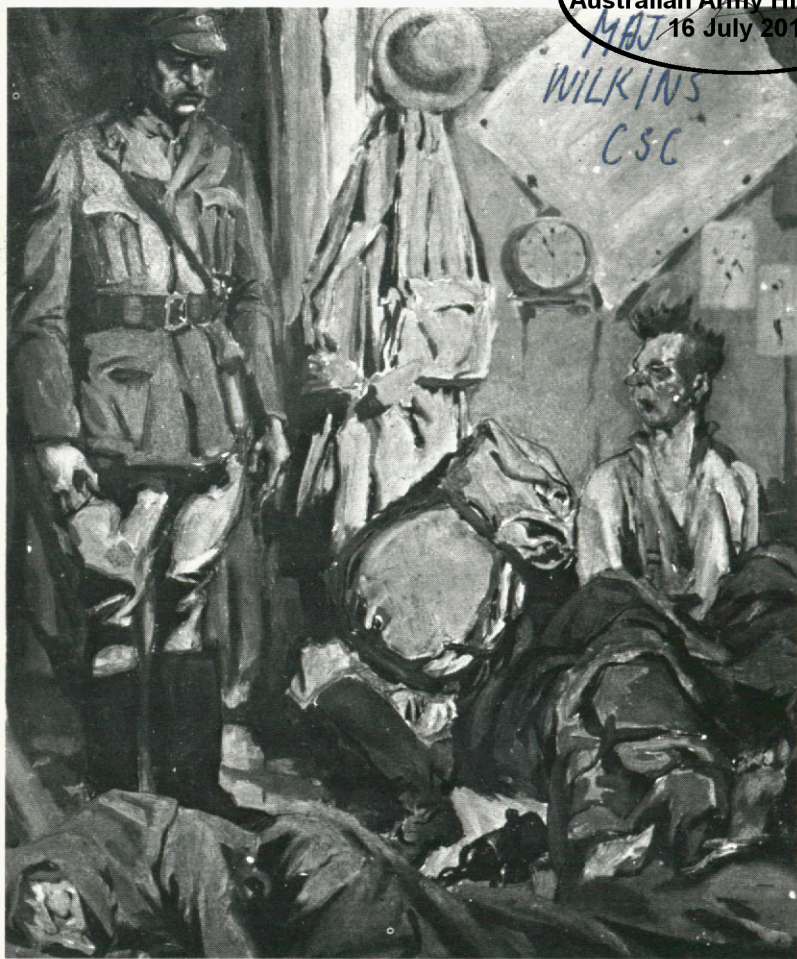


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Australian Army History Unit  
16 July 2014



# ARMY JOURNAL

No. 272 JANUARY 1972



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# ARMY JOURNAL

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**Cover:** 'A Visit from Corps' by Hon Lieut Will Dyson, France, 1918. At the Australian War Memorial.

# ARMY JOURNAL

*A periodical review of military literature*

**No. 272, JANUARY 1972**

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*(Australian War Memorial)*  
Units of Australian infantry rest on the heights overlooking Tobruk after having advanced through the outer defences of the area in January 1941

# a report on EXERCISE JAYWICK



## 8/19 September '71

Lieutenant R. W. Lowry  
Royal Australian Artillery

**E**XERCISE Jaywick was undertaken by a group of soldiers from 108 Fd Bty RAA supported by the *GSL Uriah Heep* and her seven-man British crew from the FARELF Maritime Troop of 32 Regt RCT. It was conducted in the area of the Rhio and Lingga Archipelagos, Indonesia, during the period 8-19 Sep 71.

### Historical Background

References: *The Heroes* by Ronald McKie.  
*Return of the Tiger* by B. Connell.

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Lieutenant Lowry enlisted as an apprentice clerk in January 1963 and after training at the Army Apprentices School was posted to 1 Field Regiment RAA. Selected for officer training at OCS in January 1966 he graduated in December and was posted to 102 Field Battery after Young Officers and Gun Position Officers courses at the School of Artillery. He served with 102 Bty in South Vietnam 1968-69 and was then posted to 108 Field Battery for service in Singapore 1969-71. He is now posted to 8 Medium Regiment at Holsworthly NSW.

The nine participants from 108 Field Battery in Exercise Jaywick were volunteers and besides Lt Lowry were: Cpl G. M. Quilkey (Medical Assistant), LBdr D. P. MacDonald, Gnr J. S. Callaghan, LBdr P. J. Jenkins, Gnr S. Fowler, Gnr I. C. Porter, LBdr R. E. Hogan. In this order they initially paired into four teams. LBdr R. A. Robertson was the signaller aboard the *GSL Uriah Heep*, responsible for rear link communications and VHF communications with the canoes. *Uriah Heep* was made available from FARELF Maritime Troop RCT. WOII W. J. McGuire was the Captain, SSgt T. H. Proctor, Chief Engineer, and the other members of the crew were: Cpl M. Gashonde, LCpl M. E. Thomas, LCpl J. F. McKie, LCpl J. S. Lumb and Dvr D. Moore.

The references contain the story of the two raids, one successful, the other a disaster, carried out by members of Z Special Unit on Japanese shipping in Singapore during WW2. Both raids were initiated and led by Maj (later Lt Col) Ivan Lyon, DSO, MBE, the Gordon Highlanders, with members of each raid volunteers from the navies and armies of Britain and Australia.

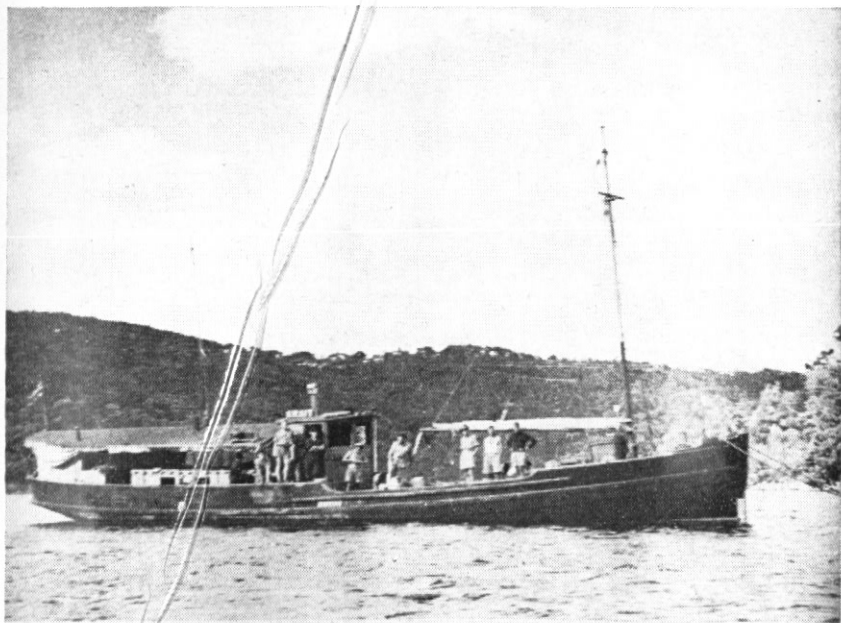
The first raid, codenamed Operation Jaywick, was launched from Cairns aboard the MV *Krait* on 9 Aug 43. The *Krait* was originally a Japanese fishing boat named the *Kofuku Maru*, which had been brought via India to Australia to carry the raiding party to the vicinity of Singapore. Their first port of call was Exmouth Gulf WA where they received new collapsible rubber canoes and restocked the *Krait*.

On 2 Sep 43 they headed north into Japanese controlled waters flying the Japanese flag, and after a nerve-racking voyage via Lombok, Karimata and Temiang Straits the *Krait* dropped the raiding party of six men and their equipment off at what became their rear base on P. Pandjang in the Rhio Archipelago.

After two days rest and exercise the raiders made their way, during three nights, via P. Bulat and Bulan Strait, to their attack base on P. Dongas. After spending several days observing the activities of shipping and port security patrols etc, they attempted to carry out their raid on the night of 24/25 Sep 43, but were forced to give up the attempt that night because of strong currents.

The following night they moved to P. Subar and the next night paddled into Examination Anchorage and Singapore Roads, attached limpets to seven ships totalling 35,000 tons and headed back to the RV, which had been arranged with the navigator of the *Krait*, at P. Pompong.

They were duly picked up by the *Krait* and returned to Exmouth Gulf via the same route as for the approach. The Japanese did not discover who sank their ships until they were told by members of the second raid, who were captured the following year.



KRAIT

*(RAN Historical Section)*

The second raid, codenamed Operation Rimau, was planned on a much larger scale, and a far more complicated approach and attack plan than that used for Jaywick. The plan for Rimau entailed the movement of the raiding party, consisting of 23 men (together with 15 Sleeping Beauties,\* canoes, rations and equipment) aboard the submarine HMS *Porpoise* to the escape base to be established on P. Merapas in the Rhio Archipelago. There the stores for the escape phase were to be cached. Once this was done they were to sail for the Borneo coast and pirate a junk, into which the attack stores and equipment were to be loaded for the approach to Singapore.

With this achieved, they were to approach Singapore and launch the Sleeping Beauties for the raid. The withdrawal to the escape base was to be made in the junk or, if it was decided to sink her, in the canoes. In either case the Sleeping Beauties were to be scuttled. The pickup from Merapas was arranged for

\* One-man electrically powered submersible boats.

8 Nov 44. If not picked up then they were to wait until 8 Dec 44 when, if they had still not been picked up, they could make their own arrangements for returning to Australia.

On 11 Sep 44 the *Porpoise*, with the raiders aboard, left Fremantle for the attack area as planned. All went to plan until about 10 Oct. They were then about twelve miles from Singapore aboard the junk *Mustika* — which they had captured off the Borneo coast — when they were approached by local police in a sampan. The sampan, and presumably its occupants, were quickly disposed of but the vital element of surprise had been lost so it was decided to abort the raid.

The canoes were then assembled and after the junk had been sunk or scuttled the raiders split into four groups and attempted to make their way back to Merapas. A couple of days later, when the Japanese learnt of the incident, a full scale search was organized and most of the raiders were hunted down and killed or captured in the islands of the Rhio and Lingga Archipelagos. Three of them however journeyed nearly 2,000 miles to the SE of Timor where their canoe was destroyed on a fishing stake and the sole survivor, one having been taken by a shark and the other killed, was captured and taken back to Singapore where he and the other nine surviving members of the raid were executed on 7 Jul 45.

Their conduct in captivity and during their trial, and their daring in attempting the raid, won them the greatest admiration from their Japanese captors, who treated and executed them as heroes.

### Thoughts and Plans

Greatly impressed by the account of these two raids and the way they were conducted; having been to the site of the headquarters of Z Special Unit in Cairns and the place of their great mock raid, Townsville, and then being posted to Singapore, I decided that I would visit the area of their triumph and tragedy.

Naturally I was more interested in Jaywick, the successful operation, and tried to acquire some canoes and retrace the



advance and withdrawal routes used by them in that raid. After enquiring, I realized that no Australian unit in theatre held canoes and that units such as the SBS Coy RM which did have them were not, understandably, prepared to lend them to a group of gunners for the minimum period of six weeks that would have been required for training and the exercise.

Therefore the plan submitted entailed the use of rubber assault craft and was passed on to the fleet for comments on its feasibility. One of their comments, that at least two craft should be used, was welcomed, but two others, that an experienced navigator would be necessary and that though the risks would be acceptable in war they doubted they were in peace, presented barriers to be hurdled.

The plan and the comments of the fleet were discussed with the OC of the SBS Coy RM and was then amended to include the use of two craft, and resubmitted with the comments that the leader of the party would have sufficient knowledge of navigation, with his land experience and six months at night school learning the basics of coastal navigation, to safely negotiate the proposed route, and that in the opinion of the OC SBS Coy RM the risks were quite acceptable.

The plan was referred to higher authority but approval was not forthcoming so a couple of months elapsed while other ways and means were investigated. During this time the SBS Coy RM, which was going to supply the assault craft if approval was given, began packing ready to return to the UK as part of the general withdrawal, and Brig M. J. H. Walsh, DSO assumed command of 28 Comwel Inf Bde.

One morning, after I had decided to make my own arrangements, the Battery Commander was approached to see if he had any objections to having members of his unit organizing their own expedition and seeking diplomatic clearance for it. This question was not answered as the BC said that he had mentioned the plan to the Bde Comd, who had said that he would discuss it when he visited the unit.

During the ensuing discussion the Bde Comd pressed the use of canoes, which was agreed to provide that we could get

them well before the exercise for training. He indicated that 40 Cdo RM would probably loan us the canoes and that he would endeavour to obtain a launch to act as mothership. He subsequently recommended that contact be established with Surg Lt Charles Evans, the Medical Officer of 40 Cdo and an international canoeist of some repute. The exercise was scheduled to take place during the period 1-23 Sep 71.

Another submission was then made asking for the use of four canoes, a launch to act as mothership, and diplomatic clearance. HQ FARELF approved the use of the *GSL Uriah Heep* as mothership and requested diplomatic clearance through the Political Adviser's Office.

After some time it was made clear that 40 Cdo could not provide us with the canoes. The only option left then was to take up Surg Lt Evans' suggestion and build our own canoes.



Lieutenant Lowry discusses the route for Exercise Jaywick with 108 Field Battery members of the expedition at the boat sheds of the Changi Yacht Club in Singapore.

This was not thought practicable when it was first mentioned because of the time factor, lack of money and skilled carpenters. It was then mid-July and we were to be away at Butterworth for all of August, so we hastily secured the Battery's carpentry kit, a room at Nee Soon to be used as a workshop, the necessary timber, several handymen, and most importantly, a set of plans drawn up and explained by Surg Lt Evans.

When the Battery left for its tour of duty at Butterworth two canoes were almost complete, another had been started, several discussions had been held with the OC FARELF Maritime Troop, and the route and outline programme had been submitted, so that refuelling locations and procedures could be investigated and arranged.

The first two canoes were launched at Butterworth on 1 Aug and although we only had makeshift seats, paddles and no rudders, training began on 3 Aug. Work went ahead on the other two canoes and the RAAF assisted by making the rudders and helping with the paddles.

Training progressed slowly as most of the team were involved on the NCO Promotion Course and team members were constantly changing for a great variety of reasons; however, by the time of our return to Singapore we were getting the feel of the canoes, despite the lack of rudders which were not complete until after our return on 27 Aug. All canoes, sufficient paddles and the canopy covers, which had also been made by the RAAF, were completed at Butterworth. It remained to fit the rudders and the seats, which were provided by Surg Lt Evans after our return, for the canoes and accessories to be complete.

Full time training and preparation commenced on 30 Aug and continued until 7 Sep, diplomatic clearance having been received prior to our return to Singapore. A co-ordination conference was held at HQ FARELF on 1 Sep to tie up the arrangements, for the provision of cash for refuelling, communications, route and programme, medical cover, safety and command. Passports and visas had also to be applied for and obtained.

All preparations were completed by the afternoon of 7 Sep and after an 0530 hrs breakfast, movement to Tanjong

Berlayer, loading and lashing the rations and equipment, being wished well by the Bde Comd and Battery officers we paddled out into Examination Anchorage at 0830 hrs 8 Sep 71.

### **The Exercise**

The exercise was divided into two phases, the aim of the first being to canoe, via the bases used for Operation Jaywick, 72 miles south to P. Pompong, the pickup RV for that operation. This was done in four days without any direct support from the *Uriah Heep* though she was usually in radio contact.

After leaving Tanjong Berlayer our four canoes, three named after Jaywick's team leaders and the other after their men, headed south through Examination Anchorage (where four of the seven ships were sunk during the first raid, the other three being sunk in the Roads) to P. Subar west of P. Sambu, the oil storage island visible across the Straits.

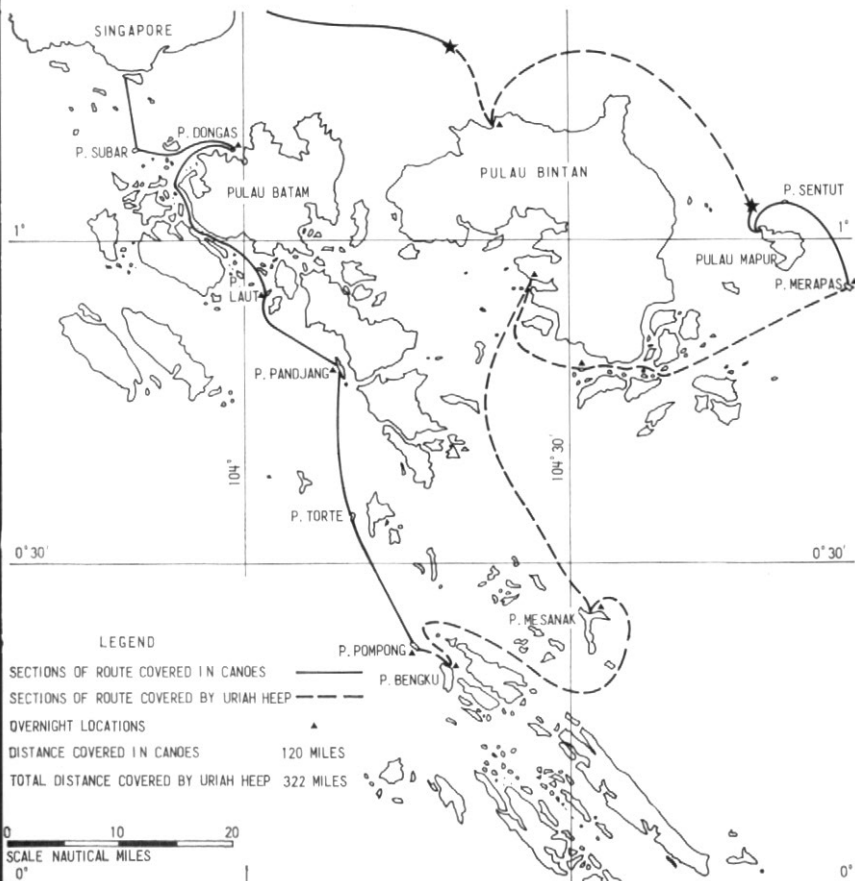
The teams crossed into Indonesia and arrived at P. Subar, a low, rocky, bracken covered island with no beaches at 1050 hrs. The hide used by the raiders was easily located — a small box shaped groove about 15 feet wide with overhanging bracken and small trees. Our spear fishermen caught their first fish here but unfortunately it was not edible. We left for P. Dongas, the attack base, at 1150 hrs and arrived there at 1330 hrs after paddling through a sea that was kept reasonably calm by heavy rain.

We established our camp on a sand-bar in the mangroves on the SW of Dongas, notified our position and searched the jungle covered island. No signs of the raiders' occupation nor of the old well that they mentioned was found. A Hermit Crab Race Meeting was held on the spit that night and a couple went fishing until the early hours of the morning. They caught several small fish, including two sharks.

Next morning, after filling the water-bottles from an old well on P. Batam, we paddled into Bulan Strait at 0915 hrs bound for P. Bulat, 20 miles to the SSE. Only a few native craft used the Strait and one of these, a forty-foot junk, we easily overtook as it tacked back and forth across the Strait. At about 1030 hrs

a Sumatra blew up and besides chilling us, it reduced visibility to about 300-500m. We had a short break for lunch at an RV on the North of P. Mengkadah and kept warm by submerging ourselves as often as possible.

To keep warm, we went on as soon as we could, but visibility was still limited when we reached the southern entrance of the Strait, so we pulled into T. Gundung, without realizing that was our location, and began making a shelter and fire. Within five minutes the Sumatra cleared and shortly afterwards we located our position and continued on to Bulat, which was not suitable for a camp, so we moved first to P. Bukit and finally



to P. Laut where we spent the night. Bulat is a small (100m diameter) scrub covered island surrounded by sparse mangrove. This island, as with the others we visited, though resembling the descriptions in the references, has changed quite considerably over the years.

The *Uriah Heep* arrived at 1630 hrs as we were moving to P. Laut. She had sailed from T. Berlayer that morning and proceeded via Tjombol Strait to Bulat. She had been hindered by the same Sumatra which had affected our progress and had been boarded by soldiers as she entered the Strait. They had fired four shots in the air as they approached in their sampan to check passports but were very friendly once aboard.

We left Laut at 0500 hrs next morning hoping to complete the short 10-mile leg to P. Pandjang, the rear base, before the Sumatra appeared. We headed SSW to clear P. Pentjaitlajar and had turned SE for Pandjang when the sky turned black and the wind was heard roaring towards us. Before the storm arrived we had to repair one of the rudder cables; while this was being done the slower team went on. Once the cable had been repaired it was too late to close with the slow team before the storm was upon us, so after securing the spray covers and equipment we battled on towards Pandjang.

We were on the outskirts of the storm and missed the calming effects of the rain but caught the wind which whipped the seas up to 4-6 feet. The canoes handled these easily so long as the seas were not allowed to break over the sides. Here our lone team was unfortunate in that it let several waves break over the side with the result that the canoe quickly filled with water, and the team leader was heard to say 'Hey Rus, we're going down.' Rus leapt out and clung to the canoe while his companion baled out.

Despite these minor difficulties all arrived at Pandjang at 0830 hrs, hauled the canoes above the high water line, had breakfast and prepared our camp before conducting a search of the beach and cliff areas for the raiders old cache.

Two of the men were sent to look for water and in doing so came across a couple of Malays who ran off. Minutes later

about fifteen locals appeared at our camp, one of whom was a navy man armed with an old French rifle of WW2 vintage. They were just curious and hung around the outskirts of the camp until lunch time when they went home.

At 1300 hrs, while some of the men were spear fishing off the beach, Gnr Porter rose out of the water holding his hand up. He had put his spear through one of his fingers while trying to reload his gun. Luckily it had bounced off the bone without breaking it and our medical assistant applied antiseptic and dressed the wound.

Later in the afternoon the locals came back with the school teacher. He told us that he was the only teacher on the island, that the total population was 54, that T. Pinang was the local capital, that there were six navy men, and that a doctor visited once a month. He could not comprehend our questions and story about the raiders. Our medical assistant applied some antiseptic to the mildly infected penis of a small boy who was brought to us and gave the remains of the antiseptic to his father. His father then went off and brought us back a coconut each, which we gratefully accepted. After having their photographs taken they went off again at 1530 hrs. Our search, while not fruitless, did not reveal anything.

After the evening orders group a water party was sent off. They were sighted by some Malays and taken to the local shop where they were gazed at by the whole population and supplied with free biscuits and soft drinks by the shop-keeper.

Being wary, although unwarranted, the evening picquet was doubled. In fact there were three men on picquet for most of the night as I was bitten on the head by a centipede and had to stamp around the fire and walk up and down the beach until the early hours of the morning to keep sane.

We arose early next morning, 11 Sep, planning to take advantage of the tides on the 28-mile leg to P. Pompong (the pickup RV). As Porter was not able to paddle as strongly as normal with his wounded finger, one team left Pandjang at 0445 hrs, while the others were having breakfast, so that they would not be held up.

Navigation on these pre-dawn starts consisted of a compass shot from which a star was picked up as a reference object. The first team paddled the first 14-mile leg on empty stomachs, in fair weather, and arrived at P. Torte, the RV, at 0840 hrs. The other three canoes arrived at 1040 hrs and shortly afterwards the *Uriah Heep* steamed in after spending the previous day and night out to the west.

Torte is a very beautiful, uninhabited, coconut palm and scrub-covered island with a fine pebble beach and clear water. We remained there until the tide changed at 1430 hrs before moving off on the final 14-mile leg to Pompong.

Everybody was suffering from sore buttocks by this time but the thought that another 14 miles would complete phase one kept us all in high spirits. While waiting for the tide to change we lunched and dried out the canoes and equipment. Our un-serviceable radio and Porter went aboard the *Uriah Heep* and a new radio and LBdr Robertson came to us as replacements. It was here that one of our members exposed his soreness to the elements for too long and suffered for several days afterwards.

We departed at 1415 hrs and paddled towards Pompong with the tide, a slight swell and in fine weather. One of the teams was very slow, due mainly to one member being so overweight he literally could not 'pull his weight', and also to insufficient training to correct faults in style. Very sore buttocks hindered progress too. Everyone kept paddling through the strong rips that were first noticed about 2 miles north of Pompong and arrived at a small beach on the NE of the island at 1900 hrs.

The *Uriah Heep* was anchored off the beach and after we had dragged the canoes ashore and started a fire we were rowed out to a very welcome ten-man ration pack stew and a couple of cold cans of Tiger to celebrate the conclusion of phase one. We had planned to base ourselves there for three days but the captain of the *Uriah Heep* advised that it was not a safe anchorage, so it was decided to move to a safer one on the north of P. Benku the next morning.



The next day, one of rest, I took Robertson and two crew members from the *Uriah Heep* and paddled around the island that, thirty-one years before, had sheltered a thousand survivors from three ships, the *Kuala*, *Tunkuang* and *Kwangwo*, after they had been sunk by Japanese aircraft. It is about three quarters of a mile long and half a mile wide, uninhabited, jungle covered, surrounded by coral reef and rises straight from its rocky shores to a height of about 80 feet. It had only the one small beach when we were there. We then accompanied the ship to the new location, where we spent the rest of the day trying to establish communications, carving out a canoe park and camp, and relaxing.

Leaving two men behind to guard the canoes and camp we returned the following day, 13 Sep, to Pandjang and conducted another systematic search for the remains of the cache that had been left by the raiders, and seen in Mar 70 by two canoeists who paddled from Singapore to Djakarta: again we were unsuccessful. The *Uriah Heep* arrived off the camp after dark and after a difficult approach anchored at 1930 hrs. We had experienced fine weather all day but the two men left behind were caught by heavy rain that gushed down the hill behind the camp and soaked almost everything.

Two of the canoes were lashed to the sides of the mothership and two were rigged for towing early the next morning, and we sailed off to take a look at the three wrecks which according to the charts should still have been visible around Pompong, before proceeding down Temiang Strait, the difficult passage used by the *Krait*. On the western side of the Strait lay the islands where many of the members of Operation Rimau were killed or captured. The swell grew as the day went on and all were relieved when the ship anchored off the northern shore of P. Mesanak, where all but two sick went ashore for some exercise on that scenic but mosquito infested island. From that night on we slept aboard the mothership.

At 0735 hrs the following morning, 15 Sep, while proceeding in a heavy swell to T. Pinang to refuel, the canoes, which were being towed, broke loose, and one capsized. It was difficult to manoeuvre the ship close to the canoes in the heavy

swell and one was damaged in the process, but after some commendable efforts by LBdr Hogan and Cpl Quilkey they were lashed onto the side of the ship with the others.

The journey to T. Pinang was very unpleasant for most of us, though only one was seasick. The heavy seas were coming from behind the ship and she pitched and wallowed most of the way. Heavy rain greatly reduced visibility, and therefore our speed, but after a hazardous approach we anchored in the harbour at 1300 hrs when the Captain and Chief Engineer went ashore with the naval officers who had come aboard as we entered the harbour.

They were taken to 2nd Naval District Headquarters, responsible for patrolling all the waters and islands between Sumatra and Borneo with 32 patrol boats. Here they were very courteously received and told that a liaison officer would be attached to us until we left. He arrived a short while after the others had returned and after anchoring a little closer to the naval pier we were allowed to go ashore. By 1630 hrs we had taken the radio ashore and established communications with Singapore, been refuelled and had the jerrycans filled with water.

Tanjong Pinang seemed to be a prosperous provincial town although the streets were quite peaceful as there were few vehicles. Everyone seemed to have a TV aerial. Fort Kroon Prins, built by the Dutch, overlooked the harbour and two small calibre coastal guns, still apparently in working order, guarded the entrances. There were many well maintained government buildings, several Christian churches and a great cluster of houses built right out into the harbour, with elevated planked roads around and through the complex. There was an airfield several miles out of the town and a regular ferry service to Singapore and Djakarta.

Sailing was delayed next morning because of bad weather so the Captain went ashore to see if he could get a long term weather report. But after being told that it would take four days to arrive by ferry from Djakarta he returned and we waited to see how the weather developed.

By 1400 hrs the weather seemed to be clearing and we left the harbour at 1430 hrs by the southern entrance past the new naval headquarters and pier. We had hoped to reach P. Merapas that afternoon but the delay imposed by the weather meant that we had to anchor for the night off P. Antu in the western entrance to Telang Strait — still  $3\frac{1}{2}$  hrs steaming from Merapas. The damaged canoe was repaired en route to Antu where the six fit members had an hour's paddling practice around the Strait and its poor bordering kampongs.

At 1000 hrs 17 Sep the *Uriah Heep* anchored off the north coast of P. Merapas (the escape base for Operation Rimau), after three and a half hours steaming in a heavy swell and through occasional rain squalls. Most of it, apart from the swampy area where the hides and camps were located, has been cleared for coconut and banana trees since the war. After lowering the canoes we paddled around to the few dwellings



The three teams which finished the last leg of the exercise talking with battery commander, Major R. N. Gair.

located on the western side of the island and were invited in and given hot milk, bananas and coconuts. We then left to complete our circuit and preliminary look at the island.

On completing the circuit we pulled into a round boulder beach where the Chief, who was repairing the dinghy, was talking to one of the locals we hadn't seen at the dwellings. His name was Karta and he claimed to have helped with the burial of two of the raiders who had been killed on the island by the Japanese, when he was a boy of ten. He said that he had seen three of the raiders and been to their camp to talk to them. One day twelve Japanese had come in two boats, landed on the northern shore and engaged in a skirmish with the three raiders, who had only pistols. Two of the raiders were killed while the third escaped in a rubber canoe. The raiders killed the Japanese Captain.

Karta agreed to take us to the graves and he led us along the northern coast to a depression on the rock and coral strewn shore where he claimed to have helped bury them. About 15 feet away was a stone sangar which he said they had fought from. All this tied in with the information given in the references, except that it was thought that only one man had been killed on Merapas.

He then led us to the camp, where we found some very old and rusted food cans. There was also a lone coconut tree which Karta referred to as 'The British Coconut Tree'. After lunch we returned to the island and while one party struggled around the rocky grave another group searched around the camp, but the vegetation was so dense and matted that it would have taken a week to conduct a thorough search. By 1730 hrs only a small hole had been picked at the site where the raiders were supposed to be buried, but no trace was found of any remains.

The Malays (there were about eight men on the island) were very curious and assisted in the searching. Karta asked for my address and promised to continue the search and let me know if he found anything, whereupon we gave them a few items from the rations and returned to the *Uriah Heep*, wishing that we had more time to continue the search.

Next morning the six fit members of the party paddled 15 miles to the NW coast of P. Mapur, via P. Sentut, from where the *Uriah Heep* picked us up and proceeded to a bay on the north coast of P. Bintan.

At 0445 hrs on Sun 19 Sep three canoe teams, the other members were suffering from conjunctivitis, were dropped east of Changi in the Singapore Strait to complete the exercise with a twenty-mile paddle into the Changi Yacht Club, where all three beached at 1015 hrs. The Strait was very busy when the teams crossed it but only one vessel, a large fishing trawler, caused us to stand on our paddles because of the erratic course she was steering.

Shortly after arrival we were welcomed back by Brig Walsh, the Battery officers and their families, the two married members' wives and the public relations men who took photographs and details.

### **Conclusion**

As a result of the exercise those taking part have a greater understanding and appreciation of the difficulties that confronted the raiders. The members were exercised in many tasks and skills: the building, maintaining and navigating of the canoes through narrow island-studded waters and open sea, the establishing of long-range communications, the observation of the geographical features of a different part of the world, learning about the problems of navigating a craft the size of the *Uriah Heep* through waters that to the untrained eye presented no problems. The Exercise Commander learnt much from the planning and organization of the mission. The aims of the exercise were attained and all members enjoyed and learnt from their experiences. □

# THE 'SLASH' HEADQUARTERS



## An Integrated Tactical Administrative Headquarters

*Colonel C. T. W. Dixon  
Royal Australian Artillery*

LATE in 1968 certain considerations in Northern Command led to a study being made of the possible amalgamation of Headquarters 6th Task Force and Headquarters Southern Queensland Area. At that time both were currently operating — the one commanding its Task Force and the other controlling a large slice of Southern Queensland. It was decided by the then GOC that, on the evidence available, amalgamation was desirable and necessary, so in February 1969 orders were issued for the establishment of Headquarters 6th Task Force/Southern Queensland Area in lieu of the previous two headquarters. It was convenient at this stage that the newly completed Task Force Headquarters building was available and that with certain limitations it was possible to incorporate the essential elements of the amalgamated headquarters in the one location.

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*Colonel Dixon graduated from RMC Duntroon in 1942 into Artillery and saw service in Borneo in World War II. After artillery specialization training in UK he served in artillery appointments before being appointed to the Directory Staff at Queenscliff in 1960. He commanded 1 RTB and was DPS AHQ during the years 1963-66. After a term of duty as Services Adviser in Kuala Lumpur in 1966-68, he returned to be posted as the first Deputy Commander 6 TF/SQ Area. In the past 2½ years he has either been deputy commander or has administered command of the formation. Recently he was reposted as Colonel Special Duties HQ N Comd.*

On the AMF ORBAT there are at present two 'slash' headquarters both having the same genesis. From observation of both, and detailed experience in one, it seems to the writer that there are two different ways of solving the same problem; it is the purpose of this article to outline the method which has been found successful in Southern Queensland.

Headquarters 6th Task Force/Southern Queensland Area, which is located at Enoggera in Queensland has had, on a number of occasions, to command and administer all units in Southern Queensland Area and concurrently to conduct an exercise for the Task Force element. This involves separation of the two portions of the headquarters as each function demands detailed attention in a discreet location. It is possible to envisage other reasons for separation, for example, commanding forces deployed away from the main base in response to requests by civil authorities. The first essential to be realized is that the Enoggera Headquarters is capable of splitting for a limited period into two elements and of operating successfully during this period in control of all of its functions. To the reader it would be wise for him to liken Headquarters 6th Task Force/Southern Queensland Area to a Divisional Headquarters in that this headquarters has an ability similar to a Divisional Headquarters for forming itself into two groups, i.e., main and rear. It goes without saying that the Commander commands both elements in each setting as is the case in a Divisional Headquarters, and, although he might delegate certain functions to his rear elements, at all times the responsibility for both tactical and administrative matters for all units placed under his command remains with the Commander.

The headquarters commands units in two main ways. It has all the normal tactical units under its command and additionally has some ASA units, for example, a military hospital, a psych unit, a WRAAC barracks and a personnel depot. It also has under command for local administration an engineer stores squadron, two signal regiments, an aviation regiment, a BOD and a command workshop, in addition to a number of other ASA units. Further to this, it has under its command for property management all properties in the Southern Queensland area with the exception of those at Jungle Training Centre. This includes

some 1,400 married quarters and some 97 major unit project environments including all depots used by CMF units in the area.

In order to understand how it operates, it is important to examine the staff and their function. Figure 1 shows the headquarters as a whole; Figure 2 shows an example of who goes where when a split occurs.

As shown, the Commander commands the entire formation through his headquarters. He is assisted in this by a Deputy

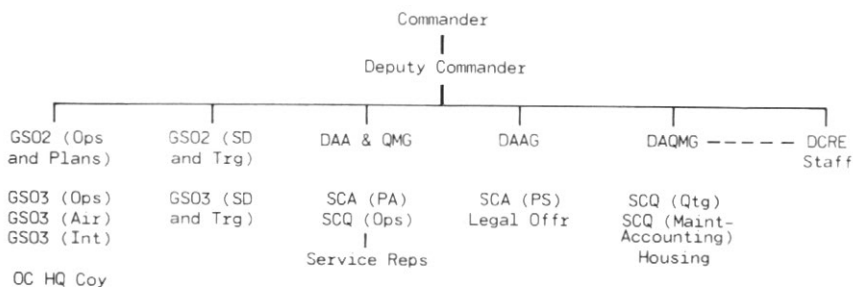


Figure 1 Operation when combined

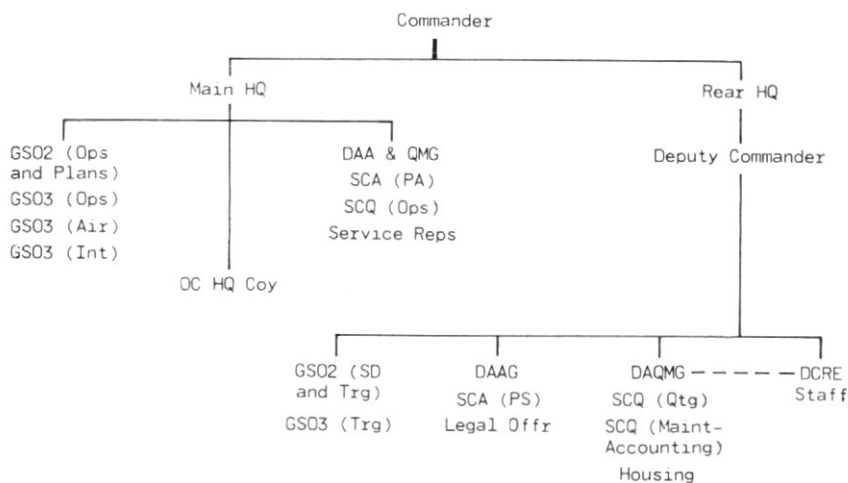


Figure 2 Operation when split



Commander who also acts as Chief of Staff when the headquarters is combined. When the headquarters is split the Deputy Commander commands the rear element. The General Staff function is catered for by two GS02s. One, the GS02 (Ops and Plans), has working for him sub-executives dealing with operations, air and intelligence, and, like the brigade major of old, is always in main headquarters when the headquarters is split. The second general staff officer is the GS02 (SD and Trg) who normally operates at rear headquarters in periods of split operation. The SD function is clear; the training function deserves further mention. The GS02 (Ops and Plans) is concerned with operational training matters, standards of training and preparation of exercises etc. On the other hand the GS02 (SD and Trg) is concerned with management of training. He also deals with matters such as the allocation of ranges, the organization of courses, the control of physical and recreational training and the facilities which go with it.

The AQ function is the one which, on the surface, is the most difficult to understand and the one on which much experimentation has led us to believe that this is the nub of the split headquarters. There is provided a DAA and QMG, a DAAG and a DAQMG. The first of these three invariably joins main headquarters during periods of separation and the others are usually at rear headquarters. To ensure continuity, the DAA and QMG has been given, in the combined role, the same functions as he has in the separated role. It has been found that, in the field, the predominance of effort by the AQ staff centres about A (PA) and Q (Maint/Ops). He has a staff captain for each function and also has the services' representatives working to him. The DAAG deals predominantly with PS matters and perhaps might more correctly be called the DAAG (PS). The DAQMG is essentially concerned with quartering matters. He has a DCRE and his staff for technical advice etc. He is a civilian officer and has a very large span of activities. Because of his continuity and because of his connections with his opposite numbers in the Public Service in higher headquarters, it has been found expedient to allot to him the responsibility for those matters normally handled by Q (Maint) which fit into the category of Q accounting, for example, stocktakes, Q investigations etc.

When the headquarters splits into its two main elements, normal routine can be preserved provided the daily passage of float files from rear to main occurs and regular visits by the Deputy Commander to the forward headquarters and the senior staff officers to the rear headquarters are made. Provided the GS02 (Ops and Plans) and the DAA and QMG visit their rear location for about half a day in four or five days, it is possible for them to sight the work that awaits them, decide what action is to be taken and delegate to one of the rear staff officers the responsibility of seeing the matter through. Initially, attempts were made to pass the responsibilities on to staff officers remaining at rear. It was found that, operating in this way, the itinerants when they returned took a considerable time to find out how their jobs had been done for them during their absence. In the interests of continuity, it was decided to make arrangements for these staff officers to return to the rear headquarters. Of course, if there is an urgent matter fed into rear headquarters which is normally dealt with by one of the officers at main headquarters, the Deputy Commander will note this from the float files. He takes whatever action is necessary and briefs the officer concerned of what had been done in his particular area of responsibility.

It may well be asked what advantage has been achieved by the integration of the two headquarters. There were growing pains and it has taken some time for staffs on higher and lower headquarters to accustom themselves to the change. The economies achieved are noteworthy. There is now only one Commander and one Deputy. Instead of two registry staffs, only one is required; one legal officer is all that is required; branch staffs have been fully utilized and, although the combined headquarters does not represent a fifty per cent reduction, considerable savings have occurred. In general terms the economies have been so considerable as to make worthwhile the inconvenience of trying to make it work. Over and above straight economies, centralization of authority allows the staff to set priorities in transport, stores and resources allocation, thereby ensuring that a consistency of judgment applies over the whole area, that every unit gets a better deal and that better service is offered to the units than the two headquarters could achieve.

It should be noted that this type of headquarters is not necessarily the panacea for all evil. Whilst the Command has one higher Commander with whom to deal, integration would appear to work. Should he have to deal with two higher headquarters, certain inconvenience and confusion may well render inoperable the system we currently use. On the experience of the last three years, it would seem fair to conclude that the 'slash' headquarters, as presently operating at Headquarters 6th Task Force/Southern Queensland Area, is a practical and workable organization for areas where a tactical or operational function and an area command function are required, particularly where there is one higher headquarters directing both functions. In the event of a major exercise or a civil disturbance when it is necessary to deploy troops in an area, this type of headquarters provides in its cheapest form a sensible and effective method of controlling both the area function and whatever operations are required of the forces to be deployed. □

#### MONTHLY AWARD

The Board of Review has awarded the \$10 prize for the best original article published in the October 1971 issue of the journal to Wing Commander N. F. Ashworth for his contribution 'Towards a Defence Policy'.

# SUPERSONIC BLOWPIPE



First Details of the  
British Army's New  
Man-held Anti-aircraft  
Missile System

*Hamish Hay*

**B**LOWPIPE, Short Brothers and Harland's newest missile, is soon to start evaluation trials for the British Army and for the first time it is possible to describe the broad principles of this diminutive supersonic anti-aircraft missile system. The remarkable thing about this weapon is that, despite its high performance and lethal warhead, the missile is no longer than an automatic rifle and, with its launching canister and aiming equipment weighs only 47 pounds (21 kg) including a five-pound (2.27 kg) interrogator unit. This compactness has been achieved by concentration upon design simplicity and the use of a new technique of steering by the nose of the missile.

Blowpipe is a short-range weapon intended for the defence of forward troops, to combat low-flying aircraft which have penetrated the main defensive screen, or as protection for isolated units. Because it is supersonic its reaction time is commensurate with modern aircraft speeds and because it is command-guided its potential accuracy is very high. It can also be used against surface targets and its warhead is effective against lightly armoured vehicles.

The weapon system consists of only two items: the missile with integral launching canister unit and the aiming unit. There are also lightweight carrying-cases for the missile/canister unit and the aiming unit for use when a serviceman has to take the weapon any distance away from his vehicle.

### **Slender Missile**

The Blowpipe missile is a slender tube, 55 inches (140 cm) long. It has a tapered nose-cone and a blunt tail. The warhead is in the centre section, with the fuze in the tip of the nose, and the fore part of the body contains the guidance equipment and the rear part the rocket motor. The four delta-shaped aerofoils in the nose are for aerodynamic control, those at the tail are simply stabilisers. In each case the aerofoils are of supersonic double-wedge profile.

So far this arrangement is not particularly unusual. Where the missile is unique is in the fact that the nose forms the 'aircraft', with a twist-and-steer action. The main body is attached to the nose on a low-friction bearing and simply trails, with the rear fins acting like the flight feathers of an arrow — their angular relationship to the nose fins is immaterial. Thus the nose is free to make its manoeuvring 'twists' without being slowed by the inertia of the main body.

The large pivots of the guidance blades and some details of the body construction can be seen in the accompanying illustration. Two 'whisker' aeriels of the receiver are also visible. The tail blades are made integrally with their mounting collar. Despite the thin supersonic aerofoil section, it was necessary to have a hinge at mid-span of each blade in order that they would fold into the canister. When in its container the collar lies just behind the nose assembly. At launch the body drives forwards and a soft shoulder at the tail picks up the collar and locks the blade assembly to the body; then as they leave the canister the tips of the blades snap out and lock.

Upon firing, the missile is accelerated out of the canister by an instantaneous first-stage booster; that is, burning is completed within the 'leg' of the canister; and the second-stage motor does not ignite until the missile is clear of the canister



A Blowpipe missile, showing the slender nose with its guidance vanes and the receiver aerials and other features.

so that there is no need for operator protection. The sustainer is really an accelerating rocket which brings the missile up to full speed, after which it coasts as a fully controlled dart. There are sighting flares in the rear body of the missile.

The warhead is detonated either by impacting with the target, or by a proximity fuze. Range is about two miles (three km).

### **Lightweight Canister**

The canister is a lightweight environmental container, sealed at the factory, and the missile does not leave it either until it is fired or removed upon time expiry for replacement of 'lifer' components. The front cap is blown off by gas pressure when the gyro is fired, while the laminated rear closure, which has an O-ring seal, is ejected at launch. The container carries the electrical mating connections joining the missile circuits to those of the aiming unit.

### **Aiming Unit**

The compact aiming unit is a saddle-shaped box with a pistol grip under its right-hand side. Contained in the aiming unit are the radio transmitter, an auto-gathering device and, optionally, an interrogator system. There are also switches for the aimer to cut out the proximity fuze and/or the auto-gathering system when these are not required.

Self-destruction of the missile may be initiated by cutting off guidance transmissions.

The aimer's sight is of monocular type, with a graticule, and he guides the missile on to the target. When using automatic guidance he simply keeps the target centred in the sight graticule — the missile is beam riding in this mode. The pistol grip has a safety-catch and a squeeze handle which actuates a spring-loaded armature generator that provides the firing current for activating the thermal batteries in the missile and the canister. The canister battery provides the power for the aiming unit during the engagement. The missile comes under full command control during the main acceleration phase and continues so for the remainder of its flight.



A soldier aiming Blowpipe. His right hand is holding the grip with his thumb on the guidance button.

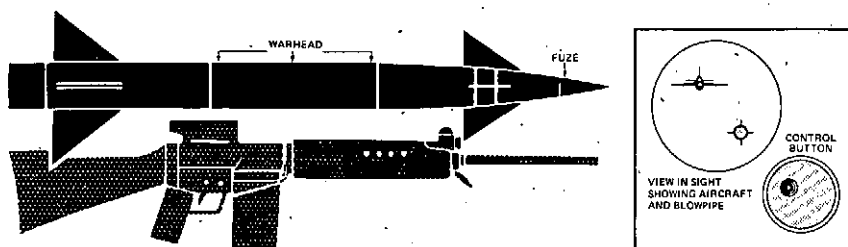
The guidance control button is thumb-operated, similarly to the Short Brothers and Harland Seacat and Tigercat missile systems.

### **Firing Sequence**

The operator puts his aiming unit on to a canister, which automatically makes the electrical connections, and lifts the weapon on to his right shoulder, steadying the fore part with his left hand. Aiming at the target, he picks it up in the monocular sight and switches on the interrogator unit.

If he identifies the target as hostile, and it is within range, he releases the safety catch and squeezes the trigger. This causes the generator to send an electrical impulse to the firing circuits and in less than one second the booster fires. Apart from the noise, the only effect on the operator is to halve the weight on his shoulder — there is no recoil.





Accompanying these silhouettes comparing a Blowpipe missile with an automatic rifle are the main details of the missile and a diagram of a monocular-sight view and thumb-switch in position to guide the missile on to the target.

Unless the auto-gather system is switched out, the missile will be automatically gathered. While it is under automatic control, the operator has only to centre the target in his graticule and the computer in the aiming unit will supply the radio signals to bring the missile on to the line of sight. Otherwise, the thumb-switch is used to guide the missile on to the image of the target — which need not be held centred in the viewfinder.

After the round has exploded, the operator unclips the canister (which contains the transmitter aerial) and clips his aiming unit on to a new canister.

### Single Trainer

A modern missile system's effectiveness is largely dependent upon good, realistic simulation, both for training and maintaining efficiency at reasonable cost. In the case of Blowpipe, a single trainer, consisting of a dummy aiming unit and canister of the correct weight, can be used for 'blind' and 'live' training.

In the former mode the trainee sees the aiming graticule in the monocular sight and on this a target image is superimposed. When the 'missile' is fired it appears in the sight as a spot of light which responds to the thumb-switch control and can be guided on to the target. The performance of the trainee is monitored on instruments, so that the instructor can assess results and give corrective advice. When used against live

targets the trainee sees the actual scene and a spot of light is injected on firing, which again responds to the auto-gathering phase and then to the thumb-switch — just like the real missile. A television relay can be incorporated which gives the instructor a picture of the trainee's performance against the live targets.

The trainer has provision for a weight loss simulator to give the slight upward effect of the lightening of the shoulder load which takes place when a real missile is fired. □

#### ESCAPERS AND DESERTERS

The escapers generally from Singapore were broadly in three categories — those who had deserted or had become detached from their units during hostilities; those officially evacuated; and those who escaped after Singapore fell. As has been related, the official evacuation was a confused undertaking. For many of those chosen to leave — mostly women and children, nurses, specialists, and representatives of various units to form experienced cadres elsewhere — the transport which was to be available could not be found when the parties had been organised. The servicemen among these were given the choice of rejoining their units or of escaping on their own initiative. Two naval gunboats and four small converted river steamers in which evacuees eventually left Singapore were bombed and sunk, but many of these, and others, survived the misfortunes which befell them.

The dividing line between desertions and escapes was in some instances indefinite, particularly as a report that the 'cease-fire' on Singapore Island was to take effect as from 4.30 p.m. on 15th February had gained wide circulation and many acted on it in good faith. Some, as the plight of the city worsened consciously deserted. Once the fighting had ceased, others felt free to get away if they could. Thus before and after capitulation Singapore's shores were combed for craft of any kind which gave hope of escape. The extent of the movement from the island is indicated by the fact that although many who took part in it died and others were captured, about 3,000 reached Java, Ceylon and India through Sumatra.

— Lionel Wigmore, *The Japanese Thrust*  
Vol. IV, Official War History (Army)

# FUNDAMENTAL PRINCIPLES OF WAR

Lieutenant Colonel D. J. Macbride  
Royal Australian Engineers

THE application of the principles of war by the Free World Forces in Indo-China, and the governments of the countries involved, are not discussed in this paper since all the facts are not yet available. The full implications of the political interpretations of the principles of war when the country has not actually declared war have not been evaluated. But such a study offers a real challenge to everyone interested in the defence of the country. A study of the above requires an in-depth understanding of the application of principles of war from the political level right down to the infantry section.

This paper proposes change, like so many other things today, but not just for the sake of change. The aim is to provide a point of view about the principles of war with the hope of arousing the reader to a critical, constructive and fresh study of a subject vital to effective consideration of events surrounding the Indo-China conflict, and a new politico/military posture which will affect the future composition, size, training and equipping of the army and other defence services.

## BACKGROUND

### Introduction

Many eminent writers over 3,000 years have said much on the topic of principles of war. However, armies of the United States of America, the United Kingdom, Russia, China, and now Australia, do not have the same principles of war. Some of

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these principles are being confused with fundamentals, elements or factors. These are very sound in their right place, but not, as presently classed, for the application to the science and art of war.

The science of war and the principles governing its management must be immutable if they are to provide the correct guide to the conduct of all types of war, today and tomorrow. This paper examines the more generally accepted principles of war to see if they justify their present status. First, a firm base will be established on which to make judgment. A brief history of the art of war, the difference between a principle element and factor, and the application of the principles to the spheres of war and the tactical phases will be examined. A number of the current principles of war will be rejected in the light of proper definition. A number are easily recognized as immutable and fundamental principles of war. The others will be reassessed.

In conclusion, a list of Fundamental Principles of War will be suggested and some comment offered on a practical approach to the study of military history leading to their application in the development of the army and in the conduct of war in the future.

### **History of the Art and Science of War**

'Sun Tzu's essays on *The Art of War* form the earliest of known treatises on the subject, but have never been surpassed in comprehensiveness and depth of understanding. They might well be termed the concentrated essence of wisdom on the conduct of war. Among all the military thinkers of the past, only Clausewitz is comparable, and even he is more "dated" than Sun Tzu, and in part antiquated, although he was writing more than 2,000 years later. Sun Tzu has clearer vision, more profound insight and eternal freshness.<sup>1</sup> This statement by Liddell Hart on a book that was written in China in about 500 B.C. establishes this as the start point of a record of military art in the Eastern World.

The earliest battle of which we have any detailed records is the Battle of Kadesh (1288 B.C.) between the armies of the Egyptian Pharaoh, Ramses II, and the Hittites. These records prove that the ancient Egyptians had mastered the art of warfare to a very high degree. The organization of their armies into self-

<sup>1</sup> *The Art of War*, Sun Tzu. (Translation by Samuel B. Griffith).

contained divisions of all arms (infantry, charioteers and archers); efficient system of administration; tactics of the flank attack; use of deception and concentration, and in fact every branch of their military science proved them to be far superior in military prowess to the Greeks and Persians who came more than a thousand years after them.

A continuous record of conflicts did not start until the Graeco-Persian wars and the knowledge of the tactics of the Macedonian phalanx. The battle of Pydna 168 B.C. saw the phalanx succumb to the more flexible Roman Legion.

The cavalry era began with the Battle of Hadrianople (378 A.D.) and infantry were relegated to minor roles. The fate of kingdoms and empires from Asia to the Atlantic was decided by hordes of cavalry raiders, whether Scythian, Christian, Tartar or Saracen. The armies of Attila the Hun, Abdullah and Musa, Genghis Khan and Tamerlane were mainly mounted. The Battle of Crecy (1346) introduced a revolution in tactics with the appearance of the English long-bowmen. A further three centuries of leisurely recovery for military science followed before cavalry were relegated to the position of a supporting arm.

The credit for the first attempts to extricate the art of scientific warfare from a chaotic state goes to Gustavus Adolphus, King of Sweden, during the seventeenth century. Tactical development grew in proportion to the increasing size of forces deployed in the field. Reconnaissance, manoeuvre, administration, protection of lines of communication and the value of topography took their correct place in operations. Marlborough at Blenheim and Ramilles demonstrated the true value of ground and in the latter the use of surprise. The tactical doctrines of Marlborough during the first half of the eighteenth century are the basis of the art of battle today.

The relationship of strategy and tactics and their interdependence, the combination of mobility and concentration and the reintroduction of the autonomous division, were ideas by Napoleon in 1796. By 1812 the deployment of divisions had grown to the deployment of armies. The art of war developed very little from this point until the Industrial Revolution produced much improved weapons, particularly the breech-loading rifle.

World War I saw the use of machine-guns and trench mortars on an enormous scale and the introduction of the tank and aircraft. The consequence of this sudden increase of war material was a general deterioration in strategy and tactics. The Spanish Civil War was the testing ground for the new tactical employment of tanks and aircraft. World War II introduced global warfare of unprecedented fury in every type of terrain, and at sea and in the air, culminating with the introduction of the nuclear bomb. Today tactical nuclear doctrine exists, although untried, but possibly the greatest problem is counter-revolutionary warfare, where the blowpipe and poison dart are still part of the enemy's armoury.

After over three thousand years of recorded war the fundamental principles applicable to the science and art of war have not been established. Some of the forty principles shown in Table 1 are the same, other than in name and scope, but this list is by no means comprehensive. It is apparent that the major powers cannot agree on these principles. In the post-Napoleonic period Clausewitz dwelt upon the socio-political setting in war. Jomini was the first to formulate a set of general rules. The Japanese studied Sun Tzu from about 1860 and prior to World War II read *A Comparative Study of Sun Tzu and Clausewitz* by Lieutenant General Muto Akira. Colin, Foch, Fuller, Hamley, Henderson, Moltke, Scharnhorst, Schlieffen, to name a few, have produced strategic and tactical theories and doctrine of immense value. Nonetheless the Western Powers selection of their principles of war come from a general combination of Clausewitz and Henderson. Mao Tsetung has taken the tactical doctrine from Sun Tzu and interpreted his principles of war from that source. Fuller listed the first set of eight Principles of War in 1923.<sup>2</sup> They later appeared in *Field Service Regulations*<sup>3</sup> and are basically unchanged from the existing British set of principles today.

A major feature of the writings studied for this paper is the lack of application of principles to the political sphere. Strategists today realize that with the rise of the national state and the advancement of industry and technology, military, economic

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<sup>2</sup> *The Reformation of War*, page 20. Colonel J. F. C. Fuller (1923).

<sup>3</sup> *Field Service Regulations*, Vol. 3. War Office (1935).

and political power cannot be separated. The principles of war must be valid in the political sphere, a point often overlooked previously because of a different politico-military climate. A study of military history and the current principles of war is not sufficient in itself. A complete understanding of each principle, its application in the past and present is essential for the correct formulation of political, strategic and tactical doctrine of the future; such doctrine must necessarily be based on a few Fundamental Principles of War. The present ones are neither few nor fundamental.

### A Principle

A glance at Table 1 shows that at various times in the last hundred years or so, many principles of war have been put forward, and of the forty listed no two are identical; further research would reveal more lists. The exponents of some of these lists have stated quite categorically that 'this is *the* list of the principles of war'. They might have had the modesty of the writers of the holy gospel, who did not state that theirs was *the* gospel, but only the gospel according to the writer.

A further study of Table 1 will show a second difficulty, many of the so-called principles listed will not stand up to an examination against the definition of the word 'principle'. The *Oxford Dictionary* states a 'principle' is 'a primary element, force, or law which produces or determines particular results; the ultimate basis upon which the existence of something depends'. Other dictionaries give other definitions, but in any event, as pointed out by Maurice 'military terminology has never pretended to be scientifically exact, and as long as we know what we mean when we talk of principles of war it is not necessary to be pedantic in the use of terms'.<sup>4</sup> However, some of those listed can not be classed as principles by any stretch of the imagination, for examples, Ability of Commanders and Freedom of Action. The *Oxford Dictionary* gives the definition of 'fundamental' as 'primary, original; from which others are derived'. 'Element' is quoted as 'a component part of a complex whole'. The definition of 'principle' contains the words 'element' and 'primary' thus tending to further confuse the issue.

<sup>4</sup> British Strategy, page 27, Major General Sir Frederick Maurice (1929).

If the principles are to be applicable at the highest level — the political concept — there is justification for them to be qualified by 'fundamental'. Any principle derived or developed from these for a particular sphere of war should be classed accordingly; a strategic or tactical principle or even subdivided further for the phases of war. This paper does not go into these special principles but nonetheless it should be possible to tabulate the fundamental principles of war and in family tree form see their extension in every branch down to platoon and section level.

The elements of war must not be forgotten when discussing this subject because so many people do get confused. The elements are the wherewithal for the conduct of war and include leadership (both military and civil), troops (quality, quantity, morale), resources (men, ships, aircraft, armaments, supplies, transport and factories). These elements, coupled with ground, time and space and information are the material bases for the application of the principles of war. Table 1 reveals that armament, morale, and quality and quantity of divisions as elements of war are out of place in a list of principles.

The *Oxford Dictionary* definition of a principle will be used in this paper for the purpose of selecting, rejecting and comparing the principles of war. This part of the article is important because here the definition of a principle of war must be clear, thus doing away with the constant misinterpretation which has made it possible for the imposing list at Table 1 to exist. The principles should be defined in sufficient length to be comprehensive. The terminology should be simple and expressive and leave no room for ambiguity. At present some principles overlap, such as Concentration and Economy of Effort, Movement and Flexibility and Surprise and Security. In most cases this is brought about by poor definition and narrow application.

### **The Application of Principles**

'We frequently find tactics and strategy treated as separate subjects. This is difficult to avoid, but it is most necessary to realize that in practice the two cannot be divorced. The interdependence between them must constantly be borne in mind.'<sup>5</sup>

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<sup>5</sup> *The Operations of War*, page 399. General Sir Edward Hamley (1922).



Liddell Hart gives a deeper expression. 'Strategy is too often considered to comprise merely military factors to the overshadowing of the political and economic, with which it is interwoven. The fallacy has been responsible for incalculable damage to the fabric of warring nations. When such critics speak of strategy they are thinking almost solely of logistic strategy — the combination in time, space, and force of the military pieces on the chess-board of war. Between logistical strategy and chess there is a distinct analogy. But on the higher plane, and with a far wider scope is grand strategy.<sup>6</sup> . . . the term "grand strategy" serves to bring out the sense of "policy in execution". For the role of grand strategy is to co-ordinate and direct all the resources of the nation towards the attainment of the political object of the war — the goal defined by national policy.'<sup>7</sup> Add Henderson's bold statement 'It (war) is a political act.'<sup>8</sup> and the soldier is emphatically reminded that the principles of war are not purely a military matter. War is a continuation of diplomacy and its object is to enforce the national policy as economically as possible. Modern war is total, involving every branch of national life, and all phases of the national effort are interdependent.

The nation at war is a team: the government, the navy, the army, the air force, the workers in industry and the civil defence services, are all members. Each member has a vital part to play. The team as a whole can achieve the aim. Within the ultimate unity of a nation engaged in war the various components of the national effort each has a unity in itself.

Though the lessons of the past are of the greatest importance, guarding against the danger of allowing past experience to carry too much weight is essential. A study of the Sino-Japanese war and World War II shows that the lessons from *A Comparative Study of Sun Tzu and Clausewitz* were superficially understood by the Japanese military hierarchy, who widely studied that book. In 1938 Mao Tsetung wrote 'Strategic Problems in the Anti-Japanese Guerilla War' in which he was very critical of the Japanese in this sphere. On the tactical level

<sup>6</sup> *Thoughts on War*, page 151. Liddell Hart (1943).

<sup>7</sup> *Thoughts on War*, page 152.

<sup>8</sup> *The Science of War*, page 12. Colonel G. F. R. Henderson (1919).

the Malayan campaign, 1941-42, abounds with examples of Sun Tzu's precepts. The Japanese made imaginative use of terrain, deception, feint and speed which were masterfully combined.

Ready adaptation of thought to the changes which scientific progress may dictate is of the highest importance. Science today is exercising an increasing influence on the equipment of all the armed forces. The aid of the scientists (civil and military) will be essential not only in the search for and the development of new weapons, but also in foreseeing the probable influences on tactics by the production of such new weapons. The closest co-operation must exist with scientists in every branch of the nation's war effort and not least of all between scientists and the commanders of the armed forces.

In making plans, certain principles need consideration. These fundamental principles provide a guide upon which national action will be based. Many soldiers are inclined to look at the principles of war in military isolation; this is wrong. The pertinent points extracted from *Conduct of War* and detailed above show that war is all embracing.<sup>9</sup>

The principles of war must apply in every sphere whether that be civil, naval, military or air.

## AN EXAMINATION OF THE PRINCIPLES OF WAR

### Introduction

The principles of war must not be regarded as a number of separate or individual things which, like the ingredients of a cooking recipe, will produce a 'Victory Cake' if compounded in the right proportion. A lot of value can be found in a study of the Mesopotamian campaign 1915-16. The complete uncertainty about the aim of the expedition which was changed and enlarged with initial successes, the failure to appreciate the qualities of the enemy and finally the collapse of the administration leading to the surrender at Kut el Amara, suggests the commanding general was unaware of the principles of war. He wrote learnedly about these principles but does not seem to have understood them.

<sup>9</sup> *Conduct of War*, Section 1, pages 1-3. War Office (1950).

The application and implementation will vary with changing conditions and the development of weapons. They should not consciously or individually be applied but so absorbed into the make-up of the national leaders and service commanders that they are used in proper balance to every circumstance of diplomacy and operations. *Conscious over-emphasis of one principle at the expense of others may well lead to failure.*

### **The Principle of Surprise**

Surprise is frequently termed the greatest weapon in war and is certainly one of the most effective methods of gaining victory. The general definitions of surprise relate particularly to tactics and methods of application. The methods are too numerous to mention here but suffice to say they are not all applicable at every level of war. Secrecy of intention is the basis of deception and can be applied by the denial of information to the enemy or providing false information to mislead him, 'war is based on deception . . .'<sup>10</sup>. In most examples from history surprise is gained from deception and defeated by the application of the principle of security.

An example of strategic deception by denial of information is provided by the Germans in 1914. They appreciated the weakness of Russia better than the Allies and took a calculated risk by leaving a relatively small force on the Eastern Front. They then mobilized their reserve divisions concurrently with their first line divisions, an unexpected move. This application of the principle of concentration was not believed possible by the French High Command. The French were confident of their calculations and were pleased when they discovered the strong German flanking movement across the Meuse and through Brussels. They assumed the Germans had weakened their centre. They were amazed to find that the German centre was still strong when they attacked. They were repulsed with heavy losses in the battles of Virton and Longwy.

The Germans right thrust was effective, the French plans collapsed in ruin and the retreat to the Marne followed.

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<sup>10</sup> *The Art of War*, page 1006, verse 12.

Instances of deception by false information are numerous. Allenby's dummy camps in Palestine deceived the Turks as to his concentration. De Guingand in 'Operation Victory' and Field Marshal Alexander in his dispatches have described the ruses devised to baffle Rommel before the Battle of El Alamein. In 1944, the Allies were concentrated in South-east England for the invasion of Europe. The excellent cover plan made the Germans believe that the main effort would be made against the Pas de Calais and not Normandy.

The enemy can be put off balance on a national level by the development of new weapons and delivery systems in strict secrecy both in peace and war. Collective defence treaties are negotiated to provide security against possible enemy activities but secret international agreements are impracticable.

Modern means of intelligence invariably makes complete surprise impossible. Deception is the fundamental of gaining surprise and security the way of defeating it. Deception can be implemented at all levels and should replace surprise as a fundamental principle of war.

### **The Principle of Security**

#### *General*

In the conduct of war the security of bases, vulnerable points or areas and lines of communication are essential. Napoleon said 'manoeuvre is only possible around a fixed point'. In some cases this might appear questionable because the fixed point or firm base is not obvious. The air battle hundreds of miles from an aircraft carrier or airfield is one example, yet without those bases the aircraft could not be sustained. Thus the firm base need not be static, in fact in many instances movement will be necessary to maintain security.

The collective treaty organizations such as NATO, CENTO, SEATO and agreements like ANZAM and ANZUS give the major Western powers secure areas from which to plan operations and flexibility for deployment of forces including the placing of strategic reserves and weapons in peace. Security assumes its greatest importance in the planning stages in pre-

paration for the execution. If all probable dangers are eliminated, security established and resources correctly distributed, flexibility of execution comes automatically. Security requirements can only be foreseen with adequate and timely information for planning and preparation.

### *Security*

In more recent years security has been difficult to achieve. Modern technology and scientific development have torn down the natural barriers which at one time provided security. For the strategic nuclear war with inter-continental ballistic missiles and submarine nuclear launching platforms security is sought in retaliatory capability. At the tactical level rapid concentration and dispersion are essential and national decentralization of industry is vital.

In counter-revolutionary warfare the 'people' are a constant threat to security unless properly indoctrinated and they give their full co-operation. The French lost the war in Indo-China because this principle was not heeded. They could not maintain secrecy, they were inflexibly tied to the roads by vehicular movement and the information available about the enemy was either insufficient or not interpreted correctly.

Fortunately the sea aspect of security has always been uppermost in the minds of the British people and the combined efforts of the navy and the air force were sufficient to win the Battle of the Atlantic in World War II. Without this line of communication to America, Great Britain would have been powerless. This demonstrates that the failure of any one of the armed services to contribute its quota to the provision of overall security must adversely affect the prospects of the other services.

### *Protection*

This was listed as a principle of war by Australia for counter-insurgency operations (1962) but it has now been covered under Security.<sup>11</sup> Protection is the application of the principle of Security. The British in 1941 believed that the Singapore base provided security for the seaways of the East but

<sup>11</sup> *Counter Revolutionary Warfare* — Pamphlet No. 11. Military Board (1965). (Also see *Organization and Tactics* — Pamphlet No 1).

failed to provide the protection for that base. The Russians prefer Stability in the Rear but this again is only one facet of security and so does not in itself qualify as a principle.

### *Intelligence*

'Therefore I say; Know the enemy and know yourself; in a hundred battles you will never be in peril' says Sun Tzu.<sup>12</sup> Without good intelligence adequate security cannot be provided, leaving the enemy opportunity for deception and at the same time reducing the ability to counter enemy action. Russia includes Preparation, in relation to intelligence, as a principle.<sup>13</sup> As has already been stated security is most important in the planning and preparatory stages but Preparation hardly qualifies for this status. Lack of both preparation and information signifies a failure to appreciate the problem.

### *Summary*

Security implies protection and cannot be effective without the knowledge also necessary for the correct selection and maintenance of the aim. The most important stage for the application of this principle is while planning and preparing. Secrecy is an essential characteristic if the enemy is to be denied the information he seeks from you. Deception can only be countered by good information and the application of the principle of Security.

Security certainly justifies rating as a principle. Close association with Selection and Maintenance of the Aim and as a counter to deception by the enemy are important features.

### **The Principles of Concentration and Economy of Effort**

The correct and skilful application of the other principles of war should lead to the concentration of men, weapons, fire-power and all resources to defeat the enemy at a selected time and place. The complement of concentration is economy of force implying the use of the minimum possible resources elsewhere.

<sup>12</sup> *The Art of War*, page 84, verse 31.

<sup>13</sup> *Notes on the Soviet Army*, page 137, para 380(g). War Office (1959).

Allied to concentration is dispersion. The ability to concentrate and disperse quickly is imperative in nuclear and counter-revolutionary warfare.

Economy of Effort is inseparable from Concentration in the definitions by those who state both as principles. The resources of any nation, army, formation or unit at any one time will be limited, and to gain effective concentration will require careful balancing of troops and material available. These principles will be dealt with collectively.

America associates fire-power and manoeuvre at a decisive time and place thus indicating mobility as an essential feature of concentration.<sup>14</sup>

The Russians agree but list concentration as a part of Preparation where they believe that preparation should include the ability to concentrate at the correct time and place.<sup>15</sup> Others fail to recognize the significance of time and space in applying this principle. Liddell Hart was of the opinion that concentration was a part of Economy of Force,<sup>16</sup> was inseparable from dispersion<sup>17</sup> and was a matter of effect and not form.<sup>18</sup> All of these interpretations are correct but neither one is sufficient on its own. Collectively they say Concentration is no good in isolation and must be directly related to the aim, mobility, information, time and space, offensive action and deception.

Napoleon, as the foremost exponent of this principle said 'the art of war may be reduced to a single principle — to unite on a single point a greater mass than the enemy'.<sup>19</sup> Although it is an exaggeration to say that concentration is the ultimate principle of war it does qualify as the one requiring the collective application of the other principles to gain the greatest advantage over the enemy.

A good example of the use of Concentration and Economy of Force is the defeat of McClellan by Lee in 1862. McClellan,

<sup>14</sup> *The Principles of War* (M1001): U.S. Army Command and General Staff College (1962).

<sup>15</sup> *Notes on the Soviet Army*, page 137, para 380(g).

<sup>16</sup> *Thoughts on War*, page 180.

<sup>17</sup> *Thoughts on War*, page 202.

<sup>18</sup> *Thoughts on War*, Page 202.

<sup>19</sup> *The Art of War on Land*, page 18. Lieutenant Colonel A. H. Burne (1944).

the Federal commander, moved by sea from Washington and threatened Lee at Richmond. McClellan's force was vastly superior to Lee's in numbers. In addition McDowell's army was despatched overland from Washington to co-operate with McClellan. Lee appreciated the psychological value of Washington and despatched Jackson up the Shenandoah Valley to threaten that city.

McDowell was recalled to protect Washington. McClellan dispersed his force by sending Porter and a detachment to reinforce McDowell. Lee seized the opportunity to order Jackson back while containing McClellan with a force one-third the size. Lee and Jackson overwhelmed Porter and then turned their full strength on McClellan and drove him into the sea. The threat by Jackson dispersed the Federal concentration. Then Lee and Jackson dealt with Porter and McClellan in turn. In these actions, flexibility in planning, mobility of units, co-operation and offensive actions are obvious. A further example of the application of these principles but on an international scale is the decision taken by the Allies in December 1941 to put the main effort against Germany before dealing with Japan.

The attainment of effective concentration requires a proper selection of the aim followed by the application of the other principles. The conditions of war constantly change and vigilance is needed to estimate the alterations necessary in the applications of these principles. Assume for the moment Offensive Action is essential to gain victory, Concentration of greater resources at the right time and place is necessary, with the result that economies must be effected elsewhere. Fundamentally, Economy of Effort results from Concentration and no justification can be made for the retention of both of these principles. In the Australian pamphlet *The Division in Battle* Concentration and Concentration of Force are both shown as principles of war, indicating a flexibility of approach which could lead to misunderstanding in both definition and application.

### Summary

Concentration alone may be misunderstood, Mao Tsetung did with his 'human sea' tactics. Dispersion is as important and



collectively the correct balance implies economic distribution of men, materials, fire-power and resources at the right time and place to give the desired result. Concentration and Dispersion is the better title.

### **The Principle of Offensive Action**

Offensive action can best be considered as a state of mind. The Russians try to describe this principle on its own apart from 'attack' and call it Dynamism.<sup>20</sup> History has proved that victory can never be won by passive defence and any operation undertaken must be inspired by the offensive determination to destroy the enemy. Stress is made that at some stage offensive action only will bring victory. On the other hand this principle must never be construed as meaning that attack is the only sound operation. The aggressor nation takes the offensive initially and in two major wars the Allies have been compelled to adopt the defensive at the start to avoid disaster. Yet the Maginot Line in France epitomized the defensive theories of the 1920s and 1930s only to have their futility proved as in the past.

Russia has ably demonstrated Dynamism in her international political deals by aggressive, provocative and threatening remarks. Dr Soekarno's 'crush Malaysia' announcements reflected offensive action long before his liberation forces (?) crossed the Malaysian borders.

Attack must not be sought for its own sake. The conditions for attack must be favourable. The steadfast refusal of Alexander and Montgomery to advance the date of attack at El Alamein ahead of that necessary to complete preparation and the refusal of the High Command of the United States of America and Great Britain to bow to the public clamour for a second front in Europe, prematurely, are good examples.

A national offensive spirit is usually gained by propaganda and an enemy threat to national well-being and integrity. The dramatic change of public opinion as a result of the Japanese attack on Pearl Harbour in 1941 demonstrates how quickly the national spirit can be changed from 'passive' to 'active'.

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<sup>20</sup> *Notes on the Soviet Army*, Page 137, Para 380(f).

Sun Tzu saw the importance of this principle by devoting one complete chapter to what he termed Energy.<sup>21</sup> His interpretation included the physical and mental characteristics.

### Summary

Offensive Action normally implies physical use of force which is not possible at the political level nor in fact for most individuals of a nation at war. The Offensive widens the application to energy, drive and spirit thus making it more fundamental. In this broader sense this principle must be retained on the list.

### The Principle of Selection and Maintenance of the Aim

Today the Russians are the only major power not to recognize this principle. Their national aim in peace or war is communization of the world and since war is only an extension of politics perhaps they feel it unnecessary to state it as a principle. The Chinese on the other hand stress this principle; it 'is held to be the cardinal principle of war, and annihilation of the enemy is considered of greater importance than gaining ground'.<sup>22</sup> The enemy's live strength is his manpower and resources and not necessarily terrain. Maintenance of the Objective (Fuller) and The Objective (USA) are considered inadequate because their definitions suggest a specific aim has to be determined with undue weight given to terrain.

The Australian definition emphasizes the requirement for political direction down to unit level with operations conducted by committees, civil and military, making the application of the principle of co-operation essential.<sup>23</sup> In the counter-revolutionary role this latter implication of Selection and Maintenance of the Aim is not disputed. The aim having been determined must be pursued without digression. If that aim is not maintained in its entirety then the forces fail in their duty as part of the team even though in a more parochial sphere they may have gained a victory. Every operation must be carefully tested by its bearing upon that aim.

<sup>21</sup> *The Art of War*, Chapter V.

<sup>22</sup> *Notes on the Chinese Communist Army*. Ministry of Defence (1965), page 44, para 7.

<sup>23</sup> *Counter Revolutionary Warfare* — Pamphlet No 11. Page 28, section 4. (Also see *Organization and Tactics* — Pamphlet No 1).

This principle is often treated as a self-evident truth (for example, the Russians) and not regarded as one which needs careful thought but there are instances in history where neglect of this principle has resulted in delay, if not disaster. An excellent example was illustrated in the Boer War. The aim of the British forces in 1901 was the destruction of the Boers. Unfortunately the capture of Pretoria was believed to be the key to ending the war and the aim became the capture of that city. The war lasted more than two years after the fall of Pretoria, proving the failure of the local commander to select his aim that would further and maintain the higher aim.

The national aim is to compel the enemy to submit to our will. This is preferably accomplished without actually going to war. 'To subdue the enemy without fighting is the acme of skill,' wrote Sun Tzu.<sup>24</sup> Outstanding examples more recently were the backing down by Russia to the firm stand and actions by the United States of America with the Berlin airlift and the Cuban affair.

Once the enemy has determined on war, to force him to submit usually implies the destruction of his armed forces. It suffices to convince the enemy that his own armed forces cannot possibly achieve his aim and that defeat is inevitable. In 1865 Lee surrendered to Grant when the resources of the Confederacy were so depleted that the end was no longer in doubt. In 1918 Germany had been heavily defeated in the field but not destroyed. The German leaders could see their own power waning and their enemies increasing. They knew they could never achieve their aim and tried to make peace. Revolution intervened and the government collapsed. 1945 saw the Japanese surrender with her army intact. Her fleet and her air force had been considerably reduced but her material resources were insufficient to sustain any further conflict. The atomic bomb only served to help her leaders make up their minds to capitulate.

The whole art and science of war depends on the selection of the right national aim and the correct distribution of available resources and forces to achieve that aim. Sound

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<sup>24</sup> *The Art of War*, page 77, verse 3.

judgment on questions of this type requires a wide knowledge of history, geography, and our own and enemy resources and characteristics. Adequate military intelligence is vital if sound decisions are to be reached.

An example of failure to maintain the aim was demonstrated in World War II when a decision had to be made on whether the Allied Powers should invade Italy, North-west Europe or go through the Balkans. Forces were committed in Italy and the final decision was to land in North-west Europe. However, only an attack through the Balkans would have ensured freedom for Poland and the national integrity of the Balkan States. This was the aim in 1939, regretfully political pressure from the United States of America and Russia forced the decision.

Although there is normally one main aim there will always be secondary ones. The defence of Britain against German air or other attacks in World War II while the Allies prepared for a main effort is an example. There are also innumerable intermediate Services aims to be achieved that all help the attainment of the national aim. Decisions on these have to be taken at every level down to the section commander who has to make up his mind what action to take in order to assist his platoon commander to accomplish the platoon's aim.

### *Summary*

This principle is not adequate unless it embraces both selection and maintenance and is best observed by following these points:

- Selection of the local aim must be determined to further the next higher command and ultimately the national aim.
- Once the aim is established there must be no digression until it is achieved.
- Every operation must be tested by its bearing on the aim.
- There must never be more than one aim at a time.
- The correct selection of the aim can only be made with adequate information.

## The Principle of Movement

This principle is often associated with Flexibility and most certainly flexibility is a characteristic of movement. It is also a characteristic of good leadership and coupled with initiative must be applied to all the principles of war. As Macklin says 'good discipline, proper training, sound organization and good staff work all contribute to the flexibility of an army'.<sup>25</sup> No war was ever won by standing still yet plenty have been lost by the inability to move troops and resources to engage the enemy at the right time and place. In the offensive the Russians say mobility is 'the only correct means by which a decision can be enforced'.<sup>26</sup> Movement is a relative term and is sufficient provided greater capability than the enemy is developed. In fact under certain conditions the ability to move at all may mean the difference between victory and defeat.

The simplest aspect of this principle is competitive movement or the race for an objective. No great exercise of leadership is needed in this case and it is usually a preliminary to the more complex operations that follow. A good example is the race between Marlborough and Villars for the crossing of the Sensee in 1711. Another is the race against time by the Japanese in 1941 to seize the Island Chain before the Western powers had time to provide adequate resources to bolster local resistance.

The next feature in planning the ability for movement is best described as opportunism. Plans for operations must never be so rigid that a commander is unable to redeploy (move) his force, if necessary, to maintain the aim. This was demonstrated by Montgomery in his attack on the Mareth Line in March 1943. The original attack was not successful so he sent all his available armour round the Axis right flank and engaged the enemy from the south. Rommel withdrew through the Gabes Gap. Ability to move coupled with other principles won the day. The Japanese infantry in Malaya in 1941 proved that it was possible to move through the jungle and mangrove swamps which the British regarded as impenetrable barriers, thus gaining for them a valuable and in this case decisive advantage.

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<sup>25</sup> *An Introduction to the Study of the Principles of War*, page 14. Major General W. H. S. Macklin (1948).

<sup>26</sup> *Notes on the Soviet Army*, page 137, para 380 (1).

An example with results of a breakdown in movement capability was evident in the huge air interdiction of the European continent in 1944. The enemy was not only unable to move his troops, he was unable to get raw materials to his factories, components to assembly shops, or products to the Service depots.

Movement must not be viewed without appreciating its association with the principles of concentration, security and co-operation. Foch's Freedom of Action and Free Disposal of Forces coupled with Economy of Force contain the same features of Concentration, Economy of Effort and Movement covered in this paper.

### *Summary*

Movement is a fundamental principle from which flexibility is derived enabling effective concentration or dispersion at the right time and place. The methods and means of movement must be secure to ensure maintenance of resources. Movement capability must exceed that of the enemy.

Existing nomenclature conjures up certain impressions. Movement is logistic in nature, Mobility is vehicular and Manoeuvre is tactical. The Ability to Move is the important feature in all spheres and is the better title for a fundamental principle.

### **Principle of Co-operation**

#### *General*

Co-operation is a very basic requisite in the management of war and unless it exists and flourishes the component parts of the national war effort can never develop their full strength. The United States of America places emphasis on the establishment of a single command authority, Unity of Command, which they say implies singleness of purpose and co-operation by all elements of command.<sup>27</sup> Their Air Force and Army cannot agree. The Air Force prefers Co-operation!

'Victory can be won only by the combined efforts of all the services and arms,' say the Russians.<sup>28</sup> Only the Australian

<sup>27</sup> *The Principles of War* (M1001).

<sup>28</sup> *Notes on the Soviet Army*, page 137, para 380(e).

definition includes the necessity for co-operation with Allied Services, governments and local authorities and agencies.<sup>29</sup>

The two Chinese principles, Political Mobilization and Co-ordination, are of interest. The former implies that the desired effect cannot be attained until 'belief in the Party dogma has reached fanatical proportions'.<sup>30</sup> Co-ordination applies particularly to the preparation and planning of operations of both revolutionary and regular warfare.

Clausewitz and Macklin rate Public Opinion as a principle and there could be no doubt that it has a considerable influence but in examples from history public opinion appears only as an application of co-operation.

Russia lists Morale as one of the five 'permanently operating factors' of war.<sup>31</sup> The War Office interprets Mao's principle of Political Mobilization as 'akin to our maintenance of morale'.<sup>32</sup> The British Commonwealth countries are the only ones to recognize Maintenance of Morale as a principle although most great military leaders write of the necessity and value of high morale. Morale has been placed under Co-operation where the best effects became apparent revealing the Russian classification to be the more correct.

The general consensus of opinion shows co-operation in all spheres of war yet each nation places different emphasis on application. To see Co-operation in its broadest sense examples from history have been placed under separate headings of co-operation, public opinion and maintenance of morale.

### *Co-operation*

This is never very easy to secure as national characteristics, prejudices and pride have to be overcome. No small part of Marlborough's genius lay in his ability to cajole, coax and argue his continental allies into agreement with his designs. In World War II the combined Chiefs of Staff in Washington was

<sup>29</sup> *Counter Revolutionary Warfare* — Pamphlet No 11, page 32, section 11. (Also see *Organization and Tactics* — Pamphlet No 1).

<sup>30</sup> *Notes on the Chinese Communist Army*, page 45, paras 10 and 14.

<sup>31</sup> *Notes on the Soviet Army*, page 137, para 379(a).

<sup>32</sup> *Notes on the Chinese Communist Army*, page 45, para 10.

an excellent example of a body set up to integrate the efforts of the Allies. In the field Eisenhower was a past master in promoting and developing co-operation.

In respect of the national effort co-operation between the component parts of the nation implies a proper organization of the government. This lesson took some learning in Britain. They found during World War I that the ordinary Cabinet system of some twenty ministers each responsible to Parliament simply would not work in war. Out of this chaos emerged the disasters of Gallipoli and Mesopotamia, not to mention the hampering of efforts on the Western Front. Finally the 'War Cabinet' was created, a small committee of key ministers charged with co-ordinating the direction of the war. This was a big step in achieving co-operation and it was followed in most of the essentials during World War II.

In March 1915 the Admiralty bombarded the forts at the Dardanelles and tried to force the passage without any prior consultation with Cabinet. These operations cost the loss of three big ships, damage to others and failed in their aim. The only lasting effect was to ensure that when the army landed at Gallipoli in April the Turk was waiting. More recently, about 1947, the RAF insisted on assuming responsibility for the control of Aden and at once discovered the need for ground forces. The Royal Air Force Armoured Car Regiment was formed.

### *Public Opinion*

The experience of the United States of America in two wars demonstrates the influence of public opinion. In 1914 no government could possibly have declared war on Germany, and even as late as 1916 the desire to remain neutral was so strong that President Wilson's backers used the argument of his success in keeping the country out of war to win him votes for re-election. The German campaign of unrestricted submarine warfare was needed to solidify public opinion to the point where a national declaration of war was possible.

The United States was so confused by the late 1930s that on the one hand there was bitter condemnation of Chamberlain's policy of appeasement while on the other Congress was passing



the Neutrality Act. The disaster of Pearl Harbour changed public opinion.

Dictatorships cannot afford to ignore public opinion. Goebbels had his propaganda ministry. The Russian Iron Curtain today attests the determination of the Soviet leaders that they and no one else shall mould Russian opinion.

The political mobilization practised by the Communists in phase 1 of revolutionary warfare and so successful in North Vietnam, Laos and initially in South Vietnam is further proof of the effect of gaining public opinion and ensuring the co-operation of the local population.

#### *Maintenance of Morale*

'Belief in the Cause' must head the list of morale maintainers. The firm conviction that the war is a just war and is vital to the nation's future existence is an essential ingredient of victory.

The necessity of attending to the welfare of the troops and their dependants needs no more than a passing reference. Where armies have to live and fight far from home for long periods and under adverse conditions this aspect assumes added importance. When the welfare of dependants is worst the morale and will to fight will generally be keenest with the soldier. The morale of the men from Holland, Belgium, Poland and France who escaped to the United Kingdom and joined national contingents there was second to none. They had left their families and homeland and had no doubt about their reasons for fighting.

Nations fight with citizen armies raised on small peacetime regular armies. Ordinary citizens make up the bulk of the fighting forces in a major conflict. In limited wars, including counter-revolutionary warfare, regular and national service soldiers are normally used. No matter what the circumstances the services should not be used without popular support which can only be inspired by a genuine belief in the cause. The combined British and French attack on Egypt in 1956 and the subsequent withdrawal brings out the effect of morale. The general public of England and America did not have a belief in the cause and

their opinion was reflected in their respective governments' actions. The United States of America refused to co-operate. The British government ordered the armed services to cease firing for lack of American co-operation and adverse public opinion at home.

### *Summary*

No matter what action is taken to gain public opinion, improve morale, make command and staff more efficient or effect political mobilization/indoctrination the fundamental requirement is a higher degree of co-operation.

Such is the importance of co-operation that in the future failures cannot be afforded. There may never be time to rectify them. Co-operation implies correct organization at the top, mutual confidence, mutual knowledge of the powers and limitations of the units of the national war effort, and above all a belief in the cause. Co-operation is a fundamental principle of war.

### **The Principle of Flexibility**

The British Commonwealth countries quote flexibility as a principle of war but a study of their definitions reveals two characteristics. The first is in relation to mobility or movement which has been discussed with that principle and also with security. Secondly is flexibility of mind. The Russians and Chinese like the latter and relate it directly to initiative.<sup>33</sup> In this latter case the application is a result of good leadership, which is an element of war. This type of flexibility was recently demonstrated in South Vietnam when the American government continued to support the fight against communism in spite of the two internal South Vietnamese government coups. Examples of lack of flexibility were apparent in the failure by the British to mount a more powerful gun than the two-pounder in their tanks when facing the German 88-mm anti-tank guns in the Western Desert campaign — similarly their failure to use the 3.7-inch anti-aircraft gun in the anti-tank role in the same campaign.

Flexibility is a characteristic of Movement and results from having the ability to move. Flexibility of mind is a charac-

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<sup>33</sup> *Notes on the Chinese Communist Army*, page 44, para 8.

teristic of good leadership but Flexibility is not a fundamental principle of war.

### **The Principle of Administration**

Administration is not now rated as a principle of war by the United Kingdom although it was introduced for a short period after World War II. Its importance as a function in war cannot be over-emphasized.

The Mesopotamian campaign has already been mentioned and the horrible example of the adverse effects of poor administration will not be elaborated. The Crimean War was not much better. At a lower level an example worth quoting is the total destruction of two British regiments because of the lack of screwdrivers to open ammunition boxes at the Battle of Isandlwana in the Zulu War.

'Since successful operations cannot be conducted without sound administration the branches of the staff need just as many brains and call for the same standard of imagination, knowledge and training as the general staff and the commanders in the field . . . Administration is an integral part of operations. To separate them is equivalent to decapitation; it is death. If we do not grasp that fact we shall find again in some future campaign that it is better to belong to the second or avenging expedition' said Macklin.<sup>34</sup> In any future war it is unlikely that the opportunity will arise for a second and avenging expedition.

Most of the other principles of war are as applicable to administration as the spheres and phases of war. Administration is a function of command, not a principle.

### **The Principle of Simplicity**

The United States of America is the only proponent of this principle. The complexity of war offers no simple solution to its problems. The least line of resistance is usually taken, but this is a human characteristic when applying one or more of the

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<sup>34</sup> *An Introduction to the Study of the Principles of War*, page 16.

principles but more often than not the simplest way is not possible. Simplicity is not a fundamental principle.

### Summary

Maurice's statement, 'as long as we know what we mean when we talk of principles of war it is not necessary to be pedantic in the use of term',<sup>35</sup> did sound commonsense. The rather brief look at some of the stated principles reveals, without any doubt, the many authors have different interpretations and use undue emphasis in particular spheres. Proof is here that even if the author knows what he is talking about others do not.

Selection and Maintenance of the Aim, Security and Co-operation are the only principles to survive unchanged in title. Emphasis was placed on the ability of each principle to cover all spheres of war. To meet the requirement the suggested names of the other four principles seem more expressive.

Every principle has a direct relation with one or more others and many examples from military history quoted to explain one principle could have been used to illustrate others. This is characteristic in the application of principles.

The principles of war examined and listed in Table 1 have been grouped and placed in order of popularity. Coincidence is responsible for the justification of retaining the first seven major ones as the Fundamental Principles of War.

## CONCLUSIONS

### General

The history of wars produces lessons which should ensure that the same mistakes are not made again. These lessons are not always understood or known. Only a detailed study of the application of the principles of war in relation to these lessons will reveal the essentials of a correct formulation of doctrine for the future.

No satisfactory study of military history can be made unless sound fundamental principles are established. The definitions of these fundamental principles must be adaptable to

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<sup>35</sup> *British Strategy*, page 27.

Table 1

Serial	Principles of War	Principles of War Listed by:														Suggested in This Paper	Remarks			
		SUN TZU 500 BC	CLAUSEWITZ 1830	HENDERSON 1889	FOCH 1903	CANTH 1912	FULLER 1933	LIDDELL HART 1924	BRITISH FSR 1935	V.S.A. 1962	Current Doctrine									
											BRITISH	CANADA 1955	RUSSIA 1959	CHINA 1965	AUSTRALIA 1967			(*)		
1	Surprise	▲	▲																	
2	Deception and Security of Information																			Deception
3	Security			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					Security
4	Protection of the Rear																			Recently dropped
5	Stability of the Rear																			
6	Intelligence Preparation	▲																		
7																				
8	Concentration of Force		▲	▲		▲	▲	▲	▲	▲	▲	▲	▲	▲	▲					Concentration and Dispersion
9	Concentration	▲					▲													(*)
10	Mass																			
11	Offensive Action		▲																	
12	The Primacy of the Offensive																			
13	The Offensive																			The Offensive
14	Pursuit		▲	▲																
15	Selection and Maintenance of the Aim		▲																	
16	Maintenance of the Objective																			
17	Victory is the Objective	▲																		Selection and Maintenance of the Aim
18	The Objective																			
19	Movement																			
20	Mobility	▲	▲																	
21	Freedom of Action				▲															Ability to Move
22	Free Disposal of Forces																			
23	Manoeuvre																			
24	Co-operation																			
25	Public Opinion		▲																	
26	Political Mobilization																			
27	Co-ordination																			Co-operation
28	Unity of Command																			
29	Economy of Effort																			
30	Economy of Force																			
31	Maintenance of Morale																			
32	Morale																			
33	Flexibility																			
34	Initiative and Flexibility																			
35	Administration																			
36	Simplicity																			
37	Dynamism																			
38	Ability of Commanders																			
39	Ascendant																			
40	Quality and Quantity of Divisions																			

- NOTES
- i. Some titles of the principles of war may not be accurate due to translation and interpretation of some of the references into English
  - ii. The principles have been grouped for the purposes of analysis and listed in order of popularity
  - iii. No relative importance is indicated. Many proponents do not give a priority.
  - iv. SUN TZU did not list any principles of war but the strategic and tactical doctrines he expounded were based on the ones shown above.

new conditions of war and to the introduction and development of new weapons. They must provide a guide upon which national action is based and be applicable in every sphere of war whether political, strategic, tactical, civil or service. They should not be applied consciously or individually but absorbed in the make-up of the national leaders and service commanders at all levels so

that they are applied in proper balance to every circumstance of diplomacy and operations.

A study of the principles of war is useless without a sound knowledge of the elements of war and a good political, economic, geographic and historical background.

### **The Fundamental Principles of War and their Application**

#### *The Fundamental Principles of War*

The following are suggested as the immutable and fundamental principles of war:

- Deception.
- Security.
- Concentration and Dispersion.
- The Offensive.
- Selection and Maintenance of the Aim.
- The Ability to Move.
- Co-operation.

#### *Application of the Principles*

The present variations in the number and name of the principles of war leads to doubt in their credibility. A study of military history in this frame of mind is dangerous. With the few fundamental principles suggested, the establishment of the reasons for failures or successes in military history and the relationships of the circumstances to these principles will provide confidence in their validity and help the student gain an informed opinion of the variations to their application. Without confidence and informed opinion no original application for the future is likely.

A 'parrot fashion' knowledge of the principles and their definitions; the organization, characteristics and roles of the Arms and Services; and the characteristics of equipment and weapons may help at promotion examinations, but modern technological advancement and changes in international, social and political structure make a detailed study of military history essential for professional competence. 'War is a matter of vital importance to the State; the province of life or death; the road to survival or ruin. It is mandatory that it be thoroughly studied,' says Sun Tzu.

### *Commonsense and Imagination*

Clausewitz lent himself to misinterpretation by expounding his theory in a way too abstract and involved for clarity. Unfortunately he died before he could complete the revision of his work to stop possible misconceptions he had foreseen in his testamentary note. The student of military history must not delude himself with or be deluded by grandiose phrases. Commonsense will dictate whether what he is reading makes sense.

The Fundamental Principles of War might be termed the Fundamental Principles of Success. This philosophy had no part in this paper but serves to highlight imagination in the application of these Principles. The Japanese, it is believed, produced an edition of Sun Tzu devoted to the application of his verses on war to business management! This approach may appear to over simplify their use but such interpretation is possible when imagination is backed by knowledge, for which there is no substitute.

Wars of the future should be designed today. New national policy, strategy and tactics call for new weapons and vice versa. Most of the major powers are parties to the Geneva Convention or other agreements and too little thought is given to the prospects of world orbiting nuclear missiles, paralysing gas and bacteriological warfare, electronic 'teaching' apparatus in psychological warfare. Their use should not be discounted. A study of their effect on the art and science of war is vital.

The pure scientist presents new discoveries almost daily and the applied scientist, with this information, provides whatever is requested. In most cases the requirements are for something to fit the existing doctrines of the spheres of war. Considerable progress has been made using this approach. Even greater progress could be made if doctrine were changed to make maximum use of technological advancement. Here the real reward is found but such new concepts must necessarily be based on military history, the application of Fundamental Principles, and imagination and commonsense. □

# Letters to the Editor

Dear Sir,

Lt Col Piper's article 'An Army Career — Is it Worthwhile?' (*Army Journal* No. 269, October 1971) contained three conclusions on how career planning might be improved. They were:

- Attractive long-range personnel development with a predictable opportunity for promotion.
- An advancement system with early recognition of ability.
- Reasonable security for the average and below average officer.

One vitally important conclusion seems to be missing. I would like to add:

- Give the man a job worth doing.

This is a factor which if unrecognized can be a major contributor to officer resignations. I believe it is going to become particularly important when the Army settles down into a post-Vietnam (i.e., post-war) posture and goes into the off season of its cycle of 'seasonal employment'. There are not going to be enough things which are worthwhile doing. If one may follow the agricultural analogy a little further, there is a requirement for us to 'diversify' so that opportunities unavailable through lack of resources during the Vietnam commitment may be exploited with resources which in peace-time are normally devoted largely to training and administration.

It can be argued that the imminent reduction in manpower will mean that we will be fully extended meeting our obligations in training and administration. I cannot help thinking that one of Parkinson's dictums is applicable; 'Work expands to fill the time available in which to do it'. The 'back to Shoalwater Bay' and 'leaf scattering and leaf picking up' syndromes may well be about to reappear. The long term effect of these can be twofold:

- Hierarchical flabbiness resulting from long periods of relative inactivity.



- Professional disaffection from boredom and lack of esteem from peers.

The first point is fairly obvious and historically well recognized. I would like to develop the second point. Lt Col Piper dealt briefly with ego needs and noted that the 'army officer sees himself in an inferior position compared with his civilian contemporaries'. One major reason this occurs is that he is often doing what appear to be less socially useful tasks than his professional civilian peers, his self-esteem suffers and so also does his status in the community (which although primarily determined by income is certainly affected by the recognizable social worth of his activities). The short term and uninformed view of a 'peace-time' Army is often that it consists 'of a lot of stuck-up bludgers who play cowboys and indians and when the crunch comes are replaced by outsiders'. While largely untrue (one must admit to faults in any system) this type of criticism has a highly corrosive effect on professional esteem. What seems to be required is that in peace-time we should have some alternate activities — perhaps even outside the conventional military field — which are both professionally demanding and of clearly recognizable social worth. These should be pursued to the extent where:

- Fundamental commitments can still adequately be met.
- Professionally demanding jobs are increased to the extent where both individuals and 'the system' are sufficiently exercised to be fit for war.

This is easy to suggest but hard to arrange. To make the argument a little more concrete I suggest the following might be one way of going about it.

- Australia is a small but important giver of bilateral economic aid in the SE Asian region and will probably remain so for a long time, because stability and well-being in the region depend on economic development and, in turn, one of the determinants of economic development is economic aid.
- Bilateral aid may consist of purely financial grants but more usually involves provision of experts and equipment in addition to money.

- The impact and effectiveness of aid (which is designed for national PR as well as economic development) depends to a great extent on how it is administered and the quality of people in the field.
- The Australian Army has an abiding interest in SE Asia and has a large number of technically trained personnel who are often technically under-employed in peace-time through lack of financial resources (lack of funds for new works by RAE etc). They must be retained, of course, because the army's abilities to meet the requirement of contingency plans require certain minimum establishments.
- A marriage of convenience might be arranged between our spare and professionally under-tasked personnel resources and the requirement for experts and administrators for aid programmes.
- The benefits could be,
  - a. kudos to the military
  - b. more professionally demanding tasks
  - c. greater experience in our likely theatre of operations;

which would all seem to be bonuses and achievable at little cost.

I must emphasize that I am not an apostle of civil aid battalions, or every soldier an 'ugly Australian': simply that at the margin there is an opportunity for us to diversify beneficially into other fields. With respect to economic aid programmes, I am also aware that there may be procedural and institutional difficulties with military involvement because the responsibility for aid administration is currently vested in the External Aid Branch of the Department of Foreign Affairs. I am offering the economic aid argument as one illustration of how we might diversify in the off-season.

To return to the original point, it is essential that there are enough worthwhile jobs available to satisfy the ego needs of individuals. Improvements to the mechanism by which careers are controlled are of limited use if the careers themselves are not capable of fully taxing and developing the professional abilities of the people following them.

Army Headquarters  
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