its sister services, faces major reductions in both equipment and personnel as it approaches the 21st Century. In a strategic planning document entitled Global Reach — Global Power, the Air Force laid out its major objectives for the near future. By relying on the characteristics of air power — speed, range, flexibility, precision and lethality — the Air Force hopes to:

• sustain deterrence through the maintenance of nuclear forces;
• provide a versatile combat force in theatre operations through the use of power projection;
• supply global mobility through Military Aircraft Command assets such as airlift and tanker aircraft;
• control the high ground by maintaining a viable Space and C3I capability;
• build US influence by strengthening security partners and relationships.16

Embarking on the same approach as the other services, the Air Force has chosen to sacrifice numbers for quality, an approach that all the services feel was justified during the Persian Gulf conflict. Continuing modernisation and preserving readiness will, it is hoped, allow the Air Force to maintain a balanced but sustainable warfighting capability in the 1990s.

The central assumption in maintaining a triad is that such a disposition of forces complicates enemy war planning by requiring they deal with the possibility of three separate and distinct retaliatory threats. Nothing has changed since the 1960s to render this assessment invalid.

The advantage of having heavy bombers in the triad is twofold. First, bombers, unlike ICBMs and SLBMs, can be recalled in flight. Secondly, given the time of flight required in order to reach even ALCM range, these weapons are ill-suited as a first strike weapon. For these reasons, bombers are believed to provide a stable contribution to strategic deterrence.

The case for modernising the US bomber deterrent rests upon the postulated threat of the 1990s. Since the end of World War Two, that threat has been the Soviet Union. While the focus of US attention will to be the Russians, the current conflict in the Persian Gulf shows that strategic bombers may be employed in other geographic areas as well.

Serious doubts have been raised, however, about the continued effectiveness of the US bomber force. Foremost of these fears concerns reliability. By the year 2000, the newest active B-52 will be 38 years old; the most recent addition to the B1-B force will be 14 years old. Maintaining these aircraft much past the end of the decade will only increase the costs associated with their employment. The on-line availability of these aircraft should decline as we move through the next decade.

The threat facing the US bomber force has also become more sophisticated. While the Russians have always deployed a strong air defence system, many Third World countries are now equipped with modern fighters, surface to air missiles and radar networks.

While cruise missile carriers provide an effective standoff potential, they do suffer from certain limitations. Cruise missiles, like ICBMs and SLBMs, are non-recallable and are not re-targetable. Once they engage they are incapable of reacting to enemy defences and relocatable targets. Surprise is critical to the success of systems such as the Tomahawk; mobile missile launchers, as the Iraqis have shown, must be taken out by other means if they have not been caught on the ground. Lastly, the use of cruise missiles only allows potential enemies to concentrate on attacking the non-stealthy carriers through the use of refuelable fighters, airborne tankers and AWACs-type aircraft.

With these limitations in mind, the Air Force has chosen the B-2 Advanced Technology bomber as the strategic asset that would penetrate Russian territory to attack mobile targets in the event of a nuclear war. Given the expected improvements in Russian air defences during the 1990s, proponents argue that the B-52, incorporating the latest in stealth technology, is the only aircraft capable of completing the mission. The B-2, with a crew of two, can carry nuclear gravity bombs, short range attack missiles and conventional weapons. With an unfuelled range of 6,000 miles, the B-2 is capable of penetrating enemy air space at roughly 75 per cent of the speed of sound.

Critics argue that the B-2 is an unproven concept designed for a single purpose and that, at a estimated unit cost of $815 million per copy, the mission could be performed by other aircraft at less cost. In addition, it is argued that the Russians might view the B-2 as different from the stabilising influence provided by earlier bombers. If the B-2 is truly invisible, the...
Russians could see the plane as possessing a first strike capability. The Russians would then be tempted to launch a preemptive strike.

Proponents counter by saying that the B-2’s slow speed, known basing locations and requirement for tanker support involving non-stealthy aircraft ensures Russian knowledge of any impending B-2 strike. Secondly, the deployment of the B-2 in the penetrating role along with a B-52/B-1B standoff capability complicates Russian war planning by taxing their ability to respond to multiple threats. The penetrating ability of the B-2 also ensures that no Russian nuclear forces would be completely invulnerable to a US retaliatory attack. Lastly, the B-2 is not as dependent on the command and control system as the other two legs of the triad. 17

With the B-2 as the penetrating element of the force, the B-1B and certain elements of the B-52 fleet would also be modernised. The much publicised problems with the defensive avionics system of the B-1B are to be fixed along with the development of a conventional bombing certification plan.

Two squadrons of conventionally armed B-52Gs will be retained. Half of the remaining B-52H squadrons will transition to a pure cruise missile armed with both the Air Launched Cruise Missile (ALCM) and the stealthy Advanced Cruise Missile (ACM). The other half of the B-52H squadrons will be upgraded to support conventional operations, thus complementing the G model aircraft already configured for this mission. 18

The ICBM force is also slated for modernisation. The major drawback to the employment of ICBMs is that fixed sites are easy to locate and therefore more susceptible to a first strike. The solution to this problem would be, as the Russians have done, to adopt some sort of mobile basing scheme. In addition to some 950 Minuteman II and III missiles in fixed sites, 50 MX missiles have been deployed in old Minuteman silos.

The single warhead Midgetman is also being considered as a mobile complement to fixed site MX and Minuteman. A single warhead mobile missile is considered by experts to be beneficial to strategic stability. However, serious questions remain concerning the cost effectiveness and survivability of the Midgetman. A mobile basing scheme would be very expensive and any warhead limitations under the START treaty decreasing Midgetman deployments below the 500 systems currently envisioned would meet serious opposition from Congress on the grounds of survivability.

If as a result of force structure decisions the Midgetman is cancelled, the MX could be converted to a rail basing scheme. However, the retention of MX, Minuteman and Trident means all US strategic missiles employ a MIRV capability. Multi-warhead missiles are seen by many experts as destabilising. Under a START treaty, US planners would seek as complete coverage as possible with fewer warheads. The relatively few MX available under a rail based deployment could mean that certain targets might be overcompensated for in terms of warhead distribution. Conversely, other important targets might survive relatively undamaged due to a sufficient strike.

Under current plans therefore, the Air Force plans on developing both the Peacekeeper Rail Garrison program, based on the MX missile and the Small ICBM program, utilising the Midgetman, where single warhead missiles would be mounted on Hard Mobile Launchers. 19

On the tactical side, the Air Force will reduce fighter force structure from 38.5 wings, employing various types of aircraft including reconnaissance planes to 26.5 wings. Given the role and capabilities of the Reserve and Air National Guard, as demonstrated during the gulf conflict, some 11.25 of these wings will be based in CONUS as part of these forces. 20

DoD Budget Analysis

The changes outlined above have been reflected in the budget submissions by each service. Looking at the four largest appropriations since FY 86, the message is quite clear. If the US wishes to maintain a high quality force for the next five years, certain tradeoffs will have to be made.

The most obvious tradeoff has been the reduction in funds allocated to procurement, with important ramifications for the defence industrial base. The overall defence budget will shrink by some 1.2 per cent by FY 93. However, three of the four major appropriations, Military Personnel, Operations and Maintenance, and Research Development Test and Evaluation will experience actual and planned growth rates of anywhere from 14 per cent to 22 per cent between FY 86 and FY 93. Procurement, by contrast, will decrease by some 28 per cent since FY 86 if the FY 90-93 projections are correct. 21

The implications for the defence industrial base is quite clear. A smaller force structure, complemented by product improvements to current systems, will severely limit new starts. While this development has not gone unnoticed by industry, the downward trend in procurement spending will no doubt accelerate the trends toward work force reductions and consolidation of operations, both within and outside of major de-
fence contractors. In particular, the future for those contractors who have specialised by service will be severely affected.

**Army Budget Analysis**

As the largest service within DoD, the Army has traditionally been subject to the greatest fluctuations in strength and funding since World War II. Nowhere is this trend more evident than in an examination of the Army's share of the DoD budget since FY 86. As a percentage of the total DoD budget, the Army share ranged from 26 per cent in FY 86 to a high of nearly 30 per cent in FY 89. By FY 93 however, this share will decline to just over 24 per cent of the DoD budget. During the FY 86 to FY 93 time period, total Army budget authority will decline some 7.4 per cent.²²

In particular, the procurement account has been most affected by the decrease in available funding. Army procurement funding is projected to decrease by nearly 83 per cent between FY 90 and FY 93. Two appropriations account for the majority of the decrease. Aircraft procurement will decrease from nearly 27 per cent of total Army procurement spending in FY 90 to just over 16 per cent in FY 93. The end of the Apache production program in FY 93 leaves a production gap of some five years until the first Light Helicopter models begin to come on board in FY 98.²³

The second major appropriation is the Weapons and Tracked Combat Vehicle (W&TCV) account which is also scheduled to take a major reduction between FY 90 and FY 93. The production of the M1 is scheduled to end in FY 92 while the M2/M3 line will go out of production by FY 95. Spending on W&TCV will decrease from 17.5 per cent of Army procurement funding in FY 90 to just 7.5 per cent in FY 93 due primarily to the fact that the Abrams and Bradleys are now being procured under multiyear contracts. Low rate initial production connected with the Armoured Systems Modernisation Program will not commence until FY 99.

Overall Army RDT&E will increase by some 10.7 per cent between FY 90 and FY 93. Despite this increase, funding for Advanced Technology and Strategic programs will decline by 33 per cent and 39 per cent during the same period. It should be noted, however, that these two programs account for only 7.5 per cent of all Army research spending. Technology Base (14.1 per cent of spending, 13.7 per cent increase) and Tactical Programs (53 per cent of spending, 22 per cent increase) account for the overall increase in RDT&E spending.²⁴

**Navy Budget Analysis**

Navy procurement spending (including that of the Marine Corps) will decline by over 27 per cent from FY 90 to FY 93. Most of the decrease can be found in the aircraft and shipbuilding accounts. These two procurement categories account for anywhere from 55 per cent to 60 per cent of all Navy spending. The A-12 attack and P-7 ASW programs have both been terminated due to lack of progress under fixed price contracts. In addition, the F-14D remanufacture program ended in FY 91.²⁵

Shipbuilding programs significantly affected include the DDG-51, Wasp-class amphibious assault ships and Seawolf (SSN-21) attack submarine. Additional Trident missile submarine production has been terminated while procurement of the D-5 missile has slowed also.

However, new ship deployments continue, although as was noted before, vessels will not be replaced on a one to one basis. In FY 92 and 93 the following deployments will take place:

- Six AEGIS cruisers; three AEGIS guided missile destroyers; one nuclear carrier; two fast combat support ships; six mine warfare/countermeasures ships; two Trident SSBNs; six attack submarines; two amphibious warfare ships; three towed array surveillance ships and seven Military Sealift Command oilers.

Some 107 ships will be deactivated during the period along with the transfer of another nine ships to a non-deployable status.²⁶

Marine Corps procurement will decline by some 69 per cent between FY 90 and FY 93. Procurement levels will fluctuate, however, year to year, caused primarily by the acquisition of the M1A1 tank as well as increased ammunition buys.

Navy RDT&E spending will remain flat throughout the period. Technology Base (10 per cent of spending, 21.5 per cent increase) and Tactical Programs (66 per cent of spending, 3 per cent decrease) account for most of the changes during the period.²⁷

**Air Force Budget Analysis**

Like its sister services, the Air Force has chosen to sacrifice current force structure for the future. Aircraft procurement spending (40 per cent to 50 per cent of total spending) will decline by 14 per cent during the period from FY 90 to FY 93, due as is noted below to the termination of the F-15 and F-16 lines. Missile
procurement (20 per cent to 25 per cent of spending) will increase by 7% due primarily to the AMRAAM and Advanced Cruise Missile programs.28

The two key programs are the Advanced Tactical Fighter (ATF) and Advanced Medium Range Air to Air Missile (AMRAAM). The ATF program entered the demonstration/validation stage in 1986. Each competing team (Lockheed/General Dynamics/Boeing; Northrop/McDonnell Douglass) has built two prototypes. One of the unusual aspects of this program is that the engine selection is being made separately from that of the air frame. Two prototypes have been provided with engines manufactured by General Electric; the other two are powered by Pratt and Whitney engines. Within the next month, the Air Force is expected to down-select to one contractor team and one engine. As a consequence, F-15 production has ceased and F-16 production will end in FY 93.

The AMRAAM has been approved for low rate initial production beginning in FY 92 (1,000 units) and continuing on into FY 93 (1,310 units).

Other plans include the retention of the F-117A stealth bomber, the re-equipping of F-16 squadrons with the LANTIRN precision night attack pod, F-15E squadrons armed with precision guided munitions capability will replace all F-111s in service with the exception of those equipped to deliver PGMs, the retention of two squadrons of A-10s and the improvement of some F-16s to an F/A-16 configuration in place of the cancelled A-16.

The value of strategic airlift was powerfully demonstrated during the Gulf conflict. However, much of US strategic airlift capability is rapidly ageing; to this end, the Air Force plans to procure 120 C-17 aircraft. The C-17 in Air Force eyes combines the advantages of a large strategic airlifter like the C-5 with the capabilities of a tactical airlifter like the C-130. Speed, range, aerial refuelling capability are married up with survivability and the ability to operate on short, unimproved airfields.

Air Force RDT&E spending will increase by nearly 12 per cent over the period. Tactical programs (33 per cent of total spending, 31 per cent increase) and Intelligence/Communications (17 per cent of spending, 17 per cent increase) account for most of the total increase. Spending on strategic programs (27 per cent of spending) will decrease by nearly 8 per cent.29

**Conclusion**

Despite the success of US arms and personnel during the Gulf War, the message contained in the budget numbers and force posture statements of each service is quite clear: Should the US be required to deploy to another Desert Storm in 1995, the mission will have to be accomplished with a smaller force structure that will be primarily CONUS-based. This will place an increased dependence on air and fast sealift capabilities along with a greater amount of prepositioned equipment. Base access will most likely be limited in some areas such as the Philippines that were previously open and available for use by US forces. By the same token, however, the US role in the Middle East may be enhanced by the granting of base rights for air, if not ground, assets in that important area of the world.

More importantly, a smaller US force structure could mean an increased reliance on allied contributions, both from a financial and manpower standpoint. Many in the US, particularly the Congress, would no doubt be happy to see such a development. The downside to this trend could mean much more activist coalition partners not necessarily in agreement with US objectives.

In sum therefore, while the Allies enjoy the afterglow of the victory over Iraq, many security concerns remain, concerns not necessarily impacted by the Gulf. The question remains “can we win the peace as well as we won the war?” Only time will tell if we have learned to apply the lessons of the Gulf in both the political and the military spheres.

**NOTES**

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8. Ibid., 50.
9. Ibid., 20.
10. Ibid., 22.
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The Singapore Strategy
Half Truths, Evasion & Outright Deception

By A.C. Welburn, Department of Defence.

"Singapore . . . the keystone of British imperial defence policy for the eastern Empire . . . the basis of the defence strategies of Australia and New Zealand."

Ian Hamill, *The Strategic Mission*.1

"The whole basis of our war policy were . . . built upon sand."

First Sea Lord Sir Ernie Chatfield
28 February 1933.2

"There was nothing wrong with the Singapore Strategy . . . until it was challenged."

Professor J. McCarthy, 6 April 1989.3

Introduction

A ustralian defence thinking was dominated in the inter-war years by the concepts of imperial defence and the "Singapore Strategy". Neither of these concepts was new; both had influenced Australia's development before the First World War. W.J. Hudson, in his essay *Strategy for Survival* highlights the close ties between Australia and Britain that took shape in Britain's determination of both countries' foreign and defence policies.4 Individual responsibilities for the latter were enshrined in the concept of imperial defence, defined by John McCarthy as the "joint defence of United Kingdom possessions and interests by a combination of United Kingdom, Dominion and Colonial Forces".5 The Empire was viewed in its totality, all parts being interdependent, the whole being threatened by dissenting action of any one part. Responsibilities under imperial defence were re-stated at the 1923 Imperial Conference and consequently became pillars of Australia's defence policy. Each part of the Empire was responsible for local defence, the defence of local trade routes and the development of bases while all were to participate in defence of the whole to the best of their ability.6 But Australia and New Zealand clung to the concept of imperial defence long after the other Dominions had followed alternative strategies. Australia's decision would exact a cost in the long run.

Singapore was inextricably linked to the concept of imperial defence. Following the Dreadnought scare of 1909, the Admiralty launched its Pacific "fleet units" scheme designed to create a Pacific Fleet based on Singapore.7 Australia adhered to the requirements of the scheme but by the time most of the Australian fleet made its debut on 4 October 1913, Britain had abandoned the concept in the face of the naval challenge posed by Germany. One consequence of the failure of this first Singapore strategy was Britain's inability to provide a Pacific Fleet during World War I; another was Japan's takeover of Britain's role in the Pacific. Britain's initial Singapore strategy failed because a fleet was never made available to operate from Singapore, policies and priorities changed and British interests dominated. What should have been a salutory lesson for Australian defence planners was ignored.

British attention returned to the Pacific after the First World War. Europe had been pacified and Germany brought to heel. It was thought that never again would a threat arise from that quarter. But the Pacific was a different matter as Japanese and American interests had to be taken into account. Indeed Japanese actions gave the British much cause for concern and, if conflict was to break out again, informed pundits believed it would do so in the Pacific region. How should such a situation be handled? The answer, to the Foreign Office and the Admiralty was the resurrection of the "Singapore Strategy".

This article will examine the "Singapore Strategy" to December 1941 and assess whether the statement "An amalgam of half truth, evasion, outright deception and blinkered thinking" is a fair description of the strategy.

The Singapore Strategy

Japan had emerged from the First World War in a very strong position; her economy had grown throughout the war, she was a creditor nation and a major industrial power, possessed the third largest navy in the world and had obtained responsibility for a number of ex-German colonial territories in the Pacific.8 Indeed, Japan was very reluctant to withdraw from areas of special interest to Britain; unwilling to relinquish the advantages she had gained during the war years.
The Foreign Office was concerned at the loss of both diplomatic and naval prestige in the Far East and Japan's continued interest in Britain's Pacific affairs. Consequently the Foreign Office approached the Admiralty three times between 1919 and 1920 about the need to station a fleet at Singapore in order to restore Britain's regional influence. At the same time support for this proposal came from another quarter altogether.

Between May and August 1919, Admiral of the Fleet Lord Jellicoe, as part of an inspection of the Dominions, visited Australia. Stepping outside his terms of reference, he responded to an Australian government request to provide a strategic appraisal for Australia. His report, which was not acknowledged per se by the United Kingdom, stated that "It is, therefore, almost inevitable that the interests of Japan and of the British Empire will eventually clash... (and) little warning would be given". He then recommended "the presence of a strong force of capital ships... in Eastern Waters" comprising not less than eight battleships and eight battle cruisers.

The Singapore Strategy gained momentum when the Commanders-in-Chief of the China, East Indies and Australian stations met in Penang in March 1921. Their discussions mirrored Lord Jellicoe's findings and described Singapore as "the key to the British naval position in the Pacific".

The Admiralty carried this proposal to the May 1921 Committee of Imperial Defence (CID) meeting where it received support. Cabinet agreed on 16 June 1921 to Singapore as the main Empire base in the Far East, overruling Treasury objections on cost. This decision was then presented to the Imperial Conference on 20 June 1921 as Britain's policy for the Pacific — in essence a fleet at Singapore would stop any expansionary move south by Japan, protect the Dominions from invasion and secure the Empire's trade routes from interdiction.

British thinking linked Singapore with Aden and Simonstown, thereby protecting the Indian Ocean and Britain's "Indian jewel" from Japanese depredations. In other words, Singapore would close the gate to the Indian Ocean. However, Australia saw Singapore as an open gate through which Britain's fleets could sail into the Pacific to counter hostile Japanese initiatives in that area. Consequently, there was scope for confusion as interpretations diverged even at this early stage.

Successful implementation of the strategy rested on four requirements. Firstly, a base had to be established with facilities to cater for the latest generation of warships; secondly, the base had to have defences other than sea power; thirdly, it had to have a garrison; and finally, it needed a fleet capable of defeating any challenge posed by the Japanese. All of these requirements came under attack at one time or another, casting doubts on the efficacy, effectiveness and real support for the strategy itself.

Confusion was rife throughout the development of the base and evolution of the strategy itself. The two major buttresses of the strategy were the base and the fleet. Initially the base was required to support the fleet in its power projection role but examination of the literature indicates that from time to time that there was a role reversal — that is, the fleet was required to protect the base. In reality both were dependent on each other. The fleet needed the base to support its sea denial and sea control operations in the exercise of naval power projection. The power projection capability of the base itself extended only to the range of its fixed defences and permanent garrison assets. While the fleet did provide a higher level of protection for the base that was not its raison d'être. To be effective the Singapore strategy required both a base and a fleet, without either one the strategy would fail.

Support for, and Opposition to, the Strategy

Disarmament and Depression

Two major factors worked against the development of the Singapore base and the provision of a fleet during the nineteen twenties and thirties. The first factor was that efforts were being made to ensure continuation of the post-war peace through such disarmament agreements as the Washington Treaties of 1921, the Locarno Conference of 1925, the Kellogg-Briand Pact of 1928 and the London Naval Conference of 1930. The most far reaching of these agreements was the Washington Treaties which reduced Britain's fleet to a one-power standard while enhancing Japan's naval superiority in the Pacific. These agreements were seen as reducing the possibilities for conflict and negated the need for large military forces and defence expenditure. Such aspirations were reflected in the Ten Year Rule of 1919 and its subsequent development through the twenties until it was cancelled in 1932.

The second major influence, the Great Depression, also attacked defence expenditure which was reduced to finance economic recovery schemes and provide social services for the destitute.

British Support for the Strategy

British support for the Singapore strategy waxed and waned throughout the nineteen twenties and thirties.
The 1921 Imperial Conference agreed to the concept but it was not until February 1923 that the new Conservative Government approved works to commence at the base. However, there was to be no expenditure during financial year 1923-1924 and only moderate expenditure in financial year 1924-1925. Even this inauspicious start faltered when Ramsay MacDonald's Labor Government took power in 1924. The project was cancelled as it "would exercise a most detrimental effect on our general foreign policy of international co-operation, and the creation of conditions which will make possible a comprehensive agreement on limitations of armaments". There had also been questions in the British press and Parliament over the validity of the strategy and Singapore's vulnerability to land attack, the provision of a fleet and the impact of air power and submarines on the latter.

The fall of MacDonald's government in October 1924 saw a revival of base construction under Baldwin's leadership but new economies were instituted. This led to the divisive "guns versus planes" debate which halted work on the Singapore defences until the CID meeting of March 1932 agreed that fixed gun defences were cheaper in the long run than aircraft. This decision was endorsed by Cabinet but implementation was delayed until October 1932.

The primary British antagonist of the Singapore strategy was the Treasury which consistently opposed the concept on grounds of cost. The main protagonists were the Foreign Office and Defence, the former keen to enhance Britain's prestige and standing, the latter requiring a base in the Far East if the Royal Navy was to remain Britain's premier Service. Debate between the supporters and detractors of the Singapore strategy was often heated and acrimonious. However, Churchill was keen to reduce the level of criticism recorded in the CID minutes "lest the Dominions think there was an intention on the part of the British Government not to provide adequately for...the Southern Pacific". So work continued slowly on the base while public debate raged over such issues as the preferred location (Johore Strait v Keppel Harbour), the need for land defences (vulnerability from landward side v no attack through an impenetrable barrier), the selection of fixed defences (coastal artillery v aircraft) and the need for a permanent fleet.

The return of another Labor Government on 30 May 1929 again threw the future of the Singapore Strategy into jeopardy. Instead of being a main base, Singapore was envisaged as a "floating base" under a "truncated scheme" proposed by Sir Maurice Hankey, the Cabinet and CID Secretary. But Hankey's proposal did keep the Singapore concept alive until a changing international situation revitalised the need for Singapore.

Work on the graving dock continued during this time but at a very slow pace. Cancellation of the contract would have cost too much in punitive payments.

Treasury opposition to Singapore's development was consistent throughout the period regardless of the party in power. Churchill had opposed funding the strategy in 1925 and 1928. Neville Chamberlain, in 1932, reviewing financial policy over the previous ten years said "the risk to the nation's financial stability from any re-armament programme had always been considered greater than the risk of military unpreparedness". These sentiments were reflected in a Treasury note which stated "financial risks are greater than any other that we can estimate". Chamberlain again opposed the Singapore strategy when he said, in considering the 1934 Defence Requirements Committee Report that Singapore should be "a base for submarines and other light craft, and we must postpone the idea of sending out to it a fleet of capital ships capable of containing the Japanese fleet or meeting it in battle".

The Government did not endorse Chamberlain's suggestion but neither did it embark on a naval rebuilding programme to redress the imbalance between the supply and demand for naval support. The Admiralty had, by this stage (March 1934) produced a paper which attacked the Washington Treaties as unsound and recommended a return to a two-power standard to combat both Germany and Japan. This article reflected discussion at the 1932 CID and was used at both the 1935 and 1937 CID meetings in debate over the required naval standard. Treasury objected to the 1935 definition as it would require increased spending to keep pace with increases in the navies of potential enemies. In fact Chamberlain, at the April-May 1935 Prime Ministers Meeting, said that while he could support the acquisition of aircraft for home defence he was "loath to make provision for the Far East". As a result the likelihood of a fleet ever being stationed at Singapore became increasingly remote.

Even though the Chiefs of Staff had their differences of opinion over the Singapore strategy, the "naval base at Singapore was (always regarded as) the pivot of Britain's strategic position". Consequently there was concern over the lack of provision of a fleet, without which the strategy was moribund.

The problem that had to be overcome was that posed by Britain's one-power standard navy, and it was a problem of some considerable magnitude. Lothian, in October 1934 said "at a time when trouble was brewing in Europe, the British public would not with equanimity watch their fleet sail away to the Pacific". The First Sea Lord, also in October 1934, echoed these
sentiments when he said “to send a battle fleet to the Far East, Britain had to have a large enough fleet to enable her to leave sufficient behind. (One) could quite well envisage the public outcry if our whole naval strength departed to the Far East”. Admiral Sir Richard Webb, writing at an earlier time, November 1930, said “to imagine that we are going to uncover the heart of the Empire and send our fleet thousands of miles into the Pacific with only one base, Singapore, ... is to write us down as something more than fools!” His views were echoed in a 1934 paper prepared by Chamberlain and Sir John Simons (Foreign Secretary) which said that “in the event of a two-front war Australia and India would be placed in dire peril because naval forces would not be available to protect the Indian and Pacific Oceans”. Australia’s High Commission to London, Bruce, was told the same by the First Lord in December 1934. Chamberlain also told Lyons and Menzies in 1935 that “it is impossible for this country to fight with Germany and Japan”.

So, despite physical work progressing at Singapore, albeit slowly, there was sufficient evidence available by mid-1935 upon which to build a case that the Singapore strategy would fail, given that it lacked a fleet to complement the base.

**Australian Support for the Singapore Strategy**

The Australian Government openly embraced the concept of the Singapore strategy. Prime Minister Hughes in 1919 said “the question of a satisfactory scheme of Imperial navy defence (was) literally one of life and death for Australia”. Bruce, at the end of the 1923 Imperial Conference said that he was “not quite as clear as I should like to be as to how the protection of Singapore is to be assured, I am clear on this point, that apparently it can be done”. Bruce then told Parliament in March 1924 that “Australia ... did not desire to provide for her own defence without co-operation with Britain and the British Navy”. These sentiments were repeated in a 27 June 1924 statement to parliament in which Bruce said “At no time has Australia been in a position to provide for her own national defence. Today, as in the past, we are dependent upon the protection afforded to us by Great Britain”. Yet, while the Government, as a whole, was prepared to accept the validity and feasibility of the Singapore strategy, questions were being asked by individual politicians, the three Services and the public at large.

Labor Party opposition to the Singapore Strategy was twofold: firstly, the party favoured a defence policy based on submarines and aircraft, and secondly it objected to the cost of Australia’s contribution to imperial defence. However, the Government chose to ignore these objections on ideological grounds and the lack of any feasible alternative.

The Royal Australian Navy supported the Singapore strategy wholeheartedly. The Navy believed it would survive the effects of disarmament, appeasement and financial constraint in reasonable condition and receive priority over the other services if the Government endorsed the Singapore strategy. The most vocal of the Services’ opposition came from the Army which raised doubts over the Royal Navy’s one power standard, its location in European waters, the time it required to deploy and the problems associated with operations on two fronts. Chauvel’s Inspector General of the Australian Military Forces Reports of 1923, 1924, 1926, 1927 and 1930 were critical of the “sublime faith (placed) in the powers of the British Navy” and warned against reliance on Singapore.

The Australian Air Force, at this time, was fighting for its survival and, somewhat less than wholeheartedly, supported the Imperial stance of the Navy. Support for the Army’s position could result in the absorption of the airforce into the Army.

The Army believed Australia was vulnerable to invasion by Japanese forces and that reliance on the Royal Navy was foolhardy. Australian military wisdom held “that Japan will make war only when she is reasonably certain of comparatively minor opposition at sea for a time long enough to enable her to establish command in the Western Pacific”. What Australia needed was an army (supported by aircraft) large enough to defeat any invasion force. Lavarack’s earlier comments (1930) were reinforced in September 1939 by a second British officer, Squires (CGS) who said “It would be unwise to assume that Japan would not, at some future date when the democratic Powers are deeply committed to other theatres, take advantage of their difficulties to further her own designs in the Pacific”. If these opinions held true, and Australia’s navy was already committed as part of the Royal Navy, then nothing would stand in Japan’s way except land based forces. The Australian Army General Staff made their views known to Sir Maurice Hankey during his visit in 1934 when they said “It is most unsound to trust the defence of the Commonwealth (of Australia) entirely to an agency that is completely outside the control of the Commonwealth Government ... What for Britain is merely the acceptance of a risk means for Australia the facing of imminent disaster”. Nothing short of a firm guarantee of a fleet to Singapore would assuage their fears, and of course none was forthcoming. In 1935, General Bruche reiterated that “Britain ... regarded the defence of Australia as merely a minor part of a world-wide problem” and suggested that Australia should look to her own defence capability in the way she had already done when the Singapore
Strategic programme and the acquisition of two 8-inch gun cruisers, the Australia and Canberra. Further equipment acquisitions were inhibited by the lack of an Australian strategic policy and the effects of the Depression. But it is ironic that the decision to acquire cruisers and eventually submarines was based on earlier British advice on Australia’s naval requirements.

This five year programme was followed by a three year programme in 1934 designed to reverse some of the undesirable effects of the earlier cutbacks. However, Australia was unable to adopt a realistic policy of self-reliance and the Singapore Strategy again remained Australia’s prime defence strategy.

Billy Hughes, who in 1919 had openly embraced the Singapore concept warned in 1935 that “Australia was aware of warnings of British Ministers and naval experts that (the British Navy) . . . is no longer able to guarantee the safety of Britain” let alone the remainder of the Empire. He went on to write that Australia “cannot expect that the British people in the present disturbed state of Europe, would agree to the despatch to the other side of the world of such powerful squadrons as would be necessary if Australia were attacked by a first class power”.

The degree of divergence in advice from the individual Services gave the Australian government cause for concern. In seeking a solution to their quandary, the Government turned to the United Kingdom for advice, unaware of the depth of the conflict in the British Services over issues such as “ships v planes”, “guns v planes”, the required fleet standard and the selection of Empire priorities for defence. Indeed, differences between the Australian Services were mirrored many times over in the British Services. Furthermore there was no guarantee that any advice given was impartial. The Australian Government had to take into account the prejudices of the Service to which the visiting expert belonged. It was generally easier to trust the status quo and the reassurances given from time to time by the British, despite the mounting evidence that the Singapore strategy would falter for lack of a fleet. Blinkered thinking? Perhaps. A pragmatic solution? Definitely.

Self Reliance for Australia

Despite earlier protestations that Australia could not look after its own defence, this very decision was taken by Prime Minister Bruce in March 1924. In response to the cancellation of the Singapore project by Mac-Donald’s Labor government, Bruce said “Clearly if we cannot look to Great Britain, we must look to ourselves”. This statement led to Australia’s first five year defence programme and the acquisition of two 8-inch
Confusion, Half Truths, Evasion and Outright Deception

Confusion

The development of the Singapore strategy was marked by confusion, half truths, evasion and outright deception, most of it on the part of the British. In 1938 the Australian Minister for Defence, Street, identified the crux of Australia’s problem when he said “Our defence problem as a small nation is insoluble without Empire co-operation... we cannot provide naval forces sufficient for our security... We look to Britain in an emergency to station a fleet of sufficient strength to safeguard Empire interests in the eastern hemisphere”. But who was to determine what “a fleet of sufficient strength” was? The fleet combinations proposed were endless depending on international tension and the source of the advice. In the end a deterrent force, “a formidable, fast, high class squadron” was sent comprising the Prince of Wales and Repulse, the aircraft carrier Indomitable being unavailable through accident damage. A cursory examination of the more outlandish suggestions would have revealed that most of the British Fleet would have had to deploy to Singapore if the figures are to be believed. Scope enough for confusion as to Britain’s real intentions.

Confusion could also have arisen from the conflicting advice received on the size of the garrison required to defend Singapore, the number of aircraft and coastal artillery pieces needed to provide immediate protection of the base and the size of the enemy force to be confronted.

Half Truths, Evasion and Outright Deception

The Singapore strategy was constantly dogged by a litany of half truths, evasion and outright deception from its inception to its demise. Many half truths were told out of embarrassment, some were told to obfuscate reality while others were told to hide the depth of disagreement within British circles over the strategy itself.

The Colonial Secretary in March 1924 did not advise the Dominions that the inquiry into the coastal defences of Australia and New Zealand had been postponed, lest the two countries link the cancellation of Singapore with the postponement; the cancellation of Singapore “undermining the whole basis of the initial enquiry”. As previously noted CID minutes were changed to reduce or eliminate reference to conflict within the Committee and there was also Macready’s recommendation to withhold information which would question the Singapore strategy. Accordingly the Dominions were never fully advised of the extent of the argument over Singapore’s defences. The First Lord of the Admiralty’s suggestion was that “British policy should be, to some extent, to leave them guessing”. Sir Maurice Hankey, in his visit to Australia in late 1934 neatly sidestepped a number of major issues by telling half truths and almost lies about Britain’s rebuilding programmes and ability to provide a fleet to the Far East in times of trouble.

A much more serious case of deception followed the Chiefs of Staff meeting of June 1937 in which a May 1937 appreciation on fleet travel time and level of reserves at Singapore was discussed. The conclusion that Singapore could fall was most contentious and the decision was taken to draw up two appreciations, one for the Chiefs of Staff and one for the Dominions, the latter without any inopportune references that might cause alarm. A further review in January 1939 again questioned the ability of the Royal Navy to send a fleet to Singapore given the increased deterioration of the situation in Europe. The decision was taken by Chatfield, the Minister for Co-ordination of Defence that “it was undesirable... to make any further communications to the Dominions as to the limitations in the size of the Fleet, which we should be able to send to the Far East”. Later that same year, the March 1939 CID meeting considered the implications of a paper “European Appreciation 1939-40” with misgivings, especially the lack of a realistic naval re-armament programme and a glaringly apparent inability to provide a fleet for the Far East. The outcome of their consideration was “not to mention such an embarrassing change of policy at all”. There then occurred the celebrated “Ismay-Duncan” incident in which, by “sleight of hand” Ismay retrieved copies of the above CID minutes which Duncan had received by mistake. He also convinced the latter that there had been no reversal to the 1937 Imperial Conference assurances that a fleet would be provided.

The underhanded methods adopted to hide such decisions were contemptuous of the trust placed in Britain and the Singapore strategy by the Dominions. However, Australia was rather sensitive and myopic about Singapore. Despite sufficient evidence already available to enable Australia’s defence planners to draw the correct conclusions about Britain’s ability to provide a fleet, self deception was practised and misplaced faith put in the Royal Navy.

Yet the most invidious half truths was the constant stream of reassurances that a fleet would be sent to Singapore in time of need:

“Hankey’s comment in 1934 that there was ample margin for safety in Britain’s Singapore policy — a
that such policy had been overtaken by events.

The Chiefs of Staff Review of 1935 which concluded that “Britain should be able to send a fleet to Singapore to provide cover against Japanese forces and at the same time retain in Europe a force sufficient to maintain control of Britain’s vital sea area.”

Chamberlain’s 1939 telegram advising Australia that it was “still out intention to despatch a fleet to Singapore”.

Churchill’s November 1939 address to the Dominion Ministers’ meeting, repeated on 11 August 1940 that “if the choice were presented of defending Australia against a serious attack, or sacrificing British interests in the Mediterranean, our duty to Australia would take precedence”.

Comments like those above were passed to the Dominions when, back in Britain there were arguments over Britain’s defence priorities, emphasis on the acquisition of aircraft for air defence of the homeland and an ever increasing knowledge that the Royal Navy could not combat the naval might of Germany, Italy and Japan if it were ever put to the test. As Andrews rightly says, “The British hid the truth from Dominion eyes with promises of consultations, which they never fulfilled, and vague generalisations about naval power, when they had little in the Pacific and did not intend to create any more”.

But Australia should have been alert to such moves. There was sufficient evidence available to question Britain’s pronouncements. Even a cursory examination would have revealed just how qualified such assurances really were. McCarthy described Britain’s responses as a “so many variables guarantee” that it was impossible to discern exactly when any assistance would be forthcoming.

Yet Australia was expected to accept Britain’s statements that a fleet would be provided and refrain from questioning one of the basic tenets of the Singapore strategy. Despite objections from a number of quarters, Australia accepted such blandishments with an air of self-deception and blinkered thinking.

Blinkered Thinking

There is no doubt that blinkered thinking occurred in both Britain and Australia over the Singapore strategy. Instead of working together to produce a viable strategy, the three Services in both countries pushed their own self-interests. There was never consideration for the common good. There was also a pronounced tendency to support policy when all the available evidence indicated that such policy had been overtaken by events.

There was never discussion of how the Singapore strategy would evolve once the fleet arrived. It was merely assumed that in any clash the British fleet would emerge victorious. In fact the capabilities of the Japanese were disparaged on a number of occasions, with eventually disastrous results. The First Lord of the Admiralty, Sir Samuel Hoare, told the May 1937 Imperial Conference that the Royal Navy would prove superior to the Japanese because of the “superior fighting qualities of the British race”. The British Government, and Churchill in particular, believed that Japanese ambitions lay on the Asian mainland and that “it was not considered possible that the Japanese . . . would embark upon such a mad enterprise” as the capture of Singapore. Brooke Popham, addressing the Australian War Cabinet in February 1941 advised that Singapore could hold out for nine months and that “no fixed defences were established at the northside of the country, as it was not considered, in view of the nature of the country, that they were necessary”.

He told the same Cabinet meeting that “Japanese planes were not highly efficient . . . and out pilots were considerably superior . . . (The Japanese were) not airminded, particularly against determined fighter opposition”. Finally the British Chiefs of Staff, in reply to a question by Menzies in April 1941 on Singapore said “the majority of . . . aircraft the Japanese could marshall would be . . . obsolete types and there was no reason to believe the Japanese standards were even comparable with those of the Italians”.

There is no excuse for underestimating the capabilities of an enemy, especially one such as Japan, with its very strong naval and naval air tradition. Underestimation on the one hand leads to over confidence on the other and the Allies paid the eventual price when Singapore fell in just under a week of fighting (8-15 February 1942).

Churchill’s adoption of a First Sea Lord’s (Backhouse) suggestion at the February 1939 CID meeting of the deterrent value of two major capital ships at Singapore is also a case of blinkered thinking; of twisting reality to fit a preferred solution. By June 1941, the Admiralty had finally realised that the need to send a fleet to Singapore was paramount. However, their solution required six battleships, one battle cruiser, one aircraft carrier, ten cruisers, 24 destroyers and an unknown number of submarines. But such a fleet could not concentrate until March 1942 at the earliest. Churchill, therefore, proposed a formidable, fast, high class squadron on the grounds that “Tirpitz is doing to us exactly what a King George V in the Indian Ocean would do to the Japanese Navy”. However, as Marder points out, Churchill’s analogy between Britain’s dilemma in her home waters and Japan’s problems vis-a-vis Singapore was completely erroneous and doomed to failure. While Churchill could say he had tried to
keep faith with Australia and New Zealand over Singapore it was, in reality, a case of too little too late.

Australian insistence that a fleet be sent to Singapore is also a case of blinkered thinking and refusal to accept reality. Britain could not afford to denude her home waters of ships in case the German Fleet sailed forth from its European ports. But even after the British naval losses following the fall of Norway, Denmark, Netherlands, Belgium and France between April and June 1940 (two aircraft carriers, one battleship, four cruisers, ten destroyers and five submarines), and the naval losses associated with the Greek campaign of April 1941 (four cruisers and six destroyers lost; two battleships, one aircraft carrier, two cruisers and two destroyers severely damaged), Australia still expected a fleet to be sent to Singapore. Neither could the Mediterranean Fleet be stripped of its resources given the number of British and Dominion troops involved in the Middle East. Menzies realised the futility of the latter when he said on 8 March 1941 that “the Dominions [now] had very large forces on land in the Middle East and public opinion would not stand for these forces being left improperly protected by a complete withdrawal of Naval Forces from the Mediterranean”.

However, this statement did leave scope for a partial withdrawal of naval assets. Such an expectation flew directly in the face of the most explicit advice of a 28 June 1940 communique from the Dominion Secretariat that stated:

“Formerly, we were prepared to abandon the Eastern Mediterranean and despatch a Fleet to the Far East, relying on the French Fleet in the Western Mediterranean to contain the Italian Fleet. Now if we move the Mediterranean Fleet there is nothing to contain the Italian Fleet . . . or . . . the German Fleet. We must therefore retain in European waters sufficient forces to watch both German and Italian Fleets and we cannot do this and send a fleet to the Far East.”

Regardless, Australia pressed for a Fleet to be sent to Singapore, and, even more incredibly, Britain continued to promise to do just that — clear cases of blinkered thinking and a myopic approach overriding reality.

**Conclusion**

In a world changed by the aftermath of the First World War, the Singapore Strategy was conceived as the answer to both British and Australian concerns in the Pacific. Britain looked to Singapore to restore her flagging international reputation and to protect her interests in the Far East. Australia looked to Singapore for the protection she herself could not provide against the depredations of her Japanese neighbour in the near north.

Australia’s mistake was to think that both countries’ interests coincided when they met at Singapore. Britain saw Singapore as a locked gate to the Indian Ocean; but to Australia it was the opposite, an open door to the Pacific. While Singapore was the focus of Australia’s defence concern, Britain also had to consider Europe and the Mediterranean. After 1935, British attention was directed more and more to local defence issues and this was reflected in changing strategic defence priorities. The adoption of the “Beat Germany First” policy at the beginning of the war was just another nail in the coffin of the Singapore strategy.

The tenor of the times also robbed the Singapore Strategy of any sense of urgency. The Washington Treaties, the League of Nations, the Locarno Pact, the Kellog-Briand Agreement, and Ten Year Rule, the London Naval Agreement and the Anglo-German Naval Agreement helped create and sustain the disarmament and appeasement movements that so distinctly marked the nineteen twenties and thirties. The Great Depression also cast its shadow over the same period, restricting even further the funds available to defence. Consequently, the construction of the Singapore base and the acquisition of a fleet upon which the strategy depended were subject to constant delay and postponement.

The Singapore Strategy required both a base capable of maintaining a fleet and a fleet capable of facing its most likely enemy, the Japanese. Singapore had neither. This lack of resources fatally flawed the Singapore Strategy and it never had a chance to prove itself. In addition, there was confusion over which came first and which provided the deterrent — the base or the fleet. Singapore was never designed to be a fortress and to stand alone, bridging the Indian and Pacific Oceans. Rather the base and its fleet were complementary and each would fail without the other.

Inter-service rivalry also played havoc with the development of Singapore, allowing the government to defer decisions until the Services had resolved their differences. Each Service took an insular approach to the Strategy, looking after their own interests to the detriment of the whole. Differences of opinion within Australia mirrored those in Britain and only differed in magnitude. No-one was prepared to accept the fact that the Singapore Strategy needed the support and assets of all the Services if it were to be successful.

Any claim that a conspiracy surrounded Singapore and its fleet must fail under the weight of evidence that consistently questioned the validity of the Strategy. Questions, criticisms and concerns were raised both in
Britain and Australia by politicians, serving officers and the public. That governments chose to ignore such warnings was their decision, at least they had the opportunity to evaluate them if they wanted. On the other hand, there is evidence to show that a mixture of half truths, evasion and deception affected the way in which information was passed between Britain and Australia. Indeed, both parties exhibited traits of self-deception and blinkered and confused thinking in their approach to the strategy.

In essence, the Singapore Strategy was a pragmatic approach to an insolvable problem: how to defend against more than one enemy with only a one-power standard navy. The Strategy was flawed from inception because it never received the resources it needed to operate. It is history now that the Singapore Strategy failed when challenged by the Japanese in 1942. In the end, the Singapore strategy was merely an illusion that never stood a chance when challenged.

NOTES

12. ibid.
13. Hamill, op cit., p.32.
14. McCarthy, op cit., p.44.
15. A.C.G Welburn, "Why were the strong differences of emphasis in the attitude of Australia's political factions to foreign affairs and defence policy in the nineteen twenties and to January 1932?" Seminar Paper, ADFA, 1989, pp.4-6.
17. Hamill, op cit., p.50.
19. Hamill, op cit., p.210. Implementation was delayed so as not to upset the public over increased defence expenditure.
20. ibid., p.105.
28. ibid., p.110.
30. ibid.
32. ibid.
33. ibid., p.134.
34. Hamill, op cit., p.21.
35. David Day, The Great Betrayal: Britain, Australia and the onset of the Pacific War 1939-42, Sydney: Angus and Robertson, 1988, p.9. Bruce, in his support for the Singapore strategy was following the advice of Generals Monash, Brudennall White and Chauvel who believed that Australia would be reasonably safer under such a strategy.
37. ibid., p.346.
38. D.M. Horner, op cit., p.3.
39. Horner, op cit., p.8. Reliance on local defence was championed by Wynter, Lavarack, Bruche and Robertson.
40. ibid., p.24.
41. Hamill, op cit., p.250.
42. Andrews, op cit., p.173.
43. Meaney, op cit., p.390.
44. ibid., p.450.
45. ibid., p.397.
46. ibid., p.398.
47. Hamill, op cit., p.94.
49. ibid., p.33.
52. Meaney, op cit., p.441.
53. A search of the literature reveals the following Singapore Fleet estimates, for different times:
b. ibid., p.33: 3 battle cruisers, an aircraft carrier, 8 cruisers, 2 flotillas of destroyers, 20 submarines.
c. Meaney, op cit., p.291: not less than 8 battleships and 8 battle cruisers.
d. Day, op cit., p.180: 7 capital ships (5 Royal Sovereigns) and an aircraft carrier.
e. McCarthy, op cit., p.39: a light cruiser squadron and 2 to 3 capital ships.
g. Robertson, op cit., p.238: 5 battleships, a battlecruiser, an aircraft carrier, 15 cruisers, 32 destroyers.
h. J. Robertson and J. McCarthy, Australian War Strategy 1939-1945: A Documentary History, St Lucia, University of Queensland Press, 1985, p.156, 4 or 5 battleships and three or four cruiser squadrons of between 10 to 12 cruisers.
54. Marder, op cit., p.220.
55. Andrews, op cit., p.179. This was shown by the net assessment done by Admiral Dreyer.
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The Effects of Social Change on Leadership

By Petty Officer R.W. Houston, RAN.

Introduction

Social change does have an effect on leadership, but why is leadership susceptible to changes within our society? Laissez-faire, democratic, and authoritarian have been distinguished as the three leadership styles. To establish if social change has an effect on leadership each of the styles need to be explored. The aim of this article is to determine if social change in the community has had an influence on leadership, as noted by Vroom and Yetton "It becomes clear that an adequate analysis of leadership involves not only a study of leaders, but also of situations" (Vroom and Yetton, 1981, p.200). Social changes can be described as evolutionary as postulated by Darling . . . "Changes in the structural design of institutions may be more influenced by this thrust of social evolution than by any other factor" (Darling, 1973. p.7). This event of social evolution has an effect on how we do business with each other. Individuals and groups have a growing awareness of their own needs and concerns thus causing leadership to become situational. The situation largely dictates the leadership style or combinations of style needed. Our society is complex, and we as social animals who are interdependent upon each other constantly evolve and grow.

Styles of Leadership

The laissez-faire leader allows a group to set its own agenda and permits the group to develop and progress on its own. This leader does not lead but merely watches and is there if the group needs anything. If the group does not ask the laissez-faire leader for help and direction, the leader exerts little or no influence over the group. This may seem a very non-leadership role, however, this style would seem to be appropriate in a social group at a dinner party or at a friends home, as described by DeVito . . . "any leadership other than laissez-faire would be difficult to tolerate" (DeVito, 1988, p.269).

The democratic leader, by allowing the group to develop and progress as the group wishes exerts far more influence. The democratic leader steers the group by stimulating self-direction coupled with member reinforcement and contributing suggestions for direction and courses of action. The group ultimately makes its own decisions under the guidance of a democratic leader.

The authoritarian leader is impersonal. To assume almost total responsibility this leader minimises intragroup communication. The group as individuals can communicate with the leader and the leader with a member of the group. The group is not allowed the freedom of developing and progressing within itself. The leader sets the agenda, goals and methods of the group. This leader often rewards or punishes the group as a parent would with a child.

During a period of extreme stress for a society such as a world war, particular leaders and their styles become appropriate. Sir Winston Churchill emerged as one of the greatest war time leaders in modern history, however, his reign as Prime Minister of Great Britain did not last beyond World War II. Had Sir Winston Churchill changed his leadership style or had the public changed their expectations of a peace time leader? As Luthans has described . . . "the leader is viewed as a product of the times and the situation" (Luthans, 1989, p.456).

Whilst there has been no major recent research into the effects of social change on leadership, Vroom and Yetton have concluded that . . . "to be effective and to communicate as intended, a leader must always adapt his behaviour to take into account the expectations, values, and interpersonal skills of those with he is interacting . . ." (Vroom & Yetton, 1981, p.203). Why should the leader adapt and not the group to the leader? The manager of a motor vehicle factory does not physically make the motor vehicles but controls and coordinates a group to manufacture for him. If the people in the factory have changing needs and these needs do not conflict with the goal of the factory, the leader should be able to recognise these needs and adapt accordingly. Japan and Korea are world leaders in incorporating employees within the company structure. As described by Luthans: "Korean managers espouse team-work, employee participation, minimal hierarchies, and emphasis on the employee's personal needs" (Luthans, 1989, p.472). Managers in Japan and
Korea are seen to be successful in the industrial world, if maintaining a high level of exports which creates wealth in their own countries can be the measure of success. Why then do peoples needs change in our society? Society's values and expectations are constantly changing. Capital punishment serves as a good example of how our society's values can alter. Capital punishment in Australia has been abolished since the late 1960s, however, the debate for reintroduction gains momentum in the public forum with each murder. Social change in our society is inevitable when we as social animals compare our abilities, accomplishments, attitudes, opinions, values and failings with those of others. Is a leader an inbred trait or is it acquired through interacting with his or her surroundings? This nature/nurture debate can best be summarised by Luthans when he goes on to say: "researchers accepted the fact that leadership traits are not completely inborn but can also be acquired through learning and experience" (Luthans, 1989, p.457).

**Adapting to the Situation**

Acknowledging that there is change in our society with regards to our attitudes, opinions and values, leadership to be effective must change and adapt to the situation. What was effective leadership yesterday may not necessarily be effective today. Sir Winston Churchill was an extremely effective wartime leader of Great Britain during World War II. However, on completion of World War II his leadership and government did not survive. Why was this great leader during the war not wanted by the public after the war? The people of Great Britain during the war needed a tough, dynamic authoritarian leader. Tough times required tough leadership as described by Luthans: "The person with the particular qualities or traits that that situation requires will emerge as the leader" (Luthans, 1989, p.456). During the war, British coal miners went on strike. Sir Winston Churchill used extreme action to settle the strike by sending in the army to keep the mines operational. The people of Great Britain condoned the use of the army in this strike because swift and decisive action was necessary. The nation could ill-afford to have the mines closed for whatever reason during the war whilst the fate of the nation was being decided in the theatre of war. However, after the war, the expectations of the British people changed and with that change in the social needs spelt the end of the leadership of Sir Winston Churchill. What were these changes in expectations? The war was over, the country no longer needed to go through the tortures of war, the public wanted and expected their lifestyles to be easier. Sir Winston Churchill may not have been able to change and adapt his leadership style to suit the new needs of the British public. From this comes an example of situational leadership, the events dictated the form and method of leadership style necessary. When that particular style of leadership was found no longer suitable, the leader (and the government) were changed to suit a changing need within the community.

**Having the Same Aim**

To be successful in business, major companies have realised the importance of employees having the same aim or goal as the company. Lassey and Sashkin have acknowledged this when they go on to say "People’s emotional needs must be met while the job is being done, or they are likely to lose interest in the goal" (Lassey & Sashkin, 1983, p.1). Acknowledging that the emotional needs of people are important and should be met in order to have an effective workforce are valid. To go on to say that a happy worker is an effective worker is not necessarily true. The worker may be happy because he has short working hours and a more generous salary, this may not be beneficial to the company at all, yet the worker is happy. So having a happy and satisfied worker is important but having the same aims and achieving them collectively is ultimately the aim between the company and the employee. Establishing the needs of the employee and the company, then ensuring that goals for both are obtainable and acceptable can be used for the formula for success.

Industry leaders have accepted that the role of the employee has changed and will continue to change in our complex society. What is important today may not necessarily be important tomorrow. How do then the captain’s of industry keep themselves abreast of changing needs of their employees and the need to adjust leadership styles to suit? Vroom and Yetton have recognised that effective employers “tend to have relationships with their subordinates that are supportive and enhance the latter’s sense of personal worth and importance” (Vroom & Yetton, 1981, p.202). Recognising that the changing needs of the employees needs to be addressed is a vital leadership tool. A heightened awareness of the importance of the individual in the leadership process has led to development of the styles used and in what situation. Leaders in society acknow-
ledge the importance of change and have placed greater emphasis on anticipating change and adapting accordingly. Darling has identified a growing awareness and need to recognise change when he goes on to say “these will be concerned with anticipating, and planning for change, with measuring the social planning for change, with measuring the social progress of the firm, the institution, and the society” (Darling, 1973, p.363). People as social animals expect and demand to be treated with concern and respect, would it be wrong to treat people the way they expect? Joining together the aims and goals of groups to that of the individual is not unobtainable. Lassey and Sashkin have concluded that “individuals and social groups require structure and a sense of order for the achievement of goals but, as social animals, also demand to be treated with concern and respect” (Lassey & Sashkin, 1983, p.1).

Since the late 18th century following on the heels of the industrial revolution was the emergence of unionism. The industrial revolution replaced the cottage industry and with that, the role of the employee in the factory was established. Manufacturing was now centralised, villages grew into towns and towns into cities. A new social structure was now developing creating new needs and wants. What were these new and emerging needs of employees in the factory? Safety in the factory was important to the employees, but not necessarily important to the owners. Labour was cheap and easily replaced and the needs of the employee were secondary. Unions grew from the employees’ needs for safer working conditions, the employer was forced to recognise the needs of his workers through industrial disputes and had to adjust their methods of leadership to suit. The role of social change and its effects on leadership can be seen to be ongoing. When change occurs within our social structure new needs emerge which then may have an impact on leadership. The leadership challenge is then to be able to foresee or to at least recognise social change and its possible effects within their particular institution.

The awareness of participation between the employer and the employee has steadily grown since the Industrial Revolution. Leadership with its many qualities has seen changes within itself. The emphasis of effective leadership is constantly changing, as noted by Lassey and Sashkin in 1983, “the most common component of effective leadership is participation” (Lassey & Sashkin, 1983, p.340). However, participation has not always been seen as a desirable leadership trait as discussed during the Industrial Revolution. The leadership methods employed during the 1700s are vastly different than that of today. Leadership was totally authoritarian in style with little or no communication between the employer and employee. The art of leadership has developed and changed as it has had to react to its surroundings. Luthans postulated that the leader and leadership is viewed as a product of the times and situation, in other words when the time and situation change, leadership to be effective must also change.

**Japan and Korea**

Methods employed in the industries of Japan and Korea have seen new ground broken in the relationship between employer and employee. The employees are encouraged to conceptualise their employment as a partnership. A greater emphasis is placed upon communication within the company or institution’s framework; upward communication as described by DeVito “refers to messages sent from the lower levels of the hierarchy to the upper levels” (Devito, 1988, p.282). This form of communication is essential to the growth and maintenance of the organisation. Management by effective use of upward communication is made aware of worker morale and possible sources of dissatisfaction. A possible problem perceived with upward communication is that the information supplied from the lower level of the hierarchy to the upper levels may be misleading. The tendency can be for messages to be sent that are what the higher-ups want to hear. For example, a worker may not want to appear to be a trouble-maker and jeopardise employment and hence send only messages he imagines the higher-ups accept or want to hear.

Downward communication has been successfully incorporated with upward communication as an effective tool of leadership in Japan and Korea. The process of downward communication refers to messages sent from the higher levels of the hierarchy to the lower levels. These messages are order-giving messages such as “prepare this parcel for despatch” and “type this for me”. However, the evolution of downward communication has incorporated accompanying explanations of procedures, goals and the like. The employer now is seen to be a motivator of people in his organisations thus achieving common goals. The problems with downward communication can be with the employer; the employer tends to have more education and greater command of technical language of the business, these areas can be the reasons for communication difficulties. If the employer does not recognise the need to be heard effectively by adjusting downward
communication to suit, the message may be misunderstood or lost in gobbledygook.

This evolution of communication from the totally authoritarian leadership of the Industrial Revolution to the humanistic perspective approach of Japan and Korea in the 1990s can be viewed as a product of the ongoing social evolution and its impact on leadership.

**Essential Tools**

Effective leadership comprises many facets of personal qualities. Schultz goes on to say “the qualities that allow a person to be perceived as leader are typically the qualities that allow a leader to be judged effective” (Shultz, 1989, p.125). Leaders must be able to adapt their leadership style to suit the needs and expectations of members. Communication skills incorporating upward and downward communication are recognised as essential tools of effective leadership. With the dismantling of the Soviet Union under the leadership of President Gorbachev sweeping changes in the social structure of the Soviet Union were introduced. The changes introduced by Premier Gorbachev either sparked the needs of social reform or were as a result of the groundswell of social change emerging through the wants and needs of the Soviet citizens. However, Premier Gorbachev’s leadership did not endure, yet he was the architect of social change. Gorbachev may not of been capable of adjusting his leadership to keep pace with the social change that was unfolding within the Soviet Union. As Shultz summarised, a leader is judged on the qualities that we perceive that a good leader must have, but what happens when the expectations of the leader changes? The leader must then adapt to the new expectations or be judged to be ineffective and suffer the consequences.

Leadership must be flexible and adapt to the situation to be effective. Changes in society have a direct influence on the style and use of leadership. A leader can be viewed as a product of the times as postulated by Luthans, however, the best suited leader may emerge, not be produced, as a consequence of the times. This is to say that effective leadership is not necessarily formed by the situation and the time but the most effective form of leadership may come to the fore as a result. Through learning and experience coupled with natural leadership traits comes a formula that effective leadership can be built upon. When we compare our abilities, accomplishments, attitudes, opinions, values and failings with those of others we grow and expand. This constant and measurable social change in our world does have a great influence and impact on leadership. Leadership evolves and grows along a parallel of human social development. Social development causes leadership to evolve and grow, leadership on its own can not be responsible for social change, however, social change is the single most important factor which influences leadership and its uses.

Situational leadership can be described as using the most appropriate leadership style that suits the current situation. The parameters by which situational leadership is governed to be effective encompass establishing common goals and aims and achieving them collectively, entire interpersonal communicative systems and a heightened awareness of the importance of the individual in the leadership process.

The effects of social change on leadership are definable and measurable. Leadership has become adaptable as a result of social changes. Anticipating and planning leadership to be effective and appropriate has evolved as a working tool of governments and business alike.

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The Ethical Dilemma in Counter-Terrorist Operations

By Lieutenant Colonel M.C. Studdert, RA Sigs.

Executive Summary

"There are no rules in this game. Hitherto acceptable norms of human conduct do not apply. If the US is to survive, longstanding American concepts of 'fair play' must be reconsidered. We must develop effective espionage and counter-espionage services and must learn to subvert, sabotage and destroy our enemies by more clever, more sophisticated, and more effective methods than those used against us. It may become necessary that the American people become acquainted with, understand and support this fundamentally repugnant philosophy."


This article argues that there is a need to establish an ethical framework by which a counter-terrorist policy should be guided. This framework is required in order to ensure that the counter-terrorist policy does not emulate the ethically unjustifiable acts of terrorist violence.

In Part I the need for military forces to consider the ethics of counter-terrorism is established and some definitions relevant to the essay are presented.

Part II summarises the aims and characteristics of terrorism and presents some of the common justifications for the use of terrorist violence. The aim is to show that counter-terrorist violence has the potential to be as unethical as terrorist violence if it does not recognise the ethical distinction between force and terrorist violence.

Part III discusses some of the attitudes present in liberal democracies which establish the ethical expectations of that society and which influence a government in its consideration of the ethics of counter-terrorism.

Part IV describes some of the possible dangers to the ideals of liberal democracy if counter-terrorist organisations are given unlimited authority to employ unrestricted methods against terrorists.

Part V presents four principles which must guide the formulation and implementation of a counter-terrorist policy in order to maintain an ethical position which is consistent with the principles of a liberal democracy.

Part I

Background and Perspective

"... in the struggle between the legitimate authorities on the one hand, and terrorists on the other, anything goes: neither ethical nor legal restraints should be allowed to hamper the pursuit and extermination of terrorists."

"The primary objective of counter-terrorist strategy must be the protection and maintenance of liberal democracy and the rule of law. This aim overrides in importance even the objective of eliminating terrorism."

Introduction

The extremes represented by the above quotations reflect the problems which are inherently associated with a government's response to terrorism. The problems arise from the existence within society of conflicting attitudes regarding what constitutes a terrorist act and what represents a legitimate response to such acts. These conflicting attitudes derive from the wide variety of ideological, ethnic, and religious differences within Western society. The attitudinal conflict is exacerbated by the philosophy of liberal tolerance that underlies Western culture and by the "opening up" of the world through extensive transnational migration and by the proliferation of electronic communications.

The violence associated with terrorism has led some governments to establish counter-terrorist organisations whose role is to provide a means of resolving, through violence if necessary, terrorist incidents which are potentially violent or which threaten damage to significant facilities. The employment of these organisations is generally seen as a last resort occurrence when negotiations have failed to resolve the incident. In a large number of countries this last resort capability has been successfully provided by the Defence Force. The paucity of literature on the subject indicates that insufficient consideration has been given to the moral issues associated with the use of military forces to apply government sanctioned violence in response to terrorist violence. It may be argued that it is not for Defence Forces to decide on the morality of their
employment. To adopt this attitude not only abrogates the responsibility of a Defence Force to provide advice to government, but also rejects the philosophical premise that individuals are responsible for their behaviour. As long as military forces are employed in a counter-terrorist role, consideration of the ethics of both terrorism and of counter-terrorism must be regarded as a topic of military significance.

The aim of this article is to show that there must be a framework of ethical principles against which any counter-terrorist policy should be judged in order to ensure the ethical legitimacy of the policy.

This article will assert that moral legitimacy must be the primary consideration when developing any counter-terrorist policy. This argument will be developed through a description of what governments are responding to when faced with a terrorist threat. The characteristics of modern liberal democracies that influence a government’s response to this threat will be discussed. The dangers inherent in an unregulated counter-terrorist policy will be detailed, and a proposed ethical framework, based on four principles, against which counter-terrorist policies should be judged, will be described.

**Definitions**

It is beyond the scope of this article to generate arguments to support the use of the terms “ethical” and “moral”. The terms are used synonymously and have been used so as to ensure that their application is consistent with generally accepted behavioural standards; albeit standards that derive from a Western cultural perspective.

The use of the term state is conditioned by the terms de jure or de facto in an attempt to discriminate between states which are internationally accepted as legitimate and states which may, de facto, represent a collective of people but which do not have international legitimacy.

The definition of terrorism used in this essay is derived from the Schmidt-Jongman study, which describes five points which have become well accepted by academics and specialists in the field as a comprehensive definition of terrorism. The definition may be summarised as:

A systematic and deliberate method of violence which invariably involves a random or symbolic target; whose aim is to achieve coercive intimidation and a climate of fear and which is addressed to, and seeks to influence, a wider audience than the immediate victims of the violence. Terrorism becomes international when it involves citizens of more than one state.¹

In order to formulate a valid counter-terrorist policy it is necessary to understand the nature of the terrorist threat that governments must respond to. The aims and characteristics of terrorist violence will lead into the question of whether terrorist violence can be justified. This question will become important when the legitimacy of incorporating violence into a counter-terrorist policy is considered.

**Part II**

**Threats and Justifications**

**The Terrorist Threat**

Former US National Security Advisor, Robert E. McFarlane has written that:

"In national security terms terrorist attacks . . . do not, in any immediate sense threaten a nation. The attacks are short in duration and do not occur on a battlefield . . . They are likely instead to occur in a city street of a friendly country. The adversary remains hidden until after the attack."²

Despite McFarlane’s pragmatism, terrorism remains a significant concern for Western governments because of the possibility of extreme violence that it represents. Whilst the frequency of terrorist attacks has fallen since the mid-1980s, there have been improvements in the level of organisation of terrorist groups. The increasing number of state-sponsored terrorist groups reflects a trend away from the idiosyncratic terrorism of the 1960s and towards a better organised and funded style of terrorism.³ In addition there are increasing fears that terrorist groups will acquire a weapon of mass destruction, either nuclear, chemical or biological. Indeed, there have been discoveries of laboratories established by terrorist groups to produce chemical and biological weapons. The nature of the ideology of the terrorist groups that confront Western states has changed in the last ten years. The threat is now largely from groups supporting regional conflicts or from ethnic separatist groups, although there are some peripheral interest groups that provide an irregular, but nonetheless serious, threat to Western states.⁴
The Aims of Terrorism

The primary aim of any terrorist group is to publicise its cause, and in so doing, to legitimise that cause in the world arena. To this end, media access is critical to terrorists and this places governments in a dilemma regarding their attitude to the media. The second aim of terrorism is to inspire and mobilise followers and potential sympathisers, not only in the terrorists' region of interest, but also in the target state. This aim is associated with the desire of the terrorists to undermine public confidence in a government's capacity to protect the general public. Finally, the terrorist aims to induce from a government a response that is considered by the public and, ideally by other world nations, to be heavy handed or disproportionate.

Characteristics of Terrorism

Acts of terrorist violence have a number of common characteristics which are important to understand because they provide support for a rebuttal of any justification of terrorism. The characteristics of terrorist violence that indicate the inherent immorality of such acts are that: terrorism is indiscriminate in its effects, arbitrary in its application, frequently employs potentially cruel weapons and denies recognition of the generally accepted rules and conventions of war.

Justifications for Terrorism

One of the assertions made by terrorist groups in defence of their methods is that they are not the initiators of the violence, rather they have been violated and are merely responding as is their moral right. A corollary of this defence of terrorism is that the original aggressor forfeits the right to respond to the legitimate response. This explanation of violence raises the issue of how terrorists justify their methods and whether the justifications are valid. This issue is critical to the development of a counter-terrorist policy because it establishes the ethical parameters for a violent counter-terrorist response. If the justification for the use of terrorist violence is valid then a state must not, ethically, respond with violence, but must resolve the grievances of the perpetrators of the violence. If, on the other hand, a terrorist's justification for violence is invalid, how can a state ethically respond with violence? Two of the most common justifications for terrorist violence are the justification of "Supreme Necessity" and the justification of "Extra-Legal Force". By considering these two justifications for terrorist violence, a judgement can be made on whether the arguments presented are valid, and, therefore, whether the use of force (implying violence) to counter terrorism can be ethically justified.

Supreme Necessity

The most compelling justification for terrorist violence is the justification of "Supreme Necessity". This justification invokes the argument that when a nation and its people are threatened with physical destruction by another state they have the moral right to employ any method in their fight for survival. An individual's right of self-preservation is extrapolated to show that, collectively, a people have the same right. In philosophical terms this argument is an extreme example of jus in bello (just conduct of war) being based on jus in bellum (the right to go to war); or, in simple terms, the "end justifies the means". The justification of "Supreme Necessity" can be supported by international law which recognises that a state may employ force in response to aggression. Aggression in this context involves a violation of territorial or political sovereignty. Terrorist groups frequently claim that, firstly, they are de facto states that should be affirmed as states de jure and, secondly, that as a state, their use of force is supported by international law.

The rebuttal of this justification of the use of terrorism is a long and detailed matter. To summarise the argument, it needs to be noted that, in almost all conflict, both sides claim "just cause"; in most cases, both sides have some measure of just cause. If each belligerent in a conflict claims some measure of legitimacy for unlimited means in self-defence then there are no legal or moral limits to the violence able to be perpetrated by either side. This is an unacceptable ethical position. From an ethical standpoint, the justification becomes moral contrivance if a state misrepresents the case of supreme necessity or is guilty of too facile an appraisal of their situation prior to reaching the conclusion that they are in a condition of "Supreme
Necessity”. It must be accepted that violence which violates accepted moral principles cannot be exonerated by appeal to just cause. The key issue is that:

*The morality (or immorality) . . . [of violence] is judged by the violence per se, not by the identities or the respective “justness” of the causes of the belligerents.*

**Extra-Legal Force**

The second justification for terrorist violence relates to the claim that terrorist groups are resorting to the use of extra-legal, rather than illegal, force as the only available means to redress their legitimate grievances. The assertion, particularly by “National Liberation” movements, is that they represent a de facto state which should be given autonomy and de jure recognition. They claim that the inequitable regime of international law prevents this recognition from occurring and, therefore, provides a moral warrant for the use of force to achieve their aims.

This argument focuses on the inadequacies of international law. It notes that the legal code of a society reflects the ethical code of that society and that individuals comply with the law because they accept its moral basis. However, in a global context, many states do not accept the moral basis of international law. The effectiveness of international law depends on a voluntary adherence to the morality of the law — a morality which is not universally accepted. Indeed, for some cultures, international law is seen as an instrument of repression. Again, unlike the case in any given society, there is no effective global authority empowered to regulate conduct or to resolve injustices. The ineffectiveness of international law to secure justice for an aggrieved state is supported by the historical failure of international law, in all but the case of Israel, to ever legitimise a de facto state’s struggle to obtain de jure recognition. Faced with the inability to secure justice through orthodox international channels the state turns to violence which, invariably, becomes terrorist in nature.

**Discrimination**

The principle of discrimination demands that the distinction between combatants and non-combatants be respected. The failure of terrorist violence to comply with this principle is well described by Paul Wilkinson when he says:

“Terrorists recognise no rules or conventions of war and no distinction between combatants and non-combatants. They regard anyone and everyone as expendable in the interests of their cause. In the . . . world of the terrorist no one has the right to be neutral.”

**Proportionality**

The principle of proportionality recognises that human suffering through violence may sometimes be necessary in the pursuit of ideological goals, but insists that the effects of the violence should not be disproportionate to the good being sought. Any assessment of disproportionality in this context is clearly subjective, and may be questioned by arguments such as those based on ‘the lesser of two evils’ and ‘military necessity’. This subjectivity however, does not invalidate the principle, for, as Beginnes says:

“. . . the extremely disproportionate nature of some acts . . . is so manifest that these acts are clearly regarded as legally and morally wrong even if one grants substantial efficacy to all of the objections . . . (to this principle).”

**Relevance**

The principle of relevance relates to the avoidance of unnecessary harm and suffering. This can be applied if the violence is either futile, in that it is unlikely to further the aims of the group, or if the violence is irrelevant because it is perpetrated against a state which has no power to influence the outcome of the matter in dispute.
These three principles do not question the validity of the arguments which justify the use of extra-legal force to secure justice. Indeed, on the basis of these arguments, the employment of force can be justified as an ethical state response to terrorism. The abovementioned principles become relevant when the extra-legal measure that is applied changes from force to terrorism. What is critical here is the differentiation between force and terrorism. Both use violence; but the selection of either term implies a judgement regarding the morality or immorality of the act. When terrorists use terrorism rather than force, the principles outlined above damn the violence as immoral. In the last 20 years there have been numerous examples of terrorist violence which have been clearly indiscriminate and disproportionate. The question of relevance is a more difficult principle to attribute. It is valid to argue, however, that the general acceptance by governments of the principle of no concessions or compromises to terrorists whose demands are supported by violence, would lead one to question the utility of such violence in the achievement of the terrorist’s aims. One could argue that, on this basis, the violence is not relevant.

The conclusion is that the arguments used to justify terrorist violence are not valid, and that terrorist violence is therefore immoral because it is violence without ethical conditioning. Whilst few would question the application of ethical scrutiny to the use of force by terrorist groups, it has not always been deemed necessary to go through this process in regard to the application of government sponsored force. This process of public accountability is a relatively modern one and now has a significant influence on how a government responds to terrorism. This influence is important when attempting to establish a behavioural framework for counter-terrorism. The publics’ expectations of how a government should act in the application of its power must be understood.

Part III
Societal Influences

Government Accountability

In modern Western liberal societies it is no longer automatically accepted that a government has the right to act in an authoritarian manner in the implementation of policy. Contemporary Western governments are expected to be accountable to the people who elect them and not to act in a manner that is seen as unacceptable to the general populace. As the attitude of Western society has become more liberal and individualistic the use of violence as a governmental response to societal phenomena has become increasingly unacceptable. This is reflected by the trend away from capital punishment and a general abhorrence of the use of violence by police forces attempting to resolve civil unrest. Governments are well aware that this resentment of the use of violence by government organisations could easily be extrapolated to a rejection of violence as a response to terrorism. In fairness, it must be added that governments generally oppose a violent response to terrorism on ethical grounds as well as recognising that such a response may be electorally unpopular.

Liberal Values

A second factor which influences a government attempting to establish a framework for behaviour which conforms to societal expectations is that, whilst it is generally accepted that governments have a moral obligation to protect the society that they represent, there is a widely held belief in modern liberal states that the actions of the government must be consistent with the principles of the liberal democracy that they seek to protect. In philosophical terms, the liberal state, as described by Hobbes and other liberal philosophers, is unequivocally based on the premise that the fundamental “right of nature” is the primacy of the physical preservation of life as both the individual right and as the most important task of government. Despite this, it is equally fundamental to liberal states that the state’s monopoly on the use of force to defend law and order and to defend the community against external enemies must be legitimately and ethically implemented. As Wilkinson states: “To believe that it is worth snuffing out all individual rights and sacrificing liberal values for the sake of ‘order’ is to fall into the error of the terrorists themselves, the folly of believing that the end justifies the means.”

Use of the Defence Force

The government of a country which is the object of terrorist violence must frequently provide a defence both within its own country and in any other region of the world where it has an interest. Terrorist violence has become international in that it is now frequently committed away from the region where the positive
results expected to be achieved by the violence have been expected to accrue. The third societal influence for governments arises from this internationalism. In the past a military force could control terrorist violence in the country where the violence originated. In modern Western society, however, it is politically unacceptable to project military force into other sovereign nations. Even in its own country, a Defence Force is seen to be a wartime organisation whose use to suppress civil disorder in peacetime is regarded as inappropriate or disproportionate. This attitude may be reflected in a general distaste for the employment of military forces in a counter-terrorist role.

Is it Terrorism?

Three of the most characteristic attitudes of Western liberal societies are the sympathetic consideration given to different cultures, the popular support for national self-determination and the belief in equality for all people. These characteristics have made it difficult for governments to develop a response to terrorism because there is a wide range of definitions of what represents a terrorist act. This has meant that whilst societies have condemned terrorism in general, there is often one particular group of terrorists which arouse the sympathy for historical, religious, ethnic or ideological reasons. These people do not call the group for whom they have sympathy terrorists, but refer to them as “Freedom Fighters” or guerrillas. As McGum notes: “These special exemptions derive from a concentration on the political ends espoused and an indifference to the means employed”.

It can be argued that the restrictions placed on governments by the abovementioned “idealistic” expectations of a liberal society make an effective response to terrorism impossible. It follows from this approach that governments must be able to respond to a terrorist threat with the same ferocity and disregard for ethical considerations that characterises the terrorist violence that they face. There are, however, some dangers in this approach. These dangers relate not only to the likely occurrence of ethically unjustifiable acts of violence, but also to the imposition of restrictions and controls on the general public which are inconsistent with the traditions of liberal democracy. The existence of these dangers reinforces the thesis that an ethical framework for counter-terrorism must be established in order to prevent these dangers from becoming reality.

Part IV

Dangerous Possibilities

If a government places no restrictions on the means of resolving a terrorist threat it will solve the problem very quickly. Paul Wilkinson observes that: “Any bloody tyrant can ‘solve’ the problem of political violence if he is prepared to sacrifice all considerations of humanity, and to trample down all constitutional and judicial rights.”

Of course the problem with the unrestricted approach to solving the terrorist threat is that it invariably incorporates measures which deny certain civil rights which are fundamental to liberal democracies. These rights are not only denied to the terrorist, but may also be denied to a proportion of the population.

Personal Privacy

Perhaps the most common humanitarian right that may be lost through an uncontrolled counter-terrorist policy is that of personal privacy. This right may be endangered by government efforts to gain information on terrorists. Intelligence gathering is critical to effective counter-terrorism, but is also potentially incompatible with an individual’s right to privacy. The means of intelligence gathering may include unlimited surveillance of individuals or of a group within society. There may be intrusive monitoring of personal records, bank accounts or personal conversations. All of these methods can be rationalised in the name of effective counter-terrorism but it is inevitable that such methods encroach on the rights of individuals who have no association with terrorism. There is also a danger that security forces may extend the employment of these methods beyond counter-terrorism or that the methods may be used for political rather than counter-terrorist ends.

Judicial Rights

There is a similar danger that established judicial rights may be denied by unrestricted counter-terrorist measures. For example, the broadening of powers to allow more time to hold and question people suspected of terrorist activity could easily be extended to non-terrorist investigations. Greater powers of entry and search of premises, and the ability to summarily deport
suspects are measures which counter-terrorist organisations see as absolutely necessary in order for them to counter terrorism, but which are inconsistent with liberal democracy. As an example of this denial of judicial rights, consider John Soule’s description of the situation in Northern Ireland:

“Trials without jury, internment, special interrogation techniques, and convictions based on one person’s word without corroborating evidence, have been special British laws aimed exclusively at Northern Ireland to stem the flood of violence.”

2

Freedom of the Media

The constitutional rights of freedom of the press, and freedom of speech generally, are important issues which may be threatened by unrestricted counter-terrorist measures. Does a government’s need to deny terrorist access to the media outweigh the right of the population to hear the terrorist view point and to be informed about terrorist groups or a terrorist incident? Some Western democracies have legislated against the right of the media to interview or report on groups that the government has declared as terrorist.

This censorship of the media and the potential for its extension to include non-terrorist groups is inconsistent with the ideals of a liberal democracy.

Other Issues

There are a number of other issues which, when considered in extremus, have outcomes which threaten the ideals of a liberal democracy. The issue of capital punishment for convicted terrorists, the question of whether registration of the population and the issue of identification cards is an acceptable measure and the establishment of limits to the policy of no concessions to terrorists in the face of a nuclear threat are just some of the possibilities. If any of the powers associated with these issues are given to counter-terrorist organisations, without the imposition of strict guidelines which regulate the use of these powers, there is a significant danger that civil rights will be abused. Moreover, the ethical parameters that are used to deny the moral legitimacy of terrorism will equally deny the moral legitimacy of the counter-terrorist policy.

This brief description of some of the dangerous possibilities associated with an uncontrolled counter-terrorist policy confirms the need to establish an ethical framework on which that policy should be based. Because the framework may conflict with the preferred methods available to a counter-terrorist organisation it is important that the parameters are clearly established. It is not enough that counter-terrorist organisations be self-regulating — their aim is to destroy the terrorist threat, not necessarily to protect the principles of liberal democracy. The ethical framework should properly be imposed by a body which has the responsibility and authority to protect the nation and its way of life. In liberal democracies that way of life does not condone methods which are inconsistent with the principles which the government seeks to protect.

Part V

An Ethical Framework for Counter-Terrorism

While this article has been primarily aimed at establishing the need for an ethical framework to govern a counter-terrorist policy, it is important that these ethical arguments are able to be translated into some practical principles rather than remain lofty but impractical ideals. The following four principles, extrapolated from the ethical arguments that have been used in this essay, are examples of the guidelines which should be applied to the formulation of counter-terrorist policy. The principles are presented in order of possible application, starting from the initial exposure to a threatening incident, and leading to the final decision to implement a violent response to the threat.

1st Principle — Is it Terrorism?

The first principle is that governments must ensure that what they are responding to is actually terrorist violence. This principle arises from the validity of the arguments which justify the extra-legal use of force to secure justice. Governments have a moral responsibility to address, and to attempt to remedy, the legitimate grievances of a disenfranchised or politically repressed state. If that which purports to be force is determined to be terrorist violence, then the government has a moral right, and a responsibility, to defend itself, and its people, against that violence.

2nd Principle — Passive and Active Responses

The second principle is that a counter-terrorist policy should not be based solely on violent measures. This principle arises from the need for a proportionate response, and requires the counter-terrorist policy to incorporate passive measures such as increased security at airports, active international co-operation against terrorism and the “hardening” of overseas facilities such
organisations unlimited freedom of action, have been counter-terrorist policy that allows counter-terrorist violence to be described as the use of terrorist violence. The terrorists' purported use of force must be discounted as an application of force. This means that any force that is applied under the auspices of counter-terrorism must comply with the laws and conventions of armed conflict in that it must be discriminating, proportionate and relevant.

4th Principle — Violent Response

The fourth principle is that if a violent response to terrorism is to be implemented, then that violence must never become terrorist in nature but must remain as an application of force. This means that any force that is applied under the auspices of counter-terrorism must comply with the laws and conventions of armed conflict in that it must be discriminating, proportionate and relevant.

Conclusion

In this article the ethical problems associated with the formulation of a counter-terrorist policy have been considered. The aims and characteristics of terrorist violence have been described and some of the most common justifications for terrorist violence presented and rebutted. Terrorist violence has been shown to be unethical because it is not conditioned by the application of ethical limitations to the means employed by the terrorist. This lack of ethical conditioning allows the terrorists' purported use of force to be discounted and to be described as the use of terrorist violence. The differentiation between force and terrorist violence has been used as the basis for the claim that the controlled use of force by a government to protect its people and their way of life is an ethical response to terrorism. Having established the legitimacy of a violent response to terrorism some of the dangers associated with a counter-terrorist policy that allows counter-terrorist organisations unlimited freedom of action, have been presented. Finally, some ethical principles have been described which, if rigorously applied to a counter-terrorist policy, will allow an assessment to be made as to whether the policy is ethically correct.

Whilst terrorist violence is clearly an anathema to the ideals of liberal democracy, it would be equally abhorrent if a liberal democratic government were to employ methods that were inconsistent with the ideals that it sought to protect. It is for this reason that an ethical framework must be established in order to resolve problems inherent in the formulation of a counter-terrorist policy. Carmichael sums the situation up well when he states:

"While it is true that terrorism must be combated with trenchant determination, the idea that this may (or should) be done by dispensing with ethical considerations is to ignore the basic stakes of the struggle: terrorism's assault upon the standards of civilised life and the community's need to defend them."  

NOTES

6. For a full description of terrorist threats past and present see Albert Parry, Terrorism from Robespierre to Arafat, New York, 1976.
12. ibid, p.60.
13. ibid, pp.63-68.
16. Wilkinson, Terrorism and the... , p.122.
18. Roberts, "Ethics, Terrorism...", p.49.
19. Wilkinson, Terrorism and the... , p.121.
21. ibid, p.31.
22. For further examples of possible guidelines see: Paul Wilkinson, Terrorism versus Liberal Democracy — The Problems of Response, p.10.

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Lieutenant Colonel Studdert graduated from the Royal Military College in 1978 after completing a Bachelor of Arts degree. On commissioning and allocation to RASIGS he was posted to the 2nd Signal Regiment. Postings to 1st Recruit Training Battalion, Civil Schooling and back to the 2nd Signal Regiment were followed by a posting to the Special Air Service Regiment. Lieutenant Colonel Studdert attended Canadian Forces Commerce and Staff College in 1990/91 and is currently posted as the Staff Officer Grade One Communications of Land Headquarters.
The Philosophy of Total Quality Management

By Lieutenant Colonel C.W. Ferndale, RA Inf.

Introduction

There are many indications in the market place and in literature of the increasing levels of global trade and rising public expectations of quality and value in both goods and services. Examples can be seen in the Pappas Carter Report \(^1\) and like reports. Firms, industries and whole countries are finding that international competitiveness is necessary for long term economic survival. Without the ability to compete economically and meet customer expectations, firms are failing. The result is a sharpening focus on increased productivity and on the quality of output in both public and private sectors. This begs the question: what is meant by "productivity" and "quality" and how do they relate to organisations? The question is of particular interest to Army (and to the Department of Defence) as the "productivity" of an Army and the "quality" of service to the nation may be difficult to bring into sharp focus.

This focus is becoming more critical as Army and Defence are required to be increasingly competitive in order to retain a responsible share of the Federal budget to provide for the defence of Australia.

There is strong support for the notion that productivity and quality improvement is the role of management, and that a paradigm shift in management thought is required in order to achieve them for Australia.\(^2\) Total Quality Management (TQM) is increasingly being accepted on the global scene as the management philosophy most likely to succeed in achieving this shift, utilising a focus on quality to raise productivity.

A New Meaning of Quality

It is essential that "quality" be understood and the meaning be agreed to within an organisation before the TQM philosophy can be properly assessed.

While the Concise Oxford Dictionary defines quality as the "degree of excellence", there is a variety of definitions among practitioners and theorists. Quality need not necessarily have the meaning of "best" in any abstract sense. To industry, for example, it may mean "best for satisfying certain customer conditions". There are, however, many approaches to the notion of quality, and I would like to raise a selection of them.

Juran (1988: 2.8) quotes quality as being "fitness for use", noting that this definition has not achieved universal acceptance. He states that of the multiple meanings given to the term "quality", two tend to dominate. These are:

- quality consists of those product features which meet the needs of customers and thereby provide product satisfaction, and
- quality consists of freedom from deficiencies.

Juran also provides other definitions that are useful in understanding quality. He defines a product as the output of any process, and a customer as someone who is impacted by the product, whether internal or external to an organisation. The outcome may therefore be expressed as the product plus a measurement of customer satisfaction.

Ryan (1989: 3) defines a quality product as one "which meets the needs of the marketplace", and notes that those needs are not likely to be static. Taylor (1989: 472) discusses quality, and, separately, quality in the measurement sense. He defines quality as the totality of features and characteristics of a product, process or service that bear on its ability to satisfy stated or implied needs. In the measurement sense quality is the probability that the values of the characteristics of a service or product will lie within specified limits, and impart to the product or service the ability to satisfy given needs.

Ross (1988: 1), whose main interest is in the area of design engineering and the reduction of variance, also argues for quality being measured in terms of the characteristics of the product. Product characteristics describe their performance relative to the requirements or expectations of the customer. Examples of this are the fuel economy of a car (or the endurance of an armoured vehicle), and the breaking strain of fishing line (or the trip wire of a flare). Because product

Definitions

This paper, the first of a series, examines the TQM concept. Definitions, historical development and characteristics will be discussed, before looking at international applications and the TQM situation in Australia.
Worst Possible Cases

By Robin Higham, Professor of History, Kansas State University.

In both war and peace it behooves planners and their masters to find and consider worst possible cases. The problem is that a number of often self-imposed factors prevent this being done effectively. Why?

To answer that question a few historical examples help.

Before World War II a number of studies looked at what was considered to be the worst possible case — and missed the target. The British created the idea of the bombing of Britain as a reflection of their own theory of massive aerial deterrence. The Royal Air Force talked of a deterrent strike against the enemy, but ordered no aircraft, trained no crews nor tested any bombs to flatten Paris, let alone post-1934 Berlin.

Elsewhere in Whitehall, the civilian side of the government expressed increasing anxiety about casualties, burials and control of the population as concepts of the destruction to be visited upon the world’s largest city, London, extrapolated from one bomb dropped in 1917, the worst possible one in World War I.

It was only when the enormity of storing the coffins and burying the 1.5 million dead was re-examined in 1938 that sanity began to return.

Several lessons to be learnt came out of this scenario:
1. Extrapolation from one instance without reference to probability can lead to irrational suppositions.
2. All parties need to be consulted in an attempt to be certain the proposals and projections make sense; people and calculators are, after all, fallible.
3. Above all, everyone needs to be sure the enemy is, in fact, both planning to act in the way it is assumed they will and that they are capable of doing so.

In another instance, panic and reality were brought together at the time of Munich, in September 1938, when the British Prime Minister discovered that he had to absolutely postpone war. Why? Because he had just learnt that the RAF could neither deliver a deterrent to Berlin because it had vastly underestimated the task and because the politicians had withheld a supply of money. But even more alarming, in a worst possible case that had not been anticipated, the RAF could not defend Britain from air attack.

Why? Because it was at the crossroads of rearmament when the old defensive aircraft were running out of spares and becoming unserviceable, while the fighter squadrons would be down as air and ground crews adjusted to and learnt to become proficient on the new Spitfires and Hurricanes.

The lessons here are that grand strategy requires a continuous and ongoing review including the projection of all factors well into the future. This includes not only the leadtime of new weapons, but also a reanalysis of readiness to perform the political tasks as well as the military. In this case, what had been started in 1934-36 was just becoming reality in 1938-42.

Neville Chamberlain at Munich got caught in an unforeseen worst possible case. And that has been par for the course.

A third related case occurred in April 1940 when the British planned to pre-empt the Germans re the Norwegian iron ore supply. The plan included sending a totally inadequate force to “seize” Sweden.

The plan was a disaster because the well-protected troops could not move about in their winter gear in the thick snow, lacked A/A defences and adequate air cover, and above all because the hesitant British response to a boldly executed surprise German plan led to the worst possible case — another Gallipolian evacuation and loss of ships at sea.

Norway, 1940, pointed up the need to plan for climate and geography and to consider carefully the limits of new weapons systems.

A fourth related case has to do with Britain’s perception of France at this same time.

We know that in 1935 the War Office in London did not trust the reports on the French Army being sent back by the Military Attaché and so sent officers to make an assessment. That report was not as incisive as it might have been.

The Royal Air Force was not realistic. It overoptimistically described the L’Armée de L’Air as being willing to fight to the last man. The French had better intelligence than the RAF. The result was that the British sent precious fighters to a collapsing France and endangered the survival of Britain itself.

Hitler’s successes in Norway, Denmark, the Low Countries, and France placed Britain in a danger she had not faced since the Napoleonic War of 1801-1815 — not so splendid isolation. And by mid-summer 1940 this really was the worse possible case, but one totally unforeseen by London.
Contingency plans had always assumed France and French colonial territory would be available.

But the disaster had its silver lining. Thrown off the Continent (except in Greece), and ringed in by potential U-boats and air bases, the British were forced to refine their war making ability. By 1942 they were ready to fight. Their worst possible case had forced them to work harder and to innovate.

It had also the advantage that it placed Britain’s defences behind a moat the Wehrmacht could not cross. This allowed time to contemplate a new grand strategy.

And the humiliation was deepened by the loss of the “great” Far Eastern base at Singapore in 1942. Thought to be invulnerable behind impenetrable jungle and able to hold out until the main fleet could arrive within 90 days, it was neither. The trouble was that by 1941, Britain found a multi-front war beyond its superpower capabilities because its status had changed drastically relative to both former enemies and ancient allies.

Years of a Ten-Year Rule which assumed no major war for a decade ahead (an idea placed on a moving basis in 1928) left Britain unprepared to respond at a time both of depression and technological change. The political mentality could cope with neither, in part because of a refusal to see that moderate defence expenditures could provide both work and national security. Such a neutral mind set created its own worst case.

Before World War II the Middle East was not thought of as a British theatre of war. By late 1940 it was the only theatre. And with the closing of the Mediterranean by Italy, it had become 12,000 miles away, not 3,500.

The disasters of 1938-40 provide the additional lessons:

1. Knowing an ally is as important as knowing the enemy.
2. Grand strategy must be planned and understood with possible responses to enemy activities at least as important as plans for taking the offensive or defensive in any theatre. It is vital to have a positive grand strategy and not to be merely reactive. The difficulty is how to display positive power without dominating. Or on the other hand, to avoid pussyfooting so that the state appears weak or even condoning.
3. Ends must be matched to means in the short term and means to ends in the long.
4. Bases must be established and protected with a view to their use.
5. All forces must be mobile to be able to avoid the traps of a worst possible case.
6. A campaign cannot be implemented before forces can crawl into a defensive position.
7. It must not be assumed that evidence is to be interpreted only one way thus neglecting the odd pieces of the puzzle. So employ gadflies in assessment and analysis.

Just as the British have had their worst possible cases, so has the United States, as is well known — the Civil War and Pearl Harbor, if not also the War of 1812. In spite of the pre-war rhetoric, no one really expected a civil war in the United States. When it happened, it was a worst possible case. Many officers, but not enlisted men, went south in the Army, but fewer naval officers. Neither side foresaw a long war. And yet in spite of the odds, the South fought for four years, gradually losing the offensive as the North geared up and found its generals and admirals. The defeat of the South was also the last of a series of worst cases.

Worst possible cases actually do stimulate activity and the innate sense of survival.

The War cost the country 600,000 dead and many wounded, but it ushered in a boom period.

Pearl Harbor was certainly a worst possible case — meaning it was unforeseen. But it was also very much a blessing in disguise for the US.

The enemy attack humiliated and unified the US public, it wiped out the dangerous US strategy to reinforce the Philippines while winning Jutland on the way, and it made the new carriers and their advocates supreme in the USN and in Pacific Fleet Strategy.

Pearl Harbor saved the USN’s battleships and two-thirds carriers in the Pacific sailing into a Japanese trap and being lost. The attack upon Pearl Harbor hit the USN over the head with a 2x4 and made it rethink modern naval war. (Will the loss of Subic Bay do this for the US’s grand strategy?)

The irony is that this worst possible case was the second repeat of a successful carrier attack on Pearl Harbor. Two others, in 1931 and 1938, had been carried out on exercises by US fleet airmen, just as Singapore had been “attacked” in 1937.

Pearl Harbor was, in fact, a boomerang worst possible case. A timid enemy commander failed to achieve a devastating victory. He refused to repeat his strikes so as to destroy the fuel tanks and workshop-repair facilities, sink all the battleships, and to find and destroy the two carriers in the area. The result was that an aroused United States responded dramatically and seized the initiative at Midway seven months later.

Earlier in the Russo-Japanese War of 1904-1905 the pre-emptive strike had been partially successful and had goaded the Russians into sending the Baltic
Fleet to its armageddon disaster at Tsushima in 1905. That was the worst possible case for the Russians with virtually the entire navy lost, and peace followed.

In all of these cases the question is twofold: what can be learnt from them and why did each happen?

A common denomination in all the cases is that influential persons did not believe that the worst possible case could happen and that it would be worse than anticipated. They reasoned themselves out of facing unpalatable facts, inferences, and possible consequences. That they reached these conclusions was often due either to lack of, faulty, or undigested intelligence. In part that was due to rose-coloured glasses and in part to partisan obstinacy, not to mention a pre-war lack of appreciation of sources and necessities.

Moreover, in one case, at least, there was that fatal presumption that the enemy thought in the same way as the planners and used the same assumptions. And that was coupled with the arrogance of ignorance and the failure to study his or her history.

Current, modern officers should learn from these cases that truth is stranger than fiction. They should also know that knowledge is power and comfort. And lastly, that vicarious experience is a great teacher if people are not permitted to make their own mistakes.

War is too important to be left to the professionals. Grand strategy is too vital to be left to the politicians. The reports of intelligence must never go unchallenged. And the dilemmas of war and peace should never be allowed to be decided by short-sighted, fickle public opinion.

NOTES


4. Sir Charles Webster and Noble Frankland, The Strategic Air Offensive against Germany, I (1961) and the Public Record Office (London), AIR 629, the Minutes of the 120th meeting of the Air Ministry Expansion Committee.


6. John Connell, Wavell, I (1964); Robin Higham, Diary of a Disaster (1986) 44, 88 on why the former military attache, a major-general, was ‘not wanted for command’ in the Middle East in 1940.


11. PRO/AIR 10/3915, S.D. 98.


13. See papers given at the 10th Naval History Symposium, Annapolis, 12-13 September 1991 by Marty Callahan and Edward S. Miller, as well as the latter’s War Plan Orange (1991).
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Logistics Changes

By Group Captain Gary Waters, RAAF.

As the environment in which the RAAF has traditionally operated changes, the impact on logistics support will be profound. Such changes encompass the Force Structure Review (FSR), Program Management and Budgeting (PMB), Defence Logistics Redevelopment Project (DLRP), Commercial Support Programme (CSP), and Defence Regional Support Review (DRSR); all of which will contribute to a leaner logistics support organisation. With a leaner logistics organisation, the focus for the future must be on sustaining combat forces in credible contingencies.

As a result of FSR deliberations, the RAAF is to reduce its size from 22,000 to 17,400 (a 20 per cent reduction) by the year 2000. There is a need for the RAAF to emerge more effective, more efficient and more productive as a result. It will need to employ lateral thinking, intelligent corporate management practices and integration of common activities to do so.

RAAF support philosophy will be to use uniformed personnel only on essential activities. Thus, we will need a more streamlined structure and will need to use risk management to achieve efficiencies that do not impinge on operational capability, readiness or sustainability.

The final structure of the logistics organisation will depend on the implementation of the several other initiatives mentioned above. These are expanded as follows:

(a) PMB which encompasses devolution of financial accountability and hence responsibility.
(b) The Wrigley report on civil infrastructure in May 89 which led to the CSP, which in turn will result in 2000 RAAF posts being replaced by commercial contracting (analysis indicates that a civilian can be employed for 20 per cent less cost than a serviceman).
(c) DLRP which involves closure of the three RAAF stores depots and greater local purchase and warehousing activities at units.
(d) DRSR which will provide common support services in capital cities.

The high-technology operational weapons systems which the RAAF employs must be able to adapt to a wide range of threats, some of which could arise at short notice. Since the focus for operations will likely be in northern Australia, the systems must be rugged enough to operate there. The logistics support systems must also be able to survive there, to provide continued support for the operational effort.

Long-range planning for logistics is vital to ensure that the necessary level of support can be provided when required. Not only must the Air Force logistics system remain responsive to operational requirements, it must also develop in conjunction with the ADF and Departmental policies that provide common guidelines for logistics support to the three Services.

In particular, the Logistics Strategic Planning Guide (LSPG) has provided eight objectives which the RAAF has embraced as it develops a posture based on range, endurance, mobility and independence, as articulated in DOA87. The eight objectives, re-worded as RAAF objectives are:

(a) Relate RAAF logistics support directly to RAAF operational need.
(b) Identify and meet support targets that will achieve RAAF force element preparedness objectives.
(c) Apply the principles of integrated logistics support with emphasis on life cycle costing to the RAAF.
(d) Improve and integrate RAAF logistics information systems for responsive decision support and hence better RAAF logistics performance.
(e) Improve the RAAF's contribution to national infrastructure, in terms of reducing duplication and improving efficiency and effectiveness.
(f) Optimise the use of RAAF personnel in providing logistics support.
(g) Create a more flexible, motivated and productive RAAF logistics work force.
(h) Improve the quality and management of RAAF logistics operations.

Additionally, policy guidance also emanates from the Defence Corporate Plan, and single Service guidance from “Towards 2010 — The RAAF Strategic Plan 1991” and “RAAF 2000 — Our Flight Plan for the Future”. As the various management initiatives are adopted to improve logistics efficiency, the logistics organisation’s capacity to support must be effectively matched to operational planning objectives. Peacetime requirements and efficiencies are important, but higher-level planning must ensure that operational capabilities are not degraded in the event of conflict.

To ensure that the appropriate level of logistics support is provided at all times, management is based on
the philosophy of Integrated Logistics Support (ILS). Within ILS, 10 elements have been identified as the key support areas which together provide effective and efficient life cycle logistics support of weapons systems, commensurate with preparedness requirements and at minimum life cycle cost. These are: management; engineering support; maintenance support; supply support; technical data; support equipment; packaging, handling, storage and transportation; manpower and personnel; training and training support; and facilities.

Future logistics support concepts should be developed around the likely operational environment. Of necessity, this will involve articulating future strategies, planning strategic changes, and implementing the practices and procedures necessary for logistics support in terms of the need to remain responsive to operational requirements, while meeting government efficiency initiatives.

Survivability and sustainability of operational forces will be the catch-cry of future operations, which will necessitate dispersal and deployment of forces in the north, and a concomitant ability for logistics support to be dispersed and deployed. The precise nature of future conflict cannot be predicted and will only be met by operational and logistics support forces which are capable of responding to rapidly changing circumstances.

The capability for logistics to respond rapidly will be improved through adoption of two levels of maintenance and the formation of Logistics Units (LU). Operational Maintenance (OM) will cover all current OLM activities and ILM activities focused around mission generation, and will be the responsibility of Air Command. Deeper Maintenance (DM) will cover current DLM activities and the remaining ILM activities, and will be the responsibility of Logistics Command.

Logistics Units: will form under AOCLC; will be tied to aircraft types; and will be positioned at appropriate RAAF bases. They will incorporate Weapon Systems Logistics Management (WSLM) and will be responsible for DM. Closure of stores depots will mean positioning weapon system spares at the operating bases. Thus, each LU will be responsible for WSLM, DM and technical spares supply. The LU will be non-core, although contingency manpower positions will be identified and military expertise and professional mastery retained to a certain degree. These changes will impact on the Management Information Systems such as CAMM2 and SSRP, which are currently planned. The following LU will form:

(a) 501 WG AMB (F-111) — comprising WSLM from HQLC, 3AD, DM from 482 SQN, technical supply from SSSAMB.
(b) 502 SQN WLM (F/A-18, Winjeel, Macchi) — comprising WSLM from HQLC, DM from 481 WG, technical supply from SSSWLM.
(c) 503 WG RIC (C-130, B-707) — comprising WSLM from HQLC, 2AD, DM from 486 SQN, technical supply from SSSRIC.
(d) 504 SQN EDN (P-3C, Dakota) — comprising WSLM from HQLC, DM from 492 SQN, technical supply from SSSEDN.
(e) 515 SQN ESL (HS-748) — comprising WSLM from HQLC, DM from MNTESL, technical supply from BSESL.
(f) Optional — 516 SQN PEA (PC-9) — comprising WSLM from HQLC, DM from 2FTS, technical supply from BSPEA. (Depends on outcome of CSP evaluation of PC-9 maintenance).
(g) A LU at Oakey will also be needed to support Blackhawk, Iroquois, Kiowa, Chinook and Nomad aircraft.
(h) Operations Support Squadrons (OSS), made up of current base squadrons at Darwin, Tindal and Townsville will form as follows:
  (1) 301 SQN at Darwin,
  (2) 302 SQN at Tindal,
(3) 303 SQN at Townsville, and
(4) 304 and 305 SQNs as cadre units to support deployments to Curtin, Learmonth or Scherger.
The military career of Lieutenant General Sir Horace Robertson commenced shortly before the Australian Army received its baptism of fire at Gallipoli, and developed considerably during the terrible tragedy that was the First World War. It also encompassed the economic stringencies associated with Australian military service during the depression, and the woefully inadequate Australian defence preparedness prior to the Second World War. Robertson’s career continued to flourish during the military occupation of Japan and ended shortly after the Korean War, the first conflict that the Australian Regular Army was to see active service. Robertson could thus be seen as a central figure over the period which saw the Australian Army undergo enormous changes, and therefore he could be considered an ideal figure for an autobiography.

Military life for Robertson commenced in 1912, when he was selected to attend the then fledgling Royal Military College as a member of the second intake. His time at RMC was cut short by the First World War, with his class graduating in November 1914. He joined the 10th Light Horse Regiment and saw active service at Gallipoli. Within a short period of time he was commanding a squadron and continued to do so until the end of that campaign. He saw out the remainder of the war in the Light Horse and in staff positions in the Palestine campaign.

The years following the First World War saw the military forces shrink rapidly, and Staff Corps officers such as Robertson revert to their substantive ranks and occupy training and staff positions. Robertson was fortunate to study at Camberley during 1923/24 where he was to graduate with an A pass. Over the next few years he was to serve in a range of field and staff postings, punctuated by regular training appointments. In 1939, he was appointed Commandant of the 7th Military District, the then newly created command based in the Northern Territory, where he was to oversee the belated preparation for the defence of the Northern Territory.

Robertson was promoted to colonel in November 1939. He was fortunate, in April 1940, to be appointed the commander of the 19th Brigade and was the only Staff Corps officer to obtain such a command in the 6th Division. As a result of a minor medical condition, he relinquished this command in February 1941 and subsequently was posted as the commander of the AIF reinforcement depot, where once again he found himself involved in training. He was promoted to major general in December 1941 and returned to Australia to assume command of the 1st Cavalry Division and to oversee its conversion into an armoured formation.

He had hardly scratched the surface of this problem when he was posted in command of the 1st Armoured Division and saw out the majority of the war in this and other infantry formations, including command of the rapidly diminishing III Corps in 1944 in Western Australia. In April 1945, he obtained command of the 5th Division in New Guinea, continuing in command to oversee the surrender of the Japanese forces and the demobilisation of his formation. The majority of his post war service was to be in Japan as Commander-in-Chief of the British Commonwealth Occupation Force.

The military man that was Horace Robertson possessed a leadership style that had the ability to inspire great confidence and affection from people, or could equally cause others to utterly detest him. With Robertson, there was no half way. His men, contemporaries and superiors, gravitated readily to either end of the spectrum. His egotism and bombastic nature ensured that this would occur. His complete professionalism ensured, however, that even those who disliked the man, conceded that he possessed great talents as a field commander, trainer and administrator. It was the combination of his personality and immense ability and the innate threat that it posed that ensured his career would not be allowed to prosper during the Second World War.

Jeffery Grey sought to do a number of things in this work, including providing some recognition of Robertson, presenting a detailed look at the BCOF, and examining the development of the regular officer corps through the experiences of one of its members. It is, I believe, the third of these aims where I feel Grey has best succeeded. Given the limited private material available on Robertson, a detailed coverage of the man and especially his private life was not available to the author. So while this autobiography provides little on the man, it does provide an excellent coverage of the military age he was part of, and helps fill in the gaps of history.
Jeffery Grey is a lecturer in the Department of History, University College, at the Australian Defence Force Academy. He has written a number of other military history works, mainly on the conflicts after the Second World War. I feel that he has succeeded in his coverage of the rise to prominence of a most controversial and colourful senior officer, and in doing so has provided an excellent portrayal of the Australian military times in which he lived.

BLOODY SHAMBLES by Christopher Shores, Brian Cull & Yasuho Izawa, Grub Street, UK. 1992. 392pp, numerous photos, maps.

Reviewed by Lex McAulay.

For anyone interested in any way in the air war in the Pacific from December 1941 to April 1942, this book falls into the "must have category". The authors have produced a greatly detailed account of the operations, from both Allied and Japanese sides. Every action is described; losses and victories are determined, despite claims from either side. The book begins with the scene throughout the Pacific, and the aggressive moves by the Japanese are fully detailed, including deliberate attacks on regular airline flights, for which little or no apology was offered. The nine chapters describe the initial attack on Malaya, the loss of northern Malaya, the struggle for the Philippines, the collapse of the East Indies, the attack on Burma, the defence and fall of Singapore. It is here that Volume 1 ends; the second will follow in 1993.

The pages are filled with incidents and photos of the men, aircraft and places in the campaign. It would have been easy for the authors to simply collect the information and place it between covers as an uninteresting bundle of facts. This team of authors has, instead, produced an excellent account of the events, described by witnesses of the actions.

Bravery, incompetence, humour and tragedy are on almost every page. One is appalled by the bone-deep stupidity and stubbornness of the civilian administrations; sobered by the repeated courageous acts from Service personnel. Some of the events are tragic in the extreme, as with the lone Blenheim attack by Squadron Leader Arthur Scarf RAF, 62 Squadron, on the Japanese air base at Singora, despite fighter attack. The Blenheim fought its way back to Alor Star, where the badly wounded Scarf force-landed only 100 metres from the hospital where his wife was a nurse. Despite immediate attention and blood transfusions which included two pints from his wife, Scarf died. In 1946, he received a posthumous VC.

The full details from both sides of the loss of Prince of Wales and Repulse are included, and the book is worth buying for that alone. Put this in your "must have" list, and keep a place on your bookshelves for it.


Reviewed by Lieutenant Jason Sears, RAN.

Australia's Navy 1992-93 is the third edition of the Navy Annual and it continues to impress with its progress and content. The standard of both the written and photographic contributions is very good and the Australian Government Publishing Service has maintained its high production standards.

The Annual provides a high quality publication that informs Australians about their navy. Australia's Navy is also used by Australian defence and naval attaches and commanding officers of ships as a means of giving government officials in regional countries an insight into the RAN.

The 1992-93 edition of Australia's Navy has focussed upon the RAN's operations in support of the United Nations, the Navy's journey of self reliance and the Service's commitment to the environment.

The Royal Australian Navy continues to support the United Nations in a variety of ways. Since the end of the Gulf War its guided missile frigates Darwin, Sydney and now Canberra, have operated in the Arabian Gulf in support of UN security resolutions enforcing sanctions against Iraq whilst some Navy personnel were also involved in the very dangerous task of conducting inspections of Saddam Hussein's chemical and biological weapons arsenals. The Navy also has a communications unit in Cambodia and provided personnel for a movements control group to support the initial deployment of UN forces into the country.

At home, the RAN's drive towards self-reliance has picked up pace. The Seahawk Squadron HS816 was commissioned earlier this year as was the Australian built guided missile frigate HMAS Melbourne. Melbourne's sister ship, Newcastle, is likely to be completed in mid-1993—some months ahead of schedule. Fabrication work on the new submarines (Collins, Farncomb and Waller) continues and construction work on the first of the new frigates, ANZAC has commenced. Both projects are on schedule and on budget.

Australia's Navy also contains a thought provoking article by Dr John White of AMECON on the future
of Australian naval shipbuilding in which he urges Defence and industry to mirror the key elements of the proposed National Industry Policy which encourages the formation of large companies of world standard with in-house design capability and which facilitates the export activities of these companies by encouraging opportunities in the domestic market. It is well worth reading. Indeed, it is significant that our nation's two largest engineering projects are the ANZAC frigates and Collins Class submarines. This year Defence will spend about $1.16 billion on these two projects alone which equates to around 40,000 jobs for Australians and over $400 million in revenue being returned to the Government.

The Annual also reflects the Navy's progressive attitudes towards the environment. In her paper "The Royal Australian Navy: Protecting Australia, Protecting the Environment", Jane Dally shows that Navy has a vested interest in maximising the efficiency of its operations by developing a knowledge of and a commitment to the environment.

This third edition also continues its connection with The Sir David Martin Foundation with one dollar from the sale of each copy of the Annual being donated to Foundation. The Navy Annual has already raised almost five thousand dollars in support of this worthy cause.

With 104 pages containing some 30 articles and 130 colour photographs, *Australia's Navy 1992-93* is very good value and would make an ideal gift. The Annual is an important publication which does more than provide an update on where Navy is. It is largely written by the officers and sailors who were involved in the activities described in its pages and for this reason I believe that it will become a valuable historical record.

**SECRET ACTION OF 305**, by Norm Smith and Frank Coghlan, RAAF Museum Heritage Series. $12.95.

Reviewed by Frank Pederick.

A former RAAF officer a Nobel Prize-winner? With 30 years in the RAAF this was news to me and to many others I expect. No doubt this is the type of information and much more that the RAAF's annual Heritage Awards will bring to light. The awards are in the categories of art, photography and literature.

With this history of No. 305 Radar Station, Norm Smith and Frank Coghlan won the inaugural literary award in 1988. It covers the formation of the unit in October 1942, the period of active service on Goodenough and Kiriwina islands through to disbandment in 1949. This after a period with the occupation forces in Japan.

No. 305 was one of a chain of similar radar stations around the Australian and PNG coastlines. By the end of WW2 the network provided greater surveillance of our approaches than is available today even allowing for the over-the-horizon facility in the Northern Territory. No. 305 operated unsupported, in secret, inside Japanese controlled territory early in 1943. The official history of the "Air War Against Japan 1943-45" by Odgers gives the station only two brief mentions. Yet it played an important role in the air defence of our forces in PNG in 1943.

By today's standards the radar equipment was primitive. In the hands of dedicated operators and mechanics (such as Coghlan and Smith respectively) plus a good communications and support team it was most effective. Just how effective such primitive radars could be was demonstrated again a generation later. The US was forced to modify the electronic countermeasures in aircraft to minimise detection by old radars operated by the North Vietnamese.

The Australian-made equipment used by No. 305 was the lightweight air warning apparatus (LK/AW Mk 1). The story of its development and manufacture was told by D.P. Mellor in Part V, Series 4, Civil, "The Role of Science and Industry" of the official war histories. Similar equipment is on display in the Telecommunications Museum in Adelaide.

Because of the detail it contains Smith and Coghlan's book will be valued by those studying many aspects of Australia at war. It has direct relevance for all who saw active service in the PNG theatre of operations. The Nobel Prize-winner was Bernard Katz, MD (Leipzig) DSc&PhD (London) who was recruited by the RAAF in Sydney to be a radar officer. After brief training in Melbourne and at No. 13 Radar Station, Cape Otway, he became the first Commanding Officer of No. 305. Now, Sir Bernard, Emeritus Professor of Biophysics, London, he was co-winner of the 1970 Nobel Prize for physiology and medicine. In a foreword, he alludes to the ease with which he was accepted despite his obvious foreign origins. He recalls the spirit of companionship and cooperation that pervaded the station. This spirit has been recaptured by the authors.

Perhaps the Heritage Awards will stimulate the writing of more squadron and unit histories. Realistically, many of the survivors of WW2 are not going to be with us that much longer, the Korean War is in the distant past and Vietnam is fading fast, hence the need to write now. One has only to listen to individual stories to realise how much more valuable are the records residing in the memories of those involved.
than in the broad-brush formal histories. Hopefully, books such as Secret Action of 305 will preserve these memories and save them from becoming distorted oral traditions or being lost forever.


Reviewed by Captain G.J. Harper.

While this book looks at the military discipline of New Zealanders in the First World War it goes far beyond this rather narrow field depicted in the work’s title.

While the work does look at the military discipline of the New Zealanders, it does so in relation to the soldiers of other nations. Above all else the work is a comparative study of the performances and military discipline of soldiers from Australia, Canada and Great Britain as well as those from New Zealand. Pugsley has researched extensively in the archives of the four nations mentioned and has uncovered a wealth of new material.

Christopher Pugsley was a Regular Force army officer until his retirement in 1988. In that year he published Gallipoli: the New Zealand Story. This book was almost solely responsible for the resurrection of public interest in the Great War in New Zealand where, unlike Australia, interest in New Zealand’s war history had always centred on the contribution made in the Second World War. Pugsley is currently New Zealand’s official historian of the Malayan and Vietnam conflicts.

Five New Zealanders were executed in the Great War: four for desertion and one for mutiny. Two of the five executed were Australian-born. This work examines in detail the cases of each of the five men executed. It also examines why 23 other soldiers who were sentenced to death managed through fortunate circumstance to escape the firing squads of their compatriots.

The work covers in some detail each of the main campaigns of the war in which New Zealand soldiers fought. It also contains details on some well-known New Zealand figures of the war: Lieutenant Colonel Malone whose Wellington Battalion captured Chunuk Bair, the furthest point inland taken by allied troops on Gallipoli; Major General Andrew Russell, the exceptional commander of the New Zealand Division whose achievements are certainly worthy of further research, but who remains largely neglected as a topic of study; and the famous (or infamous at the time) Ettie Rout, a woman well ahead of her time and whose pioneering methods to combat venereal disease amongst the New Zealanders have at last been made the subject of a recently published biography written by Jane Tolerton.

If the work contains a fault it would be the lack of detail on New Zealand’s role in halting the German offensive of March 1918. The work mentions the campaign on several occasions but never with the same detailed attention given to the struggles on the Somme or at Passchendaele despite this build up.

This is a remarkable book. It contains a wealth of carefully researched material about the New Zealand experience in the Great War, but by its comparative nature, it contains much of relevance to the Australian experience as well. The photographs selected to accompany the text have been chosen with great care and it is worth obtaining the book for them alone although Pugsley’s crisp writing style makes the work a delight to read.

This book is an important new edition to the New Zealand experience in the First World War, especially in detailing how that experience compared and contrasted with the experiences of Australia, Canada and Great Britain. Comparative studies are never easy to undertake but they hold many valuable insights when completed properly by a competent researcher. This book is one such study.

**THE RAAF POWs OF LAMSDORF,** by J.E. Holliday and D.A. Radke (Editors), Lamsdorf RAAF POWs Association, 43 Stella Street, Holland Park, QLD 4121, 318 pages, photos, map. Price: $29.95; all profits to the Australian Red Cross.

Reviewed by Lex McAulay.

This is an unusual book in several ways, and one recommended for anyone interested in the experiences of Australian prisoners 1939-45. It is the story of some 84 RAAF POWs who were gathered at the German prison camp at Lamsdorf, in Barrack 18A.

The prisoners of Lamsdorf underwent some unusual experiences, of which not much has been recorded and released for general public information. Along with other Commonwealth prisoners, they spent just over a year “officially” handcuffed each day, all day, as a reprisal for five Germans found shot dead, with hands tied, after a British Commando raid in 1942. In the winter of 1944-45, the worst since the beginning of the century, the prison camps in the east were evacuated ahead of the advancing Soviet forces, and the prisoners took part in a forced march of 800 km. During the
march, as the column resembled marching troops, it was attacked by Allied aircraft.

The book is not arranged in a "normal" manuscript fashion, but this does not detract from the interest. The first section is of detail written at the time for a group log of how people came to be captured. Section 2 expands on this, with more recent writings. Section 4 is "Escapes"; Section 5 "The March" and Section 6 "Going Back". Section 7 is appendices, and there is a "Roll Call" (nominal roll) and photos taken during the war of the people concerned and Lamsdorf itself.

The book has been produced by the surviving prisoners of Lamsdorf, and is a good account of individual experiences in a group of Australian airmen bound by common experiences and adversity. Available from the publisher, or aviation bookshops. All profits from sales go to the Australian Red Cross, as noted above.

AUSTRALIAN NURSING SINCE NIGHTINGALE: 1860-1990,
by Sister Elizabeth Burchill, B.A., B.Lit.
Printed by Spectrum Publications Pty Ltd.
Available from 5 Lithgow Ave, Blackburn Vic. 3130.
Price: $18.95 (including postage).

Reviewed by John Buckley, OBE.

This is a good, well researched and written book. The opening chapter "Origins of the Nursing Tradition" is outstanding in tracing the history of "modern" nursing from its commencement in the small town of Kaiserwerth in Germany in 1833; it was here that Florence Nightingale in 1851 enrolled, and secured her first position in London in 1853. Sister Burchill's description of the Crimean War — "a calamity unparalleled" as Florence Nightingale described it when she arrived there in 1854 — makes chilling reading. Florence Nightingale's remarkable influence and foresight revolutionised the care of the sick.

Chapter two explains how the first five "Nightingale trained nurses" arrived in Sydney in 1866 and how they laid the foundation of the skills and loving care that we have all experienced at the hands of nurses, both in peace and war.

The remaining chapters give vivid details of how nursing moved out of hospitals with the introduction of district, bush and inland nurses.

The book pays tribute to the doctors and nurses who introduced services as needs arose, which had to be met.

As this book is currently in publication (August '92), I would recommend that you get in early for your copy.

Members of Trinity Church are busy writing books. One of our experienced authors, Sister Elizabeth Burchill, has published her sixth, and, incidentally fulfilled the prophecy of a former Minister of the Church. It is called "Australian Nurses Since Nightingale 1860-1990" (Spectrum Publications, PO Box 75, Richmond, 1992, 258pp. with bibliography and index). "Weary" Dunlop wrote the foreword. The Third John Flynn Memorial Lecture (1990), by the Duchess of York is in an appendix. The first edition of 2000 copies is almost sold out. In a month or so Sister Burchill is to receive her third degree: a Master of Arts at Monash University.

This book is "one woman's view of nursing". The "history" is told where possible with reference to the author's own experiences. No, she was not with Nightingale in the Crimea, but she was with the Anzacs at Gallipoli, but that was in 1990 at their reunion. Sister Burchill enters the story when she speaks of Jane Bell, Principal Matron of the first Australian General Hospital of the A.I.F. in World War I. (My own aunt Dora Bayston was one of the nurses there). Matron Bell played a part in Sister Burchill's "aspirations to become a nurse".

There are chapters on District Nursing, Bush Nursing, Infant Welfare, Male Nurses, the 1985 Strike, and one of direct autobiography, One Nurse's History. The narrative is person-centred, and sometimes that person is the author. The chapter on District Nursing includes a vignette of the life of a District Nurse called Brenda who nursed the author. The chapter on Border Nurses draws on the narrative of an earlier book of the author "Innamincka", which may yet make a television Series.

Sister Burchill has lived live to the full, and some of the zest which has animated it lifts the pages of this story into "a good yarn" so much beloved by her fellow Australians. No formal history of Australian nursing will hereafter fail to draw on her anecdote and incident which illuminates the flow of history. This is the way it was! Her Christian connection is not suppressed: indeed we may see it as the impulse for service, and the strength for service.
In October 1992, a group of World War II veterans made the pilgrimage back to the western desert to take part in the 50th Anniversary commemorations of the battles of El Alamein and Tobruk.

Desert Journey is an Australian Defence Force Journal publication highlighting the battles in the western desert and the veterans of the campaign who returned there 50 years later to commemorate the gallant struggle of that fateful time and to pay homage to their comrades who made the supreme sacrifice.

Illustrated by numerous drawings, this book will rekindle memories for those who took part in the campaign and also for those who participated in the Desert Journey of 1992.

Desert Journey will be available from the Australian Defence Force Journal at a cost of $25.00.