Contributions of any length will be considered but, as a guide, 3000 words is the ideal length. Articles should be typed, double spacing, on one side of the paper and submitted in duplicate.

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INTRODUCTION

TO THE DEFENCE FORCE JOURNAL

The Hon D. J. Killen, MP
Minister for Defence

I WELCOME this opportunity to contribute to the inaugural issue of the Defence Force Journal.

I have often noted in this country the paucity of informed debate on Defence. Indeed, only last March I made the point that Parliament itself hasn’t been exposed to a full day’s debate on Defence in two and a half years.

Those of us who are concerned with Defence will agree that the processes of command of the Services, of defence policy formulation and of administration are dynamic areas of activity. Change is continuous and differences of view and judgement are to be expected.

This requires of those intimately connected with Defence, both in the Services and in the Department, the exchange of ideas, and the cultivation of reflectiveness and analysis as positive disciplines.

In its own particular way the Defence Force Journal should contribute directly to this aim of informed discussion. It should also provide a means whereby we may have a more constructive and more enlightened approach to the issues of Australian Defence.

I wholeheartedly support the Defence Force Journal, its aims and ambitions. I hope it will encourage and stimulate professional discussion of the issues involved in the broad fields of military and defence matters.
A NEW CHALLENGE

General Sir Francis Hassett
AC, KBE, CB, DSO, MVO
Chief of Defence Force Staff

THE publication of the first edition of the Defence Force Journal marks another step in the evolution of defence organization, philosophy and professionalism. Emerging from the Australian Army Journal, which has built a proud tradition over the past twenty-eight years, the Defence Force Journal provides for the first time a magazine wherein “Defence” matters in their broadest context can be addressed.

The modern-day complexities of the military art, involving decision making in a rapidly changing arena of world events, economic vicissitudes, technological change, social awakenings and different values, provide a very real and new challenge for those associated with the profession-of-arms. In this challenge there is opportunity for the concerned person to make a contribution towards unravelling the intricacies of some of the more intractable problem areas and to throw light on just how these might be solved.

With the advent of this Journal, I see a means by which those who are anxious to make contributions to the profession-of-arms and its understanding can make their ideas and views known.

Articles submitted for publication should be imaginatively argued and documented; they should be constructively critical but devoid of personal criticism or animosity. Only then will they make a sound contribution to the sum of our knowledge and understanding and maintain the high tradition of the military at large. The credibility and future worth of this Journal is largely in the hands of its governing body and more importantly in the hands of those who are its contributors.

I commend the Journal to you — make use of it for a better understanding and exchange of views on the many problems which face us in our particular defence environment.
A STEP FORWARD

Sir Arthur Tange CBE
Secretary, Department of Defence

"Every nation great or small ... is fundamentally concerned with its ability to defend the integrity of its territory and maintain internal order. No Government can be indifferent to its security, however it defines it; and security requirements will compete with economic and social development for a share of whatever resources are available."

HENRY KISSINGER.

In providing for the security of Australia and its interests, it is a major task of Government to decide how much of the nation's resources can responsibly be devoted to Defence. Devoting more money is not in itself sufficient. Judgment and careful discernment are necessary to determine that mix of defence capabilities which best provides for the country's defence requirements in the foreseeable strategic circumstances.

The Government looks to its professional defence advisers, Service and civilian, for advice on these matters. Our task is to calculate the defence requirements rationally — to make a true assessment of the changing strategic outlook for Australia, examine the enduring physical environment of the country, and then present to Government a choice of capability options for the Defence Force.

Future needs will differ from those of even the quite recent past. Changes that have occurred in the rest of the world, and Australia's more independent stance in international affairs, require that Australia should have a Defence Force more self-reliant in military capability and more oriented towards the defence of Australia and its interests. Defining our future defence capability requirements is a large and complex task that embraces many types of professionalism.

Old ideas die hard, especially when valued tradition surrounds them, but new ideas are no better than the perceptiveness, imagination and prudence of those who originate them. But ideas are what Australia needs in order to create a Defence Force and a defence policy truly reflecting the requirements of independent Australia in the decades ahead. Every profession shares experience within itself. It is healthiest when it also exchanges innovative ideas. The Defence Force Journal will provide an opportunity for our Service members of the profession of arms. As a civilian administrator, I look forward to reading future issues of the Journal. I hope there will be a place for the civilians to make a contribution as well, on subjects within their competence."
THE first of what it is hoped will be a long line of Defence Force Journals makes its appearance this month. It is not intended to be a replacement for the Army Journal, which took its final bow in October after twenty-eight years, but a new Journal with new ideals, embracing the three Armed Services and the civilian component of the Defence Forces, in the spirit of the recent reorganisation.

To achieve this, the Management Committee has agreed that a new format is required: a new cover, larger size, and less restricted policy towards article content. In this, we are delighted to have the backing and encouragement of the Minister for Defence, the Chief of the Defence Force Staff and the Secretary of the Department of Defence.

The quality of content of the first issue is high. We hope to maintain the standard and to improve upon it. To do that, we need the co-operation of you, the reader. More articles, letters and photographs you may think suitable for the frontispiece or to illustrate your article, are urgently required. Short pieces of interest, which, while not constituting an article, may be extremely useful as a "filler" for the odd page, are also welcome.

It is our desire to include as much original content as possible, though this does not mean that reprints will not be used where these are considered to be of interest to Australian readers, and may come from journals not readily available to the average person.

To those authors who have already submitted articles and may be becoming impatient, because they have still not seen themselves in print; be assured, you haven't been forgotten. With a limited number of pages, the need to balance content — more especially now, since four communities must be considered — and the currency of the subject, some articles have to be held back for future issues.

To save time, authors of articles are again urged to submit them typed in duplicate, double or one-and-a-half spacing, on one side of the paper only, where possible and where relevant security cleared, and with a short biography attached. Notes should be included at the end of the article. These are most important, since they add authority to your argument.

There is an urgent need for book reviewers, especially from the Navy, or from those interested in naval history. Any reviewer has the right to keep the review copy of the book, which should be ample compensation for the work involved. Anyone interested should contact the Managing Editor, stating his or her line of interest.

"Finally," in the words of the poet Goethe at the launching of one of the world's first newspapers, the Zürcher Zeitung in 1780, "readers are reminded that all beginnings are difficult, but that progress will be made . . . "
THE SECOND TIME AROUND

Can Australia Survive?

Major Adrian R. Black
Royal Australian Engineers

Preface

Of the 332,000 Australian troops who embarked to fight in the distant theatres of World War I, 216,000 became casualties. World War II cost Australia a further 107,000 killed, captured or wounded in operational areas. Since 1945 thousands of Australians have died or been injured in Korea, Malaysia and Vietnam.

If you try to provide a simple answer to the enormous question, 'What was it all for?', you must inevitably return to one thing: national survival. No matter whether the direct cause of involvement appeared to be of duty to the mother country or of a plea for help from an ally in the face of aggression, judged in the balance of history each commitment was made to establish and preserve Australia's position as a separate nation in the world community.

Only once before, in the darker days of 1941 and 1942, have we faced a direct and powerful threat to our survival as a nation. With a life span of three-quarters of a single century, interrupted only by this brief and solitary danger, it is not surprising that we cannot seem to draw on our history to guide our future. Unfortunately the broader lessons of world history dictate that our time is running out. Even the most cursory study of our total value as a resource—that is, of space for people to live, of food to eat, of resources for industry and of capacity to produce—against our capacity to defend this resource, shows a frightening imbalance in this capacity. It is totally illogical to pretend that other nations will not covet our resources nor recognize the imbalance; it defies all precedent in the history of the causes of armed conflict.

Our present reaction to the unpredictable but nevertheless inevitable threat to our national survival, is a slow awakening backed up by what is little more than a token defence capability. At our present rate of progress towards being prepared to defend Australia, it is inevitable that we will have too little too late. Something new? Not at all. Even in our brief history it has happened once before. Our preparations for the threat which materialized in 1941 were almost as inadequate as the preparations we are making now. The disturbing difference is that although the lessons of history are now available, we seem to have chosen to ignore them.

Introduction

In evolving concepts for the defence of Australia against invasion now or in the future, it is vital that we should have learnt from the lessons of the past. This is not to say that we should give credence to the critics who insist that Generals are always preparing to fight the last war, but that we should derive real value from a study of what has gone before.
This paper traces the development of plans for the land defence of Australia prior to the Japanese threat of 1941-1942, the only period in our history in which a strong and direct threat of invasion has occurred. The aim of this paper is to highlight the lessons of an era with the hope that we can apply them and survive “the second time around”.

The First Twenty Years

Co-ordination of a national defence effort was one of the reasons for Federation. Colonel William Bridges set to work to draft the first defence plan in 1906, modifications to which were proposed by Lord Kitchener during his stay in 1909. Kitchener proposed the raising of a citizen army of 80,000 and his recommendations were accepted; however by the outbreak of war in 1914 the proposals were still two or three years away from implementation.

The sense of security which Australia felt in 1914 was derived from a combination of factors, principal among which were the lack of any immediate threat, and the naval supremacy of Britain made more certain by the Anglo-Japanese alliance; it was not due to any home-grown defence capacity. That Australia was able to send abroad a fighting force of over 330,000 volunteers over the next four years remains the most selfless mass response to a plea for help in our short history. This response strengthened the post-war notion that any Australian could become a first rate soldier with little training, a view which supported the arguments of those who saw little need for a defence force in the peace that followed “the war to end all wars”.

In 1919 the leaders of the right-wing political party remained strongly of the opinion that Australian-British links should remain firm; most believed also that at least an efficient nucleus defence force must be maintained as a part of the Empire network. But even the modest defence plans of 1920 and 1921 were strongly opposed in parliament by those who felt that expenditure on defence could not be justified. The general agreement on defence matters, which had transcended party political lines after Federation, had been lost in the bitterness of the conscription debates during the war and was not to return.

BETWEEN THE WARS

Empire Defence

The Imperial Conferences of 1921, 1923 and 1926 confirmed Australian participation in the Empire Defence Scheme as the correct defence response in the post-war situation. Successive Australian Governments echoed the importance of Singapore, the British Fleet and naval power. These were held up to be the keystones of Empire defence in the eastern hemisphere.

In the years which followed the 1923 Conference, Lieutenant Colonel (later Lieutenant General) Wynter and a number of other staff officers opposed this view, arguing that in a major conflict Great Britain was likely to be engaged elsewhere and that Singapore was vulnerable to landward attack. They contended that the soundest policy for Australia was to maintain an Army capable of defending the strategically important south-eastern part of Australia until help arrived. The need for a fleet based in Australia was also identified.

Although these views were reflected in part in later plans, the proponents of Empire Defence had the greater influence on defence policy (and in turn on evolving defence plans), throughout the period between the wars. The defence of Australia against invasion as a contingency not involving British power was never properly considered by an Australian Government until the difficult days of late 1941.

As a result, although military plans were clearly directed towards the ultimate defence requirement (against invasion), planners were restricted by both the realities of difficult economic times and by a defence policy which emphasised raids as far more probable than invasion — a legacy of the value placed on British naval power.

The Plan of Concentration

In 1933, Lieutenant Colonel Sturdee (a wartime Chief of the General Staff (CGS), but then the Director of Military Operations and Intelligence), briefed senior Staff Corps officers on the “Plan of Concentration” which Army Headquarters had produced. A scenario was outlined for an exercise which followed this briefing which clearly showed Japan to be the most likely aggressor. It was foreseen that if Japan chose to invade Australia they would, for a variety of reasons, require a quick deci-
sion. The key conclusion was that Japan would have to seize an area vital to the continuance of economic life in Australia if a quick decision was to be obtained.

This line of deductive reasoning led to the selection of three vital areas: Sydney, Newcastle and Melbourne. It was considered that all the other capital cities (and presumably some other important population centres, particularly those with good port facilities), were important but not critical to the main war effort or to the economic life of the country as a whole.

Thus the principal aim of the war plans of the time was to be the prevention of enemy seizure of Sydney and Newcastle. Melbourne was excluded from this top priority grouping as it was considered less open to attack than the cities to the north.

The selection of these areas was not difficult. Sydney, the most important area, held nearly one-fifth of the total population, was the chief port with the only Naval repair establishment and was the largest industrial area in Australia. Newcastle was the main coal producing area and the principal centre of steel production. Its loss would be serious but a continued effort might be possible using Wollongong coal and steel produced in Port Kembla. Melbourne at the time contained nearly one-sixth of the population, was the second port and industrial area of Australia and the main centre of munition works.

The planned force deployment after concentration of field forces as opposed to garrison forces would place a corps near Sydney, a corps near Newcastle and a brigade plus light horse regiment to each of Melbourne, Perth, Brisbane and Hobart. Lesser forces would deploy to Darwin, while local forces would protect Adelaide. The anticipated degree of warning for an invasion was set at a maximum of seven weeks.

This Plan of Concentration, with its emphasis on the defence of areas vital to the continued economic functioning of the nation, remained the basis of military planning for continental defence into the early 1940s.

Army Headquarters produced an updated version of the plan in June 1937; the "Strategic Concentration, Outline Plan". This plan provided that if a state of war was imminent or had been declared, different measures would be adopted dependent on the assessed power of the enemy. These measures, in order of increasing commitment, were:

- the adoption of one of the stages associated with District Base Defence Schemes;
- General Mobilization; and
- Strategic Concentration.

As with the earlier plan, Sydney-Newcastle was defined as the "most vital area" and this plan therefore provided once again for Strategic Concentration in New South Wales, i.e. in the 2nd Military District (2MD). To provide the flexibility to meet significant threats to other than the most vital area, "Places of Mobilization" were to be chosen to facilitate concentration in districts other than 2MD.

The implementation of various plans by stages was to be attuned to Government decree on the state of the international situation. In increasing order of gravity, these would be:

- a "Period of Tension", when the international situation became critical and during which defence preparations might be accelerated by emergency arrangements;
- the "Precautionary Stage", when the possibility of war appeared so imminent as to require taking defence precautions; and
- the "War Stage", when the probability of war was immediate.

Provision was made in the District Base Defence Schemes for the manning of coast fortress defences during a Period of Tension and for the mobilization, on adoption of the Precautionary Stage, of 13 battalions for the local protection of forts and the defence of vulnerable points. On General Mobilization, 10 garrison battalions would be raised to relieve 10 battalions of the Field Army allotted to the local protection of the forts.

On the completion of Strategic Concentration, the Field Forces were to be disposed as shown in Figure 1, with:

- GHQ, GHQ Troops, L of C Troops and First Army (of two corps, each of three divisions) in 2MD;
• a mixed brigade in each of 1, 3, 5 and 6 MD; and
• one battalion under Darwin Command.

The timetable for mobilization had been shortened considerably. Advanced guards of covering troops were to be in position by the 14th day and the mobilization of the Field Forces was to be substantially complete by the 20th day. Strategic Concentration was to commence on the 21st day, while mobilization was to be completed by the 30th day.

**The Effect of Defence Policy**

This plan for Strategic Concentration was not the only Army plan in being or under preparation. Government defence policy had strongly affected planning priorities and it is worth pausing to look at the effect of the policy of the time on the development of Army plans. This policy was lucidly stated in a speech to the parliament by Prime Minister Lyons on 24th August 1937. In light of a recent Imperial Conference, which obviously echoed many of the principles agreed in the Conferences of 1923 and 1926, he reaffirmed his Government’s belief in the dependence on a Singapore based fleet for security in the eastern hemisphere. It was contended that Singapore was "a very powerful fortress", was becoming even stronger and would not fall. The possibility of the Fleet being inextricably involved elsewhere was dismissed on the grounds that the United Kingdom would not spend a huge sum on a fleet and a base at Singapore for the protection of its own vast interests, if it did not intend to safeguard them should the need arise.

Australia’s vital interests which were to be safeguarded by whatever means necessary, were:

• the free passage of overseas and coastal seaborne trade; and
• the maintenance of territorial integrity against attack either in the form of invasion or raids.

The Government reaffirmed that the first line of security against invasion was Naval defence, with the Army and Air Force supplementing and co-operating. Forward Naval defence was seen as far preferable to a land and air battle on home ground with Army and Air Forces which were likely to be inadequate.

This Government direction meant that priority in continental defence matters was to go to defence against raids as the most probable form of attack. Acknowledging that sea power alone could not provide a complete defence against raids, the Government called for the Army to provide for the defence of vital locations using a combination of fixed defences and forces sufficient to deal with landing parties.

Converting this policy to guide the preparation of war plans, Army Headquarters produced a memorandum which complied with the requirement to give first priority to defence against raids. It was obviously recognized, however, that any lesser plan should be both complete in itself to enable sole implementation while fitting into the framework of plans of greater scope, all plans being regarded as parts of one complete structure. Despite the priority given to defence against raids, clearly the ultimate plan in military eyes remained that of defence against all-out invasion.

Nevertheless, detailed war plans were to be prepared strictly in the following priority:

• District Base Defence Schemes;
• Mobilization of the First Line Component of the Field Forces;
• Raising and despatch of an Expeditionary Force; and
• General Mobilization:
  — without Strategic Concentration;
  — with Strategic Concentration (to conform with the Strategic Concentration, Outline Plan).

The Government had approved the retention of the existing nucleus Army organization of two cavalry divisions, the equivalent of five infantry divisions, District Base Troops and full manning of the fixed defences. Because of the priority given to defence against raids, however, a lesser force to be known as the First Line Component was considered sufficient for current needs. This lesser force retained the full district and fixed defence forces, but reduced the field forces to three cavalry brigades, two infantry divisions and four mixed brigades. This organization was still designed to provide a nucleus and a framework for general mobilization to meet the danger of invasion. Plans were to be based
on the mobilization of the full order of battle, but were to be prepared to allow mobilization of the First Line Component alone if this should be ordered.

To simplify planning and to facilitate mobilization, it was considered necessary that the peace and war organization should conform as closely as possible. Every unit to be activated on general mobilization was to contain a nucleus in peace in some existing unit, usually a few officers and NCOs.

**Late Changes**

A number of significant changes to war plans and peace organizations were recommended in 1938 and 1939. The Inspector General of the Australian Military Forces, Lieutenant General Squires, recommended in December 1938 that the peace establishment of the First Line Component should be increased to 60,000, with all Militia fighting...
units to be manned to approximately two-thirds of their war establishment. Soon after, the CGS recommended that the peace establishment of the Militia should be further raised to 105,000 to provide for the more rapid mobilization which would be necessary to meet a possible invasion. These increases were partly met, a strength of 80,000 being attained through voluntary recruiting by mid-1939.

Squires had also recommended the raising of a permanent Army force of about 8,000, to provide a covering force for the mobilization of the Militia. Though Cabinet approved this proposal in principle in March 1939, they later rejected the scheme, ostensibly on the grounds of cost effectiveness in view of the time the force would take to be ready as a permanent Army.

Squires' other radical proposal was eventually implemented, but not until October 1939. He proposed a regrouping of the existing district bases into four "commands" — Northern (Queensland), Eastern (New South Wales), Southern (Victoria, Tasmania and South Australia) and Western, with an independent garrison at Darwin. Each was to be responsible for the training and wartime operations of the formations in its area, leaving Army Headquarters to deal only with these five subordinate headquarters on all matters.

In a detailed appreciation forwarded to the Secretary in February 1939, the CGS again raised the question of having a more highly trained, ready-force available. He pointed out that in the event of a serious attack before General Mobilization or Strategic Concentration was possible, it was essential to have a highly mobile, well trained element of the Field Force to reinforce a threatened area or to cover the concentration of other formations. He recommended the raising of a "mobile division" composed of at least 50% permanent troops to enable rapid action when required. It seems that no action was taken on this recommendation prior to the outbreak of the war.

The CGS urged a rapid improvement in rail facilities to aid strategic concentration, an indication that planned timings may have been ambitious. He further urged a joint service review of the defence situation, but, as will be seen later, no joint service plan for the defence of Australia was produced by the time it was needed.

A Manpower Committee chaired by Major General Blamey had been formed in late 1938 and was active in 1939 compiling a list of reserved occupations and examining personnel allocations in an emergency to the armed forces, defence industries and essential services. Senior Army planners had long based their plans on a broad rule of thumb that an industrialised state could spare one in ten of its population to the fighting services. Planners had assumed that the Army would be able to maintain at full strength in a long war not more than eight divisions. Events later proved these estimates to be a reasonable basis for planning.

During the post-depression period from 1935 to 1938, funds available to the Army steadily increased but were still limited. At the insistence of the military, priority in expenditure was given to the purchase of the equipment which would be necessary to outfit a much larger force, rather than to manpower. Following the disturbing international events in Europe and China in early 1938, the Government announced a doubling of expenditure for the next three years and this was further boosted in December 1938 after the Munich crisis. Despite this belated emphasis on defence expenditure and the Army's own spending priorities, it was too late to enable an adequate level of equipping to be reached prior to the outbreak of war in September 1939. Machines and weapons ordered in 1935 had still not been delivered from British factories now fully committed in a late bid to equip their own Army.

**FINAL PREPARATIONS**

The Lull Before The Storm: Plans Reviewed

In December 1939, while the first contingent of the 2nd Australian Imperial Force (AIF) was preparing to embark to fight again on the other side of the world, the CGS ordered a new appreciation for the employment of the Army in the defence of Australia. This would be the basis for a review of existing plans and for the compilation of new plans. This appreciation defined the role of the Army as:

- the defence of certain vital and vulnerable areas against heavy raids, where little or no warning is given; and
to be prepared to expand to resist invasion aimed at capturing and dominating the vital centres of the nation.

The most probably enemy objectives were considered to be the south-east of the continent (Sydney, Newcastle and Melbourne) and Perth. Defence of those areas was seen to be of primary consideration in disposing the Field Army. A need was foreseen for the defence of more distant populated areas, with special provisions for Darwin. In these distant areas, locally raised detachments would cope with light raids and would delay heavy raids until the arrival of a mobile reserve.

From a consideration of the distances between likely objective areas it was deduced that reliance on a mobile strategic reserve was not practical, although mobile tactical reserves would be required. This meant that the defensive system as a whole was to be of static nature. For the defence of the main ports, fortress troops in an extensive system of defence works for immediate defence were to be backed up by the highly mobile tactical reserves tasked with engaging unpredicted landings and supporting fortress troops in destroying the enemy.

It was appreciated that operational readiness needed to be improved. For planning, the maximum degree of warning of heavy raids was set at 14 days. From May 1940, the whole Army was to be able to reach an effective war footing within 14 days.

On 29th April 1940 a General Staff paper was produced which examined the problem of meeting a Japanese attack of not less than two divisions. In this review there was no change suggested to the general defence plans and it was assumed that General Mobilization was still to be implemented. An “effective war strength” (presumably referring to the fighting element of the Army) of 114,000 was assumed, of which a maximum of 75,000 would be available for the Field Force.

Attacks on rail links were considered probable, making reliance on the railways for the concentration of forces an unwise policy. All of these factors, along with the requirement for reserves to be highly mobile, led to a requirement to change the initial deployment of the Army from the dispositions previously planned in the Strategic Concentration, Outline Plan.

Forces to be deployed near Brisbane, Newcastle, Sydney-Port Kembla, Melbourne and Perth were to be greatly strengthened, at the expense of the Field Force available for concentration. This latter force was to be reduced to one cavalry division, four infantry divisions, each less a brigade group, and Army troops.

The mobilization timetable was to be further tightened in view of the increasing Japanese threat. Covering troops of defended ports were to be at 24 hours notice. All troops involved in the protection of defended ports were to be in position by the 4th day. The Field Force was to be completely mobilized by the 10th day and initially deployed within Commands by the 13th day.

It was suggested that the initial deployment of the Field Force to provide immediate support to the main defended ports and to retain flexibility for subsequent concentration, might be:

- one division (—) : Toowoomba-Wallangarra;
- one division (—) and Army Troops; Newcastle-Singleton;
- one division (—) and Army Troops; Sydney-Liverpool; and
- One division (—) : Seymour.

Despite these reassessments of the requirements for continental defence, a lingering impression of the unlikelihood of Japanese invasion pervades many of the papers written at the time. A sense of urgency over further defence preparations appeared to be lacking as late as 1940 and in the first half of 1941. Two factors probably accounted for this, the first and most obvious being the remoteness of the war against Germany and of the AIF contingent. The second was the continuing belief that Singapore would stand firm to enable the intervention of the British fleet, a legacy of pre-war Government emphasis.

Late in August 1941, Sir John Latham, the Australian representative in Tokyo, wrote unofficially to the Prime Minister concerning the possible invasion of Australia. His principal thesis was that a strong Air Force should be the primary defence against invasion, being the only sure means of denying the enemy bases from which such an attack could be launched. He proposed a powerful Air Force.
capable of long distance operation, with bases in northern parts of Australia. He suggested that a point or line should be defined, beyond which any advance by a potential enemy should be considered a threat to Australia. Certain places should be seized, if necessary, to prevent the enemy using them as invasion bases.

Latham contended, as Lyons had inferred in 1937, that once the enemy established himself close at hand, the only alternative would be ultimate surrender. He was of the opinion that the sort of policy he proposed should be made public as a deterrent to aggression.

It is not certain what influence Latham's paper had on Government policy or military planning, although his position in Tokyo must have engendered respect for his opinion. Certainly his letter was considered by the Defence Committee in November 1941, although their reaction was not one of grateful acceptance. Once the Japanese threat crystallized in late 1941 and early 1942, increases in the Army commitment to Darwin, North Queensland and New Guinea were made. By war's end the Air Force had grown almost four-fold from its 1941 strength.

Mention was made earlier of the lack of combined service planning. When it was revealed to the War Cabinet in September 1941 that no joint operational plans existed for the defence of Australia against invasion, the Government gave directions that this situation was to be corrected as soon as possible. But time had almost run out.

Japanese Advances

During the early days of December 1941, a further appreciation of the defence of Australia was ordered in light of the rapidly deteriorating situation, culminating in the attacks on Malaya and Pearl Harbor on 7th-8th December 1941 and the sinking of the capital ships Repulse and Prince of Wales on 10th December 1941. This time the appreciations considered defence against an invasion force of about eight divisions, concluding that an Army of 300,000 plus a Volunteer Defence Corps (VDC) of 50,000 was required, a considerable increase over any previous estimates.

Concern with the manning situation and proposals for the employment of returning AIF troops in the Dutch East Indies, caused Sturdee, who by now was CGS, to submit a paper on the subject on 15 February 1942. He strongly recommended the diversion and early return of all AIF elements still overseas, undoubtedly a view strengthened on that same day by the fall of Singapore. It is a little frightening, in retrospect, to consider how clear a threat to Australia was necessary before attempts could be made to harness the full military resources of the nation towards its defence.

The C-in-C Acts

Blamey, who was recalled to command the Australian Military Forces (AMF) and Allied Land Forces in March 1942, paraphrased what was still the military thinking of the time in a letter to the Prime Minister written some time later (January 1944). The letter confirmed the basic plan which had been in existence for a decade. He reaffirmed that the area Newcastle-Sydney-Port Kembla-Lithgow was most vital to Australia and that forces had been distributed accordingly. Local forces had been distributed in each state for the protection of other centres of strategic importance. Garrisons were provided in Western Australia, Darwin and Port Moresby, with detachments in adjacent islands because of the difficulties of movement to these areas. A General Headquarters (GHQ) reserve was provided from formations raised and located in Victoria and South Australia.

Blamey confirmed that during the period of the rapid Japanese advance (December 1941 to mid 1942), the enemy's control of the sea to the north confined Australian action to a concentration on defence measures to retain the most vital area.

A new Chief of Staff appreciation in early 1942 was the basis for new plans to increase garrison forces when troops became available. The Darwin garrison was to be boosted from two brigade groups to one division, Western Australia from one brigade group to one division and Townsville from one brigade group to one division.

Soon after Blamey's return and assumption of command, AHQ Operation Instruction No. 50 of 9 April 1942 was issued. The land forces of Australia would consist of a Field Army and an L of C. The Field Army would be
made up of 1st Army (Queensland and NSW), 2nd Army (Victoria, South Australia and Tasmania), 3rd Corps in Western Australia, 6th Division in the Northern Territory and New Guinea Force (Figure 2). The L of C was organized into eight L of C areas, one for each state or territory, the commanders also controlling the fixed coast and anti-aircraft units and garrison battalions. GHQ Australia was formed from AHQ. As C-in-C AMF, Blamey exercised command over all Australian land forces.

1st Army was the key formation, consisting of two corps of six infantry divisions, a motor division and brigade, the remaining field troops in Northern and Eastern Commands and corps troops. GHQ Operation Instruction No 1 of 10th April 1942, stressed to the GOC 1st Army the importance of Brisbane on the northern flank of the most vital area, and of Townsville as a potential enemy port and base. As resources increased it was intended to hold in strength progressively north from Brisbane. The tasks of the 1st Army were to defend the east coast from Brisbane to southern NSW and to defend Thursday Island and Townsville.

2nd Army in the south was to contain one motorized division, a brigade group, the newly arrived 41st US Div and other field troops in the area. In addition to the local defence of Melbourne, Hobart and Launceston, 2nd Army was to supervise the training of all Army units and headquarters.

Darwin was, for obvious reasons, considered the most vulnerable area in Australia and its retention was stated to be of great importance to future operations. The Commander 6th Division (soon to be GOC Northern Territory Force) was tasked with preventing the seizure and occupation of Darwin, but was to ensure that his dispositions would not immobilise his force in the port area in the event of an invasion in great force. Clearly the AMF could not afford the loss of another major formation as had occurred with the loss of the 8th Division in Singapore.
This Field Army organization of April 1942 contained ten Australian divisions — seven infantry, two motorized (formerly cavalry) and one armoured (in the GHQ Reserve). The rough numerical equivalent of two further divisions was contained in the Northern Territory and New Guinea Forces. The incomplete 41st US Division had arrived and the 32nd US Division was due to arrive in May.

To compute the total Australian land force organization of the time, one must add the AIF divisions; the 6th and 9th (yet to return from the Middle East) and the 8th Division (captured on Singapore). This gives a total fighting force on paper of around fourteen divisions or equivalent, from a population at the time of about 7.2 million people. A force of this size proved later (in 1943 in particular) to be more than the nation could bear in a sustained conflict if industry was to continue.

**MacArthur's Plan**

General MacArthur arrived in Australia in mid-March 1942 and was immediately appointed Supreme Commander of Allied Forces in the South West Pacific Area (SWPA). On 25th April 1942, in his first directive issued to Blarney in his role as Commander Allied Land Forces SWPA, he tasked the Army with preventing any landing on the north-east coast of Australia or on the south-west coast of New Guinea. This order would appear to be the first major shift in orientation away from the vital areas, focusing attention further north than the approaches to the Brisbane-Bega coastal stretch guarded by 1st Army; it represented a swing away from the "most vital area" strategy long held by Australian planners. Although he undoubtedly recognised the importance of the Sydney area to Australian industrial production and to the war effort in the Pacific, MacArthur apparently placed more emphasis on denying the enemy bases in north-eastern Australia and New Guinea than had Australian planners to this time.

The naval losses in the Coral Sea and Midway eventually stemmed the Japanese tide. American not British naval power had probably saved Australia from invasion. The Japanese still landed on New Guinea in July 1942 and advanced until halted at Imita Ridge and defeated at Milne Bay, both in September 1942. After these reverses the threat of invasion of Australia gradually diminished. For the purpose of studying the evolution of plans for the defence of Australia, mid-1942 is a satisfactory exit point.

**Manpower**

One further item of correspondence is relevant to this study. In a letter to the Prime Minister on 4th December 1942, Blamey again raised the manpower question. Although the manpower wastage which caused his concern was due to losses in New Guinea, this can be used as a comparison with intensive operational losses which might have occurred following a major invasion of Australia. In his letter Blamey reviewed the current distribution of divisions, which was:

- three divisions in New Guinea (less one brigade);
- one division in North Queensland and one at Darwin;
- two divisions (less one brigade) and one armoured division in Western Australia;
- one greatly reduced division and one armoured division (then forming) in N.S.W.; and
- one reduced division and one armoured division (still forming) in Queensland.

The armoured divisions had been formed, in Blamey's words, "... with a view to adjusting our organization to weapons which had previously not been available". The reorganization which had occurred at this time had already reduced the Army effectively by 11 battalions or roughly one division.

This force, equivalent to about eight infantry and two (plus) armoured divisions was distributed around the perimeter of Australia. At this time the 9th Division had still not returned to Australia from the Middle East. Blamey's purpose in writing was to press for a further reduction of this force by one division and to urge once again the return of the 9th Division. Blamey was recommending that Australia could only support a force of about 10 divisions following the recent heavy fighting and medical wastage in New Guinea. This figure is probably the best guide to our potential force ceiling for today.
THE LESSONS WE CAN'T AFFORD TO FORGET

Defence Policy
Basic to our defence preparedness is the existence of a clear and sufficiently detailed national defence policy, transcending (as far as possible) party political differences, allowing steady strategic plan and force development and having wide acceptance by the community. No matter what the emphasis of this policy (e.g. the “raids” emphasis of the 1930s), the Government must insist that preparations for defence against invasion by a fully mobilized Australia is the ultimate situation for which the Services should plan. Any other policy threatens our national survival.

Alliances
Any plan which relies on a powerful ally to play the principal role or even a major part in the defence of this country is unsound. We must plan to defend Australia unaided, treating additional support as a bonus if it should materialise. Twenty years of waiting for a British fleet which never appeared should tell us that.

The Worst Case
Defence strategy for World War II was based on the preservation, in the ultimate, of the principal national economic and population base in south-eastern Australia. Though there are now more areas of strategic importance around the continent, the economic “heartland” remains unchanged. So long as our forces are inadequate to defend the whole continent equally well at any one time, priority in defence planning must still go to the retention of the “heartland”, which is our most vital area. This is simply a matter of planning for the worst case, not an emotional plea to a “Brisbane Line” defeatism.

Forward Defence
The importance of the northern approaches to Australia, from the northern island chain to the remote continental north-west and north, was increasingly recognised as the threat to Australia became extreme in 1941 and 1942. Control of these approaches remains of the utmost importance to the defence of Australia. Forward defence, by whatever name and in whatever form, must be a part of our defence planning.

Strategic Mobility
World War II plans tackled the problem of insufficiency of forces to defend Australia by a combination of fixed coastal and anti-aircraft defences and a more mobile field force which could react against a specific threat. The field force lacked any real strategic mobility and consequently, as the threat to Australia became stronger, the field force was diminished in effectiveness by the requirement to strengthen specific areas, including areas remote from the “heartland”. With the manpower and equipment limitations likely, we must cater for the defence of important areas by relatively static forces which can be rapidly reinforced by a strategically mobile force of considerable strength. We must ensure that the transportation means are available to make strategic mobility a realistic possibility.

Strategic Alternatives
Even if our defence capabilities are fully developed, there will be a finite limit to the scale of threat which Australia can hope to counter by conventional means without the aid of a major ally. Beyond this point, non-conventional means will have to be considered.

Joint Service Plan
Until 1942 there was virtually no joint service planning at the national level. A national command and control structure which recognises that defence is a joint service matter must actually operate in peace as it would in war. Plans must be developed in the first instance on a joint service basis, to ensure that each element of the force contributes most effectively to our defence. Continual joint service consultation is the only means of ensuring that our total force is developed in concert with our perceived strategic priorities.

Force Structure
A nucleus peacetime force must be structured to allow rapid expansion on partial or full mobilization to meet a threat. This requirement was recognized by the planners of the 1930s and did enable a rapid build-up when it was required. No such plan could be readily implemented with our current force structure. We must quickly establish a core force carefully structured to maintain the essential skills and to provide the immediate expansion
nucleus of commanders, instructors and administrators. Broader plans for mobilisation are urgently required.

**Equipment Policy**

To allow rapid expansion it is necessary to have an equipping policy which does not rely too heavily on overseas supply and which holds adequate stock levels to equip a rapidly expanding force, recognizing the long lead times inherent in a military build-up. The lessons of the undelivered British orders of 1935 are all too clear. If financial constraints cannot be lifted, we must consider the solution of the 1930s to trade off manpower for equipment. If it takes five years to obtain a tank and one year to train a tank crewman, simple mathematics demands four years of emphasis on buying the tank.

**Defence, the Government, the People and the Military**

All of what has been said in this article is wasted unless the people of Australia force the Government, through the pressure of public opinion, to maximise our defence capability. Perhaps the most important reason for the poor state of Australian preparedness to meet the Japanese in 1941 and 1942 was the limited degree of acceptance of military advice on the threat and on the essential preparations to meet it. Greater Government acceptance of military advice is only possible if the community has a wider understanding of and concern for defence. As the principal students of the subject of defence, the services must assume greater responsibility in the process of enlarging understanding of what national security entails.

Gavin Long succinctly reveals this crucial deficiency in "To Benghazi". Discussing the lack of public awareness, he states:

"There was in Australia no organised group to press for more effective military defence, nor any journal in which military and naval problems were discussed with authority... with one small exception, no military journal existed in Australia between the wars. To the extent that they thus failed to establish an adequate channel of communication with the people at large, the officer corps, both professional and amateur, must share, with the political leaders and the press, the responsibility for neglect of the army". This is perhaps the ultimate lesson.

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**NOTES**

1 From a speech by the Rt. Hon. J. A. Lyons, the Prime Minister, on The Commonwealth Government's Defence Policy in the light of The Imperial Conference, Page 4, Parliamentary Debates, 24th August 1937.
2 In a letter from General Blamey to Prime Minister Curtin dated 4th December 1942.

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I asked God for strength, that I might achieve — I was made weak, that I might learn humbly to obey.
I asked for help, that I might do greater things — I was given infirmity, that I might do better things.
I asked for riches, that I might be happy — I was given poverty, that I might be wise.
I asked for all things, that I might enjoy life — I was given life, that I might enjoy all things.
I got nothing that I asked for — but everything that I had hoped for.
Despite myself, my prayers were answered. I am, among all men, most richly blessed.
Written by an anonymous soldier.

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**AWARDS**

There will be a prize of $30 in cash to be awarded to the author or authors of the best original article in each issue of the *Defence Force Journal*, as judged by the Board of Management.

All prizewinners will then be eligible to compete for the annual prize of $200 for first place and $75 for runner-up, again judged by the Board of Management.
Commander P. J. M. Shevlin, AM
Royal Australian Navy

In February 1974 Lt. Col. L. D. Johnson, CO of 4 RAR, wrote an article for the Army Journal on ‘The Need for an Australian Amphibious Force’. In that article he made the points that:

- between Cocos and Christmas Islands to the north and the Antarctic Islands of Heard and McDonald in the south, Australia has defence responsibilities for nine groups of islands;
- for deployment to many undeveloped parts of the continental Australian coast sea lines of communication must be used; and
- a purely land-based, land-air operations trained Army would be unable to deploy quickly enough to meet all the needs of continental defence and would be unable to cope adequately with operations required for the defence of island territories or in the island chain.

Lt. Col Johnson postulated that the sort of Australian Defence Force that would be able to cope with Australia’s special geographical problems needed to be structured around an amphibious organisation as such a force would be essentially mobile, with embarked elements ready for immediate response and with the ships free to steam unhindered around the coast with any type of equipment, unhindered by geographical obstacles.

While strongly supporting Lt. Col Johnson’s call for the Australian Services to be capable of amphibious operations, this writer would take issue with two points in his article; firstly his statement concerning the past, that the Australian Services have fought in wars for over 100 years without having to develop particular skills in amphibious operations, and, secondly, his thesis that although it would be reasonable for Australia to raise a brigade-size amphibious force, to do so would so involve the three Services that they would be limited in the conduct of any independent operations outside that being undertaken by the amphibious force. It is considered important to refute these two ideas because it is believed that too wide an acceptance of these misconceptions has for too long delayed the creation of an effective amphibious capability in the Australian regular forces.

Australian Amphibious History

Far from not having had to acquire amphibious skills, the contrary has been the case for both RAN and Army in both World Wars, principally for the conduct of operations in the island archipelago to the north of Australia. The first actions against the German Army by Australian forces in 1914 were undertaken by the Australian Naval and Military Expeditionary Force (ANMEF) commanded by Colonel W. Holmes, DSO, which undertook a series of successful landings from the newly converted amphibious transport, HMAS Berima, (Cmdr. J. B. Stevenson, RAN) into New...
Ireland and New Guinea to capture those then German colonies. The Royal Australian Navy’s first action casualties were suffered at the first amphibious landing when Lieutenant Commander C. B. Elwell was killed, sword in hand, on 11th September 1914 leading a bayonet charge against the German trenches defending Rabaul.

Then in March 1915 an RAN Bridging Train was formed under Lieutenant Commander L. S. Bracegirdle DSO, one of the company commanders from the naval component of ANMEF. Five months after being raised this unit was responsible for the ship-to-shore movement of the British Army IX Corps landing at Suvla Bay at Gallipoli, and there they remained until the withdrawal from Gallipoli. The unit was then in demand to serve three different Army Commanders, but the AIF won and the Bridging Train joined the Australian Army in Egypt where they supported Canal crossings and then an amphibious landing at El Arish as the Commonwealth Desert Force advanced up the Sinai to Palestine.

At the end of 1916 the hard won amphibious expertise was allowed to be disbanded and then, twenty-six years later in 1942 Australian amphibious training had to be restarted from scratch when a Combined Operations Training Centre was set up in Port Stephens with a directing staff provided by the RAN, Royal Marines, Royal Artillery and RAAF while at Toorbul in Queensland a complementary Army school was established under Lt. Col Rose, a cavalryman from 7 Division. The 2/25th Battalion of 7 Division was the first complete unit to be trained at Toorbul while at HMAS Assault in Port Stephens individual training was conducted for RAN landing craft crews and beach parties (designated Beach Commandos) and for Combined Operations Signals units. Interestingly in view of its role today as base for the First Australian Landing Craft Squadron, HMAS Moreton in Brisbane then recruited RAN personnel with local knowledge of the Queensland coast specifically to support Army amphibious training at Toorbul.

By early 1944 when the whole of 6 Division had been trained for amphibious operations, the First Australian Combined Operations Section was formed to direct the amphibious training of the three divisions of I Australian Corps with Commander A. S. Pearson RAN as SNOCOS (Senior Naval Officer, Combined Ops Section) and Senior Beachmaster for the series of Australian amphibious landings in Borneo and New Guinea carried out in succession at Salamaua, Lae, Buna, Tarakan, Wewak, Labuan, Brunei and Balikpapan.

These landings were executed from ships of the RAN’s amphibious squadron comprising the three Landing Ships Infantry, Westralia, Manoora and Kanimbla. These ships each carried 20 RAN landing craft of a type which would now be designated LCVP (landing craft vehicle and personnel.) The troops landed across beaches controlled by RAN Beach Commandos. The final Australian landing of the war, that at Balikpapan on 1st July 1945, was a truly combined operation with Australian troops landing from RAN ships under the cover of an RAN cruiser and destroyer force’s guns and with RAAF air cover.

Apart from these offensive landings, Australian troops had to be extracted by sea by RN and RAN ships from Greece and Crete and, as an administrative move from Tobruk; all without the advantage of amphibious ships.

Post-1945, although Australian Army units have not participated in operational amphibious landings, the allied land forces, of which they have formed part, have had to conduct amphibious operations in Korea, Borneo and Vietnam, and HMA ships have been involved in these amphibious operations. Meantime soldiers of the SAS Regiment and the Commandos have maintained an expertise in at least small scale amphibious operations for, by Australian definition, a section landing by canoe or rubber dinghy from the sea and prepared to meet opposition (though planning to avoid it) is conducting an amphibious operation. Additionally the Gunners maintained an Amphibious Observation Battery until the end of the Korean War.

An Amphibious Capability for the 1980s

Lt. Colonel Johnson’s article suggested that Australia should raise a brigade size amphibious force of which a battalion group with a strength of about 1300 should be maintained.
at sea. He observed that the bulk of the forces and equipments required are already available in the Australian Services, apart from specialist amphibious shipping, but he went on, without explanation, to claim that the creation of an amphibious force would reduce the size and capability of the three Services for the performance of individual Service duties. This claim would appear to be based on the idea that a separate Marine Corps with its own air support is a necessity for the conduct of amphibious operations; but the need for such a concept cannot be substantiated. As noted earlier, Australian Army units have conducted amphibious operations successfully in two World Wars; although the US Marines conducted a series of island-hopping amphibious operations required in the Pacific in World War II, US Army units provided the bulk of American participation in allied landings in the North Africa and European theatre; while in the UK forces the British Army has always provided the bulk of wartime landing forces. Even in the so-called ‘peace’ of the ’50s to ’70s, when the Royal Marines Commando Brigade has provided the spear-head of UK landing forces, their armour, artillery, engineer and logistic support has been provided by Army units.

In this writer’s view, to meet Australia’s strategic requirements and to give greater tactical flexibility to operations around Australia’s coast, all Field Force units should be capable of tactical deployment by sea as well as by land and air. There would be no loss in any Service’s capabilities to conduct their individual single service roles, but there would be a very definite gain in joint capabilities for strategic and tactical movement. A Patrol Boat inserting a beach recce party; destroyers providing escort and/or naval gunfire support; a clearance diving team clearing underwater
obstructions; or carrier aircraft providing reconnaissance and/or close air support would be allocated to a particular amphibious operation only for the time each such ship was required for its particular role and the ships would be undertaking tasks for which they have for long been trained, but are too infrequently exercised. The only effect on the RAAF would be to provide some reduction in the calls on their fixed and rotary wing transport squadrons, and to require their LRMP squadrons to become familiar with the characteristics of amphibious shipping. In the case of the Army, units would have to learn how to embark in, live in and land either tactically or administratively from a ship. A cavalry squadron embarked in Townsville to be put across a Cape York beach; a tank squadron embarked in Melbourne, to be put across a beach in NW Australia; or an infantry company group embarked by helicopter, moved by sea and then inserted by helicopter would not be lost to the Field Force; they would merely have demonstrated an important added capability to an Army Commander's options for administrative or tactical movement.

The Australian Defence Force possesses all the required capabilities for such amphibious operations now, apart from

- the necessary specialist ships, and
- army units, trained to operate from such ships.

The Amphibious Heavy Lift Ship

The new RAN Amphibious Heavy Lift Ship (LSH) approved for procurement by the Government in August 1975 and to be named *Tobruk* will provide the Australian forces with some capability for all forms of amphibious operation and LOTS* operation. Developed from the last group of the UK's very successful LSL design, the LSH will be a roll on/roll off hull design with bow doors and bow ramp and combined stern door/stern ramp. Between bow and stern doors will be the enclosed Tank Deck capable of carrying a squadron of tanks or any other equivalent size mix of wheeled or tracked vehicles, and off which deck will be located Army workshops and stores; below it will be Army cargo holds.

Two combined ramp/hatches will connect the Tank Deck to an Upper Vehicle Deck which can be utilised as either a stowage for wheeled vehicles and artillery, or for containers, or to carry Army landing craft, or, when not required for cargo, as a second helicopter deck.

On either side of the Tank Deck will be sited Troop Messes, while aft there will be separate dining and recreation spaces for officers, SNCOs and soldiers, together with hospital facilities including surgery. Above these after accommodation spaces will be a dedicated Flight Deck for Helicopter operations.

For ship-to-shore movement the LSH will be able to either

- beach itself and unload through its bow doors; or
- position its own (when required) side-carried pontoon causeway to which it can marry its bow ramp; or
- 'swim' amphibians from its lowered stern ramp; or
- utilise its own davit-carried landing craft (LCVPs) and, when carried as cargo, Army landing craft, which can be loaded either alongside or at the stern ramp; or
- use its pontoons as self-propelled lighters; or
- use helicopters for both personnel and equipment moves, the ship being able to operate a flight of Wessex; or
- any mixture of the above, as appropriate to the particular situation.

To control embarkation/landing operations the LSH will have a joint operations room and a joint communications centre, and a combined naval flying control/Army load control position on the port side of the bridge.

Noteworthy, this new 6,000 tonne ship at about one third the displacement of the amphibious transport, HMAS *Sydney*, and requiring only about one quarter of *Sydney's* complement, will have 80% of the troop lift and 75% of the total cargo lift of the much larger ship. Additionally it will have the heavy lift capability that *Sydney* lacked, being able to carry tanks, heavy engineering plant and LCM8 size landing craft.
Army Involvement

Right from conception the new ship should be a splendid symbol of 'jointery' at the working level. The LSH Project Team includes Army and RAAF advisers; the ship’s complement will include a permanent Army detachment from Signals and Transport Corps with the detachment commander being one of the ship’s departmental heads and with his detachment having important responsibilities for the maintenance and operation of primarily Army user spaces in the ship such as the Tank Deck and Army communications. And, as in the British Services, the Army will maintain and operate the pontoon causeway that the ship will be able to carry.

Once the ship is commissioned it is to be hoped that all Field Force units will become familiar with being moved and landed from the LSH by all the methods of which the ship is capable.

Roles for the Amphibious Ship

The new LSH is being designed to operate with the LCH of the First Australian Landing Craft Squadron (AUSLANCRON ONE), and many will be the roles that this small but versatile amphibious force will be able to undertake, and thus extend the operational capabilities of the Australian Army as its units re-acquire the expertise to operate from a ship off shore as easily as from a jungle, bush or desert base. Administrative moves; tactical lodgement or extraction by landing craft or helicopter; seaborne logistic support; sea-based support of national development or disaster relief tasks; HMAS Tobruk will be able to make a significant contribution to all such operations. Because the LSH is derived from a class of ship designated Landing Ship Logistic in the UK forces, some doubts have been raised as to whether the Australian ship can perform more than logistic tasks. It is rele-
vant therefore to draw readers’ attention to the fact that in the Soviet Navy the main tactical and assault landing capability for the Russian forces is provided by their LSL-equivalents, the Alligator class which are similar in size, layout and capabilities to that planned for the LSH. Of recent months the presence of a single Alligator class ship, with marines and tanks embarked, off the coast of Angola or in the Indian Ocean has caused considerable concern in Western Defence circles, and these ships have been used on other occasions to provide tactical threat as well as strategic deployment.

Now, while the LSH is building, Army and Navy should be planning an evaluation programme to establish exactly what range of operational roles these RAN amphibious ships and their embarked Army forces can undertake. Well known are the logistic support tasks that the UK LSLs have undertaken in NATO, Middle East, Far East and Caribbean areas, but less well documented are the LSLs tactical capabilities. During ‘confrontation’ these ships were also used as mobile bases for the tactical deployment of Commandos by helicopter, to supplement the UK forces’ other larger and more ‘assault orientated’ amphibious ships. How best then can the Australian Defence Force use the LSH?

It is suggested that Army officers of all arms and services should be thinking deeply on how the LSH/LCH combination can be used most effectively as tools of both logistic and field force commanders.

In the LOTS field, do the Services’ present organisations provide the necessary beach unit expertise for the LSH to self-discharge across a beach without having to wait for Terminal Group personnel to be flown or driven to the appropriate beach area?

In the tactical field, the following thoughts on ship usage are offered for consideration:
- the lodgement of a cavalry squadron to harass a coastal line of communication.
- the helicopter and/or gemini insertion of SASR units along a coastline;
- the tactical re-deployment of a tank squadron or artillery battery;
- the surface and/or air deployments of infantry patrols from a mobile base;
- the insertion of engineer units, suitably defended, to either destroy enemy routes or create/improve own lodgement routes;
- the provision of a mobile base for Army Air Corps helicopter operations.

In the near future, as it was in the past, the sea will be able to become an Australian Army TAOR instead of being either a hostile or a neutral zone. The Services must be ready to take maximum advantage of the new tactical and administrative movement opportunities. 

* * *

TORTOISE AND HARE

The Royal Navy with its usual panache for total efficiency incorporated the simplest movement in devising its salute. But the Army, with its inbred love of ceremonial for its own sake, devised the most circumlocutory and physically exhausting manoeuvre possible, suggested a correspondent to The Times.

Quoted in The Army Quarterly and Defence Journal.

* * *

From HMS LEANDER after sinking an old Bermudian tug, Justice, by gunfire:
“Justice has not only been done, but it has been seen to be done. There is no Justice.
RIP.”

* * *

Hard work has an astonishingly poor record in terms of killing people. So little in life is worthwhile unless people work for it. Having shown your capacity for hard work never surrender it.

The Honorable Jim Killen, The Minister for Defence, in an address to air crew graduates at RAAF, East Sale.
(RAAF News)
AUSTRALIAN infantrymen have not fought a direct engagement with enemy armour since Korea when a small number of tanks, probably Soviet built T34s were briefly engaged by Bren gunners according to a newspaper report which appeared at the time. Although our combat troops have since been involved in three substantial conflicts not once have they encountered enemy armour of any description. Subsequently, the generation of anti tank gunners who fought Rommel’s tanks in the Western Desert in 1942 has nearly all gone, with the result that today’s level of anti armour expertise and our infantry’s ability to counter any enemy armour is so low as to approach virtual non-existence at both commander and weapon operator level.

In light of most other conflicts that have taken place since 1945 and the significance that armour has had in many of them, the author proposes to examine the Australian infantry’s current ability in this field, compare it to NATO’s anti armour capability and to discuss possible and realistic methods of remedying the critical situation to be found within the Infantry Corps.

Conventional Conflicts Since 1945

One should embark upon a study of recent wars involving the use of armour to see just how relevant this article is in the light of our current standard of readiness for such a war. The stark reality of what this article is about would be brought home to the student very quickly. Accounts of the Arab-Israeli conflicts, in particular the Seven Day War 1967 and the Yom Kippur War of 1973, the Indo-Pakistani War, the Turkish-Cypriot War — all limited conventional wars — clearly indicate the overwhelming significance and influence of the tank and personnel carriers in the final outcome of battles. The use of counters in the form of infantry anti armour weapons that have been by necessity developed to curb the tank also shows a dramatic increase. In the Yom Kippur War, Israeli sources acknowledge that two thirds of their tank losses were attributed to infantry anti armour weapons and infantry placed mines and this surely substantiates these claimed developments in the armour war.

During the same time, the Australian Army has somewhat glibly looked on with half hearted attempts to capsule the lessons re-demonstrated into parcels of information for the student of military history but has not itself really learnt the infantry anti armour lessons that have arisen from these wars. The lessons of mobility, shock action, the ability of an enemy to muster a powerful attacking force and how Australian infantry could cope when faced with such an enemy, especially in view of its very small armoured support and lack of mechanisation, appear to have gone virtually unheeded — unheeded in terms of reacting physically to prepare for such an eventuality. The Yom Kippur War and its military lessons have aroused interest in the Australian Army and indicated the lack of awareness of its poor level of defence capability, especially within the infantry, should it be employed at short notice against an enemy equipped in a similar fashion to the combatants of the 1973 war.

Captain R. J. Linwood*
Royal Australian Infantry

*This article was written in January 1976. Since then, the author has taken through No. 1 Anti Armour Course at Singleton, so a start has been made.—Ed.
Anti Armour in the Context of Continental Defence

It is necessary to examine the current state of anti armour capacity within the limits of the context of the defence of Australia. There is little doubt that any invasion of mainland Australia (albeit for our minerals as current political scares indicate) would not be one by a mobile, mechanised force relying on light armour for its mobility, firepower and ability to achieve surprise by moving rapidly over long distances in order to capture strategic goals. The physical enormity and relatively impractical aspect of a foot invasion becomes apparent when one considers the distance involved between entry points and targets or strategic areas. Subsequently, any enemy would almost certainly be highly mechanised employing a variety of AFVs including tanks, light tanks, armoured personnel carriers and self propelled artillery in the armour and mechanised infantry concept backed up by tracked or wheeled resupply vehicles or air supply.

If infantry training is oriented for the defence against such an invasion then it must have both the weapons and the knowledge of how to counter and defeat such an enemy. It is foolish and naive indeed to assume that infantry can engage armour and defeat it alone and vice versa as the lessons of the 1973 War would indicate. An Israeli counter-attack for example, was carried out alone in a piecemeal fashion by an armoured brigade which was almost entirely annihilated by the Arab anti armour fire. The author does not intend to even suggest that the Australian infantry should attempt such a lone manoeuvre, but in light of the fact that the RAAC is so desperately short of tanks and equipment with which to support the infantry, the need for an increased self reliance and a high degree of awareness of the requirement for an anti armour capacity far above the present one should be apparent to every soldier. This is especially so for the Infantryman upon whom the brunt of the fighting ultimately falls.

It is probably true that the old adage of “the best weapon against a tank is another tank” is still valid. However, it is the combined arms team utilising the integrated firepower and tactics of all members that will ultimately decide the outcome of a conflict involving armour and infantry — none will on their own. This lesson has been demonstrated time and again from Hannibal’s conquests with his armour clad elephants and foot soldiers to the iron clad steeds and infantry of the Middle East Wars, as recently as three years ago.

Current Infantry Anti Armour Capability

It hardly needs stating that the present infantry anti armour capability is pathetically weak. Let us examine this contention in the following terms:

- weapons
- organisation
- tactics
- knowledge of likely enemy
- integration of all arms anti armour firepower
- training

Weapons

The Australian infantry is equipped with four anti armour weapons. Principally a very close range weapon, the No 94 Energa grenade (Anti Tank) can be fired from the SLR using a special Ballistite cartridge. This projectile employs a HEAT (High Explosive Anti Tank) shaped charge warhead which is designed to penetrate armour at a range of up to 150 metres. The Energa has been neglected by the bulk of infantrymen but is still in service as a personal weapon. A more familiar weapon to the individual is the 66 mm Rocket LAW (Light Anti Tank Weapon) which is the first of the recoilless weapons and has been combat proven in South Vietnam. In 1972, Government troops successfully destroyed several Russian built T54 and PT76 tanks at An Loc with LAWs. One such soldier is credited with three kills at a range of less than twenty metres. This weapon has an effective range of 200 metres over which it is very accurate in the hands of trained users, and it will penetrate most armour including the frontal armour of the T62 Russian main battle tank and its predecessors. A principal advantage of the LAW is that every man may carry one or more and operate them on his own. Its low weight makes it ideal for the individual in all phases of war, particularly close defence, ambushing and tank hunting. Its only real disadvantage is its short range and under-employment.
The L14A1, 84 mm Gun Anti Tank Carl Gustav (Medium Anti Tank Weapon) is the smaller of the two crew served weapons in service. It can be operated by one man in an emergency, and in the author’s opinion, is still one of the best non guided weapons in its class in use today. Its HEAT round has an excellent ballistic performance, good penetration, is lightweight and very reliable whilst the gun’s sighting system and resultant accuracy are superb. Properly maintained and prepared the MAW is easily capable of hitting stationary and moving targets at 550 metres and 450 metres respectively. Competent handlers achieve remarkable accuracy with the MAW and this is an important attribute especially when one requires such accuracy to hit ammunition or fuel storage areas on enemy AFVs at specified ranges as opposed to a body hit which may not always result in a complete kill. The MAW has not been combat proven but is widely used throughout the world.

The largest anti armour weapon within the battalion is the M40A1 106 mm RCL. This is an American weapon recently redesignated MRAW (Medium Range Anti Tank Weapon) and has almost completely been replaced in the US forces by TOW. The MRAW saw service in the Australian infantry in the early sixties but was discarded as was the 120 mm BAT due to the lack of use of such weapons in a CRW environment. Anti tank platoons were subsequently re-employed as trackers and reconnaissance troops. The MRAW has seen active service in its anti armour role when used both in the Yom Kippur War by the Israelis and the Turkish-Cypriot War by the Turks. During one particularly hectic phase of the initial Golan Heights battle, Israeli infantry held off the Syrian assault with jeep mounted 106 mm RCLs and 3.5” RLs while the Israeli tanks withdrew to rearm with more ammunition. HEAT strikes on the Syrian tanks were completely effective at all ranges. In 1974 the MRAW was re-introduced to the battalions to give those units an anti armour weapon of greater range and lethality than those previously used. Utilizing both HEAT and HEP-T (High Explosive Plastic — Tracer — a squash head principle round) this weapon has proved that it can easily defeat any known armour including the heaviest battle tanks at effective ranges reaching 1100 metres. An extremely hard hitting weapon, it is disadvantaged only by its weight and large backblast. The MRAW is normally mounted on a special vehicle but...
can be dismounted and dug in should the situation require it.

None of these weapons has any night vision assistance in Australia other than relatively primitive reticule illumination and the use of battlefield illumination. Anti tank mines of British and American origin exist with assault pioneers and some unit riflemen trained in the use of them. These mines have been widely used throughout the world since 1945 and have proved to be capable of inflicting substantial damage to armoured vehicles. Pakistani infantry used large numbers of anti tank mines to offset the technical advantage held by the Indian armour during the 1965 war.

Organisations

As previously stated the Energa grenade and the LAW are individual weapons and are shows the same allocation of MAW per rifle company but removes all eight MAW from the anti armour platoon, replacing them with eight MRAW, the 106 mm RCL mounted on vehicles. A comparison drawn between the new organisation and other formations of a similar nature in foreign armies shows that the allocation of such weapons here is still far short in terms of defensive fire capability required, should be engaged by an armoured enemy. This is a dangerous limitation for any infantry battalion, especially in the Australian Army.

Tactics

The anti armour platoon, whose primary role is to prevent enemy armour from penetrating the battalion area, consists of a headquarters and four sections. The normal allo-

issued at that level as required. Infantry battalions currently have sixteen MAW and four MRAW — the latter being an interim measure. Eight of the MAW are in the anti armour platoon and the rest are allocated on a scale of two per support section in the rifle companies. Evidence suggests that training on and the employment of these by some units has until recent months been neglected. The new battalion organisation shortly to be effected

cation is usually one section to each rifle company whilst on the move, or concentrated within the overall anti armour plan in the defence. The company support sections remain with their parent unit and are responsible for the local prevention of enemy armoured penetration of the company area. Tactics and doctrine for infantry anti armour warfare today comprise little more than brief paragraphs here and there in training and tactics publications.
The only Australian pamphlet to deal with the subject in any detail is the 84 mm MAW pamphlet. This is a serious shortcoming of our tactical thinking and level of knowledge. Perusal of equivalent foreign training information sources in this field bears testimony to that.

Recently, units have been forced to develop their own tactics and training thereby often developing different and conflicting methods of employment of their weapons. Although steps are being taken in the right direction to produce an overall doctrine for the Australian Army, such doctrine will not likely dictate the detailed knowledge the infantryman requires. Where are they to get it from? The answer lies in the wealth of historical lessons learnt and information derived from the conflicts that have arisen in the past few decades where modern weapons have been deployed — weapons Australia uses or could have used teristics, enemy tactics, performance abilities of the various types and models of enemy AFVs, gun ranges, night operation capacities, national armaments — the list is endless. None of our recognition pamphlets are anywhere near up to date, so much so that the Soviets probably regard them as collectors items.

Very little training of this nature is done except by individuals and there are no apparent moves to update, renew or create reference material for the infantry in particular to alleviate the shortage of such information that commanders and instructors alike face.

Integration of All Arms Anti Armour Firepower

In almost all battles involving an armoured enemy force and friendly infantry, quite a variety of anti armour firepower is available, yet very few people appreciate or bother to train in the use of it. Friendly armour integrated with infantry defences to provide anti armour defence is virtually unheard of in exercises, and it is safe to say very few soldiers would have a sound knowledge of the method of operation of a Centurion if one were to appear in their position. Seldom, if ever, is more than a token service paid to the integration of medium and field artillery and mortars with anti armour weapons in a carefully prepared anti armour defence plan.
Anti armour minefields are mostly paper representations on tactics TEWTs. The use of FGA aircraft on immediate call to attack armour and break up such an assault is rarely even heard of, certainly at unit level. All of these serious deficiencies are probably due to the fact that the infantry is rarely exercised in the use of such measures, as there now populates the Army a generation of soldiers who have never had to fight enemy armour (except of course for a few long serving soldiers and senior officers). Perhaps it is in the field of the combined arms application of anti armour efforts that commanders can make up much ground. Even though Australia does not have large numbers of APDSFS firing tanks, aerially delivered ATGW, Smart artillery or appreciable quantities of night vision equipment, there is a large amount that can be achieved to atone for our sins of negligence. The infantry can do that by appreciating fully what they have themselves and what supporting weapons can achieve in the anti armour battle.

Training

Present training is seriously hampered by both economic and administrative problems. Lack of ammunition, insufficient sub calibre training devices, over stringent and restrictive safety regulations, insufficient ranges and training areas, no efficient moving target facilities (other than at Puckapunyal), a shortage of armoured targets and equipment of all descriptions including 106mm RCL carriers: all paint a gloomy picture for the present and immediate future for the full scale training required. Training aids such as models, films and publications are in short supply. As yet, there are no defined performance standards required during training of the anti armour gunner in order to assess whether the soldier is capable of completing his task or not. Yet, thirty-four years ago the German Army training in this field was nothing short of astonishing. Compare today's training requirements to those shown in the following extracts from an account of a German prisoner of war on anti tank gunnery training.

"The course lasted from 8 to 10 weeks... During the mornings of the first two weeks we learned the basic principles of gun laying and aiming... The afternoons were spent in manhandling the gun at the double. The 3.7 cm gun was drawn by two men with ropes, and two men pushing behind... The whole distance to be covered was 9 kilometres... Aiming and firing of dummy cartridges was then practised on a moving target of cars camouflaged as tanks... weeks were spent mainly in theoretical instruction and firing practice with a detachable barrel liner (Einstecklauf) with ordinary rifle ammunition at a range of 10 metres... The time allowed for sighting, loading and firing was 35 seconds, and the standard to be obtained was four hits and one near miss. Wooden practice tanks of the same size as normal tanks were pulled along at a speed of ten kilometres per hour... The five shots were to be fired at the following distances: 1,200, 1,000, 800, 600, and 400 metres. The standard to be reached was 80 per cent... The best shots usually got ten extra shots as a reward."

Infantry Anti Armour Training in NATO

A very sobering comparison may be made and conclusions reached by investigating NATO's solutions to the anti armour problem. As in Australia's strategic thinking, NATO is defensively oriented with an overwhelmingly armoured/mechanised enemy aligned against it in the form of the Warsaw Pact forces. It is very probable that any likely enemy of Australia will be equipped similarly with Soviet origin or Soviet designed armour, a disturbing fact that has come to light in almost every conflict in recent years. Whilst NATO cannot possibly maintain the balance of tanks with the Soviets (currently about three to one in favour of the latter) it is nonetheless pursuing a policy of equipping its forces with such armour on the basis of its defensive capability. In this field, all member nations — notably Britain with the Chieftain, Germany with the Leopard, France with the AMX 30 and the USA with the M60 family have opted for all round superior quality in their tanks. Gunnery, rangefinding, stabilisation, fuel, ammunition, range, crew comfort and equipment performance aspects are all superior to the Soviet counterpart. It is hoped that the superior quality Western armour will be able to destroy several enemy tanks for each friendly casualty in the event of a massed attack. On
this theory, seven out of ten enemy tanks with their supporting mechanised infantry would still reach NATO infantry defensive positions.

Because of such a threat, NATO infantry is currently employing a massive array of anti armour weapons notably ATGW systems. These may be delivered to the target in several ways. Infantry ATGW are essentially employed and launched in two of these modes — ground launch and vehicle launch. Ground launch ATGW are found in almost all infantry formations and are often employed down to platoon level, with even smaller sub units using them to complete specialised tasks such as tank hunting. ATGW currently in service in NATO are known to include Vigilant, Swingfire, SS11, SS12, TOW, Dragon and Milan. Most of these are carried and fired by one man. Systems such as Vigilant and SS11 belonging to the manually guided class, or first generation family, Dragon and Milan are similarly man portable with semi automatic guidance, very short minimum ranges and maximum ranges of 1000 and 2000 metres respectively. These systems are very simple to operate and provide the infantryman with a powerful anti armour punch with extreme accuracy at ranges far greater than effective enemy tank gun range. TOW is a crew served weapon equipping many of the NATO members’ armies and has a range of 65 to 3000 metres. Using semi automatic guidance, this second generation weapon system is a formidable weapon which has proved its lethality in Vietnam (although it was helicopter launched there) and the Middle East under combat conditions. Israeli operators were able to familiarise themselves with TOW in a few hours and have claimed a very high kill rate with it, an even higher rate than achieved with the Swingfire they already had. Reports even reveal that the Israelis fitted a night vision device to TOW, allowing night engagement of tanks again (as claimed) with a very high success rate. TOW replaces the 106 mm RCL still found in some US units.

Many NATO mechanised infantry units include armoured vehicles mounting ATGW. The range extends from tanks organic to infantry battalions mounting HOT, SS12 and ACRA, and Sheridan 152 mm gun/launcher tanks to specialist armoured ATGW carriers integral to such infantry units. These include AMX 10 mounting HOT, Raketen-jagdpanzer with SS12, Entac and HOT, M113 mounting TOW, FV 102 (Striker) with Swingfire, and an assortment of light skinned vehicles carrying various systems such as TOW, Dragon, Milan, SS12 and Entae.

The recoilless weapon family is still to be found, incorporating 120 mm Wombat, 106 mm RCL, 90 mm RL, Armbrust, Carl Gustav 84 mm NAW and the LAW to name most. These weapons proliferate within the infantry organisations, particularly anti armour sub units. Many are also carried in rifle platoons. British rifle platoons if not already carrying ATGW are substantially equipped with recoilless weapons. For example a mechanised rifle platoon carries one MAW in platoon headquarters whilst each of the three sections carry six LAW. Air portable rifle platoons carry nine LAW per section. This is very heavy anti armour firepower in relation to that at the disposal of Australian rifle platoons.

To cap this impressive and increasing array of both recoilless and guided weapons, all NATO soldiers undergo very substantial training in day and night firing, tank recognition, Soviet and Warsaw Pact armoured tactics, mine warfare and co-operation with friendly arms. Soldiers are also thoroughly trained in the operation of their anti armour weapons and are required to fire these weapons regularly. ATGW gunners fire some live rounds annually and spend considerable time on simulators in both miniature range and actual battlefield environments.

What can be Done to Help Overcome These Problems?

First of all our Army must face reality and be prepared to train with what weapons and conditions we have at present. The fact that a family of ATGW may be purchased for the infantry soon will not help them if war breaks out tomorrow. Reliable estimates show the present weapons having to last for some years yet. Not all of the problems listed can be overcome, but some of the chronically weak aspects of the appalling state of the art can be significantly bolstered if the following course of action is followed. Both RAAC and RA Inf need to drastically update themselves in all aspects of anti armour warfare (a start has been made with the publication shortly of a
TIB dealing with the doctrinal aspects of this within the concept of our current defence policy) and produce the results of such research in the form of comprehensive anti armour courses at both Centres, each dealing exclusively with those matters pertaining to their own Corps' responsibility. This information distribution should be aimed at the weapon operator and junior commander (specialist) level in great detail, whilst at senior commander level the tactical employment and considerations should be taught to a more advanced degree and over a wider spectrum than it presently is.

Today's training pamphlets need to be updated in some cases and there is a definite case for a specific pamphlet for the specialist anti armour platoon covering the varied aspects of anti armour tactics and so on to be produced. Such a pamphlet should follow along the lines of the better foreign equivalents. Subject matter for such anti armour training should include (depending on the recipient level) the following:

- weapon handling and firing
- tactics (employment and sighting)
- minor tactics (operation at crew and platoon level)
- AFV recognition (advanced)
- enemy armour tactics
- specialist roles and uses of weapon other than anti armour
- mine warfare
- all arms co-operation.

Pure weapon handling, organisational use and deployment can be effected by units as has been demonstrated in at least one battalion using existing doctrine found in weapon pamphlets. As an interim measure a detailed grasp of the intricacies involved may be obtained by junior commanders by undertaking private research from existing manuals, foreign service publications, defence publications and a surprisingly large amount of commercially available sources of information on many of the subjects involved. Economic considerations lie behind the equipment shortages, ammunition and training areas but what is to be the cost of readiness? That is a question most soldiers are not qualified to answer and is not within the scope of this paper.

Weapon Effects against Armour and their Assistance to Infantry

One must keep in mind the enemy tactics for both their mechanised and tank formations. It is common practice for enemy infantry to ride on top of tanks and in some open armoured personnel carriers. Syrian troops on the Golan Front were often observed doing this during the 1973 war. Commanders often do not close down but ride exposed to maintain better observation, particularly in tanks. A lot of emphasis is placed on night operations using night vision equipment. Most enemy tanks employ the short stop principle to fire as only the more recent T62 and T64 are stabilised sufficiently to allow accurate fire otherwise.

Careful use of all types of weapons will have a far reaching effect on an armoured vehicle.
Firstly, consider the weapons within the battalion. Small arms fire will kill exposed troops and crew commanders or at least force the vehicle crews to close down. Several Israeli crew commanders died in this manner early in the 1973 war. From inside, observation is thus severely restricted especially if the vehicle is moving, and the cupola machine gun cannot be used. This certainly decreases the enemy armour's ability to locate and fire at friendly troops, particularly anti armour weapon operators who usually have to expose a part of themselves above ground in order to fire their weapons. Anti tank mines will either kill an enemy AFV in the case of a BMP or BRDM, or disable a tank or self propelled gun, thus momentarily taking that vehicle out of the assault and leaving it for follow up tank killing operations. Whilst the battalion mortars and field artillery will not usually seriously damage a tank, a direct hit by high explosive will scour any troops off, blast in any open hatches, ignite external fuel tanks, damage periscopes, externally mounted weapons, radio aerials, infra red and white searchlights, severely jolt and concuss the crew thus decreasing their battle efficiency.

Lighter AFVs may be destroyed or substantially damaged as to render them temporarily inoperable depending on the angle of impact and the type of vehicle. Airburst missions are deadly when fired to detonate above personnel carriers and exposed crews. Smoke (white phosphorus) will blind the enemy, blacken optical devices, cause local fires amongst external fuel tanks and externally stowed cargo and force the AFV to remain closed up. The effect on the morale of the crews must be significant as most Soviet AFVs are not air conditioned and burning phosphorus has a profound effect on enclosed areas such as metal AFVs. Even the simple expedient of the Molotov Cocktail can brew up a tank. Several T54 were gutted by fire from these when attacked by students in the streets during the invasion of Czechoslovakia in 1968. Lack of visibility and the inevitable confusion could lead to dislocation of the assault, break up of the formations and subsequently to the failure of the attack.

Medium artillery and direct fire artillery firing HEAT will destroy most armour if a direct hit is achieved. Their use in defensive fire plans must be considered. The use of all forms of illumination bears mention but as it is a double edge weapon the use of it must be made judiciously. Illumination serves two major purposes: it provides friendly infantry with the visible targets and it also serves to play havoc with enemy night vision equipment particularly the passive light intensification variety which some of the more modern vehicles such as the T64 and BMP are reputed to have. Whilst friendly armour will probably conduct their own battle of movement, it is of tremendous morale value to friendly infantry to know they are there and what they are capable of doing; namely, their superior performance in terms of accuracy and range over their enemy counterparts.

At battalion command level are available on call FGA aircraft whose formidable array
Leopard I, Australia's new MBT.

of armour busting ordnance includes AP cannon, rockets, HE and Napalm bombs—all presently available in RAAF storages. Israeli Defence Force Mirage and Phantom FGA aircraft have repeatedly demonstrated the modern aircraft's effectiveness in delivering precise strikes on armour although this capability was at times severely restricted by Egyptian air superiority. Used in conjunction with these weapons are the vital and extremely effective obstacles which can be used to break up, canalise, immobilise and confuse the enemy armour assault. The Israeli anti tank ditch dug across the Golan Front and the hundreds of Syrian tank casualties directly attributed to it is a classical example of this effectiveness. A well planned and meticulously prepared defence incorporating the use of all arms is vital to success and an integral part of proven tactical doctrine. So it is to be applied in the anti armour battle.

Having examined the current state of the art in the Infantry at present and compared it to NATO, one can no doubt see that much needs to be done. By examining the present availability of firepower and what can be achieved, certain areas of training have been highlighted showing what needs to be done within the Infantry to improve current capabilities with today's weapons. But what about tomorrow?

The Future

It should be clear to the concerned reader that the solution to today's inadequacies lies not only in a revamp of interest and training but also in a procurement programme of modern weaponry. With the exception of Entac and the experimental Malkara of the fifties, Australia has no ATGW. These missiles which never made their way into the hands of the infantry anyway, border on antiquity and urgently need replacing. As it is not an aim of this discussion to argue which ATGW systems Australia should procure, the author does not intend to specify any particular system. A personal choice is of course held. It suffices to say that the infantry urgently need modern weapons including a combination of recoilless gun type weapons, ATGW, multi attack anti tank mines — and lots of them all. All have their limitations and thus need to be used together so they are mutually advantageous. Not only should the establishments of such weapons in the battalions be markedly upgraded, but also should the degree of specialisation and amount of training at all levels. One only has to review the Egyptian Army's preparation for war in 1972-73 to have that point made.

Tactical employment of the infantry anti armour weapons will be the football in a game played by many others whose interest has hopefully been kindled by this article, and the author does not intend to discuss that topic here. One matter of overriding concern should now be clear in the light of the evidence produced in this discussion. The Australian infantry is chronically ill-prepared to meet and deal with an armour oriented enemy. Unless rectification of this condition occurs very soon, Australian soldiers may well learn by bitter experience what the European soldier did during the German blitzkrieg of 1939-40.
THEIRS NOT TO REASON WHY...?

An Essay in Military Ethics

Squadron Leader A. K. Robertson
Royal Australian Air Force

"Forward, the Light Brigade!"
Was there a man dismay'd?
Not tho' the soldier knew
Some one had blunder'd:
T theirs not to make reply,
T theirs not to reason why,
T theirs but to do and die:
Into the valley of death
Rode the six hundred.
—The Charge of the Light Brigade,
Alfred Lord Tennyson

INTRODUCTION

In its baldest terms, this essay is concerned with the problem of reconciling obedience and authority in the human military situation. The theme is of military ethics and dwells on the standards that govern, or should govern, the conduct of the individual serviceman. The problem has many ramifications bound up not only with old questions of loyalty, duty, obligation and the rights of the individual, but also with rather new questions of personal responsibility and the dynamics of decision-making in a technologically complex and bureaucratic age.

An investigation of this nature should span a whole range of thought in such disciplines as, among others, ethical philosophy, law, psychology, history, modern management theories, and sociology. A thorough analysis in these terms is certainly beyond the present writer's competence and intent. What is attempted here, however, is an approach to the problem by way of some inter-disciplinary observations and their relevance to modern times. The guiding purpose is to express some insights that may have value for those who have a responsibility to recruit, train or manage military personnel, and for the individual serviceman in coming to a deeper understanding of his situation.

THE MILITARY ETHOS

Preservation of the Body Corporate

A Russian grand duke was once reported as saying 'I hate war because it spoils the armies'. The point was a good one. The military way is in fact marked by the concentration of men and materials on winning specific objectives with the least expenditure of blood and resources. After the battle at Wejh, for example, Colonel T. E. Lawrence did not share the satisfaction of his fellow officers, and was moved to write: 'To me, an unnecessary action, or shot, or casualty, was not only a waste but a sin... I am unable to take the view that all successful actions are gains... Even from the purely military point of view the assault seemed a blunder. The 200 Turks in Wejh had no transport and no food, and if left alone for a few days must have surrendered'.

The military is as concerned as any other body with self-preservation despite, paradoxically, its dedication, as necessary, to give and partake of death.

Men do not give their lives lightly. This is why qualities of leadership and obedience,
particularly in dire circumstances, are so highly valued in the military. Thomas Carlyle expressed the feelings of countless writers throughout the ages when he wrote: '... the commander of men; he to whom other wills are to be subordinated, and loyalty surrender themselves, and find their welfare in so doing, may be reckoned as the most important of great men.'

**Tradition and the Individual**

Tradition is vital to the military. Tradition, with its strong emotive appeal, and as a body of precedent, is the principal bulwark of authority. Tradition also predetermines to a great extent the serviceman's behaviour and his mode of thought. The professional serviceman is an individual, but his patterns are cut for him and he conforms to them. In moments of stress, however, when he must call upon all his reserves of initiative and courage, his indivisibility may well be his greatest asset.

The traditional military leader is an insulated person, sometimes difficult to approach, and alone in his decision-making, but fundamental changes are occurring. Conditions of modern warfare tend to reduce the authority and power of decision of the military leader; a consequence is that responsibility for the conduct of military operations tends to be indivisible and no one person held accountable for decisions. Bureaucratic influences and technological controls, arising largely from the cost to society of maintaining military forces, exert enormous pressure on the military way, to the extent that decision-making has become a highly participative affair involving all levels of authority. The independent leader has perforce become a dependent manager of resources of which he may have only an imperfect understanding. Rarely now would a leader need to stand before his men, brandish his sword, and shout 'Follow me!' In the colder calculations of modern warfare, the old cry 'Up, up and at them!' — that was once the pith, the quintessence, of the whole practical art of war — has lost its sting.

**THE DEFENCE OF OBEDIENCE TO SUPERIOR ORDERS**

**The Function of Law**

Attitudes towards obedience and authority in the military are reflected to a great extent in the way legal sanctions are applied, particularly in the laws that govern 'the defence of obedience to superior orders'. In this context, the words of Rousseau are apt: 'Since no man has a natural authority over his fellow, and force creates no right, we must conclude that convention forms the basis of all legitimate authority among men ... To remove all liberty from his [Man's] will is to remove all morality from his acts. Finally, it is an empty and contradictory authority that sets up, on the one side, absolute authority, and on the other, unlimited obedience'. Few would argue that law — the 'legitimate authority' — sanctifies principles of community conduct beyond all doubts or dispute; on the other hand, the law is not necessarily 'an ass'. Law operates in a community to bind rights to duties by means of a system of sanctions and deprivations. The life of the law is not logic, but experience, and, not unlike the words in a dictionary, stands astride the worlds of yesterday and today. A universal solution to the problem of obedience to authority still lies in the world of tomorrow, and an exhaustive treatment of the subject has yet to be written; however, a statement of the current positions in comparative law and the law in Australia may be useful in highlighting the difficulties.

**British Law**

British law places a high degree of personal responsibility on the individual serviceman who breaches the law when acting under orders. The position is summarised by an eminent British jurist as follows:

'When a soldier is put on trial on a charge of crime, obedience to superior orders is not of itself a defence ... A soldier is bound to obey any lawful order he receives from his military superior. But a soldier cannot any more than a civilian avoid responsibility for breach of the law in bona fide obedience to orders ... His position is in theory and may be in practice a difficult one ... He may be liable to be shot by a Court martial if he disobeys an order, and be hanged by a judge and jury if he obeys it ... The hardship of a soldier's position resulting from this inconvenience is much diminished by the Crown to nullify the effect of an unjust conviction by means of a pardon.'
An ‘inconvenience’, indeed. Apparently, the surrounding context makes no reference to the liability of the soldier’s military superior in issuing an unlawful order.

**United States Law**

In the United States the legal position of the serviceman appears to differ little from that of his counterpart in Britain. Conflicts in Seventeenth Century Britain had the effect of erasing from the British consciousness much of the authority of military law, and the supremacy of civil jurisdiction became firmly established. United States law owes much to the British experience, although the emergence of the United States as a nation made it more receptive to continental influence than might otherwise have been the case. According to the American jurist, Wharton:

> ‘Where a person relies on the command of legal authority as a defence, it is essential that the command be a lawful one, which he was required to obey ... An order which is illegal in itself and not justified by the rules and usages of war, or which is, in substance, clearly illegal, so that a man of ordinary sense and understanding would know as soon as he heard the order that it was illegal, will afford no protection for a homicide ... Moreover, if it is not part of the soldier’s military duty to kill the particular victim, his act in so doing is criminal ... When an act committed by a soldier is a crime, the fact that he was ordered to commit the crime by his military superior is not a defense’.

The burden on the court was especially heavy, for the members had knowledge wider than the evidence: they, like Calley, knew the stresses of decision in war; their emotions resisted the facts, but, as jurors, they could not ignore them. Calley’s culpability was clearly established in law. The jury decided that even if Calley’s superior, Captain Medina, had ordered the death of ‘everything that moves’, Calley was responsible for knowing that such an order was illegal and should have disobeyed it. The subsequent order by the President to release Calley shook the nation, but probably came down on the side of majority public opinion.

**Canadian Law**

Evidently, Canadian law gives a good deal of weight to the defence of superior orders; moreover, military and civil law seem to be strongly in accord on this matter. Canadian **QR & Os** spell out the position of a Canadian serviceman as follows:

> ‘... every officer and man shall obey the orders of every officer and man senior to him ... but if an officer or man is given an order that he considers to be in conflict with the National Defence Act, QR & O, or general or particular orders binding on him, he shall point out the conflict orally, or in writing if the order does not require immediate obedience, to the superior by whom the order was given. If the superior still directs him to obey the order, he shall do so.’

There remains some uncertainty as to what the subordinate’s position would be if he carried out the order and the order was subsequently found to be illegal. Elsewhere in **QR & Os** the wording stresses obedience to ‘lawful’ commands. A man would indeed be impaled on the horns of a dilemma if called upon to decide whether every order given to him were lawful or not.

**Continental Law**

While the doctrine of absolute liability, ie, ‘individual responsibility’ (or ‘intelligent bayonets’), is more compatible with Anglo-American law, the alternative doctrine of ‘Respondeat superior’ is more compatible with continental
Continental legal systems owe much to the Roman law, which gave exclusive jurisdiction to military courts over offences committed by soldiers. In Anglo-American law, as stated earlier, the civil courts have unquestioned supremacy over military courts. In Spain, on the other hand, the military courts have jurisdiction over offences committed against the military, whether committed by servicemen or civilians; the same situation exists throughout Latin America, and one might conjecture — as an aside — whether the constitutional instability of Latin America owes something to this fact. However, on grounds of jurisdiction, the main inference to be drawn is that the dilemma of the continental serviceman is less difficult than that of his British, American or Canadian counterpart.

‘Duty of obedience’ and ‘accountability of superiors’ are two sides of the one coin. The duty of continental servicemen to obey commands has a long tradition, as, also, has the accountability of the commander. Of interest is that the German military manuals of 1957, in accord with the Prussian military tradition, do not prefix the words ‘commands’ and ‘orders’ with the word ‘lawful’. German servicemen would appear, therefore, to have a defence denied to British, American or Canadian servicemen.

**International Law**

There is no equivocation about the responsibility of the individual in international law. The essence is that individuals have international duties that transcend the national obligations of obedience imposed by individual states; however, to understand the force of this principle, one must also understand the nature of international law. International law is ultimately an expression of international morality. Phrases such as ‘crime in international law’ were echoed at the Nuremburg Trials as if international law were a body of statutes — which, in fact, it is not. The main sources of international law are custom (the observance being a matter of political convenience) and treaties (such as those concluded at The Hague and Geneva Conventions). In matters other than ‘war crimes’, international law operates effectively only where there is a basis of mutual consent. The ‘legality’ of the Nuremburg Trials is, as a consequence, a complex issue that invites disagreement among international lawyers even today.

For our purposes, the main observation to be made is that the Tribunal laid the principal grounds for prosecution upon Article 8 of the Nuremberg Charter, ‘... the fact that the defendant acted pursuant to an order of his government or superior shall not free him from responsibility’, and went on to assert that Article 8 was ‘... in conformity with the law of all nations.’ The General Assembly of the United Nations avoided endorsing the entire Nuremburg proceedings, but did affirm the principles of international law found in the Charter. A great deal of recent commentary attempts to whitewash the accused at Nuremburg, to discredit the proceedings, and to dismiss much of the factual evidence. For Germans, of course, Nuremburg is a misty and unpleasant image, best forgotten, but the ghosts have yet to be laid to rest.

**Australian Law**

The foregoing discussion on ‘the defence of obedience to superior orders’ has been developed partly with a view to placing the Australian situation in perspective. In Australia, the defence has yet to be tested. No judicial decision on the matter has been handed down in Australia, and no manual sets out clearly where the serviceman stands. A draft bill on the Uniform Disciplinary Code — yet to be presented to Parliament — is expected to modify some of the disciplinary provisions inherited from British legislation, particularly on questions of obedience to orders. There has also been strong political interest in the matter, as suggested by questions in Parliament and as indicated by the following statement made by the former Minister for Defence:

‘It is difficult to avoid the conclusion that a soldier under our military law is conceived more in terms of duties than rights ... Undoubtedly, an aura of harshness and repression still surrounds military life flowing from the inferior status inflicted on servicemen by much of the statutory law dating back to 1903 ... My major concern about the code as it currently stands is that after several readings I cannot find a clause which places upon a member of the Australian Defence Forces an obligation to refuse an
order which is illegal under Australian law or the Geneva Convention.\textsuperscript{10}

The word ‘obligation’, as used here, would seem to make the serviceman's position more rather than less difficult, despite the Minister’s humanitarian intent. If a serviceman were obliged both to obey and to disobey a particular order, his position would be intolerable, and his behaviour would be quite unpredictable in a moment of crisis.

The 1973 draft of the Uniform Disciplinary Code included a form of defence of obedience to superior orders, but the 1974 draft expressly rejected it, stating that superior orders are relevant only in mitigation. A primary issue still is whether or not the defence should be retained in a limited form. Retention seems likely; in which case, the related issue of including the offence of giving an unlawful command needs to be considered. A suggested version of the offence of giving an unlawful command was put forward towards the end of the 1974 working party deliberations, as follows:

'32A. (1) A person who knowingly gives an unlawful command or issues an unlawful order is guilty of an offence for which the maximum punishment is imprisonment for five years.

'(2) It is not a defence if the command or order is not carried out.'\textsuperscript{11}

If the law is amended thus, a greater burden of responsibility for 'lawfulness' will be carried by the superior, and the subordinate will, as a consequence, be protected more than he now is. The difficulty of fixing personal responsibility remains, for the law in Western society implicitly insists that man is never an automaton entirely enslaved to the will of another — that he is always free to listen to the voice of his conscience and to choose.

\section*{THE DYNAMICS OF OBEDIENCE AND AUTHORITY}

Purely legal considerations do not reach to the heart of the problem. The law is more concerned with the use and effects of obedience and authority in relation to social ends than with the dynamics of obedience and authority as such. Many forces are at work in the obedience-authority relationship — forces in the situation itself, the subordinate and the superior.

\section*{The Changing Basis of Authority in the Military}

Morris Janowitz asserts that ‘There has been a change in the basis of authority and discipline in the military establishment, a shift from authoritarian domination to greater reliance on manipulation, persuasion and group consensus.’\textsuperscript{12} For the military, with its traditions of authoritarian discipline and conservative outlook, any shift in the basis of authority must cause fundamental difficulties. Changes on an unprecedented scale have in fact occurred in the military within living memory. These changes have been most obvious in technological developments — in communications, weaponry and man’s capacity to wreak awesome destruction — and a concomitant growth in bureaucratic control.

Moral questions take on a new character when the unit of battle is less likely to be a man on the battlefield with his hand on a sword or bayonet than a remote personage with his finger on a button. In modern warfare, the destruction of whole cities from a distance seems to excite less moral repugnance than the face-to-face shooting of hostages. Indeed, the morality of using advanced technology in war has yet to be circumscribed by convention. A vigorous, ruthless use of manpower without regard for casualties may, in the wider view, be less repugnant than a vigorous use of technology, common law values notwithstanding. A relatively new and emotionless breed of men, the ‘technocrats’, is growing, with the power to influence decisions without necessarily having learned or even having to accept the responsibility.

The ‘shift from authoritarian domination’, as Janowitz puts it, has far-reaching consequence for the validity of the ‘chain of command’. With the growth of technical elements in military operations, strict adherence to the principle of hierarchy can now become dysfunctional. The hierarchical system presupposes a single channel for passing down orders that lower levels are bound to obey. There is a growing dependence on staff officers, who may increasingly exercise de facto authority with regard to problems that fall within their competence. There is, therefore, a growing tendency to separate the line authority structure from the true power structure.
Bureaucratic control is not a modern phenomenon, but it has evolved in modern times to a state of great complexity. Responsibility for decision-making in a bureaucracy is often difficult to fix or even to recognize; moreover, responsibility is easily ignored when one is only an intermediary far from the consequences of action: one has only to shuffle paper in an office to participate in mass murder, as some administrators must have done in consigning victims to the gas chambers of Auschwitz and Belsen. Bureaucratic functions tend to channel people in narrow, specialized jobs that deny them a view of the whole situation. A consequence for the bureaucrat himself is that he is sometimes unable even to act without direction; in yielding to this situation he loses some of his human quality and is alienated from his own actions. An implication for the military is that servicemen need to understand the nature of the bureaucracy of which they are now very much a part, and to be constantly aware of the reasons and the ethical bases of controls and decisions.

Psychological Aspects of Authority and Obedience

Ultimate authority may well have a divine origin or merely reside in the individual's conscience. The ultimate source of authority Man recognizes, however, is a personal matter and is not addressed here. The present concern is with how a man perceived authority in his environment and how he reacts to it in the form of obedience.

Authority consists of rights — the right to act for a body in certain areas, the right to direct others to perform activities of various kinds, and the right to impose sanctions and discipline. Whatever emotive or semantic difficulties there may be in defining 'management' and 'leadership', one fundamental is clear: 'managing' and 'leading' are essentially the exercise of authority. Authority is supported not only by law and custom, but also by group or societal approval, by concepts of private property, and by the human need for a leader in group effort. A complex set of attitudes, therefore, creates what Newman, Summer and Warren describe as 'a zone of acceptance' common to leaders and followers.19

Obedience stems from a sense of obligation — a compulsion felt by the subordinates to accomplish assigned tasks. A sense of obligation is itself simply an attitude. In the military, this attitude is conceived in terms of 'duty', and is also bound up with concepts of 'loyalty' and 'honour'. In the business world, the attitude is one of 'contract', and honour is satisfied when a man is 'as good as his word'.

The mechanism by which men recognize authority and obey it has been well-researched by psychologists, sociologists and management theorists. Until more modern times the military was universally regarded as pre-eminent in the field; indeed, researchers continue to study the military environment and its power to exert subtle and abiding influences over individuals. The very words 'authority' and 'obedience' connote a military image even to people who have not experienced a military environment. Nevertheless, the military is now increasingly regarded as a sub-group in a larger society, and independent research may contribute to a broader understanding of the subject.

Modern Management Research

Modern management theorists have given a great deal of attention to the resolution of conflict situations. A current management philosophy is 'Management by Objectives'. The method of resolving conflict in terms of this philosophy is instructive. In management by objectives, there are two main considerations — the setting of objectives and the outcomes of proposed courses of action as seen by all the parties involved. In an organization guided by this philosophy, employees are expected regularly to make known their own personal objectives, the objectives they see for their immediate working group, the objectives they see for other groups, and so on through the hierarchy. Careers are determined largely by the compatibility of personal objectives with the objectives of the organization as a whole. In the event of conflict over a particular issue, agreement is sought first on the basis of the objectives of the parties concerned, and then on the prediction of outcomes of optional courses of action. When objectives are incompatible and particular outcomes highly uncertain, conflict is resolved by bargaining and by the application of a variety of persuasive techniques. The concept of 'bargaining', which businessmen see as the operation of the prin-
The principle of compromise, could be viewed by traditional military men as 'the compromise of principle'. (Military executives may, however, benefit by refining their thinking on the nicety of the distinction.)

Modern business management has had to adapt to the increasing pace and complexity of the business world at large. A consequence is that managers rely more than ever before on the voluntary co-operation of their subordinates. The more willing and enthusiastic subordinates are, the more vigorous the enterprise is likely to be. Psychological techniques are used widely to promote the desired atmosphere of co-operation. The factors of human motivation and group dynamics have, accordingly, been subjected to intensive research. For the most part, the research seems only to have confirmed what most managers already believed to be true, but occasionally some startling results have been produced.

Business management research appears to confirm what military managers have traditionally accepted as true of the nature of co-operation — that co-operation is primarily an emotional response and that thinking plays a lesser part. The usefulness of this knowledge to a superior lies in his making an act of co-operation emotionally attractive to the subordinate. However, the matter goes deeper. Attitudes of voluntary co-operation take time to develop. Co-operation, as with all elements in the affective domain of human attitudes and motivation, is developed slowly by simple actions, day by day. Military experience does not, however, under-rate the value of reason in promoting co-operation. In the military, authority is generally recognized to have greater validity and consequent power if the reasons for its application are clear to the one who is expected to obey.

Modern business management, in turning away from overt, authoritarian controls, has turned towards manipulative techniques. Individuals have a need for a measure of personal independence, a desire to participate in decision-making, a willingness to learn and gain experience, and a tendency to identify personal security with group goals. The extent to which such psychological observations about subordinates may always have been valid is impossible to say, but the range of implications for the military may be studied to advantage. While a military force without overt, authoritarian control is virtually inconceivable, little imagination is required to conceive of situations in which manipulative techniques could be more effective than obviously authoritarian methods.

The distinction between 'manipulation' and 'leadership' is difficult to draw as both are essentially concerned with persuading others to do what you want them to do. Napoleon's speech to his Army of Italy in 1796 could have fallen into either category: 'Soldiers you are unclad, badly nourished; the government owes you much, it can give you nothing . . . I will lead you into the most fertile plains of the world. Rich provinces, great towns will be in your power; you will find there honour, glory, and riches!' Napoleon also knew how to praise and made his men worthy of that praise. Indeed, he was probably the first European general to recognize bravery and faithfulness in 'other ranks' by means of some formal token, and this he did by granting golden rings. Was he a clever leader, or merely a cunning manipulator?

Psychological Research

Sometimes the findings of business management and psychological researchers point in opposite directions. According to Richards and Neilander, 'The real source of authority lies entirely in the acceptance of its exercise by those who are subject to it . . . Why do subordinates accept, rather than reject the authority of their superiors? The answer lies in the consequences attendant upon each of the two alternatives . . . Submission to authority may result either from a deliberate recognition of it as good or from an acquiescence of it as inevitable, to be endured permanently or temporarily with scepticism, indifference or scorn, or with fists clenched but in the pockets.'

This statement is consistent with the argument advanced by Newman, Summer and Warren, but a recent work by Professor Milgram, which was widely acclaimed in reviews during 1975, throws an entirely different light on the matter. Milgram conducted some experiments which seem to show that the mere trappings of authority are in themselves quite sufficient to produce obedience — that, even in a free society, it seems that it is
not what people do, but for whom they do it that matters.

Milgram's conclusions seem to turn the clock back on the thinking that underlies the relation of obedience to authority, but his experiments are impressive and evidently meet rigorous criteria of scientific method. He asserts that a person — the ordinary person — can come to view himself as the instrument for carrying out another’s wishes and no longer regard himself in any way as responsible for his own actions. He argues that the person who, with inner conviction, will not steal, assault or kill, can perform such acts with relative ease when commanded by a respected authority. He observed that there were ‘poignant, even tragic’ elements in some of his subjects, as when a person strove desperately, yet unsuccessfully to control his actions in a situation of real consequence to him.\(^1\)

Milgram's book is fascinating in all its detail; however, one of his minor conclusions should have been accorded greater significance: there is, he says, a tendency for the individual to become so absorbed in the technical aspects of his task that he loses sight of what he is trying to achieve beyond that task. For illustration, Milgram cites the film ‘Dr Strangelove’ and the bomber crew who were so absorbed in the procedure of dropping an atomic bomb that their concern for competent performance eliminated their moral concern over the consequences of dropping the bomb. Concern for professional perfection can amount to obsession.

**THE RECONCILIATION OF OBEDIENCE AND AUTHORITY**

*Is a Reconciliation Possible?*

In history, the higher generalities of how authority is maintained, and why people obey, rarely receive intelligible expression, as they are usually described in forms appropriate only to the age in question. History purports, among other things, to tell the story of civilization — of class conflicts, and the pathos, the heroism and the grossness of the general multitude of humanity. Against the vast backdrop of history viewed in these terms, with its patterns of conflict, resolution of conflict and continuing conflict, obedience and authority seem impossible of reconciliation.

Philosophies try to reconcile obedience and authority in different ways. The moral question of obedience to authority — that is whether one should obey when commands conflict with conscience — has been argued and treated to erudite philosophical analysis in every historical epoch. Some philosophers have argued that the fabric of society is threatened by disobedience, that in the larger interest of preserving order and the constituted authority structure, evil acts may be necessary and have to be tolerated. Other philosophers have argued for the primacy of individual conscience, asserting that the moral judgment of the individual over-rides the command of constituted authority when the two are in conflict. Philosophical argument, therefore, points in all directions, and its usefulness lies only in elucidating the problem itself.

Psychologists and other theorists, with their passion for objectivity in their practical research into human behaviour, tend to be selective in their analyses and are necessarily guarded about the generalizations they are tempted to make. In these circumstances, they have difficulty in ‘painting the big picture’ that must be seen for the whole truth to be known. Consequently, they tend to adopt an attitude of pragmatism — ‘it works, so it must be right’. Nevertheless, such conclusions are invariably set largely in ignorance, and one can never be sure that what works in one situation will necessarily work in another.

**Towards a Code of Military Ethics**

Where, then, does the reconciliation lie? As Rousseau stated in the opening sentences of ‘The Social Contract’: ‘Man is born free; and everywhere he is in chains . . . How did this change come about? I do not know. What can make it legitimate? That question I think I can answer’.\(^2\) Problems of obedience and authority surface when a man is under pressure to act in a way that is incompatible with his personal code of ethics. A constituted authority operates within its own peculiar code of ethics, expressed partly in its system of laws, but more broadly in the customs and political ethos of the society at large. In the military, then, the problem may be seen as an incompatibility of two disparate codes of ethics — the ethics of the military, and the ethics of the individual.
Mankind's progress may well be viewed to some extent in terms of how man has succeeded in accommodating himself to the laws of nature. The laws of nature are immutable, but the laws of man, and the forces that generate authority over a group, are not immutable. Resolution of the conflict of obedience and authority can come about only by interaction between man and his society in a manner that either modifies the ethical code of the constituted authority or causes man to modify his own personal ethical code. The implications for the military are several.

A code of ethics for the military needs to be expressed in simple and inspirational language. The law is not an appropriate place for such a code; the prosaic terms of the law could entomb the principles amongst a complex collection of punishments and sanctions. Perhaps a code of ethics for the military would be too multi-faceted for comprehensive prescription, but something more is required than a statement such as the pithy West Point motto, ‘Duty, Honor, Country’. What is required is an intelligible statement of faith for framing personal decisions in particular situations.

A military man can claim to be a professional only if his personal code of ethics is not in conflict with the ethics of his profession. If the two codes are in harmony then, fundamentally, obedience and authority are reconciled. Obedience in these circumstances is not robot-like, but a thoughtful surrender to the common purpose of the individual and the military.

An implication for the training and management of the military is the need to educate servicemen to resolve their dilemmas of conscience before moments of stress occur. If, under stress, a man’s intellectual search into the morality of an act is not clear or logical to him, and there develops a hiatus of personal and military ethics, the consequences may either be tragic for the individual or inimical to a military operation. An implication for recruiting is the need to select men who have a rational, intelligent understanding of obedience and authority. An unwillingness to obey is patently unacceptable; a willingness to obey mindlessly is not only without morality, but devoid of the kind of individuality and personal initiative western-style democracy seeks to preserve.

**CONCLUSION**

The military ethos is difficult to capture in words, possibly because it consists of a set of attitudes found deep in the human psyche rather than of a set of rational calculations. It is concerned with the fundamental issues of life and death, the preservation of society, and the ideals that motivate men. Military ways are, however, changing with changes in society and advancing technology, and military thinkers are re-examining the fundamentals that govern the military way of life.

To some extent, legal sanctions reflect the formal relationship of obedience and authority, particularly in laws that deal with ‘the defence of obedience to superior orders’. International law, Continental law, and the laws of Britain, the United States, Canada and Australia, are at variance on critical points of the issue, but they have the common ethic that superior orders constitute grounds only for mitigating punishment and cannot be used to justify an act that is ‘obviously unlawful’ in the view of the ‘reasonable man’. The law, therefore leaves important questions unanswered. (What is ‘obviously unlawful’? Who is a ‘reasonable man’?) A proposal to include in Australian legislation the offence of issuing an unlawful command aims to place more responsibility on superiors than presently exists for the lawfulness of commands; in so doing, Australian legislation may embody a new principle in the military law of Western democracies.

Purely legal considerations do not, however, reconcile obedience and authority. The law is intended to mirror the will of society and, in a democratic society, can be changed only in the light of how society sees itself. The dynamics of obedience and authority are not yet understood at the personal level or within various institutional frameworks. Within the military, the basis of authority is changing, largely in response to advancing technology and bureaucratic controls, but with disturbing effects on the hierarchical structure and the processes of fixing responsibility. Diminishing confidence in normal authority is both a consequence and a problem that still has to be faced at all levels of military management.

Business management traditionally operates on a basis of ‘bargaining’ and compromise,
actions. Men who take up arms against one another in war do not on that account cease to be moral human beings, and acts of authority are always limited by their power to command the support of thinking men. The uncritical romanticism unfolded in Tennyson's 'Charge of the Light Brigade' may have extolled some fine military virtues; but it also celebrated a needless death not consistent with the ethos of professional military men. The more clinical revelations of Nuremburg and My Lai exposed the failure of legal processes to resolve basic problems of military ethics; yet they exposed even more acutely the need for military men to know not only what they do and how they do it, but also why. Assumptions that place value on the individuality of Man lead to the conclusion that obedience and authority are reconciled best in wise subordination to wise command.

Obedience and authority cannot, apparently, be reconciled in terms of law, psychology, historical experience or philosophy alone. The reconciliation, if it is possible, seems to lie deep within Man himself, his concept of society, and his concept of a world-view. Within the military, a reconciliation may be approached rationally by inculcating an intelligible code of ethics. The military has yet to develop a formal code of ethics, reflecting its own ideals and self-image and expressing a positive intellectual attitude towards conflict. The conflict of obedience and authority can be seen as a conflict of military ethics and personal values—a conflict that may not be recognized until a moment of stress occurs. An implication for the management of the military is that there exists a need to resolve ethical dilemmas before moments of stress occur. An implication for recruiting is that there exists a need to select men who have a rational, intelligent understanding of obedience and authority.

A foundation of Western philosophy is that each man is ultimately responsible for his own actions. Men who take up arms against one

NOTES
1 Vagts, Alfred, A History of Militarism, quoted from p. 16.
2 Ibid, p. 20.
7 Canadian Armed Forces QR & O. Chapter 19, quoted from 'The Canadian Yearbook of International Law, 1970', p. 66.
8 For extensive argument, see 'The Nuremberg Trials', Heydecker & Leeb.
11 Nichols, D. B., Group Captain, DDS-AF, Minute to JAG-AF 11 April, 1975.
14 Richards, Max, and Neilander, William A., Readings in Management, p. 709, et seq.
15 Ibid. Richards and Neilander have analysed these matters extensively.
16 Lang, Kurt, Military Institutions and the Sociology of War, p. 58.
17 Richards, Max and Neilander, William A., op. cit., p. 710.
18 Milgram, Stanley, Obedience to Authority.
19 Ibid., p. xiii.
20 Rousseau, Jean Jacques, op. cit., p. 3.

There is an extensive bibliography which space does not permit me to include. Any reader interested may obtain a copy by writing to me.—Editor.
A MUSKETRY COACHING AID USING VIDEO TECHNIQUES

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"NOTHING could be easier than hitting the bull's-eye at 25 yards with the service rifle; simply align the foresight and rearsight according to the easy-to-follow diagram; lay the tip of the foresight below the aiming mark in the prescribed manner; squeeze — (don't pull!) — the trigger, so that the sight picture is not disturbed, and there it is — a perfect hit in the middle of the target. Repeat as instructed for the remaining shots in the exercise and the result clearly has to be a perfect score. Naturally, if one is dealing with recruits who are learning to shoot with the service rifle, then scores will be less than perfect, but the whole business is so simple that after a few trips to the range they will all be achieving near-possible scores.”

Of course the foregoing has an air of unreality, even allowing for the gross oversimplification in not considering the influence of aspects such as breathing, grip, posture, physical condition and concentration. On the other hand, the fundamentals of good marksmanship are very simply stated, and the level of performance attained by the individual is largely a measure of his success in co-ordinating these basic elements. Given that the level of performance required for qualification is less than perfection, the spread of individual scores may be linked to the degree of motivation, and the final lines of the first paragraph can be amended to — "after a few trips to the range, and a few sessions of diagnostic and remedial coaching where necessary, they will all be achieving at least adequate scores”.

However, every instructor will agree that even this statement does not describe the real situation, because there still remains the problem of the odd man possibly highly motivated, who cannot shoot even adequately with the service rifle; he cannot group and may not be able to put all his rounds on the target. This does not mean that all is lost, however, as remedial coaching will eventually find the cause of the problem and, once it has been identified and corrected, his scores will rise with practice until he is performing at a level appropriate to his motivation. Our first paragraph now ends — “after a few trips to the range, and a few sessions of diagnostic and remedial coaching where necessary, they will all be achieving at least adequate scores”.

At this point the instructors are again throwing up their hands in horror. Manpower limitations and the tight schedules of training programmes allow for only a bare minimum of such remedial coaching, with the result that the recruit with a marksmanship problem may well go on to Corps training, taking his problem with him. Few things are easier to acquire than bad habits, especially in shooting, and they are very hard to lose.

This is the situation which led to the development at the Weapons Research Establishment (W.R.E.) of the Musketry Coaching Aid Equipment (figure 1).

The items illustrated consist of (1) a miniature lightweight TV camera mounted on the standard S.L.R.; (2) a commercial TV camera with long-focus lens, mounted on the tripod; (3) a control box to select the output of one of these cameras and direct to it (4) the TV monitor screen and (5) the videotape recorder; (6) a microphone.

The Rifle-Mounted Camera

The lightweight camera was developed and produced at W.R.E. some years ago, since when it has built up a reputation for reliability.
and performance in a number of applications. As shown in figure 2, it is mounted on a standard S.L.R. dust cover so that it may be readily attached to any service rifle.

This location ensures that the centre of gravity of the camera attachment coincides with the normal point of balance of the rifle. The camera is offset obliquely to the left so that it does not interfere with the normal rifle sight line, the travel of the cocking handle, or the ejection of spent cases. In order to minimise shock and vibration effects on the vidicon tube during firing, the camera is carried on a recoil-absorbing mount. The precision-ground rails of this mount ensure that the camera returns to exact alignment after each shot, while the totally-enclosed design excludes dust and moisture. The collar supporting the lens provides adjustment of the camera axis in azimuth and elevation, so that it may be harmonized with the sights of any S.L.R. at a range of 25 yd. The lens, designed and manufactured by the Mechanical and Optical Techniques Group at W.R.E., has a focal length of 150 mm and a maximum aperture of f/16. This restriction on the aperture serves primarily to minimise the risk of overloading the vidicon tube should the rifle be pointed toward the sun or other intense light source. In addition, the physical size of the lens is greatly reduced, resulting in a lightweight, yet extremely rugged and compact, optical system which does not interfere with the shooter's grip on the fore-end woodwork. The camera is provided with its own sight, consisting of a silhouette mask, in the shape of an S.L.R. foresight, cemented to the front face of the vidicon tube. This mask is produced by vacuum deposition of a thin film of lead onto a 0.005 inch thick microscope cover glass, the size relationship between the sight silhouette and the target image matching that perceived by the eye. Figure 3 shows a typical sight picture as displayed on the television monitor screen.

The Monitoring System

The commercial TV camera on the tripod in figure 1 is used as an electronic spotting telescope. It is fitted with an 8½ inch f/5.6 telephoto lens which produces a large-scale image of the target to enable each hit to be observed and recorded.

The outputs of the two cameras are fed to the control box, which enables the operator to select one of these signals for display on the television monitor screen. The picture being viewed may be simultaneously recorded on videotape when required, together with the instructor's spoken instructions and comments.

Operating Procedure

The operating procedure that has evolved is quite straightforward and can be thoroughly acquired in less than a day. The pupil is settled down with the rifle, given a brief description of the purpose of the system and, if deemed necessary, allowed to fire a couple of shots into the backstop to demonstrate that the handling of the weapon is completely conventional. When the pupil is settled and the instructor has gone through his preamble, the videotape recorder is started and the instructor states the date and time, the name and other details of his pupil, and his own name. The rifle camera input is selected and the pupil asked to lay an aim and hold it. This preliminary will often show up basic faults in the sight picture, and problems in breathing, grip and posture without a shot being fired, while dry firing will show up faulty trigger control. If any faults are apparent at this stage, the recorder can be stopped and rewound, and the pupil is shown his replay while the instructor points out the errors. The relevant section of tape can, of course, be replayed repeatedly until the point is made. The pupil then returns to his rifle, loads, and starts the exercise. After the first shot is fired, the spotting camera input is selected for a few seconds to indicate the position of the hit, then the rifle camera is selected in time for the second shot. As the exercise proceeds, the instructor's comments, whether directed to the pupil or, sotto voce, to the microphone, are recorded on the tape. This removes the burden of remembering that, say, the third shot was snatched or the fifth shot was accompanied by a flinch — on replay the voice track identifies each feature of the pupil's performance as it occurs, in synchronisation with the playback of the sight picture. (It must be pointed out here that, although the operation can be learnt in a day, learning to interpret the record is necessarily a longer process, and in common with any other type of diagnosis,
the accuracy and quality improve as experience is gained. Once the equipment enters regular service, a collection of tapes could quickly be assembled to illustrate the classic faults, and eventually a master tape produced to speed up the familiarisation of instructors). At the end of the exercise, usually five shots, the tape is rewound while the target is being changed. The instructor and pupil then view the replay with the target before them, and a quick analysis is made while the shot holes in the target are labelled in sequence.

ing the trigger. However, even this close scrutiny does not quickly give a clear-cut diagnosis, since the real problem case is usually a subtle blend of several faults. On the other hand, the replay will have shown the trainee that the rifle hits where it is pointed, and that, for a variety of reasons, it is not being pointed at the right spot at the critical moment. He should also have grasped the causes of some of his errors, and he can proceed to a second exercise with these firmly in mind. The second target should show some improvement, while

Diagnosis of Faults

This preliminary evaluation will not usually provide an instant solution, but it will almost certainly reveal a number of highly suspect shots. These can then be examined in minute detail, using the frame-by-frame stop-motion feature of the videotape recorder. Close study of the two seconds prior to trigger release usually discloses faults in breathing, holding or posture, whereas flinching or muscling occur in the last fifth of a second. Problems of trigger control are confined to the final one or two frames, and the videotape record has shown many times that what should have been a perfectly good shot has been ruined in a few thousandths of a second by snatching or jerk-

the tape replay will show the reasons for his improvement. Once this stage is reached, the tape begins to establish the causes, not only of his bad shots, but also of his good ones.

1 From the earliest stages, the camera attachment has been designed to fit any S.L.R. without modification. However, experience has shown that a dedicated TV training rifle should be part of the equipment package, for the simple reason that the value of the TV information depends upon the accuracy of the zero-ing of the rifle sights. In the case of the problem shooter who cannot group, the accuracy of zero of his issue rifle is an unknown quantity.

During a trial at the Infantry Centre, a rifle was zeroed by a “committee” of six instructors. This rifle was then used for TV instruction with the certainty that the rifle sight line, the camera sight line and the trajectory coincided at 25 yd.
He can now pick up his rifle with a clear mental image of what his sight picture should look like, and he should begin to produce a group, albeit a large one. Having achieved this, the trainee begins to realise that he can be the master of the rifle, and anxiety begins to give way to confidence.

There is no fundamental difference between this process and classical coaching methods, except for the additional visual information given by the television camera and stored on the videotape. The system does not claim to turn instructors into Olympic coaches, or bad shots into expert marksmen, but it offers the prospect of improved training standards within the existing structure, and, hopefully, improved standards of marksmanship.

**Development Status**

Throughout the development of the equipment, a close liaison has been maintained with the Army Office and the Infantry Centre. The first engineered prototype was sent to the Inf. Centre, Singleton for evaluation early in 1976. Production models may incorporate such improvements as the substitution of a video cassette recorder for the reel-to-reel machine, and integration of the components into a combined transit/operational package.

The equipment could also be adapted for use with other weapons by fitting appropriate sight silhouettes and lenses of suitable focal length. The camera body has a standard “C” type lens mount so that any 16 mm cine or television camera lens may be fitted, although this may entail modification or re-design of the lens support collar.

As a further bonus, when the equipment is not in use on the rifle range, the commercial camera, with the monitor and videotape recorder, could well be used elsewhere on the unit as an addition to the existing range of instructional aids. Perhaps the Regimental Diary could be augmented with a videocassette library of important events.

To sum up, the TV sight picture monitor is offered as an addition to the present scheme of rifle marksmanship training, to assist the instructor with those trainees who encounter a real problem in reaching the basic qualifying level of skill. It is not seen as a mass training aid for all recruits, although the master tape of classic faults could have some instructional value, as could a tape showing the right techniques. If it proves to be of value in enabling the instructors to turn out a higher percentage of competent, confident riflemen with no increase in training time or expenditure of ammunition, it will have met the original aim.

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**Fig. 2 Lightweight camera mounted on a standard SLR.**

(WRE. Salisbury, SA)
Fig. 3 Typical sight picture on the TV Monitor screen.

* * * *

IMPERIAL WAR MUSEUM, LONDON
DEPARTMENT OF SOUND RECORDS

The Museum's oral history programme was set up in 1972 under the direction of David Lance. With a collection now amounting to about two thousand recorded hours of interviews, it has become the largest and most varied oral history programme in Britain.

The Imperial War Museum is concerned with the broad field of war in the 20th century. In organising its recording programme the Department of Sound Records has exclusively used a special project approach and, to date, has completed seven separate projects. The groups of people who have been interviewed divide evenly between service personnel and civilians. Thus, on the one hand, there have been projects with military, naval and air force officers and other ranks. On the civilian side medical-welfare work, wartime industry, pacifism and conscientious objection, and war artists have been the main areas of research.

The projects so far carried out have been mainly concerned with the First World War period. Current work is concentrating on the inter-war years and the programme will eventually deal with the Second World War and post-war periods.

In 1976 two projects, which have already begun, will be carried out. One will be concerned with the British Army in India up to 1939 and the other with the mechanisation of the British Army during the same period. A third project on the Spanish Civil War will also get underway. Future plans include a social history of the Royal Air Force and the development of radar before and during the Second World War.

All the oral history projects are organised and carried out by Departmental staff — which includes three historians — who are supported by a small number of freelance interviewers. There are four other members of the Department who have special responsibilities for technical processing, cataloguing and transcribing. Freelance typists are also used for transcribing purposes.

The oral history archive at the Imperial War Museum will be officially open for public reference in 1977, but some specialised uses are already made of the collection. Recordings have been incorporated into Museum exhibitions and educational services; transcripts can be made available through the Museum library; and oral history tapes have been used in national, regional and local radio broadcasts. One forty-five minute radio programme, compiled and presented by David Lance, and created entirely from IWM recordings was broadcast nationally by the BBC in 1975. Further broadcasts are being scheduled. A fairly active publishing programming has been pursued. Three catalogues have so far been printed and several articles by the staff based on the Department's research work have been published in historical and professional journals. Plans are also advanced to publish a series of audio teaching cassettes in conjunction with the publisher Longman.
Captain Gregson talks of the reluctance of women leaders to compete on equal terms with men. (Army Journal No. 325, June 1976). I assume she advocates a greater involvement in those areas previously denied them. I heartily endorse her remarks.

Does Captain Gregson advocate the replacement of the six month WRAAC OCS course, after which a graduate is commissioned as a lieutenant, with a more realistic twelve month course graduating as a second lieutenant?

If she does, she has made no mention of this cosy little advantage.

K. A. Thomas
331 Supply Company, Seymour, Victoria. Lieutenant

I have just read Major McCullagh's article in the August issue of the Army Journal. My first thought was that maybe Major McCullagh is not aware that for the period 1955 to 1972 the Australian Army had been on operations against the type of person he sees as guerrillas, whether they be Malayan CTs, Bornean "incursionists" or VC/NVA.

Almost everyone who served in the Army for the period 1955-72 is well aware of the strengths and weaknesses of a guerrilla movement, and would easily be able to consider the problem from the point of view of ourselves as guerrillas, either as local force or national headquarters.

However, as Major McCullagh has gone to the trouble of researching and writing his article, I find it surprising that he (apparently) has not studied some campaigns which fit exactly the situations he describes in his article, namely:

- The Russian Front 1941-44, and the part played by partisans in it,
- Yugoslavia 1941-45,
- Vietnam 1945-73.

All these were campaigns brought to a successful conclusion, i.e. the (foreign) invaders withdrew and the guerrillas were left in control. The most outstanding guerrilla campaign of the Second World War was that carried out by the Russians.

The following books may be of interest to Major McCullagh (and other readers):

- Partisan Warfare — Otto Heilbrunn
- Handbook of Intelligence and Guerrilla Warfare — Alexander Orlov
- Viet Cong — Douglas Pike.

HQ Field Force Command, A. H. McAulay Paddington, NSW.
Development of Seabed Resources and Naval Co-operation*

Captain P. Kavanagh, N.S.
Republic of Ireland

In time of peace, when no threat to national security from external or internal sources is apparent, the size of the Navy of a nation without aggressive tendencies may well depend on the contribution it makes to national economy and welfare.

There are many roles, primarily civilian in character, in which Navies can co-operate with the rest of society to make use of knowledge, experience and developments in the underwater field, for exploration and exploitation of the seabed resources, without interfering unduly with their primary objective of preparing for war, and which may be fitted in with Naval planning, training and operations. Many of the tasks envisaged cannot readily be undertaken by other agencies without enormous expenditure on vessels, equipment and training of personnel. While seabed exploration cannot be expected to yield a quick financial return for expenditure, it is of utmost importance to nations, who would hope to benefit in the longer term from their geographic maritime position. This is particularly true in the case of small nations who cannot afford separate organisations for the many and varied chores in the oceanographic field but which must receive attention if the potential for exploration is to be assessed and developed.

Roles in which Navies may co-operate by contributing knowledge, experience and expertise, making use of their skills and of their equipment, and in which the value of their co-operation can readily be seen, are discussed hereunder. While some of the roles envisaged are only obliquely connected with the exploration and exploitation of the seabed, they are matters which require attention if safe methodical and economical progress is to be made.

Fishery Protection

While fishing and marine biology will not readily be identified with seabed resources in the public mind at the moment, when so much publicity centres on new found mineral resources, they are nevertheless most important resources. Their value is rapidly increasing and by the exercise of proper control, need not be a diminishing resource.

Fishery protection has been, traditionally, an alternative role for Navies over the centuries and has played an important part in the economy and development of maritime nations. Fishery protection has changed in concept and scope in recent years and is likely to be an area of greater international co-operation in the future. As it demands regular patrolling in all weather, it provides purposeful peacetime activity giving valuable experience and training in seamanship, navigation and communications which are basic to naval operations. It may be simultaneously carried out with general surveillance and the exercise of maritime jurisdiction. Fishery protection may take various forms: conservation within exclu-

* The O.C. Naval Service presented this paper at the Stockholm Maritime Symposium on 12 June 1975.
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Captain Kavanagh joined the Merchant Navy as a Cadet in 1937, after a pre-sea course at the Irish Nautical College. He served in the British Merchant Navy between 1937 and 1942 and the Irish Merchant Navy between 1942 and 1947. He qualified as a Foreign-going Master Mariner in 1947 and was commissioned as an Ensign in the Irish Naval Service on 13 June 1947. He was an Instructor at the Naval School, saw service in corvettes, getting his first command in 1951. He was promoted Captain in 1973 and appointed Commanding Officer and Director, Naval Service.
sive fishing limits, enforcing regulations and by-laws against all fishing vessels including those of one’s own nation; maintenance of the integrity of one’s exclusive fishery zones; policing and reporting upon the high seas in support of international or multinational conventions; offering support to one’s own fishing fleet, particularly on the high seas and on distant waters.

While future international law in respect of fishing remains shrouded in uncertainty pending the final outcome of the United Nations Conference on the Law of the Sea, it can be anticipated that there will be a greater need for an authoritative presence on seas and oceans to enforce regulations, impose conservation rules and protect national interests. It is likely that Navies will be required to provide this presence.

**Oceanography**

There are many areas under the broad heading of Oceanography in which Navies may co-operate with the rest of society. The search for cheap protein and the advance in science and technology which permits exploration of the seabed in areas heretofore inaccessible have increased interest and activity in biological and physical oceanography. The scope and activities of modern submarines and consequent activity in the ASW sphere demand specific and precise information not previously required or available. Hydrographic and Geodetic survey is a prerequisite to exploration of the seabed. Naval expertise may be used to contribute information in these areas, as much of the information is also required in modern Naval warfare.

Hydrographic survey of coastal and ocean areas has generally been carried out by Navies, the information gathered being vital to their own efficient operations. The information is also a requirement of commercial shipping and for scientific research. The expense of carrying out surveys may be largely defrayed by sale of charts and other publications and a profit sometimes results.

Due regard must be paid to meteorology by all users of the sea. It is particularly important in exploration and exploitation of the seabed for oil and minerals where large structures must be either fixed, portable or mobile. The strength required in the structures has a significant bearing on their cost and must be assessed with regard to weather condition likely to be encountered in the area of operations. Mobile structures, and equipment operated from them, may suffer serious damage if timely regard is not paid to the approach of stormy weather, but it is also necessary to use them for the maximum possible time because of the heavy investment in them. Reliable weather predictions are therefore essential and these must be based on reports from a wide variety of sources particularly sea areas, forecasting of sea and swell conditions being of particular importance. Naval vessels can play their part by observing, collecting and transmitting data in their areas of operation; in doing so they improve their own knowledge of weather and its effects, and develop their powers of observation.

Marine geology requires the use of substantial bulky and expensive equipment and personnel skilled in its operation. It does not seem practical to install the equipment in naval vessels, together with the technicians and scientists, without seriously interfering with their primary naval role. It also seems illogical to install it in a vessel which may be called away for naval duties. Navies may provide some help by extending their facilities for the operation of special vessels owned and used by geological departments, who may have little knowledge or experience of operating ships.

**Training**

Navies have developed knowledge, skills and techniques required for their wartime tasks over a number of years. Such skills are now needed and eagerly sought after by civilian organisations as exploration and exploitation of the seabed gains momentum. Navies have training staffs and equipment including simulators for training of personnel in sonar, diving, damage control, etc., which may not be fully utilised in peacetime. They could be used for training of civilians to advantage.

**Aid to the civil power**

It is necessary to ensure safe and proper conduct of those engaged in exploration and exploitation of the seabed and to enforce law and order. In areas of national jurisdiction
the laws of the flag nation will probably apply but the departments charged with implement­
ing the laws may not have the means of enforcing them. Navies, who have tradition­ally aided the civil power in enforcing the law beyond the coast in respect of revenue, emi­
gration and crime will be required to extend such aid as use of the sea increases. Small countries with large continental shelves, will be particularly dependent upon their Navies for such duties. Defence and protection of installations such as oil rigs, from enemies of and rescue areas and may be in a position to call upon air and medical support. Being unhampered or uninhibited by commercial consider­ations naval vessels can be made available more readily than commercial vessels for the task. Few countries can afford to main­tain vessels with long range and endurance for such tasks alone.

Environmental protection

The effects of sea pollution are felt in areas far distant from the source and primary damage to marine life is increased by the creation of biological imbalance. It is therefore a matter of international concern and has led to con­ventions for control of pollution of the sea. Navies contribute by monitoring, inspecting, reporting and by example. They may also be to the fore in clean-up operations in the event of heavy oil spillage and may be required as co-ordinators. Exploration and exploitation of the seabed, particularly for oil, has greatly increased the risk and incidence of pollution.

Conclusion

While Navies must primarily be a part of a Nation’s Armed Forces providing an exten­sion of military capacity to sea-ward of the coastline, co-operation with the rest of society
is both desirable and possible without diminution of their primary function. While armed forces cannot be expected to pay their way, the cost effectiveness of Navies can be improved by involvement and co-operation in certain civilian activities such as exploration and exploitation of the seabed and associated tasks. Such involvement may justify a larger Navy during peacetime in the eyes of society than might otherwise be contemplated or countenanced. It could provide more vessels, useful and interesting activity upon the seas, suitable nautical experience and training and improved career structure. It could create a more favourable public image, improving morale and aiding enlistment, while aiding the national economy.

CURRENT DEFENCE READINGS

Readers may find the following articles of interest. The journals in which articles appear are available through the Defence Library Information Service at Campbell Park Library and Military District libraries.

Big threat from the little bombs. New Scientist, 3 June 76: 516. (Nuclear Weapons — strategic; Nuclear weapons — tactical; Defence planning — Europe; NATO).

The RAAF needs new fighters and jet trainers. (Minister for Defence, D. J. Killen). Aircraft, August 76: 14-16, 48. (Defence procurement — Australia; Air Force — Australia; Aircraft procurement — Australia).

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Technical

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AF seeks to cut solid propellant smoke. Aviation Week & Space Technology, 16 August 76: 43. (Rocket exhaust; Solid rocket propellants).

Reviewed by Professor L. C. F. Turner, Professor of History, University of New South Wales, RMC, Duntroon.


These two volumes of the official British history of World War II were published originally in 1961, and form part of a set of four volumes dealing with the operations of the RAF Bomber Command. The period covered is that of the independent air offensive against Germany between September 3, 1939, and March 31, 1944.

Sir Charles Webster was best known for his masterly study of the foreign policy of Castlereagh, while Dr Frankland, who served as a navigator with the RAF is at present Director of the Imperial War Museum. They have produced one of the finest studies of war ever written, and their work combines profound analysis with a graceful and attractive style.

No aspect of the war has produced so much controversy as the contribution of strategic bombing to the Allied victory, and the great scientist, Sir Henry Tizard, has declared unequivocally that the fearful sacrifices of the RAF Bomber Command injured Britain more than Germany. In his opinion, the investment in money and manpower expended in the bombing offensive exceeded by far the damage done to the enemy. Webster and Frankland confirm this view.

In June 1942 Sir Arthur Harris, C-in-C Bomber Command, declared in a letter to Churchill that his operations would preserve "the flower of the country's youth" from a repetition of the Somme and Passchendaele. Much has been written of the "lost generation of subalterns" and the effects on British politics and society of the sacrifice of 37,000 officers in the holocausts on the Western Front. However, while the total British casualties in World War II were barely a third of those of 1914-18, the slaughter of elite youth was even greater. Apart from those killed in the RAF Fighter and Coastal Commands, and the officers who perished while serving with the Royal Navy and Army, 55,000 aircrew of Bomber Command died in the unique and terrible battle fought over Germany and Western Europe.

The authors refer to Sir Arthur Harris as a "great commander", but their volumes do nothing to substantiate this claim. He emerges as an extremely obstinate and narrow-minded man, whose extravagant statements were matched by his absurd miscalculations. He really believed in December 1943 that his "Lancaster force alone" could achieve by April 1, 1944 "a state of devastation in which surrender is inevitable". He really thought he was winning the Battle of Berlin in the period November 1943-March 1944, when in fact he was suffering a smashing defeat. Finally, after losing 94 bombers out of 795 despatched to Nuremberg on March 30, 1944, he broke off the battle and surrendered the skies to the night fighters of the Luftwaffe.

Even with regard to the prosecution of his precious bomber offensive, Harris was incredibly obtuse. He resisted by every means the introduction of a Pathfinder force until it was finally thrust down his throat by the Air Staff, and his indifference contributed to a year's delay in the introduction of the vital anti-radar device known as "Window". It is impossible to estimate the numbers of bombers and aircrew who were lost through this folly.

However, Harris had the ear of Churchill, who in turn was guided by his "scientific adviser", Lord Cherwell, who on March 30,
1942, formulated a master plan for crushing Germany. Drawing up a list of 58 German towns, which he singled out for destruction, this learned Oxford don informed the Prime Minister that “there seems little doubt that this would break the spirit of the people”. This policy, as politically immoral as it was strategically absurd, foundered on the twin obstacles of German organisation and German morale. It was to reach its culmination, long after the war had been won by other means, in the monstrous horror of the attack on Dresden on February 13, 1945.

So far from the bombing offensive destroying German armaments production, it continued to rise dramatically until September 1944. Admittedly the rate of increase of total German factory production was reduced in 1943 by nine per cent and in 1944 by 17 per cent, but less than half of this reduction was in armaments. The daylight offensive of the United States Eighth Air Force in 1943 was even more costly than that of the RAF Bomber Command and, after what the authors describe as a series of “tremendous victories of the German fighter force” was broken off following the disastrous attack on Schweinfurt on October 14, 1943.

Certainly, the destruction wrought by the RAF in its “area bombing” in 1943 was on a colossal scale. Between March 1943 and March 1944 200,000 people were killed and a much larger number injured, and Berlin, Essen and, above all, Hamburg were subjected to an incredible ordeal.

However, the authors state:

“In fact armaments production was not only maintained but much increased during the first half of 1943 ... The workers, both native and foreign, endured the ordeal to which they were subjected without any widespread demoralisation. The first result was due to the reorganisation of Germany’s methods of production by Albert Speer, the ablest of all Hitler’s lieutenants, the second to the measures taken to deal with the effects of the bombing ... The stoicism and indeed, in many cases the heroism of the German people may be considered to have been mistaken, but, whatever the consequences, the refusal to accept defeat through anguish and terror must command respect and admiration”.

This work makes it abundantly clear that Germany was not defeated or even seriously endangered by the independent bombing offensive conducted by the RAF and the US Eighth Air Force. She was overpowered in two gigantic operations of war — the successful invasion of Normandy in June 1944 and the crushing of the German front in White Russia in the Red Army’s offensive of the same month.

These disasters had the same effect on Nazi Germany as Napoleon’s defeat at Leipzig had on Imperial France, and made her ultimate collapse inevitable.

‘THE CITIZEN GENERAL STAFF’ (THE AUSTRALIAN INTELLIGENCE CORPS 1907-1914), by Captain C. D. Coulthard-Clark.

Reviewed by Lieutenant Colonel D. Elliott.

Military Intelligence has not been the focus of balanced or scholarly research in Australia to date. Only with the setting up of the present Royal Commission into Intelligence and Security under Mr Justice Hope has there been some increased interest into this subject within the general community. However, even this has been directed largely at the more sensational aspects such as security matters, rather than to intelligence as an Arm of the service and an essential part of the military profession.

The book under review is possibly the first published in this country to be concerned with the subject, and the only one dealing with intelligence within the Australian Army. It is fortuitous, therefore, that it has come out before the results of the Royal Commission, which may foreshadow changes to the present intelligence structure, for it will exist to record how that structure came into being. As a point of interest, the book has been studied by the Commission.

The text examines the development of an intelligence system within the AMF from pre-federation days, and the subsequent emergence of an intelligence corps until its disbandment in 1914. It is a small book (95 pp). This may be a disappointment to those readers who may have envisaged a more voluminous work covering events to a later period, and dealing with intelligence operations within the Army in
some detail. However, as the author has stated, the organization and structure of the early Intelligence Corps was completely different to that of the reformed Corps which has existed since World War II. The disbanding of the AIC in 1914 thus forms a clear break in historical continuity and makes separate examination of both periods appropriate and convenient.

The lack of discussion of intelligence methodology is perhaps mainly due to the fact that the book is a corps history rather than a history of intelligence overall. The disbandment of the AIC before it was given an opportunity to operate under wartime conditions is also relevant. Had it continued in existence throughout the war, detailed examination of its operation and methods would have been necessary. Nevertheless some fascinating vignettes do appear. There is reference to the pre-AIC assignment of the then Colonel Bridges on an espionage mission to New Caledonia, and the activities of Captain Taylor and his arrest of two suspected German agents at Prospect in 1912. There is mention of the role of the Intelligence Officers of the 5th Division at the battle of Polygon Wood, although by that time this had nothing to do with members of the Corps.

Readers, many within the Army and even within the present Intelligence Corps, may be surprised by the number of illustrious military personalities connected with the creation and early years of the AIC. The names of officers like Bridges, Monash and McCay are usually remembered for their wartime exploits, and not for any connection with intelligence. Even more startling must be the realization that the AIC, as the title of the book suggests, was the progenitor of the General Staff structure in the Australian Army, and that these officers not only performed that function, but did so in their own time as citizen soldiers. This was a situation which could not last, and the author has explained the outcome clearly.

Attention is drawn also to the prominent part that ex-AIC officers played in the formation and work of other organizations such as the Special Investigation Bureau and the Pacific Branch of the Prime Minister’s Department; forerunners of ASIO and Foreign Affairs. There is also the fleeting association with the early development of the Survey and Flying Corps.

This first volume is therefore full of interesting material which should hold the attention of the general reader and be a useful aid for the researcher and military historian. The comprehensive list of officers’ biographies is a case in point. This should prove an invaluable reference list, but unfortunately it may be a precedent hard to follow in the second volume.

In all, this is a well written and readable book. We await the second volume with anticipation.


In this sequel to ‘No Exit From Vietnam’ Sir Robert Thompson deals with the war in Vietnam from 1969 until early 1974. He discusses the considerable advances made in South Vietnam and in the Republic of Vietnam Armed Forces under President Nixon’s Vietnamization and pacification policy. The book explains why North Vietnam departed from normal doctrine and launched a conventional invasion when the strength and influence of the Vietcong was at such a low ebb and there was no chance of a popular uprising. It explains why this invasion failed and why the North then accepted ceasefire terms which it had previously rejected.

This book refutes many of the popularly held misconceptions created by North Vietnam and her supporters. Examples of these are: the bombing of the Hanoi dykes; the 200,000 political prisoners; and, the conditions under which prisoners were confined in the ‘tiger cages’. It points out the grave dis-service of the press and television through inaccurate and incomplete reporting and sounds a warning for any free country that might be involved in a war with a country that excludes the world press. This one sided reporting, Sir Robert claims, ‘was largely responsible for the creation of the myth that the war was unwinnable’.

Finally this book explains why the Paris Ceasefire Agreement of 1973 did not achieve peace and examines the world strategic impli-
cations of the United States acceptance of an agreement that could not be enforced.

Sir Robert Thompson writes in a vigorous style. He is forthright and forceful and supports his arguments logically with well researched facts. Although the book is a sequel to his previous work it introduces the reader to the history before concentrating on the defined period of study and could easily be read without any prior detailed knowledge of the Vietnam situation. The author was a RAF officer during the Second World War and served in Burma where he was awarded the MC and DSO. After the war he returned to Malaya where he had previously been in the Malayan Civil Service. He was successively Deputy Secretary and Secretary for Defence, Federation of Malaya, from 1957 to 1961. From 1961 to 1965 he was closely involved with the Vietnam war as head of the British Advisory Mission to South Vietnam. Subsequently he has made frequent visits to South Vietnam as a consultant to the United States Security Council and the White House. Through this continuing close association and personal contact with the military and political leaders of both South Vietnam and the United States of America he is able to write with authority and insight. He despises the journalists who wrote their articles from the relative comfort of Saigon and avoided the same mistakes by travelling as widely as possible within the country and learning from the people who were involved at village and hamlet level.

The text is supported by maps which are helpful but would be even more so if they were mounted to fold clear of the book for easy reference. A comprehensive index and list of notes is included at the back of the book. Notes placed in this way do not allow easy reference during reading, nor do these have a cross referencing system that would allow them to be read separately and the supported text found easily.

The book is well researched and presented in a simple, coherent form. It does not stop at merely recounting occurrences but analyses reasons for and implications of events. It will be controversial for many people but it will be difficult to refute its logic.

Sir Robert Thompson has produced a book which should be of great value to all military and strategic students. He certainly achieves his aim of directing attention to the world wide implications of an unsatisfactory conclusion to the Vietnam conflict. He has said what he feels must be said to counter the feeling of resigned acceptance of an ever diminishing free world society. In his words, quoted from the preface to the book:

"This has not been a pleasant book to write and it will not be a comfortable, or comforting, book to read, because it deals mainly with one of the most bitter wars in history and with the harsh reality of the danger which now faces the United States and the West."

Although this book was published in 1974, before the end of the Vietnam War, it is strongly recommended to readers who wish to get a more balanced view of the conflict as seen through the eyes of an acknowledged expert in the field of revolutionary warfare.

—Editor.


Reviewed by Major D. M. Ivison, RCT
UK Exchange Officer, Army Office, Canberra.

On Sunday 27th June this year, the world read about the hijacking of an Air France airbus en route from Athens to Paris with 250 passengers on board. The hijackers were members of the Popular Front for the Liberation of Palestine (PFLP). It was yet another in a series of aerial kidnappings.

Exactly one week later, on Sunday 4th July, came the electrifying news that Israeli forces, by an audacious coup de main, had freed the hostages from Entebbe airport in Uganda.

Scarcey less swift than the rescue operation was the publication of William Stevenson’s book “90 Minutes at Entebbe”, only a fortnight after the event — surely a literary record!

This short and very readable book analyses step by step the mechanics of the hijacking, the involvement of Uganda and its erratic leader Idi Amin. This and the feelings of the hostages is well covered by interviews with and extracts from diaries kept at the time by the prisoners.
During the course of the fateful week, the majority of the 250 passengers were released by the hijackers, but some 83 of Israeli and dual nationality were segregated and kept to be used as a bargaining counter for the release of 53 convicted Arab terrorists held in five countries.

While unsuccessful attempts were being made on the diplomatic front, the Israeli Government and armed forces were collecting intelligence and formulating military plans to effect the release of the hostages. A daring plan involving elements of all services of the Israeli Defence Forces was drawn up, rehearsed and successfully executed. The plan, based on an airborne assault over 2,500 miles from Israeli territory, must surely be unique in the annals of military operations for sheer audacity and enterprise. The actual assault and rescue operation lasted only ninety minutes and cost the attackers one dead and minor injuries to a handful of others. Two of the hostages were killed and a small number injured. The hijackers were all killed, as were a number of Ugandan soldiers. The Israeli team also destroyed several Ugandan MiGs on the ground to deter pursuit. One is left wondering if any other nation in the world would have the courage and audacity to undertake such an operation—aptly codenamed 'Operation Thunderbolt'.

A fascinating book for all readers, military or civil. My only criticism is that, being written so soon after the event, it is not possible for the author to analyse the results objectively nor to divulge his sources of information. For all that, once begun, it is a difficult book to put down.

Peter Firkins has indeed produced a book worthy of his subject. He has the uncanny knack of fully dealing with an action in one part of the globe, without getting it chronologically out of sequence with events taking place elsewhere. Thus the reader is able to follow the drama of an individual action without losing sight of the broad strategic concept.

In the opening chapter, he quotes from Rear Admiral Patey's Operation Order No. 1, issued aboard HMAS Australia in 1914, three days after the outbreak of war. The wording is crisp and precise, leaving no room for misconstruction, and yet giving the individual commanders great scope for initiative. The book is written in a similar crisp and concise style, which is complemented by a production which does credit to the printer and publisher. The print, though small is fine and easy to read, and the illustrations are neat and clear.

The book deals with the history of the Naval Service in Australia from the earliest days until 1972. All aspects are covered, including the coastwatchers of the Pacific campaign, mine clearance and even administrative responsibility.

The great actions of the first and second Sydney's in two World Wars, the exploits of the famous "scrap iron flotilla" of ancient destroyers in the Mediterranean and the tragic loss of HMAS Perth in the Battle of the Sunda Strait are all covered in fascinating detail. Also covered are the less spectacular, yet no less important roles of the battle-cruiser Australia in the North Sea in 1915-18 and HMAS Adelaide in 1940, under the command of Captain Harry Showers. Adelaide, by her presence off Noumea, probably saved New Caledonia from a Vichy takeover, which would have been both embarrassing and dangerous to the Allies' cause after Pearl Harbor.

As a long-serving member of the Royal Navy, it was something of an embarrassment to read of the early neglect and later acquisitiveness displayed by the Mother Country towards the seaward defence of Australia during the last two hundred years. Hulks, such as HMS Nelson, known locally as "HMS Useless and Dangerous", were fobbed off on the infant colonies. Then there was the call for the modern and powerful Australian Fleet to leave home waters in 1914 for service in the
Northern Hemisphere. This was no doubt justified after the destruction, by HMAS Sydney, of the raiding cruiser SMS Emden in the Cocos Islands, and the bottling up and subsequent destruction of SMS Königsberg in East Africa, but it is harder to understand why the Australian Government was prepared to disperse their fleet in 1940, when the threat of a powerful Japanese Navy loomed large and the myth of the invincibility of the fortress of Singapore was already suspect to clear-thinking strategists.

Nevertheless, in both wars, Australians afloat distinguished themselves. How fortunate was the RAN in having among its first graduates from Jervis Bay such men as Collins of the Sydney and Waller of the Stuart. This professionalism and dash has, happily, been carried on through Korea and Vietnam. The US Navy simply refer to their Australian colleagues as "The Professionals".

Britain somewhat compensated for her rough handling of the colonies and later the Commonwealth of Australia by sending out officers of superb calibre to command ships of the Australian Squadron. Admiral Sir George Tryon, the first Commander-in-Chief, was such a man, as was Vice Admiral Sir William Creswell, who more than any one man was responsible for the establishment of the Royal Australian Navy. In later years, Commander (later Admiral Sir Philip) Vian, of Altmare fame, was Gunny Officer of HMAS Australia in the early twenties. Rear Admiral V. A. C. Crutchley, VC, RN, who hoisted his flag in the second Australia in July 1942, was Commander Australian Squadron at the Battle of Savo.

There is much in this book for the naval historian. There is also much food for thought for those who may scoff at the present size of the Royal Australian Navy. Written by an ex-member of the RAAF, it is a fitting tribute to a small, but intensely professional service which has always been in the van of naval actions across the globe during this turbulent century.

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Balloon-borne radar to look for low fliers. Electronics, 19 Aug 76; 33.


Milan and Harpoon — Britain's new guided weapons. Defence Attache, May 76; 12, 14.


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The AN/AWG9 and the AIM 54A: a formidable option for Australia. Pacific Defence Reporter, Sep 76; 47-50.


Marisat takes first operational step: present market potential believed 4,500 ships. Sea Technology, May 76; 10-12.


Communications for air defence systems. Systems Technology, Jun 76; 10-16.

Mini-based system to manage 3 million documents. Computerworld, 23 Aug 76; 28.


Specialized training versus experience in helicopter navigation at extremely low altitudes. Human Factors, 18 (3), 1976; 305-308.
A Medal for Horatius

Colonel W. C. Hall in The Army Combat Forces Journal (U.S.)
Reproduced from the Canadian Army Journal

Rome
II Calends, April, CCCLX

Subject: Recommendation for Senate Medal of Honour.

To: Department of War, Republic of Rome.

I. Recommend Gaius Horatius, Captain of Foot, O-MCMXIV, for the Senate Medal of Honour.

II. Captain Horatius has served XVI years, all honourably.

III. On the III day of March, during the attack on the city by Lars Porsena of Clusium and his Tuscan army of CXM men, Captain Horatius voluntarily, with Sergeant Spurius Lartius and Corporal Julius Herminius, held the entire Tuscan army at the far end of the bridge, until the structure could be destroyed, thereby saving the city.

IV. Captain Horatius did valiantly fight and kill one Major Picus of Clusium in individual combat.

V. The exemplary courage and the outstanding leadership of Captain Horatius are in the highest tradition of the Roman Army.

JULIUS LUCULLUS
Commander, II Foot Legion

Ist Ind. A.G: IV Calends, April, CCCLX
To: G-III
For comment.

G. C.

IId. Ind G-III. IX Calends, May, CCCLX.
To: G-II
I. For comment and forwarding.

II. Change paragraph III, line VI, from "saving the city" to "lessened the effectiveness of the enemy attack." The Roman Army was well dispersed tactically; the reserve had not been committed. The phrase as written might be construed to cast aspersions on our fine army.

III. Change paragraph V, Line I, from "outstanding leadership" to read "commendable initiative." Captain Horatius' command was II men — only 1/IV of a squad.

J. C.

IId. Ind. G-II II Ides, June, CCCLX.
To: G-I
I. Omit strength of Tuscan forces in paragraph III. This information is classified.
II. A report evaluated as B-II states that the officer was a Captain Pincus of Internum. Recommend change “Major Pincus” to “an officer of the enemy forces.”

T. J.

IVth Ind. G-I IX Ides, January, CCCLXI
To: JAG
I. Full name is Gaius Caius Horatius.
II. Change service from XVI to XV years. One year in Romulus Chapter, Cub Scouts, has been given credit for military service in error.

E. J.

Vth Ind. JAG IId of February, CCCLXI.
To: AG
I. The Porsena raid was not during wartime; the temple of Janus was closed.
II. The action against the Porsena raid, ipso facto, was a police action.
III. The Senate Medal of Honor cannot be awarded in peacetime. (AR CVII-XXV, paragraph XII,c.)
IV. Suggest consideration for Soldier’s Medal.

P. B.

VIth Ind. AG, IV Calends, April CCCLXI
To: G-I
Concur in paragraph IV, Vth Ind.

L. J.

VIIth Ind. G-I, I day of May, CCCLXI
To: AG
I. Soldier’s medal is given for saving lives, suggest Star of Bronze as appropriate.

E. J.

VIIIth Ind. AG III day of June, CCCLXI
To: JAG
For Opinion.

G. C.

IXth Ind. JAG, II Calends, September, CCCLXI
To: AG
I. XVII months have elapsed since event described in basic letter. Star of Bronze cannot be awarded after XV months have elapsed.
II. Officer is eligible for Papyrus Scroll with Metal Pendant.

P. B.

Xth Ind. AG. I Ide of October, CCCLXI
To: G-I
For draft of citation for Papyrus Scroll with Metal Pendant.

G. C.
XIth Ind. G-I III Calends, October, CCCLXI
To: G-II
I. Do not concur.
II. Our currently fine relations with Tuscany would suffer and current
delicate negotiations might be jeopardized if publicity were given to
Captain Horatius' actions at the present time.

T. J.

XIith Ind. G-II VI day of November, CCCLXI
To: G-I

A report (rated D-IV), partially verified, states that Lars Porsena
is very sensitive about the Horatius affair.

E. T.

XIIIth Ind. X day of November, CCCLXI
To: AG
I. In view of information contained in preceding XIth and XIIth Indorse­
ments, you will prepare immediate orders for Captain G. C. Horatius
to one of our overseas stations.
II. His attention will be directed to paragraph XII, POM, which prohibits
interviews or conversations with newsmen prior to arrival at final
destination.

L. T.

Rome
II Calends, April, I, CCCLXII
Subject: Survey, Report of DEPARTMENT OF WAR
To: Captain Gaius Caius Horatius, III Legion, V. Phalanx,
    APO XIX, c/o Phalanx, APO XIX, c/o Postmaster,
    Rome.
I. Your statements concerning the loss of your shield and sword in the
Tiber River on III March, CCLX, have been carefully considered.
II. It is admitted that you were briefly in action against certain
unfriendly elements on that day. However, Sergeant Spurius Lartius
and Corporal Julius Herminius were in the same action and did not
lose any government property.
III. The Finance Officer has been directed to reduce your next pay by
II 1/2 talents (I III/IV talents cost of one, each, sword, officers; III/IV
talent cost of one, each, shield, M-II).
IV. You are enjoined and admonished to pay strict attention to
conservation of government funds and property. The budget must be
balanced next year.

H. HOCUS POCUS
Lieutenant of Horse,
Survey Officer

Q