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Australian Army History Unit
16 July 2014

MILITARY BOARD

Army Headquarters Melbourne 1/10/1959

Issued by Command of the Military Board

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The Journal is issued through Base Ordnance Depots on the scale of One per Officer, Officer of Cadets, and Cadet Under Officer.

AUSTRALIAN ARMY JOURNAL

A Periodical Review of Military Literature

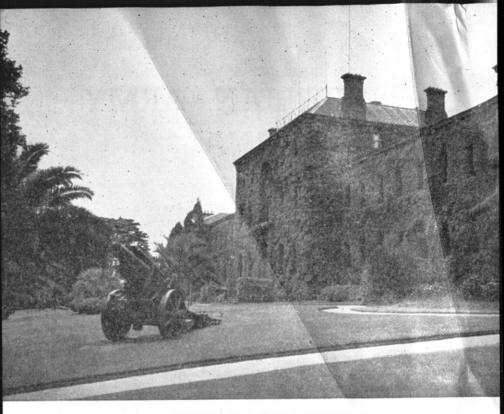
Number 125

October, 1959

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VICTORIA BARRACKS, MELBOURNE

AUSTRALIAN ARMY JOURNAL

Editor

COLONEL E. G. KEOGH, MBE, ED (RL)

Assistant Editor
MAJOR W. C. NEWMAN, ED

Staff Artist Mr. G. M. CAPPER

The AUSTRALIAN ARMY JOURNAL is printed and published for the Directorate of Military Training by 1 Base Printing Company, RAAOC. The contents are derived from various acknowledged official and unofficial sources, and do not necessarily represent General Staff Policy.

Contributions, which should be addressed to the Director of Military Training, Army Headquarters, Melbourne, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers. £5 will be paid to the author of the best article published each month, and £40 to the author of the best article published during the year.

Communist POW Treatment in Indo-China

BERNARD B. FALL

Reprinted from the December, 1958, issue of the *Military Review*, Command and General Staff College, Fort Leavenworth, Kansas, USA.

In the case of armed conflict not of an international character . . . each Party to the conflict shall be bound to apply, as a minimum, the following provisions:—

(1) Persons taking no active part in the hostilities, including members of armed forces who have laid down their arms . . . shall in all circumstances be treated humanely, without any adverse distinction founded on race, colour, religion or faith, sex, birth or wealth, or any other similar criteria.

To this end, the following acts are and shall remain prohibited at any time and in any place whatsoever . . . :—

- (a) Violence to life and person, in particular, murder of all kinds, mutilation, cruel treatment and torture.
- (b) Taking of hostages.
- (c) Outrages upon personal dignity, in particular, humiliating and degrading treatment.
- (d) The passing of sentences and the carrying out of executions without previous judgement pronounced by a regularly constituted court, affording all the judicial guarantees which are recognized . . . by civilized peoples.
- (2) The wounded and sick shall be collected and cared for.

Article 3 of the Geneva Convention of 12 August, 1949, for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field.

When the Indo-China war ended on 20 July 1954 by a cease-fire, the exchange of all prisoners of war (POWs) held by both parties was, of course, part of the agreement. Thousands of members of the Vietnam People's

Army (VPA) — the official name for the Communist forces in Vietnam who had been made prisoners by French Union troops over the past eight years, were returned. Interned in regular POW camps inspected by representatives of the International Red Cross, their external aspect bore eloquent evidence of the adequate treatment they had received while in French Union hands. They were brought to the transfer points in army trucks or river craft.

French Union prisoners returning from captivity in the VPA area of control arrived on foot, with the exception of litter cases. The exchange began officially on 18 August 1954 (although, by an act of clemency on the part of the VPA High Command. severely wounded French POWs had been released earlier) and soon two factors became clear: there were not going to be as many returnees as expected, and most of those who returned were walking skeletons whose general aspect was in no way different from that of the survivors of Dachau and Buchenwald In order not jeopardize the chances of return of certain civilian and military prisoners who might still have been detained in Communist camps, the French Union High Command made a deliberate effort to play down the fate and state of those prisoners of war who had returned alive to the French lines. However, a highlevel group of French military surgeons and medical specialists was called upon to investigate the exact facts of the situation.

The facts which emerged from the painstaking interrogation of thousands of returnees, in addition to those gathered from civilian sources on the spot and several books published by survivors, give a picture of the Vietnamese Communist attitude towards prisoners of war and military medicine. This needs to be known in the West, since future complications in the area may compel friendly forces to face the same foe once more under similar conditions.

POW Camp System

The Indo-China war began as an insurrection against the French, with the Communist forces operating on a hit-and-run basis. Even prior to the outbreak of hostilities they had held several hundred French civilians as hostages, including

Doctor Bernard B. Fall, a French citizen, came to the United States as a Fulbright scholar in 1951 and received his Master of Arts and Ph. D. degrees from Syracuse University. He has travelled in the Middle East and spent 1953 in Indo-China where he accompanied French units in combat operations throughout the country. A frequent contributor to the MILITARY REVIEW. his latest article was "The Two Sides of the Sinai Campaign" (July 1957). Doctor Fall recently has returned from another research trip Indo-China and now is an Associate Professor of International Relations. Howard University, Washington, DC.

women and children. The hostages, along with whatever military prisoners were in their hands in December 1946. were hurried off into the mountains of north-western Vietnam. Such a period of fluid operations by irregulars is, of course, most dangerous to the prisoners. for the temptation often arises to get rid of these "useless eaters" who generally slow down the march of a unit and pose special security problems. Likewise, the inhospitable climate (temperatures in the uplands drop to the freezing point in the winter and in the summer the area is heavily malaria-infested) operated its own weeding-out process, particularly on the civilian prisoners. Deliberate killings, however, were not too numerous, as the live hostages were considered a good bargaining point. Quite a few of them acclimated well to existing conditions and survived the whole ordeal in surprisingly good health.

Actual POW camps began to be organized when the ill-fated battles of October 1950 along the Red Chinese border brought the first batch of several thousand prisoners into VPA hands (Figure 1). From 1950 until the end of 1953, all POWs were considered as ordinary prisoners, regardless of their state of health or their wounds. All

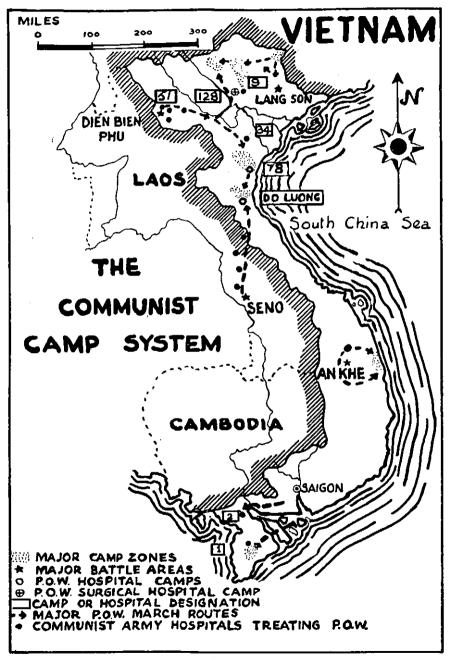


FIGURE 1

French medical officers captured with the troops were removed from the units and sent to Camp Number 1, the officers' camp (Figure 2) without being able, in the majority of cases, to administer even first aid to the most urgent cases prior to their separation.

results of this policy\ were inevitable, and clearly show up in the wound statistics of the returnees: not a single POW suffering from injuries of the abdomen, chest, or skull survived Communist captivity. This does not, of course, include simple skin wounds or those who were luckly enough to be evacuated directly from the battlefield of Dien Bien Phu via helicopter during the brief local truce arranged for this purpose between the two high commands in May In most cases, serious casualties either died on the battlefield or within a few days after capture, subject only to medical attention of their own fellow prisoners. In the camps themselves, the VPA maintained an "infirmary" equipped at best with anti-malaria tablets and a lancet or two, and staffed with a medical attendant of indeterminate training.

In some cases, depending upon the pleasure of the local VPA commander, POWs were transported to VPA mobile field hospitals for treatment. But even in those instances the cure was often worse than the illness, for the POWs, if they survived harrowing portages of hundreds of kilometers on bamboo stretchers, often were left for months without adequate treatment.

There are authenticated cases on record with photos where soldiers were left for eight months with unconsolidated fractures and the resulting osteomyelitis being cleaned out without anesthesia; where a Foreign Legionnaire marched for 25 days with an arm smashed by a machine-gun burst, only to be operated on without antibiotics or anesthesia; and where an Algerian rifleman, his face shattered by a burp-gun burst, marched 33 kilometers and was left without surgery from 1952 until his return to

the French in 1954. These are but a few cases and do not include the wounded from Dien Bien Phu.

On-the-Job Surgery

Only in January 1954 did the VPA begin to set up a few hospital camps near the largest concentrations of POW camps (Figure 1) but these were too far apart for the treatment of urgent cases and too ill-equipped for anything but the lightest surgery. Hospital Camp Number 128 was staffed with French medical personnel subordinated to VPA personnel whose state of training in most cases was elementary, but who were anxious to learn the trade by operating on the prisoners. As one of the French medical officers of Camp 128 pointed out: "We may not have saved many lives by performing surgical operations, but we saved quite a few by preventing our over-enthusiastic guardians from performing any".

It is clear that under such conditions the survival of a serious surgical case would have been a near-miracle. Here, again, stark statistics are more eloquent than long phrases - out of a total of 10,754 POWs liberated by the VPA, only 612 were active surgical cases. Of the latter, 391 had been captured at Dien Bien Phu and thus had been Communist hands for less than four Also, 718 others had been months. surgical cases, but their wounds had spontaneously consolidated and their general low state of health was primary consideration over their needs for remedial surgery. Out of this total of 1330 surgical cases, only 81 appeared to have had surgery of any kind during their captivity, and of those, 38 had been operated upon without any anesthesia. Only one POW is known to have survived an appendectomy while in captivity, and that was performed by a French doctor at Camp 128.

The camps themselves were constructed like the villages surrounding them. Their location was never communicated to the French High Command, so that

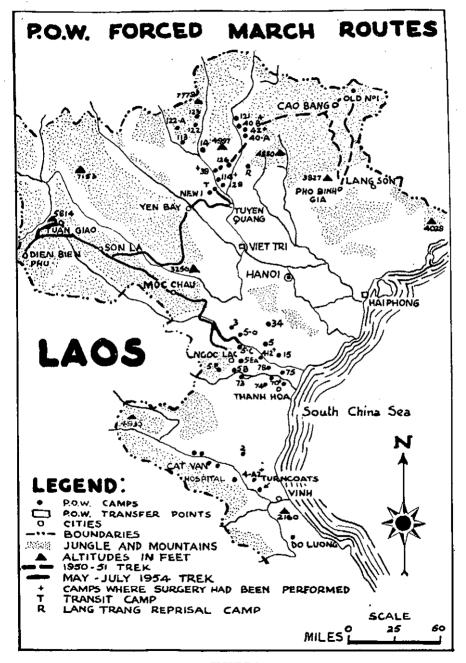


FIGURE 2

at least in one case a POW camp was completely razed by the French Air Force, who believed that it was an enemy installation. In certain cases, camp locations were identified by French Union Forces and efforts were made to parachute essential foods, drugs and clothing to the POWs. Such aid was confiscated as "war booty" by the adversary.

Camp equipment was nil. Only the officers' camp was provided with a pot large enough to boil the drinking water. All other camps simply were located near rivers and rivulets (Figure 2) and the inmates drank directly from the river. The death rate from waterborne intestinal diseases assumed alarming proportions

in certain areas. Camp 5-E counted 201 deaths out of a total of 272 inmates between March and September 1952. Camp 70 lost 120 out of a total of 250 men in July - August 1954. Camp 123 lost 350 men (one-half of its effectives) between June and December 1953. Camp 114 maintained an average of two deaths a day throughout 1952, and even the officers' camp, with its large complement of French medical officers and its comparatively better facilities, showed a mortality rate of 18 per cent from 1951 to 1954.

The over-all results of this Communist prisoner of war policy are apparent in Table A.

Units	Missing 1945–1954	Returned July – October 1954	Percentage of Missing
French Mainland	6449	2587	40.1
Foreign Legion	6328	2567	40.6
North African	6695	3369	50.7
African	1748	796 1	45.6
Vietnamese	15,859	1435	9.1
Totals	36,979	10,754	28.5

TABLE A

In addition, a total of 4744 persons, military and civilian, were returned by the VPA between 1945 and 1954 to French Union lines during "clemency periods". Of the 10,754 POWs returned after the cease-fire, 6132 required immediate hospitalization and, of these, 61 died within the next three months.

Circumstances concerning the 61 dead deserve closer examination, for they reveal clearly that the situation in the POW camps, far from improving as the VPA received more adequate equipment from the Soviet Union and Red China, actually became worse. For instance, of the 61 that died, 49 had been captured at Dien Bien Phu and all but four had been Communist POWs for less than four months. It must also be emphasized that none of them were surgical cases,

but merely "walking skeletons" — men, who after 57 days of continuous combat, had been simply marched to death under the worst possible conditions over 500 miles of jungle paths from Dien Bien Phu to the camps of northern and central Vietnam.

Marches That Killed

It is still not clear what prompted the VPA High Command in singling out the defenders of Dien Bien Phu for especially harsh treatment. Was it merely an unthinking military "snafu"? Was it a militarily logical attempt to remove the maximum-number of prisoners from an area where perhaps they could expect succor through a relief column based in Laos or through a problematical, but possible, airborne raid? Was it a

politically inspired scheme to influence French diplomats negotiating in Geneva for a cease-fire? Or was it merely good psychological warfare designed to break the spirits of remaining French Union troops fighting on in Indo-China? Perhaps all of these motivations played their role in the reasoning of the VPA military and political leaders.

In simple terms, the bulk of the prisoners — approximately 7000. about 1000 wounded and 4000 to 5000 dead left behind on the battlefield --faced a trek of 450 to 530 miles. according to whether they were assigned to the northern or the central Vietnamese camps. This they covered over difficult terrain during the rainy season in about 40 days, with an average load around 35 pounds, with many of them carrying litter cases or dragging exhausted comrades.

Even more unfortunate were the POWs being escorted north from the battles in Central Laos (Figure 1). Their officers marched from Laos to Camp Number 1, a distance of 900 kilometers, in 63 days with the enlisted men covering the 500 kilometers to the camps around Vinh in a record 24 days.

Death rate figures for those forced marches are not available, but they were considered high by all concerned. Actual executions of prisoners no longer able to march were not too frequent - they were simply left on the pathside to die. The Communist escort troops were relayed, that is, they did not follow a prisoner group throughout the entire duration of the march. Food given the POWs was cold rice once a day. This diet, to which all but the Vietnamese were unaccustomed, fed to men who were exhausted by their wounds and by two months of constant lack of sleep and adequate nourishment, had serious results upon the health of the column. Dehydration due to continuous dysentery and abnormal perspiration soon made most POWs lose more than one-half their normal weight and probably was responsible for the majority of deaths while on the march.

It is also important to note that the various racial groups or nationalities responded differently to both the physical and psychological strains of the ordeal a fact which also had come to light in Korea. For obvious reasons the Africans and Asians withstood the march best in spite of the fact that the Vietnamese who had fought on the French side often were singled out for particularly brutal treatment. Thus. among the 10,754 liberated POWs. the various groups accounted for the following percentages of hospitalization:-

French Mainland	ı	 66.7
Foreign Legion		 69.04
North African		 60.7
African		 24.0
Vietnamese		 24.45

The unusually high casualty rate among the Foreign Legionnaires was attributed to the fact that their predominantly central European background, with their fair skins and hair, made them particularly ill-equipped to withstand the murderous monsoon climate. At the same time, their highly individualistic attitude made them adopt, in many cases, a "may-the-Devil-take-the-hindmost" view of their fellow Legionnaires, although, of course, cases of devotion to weaker friends were not infrequent.

The mainland French were hardly better equipped for the trek, but displayed a great amount of group cohesion and devotion to their wounded and sick comrades — a qualtiy which the French already had exemplified in the German concentration camps of World War II. This cohesion was stronger as the POWs involved belonged to one of the elite units (commandos and paratroops) and had succeeded in remaining together as units or parts of units. Wounded and sick were carried along until the camps were reached or until no one was left who was strong enough to carry them. Marche ou creve — "March on or croak" - became a byword for the columns as they wound through the steep hills of the Thai country. In the words of some survivors, "only the men with strong character, those who had the will to march, to stay in the column, had a chance of survival".

Here, also, hundreds of well-documented cases attest to what this meant in actual practice: there was the case of Foreign Legionnaire Number 202, of the 13th Half-Brigade, wounded both at Dien Bien Phu and later through French bombing on the road between Tuan Giao and Son La, who was carried for 500 kilometers through the mountains without a stretcher by his comrades and whose fragment-fractured thigh was immobilized only two months later.

There was the paratrooper blinded by shell fragments who was half-dragged and half-carried by his friends for 600 kilometers, and the artilleryman with a pierced diaphragm who had to carry 44-pound rice bags.

This was the "Death March" of the French Union garrison of Dien Bien Phu, lasting from May to July 1954. It caused more casualties than any single battle of the entire Indo-China war.

Political Cadres

As in Korea, political indoctrination of POWs was standing operating procedure, and, to all appearances, the VPA was better equipped to deal with the various national minorities of the French Union Forces than its North Korean counterpart. Broadcasts or leaflets directed at French troops were written in French, German, Arabic, and even in African dialects. Usually, such materials were prepared by deserters, but also, according to published East German sources, by propaganda organizations in various Soviet bloc nations and by French and Algerian Communists in France.

Every POW camp had its can-bo (political cadre) in charge of the "re-education" of the POWs, and the Communists did their utmost to pit one national group against the other. For example, the Foreign Legionnaires were told that they were being exploited for

the "imperialists" and offered repatriation to their East European homelands. A few of them accepted, and recently there arose the curious case of one such Legionnaire who redefected from East Berlin to France to serve out his term of enlistment with the Legion. The Algerians and Moroccans were told a story with a different slant, and still another propaganda line was presented to the Senegalese.

In order to break down unit morale more rapidly, overseas units separated rapidly from their French junior officers and non-commissioned In fact, the VPA developed officers. an extremely rigid system of racial discrimination in order to sharpen group antagonisms. This policy had a measure success, particularly among Algerians, but several sources (such as Major Grauwin, the chief medical officer at Dien Bien Phu) mention instances entire detachments of North African troops who preferred to take in stride the harsh treatment reserved for the recalcitrants rather than to turn "progressive".

In certain cases the political indoctrination began with the wounded themselves. Major Grauwin states that he found "understanding" with the French-trained chief surgeon of the VPA 308th Infantry Division. However, one of Grauwin's colleagues, Lieutenant Resillot, had the experience of seeing the wounded under his care reclassified for surgical intervention according to a priority system of "People's Democratic urgency": ex-prisoners of the French North African enlisted men, Foreign Legion enlisted men. French enlisted men, and, lastly, French officers. The result was that several patients whose state of medical urgency required immediate attention, died before help could be given them.

"Reprisal Camp"

In the POW camps, "recalcitrant" prisoners were subjected to the severest and most humiliating duties. If particularly resistant to Communist

indoctrination, they were transferred to Lang-Trang, the feared "Reprisal Camp", which was little else but a death camp. The re-education process was an important step in the integration of the POW into the prison camp system, for the "re-educated" prisoner had become a "new man". Violation of camp rules by one of these prisoners was considered a relapse into "reactionary" thinking—a grave fault punishable by death. Claude Goeldhieux, a former POW, described such an execution in the following terms:—

While the Communists considered an evasion prior to political re-education as a benign political mistake, their attitude now changed radically. The escapee now became a deserter, a traitor to the cause since his eyes had been opened upon the truth. By attempting to escape, he new-found reneved his faith and re-affirmed his former errors. individualistic, hence guilty, feeling, he had sabotaged the political action of the mass of the prisoners. Thus he ceased The sentencing to death to exist. was merely a concretisation of this non-existence.

Like the United States Army in the case of American POWs in Communist hands, the French Union High Command faced the problem of how to deal with returning "Progressives", that is, soldiers who supposedly, in one way or another, had co-operated with their captors. Here, a sharp distinction was made between those who, by their actions, had contributed directly to harm their fellow prisoners or the war effort, and those who merely mouthed Communist slogans in order to avoid undue hardships. was assumed (wrongly, as it turned out in the case of the Algerian POWs) that the level of Communist propaganda was so unsophisticated as not to cause any harm to general combat morale. the whole this has remained true. Communist psychological warfare in the long run was more effective upon morale in France than upon combat troops in Indo-China.

To the knowledge of this writer, no formal official order ever was given by the French Union High Command with regard to the attitude to adopt toward Communist indoctrination. It appears from actual experience, however, that the senior officers detained by the VPA in fact told their subordinates to "go with a certain number along" of Communist propaganda demands as long as such compliance fulfilled the purpose of improving the lot of the greatest number of POWs and did not materially harm the war effort. Thus Major Grauwin signed an "appeal of clemency" to Ho Chi Minh, the President of the North Vietnamese Democratic Republic. in order to ensure evacuation via helicopter of the most seriously wounded POWs of Dien Bien Phu. Similar appeals were signed by other officers and by the French nurse at Dien Bien Phu. Mademoiselle Genevieve de Galard.

The fact that the appeals contributed to the saving of nearly 600 wounded whom otherwise surely would have died on the trek, seemed well worth the price of a few signatures which, in any case, convinced only those who already were converted. There is no evidence that officers and men whose activities in the propaganda field were limited to such innocuous gestures were in any way penalized by the French Army upon their return.

This, of course, is not the case with regard to deserters - members of the armed forces who deliberately joined the Communist ranks either before or after capture. They are being tried by regular French military courts. Even at the present moment, a steady trickle of such deserters - their total number may have reached about 800 — continues to request repatriation to France via the channel of the International Control Commission in Hanoi. It is significant that, as particular cases of American turncoats in Red China, the returnees seem to prefer the certitude of a jail sentence in France to "freedom" in North Vietnam.

Conclusions

In view of the experiences which Western forces have been able to gain from the POW camp systems in Korea and Vietnam, it may be useful to consider certain steps which will enable friendly forces unfortunate enough to be captured in monsoon Asia to face the prospect of captivity with a better chance of survival.

To be sure, the soldier's first job is to fight with every ounce of strength for his country, and captivity cannot be considered as an "easy way out" from the hardships of combat. It would be equally illogical to rule out any physical and/or mental preparation for possible capture on the grounds that it may incite the soldier to letting himself be captured. Considering the sobering facts that came to light about North Korean POW camps after the end of the Korean war and those revealed about the VPA of North Vietnam, camps probably will never become a happy alternative to anyone, no more than teaching airplane crews to survive in the Arctic or the sea will incite them to crash their planes in Greenland or the Pacific.

A few suggested "POW Survival Measures" may include simple practical steps such as the following:—

- 1. Inculcate ruthless observance of rules of elementary tropical hygiene making every possible effort to obtain clean drinking water, use of latrines, and deratization of living quarters.
- 2. Train a large number of enlisted men with some medical knowledge beyond that of the average present-day corpsman, since they are more likely to be permitted, after capture, to remain with their unit than medical officers.
- 3. Distribute more complete first-aid kits to all men. Some simple injectable

antibiotics could be included, since the Communists almost never gave any to their POWs and then only in ridiculously small quantities.

- 4. Condition soldiers to local food staples as part of their normal diet. Many French soldiers dug their own graves by refusing to absorb unappetizing "gluey rice" (rice cooked with its husk, which retains all its vitamins) until driven to it by sheer hunger.
- 5. On the psychological plane the soldiers must be trained to carry over the "buddy-system" into the POW camp and, particularly, during the extremely harrowing marches to collection points and assembly centres. Esprit de corps probably has saved the lives of more POWs than food or first-aid kits.
- 6. On the political level, the enemy, whether a nation or a semi-regular force, must be made to understand. either directly or via neutral observers or international organizations, that the friendly forces are determined, if need be through the use of retortion or reprisals, to see the rules of war observed to the letter. The agonizing fear which generally gripped Nazi prisoners who fell into the hands of Soviet troops during the latter part of World War II and who expected — and sometimes got — the treatment which they themselves had in many cases meted out to enemy POWs. that even dictatorships particularly dictatorships) are amenable to this argument.

Thousands of unmarked graves dot the march routes of the French Union prisoners of war from the China Gate near Lang Son to the hills of Laos and the sand dunes of Central Vietnam. It can only be hoped that this brief tale of their fate may help save the lives of other soldiers in possible conflicts yet to come.

Guided Missile Development in Australia

LIEUTENANT-COLONEL R. W. SWARTZ, MBE, ED, MP AQMG (CMF), HQ N Comd

From the notes of a lecture delivered to the United Service Institution

AUSTRALIA is making a vital contribution to military science through the guided-weapon establishments at Salisbury and Woomera in The trials facilities South Australia. provided by these establishments have played an important part in the development of practically every guided weapon in the British Commonwealth armoury. They provide in addition, means for research and experiment in in which specialized fields these instrumentation, long range, safety, the ability to recover rounds after firing and conduct large-scale trials appropriate secrecy, are available to a degree beyond the provision of any other such ranges in the Western world.

Australia's participation in this field dates from 1946 when work on guided weapons had only recently begun in the United Kingdom and it had become clear that there was a need for a long range,

preferably over land, for the testing and development of guided weapons. Such a range could not be located in the British Isles, and a survey throughout the British Commonwealth Nations of suggested that Australia was most likely to provide a suitable site. As a result, a party organized by the British Ministry of Supply carried out a preliminary survey in Australia in 1946 and, on its return to England, submitted a detailed report. Following the recommendations the United Kingdom Australian Governments jointly agreed to set up the Long Range Weapons Establishment at Salisbury in South Australia and to undertake construction of both guided weapons and bomb ballistic ranges at Woomera, approximately 300 miles north-west of Adelaide. A second UK party arrived in Australia in March 1947, and the project officially began on 1 April of that vear.

The South Australian location had two outstanding advantages. Firstly, by choosing a site near Pimba, on the Trans-Continental Railway, for launching area, it would be possible to fire missiles to distances up to 1250 miles, over practically uninhabited country. before reaching the north-western coast of Australia. Secondly, at Salisbury (only 15 miles from Adelaide) a disused but new explosives factory was available with 1½ million square feet of convertible buildings, with supporting office blocks, transport facilities, and some housing. For economy of operation it was decided to concentrate at Salisbury the supporting workshops, laboratories, and preparation facilities, so that the minimum number of people would need to be accommodated in the semi-desert region at Woomera. the total community at so, Woomera now numbers over 3000 men, women and children.

The joint agreement between the two governments provided that Australia would finance, build, equip, staff and operate the Australian Establishments. United Kingdom would responsible for the formulation of the policy for guided weapon development, would undertake the basic research and development, and provide the various weapon prototypes for trials their undertake subsequent manufacture for the Armed Services. It largely stemming from undertaking that a decision was made to set up the Australian Defence Scientific Service, whose members currently staff these defence establishments.

The accommodation to be provided in Australia also included commodious premises to be used by UK firms who were contractors to the British Ministry of Supply for the various guided weapon systems and weapon components, and who, to a large extent, would thus be the users of the ranges. This has been done, and currently eleven firms amongst Britain's leading aircraft and electronic manufacturers are established within the boundaries of the Weapons Research Establishment. These firms, and much

of the joint project activities, rely a great deal for the movement of equipment and staff on the Ministry of Supply's air ferry service operated by RAF Transport between England Command Edinburgh Airfield. which is Establishment. of the Salisbury Aircraft, mainly Hastings and Comets, chartered | aircraft, supplemented by provide a fast service at about weekly intervals.

Weapons Tested at the Woomera Range

Bloodhound

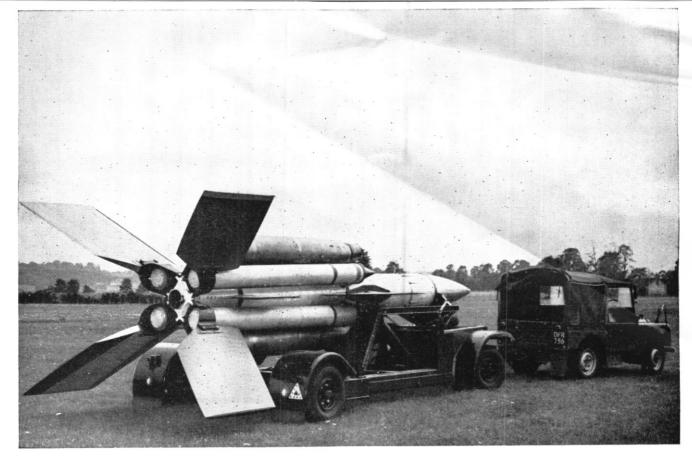
Bloodhound is a ground-to-air guided weapon developed jointly by the British Aeroplane Co and Ferranti Ltd. It has been selected as the key weapon in the air defence of Great Britain. The weapon is classed as a radar homing type, which means that it will seek out and "home" onto a target which is held in the beam of a ground radar. It is propelled by "Thor" ramjet engines using as fuel normal aviation turbine kerosine. The Ferranti Co has been responsible for the electronic equipment and the control and guidance system.

Fireflash

Fireflash is an air-to-air guided weapon developed by the Fairey Aviation Co. It is a beam-riding weapon, which means that the weapon is directed by a radar beam which the attacking aircraft directs at the target aircraft. The weapon proper carries no propulsion system. Propulsion is provided by boost "motors" which fall away when expended, allowing the round to coast to the target.

Firestreak

Firestreak is an air-to-air guided weapon developed by the de Havilland Aircraft Co. It is an infra-red homing weapon, which carries a detector eye sensitive to infra-red rays emitted by the air target. The weapon will steer a course towards the source of the radiation.



BLOODHOUND

Photo Courtesy Bristol Aeroplane Co (Aust) Pty Ltd

Malkara

Malkara is an anti-tank guided weapon wholly developed in Australia by Establishments of the Department and manufactured at Government Aircraft Factories.

Seaslug

Seaslug is a ship-to-air guided weapon developed by Armstrong Whitworth Aircraft Ltd for use in the Royal Navy. It is a system in which missiles are fired from a triple ramp launcher on a ship. The weapon is propelled by a sustainer motor after launching by boosts, which fall away when expended. Targets for the Seaslug are detected and selected by radar.

Thunderbird

Thunderbird is a ground-to-air guided weapon developed by the English Electric Co. Like the Bloodhound, it is a radar homing type of weapon which "homes" onto a target held in the beam of ground radar. It is propelled by a solid sustainer rocket after launch by four boosts which drop away when expended.

Jindivik

Jindivik is not a weapon, it is a jet-propelled aircraft which can be flown without a pilot, under radio control from the ground, for use as a target when testing guided weapon systems. This aircraft was designed and is made at the Government Aircraft Factory Melbourne in collaboration with the Weapons Research Establishment to a specification drawn up in the UK. The aircraft takes off on a three-wheeled trolley which remains behind on the airstrip. For landing, a single skid is let down on which it skates to rest. design has proved to be most successful. to an extent which has enabled a number of these aircraft to be sold to foreign countries.

Black Knight

This ballistic rocket has been designed by a team headed by the Royal Aircraft Establishment of the Ministry of Supply to provide research data. The vehicle is about 35 feet long by 3 feet in diameter, and a large proportion of its weight is accounted for by propellents.

Working in very close association on this project with the Royal Aircraft Establishment are the principal contractors, Saunders Roe Ltd, of Cowes, Isle of Wight, England. They are responsible for a large part of the development and construction of the vehicle and run the static firing test site at Highdown at the western tip of the island. Armstrong Siddeley Motors Ltd, of Coventry, have developed the rocket engine.

After rising vertically under its own power from the launcher, the vehicle is controlled to climb still vertically for several thousand feet, after which it is directed, while still under power, into a climb path towards the target area. From the point of engine cut-off, the missile coasts upwards in "free fall" to an apogee of several hundred miles and then descends until it reaches the fringes of the atmosphere above the downrange target area.

Measurements of the behaviour of the rocket engine, the control and guidance and the conditions when the motor is accelerating the rocket, together with its environment and other phenomena under investigation, are continuously made throughout flight and relayed to a number of ground receivers along the range by several telemetry transmitters installed inside the missile. Its behaviour during its re-entry into the earth's atmosphere is also recorded. Additional information is obtained by tape records and by recovery of the vehicle after impact.

The rocket is being fired on the Woomera Range because of the great distance that it travels. Since the range at Woomera is over the land, the rocket can readily be tracked and recovered after firing. New techniques have been developed for the trials of Black Knight, including elaborate safety devices for

tracking the missile and for destroying it should it wander from its desired course.

Woomera

The town of Woomera is four miles from Pimba, a rail halt on the Trans-Australian railway linking Adelaide with Perth. From the town roads branch out to the ranges which, for reasons of safety and security, are dispersed over many miles.

Woomera is an example of modern town-planning in which the main roads skirt the residential areas. Services such as water, electricity, and drainage are laid on to all buildings. A good standard of housing has been provided timber-frame and prefabricated construction. Public buildings include a retail department store, cinema, churches, school and kindergarten, police and fire stations, hospital, and post office. Hostel accommodation is provided for single employees. Amenities for sport and recreation include a swimming pool, basketball and tennis courts, a bowling green, cricket and football grounds, and a golf course.

Talgamo

Talgarno, which is aboriginal for "Dry Country", is an area between Port Headland and Broome on the northwestern coast of Australia, where the Intermediate Range Ballistic Missile "Blue Streak", launched from Woomera, will impact.

Situated some few miles inland from the 80-mile beach, in colourful red sandy country, known as Pindan, covered with low scrub, the Base Establishment to house scientists, engineers, and other personnel, is being set up, and amenities such as swimming pool, open air cinema, tennis and basketball courts, will be provided.

A prohibited area surrounding Talgarno has been declared and operations are expected to be carried out as they have been at Woomera for over ten years, without interruption to the local pastoral activities.

Trials Procedures

The trials procedures at the Weapons Research Establishment follow a standard pattern in which guided weapon prototypes, research vehicles, and components arrive regularly from the United Kingdom by air and by sea. They are delivered to the weapon contractors for assembly and checking before being forwarded to Woomera.

Final checks are made in the workshops supporting the launching aprons, and in due course, they are brought forward for test.

In parallel with this round preparation, the details of the trials to be performed are worked out. The range organization is brought into action by a specification of the instruments to be used for measuring and recording the details of the trials.

The round is fired and the instrumental records are gathered up for transmission back to Salisbury for processing and analysis.

complexity The general of these records and the tremendous amount of detail to be assimilated is such that only a very large and highly developed system using automatic computing machines can process the information in the time required. This "Data Processing System", as it is called, is one in which great pride is taken by the Establishment because of its unique features.

The results are compiled into reports which summarize in detail the performance of missiles.

As the work of the trials proceeds it is also necessary to maintain a continuing effort on the development of instruments and instrumentation systems, and of the range itself, to meet the pressure of increasing work and the need to fire to ever-increasing distances.

These activities absorb a continuous effort of scientists and engineers, and require large expenditure of effort in surveys, roads and construction work in the vast areas based on Woomera.

Defence Research in WRE

Not all activities of the Weapons Research Establishment are concerned with the joint UK/Australia project of guided weapon development.

A wing of the establishment is engaged in defence research and development projects, originating in Australia, particularly in the fields of aerodynamics research, electronics research and research in rocket propulsion.

Aerodynamic research in this Establishment is concerned with flight at One of the main supersonic speeds. facilities for this work is a 15-inch square continuous-flow wind-tunnel operates at wind speeds up to 200 mph and requires 400 horsepower to drive it. The tunnel is equipped with optical apparatus and pressure gauges so that the airflow round models placed in the tunnel can be seen and measured. At the same time the forces on the model due to the wind are measured.

The range at Woomera is also used. Models of the aircraft, bomb, or other device to be tested are boosted off the ground by rockets which fall clear and allow the device to coast on.

The instruments at the range then follow and record the flight for later analysis.

Electronic research has been directed to certain aspects of radar and aerial navigation.

Recently a method of navigation was developed which enables a navigator to measure the distance he flies along his course and the amount of drift he experiences due to cross winds.

Other projects include radio communication by the newer techniques.

Rocket propulsion research is exemplified by the development of a successful rocket motor to propel the anti-tank missile Malkara.

New forms of propellents are investigated and materials are being developed to withstand the very great heat that results from their burning.

Instrumentation

Facilities used to conduct trials at Woomera may be considered as falling within three classes, namely, apparatus required to implement the trials, apparatus to measure and record events occurring during the trials, and apparatus to analyse and assimilate the records to enable comprehensible and factual reports to be prepared.

Among the first of these would be included systems such as that which enables a pilotless target aircraft to be engaged by a guided weapon. It is not enough that the target aircraft should be within range of the missile, but the engagement must occur within a zone of sky which can be covered by the instruments on the ground which measure and record the event.

A "Jindivik" is therefore required to fly a prescribed course to a prescribed programme.

Its speed, height, and location must be known at all times and the control of these factors must be at the disposal of the trials controller. This is done by a combination of optical and electronic apparatus developed for these special purposes in the supporting laboratories of the Establishment.

In the class of apparatus required to measure and record events, a novel camera has been developed which is carried in streamlined pods attached to the wing tips of Jindivik. Its purpose is to take photographs as the missile passes. From this the "miss-distance" between it and the target can be measured.

Since the missile can approach the target from any direction the fields of view of the cameras must include the whole sphere of space whose centre is at the target. With conventional cameras lenses the fields of view are so restricted that a great number of cameras would be required. To solve this problem the Establishment undertook the special development of wide-angle lenses, in which it has been most successful. Lenses having angles of view of 230 degrees have been made and are in current use at angles in excess of 180 degrees. Since the whole sphere of space comes within the field of view of two such lenses oppositely directed, two cameras only are needed on each wing tip, the separation between wing tips a base-line which from providing calculations of distance can be made. This development makes possible the measurement of "miss-distance" to an accuracy of a few per cent with a minimum of bulky apparatus.

In the third class apparatus, means are required for analysing and reducing to manageable proportions the mass of data which is recorded by all the range instruments used during a trial.

The subject of data processing is of universal interest in modern times, and in June 1957 the Weapons Research Establishment convened a conference which was attended by people from all States in Australia, and from England and America, to discuss the methods used.

It is now recognized that it is only possible to effect the analysis of such large masses of data in an acceptably short time by using large computing machines. The results from such equipment are printed as tables of figures or as graphs automatically plotted as the calculations proceed.

Other Activities of WRE

During the International Geophysical Year, WRE undertook a programme of rocket firings to assist investigations into the nature of the upper atmosphere, using "Skylark" rockets.

Apparatus installed at Woomera records the passage of certain "Satellites". This consists of two major items, the Minitrack radio tracking equipment, supplied by the US Naval Research Laboratory and the Baker-Nunn tracking camera provided by the Smithsonian Institute of America.

Certain atomic tests have been carried out, and Intermediate Range Ballisite Missiles tested at Woomera and adjacent areas.

Australia Benefits

It might be asked, in what way does Australia benefit from supporting and financing such a large undertaking?

There is, of course, the obvious benefit that in these fields a strong body of Australian scientists, engineers, technicians and servicemen are in the forefront of modern defence science. When guided weapons are introduced to Australia's defence services there will be in existence in this country a rich fund of expert knowledge to support them.

But apart from such direct benefit, these activities bring to Australia new techniques, new knowledge of skills, and train men in advanced work which supplements and strengthens our industrial advancement.

Industry cannot fail to feel the benefit from the continuing pressure over many years of new ideas flooding into the country as a result of our undertaking to co-operate with Great Britain in the development of guided weapons.



Exercise Grand Slam

I DRAW the attention of all officers of the Army to the report submitted by the General Officer Commanding, Northern Command, on the lessons learnt in Exercise GRAND SLAM.

The report does not pretend, nor would it be desirable, to touch on all the lessons the exercise brought out. It does, however, cover those of major importance and many are equally applicable to a field formation and a base installation.

Many mistakes were made and the first to admit that this was so, are the members of 1 Infantry Brigade Group, from the commander downwards. Nevertheless, I venture to suggest that very few of those mistakes would be made again and in that fact lies the value and success of the exercise.

In this nuclear age, I am struck by the basic nature of the lessons learnt. Lack of the fundamental skills of soldiering, such as field hygiene, camouflage and man-management, will still cause the loss of a battle.

Several things stand out very clearly. If a brigade group is to be an effective fighting formation under conditions of modern war, every officer and man must be master of his job. Every unit must be able to move quickly, to live healthily, and to fight cohesively. All units must be capable of working together as a controlled and co-ordinated machine. The standard required to achieve this cannot be attained except by many months of hard and continuous training.

The report deserves close study but, more important, having studied the lessons, see that they are applied.

LIEUTENANT-GENERAL
CHIEF OF THE GENERAL STAFF

Hearrett

EXERCISE

Grand Slam

Report on Lessons from the Exercise

This report on the lessons from Exercise GRAND SLAM is published by the General Staff, AHQ, for the information and instruction of all ranks

— Editor.

EXERCISE GRAND SLAM was organized by Headquarters Northern Command for 1 Infantry Brigade Group and was held as the culmination of the Brigade Collective Training activities. The Exercise took place in the area west and north-west of Mackay, Central Queensland.

Aim of the Exercise

The aim of GRAND SLAM was to exercise 1 Infantry Brigade Group under tropical conditions against an enemy (The Phantom Army) with nuclear capability.

The exercise was held during the period 21 May 59 (D Day) to 27 May 59 (D plus 6).

Scope

The exercise was designed to cover -

- (a) Administrative movement by road.
- (b) Tactical advance mounted in semi-open and savannah country.
- (c) Tactical advance dismounted in close country.
- (d) Protection on the move.
- (e) Quick attacks at all levels.

- (f) River crossings.
- (g) Deliberate brigade attacks.
- (h) Occupation of defensive positions.
- (j) Re-organization procedure at all levels.
- (k) Patrolling.
- (1) All possible aspects of administration in the field.
- (m) Protection against guerilla and Fifth Column activities.

Terrain

The area (see sketch map) in which the Exercise was conducted was chosen because of the variety of terrain conditions it contained, namely—

- (a) Semi-open flat plains, encountered in the early phase of the Exercise.
- (b) A river large enough to present a number of river crossing problems.
- (c) Several narrow defiles in mountainous country through which the centre line passed.
- (d) Rugged mountainous country with thick undergrowth and having no roads or tracks.

The distance covered in the advance was such that some movement in troop carrying vehicles was necessary. This movement resulted in gaining of valuable experience in —

- (a) Camouflage and concealment.
- (b) Road movement planning.
- (c) Traffic control.
- (d) Route clearance.

Realism

Throughout the Exercise, realism was maintained by the employment of —

- (a) RAAF aircraft representing enemy planes from D Day to D plus 2 and a mixture of friendly and enemy machines from D plus 2 onwards. Missions flown included fighter ground attack, low level bombing and armed, photographic and visual reconnaissance;
- (b) light aircraft for air observation post missions and light liaison duties;
- (c) a guerilla force, which operated behind the brigade from D day to D plus 4, made up of members of Northern Command CMF intelligence units;
- (d) an enemy force composed of members of 1 SAS Coy, 1 Armd Regt, and containing medical, engineer and intelligence elements;
- (e) intelligence summaries and reports "fed-in" by Higher Control, giving a complete "picture" of operations of formations on the flanks and build up and movements of enemy forces;
- (f) the threat of nuclear attack and the eventual exploding of a simulated air-delivered nuclear missile on the rear elements of the brigade on D plus 5;
- (g) the construction of the enemy force of actual obstacles on the centre line necessitating the employment of engineer plant and mine clearance parties to enable the brigade group to maintain the speed of advance. The simulated demolition of bridges and fords, forcing the brigade group to construct alternative crossings;
- (h) the employment by the enemy force of high explosive charges (to represent artillery fire falling on their positions) light machine guns and machine carbines firing

- into pits, smoke, thunderflashes and blank ammunition. Enemy artillery and mortar fire was simulated by thunderflashes exploded by umpires;
- (j) the construction by the enemy force of actual dug-in defensive positions including the erection of barbed wire and laying of dummy mines:
- (k) the "planting" throughout the Exercise area of propaganda literature in English and foreign languages and "enemy" maps and documents, and
- the capture by the brigade of specially briefed prisoners of war who spoke foreign languages and carried documents and equipment designed to give information of tactical value to the intelligence staffs at brigade and division headquarters.

Thirty-nine New Zealand officers and NCOs were attached to various units during the Exercise.

Umpires

To ensure that all ranks of I Inf Bde Gp gained the maximum benefit from Exercise GRAND SLAM it was necessary to provide umpires down to platoon and equivalent level. As a means of keeping the number required to a reasonable figure, umpires were organized on a pool system within units for allocation to sub-units, patrols, etc, as the situation demanded.

Higher Control

In addition to umpires, there was a Higher Control organization representing divisional headquarters. The Exercise was controlled through normal operational and administrative nets between brigade and divisional headquarters, through the umpire net and through that operating between Higher Control and the enemy.

Concentration Area

Prior to the commencement of the Exercise the Brigade Group was concentrated in the area of Binbee, the main body arriving in that area during the afternoon of D minus 1 (20 May). The move from brigade training area at Colston Gap to Binbee was by road via Marion — Proserpine — Bowen — Binbee.

D Day (21 May) dawned clear and the movement by road of the Brigade Group was accompanied by a cloud of dust from the unpaved roads. the night D plus 1/D plus 2 rain fell and the Exercise slowed up as vehicles skidded on the muddy tracks. Intermittent rain fell on parts of the Exercise area on D plus 3. After crossing the Tiverton Pass (D plus 4) the skies cleared and the only complaint about weather until D plus 5 was the coldness at night. On the evening of D plus 5 during the move to Backstop strong winds with rain occurred. On the morning of D plus 6 the winds had dropped but intermittent showers occurred until the Exercise ended at 1400 hours on D plus 6 (27 May).

Many derogative remarks were heard about the weather in sunny Queensland but all in all it could be said that it was typical of what could be encountered in fighting in that type of country and was, therefore, excellent for training. At no time was the rain sufficient to cause the rivers to flood but negotiating the muddy roads did require a good deal of skill on the part of all drivers.

Lessons from the Exercise

The Exercise produced many lessons applicable to individual units and a number which effect the Field Force as a whole. The former have been passed to Comd 1 Inf Bde Gp; of the latter, those considered to be important and of wide general interest, are set down in this report.

Security

Protection on the Move

Long vehicle columns are vulnerable to air and ground attack. To reduce the dangers of such attacks convoys should be kept as small as possible, should move with vehicles well spaced and should "wind up their tails" and disperse quickly and well clear of the roads when halting. Features on the flanks of the advance should be cleared of enemy and the route cleared of obstacles well ahead of the leading vehicles.

Plans for road movement must be prepared in detail to ensure a free flow of traffic on each section of the road or roads to be used. A co-ordinated traffic control plan should be worked out to ensure that the road space is utilized in the most economical manner. This calls early route reconnaissance. for communications for Traffic Control Posts and good signposting. Much can be done to prevent congestion on roads by the construction of bypasses at difficult points along the route. The need for such work should be forescen by engineer reconnaissance parties.

Drivers must be well trained in convoy drill, concealment and camouflage and action on air attack and ambushes. The importance of keeping correct spacing, selecting suitable cover when dispersed, and intelligent use of camouflage nets must be fully appreciated.

Ambush drills must be worked out for all types of vehicles; drivers and troops being transported must know the drills and be trained and practised in them.

Drivers and troops must also be trained and practised in drills to be adopted in the event of air raids on the column.

When the possibility of air attack on a column exists, troops must not be carried in vehicles with canopies erected. If

BOWEN LEGEND: ROADS METAL OR GRAVEL RAILWAYS RIVERS SEASONAL STEEP CLIFFS HOMESTEADS OTOWNS &..... **MILES** CAUSEWAY EXERCISE EMU PLAINS

EXMOOR TIVERTON TIVERTON PASS REDCLIFFE TABLELAND BRIDGE PALM JUNCTION canopies are not removed troops have a feeling of being "cooped up", and are less able to take rapid action in the event of air raids.

Protection at Rest

Troops must be trained to dig in as a means of survival against ground and air attack and the necessary tools must be readily accessible when required.

A balance must be struck between dispersing widely for protection against nuclear attack and remaining sufficiently concentrated for protection against conventional ground attack and, in certain cases, for operational efficiency. It will probably be necessary to concentrate at night. Where it is necessary to concentrate by day, a high degree of concealment must be aimed at. This may influence the siting of certain administrative units.

Important localities such as headquarters, gun areas, maintenance areas and defiles should be protected against air attack. The deployment of the LAA battery must be planned well ahead so that guns can be fitted into the road movement plan and be positioned when and where required as the operation progresses.

Patrolling is the only means of preventing the enemy from gaining the initiative when our own troops are in a defensive position. Patrolling must be aggressive and is undertaken to prevent the enemy gaining information of our own dispositions, to find out where and in what strength the enemy is situated, and to obtain early warning of enemy intentions. During GRAND SLAM patrolling at night was seldom practised, with the result that the enemy was free to penetrate positions and, after dark, do much as he pleased.

Balance

Grouping to meet contingencies that may be encountered requires a careful appreciation and plan. The entire

Brigade, and particularly infantry battalions, must be kept as compact as possible, especially when contact is imminent.

Camouflage and Concealment

One badly camouflaged vehicle or gun can be sufficient encouragement for a pilot to return for a second look. second look may disclose the positions of others which would otherwise have unnoticed. Camouflage passed and concealment mean considerable physical and mental effort on the part of drivers, gun crews and the like at times when they may be tired. This is a problem of command and discipline and all ranks must be taught that on this effort may depend not only the success of the operation, but their own survival.

Mobility

Road Movement

Mobility means far more than adequate availability of vehicles. To achieve true mobility it is necessary to —

- (a) have a sound movement plan;
- (b) reconnoitre and clear obstacles, prepare crossings over rivers and construct bypasses around places where the going is difficult. Unless this is done convoys will move for short distances at good speeds and then be forced to halt for long periods, probably in vulnerable positions;
- (c) clear enemy from ground overlooking the route;
- (d) move an adequate amount of engineer plant and bridging equipment forward in good time when obstacles are likely to be met. Judicious positioning of this equipment in the order of march will avoid hours of delay while it is brought forward from rear areas, and
- (e) use troop carrying vehicles only when a reasonably long, clear move is possible and a reasonably

favourable air situation prevails. When air attacks are to be expected, or bad roads and obstacles are known to exist, TCVs may slow down the rate of advance to less than marching pace and at the same time invite heavy casualties.

There are undoubtedly too many roadbound vehicles in the Brigade Group for a formation designed to operate in undeveloped countries. A careful but consideration of essential undertaken requirements should be followed by a drastic pruning. More cross-country types are undoubtedly sound needed. but planning organization could achieve better results with fewer vehicles of the current types.

Maintenance of Momentum

Momentum was often lost when a small force held up the advance of the whole formation. Loss of momentum may well mean loss of the initiative. The fundamental need is for quick but sound action on contact, based on good information.

Adequate and Reliable Information

Attacks launched without adequate information usually developed into long drawn out encounters in which the enemy achieved his aim of imposing delay on the advance. The sources from which reliable information was most readily available to the commander were—intelligence reports, patrols and personal reconnaissance.

Patrols. To be of value patrols must be carefully planned and briefed to obtain certain specific information in the most expeditious manner. Vague instructions result in vague information and an unacceptable waste of time.

After contact, well organized reconnaissance patrols were generally lacking. This resulted, in the absence of good maps, in failure to appreciate the shape and extent of the geographical

features, failure to establish the extent of enemy positions, particularly their depth, and faulty assessments of enemy strengths. This meant that the attacking force was often much too large with a consequent unnecessary delay in deployment, or much too small, resulting in even greater delay while larger forces were deployed. Worse, it often resulted in the attack being built up piecemeal.

Personal reconnaissance. There is no substitute for personal reconnaissance by a commander and normally no unit commander should commit troops to battle over ground he has not seen.

Deployment Procedure

The aim of deployment procedure is to save time. Time wasted on contact is time gained by the enemy. Generally speaking very little happened on contact other than probing and the lack of capacity for swift deployment enabled the enemy to gather information at leisure and when necessary to redeploy to meet the threat. It is essential that units and sub-units should realize that good deployment procedure, purposefully carried out, will result in a far quicker defeat of the enemy and with fewer casualties than by taking a chance and "pressing on regardless".

Fire Plans

In planning an attack sufficient time must be allowed for the preparation of a co-ordinated fire plan. Supporting arms commanders must be consulted early so that weapons deployed, ammunition prepositioned and preliminary work fire on commenced. This was often not done as commanders were engrossed with the deployment of their immediate commands and the supporting arms were sufficiently insistent in peddling their wares.

Control

A commander should position his HQ as far forward as possible commensurate with security and the efficiency of his communications. Headquarters must be mobile and able to move at very short notice without losing wireless contact. Reluctance to move will result in the HQ being left behind in a mobile battle and in ultimate loss of control.

There are, of course, occasions when a commander must go forward personally in order to see the ground and to absorb the atmosphere of the battle, to appreciate quickly any sudden changes in the situation and to impress his personality, on subordinate commanders. However, he must accept the fact that when he is absent from his headquarters he is not in full control of the battle. To command effectively, he must have available his range of communications. assistance of his staff, commanders of supporting arms, and service advisers, and access to the information reaching his headquarters from all sources.

It is utterly wrong to allow the conduct of an operation to be dependent on the vagaries of one roving wireless set.

Wireless Communications

The best wireless equipment will be ineffective if operators are not well trained in the operation and maintenance of their equipment and if officers are not fully versed in their capabilities and limitations. Operators must be imbued with the vital necessity for getting their message through and getting it through quickly. Similarly the standard of voice procedure of officers must be such that they can say what they have to sav quickly and get off the air. In a fast moving action restricted with communication channels the repetitive waffling which one so frequently hears on the air cannot be tolerated. Too much time cannot be spent in training officers in voice procedure and operators in the care and operation of their sets.

Nuclear Attack

The explosion of a nuclear missile in the brigade administrative area on D plus 5 highlighted a number of valuable lessons, among which were—

- (a) Rapid action on the part of the senior surviving commander is necessary to re-organize survivors in ad hoc units capable of temporarily carrying out essential functions. In this case, the Brigade Commander appointed OC LAA Bty to take command. With his own headquarters and staff he quickly set about re-organizing the area.
- (b) Speedy salvaging of useable vehicles and pooling of them for tasks helped greatly in the re-establishment of order in the devastated area and made possible the quick evacuation of casualties.
- (c) A monitoring team must be put into the area quickly. If it is not, further casualties will occur among rescue parties and existing casualties will be aggravated.
- (d) The formation commander must be prepared to improvise in order to maintain essential services. This may mean making detachments from units outside of the affected area and cannibalization of surviving sub-units.
- (e) Every man must be capable of rendering elementary medical assistance and must be equipped with a minimum of the necessary dressings, etc.

Administration \

Administrative Planning

The DAA and QMG of a Brigade Group must be continuously in the picture his operational so that administrative planning is, if possible, a little ahead of current operations. must advise the Brigade Commander during the planning stage of an action and attend his orders group. In order to do so he must make full use of his staff and Service representatives. must never allow himself to become involved in a mass of detail, or to perform the duties of LO. If he does, the administration of the force will rapidly be reduced to chaos.

Control of Administrative Resources

The control of the administrative elements of the force left something to desired. The Brigade Group resources of transport, medical. provost should, recovering and principle, remain centralized under the and OMG. Only by the means will he have resources available to implement his commander's administrative plan and retain the degree of flexibility needed to meet changing situations. When a brigade administrative area is formed an officer should be appointed to command it. He should be responsible for the local-administration of personnel in the area, for movement of the area and for its protection.

Arrangements for movement were perhaps the worst feature of the control of administrative units. Many of them spent many of the daylight hours on the road and, as a result, were quite unproductive. This was due to lack of an effective movement plan and the organization to put it into effect. Road movement generally has already been mentioned and it is perhaps the most important lesson of the Exercise.

Hygiene and Sanitation

In a tropical area the fighting efficiency of the Brigade will depend very much on its standard of hygiene and sanitation. The high level of physical fitness and morale at present evident in all ranks will soon be destroyed in an operational theatre unless the following elementary, but often neglected, rules are zealously observed:—

- (a) At halts, in bivouac areas, harbour areas, administrative areas and defensive positions, latrines must be dug as a matter of highest priority.
- (b) Food tins and food scraps must be properly disposed of.
- (c) In cookhouses, no matter how temporary, the highest possible

standard of cleanliness must be insisted upon. One cook with dirty hands and finger nails can spread disease through a whole unit.

. Conclusion

In conclusion there are two important points which bear mentioning. The first is the way in which simple but fundamental procedures tend to go by the board under the stress of active operations. Mention has been made of the widespread neglect of the elementary rules of field hygiene. The same can be said for fundamental functions of junior leadership, such as the care and inspection of personal weapons and insistence on a high standard of personal hygiene. Although ample time was available during slack periods, inspections of small arms by sub-unit commanders were exceedingly rare, if indeed they occurred at all, as were foot inspections and other elementary aspects of manmanagement. The second is the obvious deficiencies in the training of officers of technical arms. Whereas their technical performance was good, their tactical handling of their units, their unit administration and their manmanagement, generally speaking, left much to be desired. This is, perhaps, inevitable while young officers have little or no true regimental experience during the earliest and most receptive years of their commissioned service.

It is impossible to speak too highly of the keenness and fitness of the individual soldiers, particularly those of the 1 Armd Regt, 1 and 2 RAR and the SAS Squadron. Their spirit, enthusiasm and endurance was of a high order and reflected credit on their leaders.

The junior officers in these units possessed a fair degree of tactical competence but were deficient in the detailed "know how" of command. If given an order to carry out a minor operation they were reasonably at home. If left to their own devices during a

slack period there was none of the bustle of activity which one would expect; the digging, the general improvement of local defence arrangements, the seizing of the opportunity to improve hygiene facilities. the cleaning of weapons and vehicles and the little individual make and mend tasks which are so important. In short, they gave the impression of being enthusiastic amateurs. rather than practised professionals. On the other hand they were obviously on good terms with their men, cheerful, fit, keen and courteous. Company, etc, commanders varied a great deal but there were a number to whom the above remarks would be pertinent.

There is no doubt at all that the Brigade is solidly based on sound foundations of morale and physical fitness. However, the intensely personal, practical and operationally essential "know how" of junior leadership which was second nature to officers and NCOs towards the end of World War II will die out unless commanding officers take very active steps to ensure its survival.

EXTRACT FROM A REPORT TO AHO

Difficulty with the soup was probably due to the lack of canteen cups for the coffee, necessitating the use of paper cups which were intended for the soup.

THE AGGRESSION IN LAOS

VERY little information about the cause of the trouble in Laos has emerged from the press and radio news, which is another instance of how badly informed the Australian public can be about important events in our Near North.

Laos, it will be remembered, is one of successor states of what used to be French Indo-China. When the country was set up as an independent kingdom, Ho Chin Minh, the leader of the North Vietnam Communist Government. succeeded in establishing in the border province the Pathet Lao, a pseudo controlled movement patriotic Hanoi, North directed from the This organization Vietnamese capital. succeeded in gaining virtual control of the border provinces, and thus won for their Communist masters a position from which infiltration tactics could be developed.

Infiltration against the badly organized parties supporting the Government succeeded to the point where the Pathet Lao had high hopes of winning participation in the Government and "integrating" their military units in the regular army, without surrendering any of the reality of their conrol of the border provinces. However, the political parties supporting the Government suddenly rallied. Thus strengthened, the Government proceeded to assume control in the provinces, and indicated that whole units of the Pathet Lao "army" would certainly not be integrated into the Government forces. though selected individuals might be accepted and widely distributed.

Baulked of their plan for political subversion from within, the Communists have taken to guerilla warfare. guerillas are undoubtedly backed and actively supported by Ho Chin Minh, who is a henchman of the Red Government in Peking. It is the well-known pattern of war by proxy, of aggression against a peaceful country trying to establish a stable government and Whether the mere provision есопоту. of war material will enable the Laotian Government to cope with a rebellion actively supported from North Vietnam, and consequently from Peking, is at least doubtful.

Co-Existence

Semasiologists have frequently drawn attention to the confusion of thought that results from the fact that different people often give different meanings to the same words and expressions. This confusion was never more clearly demonstrated than in the utterances of public men and in press comment relating to the mooted "Summit Conference". Unfortunately, all the confusion seems to be on the Western side of the Iron Curtain; the Communists appear to have a much firmer grasp of realities.

Most of those who base their hopes for an easing of world tensions on a "Summit" conference appear to be thinking in terms which were quite appropriate to the conduct of international relations in bygone days. Before the rise of Communism, international stability could be achieved through the

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balance of power and the acceptance of agreed "spheres of influence". A great many people, including some who ought to know better, evidently think that these conditions still apply, that Khrushchev can be brought to accept, in substance, a permanent division of the world into two distinct spheres of interest. Khrushchev can imagine that he. persuaded to make the Iron Curtain a barrier impassable from both directions, that he will sit quietly on his side of the fence and forever refrain from attempting to influence events beyond it. That, in essence, is the interpretation of "coexistence" being foistered upon the public.

Even if he wished, Krushchev could not really accept that interpretation though he might pretend to do so - and retain his leadership of the Communist Krushchev might be a dictator, but he is nevertheless the prisoner of the Party. Acceptance of the interpretation would mean nothing less than the abandonment of the revolutionary ideology which is an essential element in the cohesion of the whole Communist system, and the justification of the rule of the Party. To the Communist, coexistence means something quite different from the meaning being given to it in our organs of public expression. To them it means a situation in which the West treats the status quo behind the Iron Curtain as untouchable, while they remain free to continue their "liberating" activities wherever they see a favourable opportunity.

There is nothing whatever in Krushchev's career to suggest that he is likely to go off the Communist rails, that he is in the least likely to deviate from his path. On the contrary, he continues to blow hot and cold, doubtless with the intention of enhancing the confusion and trepidation in the West. On his recent visits to his eastern European satellites, and in personal interviews and press conferences, he has followed his usual pattern of varying his assurances of peaceful intentions with threats and abuse.

The illusion of peaceful co-existence imposes—on the West a purely defensive posture. It precludes any active countermeasures against the inroads of the red revolutionaries. Further, it denies the possibility of recovering any of the lost ground. Acceptance of the status quo as a permanent phenomenon, tacitly or by formal agreement, writes off forever all the subject peoples behind the Iron Curtain. It deprives them of any hope that the West will ever go to their assistance or give them any support in their struggle for freedom.

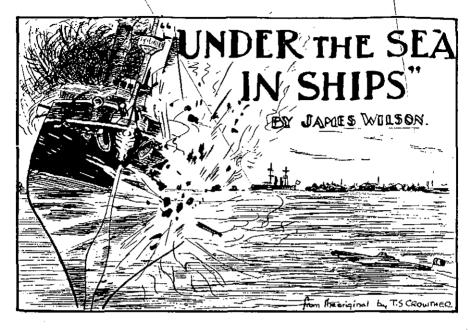
Communism must continue its war of expansion or abandon its basis theory of human existence, the very mainspring from which it draws its life. If the West is to survive, we must adopt an equally positive and dynamic strategy. To allow ourselves to be misled by words, to be blinded by the illusion of co-existence and a status quo, is to play into the hands of those bent upon destroying our way of life.

1 Sep 59

-- E. G. K.

COMPETITION FOR AUTHORS

The Board of Review has awarded first place and the prize of £5 for the best original article published in the July issue to "The Formation and Development of Communes in Communist China" by Staff-Sergeant P. G. Gittins.



A SUBMARINE ATTACK AS PICTURED BY FRENCH JOURNALISTS

Todays military planners may derive some comfort from this article, which was published in 1899 in the "Navy and Army Illustrated", a London magazine "descriptive and illustrative of every-day life in the defence services of the British Empire". Subsequent events suggest that the crystal ball used by the author was not a very good one — Editor.

OUR excitable French neighbours are the latest devotees at the shrine of the underwater warship. Nation after nation has its submarine-boat craze, and breaks forth in its turn with the announcement that it has at last found a perfect machine of this nature, which is to effectively demolish the battleship and its present control of the seas. The French are at present passing through the throes of a bad attack of a

craze for submarine-boats, and as an outlet for their pent-up feelings have been sending in their francs to the editor of a prominent Paris paper, in order that he may go out and buy an extra submarine-boat or two to assist in the destruction of all enemies of the land of liberty, equality, and fraternity! France is to have the control of the seas in future, and perfidious Albion is to become a mere third-rate power, a state of affairs to be brought about wholly and solely by submarine torpedo-boats, as represented by the "Gustave Zede" But a few more and her sisters. alterations are desirable, and behold. M. Lockrov. as interpreted bv "France is to dictate to Great D'Adda: Britain".

Submarine-boats have been dealt with before in these pages. An article dealing with their early history appeared on 17 September, 1897. In this article

mention was made of the boat invented by Mr J. Holland, Fulton's boat the "Nautilus", and one or two others. is now proposed to describe all the boats of this character which have come into prominence since that article was written and the others which were then omitted. The "Gustave Zede" takes her name from a French naval officer, a former Director of Naval Construction. Her record is a curious one. She has passed through many changes, and has been utilized by several designers of submarine-boats for the furtherance of their ideas. She was built at Toulon in 1893, and--was then-known as the "Sirene", her name being altered when changes were made in her in accordance with the ideas of M Zede. Her length is 131 feet, she displaces 266 tons and the electric accumulators now fitted up in her give her a horsepower of 720 and an estimated speed, which by the way has never been attained, of 14 knots, about miles an hour. Prior to these alterations she had one torpedo tube and carried a crew of eight men. She is the largest submarine-boat which has yet been tried by the French and is the result of a long series of experiments.

At the recent trials she was sent out the to attack French battleship "Magenta" and succeeded in torpedoing Everything was in favour of the submarine-boat, for the battleship lay at anchor during the first attack and, although she was under way during the second, she was hardly moving through the water. It must be remembered that these boats are more properly called submergible than submarine-boats, since they are only intended to go under water for a short time and are obliged to come to the surface in order to see their way. This will explain the tactics which are adopted by the crew of the submarineboat in its attack. The "Zede" marks out her enemy, then plunges, and comes up every now and then to see that she is on the right tack. Here then she resembles the whale and however quick a whale may be in diving after coming up to blow or to obtain air it is easily destroyed by men in small boats armed only with harpoons. What chance would the "Zede" have if she attempted to attack battleships surrounded by a fleet of fast torpedo-boats armed with quickfiring guns? The first time she showed herself above water in order to find a target she would probably be blown to pieces.

As an adjunct of harbour defence, such boats as the "Gustave Zede" may be worth something, but it has yet to be shown that as an offensive weapon to be used against ships at sea she can play a useful part. It is true, we are told, that she is provided with an "eye" — probably a development of the camera lucida principle - a long tube poked up through the water from the top of the boat, fitted with prisms and mirrors in such a manner that those inside the boat get a more or less correct view of what is happening above --- provided they are operating in smooth water. The least semblance of rough weather would naturally drown the glass with spray and dirt and render it useless. Apart from the "eye", the "Zede" when under water has to find out where she is going by means of an ordinary compass, the depth as she descends is measured by a pressure gauge and the distance run is determined by the number of revolutions of her propellers.

The performance of the "Gustave Zede" in Hyeres Roads is by no means novel. Twelve years ago a boat invented by Messrs Nordenfelt and Garrett, the former gentleman being the inventor of the well-known gun, was tried in a similar manner at Southampton. "Nordenfelt" was constructed by the Barrow Shipbuilding Company and was 125 feet long. She displaced 160 tons awash — that is, when steaming along with her upper portion above water and 245 tons when entirely beneath the surface. She had a speed of 14 knots awash and of 4 knots under water. A great point has been made of the feat performed by the "Zede" in steaming fifty miles, but the "Nordenfelt" travelled from Barrow-in-Furness to Southampton and took part in the Jubilee Review of 1887. The weather during the trip is said to have been very rough. Russia purchased this boat, but during her passage to Cronstadt she unfortunately struck on some rocks in the Baltic Sea and was lost. As has been the case with all submarine-boats, no idea could be formed of where the "Nordenfelt" was going when she was beneath the water. The method adopted was steering by compass, but this was found to be untrustworthy. Greece also purchased a Nordenfelt boat. Two other Nordenfelt boats were sold to the Turkish Government and one of them carried out some trials at the Golden Horn which were far more successful than anything that the French boat did in the Hveres What finally became of the Turkish boats is unknown, but probably they rusted away in some unknown corner of a dockyard.

The "Gustave Zede" is not, however, the only submarine torpedo-boat with which the French hope to startle the world. There is the "Morse", which is now being built at Cherbourg. She is to cost more than £30,000 and is described as an improved "Zede". displacing 140 tons and being 120 feet long. This boat is for use in connection with harbour defence, but the "Narval", which is also being built at Cherbourg. is intended for offensive operations on the high seas. She is not to cost quite so much as 'the "Morse" and is of a different type of construction to any of the foregoing vessels. Above water her propelling power will be steam, but below, electricity. Six similar boats are to be built as soon as possible. Another submarine-boat which is reckoned among the fighting vessels of France is the "Gymnote". This boat was built at Mourillon in 1888 and is only 48 feet long, displaces 30 tons and, with a crew of four, is said to be able to travel at from four to six knots. The "Gymnote", however, is too old for much further use and will probably be broken up before long.

addition to the boats ไต officially constructed, there are several being built in the private French shipbuilding yards. The "Goubet" is the idea of an independent inventor, one Charles Goubet. a mechanical engineer. She was tested at Cherbourg by the French Government, favourable results, in 1890, which caused Brazil to order two similar boats. curious feature about the "Goubet" is that she is provided with an emergency weight. At the bottom of the boat, on the outside, a mass of lead weighing about a ton is fixed and, by releasing a bolt which holds the weight in position, it immediately drops to the bottom and the "Goubet", thus lightened, comes to the top of the water at once. But this course would only be adopted should the engines break down. The "Goubet" can be steered by hand, should the electric steering-gear get out of place, and she can also be propelled through the water by manual power. M Goubet has found means whereby to send messages to the top of the water, enclosed in a small wooden egg-shaped box: and. for signalling at night, has made arrangements for sending up a long luminous glare. In other respects the "Goubet" is very similar to other boats of its class.

"Le Plongeur", the predecessor of the "Zede", "Gymnote", etc, was another boat intended for underwater warfare, which the French Naval authorities experimented with in 1863. She was designed by a naval constructor named Charles Brum and was shaped like a cigar, 146 feet long and 12 feet deep. She also was a failure.

A submarine-boat which attracted a good deal of attention during the late Spanish-American War is the boat known to the public as the "Holland", but officially named the "Plunger". She was briefly referred to in a previous article. Mr Holland, the inventor, is a native of Ireland, and has been working on the subject of submarine navigation for more than twenty years. He built his first boat in 1877 and ten years later

succeeded in inducing the United States Navy Department to take the matter up. vessel has steam for propulsion and electricity for use under water. Those interested in her talked about entering Santiago Harbour and destroying the Spanish Fleet when it lay there, but they were not equal to the task; and since then faith in this kind of boat has evaporated in the United States. Probably the recollection of the fate of the crew of the "David" is still fresh in the minds of American Naval men, every person in that boat meeting death when she succeeded torpedoing the "Hausatonic".

The boat constructed by Mr Holland for the United States Navy Department was launched last August. She is the fifth designed by that gentleman. She is 84 feet long and 11 feet 6 inches in diameter, displacing 140 tons awash and 165 tons submerged. The increase of tonnage when submerged is caused by water let in for the purpose of sinking her. She was to travel at 15 knots on the surface, 12 knots awash, and 8 knots submerged, but this has not been accomplished.

The "Plunger", or "Holland", is provided with three screws and has a crew of ten men. When it is found necessary to submerge the boat, the valves are opened and water pours into specially prepared tanks, capable of standing a charge of 3000 pounds to the square inch. The boat carries five torpedoes, whereas many other boats only carry two. When afloat in the ordinary manner of ships she is able to reach a depth of 20 feet in one minute but from the awash condition can reach the same depth in half the time.

Another boat which has been brought into prominence lately—the "Peral"—is somewhat antiquated, since her keel was laid on 23 October, 1887, and she was launched on 8 September of the following year. Like the "Zede" she went through her trials and created a great deal of discussion, as she actually succeeded in torpedoing and blowing up

a warship under more difficult conditions than ruled when the "Zede" torpedoed the "Magenta". The Spanish nation at once concluded that they had got the right boat at last and a public subscription was started to build similar boats, but a few months later she was practically forgotten until the performances of the "Zede" recalled her to mind.

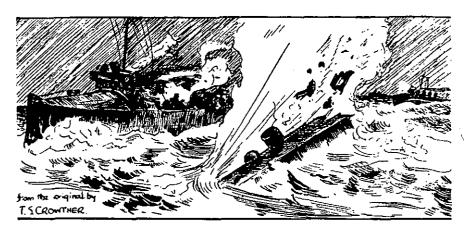
Numbers of submarine torpedo-boats have been invented and built during recent years and for the most part have had brief - in some cases very brief and exciting careers. I may mention, in addition to those referred to in the previous article, the "Argonaut", built for submarine engineer work in rivers; the "Nautile", a small diving-boat tried Havre in 1810: the (uncompleted), an American boat built by the well-known inventor, Fulton, in 1815; the "Intelligent Whale", which was tried and proved to be a failure by the United States Government in 1872; and the "Fenian Ram", launched at New York in 1881.

Mr W. C. Cox, a joiner at Chatham Dockyard, invented a boat only last year, but British Naval officers do not look upon these machines as likely to be useful to them or capable of real work.

After all is said and done in connection with submarine or submergible boats, we are practically no nearer the solution of the problem of submarine navigation. Each boat is in the nature of an experiment and much has been learnt; but even now it is an open question as to what is the best motive power for underwater locomotion. And again, as to comfort. These boats are mere shells of machinery and there is nothing in them at all resembling that wonderful piece of mechanism invented by Jules Verne for his hero, Captain Nemo. Those who have read the delightful story, "Ten Thousand Leagues Under the Sea", and have pictured to themselves a trip in the "Nautilus", would experience a complete disillusion could they undertake a trip in one of the vessels I have described.

sensation experienced by a Landsman taking his first plunge in a submarine-boat has probably never yet been thoroughly described. The dome at the top of the boat opens and you awkwardly scramble inside and take You sit and wait and your place. wonder when the boat is going to move, nervously holding anything handy. When it does move you start, and make a grab with both hands at the seat, as though you would stop the boat from descending. Your friend in command cheerfully hopes you have made your will, and you say nothing, but simply glare at him, inwardly resolving to have nothing to do with him from that day

Gradually the daylight henceforth. disappears and you see the dirty water swirling about the little windows in the dome. Finally, you can see nothing at all outside the boat. Down she goes: you feel a tightness at the chest, your legs seem to be dropping away from your body, but presently you settle down and Your friend. then become curious. however, is now too busy to pay any attention to you. So you sit and sulk, until presently you see the swirl of water round the dome again and at last you are on terra firma. You have been down in the submarine-boat and hereafter may pose before your admiring friends as an expert on the subject.



THE PROBABLE RESULT IN ACTUAL WARFARE



A brief review of their origin and history, and their role in the Far East today

STAFF-SERGEANT P. G. GITTINS Royal Australian Engineers

THE Chinese are fully aware of the force of the adage that "unity is strength". United, a group can achieve far more than one man and, adopting this principle, China has been known as a land of associations and secret societies which are as numerous, and the objects of which, are as varied as the needs of man.

In many respects there seems to be a world-wide similarity between secret societies. In their fundamental principles there is a wonderful likeness, as well as in many points of practice, ceremonial, and ritual. When we come to examine them however, it seems as a general rule to be a family likeness, perhaps the result of heredity, and not a servile imitation of one another during recent times.

Especially is this true of some of the Chinese Secret Societies. Of most of them, it may be said that they were founded upon a spirit of fraternity, devotion, filial piety, and religion. Originally they were either —

- (a) Political, as the Ch'ih Mei or "Red Eyebrow" sect.
- (b) Religious, as the Vegetarian sect.
- (c) Politico-Religious, as the Triad Society.
- (d) Personal, such as the "Golden Orchid", a girl's anti-marriage society.

Today, however, in the majority of cases, their original aims and objectives have been either forgotten or discarded, and the secret society has become a powerful weapon — a weapon that could have a serious effect on a country's economy, and a weapon that could be instrumental in the overthrow of a country's lawful government.

These Chinese secret societies are common and powerful, not only in China itself (much to the embarrassment of Mao Tse Tung) but they often obtain a more powerful position, and even exert at times, a greater influence when transplanted to a foreign soil.

The Triad Society

Perhaps the best known of the Chinese secret societies and the one with the greatest influence in the British Commonwealth nations in the Far East, is the Sam Hop Wui or Triad Society.

It has the largest membership of any secret society in the world and claims a high antiquity, but it is impossible to say with any certainty from whence they sprang. It has existed since 386 AD in close association with the "White Lotus", but there would appear to be some slight indications or possibilities of the existence of this society in some form or another in earlier times.

In 386 AD it was founded, or perhaps re-organized, by the Buddhist patriarch Eon or Hwui-Yin at Rozan, to spread the cult of Amitabha Budda. In 630 AD Zendo joined it to gain instruction and in 1344 it rebelled against the Mongolian or Yuen dynasty. In 1662 it fell under the ban of Kwang Hsi who, in his "Sacred Edict", instituted a persecution of the Buddhists and Taoists and ordered the suppression of five religious societies, among which the "White Lotus" and the "Hung" (one of the names of the Triad Brotherhood) were specifically named.

The exact relation between these societies is still obscure, but if they were not alternative titles for the same organization, they were probably names of different degrees of one common rite. It is just possible, however, they were similar but separate, mystical societies.

Partly as a result of this persecution, the Hung society became political and anti-dynastic, and has raised numerous insurrections against the Manchus, one of the most famous being the T'ai P'ing revolt in 1851. The rituals were peculiarly suitable for conversion from religious to political aims, since the slogan of the brotherhood is "Overthrow Ching and restore Ming". Ming means light, and especially the perfected spirit in man; while Ching means the vital force or, as we should say, the soul

immersed in matter. By slightly changing the way in which the character for Ching is written, it becomes the name of the Manchu dynasty, while the last Chinese dynasty was the Ming. Hence it will be seen that the change from a Buddhist-Taoist mystical initiatory rite to a dangerous political society was easy.

The T'ai P'ing Rebellion

While the great Western Powers by their blows from without were lowering the prestige of the Manchus and were weakening the Imperial structure, a rebellion which had its roots partly in foreign contacts was threatening the Manchu rule from within. This rebellion had its origin in a Hakka, Hung Hsiuchuan. Hung was a school teacher, and an unsuccessful competitor in the civil service examinations. In his young manhood he suffered a serious illness which was accompanied by bizarre visions. These visions he later interpreted in the light of some books prepared by the Christians and which had been given him some years before while he was in Canton. He believed that he was called by God to wean the Chinese from the worship of idols. To this end he preached (in the 1840s) in Kwangtung Kwangsi. His followers formed themselves into societies and allied with the Triad themselves seemingly at the instance of a companion, Feng Yun-shan; and by 1848 were welded into fighting units and a political force with aspirations to the throne.

The followers of the society degenerated into bands of rebels and robbers, and lost every notion of the spirit of their association. Under their leadership many of the finest provinces of China were overrun, death and destruction dealt to the inhabitants, the idol temples demolished and the idols mutilated, the fair land turned into a desert, and Nanking, the ancient capital, captured.

Their inability to organize and consolidate their conquests soon cost them all they had gained, and a force

under the American, Ward, and later, the Englishman, Gordon ("Chinese Gordon") soon quelled them.

The Organization of the Triad Society

Each Lodge in the society—and how many there are we are unable to say—is governed by a President, two Vice-Presidents, one Master, two Introducers, one Fiscal (who is styled "The Red Stick" and is responsible for discipline) thirteen councillors (amongst whom are the Treasurer, Receiver and Acting Treasurer) and numerous agents and minor officials. Some of the brethren who are styled Horse Leaders, are appointed to act as recruiting agents.

Recruits for the society are got by persuasion but, failing that, notices are put into the houses of those they wish to have join them, instructing them to go to a certain spot at a certain time, and threats are made that if the authorities are informed, destruction will overtake them and their property. Arrived at the rendezvous, they are conducted to the Lodge; at other times they are assaulted and decoyed until, overpowered numbers, they are put into a sack and carried there. After an examination has been carried out, the trembling recruits are asked if they wish to proceed with their initiation. Those who refuse invariably are executed.

There would seem to be no Grand Master of the whole Triad body, but a Central Government is in existence, composed of the Five Grand Masters of the Five Grand Lodges of the Chinese mainland – Fukien, Kwangtung, Yunnan, Hunan, and Chekiang. This governing body, then, has some sort of control over millions of Chinese, not only in China itself, but throughout the whole world. Writers have said of this organization —

"The Hung League has carried civil war and murder wherever it has gone.

"They engage to defend each other against the police, to hide each other's crimes, to assist detected members to make their escape from justice.

"Their principles . . . and the assumption of their power by an irresponsible tribunal, constitute . . . the foulest, the bloodiest, the most oppressive of which we have record on such a scale".

The brethren have a perfect system of secret signs adapted for all times and season's and conditions. All contingencies appear to be provided for, for amongst others, directions are given how to put up a secret sign over one's door in case of revolt. This is not part of a mere system, but is of practical use, as for instance, houses in Chinese cities were thus protected when it was feared that the T'ai P'ing rebels would attack the place.

There is a code of laws and statutes, all designed to inculcate brotherly kindness, assisting of brethren in time of need, shielding them from the authorities, and abstaining from giving evidence against them in courts of law.

Their membership is enormous, in some places, such as Malaya and Singapore, almost equal to that of the Chinese population, membership not being limited to men only. Naturally such numbers exert a great influence and almost absolute power (far greater than the lawful government) over their fellow-countrymen.

The Ko-lao Hui Society

This was an association which attracted much attention in the eighties, nineties, and later especially in 1911. It took its rise at the time of the T'ai P'ing Rebellion; a General Tseng Kuo-fang, so it is reported, having established it at the siege of Nanking. Like the Triad society, this organization had for its object the overthrow of the Manchu Government.

It was said to have its representatives in almost every province, and that the army was almost completely honeycombed by its members. It has been reckoned by some students of China that this society was responsible for the riots of 1891, riots which we're directed against not only the Manchu Government, but against all foreigners as well.

Its organization was in all probability on somewhat similar lines to that of the Triad society, for there are Five Heads and identical minor officials.

The Vegetarian Society

A secret society which committed the massacres on the missionaries at Kucheng in 1895, styled itself "Vegetarian". The Vegetarians were divided into nine Companies, and organized on semi-military lines. It would appear not to have been a very important society.

The Boxers

In 1898 and 1899 unrest in China was widespread, induced partly by the talk of reform, partly by the aggressions of the European Powers, and partly by the vigorous reaction led by the Empress Dowager.

The government, in an attempt to provide for national defence against possible large-scale foreign aggression, ordered the revival of the village trainbands or militia. They put this plan into effect first in the north-east provinces. Into these train-bands came many of the local rowdies, and here and there disorderly secret societies affiliated with them.

The members practised rites which believed would make them thev invulnerable to bullets, and practised to some extent the same principles and ceremonials as the Triads. They also believed largely in hypnotism, and included in their ranks, not only boys of from 12 to 15 years old, but girls of the same age. They came to be known to "Boxers", as translation of the Chinese name for the bands, I Ho Tuan or I Ho Ch'uan, Bands" "Righteous Harmony "Righteous Harmony Fists".

One of their favourite mottoes was "Protect the country, destroy the foreigner", and by the autumn of 1899, the Boxers were beginning to persecute Christians as "secondary foreign devils". Attacks on Chinese Christians became frequent, an English missionary was murdered, and foreigners generally were in grave danger.

On 17 June 1908, after the siege of the Taku Forts by foreigners to open the way to Tientsin and Peking, the storm The Empress Dowager, against all advice, ordered all foreigners to be The German minister killed. murdered, and other foreign ministers and their staffs. missionaries, hundreds of Chinese Christians, were besieged in the Legation Quarter and in the Catholic Cathedral in Peking. Scores Protestant and Roman Catholic missionaries and thousands of Chinese Christians were killed.

The Great Powers declared they were not waging war on China, but simply seeking to rescue their nationals and to suppress the Boxers. The Viceroys in the Yangtse Valley remained neutral, and endeavoured in a limited fashion to suppress anti-foreign outbreaks within their jurisdiction. That attitude was also taken by high officers in most of the west and north. The disorders, therefore, were chiefly confined to the north-east. An international force captured Peking on 14 August, the court fled to Hsianfu, and the foreign troops proceeded to loot the capital before they relieved the scattered groups of missionaries and Christians who had been standing siege, and to disperse the Boxer rebels.

The Kuomintang

After the Boxer Rebellion the Chinese revolutionaries formed even more secret societies, all working for the overthrow of the Imperial Government. One of these was the Kuomintang, with Dr Sun Yat-sen as its leader.

Dr Sun Yat-sen, with the aid of a Russian adviser, Borodin, re-organized the Kuomintang something after the style of the Communist Party in Russia, so that it might become a well-disciplined political force, able to establish its authority because it was more efficient than any of its rivals.

The task which the Kuomintang was expected to fulfil was to break down the inertia of Chinese society and modernize it. Although it accomplished many things, it failed in the evolution of an acceptable political system. The party official, army officer, bandit, landlord, village boss, all in turn preyed upon the weak peasant farmers. High taxes were levied, sometimes years in advance, land reform and rural control system was badly needed yet not forthcoming. Discontent spread among the peasant masses like wildfire.

Since the Kuomintang was supported by, and needed the landlords, it would take no steps in land reform. That was its greatest failure. It never established its authority fully, turned the peasants against it, and has been engaged in a civil war ever since.

The Activities of the Secret Societies Today

Having briefly considered a little of the origin and history of some of the more prominent secret societies, let us now examine their activities today — activities which are playing quite an important part in the internal affairs of the British Commonwealth nations in the Far East.

Hong Kong

The colony's geographical position and its role as an entrepot make it an ideal centre for narcotics activities, and the drug traffic organized and operated by the Triad society is still the main source of serious crime. In December 1958, the colony's Police Commissioner, Mr A. C. Maxwell, made the following statement:—

"Despite the most energetic action, addiction to narcotics, mainly heroin, is still disastrously prevalent, and the Triad gangs continue to exercise their maleficent influence".

That there are Beggar's Guilds, Thieve's Guilds, and Kidnapper's Guilds in the British Crown Colony (as in Malaya and Singapore) is commonly accepted. Naturally little is known of their organization, but that they are complete and extensive goes without saying; the guild system is deeply rooted in Chinese life.

Some particulars that have been revealed of the modus operandi of kidnappers indicate a surprisingly well co-ordinated business. There is a trade in captives reminding one of the slave markets, in which the unfortunates figure as less than cattle.

"Sum" is the Chinese slang term used for a prisoner held for ransom. word literally means heart, but expresses body and soul. "Lai Sum" (to lead the body away) is to kidnap. Those who in their time have been sums must number thousands. Every piracy, every raid by robbers or bandit gangs has yielded a batch of sum to be carried away against redemption. Moreover there are always more subtle members of kidnapping profession who work quietly in the cities enticing away sons and heirs, or women and girls if there seems to be a market for them. Some have been rescued, some have been recovered with horrible memories of torture seen and experienced: some have been others have murdered and languished and died. It is rare to hear of a sum returning without some mark of his or her captivity, for all are illtreated on general principle.

In March 1959 the pro-Communist newspaper, "New Evening Post", made allegations that innocent boys were being forced into the 14-K branch of the Triad Society, and made to pay a monthly membership charge of £3. The 14-K is probably the largest and most active of the Triad groups in Hong Kong. It was originally organized with a patriotic purpose, but later degenerated into a criminal organization. A senior police official of the Colony has stated that the Special Branch was investigating the

infiltration by secret societies which were involved in almost every form of criminal activity which yielded profit.

Malaya

In Malaya today, the secret societies are bracketed with Communists as the police force's major targets. They pose a tough problem. Recent (November 1958) estimates are that there are 15,000 senior secret society members in Malaya, which means that roughly one male Chinese in 40 at least is bound to take the society's orders, kill or be killed, intimidate and "protect".

The two main groups are the Ang Bin Hoey (The Society of the Ang or Hung People) and the Wah Kee, neither centrally organized, but perhaps with a hundred active gangs between them. As soon as a group becomes large enough in an area, it forms cells (something after the Communist pattern) collecting their own protection money from street shopkeepers, opium hawkers. gambling, merchants, prostitutes, others, paying a certain amount to headquarters and sharing the benefits among themselves.

In times of trouble they can call on others for help, particularly when the two main societies run into disputes over territories. The members are all armed with some of the societies favourite weapons — knives, meat choppers, axes, electric light bulbs filled with acid, and bicycle chains.

The societies usually recruit among teenagers, who аге enrolled traditional ritual which may last for two or three hours, including the drinking of mixed blood and wine. A successful member may earn his promotion from an ordinary member to Tiger General (a strong-arm man especially looked after) to Grass Sandal (the leader of the Tiger Generals) to White Fan (a treasurer and general counsellor) to Red Rod (who has authority over White Fans and can order the death penalty for ill-disciplined members) or to a Grand Master.



March \(1959 In the Malayan Government began an intensive drive against secret society gangsters, white slavers, and drug traffickers. Regulations under a new Prevention of Crime Ordinance that came into force on 1 April 1959 provided for the issue of Identity Cards for citizens, non-citizens, casual visitors, and known "thugs". A Government spokesman said that this "get tough policy" with known criminals was to give "greater protection to the public from gangsters". He said that the ordinary processes of law had proved inadequate in dealing with societies, largely because their victims were too terrorized to be willing to give evidence in court.

Singapore

Chinese secret societies, gangster organizations, already in control of the State's underworld, have entered politics. A Commission of Enquiry into allegations of corruption at by-elections in June 1958 reported—

"We are satisfied that by far the greatest threat to free and honest elections lies in the existence of secret societies and the intervention of their members in elections. On voting day in the Cairnhill and Tanjong Pagar by-elections in June 1957, secret society men went from house to house in cars provided by candidates, and electors to polling stations. The influence of secret societies on voting was exercised in two ways: first by intimidating electors into voting for the candidate supported by the society, and secondly by preventing from voting electors likely to favour opposition candidates".

In August 1958 there was an outbreak of gang warfare — a war between secret societies called "24" and "08", two of the organizations that control the Singapore underworld. The societies fought their battles mainly with knives and daggers. They also used clubs, home-made spears, motor cycle chains, and electric light bulbs filled with acid. The "Straits Times" at the time said that scores of thousands of helpless and fearful people were paying more in "protection money" than in taxes.

At the end of August in the same year, acting under the Preservation of Public Security Ordinance, the police held 72 secret society thugs. The Singapore Government had given itself dramatic new powers to deal with the societies in an all out effort to smash them.

Daily in Singapore there are robberies, stabbings, and occasionally murders, which take place in full view of the public. More often than not, the criminals are members of secret societies. There is very little help in investigation for the police. People pass by on the other side when persons are being robbed or stabbed, and take very little notice. Victims are left to bleed at the side of the road. When the police go to the scene of the crime, nobody has seen or heard what has happened, even if they were standing within a few yards of the offence.

Schools have become affected by the societies. Many youths were attracted by their bogus glamour. They paid "protection money" to the gangs, and used them to get revenge on fellow students or other people they quarrelled with.

The secret societies in Singapore are strong because —

- (a) No one was prepared to give evidence against them in an open court.
- (b) They could rarely be banished because they were locally born.
- (c) They have the support of unscrupulous businessmen and politicians.

In June 1959 the secret society leaders made the winning number in one of their regular illegal lotteries 43, the number of seats won by the Peoples Action Party in the elections. This was interpreted as a gesture of derision towards the PAP which is pledged to deal harshly with gangsters and racketeers.

After a little over one month under the Premiership of the slim Lee Kuan Yew, a determined anti-imperialist, the Singapore Government has gone to work in a determined effort to clean up the State. News stands have been cleared of pornography, eight sex publishers have been imprisoned, "B" girls sent home, and a massive assault planned on Singapore's notorious gangsterism. For the first time in memory, a full week went by without a kidnapping, extortion. OΓ rumble reported. Fifty-one thugs are now held in custody, ninety per cent of them being members of the Triad society.

The Singapore Minister of Home Affairs, Ong Pang Boon, told the Legislative Assembly recently —

"A new offensive is being planned against the island's secret society gangsters. We will ask the people to fight these gangsters, and we will re-organize and strengthen the police.

At the same time we will amend the criminal law so that those who create disorder will be punished effectively".

The Pacific

Even in the many islands of the Pacific has the influence of Chinese secret societies been felt, in Borneo, Indonesia, Java, Sumatra, and to a limited extent, in the Philippines.

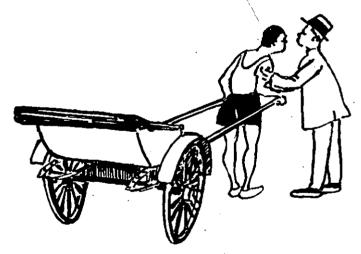
In British North Borneo, small but dangerous subversive groups are actively working against the interests of Sarawak. This is one of the rare occasions when a secret society is actively allied with Communist subversive elements. Their activities are being directed from outside the country, and already secret Communist cells and societies have been formed in the Chinese schools and labour organizations. Here too, the police and

law enforcement officers are having difficulty in getting people to come forward and give evidence. It is much the same story as in Hong Kong, Singapore, and Malaya.

Conclusion

From the foregoing brief comments, it is only too clear that where we have a Chinese community, so will we have secret societies in some form or another. It is well to remember too, that Chinese can be found in almost any and every part of Asia, and that Australia forms part of Asia.

So far, apart from the ever present threat of illegal entry into the country, we seem to be free from the particular type of gangsterism that seems to be a part of the Chinese society. Will Australia always be that way?





SPEARHEAD IN MALAYA. By J. W. C. Moran (Peter Davies, London, and William Heinmann Ltd, 317 Collins St, Melbourne).

WHEN Mayala was liberated by the British Army at the end of World War II, immediate steps were taken to restore the country to its normal peace-time administration. Part of the restoration included the recruitment and organization of a police force, the original force having been scattered to the four winds by the Japanese. Before the new force had found its feet, the Malayan Communist Party, having failed to win any general support from the Malayan people, launched their campaign of guerilla warfare in an effort to gain control of the country by force of arms.

The first brunt of the assault fell upon the Police Force, still going through its teething troubles. Men who were being organized and trained as peace officers suddenly had to undertake the duties of soldiers, to master the techniques of jungle fighting and the use of weapons they had never handled before.

Very few accounts of the fighting in Malaya give the Police Force any credit for its share in the battle. Statistics quoted by Mr Moran tell a different story. Up to the end of 1956, 2890 police were killed in action against the Army's total of 518. In the same period, Communist casualties totalled 11,718 of which 8678 were inflicted by the police jungle squads. The courage and devotion of the police were recognized by the award of no less than thirteen George Medals, as well as many other decorations.

use of the terms 'bandits', The 'terrorists', etc, has helped to create an entirely false picture of the size and power of the Communist forces in Malaya. Mr Moran shows that they are a highly trained and disciplined military force operating under the title of the Malayan Races Liberation Army. This Army was deployed throughout the country in regiments, companies, platoons, sections and independent platoons, wearing an adapted uniform and generally well armed with weapons of the latest patterns.

In support of the 'uniformed' branch of the Communist forces is the Min Yuen, which comprises spies, couriers, sympathisers and subscription collectors. In addition, there are the secret 'killer squads' whose function is to murder those marked for death by the political commissars. Mr Moran estimates that at one stage the three wings of the Communist organization totalled between them about 70,000 men.

Against this factual background, Mr Moran, a Police Lieutenant, tells in the form of a personal narrative the story of a small group of people involved in the fighting. Most of the story centres around the police post of Sungei Lembu which he commanded. He gives a downto-earth, intensely interesting picture of life in this jungle outpost, the grinding monotony of garrison duties interspersed with exciting clashes with the Communist forces. He frankly depicts the development of his relationship with his men, and shows us that courage, constancy and devotion to duty are by no means the monopoly of the men of any race, creed or colour.

If Mr Moran digresses from his main theme at times, the by-passes he follows lead us to a better understanding of the effects on the people of the Japanese occupation, of the ruthlessness of the Communists, and of the characters of the men who fought them. In places his dialogue is a little tedious, due probably to his training in police interrogation.

Altogether this is a sound, entertaining book which throws much light on the struggle against the Communists in South-East Asia. It is highly commended by Field Marshal Sir Gerald Templer, at one time GOC in Malaya.

— E. G. K.

LONG PIG. By Russell Foreman (William Heinmann Ltd, 317 Collins St, Melbourne)

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m A_{T}}$ the beginning of the Nineteenth Century the American ship Argo disappeared on a voyage from Boston to Port Jackson. Wreckage later found on one of the reefs of the Fijian Islands was assumed to belong to the missing vessel, and the reef was named after her. According to Fijian tradition, a wreck did take place on the reef about this time and her crew were the first white men seen by the natives of the small island on which they landed. The sole survivor is supposed to have discovered sandalwood, an accident that led to the bloodiest decade in South Sea history.

With these facts and suppositions as a background, Mr Foreman has written an exciting tale of the impact of a handful of white men on a primitive and ferocious society, and of the struggle of the shipwrecked mariners to survive in their strange and terrifying environment. The story is told in the best tradition of the cannibal islands. There is never a dull moment, crisis follows upon crisis in rapid succession.

Some of the scenes are a little too vividly described for children, particularly just before going to bed. But for an adult is it a full-blooded adventure story which holds its interest to the end.

→ E. G. K.

THOUSAND CRANES. By Yasunari Kawabata (Secker and Warburg, London, and William Heinmann Ltd, 317 Collins Street, Melbourne)

A thoroughly Japanese extent that \Japanese novel to the ceremonial is the whole background. In addition, the social and sexual relations of the characters reflect a social evolution so different from our own that the reader is left groping - the more so, in that the dialogue is intended to stimulate the imagination in that it refers to symbolism which escapes us. The story centres around Kikuji being invited to a tea party by a woman who had been one of his father's mistresses, but for whom he had a revulsion. This woman plots to have him marry the girl of the Thousand Crane Handkerchief and the plot centres around her endeavours to trap him against the strong attraction he feels for the daughter of another former mistress of the father. One is left with the impression of a society utterly remote from our own, in which the elemental acceptance of sex is modified by a sensitiveness to impressions we do not share. Behind the practised motions of the tea serving, the cherishing of ancestral vases and bowls, the sensitiveness to flowers and light and atmosphere are utterly lonely beings in the shadow of ancestral curses and the imminence of death. Through it all, we have a sense of the permanence of these ceremonial tea bowls passed down through the centuries from an early known master, as against the impermanence of individual human life. As a picture of ancient ceremonies, the book would be evocative to anyone familiar with the Japanese tea ceremony, but the characters work out their destiny in an atmosphere of inevitability and despair.

You feel that it represents a phase of life that is passing; you also feel, let it pass.

- WO C. M. D. Flinn

"Why Don't They?"

Captain G. S. Bolitho Royal Australian Artillery

"WHY don't they ?"
Well, why don't they? Is it just because "they" are not in the picture?

So often one hears a sentence beginning with these three words "why don't they". You hear it often in the mess when people discuss all sorts of topics, you hear it in offices, trains, buses, in fact in all places where two or more people gather together and talk.

It is good that people should take an intelligent interest in the many and varied subjects that they do, and a vast number of problems are discussed in this informal manner. These discussions cover ground rapidly and often thoroughly, and, at times critically, especially when the situation is well-known, and a grievance is felt.

And it is then that you hear --- "why don't they give us more vehicles, we can't move a battery with only two gun-towers?" or "Why don't they put national service on a complete basis or cut it out altogether?" or "Why don't they let us do a camp on our own in the field?" This is followed up by a sound and convincing argument, usually one-sided, by the propounder of the question, it is usually discussed and a conclusion again achieved "Why don't they ?" The subject is changed and everybody is happy. Joe Blow. having got rid of his little beef, is easier under the collar, the juniors are impressed by his wisdom, the seniors nod in tacit agreement and think Joe is someone to watch, "they" remain in abysmal ignorance and nothing is done.

Of course, the old question — who are "they"? Well, I'm sure that in many discussions when it is asked "Why don't they?, a different conception of "they" is held by the people in the discussion. Usually, however, it is an unknown someone who is on a higher plane and apparently is unapproachable and that is sufficient excuse for doing nothing.

But having been in such a discussion, are we right, or are we at fault, to not follow up and find out the answer to the question? It may be that our reasoning is at fault — then we should be corrected; or it may be that there is something that "they" are not aware of — the, if it is drawn to "their" notice, "they" can make the correction. But to do nothing is for us to do wrong.

I have been thinking of this, off and on, since I attended a recent atomically-flavoured formation exercise. In the general discussions it was apparent that we are in a position to gain some knowledge of atomic missiles, what happens when one explodes and the effects on ground, people and objects immediately and afterwards.

But on later occasions, talking with people such as my wife, my family and friends and acquaintances, it is obvious that people without a service connection know little or nothing about atomics. What little they know has been gained from reading the newspapers and embellishing such articles with their own fears.

Take an average civilian and ask him what will happen if another war starts — and in many cases he will say that

everybody will drop atomic bombs on everyone else and then we'll all be wiped out. Ask him the result of dropping an atomic missile on Melbourne and his reaction will be that it will be razed to the ground from Frankston to Craigieburn and from Ferntree Gully to Werribec.

Well, is this average civilian right in his ideas? I don't think he is. I consider that the feeling of the average civilian that an atomic missile is the finish of all things is wrong—that he has overmagnified the effects of the missiles is most regrettable, but the fact that many regard the atomic situation as hopeless is most serious.

Which brings me to my question—why don't "they" officially tell the average person about atomics—what happens and the effects? I think the people should be given a wiser understanding to allay their fears—and it means everybody, because those that stay behind in another war will be vulnerable just as those in the field. And don't forget that many of these civilians will be led by you and me and we won't have time to educate them then.

Well, am I right in what I feel—should they tell people about atomics? And if I am right, who are "they" and how should I go about asking them if they will tell the people these things? And if you agree with me why don't you ask "them" also?