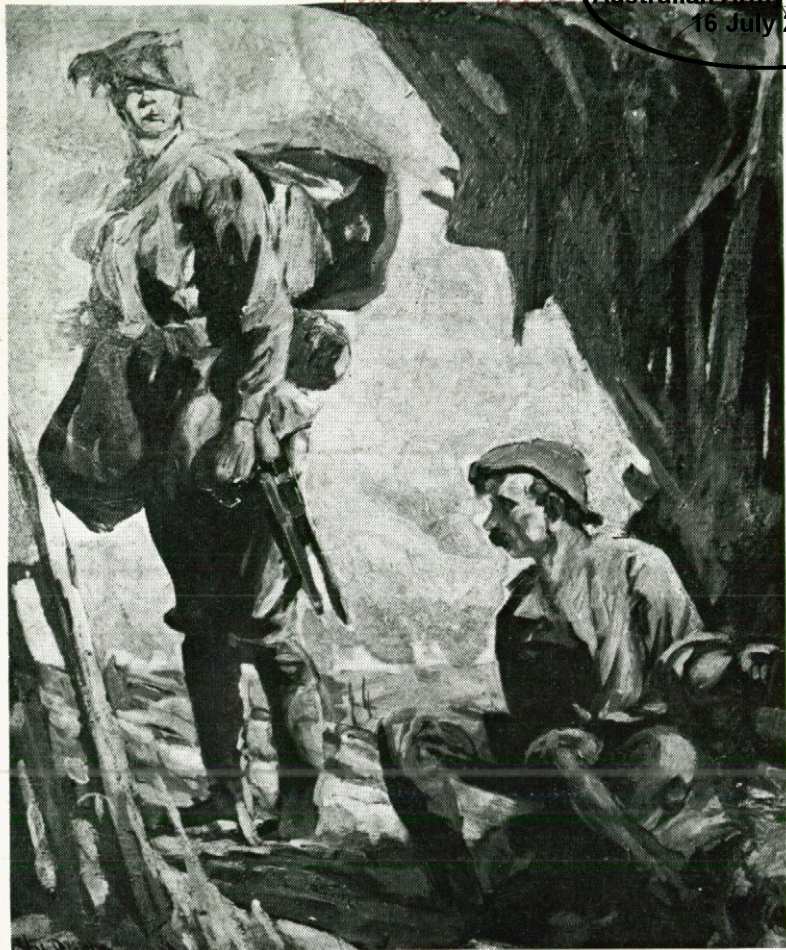
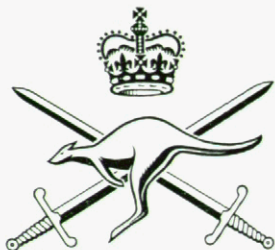


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Australian Army History Unit
16 July 2014



ARMY JOURNAL



ARMY JOURNAL

Editor

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Printed and Published for the Australian Army by Renown Press (Aust.) Pty. Ltd. and issued through Base Ordnance Depots on the scale of one per officer, officer of cadets, and cadet under officers.

Contributions, which should be addressed to the Editor, Army Journal, DTP, Army Headquarters Canberra, A.C.T. 2600, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers.

\$10 will be paid to the author of the best article published in each issue. In addition, annual prizes of \$60 and \$20 respectively will be awarded to the authors gaining first and second places in the year.

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Cover: 'Seen any of our mob about'? by Hon. Lieut. Will Dyson, France, 1918. At the Australian War Memorial.

ARMY JOURNAL

A periodical review of military literature

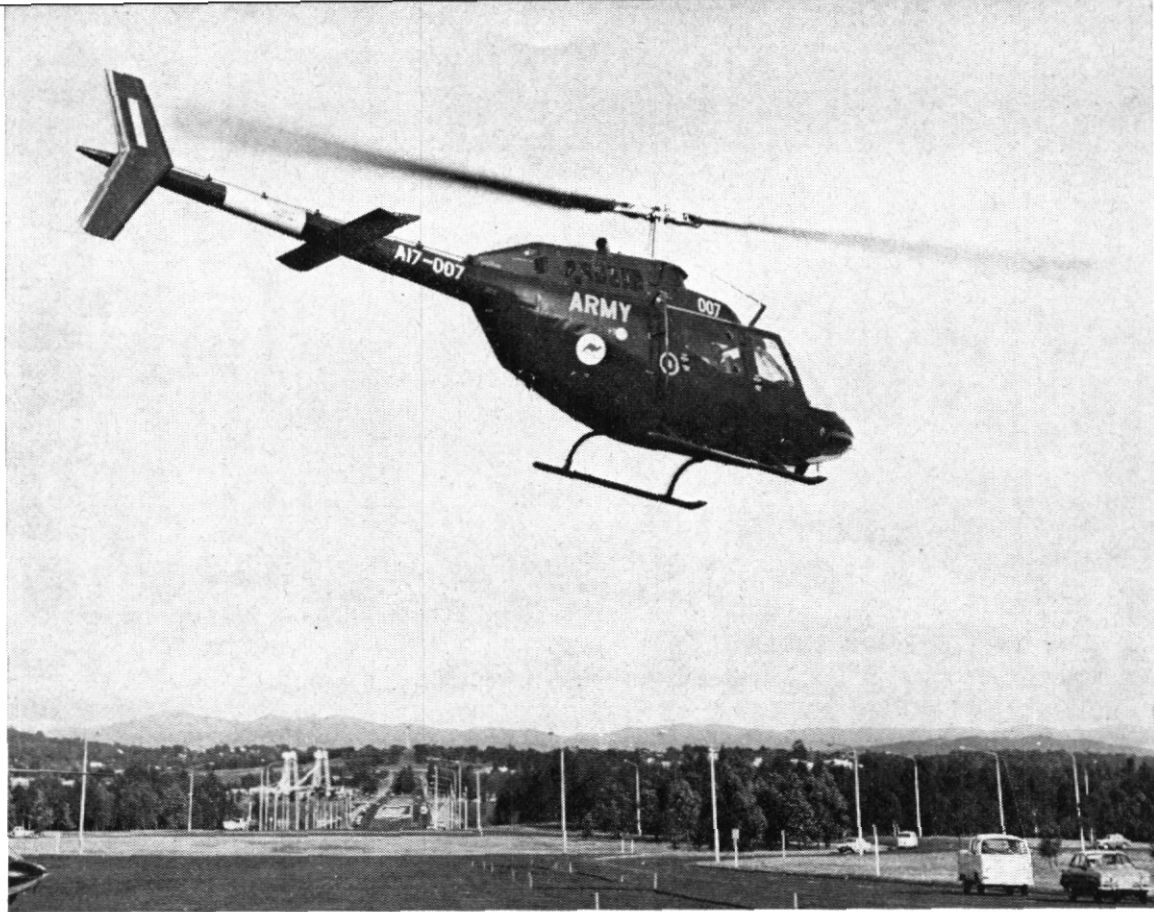
No. 278, JULY 1972

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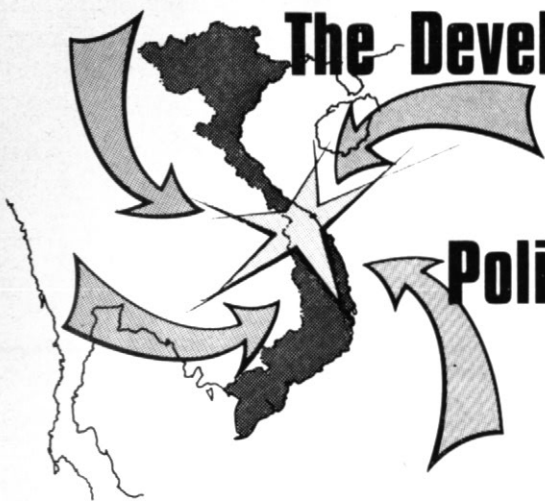
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(Army Public Relations)

One of the Army's new light observation helicopters was demonstrated recently outside Army Headquarters in Canberra. It is the Bell 206 B-1, the Australian version of the US Army's OH-58A Kiowa. The Army will receive 75 of the aircraft to replace the Bell Sioux helicopters and they will be phased



The Development of

VIET MINH Political Power

*Lieutenant Colonel P. C. Gratton, OBE
Royal Australian Engineers*

Most of the strong points of Vietnam are political ones: most of the French strong points are military ones.¹

TRUONG Chinh made this observation shortly after the outbreak of hostilities between the French and the Viet Minh in December 1946. By this time the Viet Minh had already achieved political mobilization of the majority of the Vietnamese people to the level necessary to wage successful revolutionary war. This political organization was really the key to the whole course of the war, and in particular to the survival and eventual success of the Viet Minh forces which were in a very embryo state at the time. The development of the Viet Minh's nationwide political organization was an impressive feat on any standard, but particularly so in the parochial, divided, and politically apathetic Vietnamese society existing before and during World

Lieutenant Colonel P. C. Gratton graduated from the Royal Military College, Duntroon in 1952. He holds Degrees in Civil Engineering, Arts and Economics from the Universities of Melbourne and Queensland. He attended the Staff College, Camberley in 1964 and the Australian Joint Services Staff College in 1972. His regimental appointments have included service in Malaysia (1955-56), Papua New Guinea (1962-63) and more recently South Vietnam (1969-70) as Commanding Officer of 1st Australian Civil Affairs Unit. His present appointment is Staff Officer to the Chairman Chiefs of Staff Committee.

War II. This article will examine the nature and origins of the Viet Minh's political strength with which they entered the war against the French in December 1946.

Some authorities on revolution consider that three elements must be present for a successful revolution to occur—a revolutionary potential or environment, an effective revolutionary leadership and a revolutionary organization with a viable political structure linking it to the broad mass of the people.² It is convenient to consider the Viet Minh's development of revolutionary political strength by examining the strength and the origin of these three elements.

Revolutionary Potential

Revolutionary potential refers to the state of affairs when an incumbent government or social system is no longer capable of meeting the demands made on it by the people. Revolutionary potential is not in itself any guarantee that revolution will actually take place. Without the emergence of an effective leadership and political organization, the most that can be expected is sullen discontent and perhaps sporadic and disconnected outbursts of violence. However it is equally certain that unless revolutionary potential is present, a successful revolution cannot occur.

There was strong revolutionary potential in Vietnam by the time of World War II. French reforms in village administration had weakened the traditional village leadership and had tended to promote the legal autonomy of individual villagers, without establishing any new form of political organization to encompass the new relationship.³ The different French methods of administration and the different policies adopted in the various parts of Indochina tended to reinforce old regional differences and to create new ones. This became of great significance later as an obstacle to achieving a revolutionary organization that was truly nationwide and could overcome regional and parochial loyalties.

¹ Trung Chinh, *Primer for Revolt*, Praeger, New York, 1963, p.166.

² J. T. McAlister Jnr, *Vietnam—The Origins of Revolution*, New York, 1969, pp.4, 324 to 347.

³ McAlister, p.48.

This disruption of traditional society was heightened by the social effects of the economic changes wrought by the French. These included the great increase in rice land in the Mekong Delta after World War I, the rapid acceleration in coal and mineral production in the North, and the development of the rubber plantations. In the Mekong Delta these changes produced a class of semi-feudal wealthy Vietnamese absentee landlords and a large class of landless tenants. There also evolved a small class of wealthy capitalists—mainly foreign—a small middle class, and a working class of plantation workers, miners and public works employees.

Despite the great increase in rice exports and in rubber production, the profits went to the big land owners and the French exporters, and the workers and peasants benefited very little. The enormous profits earned by the big companies, and the relatively minute returns to the peasants and workers exemplified the duality of the economy. The traditional economy was based on little trade and local consumption but the French introduced a modern commercial economy based on world wide exchange. 'Those who organized trade maintained the workers on the level of the traditional economy but sold the product of their work on the level of the city economy. The difference between the two went into their pockets.'⁴

Taxes were also a heavy burden on the lower classes, partly due to the French putting tax collection on a more efficient basis. Indirect taxes were heavy through the state monopolies on salt, alcohol and opium with their iniquitous consumption quota systems, but income tax was worse. The peasants' money income was very small and their income tax relatively heavy. Mus quotes 32 piastres per annum income for a family of eleven with income tax of six piastres. 'Such a state of affairs in which the people's livelihood is calculated in terms of one world and their taxes in another cannot endure.'⁵

Of more significance than the mass of discontented peasants and workers, was the emergence of a frustrated

⁴ McAlister, p.71, quoting P. Mus, 'Vietnam: A Nation off Balance', *The Yale Review*, p.535.

⁵ McAlister, p.76, quoting P. Mus, 'The Role of the Village in Vietnamese Politics', p.269.

intelligentsia. After World War I, the French instituted a comprehensive education programme to train indigenous cadre for both government and commercial administration. The programme was small in absolute numbers and restricted to those Vietnamese families in favour with the French. Altogether only 14,393 completed primary education and 827 gained a baccalaurate up to World War II.⁶ Most of these found a place in the French administration, but hardly any held positions of authority since these were reserved for Frenchmen. The only other avenue for those with middle level education was as primary school teachers, and even here they were blocked from higher level teaching by their lack of higher education which they were unable to get because of the shortage of schools. This group had thus been given the means and expertise to achieve higher social mobility, but had then been denied the opportunity. They were of great importance, because they formed the prime source of the revolutionary leadership.

Finally, there was the stifling of all meaningful political expression in colonial Vietnamese society. Almost all political activity was regarded by the French as subversive and vigorously repressed. In so doing they suppressed the energies that had gone into centuries of Vietnamese political conflict. The new wealthy *elites* and the newly educated class had the expectation of greater political power but they were denied any real opportunity to participate in the political affairs of their own country.

This then was the essence of revolutionary-potential, a society with its traditional social structures broken and nothing worthwhile to replace them, with old regional differences heightened and new class tensions created between the new wealthy *elites* and the oppressed and miserable peasants and workers, with a moderate-sized educated class and a wealthy *elite* with rising expectations, but barred from effective political power. The latter two formed the basis of the various parties including the communists who emerged in the 1930s and who were to lead the nationalist struggle. Of all these groups it was only the communists who recognized the need to link nationalism with social change.

⁶ McAlister, p.79.

Buttinger states:

By 1930 many peasants were ready to listen to any party whose leaders were willing to make the plight of the peasants their chief concern. This fact unfortunately, was grasped only by the Communists. When they proclaimed that independence was meaningful only if it brought about some improvement, they had won the first round in the fight for leadership of the nationalist camp.⁷

Development of the Revolutionary Leadership—The Viet Minh

In this revolutionary situation, the communists alone amongst the various nationalist parties and factions that emerged appreciated the importance of gaining mass support by advocating improvement in the lot of the peasants and workers as well as evicting the French. The Communist Party was to form the revolutionary leadership, and the next step in analysis of the Viet Minh's political strength is to show how this leadership developed and eventually formed a cohesive and effective force capable of ousting the French. Their problem was threefold. First, they had to link together the political loyalties based on the traditional structure, with the small but politically conscious group that had broken away from the traditional social patterns. Secondly, there was a need to mobilize the great mass of rural peasant support, and to link it with the urban population. Finally, there was a need to overcome several other parties also vying for leadership of the revolutionary movement.

The Indochinese communist movement had its origins in the Thanh Nien exile group that was formed in South China and took over leadership of the loose knit Tan Viet party in Central Vietnam. By 1930 numerous factions had developed and Ho Chi Minh imposed unity on the fragmented groups; proclaiming the name of the Indochinese communist party with the twin aims of 'overthrowing imperialism and feudalism and securing national independence and freedom'.⁸ The organization was small but spread throughout the country and the Party made a display of strength in Central Vietnam in the Nghe Tinh soviets that lasted from May 1930 till October 1931. The soviets were of interest as the first demonstration of clandestine organization and alternative government, but were easily destroyed by the French in 1931, after which all overt revolutionary activity

⁷ J. Buttinger, *Vietnam: A Political History*, Praeger, New York, 1968, p.166.

⁸ McAlister, p.93, quoting *Thirty Years Struggle of the Party*, Book One p.24.

ceased for ten years. The Soviets were based on essentially local issues which were still the life-blood of Vietnamese politics, and no political movement including the communists yet had the organization or the military arm to overcome them. The feebleness of the pre-war nationalist revolutionary movements including the communists can be measured by the fact that despite the excellent revolutionary potential, the French held them all in check with a small and dispersed force numbering in 1940 only 10,799 regular French forces, 16,218 indigenous militia, and 507 French police agents.⁹

The ICP kept its organization intact in the late 1930s until the collapse of the French Popular Front in 1939 and the outlawing of the Communist Party in France. Following this the *Sureté* struck and decimated both the ICP and Trotskyist organizations. Thus at the beginning of World War II, the ICP had only the bare remnants of an organization, although these remnants were spread nationwide and had the potential to revive given the right conditions. The wartime years provided this opportunity and the communists made the most of it, showing great flexibility of approach and varying their tactics to suit the opportunity of the moment.

There were two uprisings of significance in 1940—the Bac Son uprising in the Tho country in the mountains of north-west Tonkin, and the Nam Bo uprising in the Mekong Delta. The significance of the Bac Son uprising was that it led to the formation of the first revolutionary base area in the four mountain provinces adjacent to the Chinese border. In September 1940, the Tho people had begun to accept the leadership of communists cadres in ambushes against isolated French detachments manning the border forts. The uprising was put down, but the French never really regained their position. By 1942, the communists were emphasizing development of revolutionary political bases over a wide area, and intensifying the revolutionary political structure. These bases in the Tho country eventually formed the springboard for the August revolution in 1945.

The Nam Bo uprising on the other hand had some initial

⁹ McAlister, p.102, quoting *Annuaire Statistique de l'Indochina 1936-37*, pp.25, 241.

successes, but the resulting repression by the French was so severe that the party almost ceased to exist in the South, and even by 1944 had still not recovered.¹⁰ The rising was impetuous, badly timed and lacked the necessary popular support. This weakening of the party in the South was one of the basic causes of the Viet Minh's later difficulties and the French successes in the South.

The next event of significance was the formation of the Viet Minh following a meeting of the ICP in May 1941. At this meeting, a decision of enormous importance was taken in that the class struggle was to be subordinated to the nationalists struggle. The Viet Minh was formed as a front organization to:

rally the different strata of the people and the national revolutionary forces in the struggle against the main enemy of the nation, that is the French and Japanese fascist imperialists.¹¹

In theory the communists were only members of the Viet Minh but in fact they were synonymous with it, even after the dissolving of the ICP in October 1945. Their purpose in forming the Viet Minh was to attract a wider base of political support, and to do this they were even prepared to set aside temporarily their land reform programme to enable landlords to identify with the Viet Minh. This was successful and under the catchcry of nationalism, all sorts of mass associations were eventually formed to create a countrywide network for participation of the people in politics. Behind it all, the power of the Viet Minh stemmed from their ability to adopt and articulate the nationalist sentiment, and to identify it with the people's needs.

From 1941 to 1945 the Viet Minh steadily expanded their political influence, mainly in the mountainous area of the six northern provinces. The work of expansion was done by the party cadres or infrastructure and was fairly limited because of the early shortage of trained cadres. Nevertheless, by 1945 the Viet Minh were estimated to control one third of the area of North Vietnam and about 10% of the people.¹²

For the Viet Minh, the most significant event of the war was the Japanese take-over of 9 March 1945 in which they

¹⁰ McAlister, p.132.

¹¹ McAlister, p.144, quoting *Thirty Years Struggle of the Party*, p.76.

¹² McAlister, p.139.

overthrew the French administration and interned the French military that did not manage to escape into South China. At a blow, the Japanese had eliminated not only the French colonial regime that had created the revolutionary potential, but the French authority that had been keeping it in check. This provided a splendid opportunity for the Viet Minh to consolidate and expand their political base, and they took full advantage. Perhaps the most outstanding aspect of this period is the huge gap in political awareness, experience and ability between the communists and the other nationalist movements.

The Japanese installed a Vietnamese government in Hanoi under Tran Trong Kim to govern the North and Centre, but retained direct control over the South until just before the August revolution. This government consisted largely of a Francophile group of scholars and bureaucrats with no wide popular appeal, no articulate goals of independence, and no worthwhile machinery of government to impose their will in the rural areas. They were doomed before they started and resigned one week before the allied victory over Japan.

For the Viet Minh, the feebleness of the Kim government left a political vacuum in the rural areas which they proceeded to fill wherever they could. In some areas by this time they had enough strength to carry out every day administrative tasks such as settling disputes, registering transactions, and maintaining order, and the extent of this activity was limited only by the shortage of cadre. Liberation Committees were formed in factories, mines and villages, and Peoples Revolutionary Committees in the areas under Viet Minh control. At this period also, the Viet Minh brought many local pressure groups under their influence by offering them legitimacy within the nationalists cause, asking only that they form Liberation Committees to take part in the struggle.

By August 1945, the Viet Minh had thus considerably expanded their organization. They had gained status as the recipients of allied assistance, and although their influence was strongest in the Liberated Zone created in 1945 in the seven northernmost provinces,¹³ the cadres were also active in the

¹³ E. J. Hammer, *The Struggle for Indochina*, Stanford U.P., Stanford, 1954, p.100.

Red River Delta, exploiting the widespread misery caused by a severe famine and by Japanese food requisitions.

The August Revolution

Despite these preparations, the end of the war caught the Viet Minh by surprise. Even in the North they had not properly organized a following amongst the broad mass of the people, and in the South they were very much weaker, being dependent on the old Communist Party organization which had not yet recovered from the aftermath of the Nam Bo rising of 1940. Nevertheless they correctly appreciated that, ready or not, the opportunity would never be repeated and had to be seized. It was of immense importance to be able to appear as a government in power when welcoming the allied forces.

In character, the August Revolution was more the opportunist seizing of power by a small minority group than a true revolutionary struggle. The Japanese did not oppose it and the Viet Minh needed only 1,000 armed troops to seize Hanoi. Events were largely confined to the three major cities of Hanoi, Hué and Saigon, and had little immediate bearing in the countryside. The Viet Minh had thus reached the stage of actually holding power, but with an inadequate political base amongst the masses and without the military strength to sustain themselves in office. They were the firmly entrenched champions of nationalism, although several non-communist groups were still active challengers for leadership of the nationalist movement.

The Situation in the South

Before considering the events between the August Revolution and the outbreak of war in December 1946, it is worth reviewing the situation in the South, which was quite different to that in the North, and provided a serious problem for the Viet Minh in later years. The Party in the South had rather tenuous relations with the Viet Minh and was headed by men with French education and more cosmopolitan experience than in the North. They had developed some autonomy and had resisted efforts by the Central Committee to bring them under control during the Japanese occupation. The population in the South was much more politically conscious and organized, and there were several strong groups, parties, and sects besides the communists. The

Japanese had also contributed to the militarization of the sects, particularly the Cao Dai, whereas in the North, the Viet Minh were the only armed group. This reflected the fact that pre-war the *Sureté* had concentrated their efforts on eliminating nationalist groups in the North. Ellen Hammer comments:

Cochin China was afflicted with a multiplicity of rival political and religious groups. Members of the Cao Dai and Hoa Hao, other nationalists who had worked with the Japanese, Trotskyites and Communists, they were each determined to maintain independence but only in their own way and in their own image.¹⁴

The communists in the South tended to over-emphasize discipline and did not seem to be able to state broad enough nationalist goals to win the uncommitted dissatisfied masses in the rural areas. Consequently the August Revolution in the South was even more characterized by elite politics than in the North. Partly because of this, but more importantly because of the British occupation, the revolution was very short-lived.

The Viet Minh received strong support from the Advanced Guard Youth, who provided the nucleus of their armed force in the South. The Viet Minh did not formally take over the independence movement for about a week after VJ Day, when they formed the Committee of the South, which while recognizing the authority of Hanoi, in practice functioned quite independently.¹⁵ Many of the other nationalist groups, including the Trotskyites, would not even consider joining the Viet Minh, despite Viet Minh attempts to broaden their base by playing down the communist element. A struggle for leadership ensued involving widespread assassinations, during which the Trotskyites were practically eliminated.

The fact that the British reoccupied the South was also of great consequence. The British commander, General Gracey, is generally considered to have exceeded his charter, but he was placed in a very difficult position. His key action was probably the re-arming of 1,000 French soldiers of the 11th Colonial Infantry, resulting in the Committee of the South being driven from Hanoi four weeks after the August Revolution. One of the critical differences between the South and the North was that the South was plunged into guerilla war almost at once. The

¹⁴ Hammer, p.106.

¹⁵ Hammer, p.108.

North, on the other hand, enjoyed the seven months from August 1945 to March 1946 free of French occupation, and a further nine months before the outbreak of hostilities.

By early 1946, Admiral D'Argenlieu was pressing for a separatist Cochin China policy. By February 1946, the French held the main cities and the rubber plantations. Movement was possible in the countryside only by convoy by day. However, the Viet Minh guerillas were militarily weak and politically disunited. The guerilla war in the South never really moved beyond Phase One.

Thus while the Viet Minh certainly enjoyed considerable support in the South, there was never any question of 'the entire people united'. This is an apparent paradox, since the revolutionary potential was strongest in the South, but it confirms that revolutionary potential does not in itself produce successful revolution. The communists in the South never achieved the leadership over the nationalist movement that they enjoyed in the North, and their leaders, such as Tran Van Giau, were not of the calibre of Ho Chi Minh, Giap, Trung Chinh and their contemporaries in the North. Perhaps most importantly the British reoccupation and the immediate plunge into guerilla war never allowed the Viet Minh to form an adequate political organization.

Consolidation of Political Power August 1945 to December 1946

The sixteen months between the August Revolution and the outbreak of hostilities in the North were of great significance for the Viet Minh. This breathing space allowed them to perfect their political organization, and at last to identify with the masses, providing a broad political base throughout the North. At the same time, the Viet Minh eliminated all opposition from other nationalist movements contending for leadership of the revolution.

The Nationalist Chinese occupation was a very different affair from that of the British in the South. It was a period of chaos and a confusion that McAlister suggests can best be regarded as an extension of the warlord politics of South China.¹⁶ The Chinese forces averaged 125,000 to supervise the

¹⁶ McAlister, p.224.

surrender of 48,000 Japanese, 'a task which the Chinese consistently neglected and never completed'.¹⁷ The Chinese leadership apparently had three goals—to damage French prestige, to dabble in Vietnamese politics, and to enrich itself.

The Chinese brought with them the exile Vietnamese nationalist groups, particularly the VNQDD and the Dong Minh Hoi, and attempted to use them as a medium for occupational command. They installed these parties as the local governments along the routes into Vietnam followed by the Chinese armies, and the parties managed to provide some challenge to the Viet Minh by late 1945. They proved too weak and fragmented to be effective, but one of the characteristics of the period was the intense in-fighting for supremacy between the Viet Minh and these nationalist groups. The Viet Minh made legitimate progress through their better organization and through gerrymandering the January 1946 elections. However, after the Chinese left, the Viet Minh combined with the French in a macabre performance to strike at the VNQDD and Dong Minh Hoi, who had both opposed the March 6th accords. The French thus helped to destroy the last of the viable non-communist nationalist groups in the North. Of this period, O'Neill states:

A number of purges of government officials and of lower echelons of the Party were carried out by the Viet Minh, and their opponents quickly discovered the virtues of discretion. During the months of Ho's absence, Giap was responsible for the deaths of hundreds of his political opponents, for the destruction of any apparatus capable of rivalling the Viet Minh, and for the suppression of all newspapers which were not under the control of his government.¹⁸

The Chinese could have acted vigorously against the Viet Minh and denied them the freedom of action they undoubtedly enjoyed. They did not, probably because the Viet Minh were best able to provide what the Chinese wanted in the way of personal enrichment. By currency exchange manipulations and other means concurred in by the Viet Minh, the Chinese are estimated to have siphoned off about 400 million piastres, or the equivalent of half the pre-war annual national product of the whole of Indochina.¹⁹ This was a heavy price to pay for freedom of

¹⁷ McAlister, p.227.

¹⁸ Robert J. O'Neill, *General Giap*, Cassells, Melbourne, 1969, p. 44.

¹⁹ McAlister, pp.43, 44.

action, but the Viet Minh evidently considered it worthwhile. Apart from ceding this freedom of action, China also became the major supplier of arms, and made possible the rapid expansion of the Viet Minh forces during late 1946.

The Viet Minh put their freedom of action to good use in expanding their political organization. In the northern spring of 1945, there had been a great famine in the Red River Delta bringing much hardship and loss of life, and the sort of political vacuum that lent itself to Viet Minh initiatives. The Viet Minh, through their cadres, moved in and promoted the organization of the villages on the basis of associations founded on 'natural' groupings such as youth, elderly persons, farmers, women, and so on. Each of these associations became part of a district, provincial, regional and higher organization, in theory culminating at the national government level. This enabled the Viet Minh to attract recruits without the necessity of bringing them into the Party. It also started to form a bridge between the urban classes and the rural peasants, and started the process of involving people in a national movement extending beyond the village boundaries.

In September 1945, Peoples Committees were formed, followed by Administrative Committees in November 1945, at all levels from village upwards. These were the symbols as well as the substance of government in the rural areas. They provided the mechanism of government for raising taxes, creating local self-defence units, and making provision for social progress in mass education and welfare. They proved remarkably effective at this, introducing such measures as the eight-hour day, nationalisation of public utilities, great advances in primary education, re-opening of the university in Hanoi, and perhaps most impressive of all, bringing enough new land into production to have beaten the famine by the spring of 1946. More important than the actual achievements, impressive as they were, was the psychological impact on the community that the Viet Minh were in fact a viable government.

These Administrative Committees not only had an administrative function, but were the primary means for mobilizing the support of the people and controlling them, and by December

1946, they were functioning in most areas of the North, and many areas of the South including the Mekong Delta. Despite all these measures, in the spring of 1946, the Viet Minh felt that they were still not getting the required support from non-communists, and on 27 May 1946 they formed the Lien Viet or Popular National Front,

. . . into which they pressed every legal political party, dozens of Viet Minh inspired ethnic groups, and all cultural, religious, and professional organizations. The vital centre of the Lien Viet was of course the Viet Minh. In fact the Lien Viet was nothing but a kind of super Viet Minh.²⁰

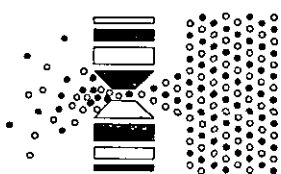
The final great stimulus to political mobilization with the Viet Minh was the demand created by the military preparations for the coming inevitable showdown with the French. In the second half of 1946, Resistance Committees were created 'to provide local liaison for the armed forces, as a source of supplies and support for mobile combat units, reporting on the political and military situation in its locality and furnishing combatants for the regular forces, in addition to organizing local self-defence units and maintaining village security'.²¹

This was the final perfection of the organization by which the many years of political preparation yielded a positive military asset that enabled Peoples' War to be successfully fought. These committees, or infrastructure, were the vital link which not only created support amongst the people but converted it into usable military power. Given this degree of mobilization, once hostilities had started many of the French actions, such as excessive use of firepower in populated areas, harsh reprisals against villagers supporting the Viet Minh, and so on, could be fairly relied on to further drive the people involved into the Viet Minh camp.

Through a quarter of a century of steadfast maintenance of the aim, tactical flexibility, opportunism, and ruthless elimination of opponents, the ICP had created the necessary leadership and organization for successful revolution. The strong points of the Vietnamese were indeed political ones, although bearing in mind the weakness in the South, it was incorrect to claim the entire people united. □

²⁰ Buttinger, p.255.

²¹ McAlister, p.369.



MANAGEMENT and the ARMY : a communication problem

*Captain G. J. Pratt
Royal Australian Army Educational Corps*

Introduction

A well established principle behind successful communication in the Army, and the other services, has been the need to define clearly and precisely appropriate terminology. Military training publications go to great length to provide common definitions of service language as a basis for sound communication in training and operational contexts. Until recently the language requiring definition in military training had its origin and functional application more or less solely in the military environment, and as a result of continuous practice and tradition little difficulty was encountered in the formulation and application of common military terms. However, in the last few years a range of terms that have not been derived and defined in the service context have been creeping into military usage, presenting a different problem of definition and application to that posed by the previous purely military terms. A number of examples of words, that do not owe their origin to a military source, in current usage in many areas of the Army are words associated with the education and practice of management. It is my contention that a number of the management terms in use throughout the Army are incorrectly used as a dual consequence of poor definition and a misunderstanding of the underlying principles which provide a basis for the definition. In the general

Captain Pratt enlisted in the ARA in 1957 and was allocated to R Aust Svy. He attended the School of Survey (1957-58) and was then posted to AHQ Survey Regiment (1958-62). Transferring to the RAAEC in 1962 as a sergeant he was posted to HQ S Comd and HQ RTR. Attending civil schooling at Bendigo Teachers College (1964-65) he was commissioned in 1966 and posted to E Comd Educ Sect. He served in South Vietnam (1968-69) with AFV Educ Sect and on return was Educ Offr at HQ E Comd (1969-70). From 1970 to present, Education Officer at the Transportation Centre RAE. Captain Pratt completed a B Comm degree from the University of NSW in 1971.

area of management the word that is possibly misused the most is 'management' itself.

A whole mountain of management literature has proliferated outside the Army in the last ten years, and this literature is often bedevilled by a semantic problem that inhibits the flow of effective communication and common understanding. An illustration of this entangling problem is given by the American management author Harold Koontz in his article 'The Management Theory Jungle'.¹ The nature of Koontz's title alone is indicative of the problem, and further examination of a few definitions of management will illustrate some of the differences of opinion. The U.S. Army defines management as, 'A process of establishing and attaining objectives to carry out responsibilities.'² The Australian Staff College presents this definition, 'Management is the effective and efficient planning, organizing, co-ordinating and control of the human and material resources available.'³ Terry in his book *Principles of Management* specifies management as '. . . a distinct process consisting of planning, organization, actuating, and controlling, performed to determine and accomplish the objectives by the use of people and resources'.⁴ Koontz and O'Donnell consider management to be, 'a process of designing and maintaining the internal environment for organized effort to accomplish group goals'.⁵ Even though there is a degree of commonality amongst these four definitions there is enough difference to highlight the basic problem of definition. For example, the definition given by Koontz and O'Donnell does not refer to specific management functions, such as planning and organizing, whereas the definitions given by the Australian Staff College and Terry both refer to two specific sets of management functions that are not entirely common to one another.

¹ Harold Koontz, 'The Management Theory Jungle' as reprinted in Harold Koontz and Cyril O'Donnell, *Management: A Book of Readings* (McGraw-Hill, 1964), pp. 10-19. The original paper was published in the *Journal of the Academy of Management*, vol. 4, no. 3, pp. 174-188, December, 1961.

² *Dictionary of United States Army Terms* (1965), AR 320-5, p.235.

³ Australian Staff College, 'Introduction to Command and Leadership (1971)', p.1.

⁴ George R. Terry, *Principles of Management* (Irwin, 5th ed., 1968), p.4.

⁵ Harold Koontz and Cyril O'Donnell, *Principles of Management* (McGraw-Hill, 4th ed., 1968), p.34.

It is worth mentioning that some writers adopt a pseudo solution by avoiding a definition of management in a several-hundred-page discourse on the subject. A further complication is introduced when the word management is used in several different senses such as 'the management' which refers to a group of people or 'good management' as a successful activity, or 'management' as something to be studied as a body of knowledge.

If the management theorists and practitioners cannot readily agree on the meaning of management at this evolutionary stage in the study of it, then a difficult task awaits the military definition writer when he attempts to apply the specific rules of military definition to words that have developed shades of meaning in current usage outside the military environment. The transplant of words from the often imprecise and developing body of management knowledge of the civil world to the precise and established military culture is often unsuccessful, as illustrated by the emotional semantic debates that occur when such words as 'command', 'management', 'leadership' and 'man management' are brought together.

Aim

It is the purpose of this paper to clarify the meaning of the word 'management' and at the same time illustrate an approach towards developing an objective relationship between traditional military language and the recent developments in management knowledge. Any positive steps in the development of such an objective relationship will considerably enhance communication and understanding in what can easily become a confused state of affairs.

Background to the Problem

Before proceeding with the discussion on the problem of marrying civil and military jargon it is worthwhile to briefly examine the origins of the problem, as it is predictable that some members of the service would see as a solution to this language problem the outright rejection of management terms from the military vocabulary. It is my belief that the difficulty of adapting

civil terms to a military environment is unavoidable in the current era of rapidly accelerating technological, social, and organizational change. The Army is not the closed system to the degree it once was when a boundary could almost be marked between the Army and society at large. It must be realized that the Army today is but one, even though vital, component in a national defence grouping that embraces the three services, various government departments and industrial suppliers.⁶ In such an interdependent environment the Army can only successfully operate as an open system that permits a free flow of communication between it and other organizations. A great range of management ideas and techniques have developed outside the Army in recent years, and it is easily understood how the jargon associated with a number of these developments has become a part of the military vocabulary when the Army is no longer viewed as a closed system operating in an independent environment, but rather as an open system in an interdependent environment.

In fact, a number of writers have warned against organizations in the modern world attempting to view themselves as closed systems apart from their operational environments, as such a policy could deny an organization valuable ideas that could contribute to the achievement of its organizational aims.⁷ For example, the problems associated with the determination of pay scales for highly skilled and expert technologists responsible for expensive equipment is common to all organizations employing this type of labour. The problem is compounded in the Army by adding a military to a technical requirement, but as this problem is generally fundamental to many organizations the Army needs to be receptive to new ideas in this area if pay scales are to be adapted to the changing conditions of society at large. A small price to pay for keeping abreast of new ideas is the problem of

⁶ The interdependent nature of national defence organizations in the modern world is stressed by Sir Henry Bland, former Secretary, Department of Defence, in the twenty-first Roy Milne Memorial Lecture, sponsored by the Australian Institute of International Affairs on 29 September 1970.

⁷ The importance of viewing the modern organization as an open system is outlined by F. E. Emery and E. L. Trist in a paper on the nature of socio-technical systems. See F. E. Emery and E. L. Trist, 'Socio-technical Systems' in C. W. Churchman and M. Verhilst (eds.), *Management Science, Models and Techniques*, vol.2. (Permagon, 1960), pp. 83-97.

accommodating a host of terms and words that do not have their origin in the Army.

The defence dollar has to be utilized to the limit and optimum utilization can only be gained if every plausible idea, regardless of origin, is examined for its functional worth in the military environment.

The Mistaken Myths

A further complication associated with an understanding of management ideas and terminology within the Army is the manner in which members of the Army perceive the nature of other organizations, and similarly the manner in which other organizations perceive the Army. Some civilian managers see the Army as an unmerciful and rigidly hierarchical organization that does not permit any individual thought and spends most of its working time stamping about the parade ground. Alternatively, some members of the Army, officer and soldier alike, see the civilian manager as an arch manipulator of people and materials who is motivated towards squeezing maximum profit for minimum effort without any sense of public duty. Unfortunately, these distorted perceptions of reality, even if held only to a mild degree, often pre-determine the manner in which members of a group are likely to react to new ideas originating from outside the group. For example, Army officers who see civil managers as 'grey suited manipulators' may see the introduction in Army schools and courses of certain management techniques as a threat to the established principles of command and leadership, and consequently management can be seen as a doctrine that will dilute the established principle of command and somehow turn direct and positive commanders into civilian style managers.

Views on management expressed in such terms in the military setting are quite false and fail to grasp what management is really about. The ideas of management, regardless of origin, should not bring about any watering down of established military principles, such as the authority and responsibility of command, providing terminology is used correctly and that objective techniques are used to assess the value of such ideas. New or apparently new ideas should not be prejudged on the basis of subjectively formed myths.

A Definition of Management

The previous discussion highlights some of the difficulties and semantic cobwebs that can arise when attempting to define management. The very newness and evolutionary immaturity of a great deal of the developing management ideas indicate the dangers in attempting, at this stage, to be too specific in defining management. However, notwithstanding this limitation, certain common elements can be stated about management. These common elements are related to the nature of human organizations and include the following:

- Human organizations are formed in an endeavour to satisfy human needs. For example, the origin and growth of defence forces is largely related to the basic human need for security.
- Organizations that are formed from a desire to satisfy human needs establish from those needs a set of goals to be attained. An army establishes a series of aims and objectives related to the defence and security of the national interest.
- Human organizations have at their disposal a finite amount of human and non-human resources.

Given these common elements expressed above, then some form of process is required to activate an organization's resources if an organization is to attempt to reach its goals. This process is the basic nature of management and can be defined in formal terms in the following manner:

Management is the process by which organizations utilize their human and non-human resources in an attempt to achieve certain goals.⁸

The basic utility of this type of definition is that it is universal and can be applied to all human organizations whether they be economic, political, public service, military, religious, sporting, social, or any other type. When management is defined in these terms the notion that management is something to do peculiarly with business is readily dispelled. As Dr F. D. Barrett

⁸ My own definition.

points out, 'This is precisely what is meant by saying that management is a generic term, not a concept having special meaning or application in any one particular type of organization.'⁹ Furthermore, this universal and general form of definition avoids the weaknesses found in some of the definitions of management that express management as being effective and economical.¹⁰ This is being too specific and limits the management process to the successful qualification of being effective and economical. Organizations that are largely ineffective and uneconomical still engage in a management process providing they are a going concern.

The great advantage of expressing a definition of management in such universal and broad terms as the definition proposed in this paper is that it allows the worth of management ideas to be assessed across organizational boundaries without being inhibited by fixed ideas inherent in any single type of organization. Such a definition of management prevents management being regarded as something especially to do with certain specific techniques such as critical path analysis or the establishment of an arbitrary distinction in an organization that refers to 'the management' as some sort of distinct group.

The Definition of Management Applied to the Army

The establishment of a definition of management now leads to the requirement of setting this definition within the conventional military organization. The military organization has at its disposal men and machines which need to be activated in order to realize certain aims and objectives. In this respect the Army is common to other organizations since the management process is just as apparent within the Army as it is in a large corporation or a government department. An aspect of the management process that is common to human organizations at large is the establishment of authority and responsibility relationships. The larger the organization becomes, the more

⁹ F. D. Barrett, *The Management Concept* (1964) as quoted in the Australian Staff College precis 'Introduction to Management Course', 1971. Annex C, p.3.

¹⁰ A similar criticism is made by Barrett, *op. cit.*, p.1.

critical the determination and clarification of these relationships become. Military organizations have traditionally determined this issue by the establishment of a command system that vests individual members of that system with an authority that is prescribed by law, and at the same time specifies certain responsibilities that are commensurate with the authority. The military command system is a distinct feature of the management process within the Army. Other organizations, outside the Army, have evolved various methods for prescribing authority and responsibility and some of these may have developed aspects that are similar to the military command system, but generally other authority systems do not have the same overall origin in law, and careful definition of authority and responsibility, that the military system has.

To express management as some sort of component of command, as some military definitions do,¹¹ is a distortion of the relationship because to do so limits the meaning of management as a universal phenomena. It is considerably more accurate to describe the command system as a unique feature of the overall management process within the Army, clarifying the position of command within the military organization and at the same time simplifying cross organizational comparisons between the Army and other organizations. For example, outsiders may criticize the Army command system as being 'too authoritarian', but the same critics may fail to see that the principle of command is related to the Army's role of adapting to situations of extreme crisis in order to survive and protect the nation's interest. The only authority system that is likely to provide the rapid and forceful decision making required in a crisis situation is a command system. Lines of authority requiring majority approval or committee decision would be inappropriate in many of the circumstances the Army has in its areas of activity. By placing command within the correct perspective of the overall management process two things are achieved: one, the entangling semantic debate over the relationship between management and command is no longer an issue; and, two, the organizational worth of the command system can

¹¹ See the *Dictionary of United States Army Terms* (1965), AR 320-5, p.235.

be clarified and reinforced as the appropriate authority relationship suited for the Army.

An examination of the whole issue of management in an open minded manner within the Army can lead to a greater understanding of the workings of the military organization and at the same time highlight the worth of numerous excellent management techniques that have developed within the Army. For example, the military appreciation is a superb analytical tool that has application in almost any area. Several analytical methods similar to the appreciation have developed outside the Army decades after appreciations were used in the Army, and exposure to these methods can force the individual within the Army to realize the immense value of some of the techniques taught in military training.

Some Implications for Training

The traditional approach to terminology and definitions in the Army training context has been to present a word, accompany it by a definition, and instruct the student in the application of words and definitions through a process of regular practice. The net result of this form of instruction has generally been effective communication. In the area of management generally, where terminology is subject to some disagreement, it is suggested that less emphasis be placed on formal definition in the instructional situation, and more emphasis be placed on understanding the principles and concepts underlying a particular term.

As an expedient of communication it may be necessary to define certain management terms in an arbitrary manner but the limitations of such expediency should be realized, and members of the Army can only realize such limitations if the training situation encourages understanding and concept formation rather than rote learning.

Again, the dangers in applying the precise rules of military definitions to words that have developed outside the service are emphasized. The training situation is the appropriate place to equip officers and soldiers with the ability to recognize the

difference between clearly defined terminology that has originated in the military environment and words that have originated elsewhere and are still the subject of a lack of common agreement. I have observed that words such as, 'supervisor', 'manager', 'systems', 'computerized', 'cost analysis', and 'economically viable' are a few examples of words that are being used in the Army today in a manner that obscures rather than enhances clear communication, and it is in the training situation that members of the Army should develop the ability to examine these terms in order to see what relevance they have to the military situation.

A further implication associated with management and its associated jargon problems is the target group in the Army that should be exposed to training in this area. There are dangers in restricting training in this area to young officers as the net result could be what General Sharp has warned about in the Canadian Armed Forces — 'two different jargons creeping in; that of the young and that of the older officers'.¹²

Conclusions

The whole issue of the Army's relationship to management ideas and communication problems is closely related to the general nature of change in the modern world. Rapid developments in technology, as indicated by Colonel Langtry in his recent *Army Journal* article,¹³ are forcing changes that affect every institution in society. It is technological development that is forcing on the Army a whole range of problems, and an example of this is the difficulty in determining relative pay skills between hundreds of different other rank trade classifications. Associated with rapidly accelerating change is the development of a whole variety of new ideas which leads to a requirement in the Army for a continuous process of open minded and critical examination of new ideas. This can only be done if

¹² Lieutenant General F. R. Sharp, DFC, CD, 'Canadian Armed Forces Unification: Some Lessons in Management' (1968). Quoted from a reprint (p.5) of General Sharp's paper prepared for publication in the *RAF Quarterly*.

¹³ Colonel J. O. Langtry, DCM, 'The Impact of Science and Technology on Society in the 1980's', *Army Journal*, No. 273, February 1972, pp.19-32.

all levels of command are clearly aware of the Army's aims and objectives from an overall Army-wide basis to a sub-unit level basis. A clear recognition of aims and objectives then enables the individual to look at new ideas in the management field and assess the worth of such ideas in terms of the Army's needs. If ideas, new and old, are examined in the light of the question, 'What's in it for us?', then I believe the misuse of terminology will be reduced.

The current reorganization of the Army on a functional basis is an example of an organization adapting to meet the demands of a changing world. General Sharp, in discussing the recent Canadian experience, indicates quite strongly that organizations have to adapt to a changing world if they are to survive. The same author points out that one lesson learned in the Canadian situation was the difficulty brought about by a lack of common understanding of important management terms.¹⁴ These difficulties need not occur in the Australian situation providing the members of the Army take an objective stand when confronted with new ideas, words and techniques. □

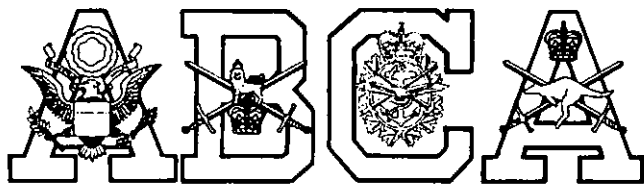
¹⁴ General Sharp, *op cit*, p.9

THE BATTLE OF EL ALAMEIN, JULY 1942

The first three weeks of July 1942 on the El Alamein line were devoted to attack and counter-attack. Rommel's one aim was that the front should not become static, and Auchinleck's aim was to make it so. The latter won the tussle and the outcome of the campaign became a question of reinforcements and supplies.

Faced with this situation, Rommel calculated that up to mid-September the advantage would be his; but in this he was badly deceived, because from the end of July on Auchinleck switched the main weight of his air offensive from the forward positions to the ports of Mersa Matruh, Bardia, and Tobruk, which left Rommel with Benghazi — 680 miles away — as his nearest secure base of supply. The results were that by the middle of August he was still short on establishments of 16,000 men, 210 tanks, 175 troop carriers and armoured cars and 1,500 vehicles; his army consumed double the amount of supplies that crossed the Mediterranean, and had it not been for the vast enemy dumps captured in Marmarica and western Egypt, 'it would,' as he says, 'never have been able to exist at all'.

— Major-General J. F. C. Fuller, *The Decisive Battles of the Western World* (1957).



Lieutenant Colonel P. C. Smeaton
Royal Australian Infantry

Introduction

AUSTRALIA is a member of a number of international organizations, covering a variety of subjects ranging from regional defence to technical co-operation, the benefits of which may not be readily discernible. However, the Australian Army is an active partner in one international organization which provides real and direct material benefits, yet generally speaking, very little is known about it. I refer to the ABCA Armies' Standardization Programme.

Without attempting in any way to coerce the reader into believing that the ABCA Programme is the universal cure-all for solving equipment standardization problems between the member armies, I do believe that a better understanding of the programme, its background, aims and organization, will assist members of the Australian Army who are involved with the development, testing and procurement of equipment.

Lieutenant Colonel Smeaton enlisted in the AIF in 1945 and saw regimental service in Japan and Korea (1946-53). After a period of overseas training (UK) he was commissioned in 1956. Regimental appointments in Australia followed (1956-63) until he attended Staff College in 1963-64. After two years at the Infantry Centre, Ingleburn he served in Vietnam with 6RAR (1966-67) and on return was posted to Directorate of Infantry at AHQ. He attended the Armed Forces Staff College (USA) in 1970-71 and from there was appointed the Australian Primary Standardization Officer at Washington DC, where he is still serving.

Background

ABCA stands for the armies of America, Britain, Canada and Australia, and the agreement which authorizes the programme is the Basis Standardization Agreement of 1964 (BSA 1964). The New Zealand Army, while not a signatory to the agreement, is associated with the programme through Australia.

Aims of the BSA 1964

The aims of the BSA are as follows:

- To ensure the fullest co-operation and collaboration among the American, British, Canadian and Australian armies.
- To achieve the highest possible degree of operational compatibility among the signatory armies through materiel and non-materiel standardization.
- To obtain the greatest possible economy by the use of combined resources and effort.

Within these aims the agreement is designed:

- To keep each army fully informed of research and development taking place in the other armies.
- To guide research and development whenever possible along lines compatible with the requirements of all four armies.
- To record and maintain formal agreements in both the materiel and non-materiel fields on items or concepts acceptable to two or more armies.
- To ensure such formal agreements are not modified without consultation.

The term 'standardization' is used in its broadest sense to cover all action directed towards meeting the aims of this agreement and it does not necessarily imply or require adoption of common or identical materials or methods. However, from a practical viewpoint the standardization programme does hope to achieve one or more of the following:

- Operational compatibility of equipment between ABCA armies, which implies a degree of interchangeability of major components.
- Interchangeability of ammunition, fuel and other bulk items of supply.
- Inter-operability of communications, electronic and automatic data processing equipment.
- Common procedures and techniques including engineering and quality assurance standards.

Organization

The formal organization which has been developed to manage and conduct the business of the programme is shown at Figure I. At the top are the four armies who provide the input necessary for the programme to progress. Any agreements or recommendations arising from the programme must be endorsed and ratified by them. Armies also provide guidance and direction

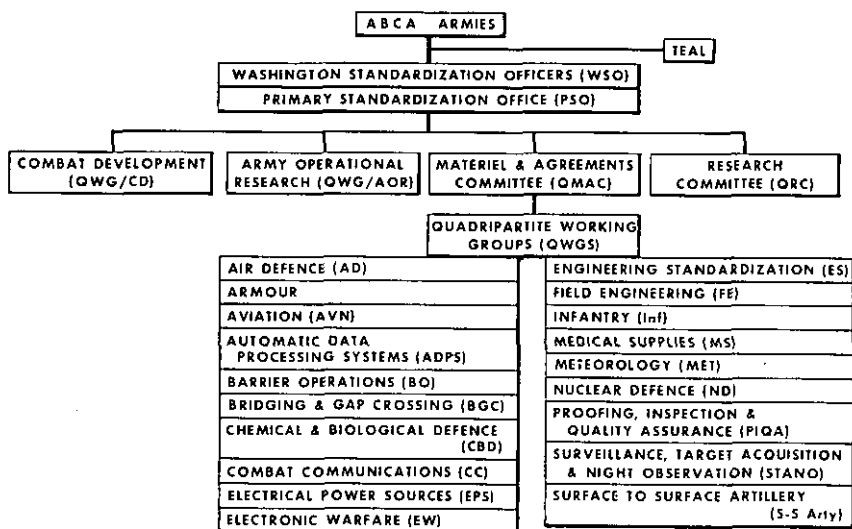


Figure 1

to the programme through the annual TEAL discussions (a title without meaning) where they are normally represented at the Vice/Deputy Chief of Staff levels.

The BSA 1964 provides for a small organization to manage the activities of the programme. This is headed by the Washington Standardization Officers (WSO), who are senior officers from the four armies, stationed in Washington DC. In the case of the *United Kingdom, Canada and Australia* these are the military attachés, who are brigadiers. The WSO co-ordinate and expedite the programme, resolve important differences, publish Quadripartite Standing Operating Procedures (QSOP) and recommend the formation or disbanding of committees and working groups.

To provide the day to day management for the WSO, a full-time organization called the Primary Standardization Office or PSO has been established in Washington DC. This office consists of four lieutenant colonels, one from each of the four armies; a small secretariat comprising an Australian major, a UK civil servant, and a Canadian warrant officer as chief clerk. The United States provides administrative backing including secretaries, equipment and office space. The PSO is responsible to the WSO for keeping the progress of the programme under continuous review. It also provides the secretariat for the WSO and standardization committees, and acts as the Office of Record.

To facilitate the exchange of information under the programme, the BSA 1964 provides that each army will maintain standardization representation (including accredited liaison officers) with each other army. These officers of Grade 1 or Grade 2 level are normally located at each army's headquarters or as part of the army staff of a national embassy.

To carry out the detailed work of standardization, the WSO have established two committees and twenty-one working groups (QWGs). One of the committees, the Quadripartite Materiel and Agreements Committee, is made up from Washington based staff officers of the four armies. It meets approximately

every five weeks and, subject to the direction of the WSO, manages the activities of the nineteen working groups assigned to it. The second committee, the Quadripartite Research Committee, is comprised of representatives of the staffs of the four armies in Washington who have interests in the research field. They encourage co-operative research effort among the four armies, arrange for the exchange of research information and work closely with other national research programmes to achieve co-ordination for research efforts.

The twenty-one Quadripartite Working Groups are composed of representatives of the four armies and with the exception of Combat Development (who meet every six months) meet on average every fifteen months, the meetings being hosted by each country in turn. Each working group deals with specific areas as defined by their terms of reference and reflected in their title (e.g., QWG/Inf).

The working groups on Army Operational Research (AOR) and Combat Development (CD), unlike the other working groups, are directly responsible to the WSO. The tasks of AOR are self-explanatory, whereas CD is concerned primarily with conceptual matters and in particular the co-ordination and development of the ABCA armies' operational concept. This concept, which covers the time bracket ten to twenty years in advance of present time, is designed to provide guidance to national staffs in formulating their research and development programme.

Benefits

One of the principal benefits of the ABCA programme lies in the free exchange of information between armies. This is achieved by the early exchange of project and other national documents, if possible during the draft stage, so that armies are aware of the trends as well as progress being achieved in national equipment research and development programmes. This exchange takes place by correspondence, by liaison and by the formal and informal discussions which occur at working group meetings. The exchange of information is designed to establish a suitable climate in which an army may offer to collaborate with another army on

the development of equipment, or to co-ordinate their own development to ensure a degree of operational compatibility. It also ensures that armies are aware of each others intent at an early stage.

Many officers apply too narrow a definition to the term 'Standardization' and look only for identical equipments to be produced or adopted by all armies as the end result of the programme. This is not a primary aim of the BSA 1964, and is an unrealistic attitude since it makes no allowance for political or economic factors which, although beyond armies' control, must affect equipment development and procurement policies. Nevertheless, providing armies are aware of the work each is undertaking or proposing to undertake, to develop equipment and procedures, collaborative or co-operative development programmes can be arranged.

Another major benefit provided for under the BSA 1964 is the free loans of equipment for testing by armies, the only requirement being that a test report be forwarded to the lending army. For example, among other items Australia, under the BSA, has borrowed from the US for testing in recent years the following equipments:

- 2 x M551 Tanks, Sheridan/Shillelagh Systems.
- M102 and XM164 Howitzers.
- Armor Vest Lightweight T66-1 (Lincloe).
- Launcher Grenade M203.
- 2 x M60A1 Tanks

The cost of developing in peacetime major equipment items of this type is, I believe, beyond the financial and technical resources of the Australian Army. Consequently these loans of equipment under the authority of the ABCA programme has had the effect of expanding our activities within the equipment

research and development budget of the Australian Army at no extra cost.

Another important aspect of the programme is the development of Quadripartite Standardization Agreements (QSTAGs). These record armies agreements on the specifications of equipments, standards, operational and logistical procedures, and are a further means of ensuring operational compatibility.

Conclusion

In times of increasingly austere defence budgets, the Standardization Programme provides armies with the opportunity to share the technological, industrial and economic resources of their ABCA partners. Through the free exchange of information each army has access to research and development programmes which alone they would find difficult or impossible to fund.

Only armies can decide to what extent they wish to make use of the programme. However, if full use is made of the programme, armies can effect economies by minimizing wasteful duplication of effort in developing similar equipment, by acquiring equipment on loan for testing which they can ill afford to develop, and by ensuring their equipment and procedures are as operationally compatible with those of their quadripartite partners as is practicable.

**AMF GOLD MEDAL
and ASCO
PRIZE ESSAY
COMPETITION
1972**



Aim

1. The aim of this essay competition is to encourage original thought and good writing on a military topic of general interest to the Army.

Sections

2. The competition is divided into two sections:
 - a. Senior—for officers.
 - b. Junior—for other ranks.

Conditions

3. All ranks of the active and reserve lists of the Australian Army are eligible.
4. Entries close with HQ 1 Div on 31 March 1973.
5. Competitors may select any military topic of general interest to the Army. As essays may be published in the *Australian Army Journal* or similar unclassified publications they are not to contain classified material.
6. An essay or thesis is ineligible for submission if it has been prepared as part of any civil or military study undertaken at government expense, or as part of the writer's normal duties.

7. Length of essays is to be between 3,000 and 5,000 words.
8. If it is considered that an entry fails to comply with any requirements Comd 1 Div may determine it to be ineligible.

Submission of Essays

9. Essays are to be typewritten and submitted in quadruplicate. Units are to provide typing assistance where so required.
10. Authorship is to be anonymous. Each competitor is to adopt a pen name and enclose with his essay a sealed envelope with the pen name and section identification typewritten on the outside and his name and unit address inside.
11. The title and page number of any published or unpublished work to which reference is made in the essay must be quoted.
12. Essays are to be addressed to the SO1 Trg Estbs HQ 1 Div, Victoria Barracks, Paddington, NSW, 2021. The envelope is to be marked 'AMF Gold Medal and ASCO Prize Essay'.

Judging

13. Essays are to be judged by at least three referees appointed by Comd 1 Div.

Prizes

14. Prizes may be awarded as follows:
 - a. For the best overall essay—AMF Gold Medal and \$100.00.
 - b. For the best essay in each section (other than the best essay overall)—\$50.00 each.
 - c. The referees are empowered to recommend that the Medal and Prize not be awarded if, in their opinion, no essay submitted is of a sufficiently high standard.

Promulgation of Results

15. The results of the competition will be promulgated in a Notice to AROs for display on unit notice boards.

Crime Reporting in the Army



*Major K. G. Petersen
Royal Australian Army Provost Corps*

WHAT is the SIS (Special Investigation Service) doing about the theft of money from A Coy lines yesterday? How often have you heard that or similar questions being asked by a commanding officer? It is a familiar phrase to most of us who have been regimental officers.

The answer is usually one of extremes, i.e., the SIS is working on the case and conducting an investigation or the SIS does not know of the theft and therefore is not taking any action. In most cases the reason why the SIS does not know of an incident is because an officer has failed to report it to them.

This article is written in an attempt to stimulate my colleagues to take appropriate action on future occasions when they are involved with a crime. The Australian Army has an efficient

Major Petersen graduated from OCS in December 1954 and served with 11 NS Trg Bn Wacol, Queensland, as a platoon commander and company second in command until 1957. In 1960 he raised a Citizen Military Forces military police unit in Adelaide of which he was adjutant. From 1963-65 he served with 28 Comwel Inf Bde Pro Unit, Malaysia, after which he returned to the Military Police School. In 1966 he saw service in South Vietnam as the Provost Marshal and was responsible for the opening of the AFV Detention Barrack in 1967. On return to Australia he was appointed DAPM Southern Command where he served until December 1970. Major Petersen graduated from the Australian Staff College in 1971 and at present is DAAG (COORD) Headquarters Southern Command. He is also a graduate of the Victoria Police Detective Training College.

police force but lacks an efficient reporting system (and the reporting system in many cases is *you*).

If an investigation is to be successful certain basic criteria have to be met and these are outlined and simplified below. But before doing so the aim of an investigation should be explained.

In non-technical terms an investigation is 'the search for truth in the interests of justice and within the specifications of the law': the person charged with the duty to conduct an investigation is the investigator and more will be said of him later in this article.

The criteria to be met are:

Early Reporting—Immediately it is known that a crime has been committed or suspected of having been committed the military police should be notified by the quickest possible means. The basic information required in this initial report is self-evident and can be summarized as follows:

- Nature of offence.
- Exact location.
- When committed.
- Any suspects—if available, a description.
- Medical assistance required.
- Name, unit and address of person reporting the incident.

When applicable, other agencies must be notified in accordance with current army regulations, for example, formation/unit HQ in the case of arson.

Early reporting is of paramount importance because, as a general rule, the greater the time delay between the committing of an offence and the commencement of an investigation the lesser are the chances of conducting a successful investigation and bringing the offender before a judicial hearing.

Protection of the Crime Scene—It is absolutely necessary to protect the crime scene from contamination. As an officer this is easy to accomplish. You make arrangements for the area to be defined, and if necessary marked, and a picquet or picquets

mounted to prevent personnel from entering the area. (Perhaps you may now recall the last occasion when the unit canteen was broken into and how many curious people inspected and contaminated the crime scene).

The crime scene is defined as the area in the immediate vicinity of the occurrence, within which evidence might be found. The limits of the area will vary according to the nature of the crime or incident. Usually the crime scene becomes the focal point of the investigation and the place from which all leads emanate. On arrival at the crime scene the investigator will take charge in accordance with *Army Routine Order 177/70*.

During the examination of a crime scene an investigator will endeavour to discover:

- Evidence to establish that a crime has been committed.
- Facts to prove the identity of the offender.
- Facts to use in subsequent interrogation.
- Physical evidence and exhibits for ultimate production in court.
- Physical evidence for submission to experts for examination or scientific analysis.

After an examination of the crime scene the investigator will commence a thorough search, conducted in the manner taught at Detective Training Colleges. The search could result in the finding of a large item such as a weapon, or a small item such as a hair or wood splinter.

The importance of the crime scene and the need to protect and secure it, from the time the crime is discovered until the investigator arrives, should be obvious and cannot be overstressed.

Competent Investigator—The responsibility to provide criminal investigators is vested with the Provost Marshal at Army Headquarters. Investigators are posted to military police units in all commands.

I believe that the SIS has many well trained, competent and experienced investigators and this opinion is supported by many senior CIB officers from various state police forces.

A short word picture of an investigator would be appropriate at this stage.

First, who is an investigator? An investigator is a person charged with the responsibility of conducting an investigation into a particular crime or event. The mere ability to ask questions or to analyse facts does not make a person an investigator. To succeed in this role he must possess particular attributes which may distinguish him from other people in degree, if not in kind.

These attributes are:

- Knowledge.
- Integrity.
- Initiative.
- Dedication.
- Judgement.
- Courage.

Together with these personal attributes the competent investigator possesses particular qualities in relation to:

- Attitude.
- Experience.
- Decision-making ability.

His approach is completely objective and he is as much concerned with the exculpation of the innocent as with the conviction of the guilty. In this sense he is a collector of evidence. It is important to remember that an investigator will treat all 'complainants' as VIPs as they are his most useful contact.

It will be seen that most of the work rests with the military police, but in the first instance the catalyst must be the officer to whom the crime or incident is reported.

However unimportant the incident may seem to you it should be reported to the nearest military police unit or detachment as it may assist in completing the 'picture' in the operations section of the military or civil police.

A simple case illustrates this particular point. A number of hub-caps were stolen from Holden cars in a certain garrison.

As these thefts were chronologically reported the *modus operandi* built up until a particular model Holden car could be isolated and also the night of the week on which the offences occurred. A trap was set on the appropriate night and the offender apprehended. He was subsequently charged with these offences and further offences for being in possession of much more valuable stolen property. From a single initial report of a stolen hub-cap a chain of events was started which resulted in a seasoned criminal being apprehended and the army well rid of an undesirable soldier.

In summary, the responsibilities of all officers, whether they be staff officers or regimental officers are:

- To report crime/suspected crime or suspicious incident to the nearest military police unit or detachment as soon as practicable.



- Protect the crime scene from contamination.
- Provide maximum support to the investigator.

In return the investigator will:

- Proceed with a thorough investigation.
- Provide necessary liaison with the civil police (including CIB if necessary) or other investigating agencies, for example, RAAF Service Police, HM Customs Department, etc.
- Produce a well documented report, and if applicable bring an offender before a judicial hearing.

Remember, that if you follow the simple procedures outlined, many more investigations will culminate in a successful conclusion and you will enjoy commanding or serving in a more trouble-free unit. □



Captain R. L. Denner
Royal Australian Army Service Corps

Natural gas, although new to Australia, has been serving man in various ways for 2,000 years. The ancient Chinese reticulated natural gas short distances through bamboo 'pipelines'. In the late 1800s in the United States of America, hollow logs were used to transport natural gas

—'Liquefied Petroleum Gas'. *Magazine of ALPG Association*,
September, 1970.

Introduction

THE purpose of this article is to create an awareness of the advantages and properties of LP Gas, its possible applications in an Army environment, and impart some general information about one of the world's newest and most versatile fuels.

Captain Denner graduated from RMC Duntroon in 1965 into RAASC and served with the following units: 5 Air Sup Con Sect 1966, RAASC Centre 1966, 391 Tpt Pl RAASC 1967, 25 Sup Pl and Det 52 Sup Pl Vietnam 1967-68. In 1969 he was posted to 4 Sup Dep, Hampstead Barracks, SA where he is still serving. Captain Denner is grateful for the assistance and information provided by the Esso Oil Company—Essogas, the Department of Public Health and the Department of Labour and Industry in South Australia.

What is LP Gas?

Liquid Petroleum Gas is composed mainly of propane, but may be a mixture of propane and butane, obtained as a by-product when crude oil is refined and also from the treatment of oil and natural gas at well-heads. LP Gas is liquefied from natural gas and may be reticulated direct from oil/gas fields to the areas of consumption.

Properties

The properties of LP Gas are:

- High octane rating.
- More volatile than petrol—vapourizes at ordinary atmospheric temperature.
- Slow uniform burning rate.
- Can be stored as a liquid and used as a vapour.
- Easy to handle and store.
- Good safety properties.
- Low production of petrochemical impurities and carbon monoxide.
- Odourless. To ensure that LP Gas can be detected, a distinctive deodorant (usually Ethyl Mercapton) is added.
- Propane and butane can be liquefied under relatively low pressure at atmospheric temperature. This property enables LP Gas to be separated from liquid Nitrogen Gas at well-heads, because LNG has to be liquefied at atmospheric pressure at -160°C .

Advantages of LP Gas

LP Gas as a fuel offers its user many advantages:

- Difficult to pilfer.
- Readily transportable in bulk or detail.
- Easy to handle.

- The fuel is lead free.
- Safe to use.
- Relatively pollution free—no smoke, carbon monoxide content in exhaust gas is reduced to an undetectable amount.
- Does not produce much noise during combustion.
- Efficient, as the total fuel is burnt during combustion.
- Relatively lower fuel costs.
- Longer engine and component life.
- Smoother power.
- Less maintenance required—oil and oil filter extended.
- Road octane rating in excess of 100—no knocking and engine operates more smoothly.
- Carbon deposits almost non-existent after thousands of hours of operation.

Disadvantages of LP Gas

There are three main disadvantages associated with LP Gas:

- Fuel is pressurized and must be handled with care.
- The LP Gas is pressurized and therefore is heavier than a petrol fuel tank. (An LP Gas fuel tank of 20-gal capacity weighs approximately 75 lb).
- The initial capacity outlay to provide storage, distribution and conversion equipment.

Commercial Uses of LP Gas

LP Gas is a versatile fuel and its uses in commerce and industry include:

- Automotive fuel for vehicles, plant and forklifts.
- Cooking and catering equipment.

- Water heaters.
- Space heaters.
- Refrigerators.
- Clothes Dryers.
- Miscellaneous items such as lamps, blow torches and burners.

Practicability

When faced with the question of whether or not to use LP Gas as fuel only two factors have to be considered. They are the practical application and economics of LP Gas. A large number of civilian industries have changed to LP Gas because of the financial benefits and other indirect advantages to be gained. These advantages are only partly offset by the disadvantages of the fuel.

LP Gas as a fuel has a calorific value which is 33% lower than for the same volume of petrol. This suggests that an LP Gas engine would consume 4 gallons of LP Gas against 3 gallons of petrol for the same amount of work. In practice this does not occur because the LP Gas is more efficient than petrol in the following ways:

- Carburettion occurs when the fuel is mixed with air. LP Gas is a gas whereas petrol is an atomized liquid that tends to condense in the inlet manifold. This disturbs the fuel-air ratio and causes uneven mixture distribution to the cylinders, especially during cold starts.
- There is no device, such as an acceleration pump or other device (e.g., choke), required for enriching the mixture with LP Gas. Regardless of the circumstances, the LP Gas air mixture will be of optimum composition.
- No drops of liquid enter the cylinders and hence the fuel combustion will be complete. The fuel need not be artificially evaporated and therefore the inlet mani-

fold and the temperature of the air-fuel mixture can be lower. The cylinders therefore are better filled with fuel prior to combustion.

Field tests conducted have shown that gallonage consumption in an LP to engine is generally only 10% higher than an equivalent petrol fuelled engine.

The repair and maintenance cost for an LP Gas fuelled engine is lower because:

- No dilution of the lube oil occurs, so that cylinder wear is less and fewer oil changes are necessary. However, an LP Gas engine will require slightly more lube oil than a petrol engine because of the fact that there is no dilution.
- LP Gas will not wash the lubricant off the cylinder walls, hence piston lubrication is better.
- Spark plug life will be extended due to complete combustion.
- The clean burning properties of LP Gas give a very clean condition in the combustion chambers and a minimum of crankcase oil contamination. In addition, these clean burning properties provide essentially smoke free operation.

Because of the complete combustion of the LP Gas, the carbon monoxide percentage in the exhaust gases is almost nil. This is especially important in the application of LP Gas in engines operating in confined spaces or closed areas such as fork-lift equipment in stores and warehouses, refrigerators and generators.

Economics

Will a switch from petrol to LP Gas save enough money to justify such a move? The answer to this question depends on such considerations as geographical location, size of operation, type of equipment and other factors:

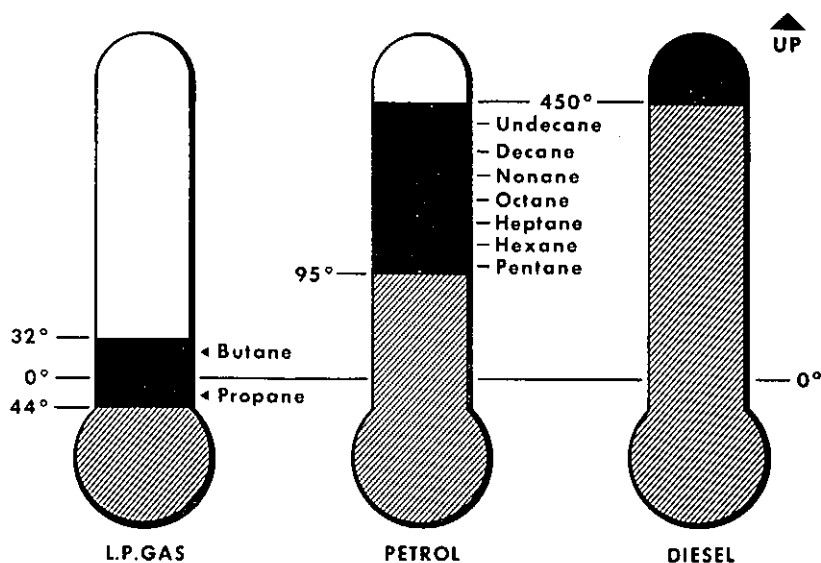


Figure 1

Compared with petrol, LP Gas is significantly more volatile— it boils or vapourizes at ordinary atmospheric temperatures. It is stored economically as liquid and used efficiently as a vapour.

- Geographical factors will influence the cost of the fuel.
- The size of operations will dictate the amount of fuel used and the economics to be gained on a cost comparison basis to petrol.
- The investment in LP Gas can be expressed in terms of the cost of conversion kits for existing equipment and their installation, or if new equipment is purchased the cost differential between LP Gas and petrol equipment. The larger the operation, the greater the economy to be gained.
- In addition to fuel savings, allowance should be made for savings in maintenance, and lubricating oil costs. These savings vary with the type of operation and it is difficult to accurately predict their actual value. Vari-

ous tests conducted by Esso Gas have shown the maintenance savings on forklift equipments to be in excess of \$100 per annum per unit.

Safety

LP Gas is safe to use, store, and handle provided that definite safety precautions are taken;

- Correctly designed equipment.
- Correct installation of equipment, components and facilities.
- Adequately trained users.

In addition, correct maintenance of fuel lines to ensure they are kept in good condition, inspections to ensure that all fittings are leak-proof and free from excessive vibration.

Refuelling should be done out of doors in well ventilated locations using the correct equipment. Tanks and cylinders should only be filled up to 80% of their capacity. Nozzles should be of the correct type and all hoses should be grounded.

Dry chemical fire extinguishers and water hoses should be available for use. Smoking should be prohibited in refuelling areas and equipment engines should be stopped. Vehicles and equipment should be stored in areas which have adequate ventilation.

All sources of open flame and heating devices should be eliminated and a strict no smoking rule enforced. LP Gas vapours are non-toxic to humans but LP Gas contaminated air should be avoided because of the danger of suffocation.

Stationary vehicles and equipments should not stand next to drains or sumps, as the gas is heavier than air and will accumulate if it leaks in these areas.

LP Gas has an excellent safety record and provided that elementary safety precautions exist; and these precautions are in the main also applicable for petroleum products such as gasoline, kerosine and aviation fuels, no real problem should be encountered with the gas.

Conversion

Petrol, kerosine and diesel engines can all be converted to LP Gas. Modern petrol engines have a compression ratio of between 8 and 10 : 1. Although LP Gas can be used in engines with slightly higher compression ratios, the modern petrol engine will perform very satisfactorily on LP Gas without engine modification other than carburettion changes.

Kerosine engines can be converted to operate on LP Gas but the compression ratio will be increased for economical performance. Diesel engines can be converted to operate on LP Gas with modifications such as the fitting of spark ignition equipment, reducing compression ratio and removing diesel injection equipment. Diesel engines can be modified to burn both diesel fuel and LP Gas simultaneously. The diesel fuel is used as a base fuel and to provide ignition for the LP Gas which is injected as a supplementary fuel.

Equipments can be adapted to operate on both LP Gas and petrol. Separate tanks are required and modifications to the fuel system to allow the selection of the desired type of fuel. Special operating instructions need to be published for dual systems.

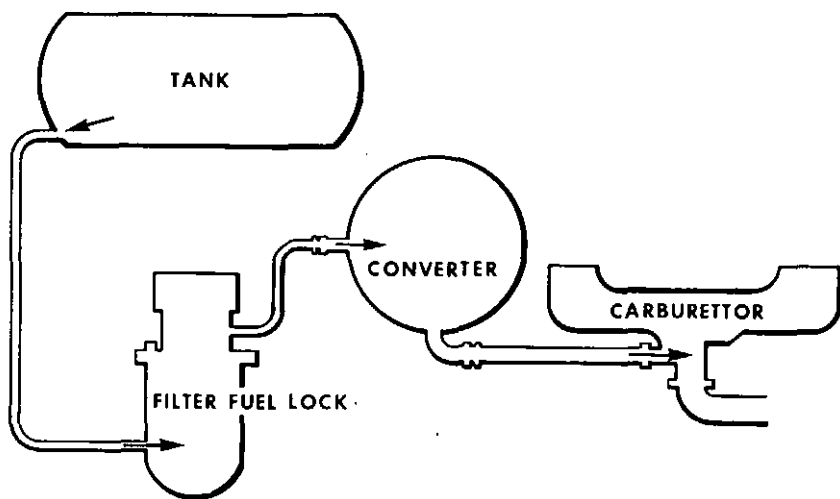


Figure 2

A typical conversion kit showing the components required for an LP Gas fuel supply to a conventional IC engine.

Conversion Kits

Some equipments are now being factory equipped to use LP Gas. In the majority of cases conversion kits are required to convert from petrol to LP Gas. There are six different brands of conversion kits available on the Australian market.

These kits consist of the same basic components:

- Fuel tank (usually supplied by the fuel supplier).
- Filter (may be combined with a fuel lock-off valve).
- Converter (connected to engine coolant system).
- Lock-off valve (electrically operated solenoid).
- Carburettor.

Small engines, below 1500 cc engine capacity, have a vapour withdrawal system. Engines above this capacity draw their LP Gas from the tank as a liquid. It is then passed through the filter and into the converter. The function of the converter is to vapourize the liquid LP Gas into a vapour and also to regulate the pressure at which this vapour will be delivered to the carburettor.

Most converters are set to give a zero or negative pressure at the converter outlet. The LP Gas vapour is then induced into the carburettor by the engine vacuum where it is mixed with the incoming air. The fuel air mixture is then passed into the engine for combustion in the same manner as a petrol engine.

Vapour withdrawal systems eliminate the converter as the amount of LP Gas vapour consumed can be adequately vapourized in a suitably sized fuel tank. The converter is replaced by a regulator.

Costs of conversion will vary. Most conversion kits cost in the vicinity of \$250.00 (incl. sales tax) plus labour. Fuel tanks are supplied by the fuel supplier on a deposit payment basis.

Cost of Fuel

For commercial operators, the cost of LP Gas is probably its most attractive attribute, not being subject to excise duties. This factor is also relevant to the Service application of the fuel

due to the fact that Service contracts are subject to negotiation with excise duties. The total government cost however is exclusive of excise as this is re-imbursed. However, the total POL vote includes the cost of the fuel plus excise. As the demand for LP Gas becomes increased it will undoubtedly become subject to excise.

Physical Contents

The following table illustrates on a comparison basis the different physical properties of propane, butane and gasoline.

Serial	Physical Property	Propane	Butane	Gasoline
1	Normal state at atmospheric pressure & 60°F	Gas	Gas	Liquid
2	Boiling point at atmospheric pressure-°F	-44	31	100 Initial 400 Final
3	Weight of liquid at 60°F per gal—lb	5.05	5.75	7.2
4	Calorific Value BTU per lb	21,750	21,300	20,500
	BTU per gal at 60°F	110,000	123,000	148,000
5	Octane number	110+	90	98
6	Vapour pressure 16/sq in at 100°F	172	37	Nil
7	Specific gravity of vapour and atmospheric pressure and 60°F	1.52	2.0	
8	Flammability limits % in air	2.4—9.5	1.9—8.4	1.4—11.5
9	Ignition temperature in air			
	°F at atmospheric pressure	950—1080	890—1020	850
	°F at 185 lb/sq in	700	670	550

N.B. The figures quoted for gasoline are for typical commercial grades of gasoline. Gasoline grades can be made to vary considerably in terms of octane and boiling point etc.

Storage and Distribution

LP Gas can be stored in bulk tanks or held in cylinders. Bulk tank sizes for static installations will vary with the user requirement and the volume of gas per annum offtake e.g.,

625-gal tank = 6-10 tons p.a.

990-gal tank = 10-20 tons p.a.

(420-lb enlarged cylinders are also available for small offtake areas).

Vehicles or equipments can be refuelled from bulk dispensing units which consist of a suitable size tank, filter, pump, hose, and dispensing nozzle. Vehicle or equipment tanks are refuelled from these units in much the same manner as petrol pumps.

Vehicles can be fitted with bulk tanks and used to transport LP Gas over long distances. Tankers come in a number of sizes:

- 2½-ton gas capacity.
- 14-ton or 7000-gal capacity.
- 19-ton or 8250-gal capacity.

Cylinders are available in a variety of sizes. They can be either liquid or vapour withdrawal systems. All cylinders have the following fittings:

- Safety Relief Valve—for excessive pressure.
- Liquid Level Gauge—indicates percentage of liquid in cylinder.
- Vent Valve—releases pressure when cylinder filled to safe capacity.
- Filler Valve—provides maximum rate with minimum pressure drop.
- Cylinder Valve—used to open and shut gas from cylinder.

Cylinder sizes are:

Capacity		Length—Neck to Base (ins)	Diameter at Base (ins)	Weight (lb)
Pounds	Gallons			
33	6.6	29	12	41
40	8.0	31½	12	46
60	12.0	44	12	56
200	40.0	53	20	175

Health and Hygiene

The National Health and Medical Research Council approved the use of LP Gas operated vehicles in ships' holds, provided that certain conditions were met in relation to engine (carburettion) tuning and engine modification. The council recommended that the LP Gas engine must be tuned to yield an exhaust gas not more than .02% carbon monoxide on idling. Most petrol engines on idling yield an exhaust gas of usually above 2.0% carbon monoxide. It was for this reason that the council did not recommend the use of petrol engines in ships' holds unless there was sufficient effective ventilation to dilute the air contaminants emitted.

Where ventilation is not adequate, it would be a safer proposition, as far as the operator and other persons present are concerned, to operate an LP Gas vehicle or engine rather than a petrol engine of comparable life. This is also a situation that is applicable in the operation of petrol engines in confined areas, which could result in localized air pollution problems such as are encountered in ships' holds.

Petrol contains a small amount of an organic lead compound as an anti-knock agent. Inorganic lead compounds in small concentrations are emitted from all petrol engines. Although it is doubted whether sufficient lead would be discharged from an engine in a confined space to affect such items as uncovered food, it is considered that the contamination of at least the exterior of the item would be measurable.

Carbon monoxide can be absorbed by certain substances, notably plastic films, and although it is unlikely that sufficient quantities to cause harm would result, this is an area of potential concern, especially in food storage areas.

It is believed that 3-4 benzpyrene, a carcinogenic polynuclearhydrocarbon, occurs in small concentrations in the exhaust gases of petrol and diesel engines. Contamination of items, especially foodstuffs, from this item is more than a possibility. However, the extent and quantities involved to cause cancer have yet to be determined.

Water vapour, which is a large component of exhaust gases from petrol, if allowed to accumulate can produce humid conditions which may result in mould growths in areas, especially on semi-perishable and perishable commodities. This problem is reduced with LP Gas powered engines because less water vapour is produced than in a petrol engine.

Sound level or noise pollution are reduced by the use of LP Gas. However, many other factors influence noise levels such as individual machine characteristics, according to the amount of wear, operating congestion, site of operation, staging and the ability and technique of the operator. It must be concluded however that noise levels of LP Gas engines are significantly less than petrol engines and equipment.

It is significant that LP Gas, when used as a fuel for internal combustion engines, produces less atmospheric pollutants as a by-product of its combustion than gasoline, kerosine or diesel fuel.

Application to the Army

The advantages of LP Gas make it a fuel that has wide potential in the Army. The relatively lower noise levels of equipments using LP Gas make it a fuel with attractive properties for use in tactical environments. Its efficiency and economics stand on their own merits. The fuel is easy to store and handle either in bulk tanks or cylinders. Dispensing of the fuel is fast and efficient.

LP Gas can be used in dual systems and hence improve the flexibility of equipments, in some cases their range, length of operation and efficiency.

Some applications that LP Gas could be used for in the Army are listed below. They are particularly applicable to use in the field:

- Fuel for automotive, vehicle or plant engines. The use of LP Gas in 'A' vehicles is discounted due to the fact that this is contained in pressurized containers.

- Fuel for generating equipment.
- Fuel for refrigeration units.
- Fuel for power tools, both hand held and mounted.
- Fuel for other small internal combustion engines, such as outboard motors.
- A source of illumination as a fuel for incandescent pressure lamps.
- Water heaters.
- Catering and cooking equipment.
- Any other equipment that is powered by existing conventional fuels such as gasoline, kerosine or diesel.

One argument against LP Gas is that industry will continue in its development and improvement of internal combustion and compression ignition engines and there is no need for the Army to adopt another liquid fuel. It is agreed that armies must equip themselves with the most common available fuel. However, as the oil reserves of the world diminish and new natural gas reserves are discovered, this factor alone should increase our interest in, and awareness of LP Gas as a fuel. Although industry will finance development it is considered that the Army should be actively engaged in this field.

Supply of Fuel in the Field

LP Gas could be supplied in the field by a variety of methods:

- Individual modular tanks for small equipments. Standardization would be necessary.
- Replacement cylinders for static equipments or plant and vehicles.
- Bulk dispensing from a tank to individual equipment tanks or refilling replacement cylinders.

- Bulk storage in tanks reticulated to equipments or dispensers in area.
- Vehicle mounted bulk tanks for use as described above.

Tank farms can be foreseen, but the weight and bulk of the larger tanks would be uneconomical in any location other than a base area. Truck mounted units for bulk dispensing or bulk storage replenishment are already established in civilian practice as the most efficient and expeditious method of transporting LP Gas.

Conclusion

Liquid Petroleum Gas is a clean, efficient, economic and versatile fuel for powering internal combustion or compression ignition engines. It is a fuel which is readily adaptable for introduction into the Army today. It offers numerous advantages to the operator, the user, the Army and other services. Its use will reduce engine servicing and maintenance, and prolong the usable life of the engine it powers. Its application to the Army should be investigated in depth as a matter of policy to gain as much benefit as possible in the immediate future. □

MONTHLY AWARD

The Board of Review has awarded the \$10 prize for the best original article published in the June 1972 issue of the journal to Major T. H. Holland for his contribution 'The Fallacy of Defence on the Cheap'.

Recommended Reading

THIS list is prepared at the Australian Staff College and published in the journal to assist any officer seeking to improve his professional knowledge through the study of past events and current trends and developments.

LOW INTENSITY OPERATIONS, by Brigadier Frank Kitson (Faber and Faber, London, 1971).

THE purpose of this book is to draw attention to the steps which should be taken now to make the army ready to deal with subversion, insurrection and peacekeeping operations during the second half of the 1970s. The book considers the situation and needs of the British Army, but many of its recommendations are relevant to armies of other countries. The author draws on recent (post-1945) history to prove the necessity of an army to achieve success in these roles.

Having established the *raison d'etre* for the organization, the story unfolds in a most logical fashion. Its conclusions, which are well supported, suggest the training and education required to ensure officers take proper action in the handling of information; and the organizational measures required to allow the right sort of units to be available, armed and equipped to conduct operations at the lower end of the scale of conflict. The reader will be struck by the depth of research recorded, and the logic used to develop argument.

Brigadier Kitson wrote the book (his first) while carrying out research at Oxford. With service in Kenya, Malaya, Muscat and Oman, Cyprus and Northern Ireland the author has the background to draw valid conclusions and recommendations regarding the improvement of army efficiency in these low intensity military roles. □

HITLER'S LAST OFFENSIVE, by Peter Elstob (Secker and Warburg, London, 1971).

THIS book, the result of five years of painstaking research, is by an author whose background includes an early RAF commission in 1935, which he resigned in order to go to the Spanish War, and a period of service with the Royal Tank Regiment from 1940 to 1946 in India, Iraq, Syria, Lebanon, Palestine, Egypt, Libya, France, Belgium, Holland and Germany.

This is the story of the Ardennes offensive (the Battle of the Bulge)—an interesting study of the great German gamble of December 1944—a gamble engineered by Adolf Hitler and the outcome of which was decided in three days, foreshadowing the final collapse of Germany four months later.

Elstob details the initial surprise assault in which the panzer columns did not even reach the Meuse, the gallant resistance of the comparatively untried American troops in the front line, the part played by Field Marshal Montgomery in stabilizing the front, the errors of judgement by many, including the tempestuous General Patton. Hitler flung his force of infantry and armour against the lightest held sector of the Allied line in a last, desperate attempt to avoid disaster. But, as the dust jacket rightly states, 'paradoxically all he ensured was that the Russians should get to Berlin first'.

A small point of criticism could be levelled at the diagrams and maps which are included within the general body of the book as normal pages. The keen student would have appreciated the little extra expense which would have given him the fold-out maps to be followed during the reading of the relevant chapters. In contrast, the index is very detailed and helpful. □

THE ARMED SERVICES AND SOCIETY, Alienation, Management and Integration, edited by J. N. Woolfe and John Erickson (University Press, Edinburgh).

THIS is an edited series of papers delivered at a conference conducted by the Seminar Committee of the Faculty of Social Sciences of Edinburgh University in May 1969. The subject of the conference was 'The Services and Society'.

The quality of the eight papers presented is variable, and ranges from detailed analyses of the demographic and politico-economic basis of service recruitment to more general, though often equally academic, discussion of the impact of society on the services. Notable for their lucidity among the contributions is the paper presented by Correlli Barnett, surveying the military profession in the 1970s, and Mr D. Greenwood's paper on the scope and pressures for change within the military establishment.

The collection is biased towards the United Kingdom experience, and is sufficiently up to date to make some reference to the pressures on the British Army imposed by operations in Northern Ireland. There are, however, contributions on the problems of social integration in the armed forces of Western Germany and the United States.

Of particular note is that each paper is followed by an edited account of the discussion which followed, and that prominent in this discussion were senior members of the staff of the Ministry of Defence and serving officers. The freedom of discussion not only allowed but encouraged between this group and the academics should be an eye-opener to those who appear to feel that such interchanges are not only profitless but potentially dangerous. However, the most illuminating comment is that made by Mr J. Lowe, the Director of Adult Education in Edinburgh, on the last paper of the collection: 'In the course of this seminar we have become aware of the lack of solid evidence about many factors impinging upon the future role of the Armed Forces.' □

ALEXANDER OF TUNIS AS MILITARY COMMANDER, by W. G. F. Jackson (Batsford, London, 1971).

THIS book is the fourth in the Batsford 'Military Commander' series: General Jackson's candid assessment of Alexander follows those already published on Montgomery, Rommel and Hitler.

The book is a fascinating study of the career, personality, strengths and weaknesses of a man who, in the author's opinion, was one of the outstanding military leaders of his age. From the

pages of the book Field Marshal Alexander emerges as an intensely human commander, a man with a wealth of active service experience who saw more fighting and survived more shot and shell than most of his contemporaries in either the British or American armies. A man of charm and moral integrity with a quiet, self-effacing style which the author remarks on as unusual in great military commanders. A sound but uninspired strategist, an intuitive tactician whose lack of decisiveness was more than offset by his genius for leadership, which won him the loyalty, respect and implicit trust of all who served under him.

General Jackson's book is easy to read, well documented and fully supported by maps and photographs. Well worth reading and of particular value to those wishing to study the twin arts of leadership and high command. □

THE MALAY DILEMMA, by Mahathir bin Mohamad (Donald Moore for the Asian Pacific Press Pty Ltd, 1970).

DR Mahathir uses the Malaysian communal riots in 1969 as a background to *The Malay Dilemma*. He attempts to explain the causes and devotes a fair proportion of the book to discussing the influence of heredity and environment on the Malay race to arrive at the conclusion that the Malay is economically backward. Several chapters are devoted to the immigration and education policy of Malaysia and a comparison of these policies with several other countries including Australia.

There is an air of pessimism running throughout the book. The author believes that it is not entirely out of the question that 'ultimately political power might prove the downfall of the Malays'. At the same time he considers that the removal of all protection from the Malays (which at present they enjoy because of political power) would subject the Malays to primitive laws that enable only the fittest to survive.

Dr Mahathir's solution is a sort of 'constructive protection' worked out after careful study of the effects of heredity and environment. Until this is done, he says, the deleterious effect of heredity and environment on the Malays is likely to continue.

The author's main contention throughout the book is that the Malays are the rightful owners of Malaysia and that immigrants (approximately half the population) are guests until they are properly absorbed into the community. This cannot happen until these immigrants have abandoned their language and culture of the past.

Dr Mahathir was involved in the Ante-Malayan Union Campaign while he was still at school. He was an early member of UMNO and as an alliance MP he travelled widely in Asia, Africa, Europe and America. Following disagreements with the party, Dr Mahathir was expelled from UMNO in 1969.

The book provides an interesting insight into the facets of racial unrest within Malaya. The book is also of interest beyond Malaysia and the Far East because it deals with the problems of human beings of different races living together in the same country. □

THE GOLDEN YEARS, Department of Air (Australian Government Publishing Service, Canberra, 1971).

THE *Golden Years* should enlighten readers of all ages. It presents a brief yet thorough history from the founding of the Royal Australian Air Force on 31 March 1921 to the Fiftieth Anniversary in 1971. The vivid accounts of early growing pains and heroics of battle from World War I to the Vietnam conflict are of particular interest.

The fact that the writing of *The Golden Years* is supported by more than 250 colour and black and white photographs makes it interesting to the scholar, casual reader and the veteran who wants to reminisce. A bonus is that it gives an update of the roles and capabilities of the RAAF as of 1971. A highly recommended book, especially for the military reader. □

BOOK REVIEWS



THE NOISE OF DRUMS AND TRUMPETS, by Elizabeth Grey.
(Longman, London, 1971. 255 pp. \$5.60, illustrated).

*Reviewed by Lieutenant Colonel C. F. Thomson,
Army Headquarters, Canberra.*

AT the outset, the Crimean War had two aspects in common with preceding wars. In the first place a reason to declare war was seldom required though an excuse was usually desirable. Thus, an alleged design for southward expansion by Russia, a collection of armies with no war to fight for more than a decade, and, most 'important' of all, a 'serious' difference between Christian Rites over a small piece of silver in Bethlehem, were sufficient causes for the war that was to be the last of its type.

The second factor common to the wars of that era was the fickle phenomenon known as public opinion. When you read Elizabeth Grey's book, *The Noise of Drums and Trumpets*, you will learn that in the year 1854, as in former years, the citizens of countries at war were sustained by fanciful, misinformed, half-truthful reporting by chroniclers who were seldom personally identified with the events they were recording, or who otherwise had vested interests to safeguard. Rarely was a battle described in terms of privation, human misery or smell. More often it was documented with emphasis on the martial virtues of valour,

steadfastness and glory. Onlookers over-embellished their accounts from the safety of picnic vantage points while the soldier understated his accounts.

It was small wonder that the image of war produced in the public mind was so good for recruiting. It caused many a young lady to swoon with pride at the sight of her hero marching off to war. Had the image been a true reflection of the soldier's lot she would more likely have fainted from the description of untreated—or maltreated—wounds, pestilence, raging epidemics and forms of hygiene which were primitive even for that era. But then came the telegraph, the camera, and William Howard Russell to change this; the image which had for so long perpetuated the illusion of the soldier as a romantic figure in scarlet. From henceforth soldiers would not 'die tidily with romantic last messages on their lips'.

As Elizabeth Grey tells it, William Howard Russell was a hero to most and a pain in the neck to some. The broad division can be fathomed from his devotion to the soldier and a perceptive criticism of his peers. He evoked in the public at large a mixture of outraged indignation and intense pride with his timely, factual accounts of battles fought and with his private commentaries on life at the front. One of the essential qualities of successful journalism, the discernment of human interest, the story behind the story, became manifest for the first time through the columns of *The Times* of London, Russell's faithful sponsors.

This interesting book is one for the casual reader as well as the serious student of military history. For the former it has a very evocative narrative; large tracts being quoted directly from Russell's dispatches, and neatly complemented by the inclusion of what must surely be some of the earliest photographs ever taken of soldiers at war. The maps, particularly those illustrating the principal battles of the Alma, Balaclava, Tchernaya and Sebastapol, are very adequate.

The serious student may have a few reservations. He may wonder, in particular, if Russell's charges that the lack of tac-

tical exploitation of local victories was caused entirely by inadequate leadership and want of decisive action. Russell learned very early that among the General Staff in the Crimea he merited no standing ovation, and he was at pains to avoid contact with them during crises. It seems doubtful, therefore, whether he would have been fully conversant with all the problems of these moments.

However, the bibliography indicates that her subject is well-researched, and Elizabeth Grey's own commentary leads one logically to the conclusion that some of the major reforms—principally those relating to a just regard for the 'common' soldier—were attributable to Russell's discerning qualities. One person whom he must surely have inspired was Florence Nightingale. At the end of the book Russell ponders on what might have been had he taken the quiet life. Perhaps Florence Nightingale would have heard no call to answer. Would another patron have emerged to fulfil the role of reformer—if not how would we stand today? □