Lt Col Marshall

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"AND HOW LONG HAVE YOU BEEN BRINGING YOUR LAUNDRY HERE?"

CATM

Canadian Army Training Memorandum

JUNE 1945 NUMBER 51

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Brig. H. D. Graham, D.S.O. and Bar

Deputy Chief of the General Staff (B)

CATM takes pleasure this month in publishing Brig. H. D. Graham's photograph. He is well known to all of us in the training field, as he has been Deputy Chief of the General Staff (B) with the responsibility of directing all military and technical training in the Canadian Army since March 1944.

His previous military career includes service in the last war, continuous and valuable service in the period between wars, and outstanding service in training and operations during this war. He has in turn commanded his own unit, The Hastings and Prince Edward Regiment, the 7th Canadian Infantry Brigade and the 1st Canadian Infantry Brigade, which included The Hastings and Prince Edward Regiment, The Royal Canadian Regiment and The 48th Highlanders. He commanded this brigade with distinction throughout the Sicilian Campaign and for a large portion of the Italian Campaign, being awarded his D.S.O. and Bar for gallant and distinguished services in Sicily and Italy.

His message on the page opposite is timely and inspiring.

What of the Future?

This is a most suitable time to say a word to all those who have had a part in the great responsibility of training the Army in Canada. That training has covered a wide field. In addition to Basic and Corps Training Centres, we have had Vocational Training Schools, Army Trades Schools, other NDHQ Schools, Officers' Training Centres, Veterans Guard Training, Operational Units, Training Brigade Group, training in Transit Camps, Training in Conditioning Centres, Remedial Training in Hospitals, Cadet Training, COTCs and Reserve Army.

Each individual engaged in this training organization, whether Commander, officer instructor or NCO assistant instructor, deserves great credit for the excellent job that has been done. Some have had the opportunity of serving overseas in this war and have returned and passed on to trainees the lessons they learned in combat; the result has been a marked improvement in the training of reinforcements for overseas. Others, veterans of the last war, have again placed themselves at the disposal of their country, and have with loyalty carried out whatever tasts were assigned to them, either in the Active or Reserve Army; their contribution to training has been invaluable. Still others, because of category or age, have not had the privilege of serving overseas either in the last war or this war; they have received no kudos, they have no heroic experiences to look back upon, but they will have the satisfaction of a job well done, and to them is given full marks for their efforts.

But here is the rub. The job has been well done up to the present—but it is not finished. As a matter of fact, we now enter upon a most difficult period for training.

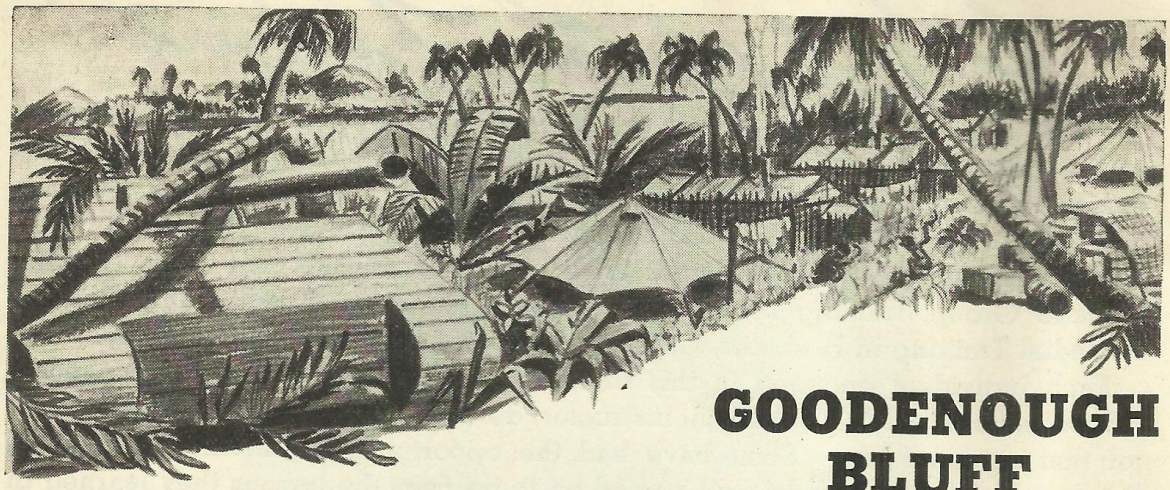
There are today in our training stream in Canada, many thousands of men and women. Their training must be continued. There can be no slackening of effort. There will be a tendency—a very natural tendency—on the part of trainees to lose interest and to become indifferent as to their prowess toward becoming efficient soldiers. There may be a tendency, too, on the part of instructors to "ease up." This attitude must be avoided.

Staffs, instructors, assistant instructors and trainees must all be convinced that we still have a big job on our hands. The Jap is far from defeated and he is our enemy just as much as was the German. Every soldier in training is a potential reinforcement for our effort in the Pacific and he must be trained to the highest possible standard.

Perhaps by the time this article is published, recruiting for the Pacific Force will have started. Whether or not a man has volunteered for that Force, will make no difference so far as his training is concerned. Today he may not volunteer—tomorrow he may do so; therefore he must be trained and ready for the day when he may decide to take his place in the Pacific Force.

Many of you who have been on training jobs for a long time may now feel that the time has come when you can go back to civilian life. As numbers in training are reduced, some of you may be given that opportunity. But until that time comes there is still work to be done. It has been well done in the past; let us see that it is equally well done in the future. Let all those who are engaged directly or indirectly in the great responsibility of training our army continue with the same spirit and with the same enthusiasm until the task is really finished.

H. D. Graham



GOODENOUGH BLUFF

(Condensed from U.S. "Military Review")

While Australian troops were driving the Japanese back through the Owen Stanley Ranges in October 1942, a small force of Australians — some of the victors of Milne Bay — seized Goodenough Island. (See sketch Page 5).

The first action was not, however, comparable with the greatest bluff of the Pacific war which was put into effect on the island a few months later.

The "Goodenough Island Deception Scheme," as it became known, was a masterpiece of organization and deception. It was a most ambitious scheme to mislead the Japanese into believing that we had at least a brigade on the island, whereas it was held by less than a battalion.

Strategic Value

Mountains rising to 8,500 feet form the greater part of Goodenough. Jungle-clad for the most part, they are reputed to be the highest in the world on an island as small as Goodenough. Although only 25 miles long and 15 miles wide, the island had great strategic value as an air base for the bombing of New Britain (it later became an important Royal Australian Air Force fighter base), as an air base for the protection of Milne Bay, and finally to provide air cover for naval movements along the north coast of New Guinea.

It was decided, therefore, to occupy Goodenough with a battalion of infantry, less one company. The battalion's objective was to "eliminate the Japanese force on the island—estimated to be about 300—and deny him the use of it."

The force sailed in destroyers from Milne Bay and disembarked on the southern tip of Goodenough during the night of 22–23 October. The task force was divided into two forces, one concentrating at Mud Bay on the east coast, and the other at Taleba Bay, on the west coast.

Although one phase — the extermination of the Japanese force — was not successful, the second was carried out. We established ourselves on the island, and the enemy was driven out. In all, 39 Japanese were killed, but it is not known how many were wounded.

The 2/12th Battalion now had the role of occupation troops, and to assist in the construction and defense of air strips. At the end of December, the battalion returned to New Guinea.

"Deception Scheme"

Goodenough Island then was garrisoned by even fewer troops, and the "Deception Scheme" was conceived and planned, to be carried out early in 1943. It called for ingenuity and imagination on the part of those who were to do the actual deceiving. The object was to mislead the Japanese into believing that the Australians had carried out from

Milne Bay a movement of a full infantry brigade group, which had occupied Goodenough. At the time, the island was, in fact, held by only a company of infantry and attached troops.

The cost of material used in the scheme was negligible, and once it was in operation it was kept going by a handful of Australian troops and a few score natives.

Deceptive camouflage in city and town areas was a relatively easy matter, as materials were close at hand, but real ingenuity and improvisation were necessary for deceptive work in the field. The Goodenough Island scheme needed both.

The first role of the men on Goodenough Island was to hold an emergency landing strip to the northeast of the island. The secondary role was the deception scheme.

It was not sufficient merely to establish a large camp on the island. There had to be some realism about it. You cannot have a brigade on an island without first moving it there. So all cargo ships that could be spared for the work were concentrated in Milne Bay, taken to the wharves in daylight for the Jap to see, if he wished, left there long enough for the loading of stores and men, and then taken out in convoy and with fighter protection to Goodenough Island.

For several days and nights these ships plied backwards and forwards between Milne Bay and Goodenough Island, always with fighter cover. But the fighters knew their work and saw to it that the Japanese reconnaissance planes had a good look at the ships.

The camps began to take shape on Goodenough Island. Areas were cleared of grass, tents were set up, kitchens were built, dumps established, slit trenches dug, tracks cleared, weapon pits rigged. Coast defense guns appeared on headlands. Bofors guns pointed skywards. Barbed wire lined the open beaches and ringed the camp areas. Smoke rose from the kitchens. Washing hung out on the lines by the tents.

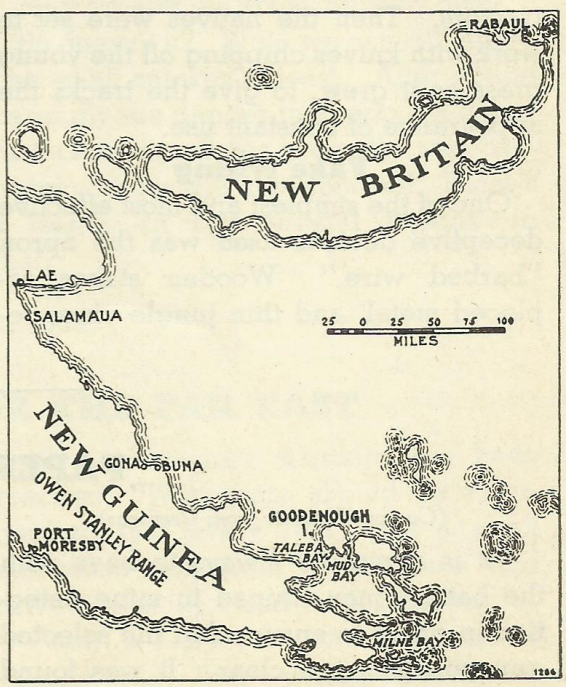
Apparently a full brigade had taken up its position along the eastern side of the island. But the tents were empty of men, the kitchens were useless skeletons, the dumps were old packing cases, the guns could not be fired, the tanks would not move. There was no brigade in that series of camps — just one company scattered widely, and a few score natives.

The kitchens were flimsy structures of wood and hessian with a few old coppers and water tins outside. But fires were lit in every kitchen every day.

The dumps were piles of old cases and tins partly covered with tarpaulins. Some were primed with petrol and oil and dry vegetation, and were wired so that they could be set on fire immediately if a bomb fell anywhere near them.

Dummy Trucks

The dummy trucks and reconnaissance cars were strange affairs of hessian tacked on wood. The tanks also were of hessian on a wooden frame. From a hundred yards, or less in indifferent light, they could not be distinguished from the real thing.



Machine-gun carriers were parked at various places on the border between jungle and grassland; heavy tracks leading to them were kept fresh by chipping off the grass or running heavy vehicles in occasionally. The carriers were camouflage netting, heavily garnished, draped on wooden frames.

The 25-pounders were most convincing — again made of wood, tin, and hessian. They were set in sunken emplacements correctly sandbagged, trenched, and netted.

One Bofors "gun" which was particularly realistic was sited on a point of land jutting cleanly out of coconut palms and commanding a wide stretch of bay. Dummy Bren guns were made of wood and mounted for ack-ack use on wooden stands.

Light-colored sand was tossed over the spoil from trenches, to attract attention, and when trenches were dug in light-colored soil, old oil was poured into them to exaggerate the appearance of depth.

Natives were used at all these positions to keep the grass short to give the appearance of constant use.

Vehicle tracks were made first with tractors. Then the natives were set to work with knives chipping off the young grass as it grew, to give the tracks the appearance of constant use.

Fake Wiring

One of the simplest and most effective deceptive devices used was the apron "barbed wire." Wooden stakes replaced metal, and thin jungle vines replaced genuine wire. From 50 yards this "wiring" was indistinguishable from real wiring. It was erected on open beaches, and around all battalion and company areas and dumps and gun positions.

Tents were mostly a single fly supported by poles, ridge pole, and guy ropes. Wherever the front of a tent was open to the inquisitive eye of the oblique aerial picture, dummy beds were set up and old mosquito nets were rigged. The tops of jam tins were tacked to trees outside to look like shaving mirrors. Washing and blankets were hung on a clothesline, the natives changing the washing — old shirts and slacks — from tent to tent each day.

Appearance of Life

One of the greatest difficulties in the scheme was to give the appearance of movement and life about the camps. With few men available, it was not possible to do much in this way. The smoke from fires and the occasional changing about of various objects was the best that could be done, but one simple device used to hang bits of unrusted tin in trees so that they would flash sunlight into the sky. These flashes would give the impression of movement.

These were all essentially ghost camps holding something of the air of mining camps that were dead. Empty tents, empty beds, unused kitchens, roads that never felt the tires of vehicles, and vehicles that never moved — yet these ghosts played a part whose true importance no one will ever know.

PAPER CHASE

(Current Reports from Overseas)

"It is advisable always to have with the battery men trained in mine detection in order to ensure that the selected gun positions are clear. It was found useful to mark the lines of approach with paper (used as in a paper chase) in order to prevent unnecessary movement about the area and so obviate possible danger from enemy mines."

TALKATIVE GERMAN PRISONERS

This Associated Press dispatch is as interesting as anything of its kind we've seen for some time:

> Washington, May 8 (AP).—The United States Army disclosed today that one of its most valuable weapons in Europe was the German soldier's inability to keep his mouth shut.
>
> A War Department authority said it now can be told that some of the Allies' most valuable information about the enemy was obtained from the enemy himself.

Willing to Talk

> From the North African invasion on, American commanders were frankly amazed at the willingness of the German soldier to talk about his unit. The army source said in some cases the information was a vital factor in the operation immediately ahead.
>
> "The only reason we ever could figure out," this officer said, "was this: The German for so long was not permitted to speak freely on any subject in his homeland that when he was captured he spoke out. Apparently that was one thing the German High Command neglected in the so-called discipline of the German army."

So the average German soldier couldn't keep his mouth shut. Fine—for us if not for them. **We** wouldn't be that stupid. But before we pat ourselves on the back too much and get a too holier-than-thou outlook on the security training of the average German, here's the translation of an extract from a diary found on a captured enemy officer:

> " . . . We took a valuable prisoner a few days later. We shot at an armoured reconnaissance car and it was abandoned directly in our line of fire.

Lost His Way

> "A Major came with a tow truck the following night to salvage the vehicle. On his return he lost his way and drove towards one of our battery positions. Before he knew what it was all about, he was disarmed.
>
> "How fateful the keeping of diaries in battle or frontline can be, is clearly seen from the following practical example:
>
> "The Major, an engineer, had made daily entries about deliveries of armoured reconnaissance cars to his unit. The entries not only gave us the number of the newly arrived reinforcements, but also information about his unit, something he would have never divulged voluntarily in an interrogation."

Sort of sets us back on our heels a little doesn't it? Well, we can still afford one small snicker at least. After noting carefully the danger in keeping a diary, that German officer promptly was captured with his still in his pocket! There's a lesson—in fact several lessons—in that.

REME TRAINING FOR THE FAR EAST

(Current Reports from Overseas)

"In this theatre of operations the importance of weapon training, fire discipline, fieldcraft, digging, wiring, and construction of obstacles, cannot be overstressed. Military training must take precedence over technical work until a satisfactory standard has been reached. Workshops should be so organized that every NCO has a small composite command of artificers and drivers who fight and work together."

—From a report by the Director of Mechanical Engineering, ALFSEA.

MORALE OF ARMIES

(Col. Fyodor Baslyk, Red Army, in U.S. Infantry Journal)

Other things being equal, victory in war is usually won by an army which is superior in morale to its adversary. High morale will often enable an army to win even when odds are against it. However strong an army may be in numbers and armament, if its morale weakens it will lose its advantages in the first serious test and will suffer defeat.

The importance of the morale factor in war has been recognized by all great generals and military theoreticians. Napoleon held that its value as compared with the physical factor was in ratio three to one.

War of Motors

In modern warfare the morale factor is more important than ever. Modern war is a war of motors. It employs vast quantities of machinery and weapons unprecedented in destructive power and capacity for influencing human morale. But as formidable as guns, mortars, tanks, and aircraft of modern warfare are, they aren't self-acting. They require men to operate and direct them. The human being, therefore, was, is, and will be a principal element in warfare and no development in the machinery of war will ever minimize the importance of human courage, staunchness and heroism.

When guns and mortars are roaring and thundering and the treads of tanks are rattling and screeching, when aircraft dive, launching heavy bombs and pouring machine gun bullets and howling death wields his scythe in frenzy, the fighting man must remain staunch and resourceful and handle his weapons with confidence and precision while the commander must remain cool, collected, and purposeful. These morale qualities are a pledge of victory.

The Nazis thought when they treacherously attacked the Soviet Union that they had only to bring their vast concentrations of means of destruction to bear upon the Red Army and it would at once be demoralized, defeated, and destroyed. But they were grievously mistaken. The fighting spirit of the Red Army didn't collapse. It rose with every battle. It seemed to draw upon unfailing sources of courage, fortitude, and heroism.

Three Elements

Knowledge of the justness of the cause in which they were fighting, their ardent patriotism and burning hatred of invaders of their land, and unwavering determination to vanquish the ruthless and unscrupulous enemy were the sources from which the Soviet people drew their moral strength. Knowledge, love of country, and determination—these are the three elements from which morale is built up. They form that tough alloy from which courage and heroism are made.

ADMINISTRATION

(Current Reports from Overseas)

"There is a need for officers to be thoroughly trained in all aspects of administration during action, with particular emphasis on the handling and distribution of rations."

—From a British Army Source.

STILL AT IT!

Proud Scot—"Scotland has turned out a great mony pipers, an' is still turnin' 'em oot."

Sour Cockney—"Well, yer kint blime her."

ARTILLERY IN BURMA

(A British analysis of the Imphal Campaign published in U.S. Military Reports)

In addition to the inherent difficulties of operations in rugged jungle terrain, British forces in Burma have been confronted with the necessity of ousting the Japanese from dug-in positions on the crests and slopes of precipitous hills. Observation and communications are especially difficult in hilly jungle. In the Burma jungle there has been a tendency to divide artillery units to carry out specific missions — a procedure usually resulting in failure. A British artillery commander's analysis of the Royal Artillery's part in the Imphal Campaign—which follows below—emphasizes the necessity for concentrated artillery support.

The concentration of artillery means concentration of fire power, not necessarily of guns, and centralization of command is essential if concentrated fire is to be effective. The tendency to decentralize artillery is still quite prevalent due to the very limited scope of operations in this theater in the past as well as to the wide area over which they have been taking place.

The policy of firing on areas 1½ miles by 1 mile in which there are thought to be some hostile forces is a waste of ammunition and is criminal under the present circumstances.

FIRE PLANS:—Fire plans are still too stereotyped. Commanders must ring the changes on methods of engagement and timing, using all possible means to do so.

Timed fire plans, in cases where the enemy is on the tops of high peaks and our infantry have to advance up the slopes to attack, are not satisfactory. In very hilly country, fire plans based on predicted fire will not be a success, because in nine cases out of 10 the vital area will be missed. Registration is the only answer.

Fire must be by observation. Orders to begin or to stop concentration, or to put down defensive fire, must be given by the FOO's (Forward Observation Officers) moving with the assaulting infantry. Whether there is or is not opposition, it is almost impossible to calculate the time it will take friendly infantry to climb 200 to 300 feet through thick jungle.

Divisional fire plans are the answer, and the orders must be complete and clear for every attack and for all defensive fire on the division front.

The best method for producing a fire plan on a well-prepared defensive position in thick jungle resolves itself into three phases:

1. Registration and a heavy artillery concentration on the area, combined with air bombing to clear vegetation so that individual strongpoints can be seen.

2. Methodical destruction of each bunker by single guns.

3. Concentration or barrage to put infantry onto their objective.

Destruction of bunkers by artillery fire is a waste of effort unless the infantry is prepared to go in as soon as the bunker has been destroyed. Delay of even 12 hours gives the Japanese time to repair and reconstruct, and he will do this even in face of persistent harassing fire.

Defensive Fire

The infantry now fully realizes the vital necessity for SOS and defensive fire. It realizes how valuable really close SOS fire is, and is taking considerable pains to assist the artillery in registering it. It also is prepared to accept the risk of casualties by having it as close as possible. SOS fire has been brought down by 25-pounders to within 50 yards of friendly positions, and on one occasion artillery 3-inch mortars put down SOS fire only 20 yards in front of friendly positions with devastating effect on the Japanese assaulting troops.

Little or no use was made of smoke, although on several occasions it would have been invaluable. It could have been used to screen friendly tanks while they were crossing difficult obstacles under artillery fire, as deception during a tank attack, and to blind the defenders.

LAYOUTS IN DEPTH:—It is incorrect (in the opinion of the corps artillery commander) to put all guns into one small area known as the "gun-box." Guns should be distributed in depth, with each battery (eight guns) or regiment (24 guns) making its own preparations and layout for defence. Small elements of anti-aircraft and anti-tank units should be allotted to the artillery area, because their high proportion of light machine guns as well as their own guns will afford considerable assistance to the defence. Wire communication is considered essential for artillery areas, since the defences necessarily will be thin and they must have warning especially if firing is done at night.

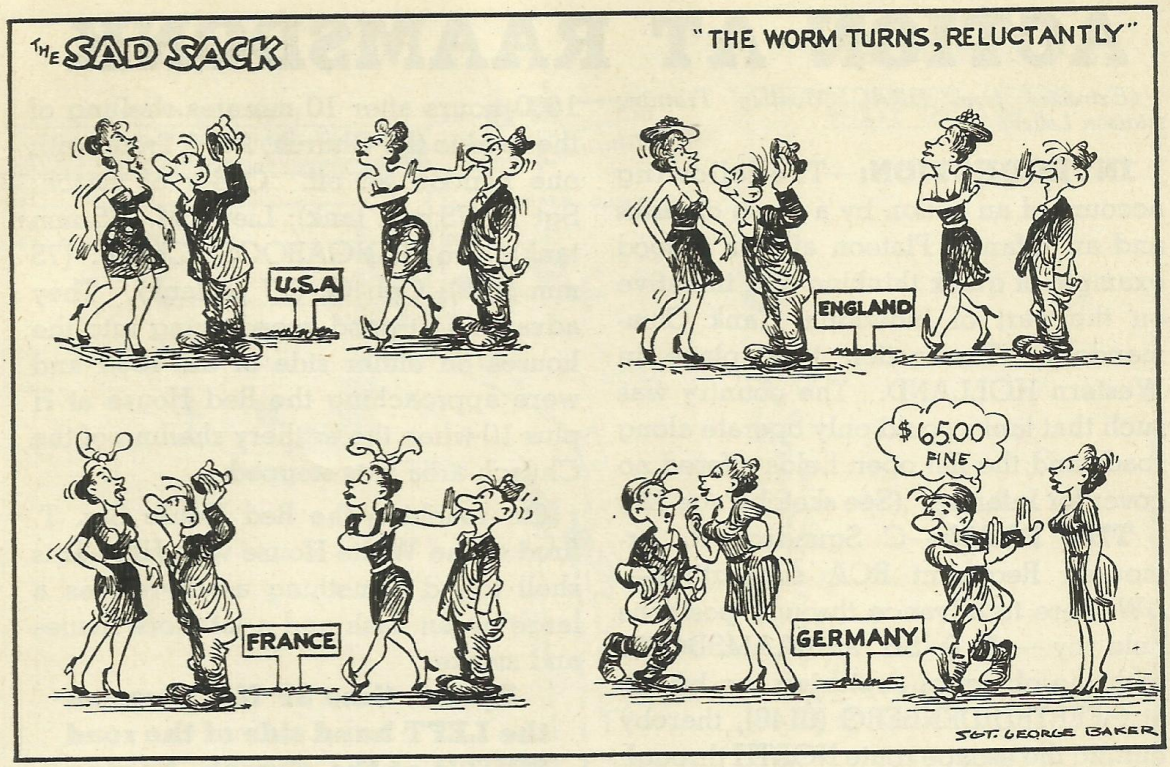
Gun areas should be in open terrain, with open approaches all around. Owing to the danger of infiltration, they should never be in thick trees or the edges of villages.

SOUND AND FLASH RANGING:—Although sound ranging was very successful, the tendency to give too high a value to sound bearings is very apparent, and it must be guarded against rigidly. Several times this tendency gave an extremely incorrect estimate of Japanese strength and dispositions. Comparator firing (matching the sound of friendly shellburst with the sound of enemy guns already detected) was carried out with good effect, but the British have not used radio link because the equipment is too heavy to get into the inaccessible places in which the microphones must be deployed.

The nature of the terrain greatly reduced the effectiveness of flash ranging. The Japanese almost invariably have flash cover, and also are reported to be using a flashless propellant.

COUNTER-BATTERY:—Counter-battery operations were very difficult because of the nature of the terrain, the constant movement of Japanese guns, and the use of many single-gun positions. It is reported that even Japanese medium guns move every 12 hours, and that they generally are dug in and heavily camouflaged. Another difficulty was their excellent synchronization of salvos, often with guns of different calibre. The value of hostile shelling reports assumes great proportions under these circumstances.

AIR OPs:—Initially, the air OP flight had little success in operations on the Imphal front. This was largely the result of commanders failing to realize the potentialities and limitations of the air



Reproduced by courtesy U.S. Army Weekly "Yank"

OP. No pre-operational training was possible, because the flight arrived just as operations began. Quite a number of officers thought that communications were by VHF (very high frequency) radio sets, and that artillery reconnaissance procedure was used. Additional mistakes included the following:

Bad briefing by commanders, such as vague orders to go out and search an area for a hostile gun.

Failure by commanders to realize that a hostile gun cannot be spotted in this country from the air unless the gun actually is firing at the moment a pilot is looking at the gun location.

Lack of co-ordination between the pilot and the GPO (gun position officer — the battery executive) before the beginning of a mission.

Failure to net in the air OP radio before leaving the ground.

With practice, however, procedure and employment greatly improved.

A deception unit, using flash simulators and dummy guns, obtained excellent results, and several times drew heavy fire. The dummy guns and flash simulators are best sited 200 to 300 yards to the flank. The deception crew lives with the nearest gun troop and fires the simulators in synchronization with the firing of the actual guns. Unless this is done, unnecessary communication problems arise.

THE OTHER SIDE

(Current Reports from Overseas)

"We took our patrol leaders on a tour of inspection of a recently captured area over which we had patrolled nightly for some considerable time. A study of the ground from the enemy's side showed us the mistakes we had made in our patrolling."

—From a U.S. Army Source.

ACTION AT RAAMSDONK

(Extracted from DRAC Monthly Training Liaison Letter)

INTRODUCTION:—The following account of an action by a troop of tanks and an Infantry Platoon affords a good example of quick thinking and initiative on the part of individual Tank Commanders. The action took place in Western HOLLAND. The country was such that tanks could only operate along roads and the flat open fields offered no cover for Infantry. (See sketch Page 13.)

THE PLAN:—C Squadron R. Armoured Regiment RCA supporting,—BW were to advance through positions held by — A & SH at RAAMSDONK with the object of capturing the bridge at GEERTRUIDENBERG (0148), thereby cutting the escape route NORTH through this town and to the EAST of it.

The enemy were known to hold the stretch of road NORTH from RAAMSDONK with MGs and bazookas and unconfirmed reports stated that there was one Mk IV tank in the vicinity. The position had been successfully attacked by tanks and dismounted infantry the previous day during which two tanks had been "brewed up" by bazookas.

Use Kangaroos

It was decided to push through a troop of tanks (No. 3 Troop) supporting one platoon of BW mounted in two KANGAROOS, onto LAAN (0347) by the Eastern road; relying on speed and armour to get them through. If this was successful a second troop (No. 1 Troop) leading the remainder of the company, mounted in KANGAROOS, was to follow through to LAAN; leaving the mopping up to be done by the remaining two Companies, dismounted. On arrival at LAAN the leading Company was to dismount and push on, supported by a troop of tanks, the remaining two Companies following up after mopping up in the RAAMSDONK area.

EXECUTION OF THE PLAN:—At 1600 hours after 10 minutes shelling of the road to the Church, No. 3 Troop with one platoon set off. Order of march: Sgt T. (75 mm tank); Lieut. M. (75 mm tank), two KANGAROOS; Cpl. P. (75 mm tank); Cpl. G. (17 pr tank). They advanced at good speed firing into the houses on either side of the road and were approaching the Red House at H plus 10 when the artillery shelling of the Church area was stopped.

On reaching the Red House Sgt. T. fired at the White House with HE. This shell found something as there was a large green flash and a lot more flames and smoke.

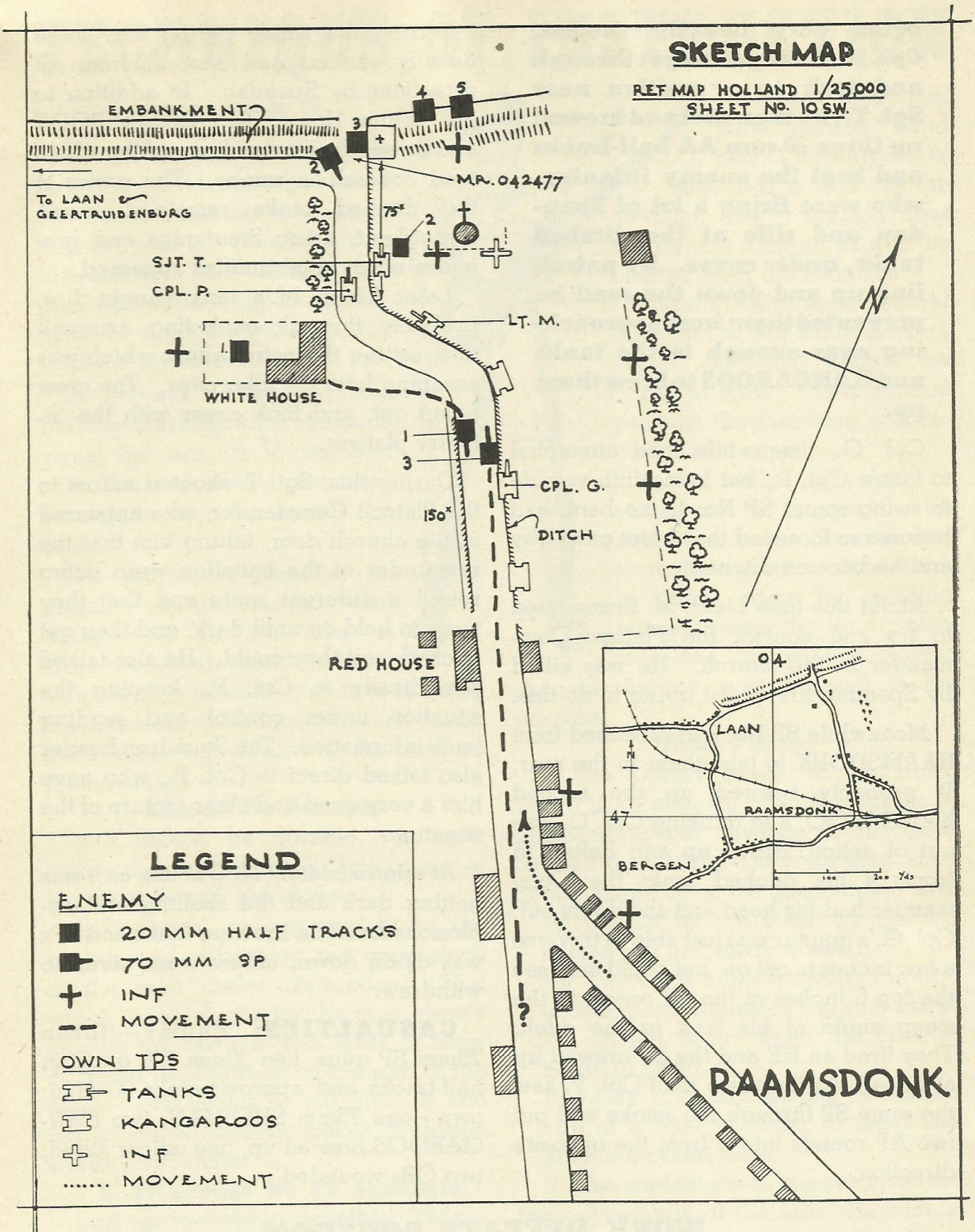
By this time SP No. 1 was on the LEFT hand side of the road SOUTH of the church, having probably moved out of the White House area. Sgt. T. did not see him, due to the smoke, but his gunner, Tpr. B., saw it and put three AP rounds six inches apart into the centre of the front, putting it out of action.

The driver, Tpr. O., kept going and just managed to get past the SP. Coming up to the RIGHT hand bend opposite the church he swerved to avoid some rubble and the RIGHT hand bank gave way. The tank dropped four feet into a ditch at an angle of 30 degrees.

At the same time Sgt. T. saw SP No. 2 through the smoke; his gunner traversed and brewed it up with the first shot from their position in the ditch. So far, owing to quick and accurate shooting, two SP guns had been knocked out before either had been able to fire a shot.

Get Ditched

Meanwhile, Lieut. M. passed SP No. 1, and, probably due to the smoke, got ditched himself. The KANGAROO following, thinking the SP was in action charged it and took off the RIGHT hand



sprocket, skidded and in its turn got ditched. The second KANGAROO, being unable to see what had happened in front, halted. Sgt. T. at this stage got through to the Squadron Leader and in the circumstances gave a very clear picture of what was happening, thus enabling the CO of 7 BW to size up the situation, and to send a second platoon and No. 1 Troop round by the Southern route to LAAN. Sgt. T. then rang up Cpl. P. and ordered him to try and get through to protect him from the front and LEFT flank.

The Infantry Platoon dismounted from the two KANGAROOS and took cover in the church because the area was

being very heavily shelled. Cpl. P. managed to get through and took up a position near Sgt. T.; he then shot and brewed up three 20 mm AA half-tracks and kept the enemy infantry, who were firing a lot of Spandau and rifle at the ditched tanks, under cover. By patrolling up and down the road he prevented them from approaching near enough to the tanks and KANGAROOS to brew them up.

Cpl. G., meanwhile, had attempted to follow Cpl. P., but being fifth vehicle to swing round SP No. 1, the bank had become so loosened that 4 feet gave way and he became ditched.

About this time Lieut. M. dismounted to try and contact the Platoon Commander in the church. He was killed by Spandau fire whilst trying to do this.

Meanwhile SP No. 3 approached from RAAMSDONK to take them in the rear. It probably brewed up the second KANGAROO, and thinking Cpl. G. was out of action, drove up and halted in front of his ditched tank; the Commander had his head and shoulders out. Cpl. G.'s gunner was just able to traverse a few inches to get on, but could only see the top 6 inches of the SP owing to the steep angle of his tank in the ditch. They fired an HE and the SP brewed up at once. At the same time Cpl. P. saw the same SP through the smoke and put two AP rounds into it from the opposite direction.

During the whole period they were heavily shelled and shot at from all directions by Spandau. In addition to the White House, two KANGAROOS and three SPs were on fire and the whole area covered in smoke. The crews of the ditched tanks remained inside throughout, using Sten guns and grenades when opportunities appeared.

Later Lieut. M.'s tank caught fire, probably through exploding ammunition, setting the petrol alight which was escaping from the filler caps. The crew baled out, and took cover with the infantry platoon.

During this, Sgt. T. shouted across to the Platoon Commander, who appeared at the church door, telling him that the remainder of the battalion were going round a different route and that they were to hold on until dark, and then get back as best they could. He also talked periodically to Cpl. P., keeping the situation under control and sending back information. The Squadron Leader also talked direct to Cpl. P., who gave him a very good and clear picture of the situation.

At approximately 1830 hours, as it was getting dark and the shelling and explosions from the brewing tanks and SPs was dying down, orders were given to withdraw.

CASUALTIES: Enemy—three 75mm SP guns, five 20mm AA guns on half-tracks and approximately 20 men; own—one 75mm SHERMAN, two KANGAROOS brewed up, one officer killed, two ORs wounded.

WORK DEFEATS BOREDOM

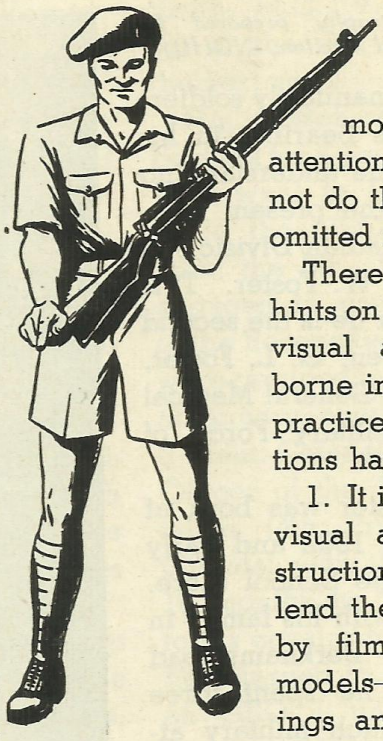
(From an Australian report on the New Guinea fighting in Current Reports From Overseas)

A busy battalion has no time to mope. No matter how inactive the operational situation may be, much can be done to maintain high morale and an offensive spirit by patrols, raids, the improvement of positions, training, range practices,—in fact, by plenty of hard work. A high standard of discipline was insisted upon at all times and, as a result of saluting and courtesy, a strong team spirit developed. Work, and plenty of it, is the complete answer to the fairly general belief that fighting troops suffer from tropical tiredness after twelve months. Work, interest, and insistence on efficiency will beat the tropics.

TECHNIQUE OF INSTRUCTION

VISUAL AIDS II

In this section of the May issue of CATM there appeared an article outlining the nature and purpose of Visual Aids to instruction. This article will deal with some of the characteristics of a good visual aid and with the technique of their use.



In general, it may be said that the characteristics of a good visual aid are six in number:

1. The aid should be large enough to be seen by all the group.

2. It should, if possible, be portable—easily moved and transported. In the case of large models and sand tables, it is not always possible of course to bring the mountain to Mahomet; in such cases, the Mahomets will have to be taken to the mountain.

Should Be Durable

3. It should be durable. In most cases the instructor hadn't time to handle aids with kid gloves.

4. It should be appropriate to the background of training and experience of the men under instruction. That which is too simple for the men merely labours the obvious and leads to boredom and indifference on the part of the class. That which is too difficult and too advanced merely makes confusion worse confounded.

5. It should be as accurate and up-to-date as possible. This is particularly true of films. Where there are parts of a film that are still of value, the parts which are obsolescent or obsolete should be out, or if this is not feasible the class should be warned in advance of the showing that certain sections are to be disregarded.

6. The important parts should stand out. The purpose of most aids is to focus the attention and if the aid does not do this it might as well be omitted from the training.

There are also some general hints on the technique of using visual aids that should be borne in mind. As a general practice the following suggestions have value:

1. It is well to use a specific visual aid for a specific instructional task. Some lessons lend themselves to illustration by films, some by working models—some by line drawings and the wise instructor chooses the aid most adapted to his purpose.

Time Factor

2. The timing needs to be right. There is an element of showmanship in all teaching and nowhere is this more evident than in the use of training aids. Some simple roles for good timing are:

(a) Do not let the class see the aid before you are ready to use it.

(b) Interest is highest during the first showing and therefore the first showing should occur when the class is ready to profit.

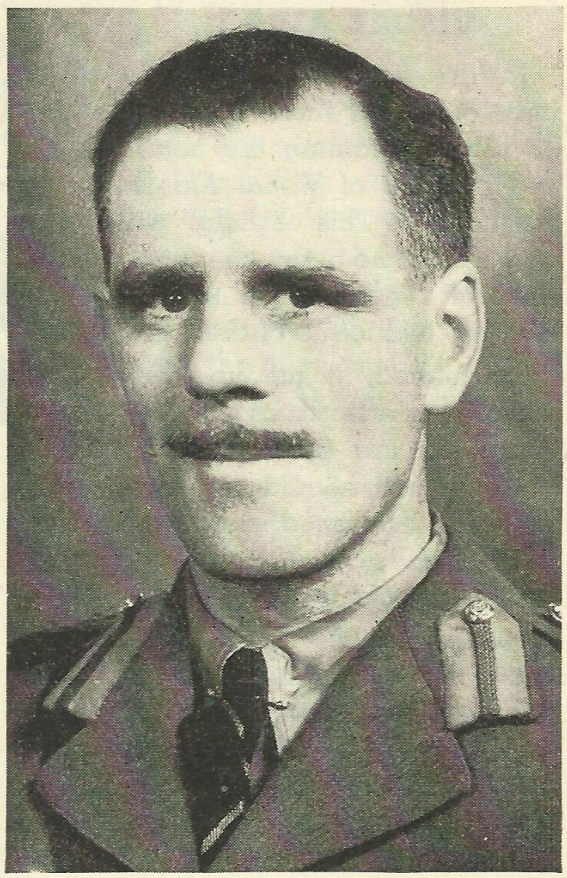
(c) Aids normally should be shown one at a time in order to focus the attention of the class.

3. The student should be prepared for the appearance of the aid. He should be made to feel that the aid will answer some questions in his mind and if the questions are not there the instructor should put them there. In other words the student is not merely to look — he is to look for specific bits of information.

4. Too many aids spoil a lesson. When too many aids are used the novelty wears off

MAJ. GEN. H. W. FOSTER, D.S.O.

(Condensed from a biography prepared for CATM by the Historical Section, NDHQ)



Few soldiers are so manifestly soldiers to the observer in his bearing, in his energy, in his masculine understanding and leadership as is the present commander of the 1st Canadian Division in Europe, Maj. Gen. H. W. Foster. This is, perhaps, natural, for he is the second son of the late Maj. Gen. G. L. Foster, C.B., who was Director-General Medical Services, Overseas Military Force of Canada, in the last war.

Harry Wickwire Foster was born at Halifax, N.S., in April 1902 and early attended King's College School there. When taken overseas with his family in 1916 he was sent to Berkhampstead Public School where he spent three years but absorbed much military atmosphere on vacations in and around Folkestone. After his return to Canada he went to Bishop's College School, a well-known moulder of good soldiers, whence he entered the faculty of applied science at McGill where he successfully completed his first year.

While still in England and barely 17 years of age he had unsuccessfully tried to enter Royal Military College, but in 1922 after his year at McGill he was allowed to enter a few months over the usual age. In the meantime he had received his first formal military experience by being commissioned at Kentville, N.S., where his family then lived, in the King's Nova Scotia Mounted Rifles.

Energy and Determination

Lieut. Foster trained with this regiment in 1921 and 1922 and again during his first vacation from RMC in 1923. At RMC he showed the energy, determination and humour which already distinguished him along with his deep attachment to the senior arm of the Service; at the end of his second year at the College, when he had acquired his military qualification, he was gazetted to Lord Strathcona's Horse (R.C.) on 8 July 1924.

He was first posted to "B" Squadron at Calgary, and during the next four years few junior officers became more familiar than he with the cavalry country southwest of that city, and he became one of the younger competitors

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INSTRUCTION

(Continued from Page 15)

and the interest is correspondingly diminished. One of the purposes of an aid is to obtain emphasis by focusing the attention and if you emphasize everything you emphasize nothing.

In a future article attention will be devoted to the specialized techniques in the use of the more common types of visual aids.

for the Guides' Cup. The summer of 1925 was spent as Cavalry Instructor for the NPAM in Kamloops and Vernon, B.C., and Lashburn, Sask. In 1926 Lieut. Foster was transferred to "A" Squadron at Winnipeg. In these early years he built up the high regard and popularity as instructor and leader which he won for himself in his many contacts with officers and men of the Reserve Army. His own professional training developed regularly; he completed qualifications for his captaincy in 1927 and passed the two wings of the Small Arms School in 1927 and 1929.

In 1929 he married Miss Margaret Ruth Muir and then took his first leave since joining the regiment. He now has two sons.

During the Corps of Guides' Cup competition at Sarcee in 1930 and while dressed and equipped for this race, Lieut. Foster saved a child from drowning and contributed to saving another, in one of the turbulent deep eddies in the river there. For this he received official commendation from his DOC and from NDHQ.

Staff Officer

He was early considered a prospective Staff Officer and passed his Militia Staff Course in 1932. He served regularly in the summer camps at Sarcee until 1932; two years later, now a Captain, he returned to Calgary as Second in Command of "B" Squadron and to the branch Small Arms School where he was Chief Instructor of "A" Wing in 1935. That autumn he was posted as GSO III to M.D. 1 and two years later, having duly qualified, he was sent to the Staff College at Camberley, and was still in England when the war broke out. Returning to Canada on the 23rd of September he was posted at once to "A" Squadron at Winnipeg where he assisted in staff work on mobilization pending the final organization of the 1st Division. Then in November 1939 he returned to Eastern Canada to be Brigade Major of the 1st Canadian Infantry Brigade under Brig. A. A. Smith, M.C., V.D., who was knocked out of the war by a serious accident the next year.

Maj. Foster remained with the First Brigade for a year and then in November 1940 went to Divisional Headquarters while the GSO II was on a course. From the 5th of January 1941 he was engaged in co-ordinating the training of the Reconnaissance Squadrons which were grouped into battalions on the 29th of January, at which time Foster became a Lieut.-Colonel and first Commanding Officer of the 4th Reconnaissance Battalion (4th Princess Louise Dragoon Guards) with the 1st Division. So for 18 months he was given work closer to his cavalry training. In August 1942 he returned to Divisional Headquarters as GSO I under Maj. Gen. G. R. Pearkes, V.C., and after four months went to the Highland Light Infantry of Canada in the 3rd Division as Commanding Officer. Like several other western cavalrymen in this war, he donned the tartan plaid. Two months later he was promoted to command the 7th Canadian Infantry Brigade.

Kiska Operation

It was while in that command that the Canadian Government undertook on short notice to share in the Kiska operation, and in June 1943 Brig. Foster was flown from England to the Pacific Coast to take command of the 13th Canadian Infantry Brigade Group. He arrived at the coast on the 19th of June with his Brigade Major (now Lieut.-Colonel) W. S. Murdoch of the Seaforths who had been Staff Officer at Spitsbergen.

As it happened, there were no Japanese left at Kiska, but that was not known until the troops had been on the island for some hours; up to the very last the United States Army Intelligence expected vigorous opposition and all ranks looked forward to a stubborn fight

like that on Attu Island in the spring. The force was mainly American and was powerful in all elements of a combined operation; the Canadians used mostly their own equipment but in a very short period had to get used to some U.S. equipment and to the flexible but new U.S. battle organization.

Brig. Foster was recalled from Kiska to Canada on compassionate grounds, leaving Col. Menard in command, but he resumed command of the Brigade Group in October. The task had been well done, and the President of the United States awarded the Canadian commander the Legion of Merit, Grade of Officer, and subsequently also the Silver Star. It is not always realized that this force was as large as that engaged at Dieppe.

For a week in January 1944 Brig. Foster attended the United States Army Air Force School of Applied Tactics for Senior Staff Officers at Orlando, Florida, and was then hurried back to his old command, the 7th Canadian Infantry Brigade in England, where they were now being groomed for a leading role on D Day. From the 29th of January to the 6th of June preparation for this was Brig. Foster's paramount duty. There was one very brief interlude. In Canada, Mrs. Foster, who had moved to Montreal and then to Vancouver, had died; and on 10 Feb., 44, Brig. Foster married Mrs. Margaret Cross at Fleet in Hampshire.

On D Day, 6 June 44, the 7th Canadian Infantry Brigade under Brig. Foster was in the assault on the Normandy Beaches as part of the 3rd Canadian Division and was the first formation to reach its objective. Immediately after the battle of the Falaise Gap, Brig. Foster was promoted to command the 4th Canadian Armoured Division with the rank of Major-General.

His early cavalry training, his early command of the P.L.D.G.'s, and his recent co-operation with tanks all contributed to the knowledge and experience he brought to his new command. The 4th Canadian Armoured Division had had brilliant success in the drive northward and now under Maj. Gen. Foster was engaged in close, jabbing fighting north of Antwerp. By November, however, the Canadian troops began to be relieved and on the 1st December Gen. Foster and Maj.-Gen. C. Vokes, commanding the 1st Canadian Division in Italy, exchanged appointments. General Foster arrived in Italy to command his own original Division immediately after they had re-entered the front line along the Lamone River. He led them across this barrier to still more stubborn tasks along the Senio; on 22nd December he was awarded the D.S.O. During February and March of this year his Division retired from the line; and then made their notable transfer, by sea to the south of France and thence overland to Belgium. Here the 1st Canadian Corps was reassembled in the zone of operations of North-West Europe, and there Maj. Gen. Foster with his 1st Canadian Division was present at the final collapse of the enemy.

BATTLE TECHNIQUE

(*U.S. Infantry Journal*)

All movement on the battlefield is necessarily slow and deliberate. Our training problems habitually teach faulty concepts by encouraging grandstand moves and by rushing through situations in a few short hours that would require days and nights of struggle in battle. Time can be saved through forethought and pre-planning, by rapid decisions and by being prepared for any emergency.

PREPARED DEFENCES

(Condensed from U.S. Intelligence Bulletin)

When the U.S. forces were advancing on the Clark Field area on Luzon, the enemy commander in that area, Maj.-Gen. Tsukada, decided not to attempt an all-out defence of the airfields themselves. "Against the attacks of the materially well-equipped enemy," Gen. Tsukada told his troops, "we will not offer resistance." Instead, his forces would fight delaying actions into the hills to the west, where, by means of artillery fire and infiltration attacks, he hoped to prevent the Americans from utilizing the Clark Field air centre.

With this in mind, Tsukada directed that his command complete and occupy what he called "protective installations" in the hills.

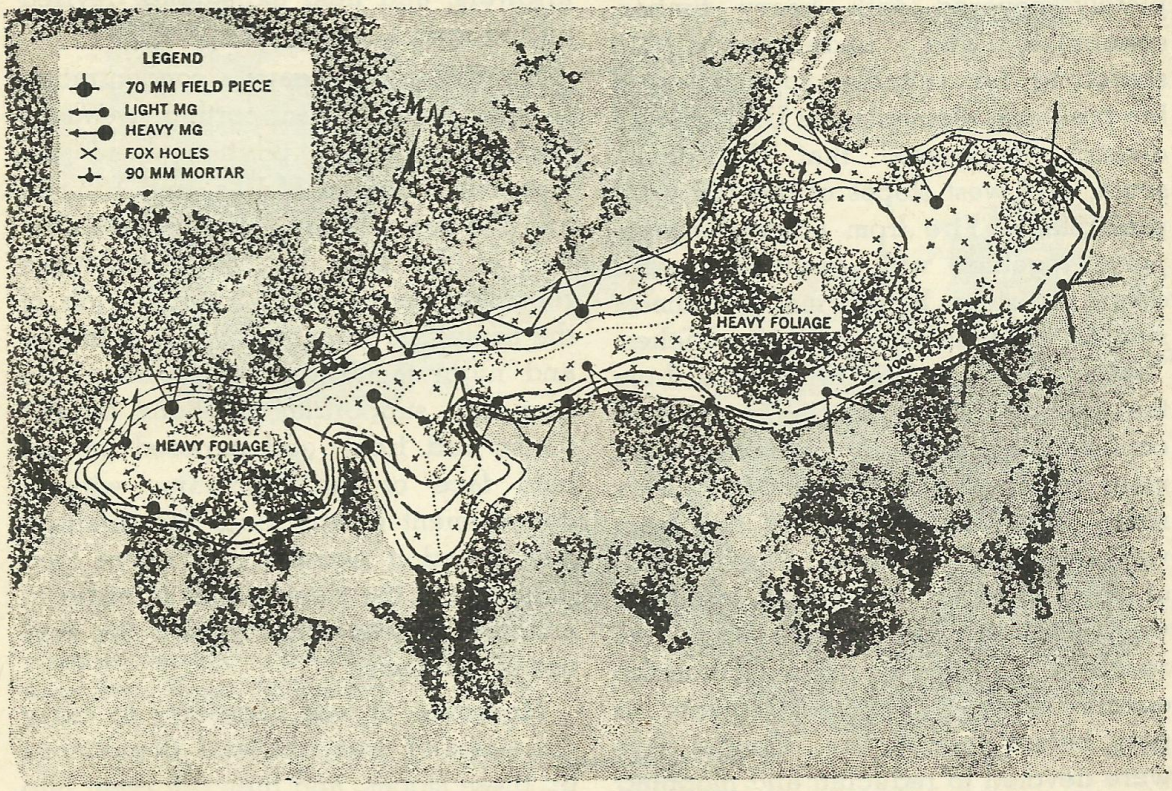
The "protective installations" constituted what is probably the most elaborate and extensive system of cave and tunnel defences yet encountered in the Southwest Pacific. Over a front of 12,000 yards, and to a depth of 16,000 yards, the Japanese organized the terrain for a protracted last-ditch defence.

Fanning out from Mt. Pinatubo, and running in a northeasterly direction behind Fort Stotsenburg, there is a series of steep, broken ridges, separated by deep, inter-locking ravines and canyons.

Caves and Tunnels

When the U.S. forces had completely neutralized the Clark Field area, and were threatening a ground offensive, the enemy shifted his defences from the open plain to this rugged terrain. Months before, large caves and tunnels had been carved in the hard rock, to protect supplies and personnel against U.S. air attacks. Bulk stores in huge quantities were transferred from Fort Stotsenburg to the less vulnerable tunnels.

Literally hundreds of aircraft machine guns had been removed from the



Weapons used in the defence of the extension of Storm King Mountain

battered planes that littered the Clark airfields, and had been carried up into the hills. Individual tunnels had been well stocked with food, ammunition, and other supplies so that each small group of Japs could continue to fight regardless of the fate of the other groups.

Gun positions had been planned to provide mutual support and to cover the barren approaches. In many instances the guns had 2,000-yard to 4,000-yard fields of fire for both plunging and grazing types of fire. For once the Japs had more than an abundance of automatic weapons; by way of illustration, 26 aircraft machine guns were found in positions on a single small knoll.

The illustration on Page 19 is an overlay of the Japanese defences encountered on an extension of Storm King Mountain, a 1,000-foot ridge. All the slopes of this ridge were completely covered with heavy timber, canebrake, and undergrowth. In searching for suitable approaches to the positions, elements of a U.S. infantry division discovered that the north, south, and west slopes of the hill were precipitous. Fire from automatic weapons, together with grenades tossed down the steep banks, made it almost suicidal to advance by these approaches.

The only suitable route was from the east, along a narrow neck that connects the extension with the main mass of Storm King Mountain. This route also was covered by fire from weapons of all calibres. The location of the perfectly concealed positions was disclosed only when fire was received at very close range. Often the enemy allowed leading elements to pass, before opening fire. Several days were devoted to reducing and mopping up these positions, and the employment of approximately a battalion of infantry and massed supporting artillery was required. Japanese strength in the area was subsequently estimated to have been a single reinforced company.

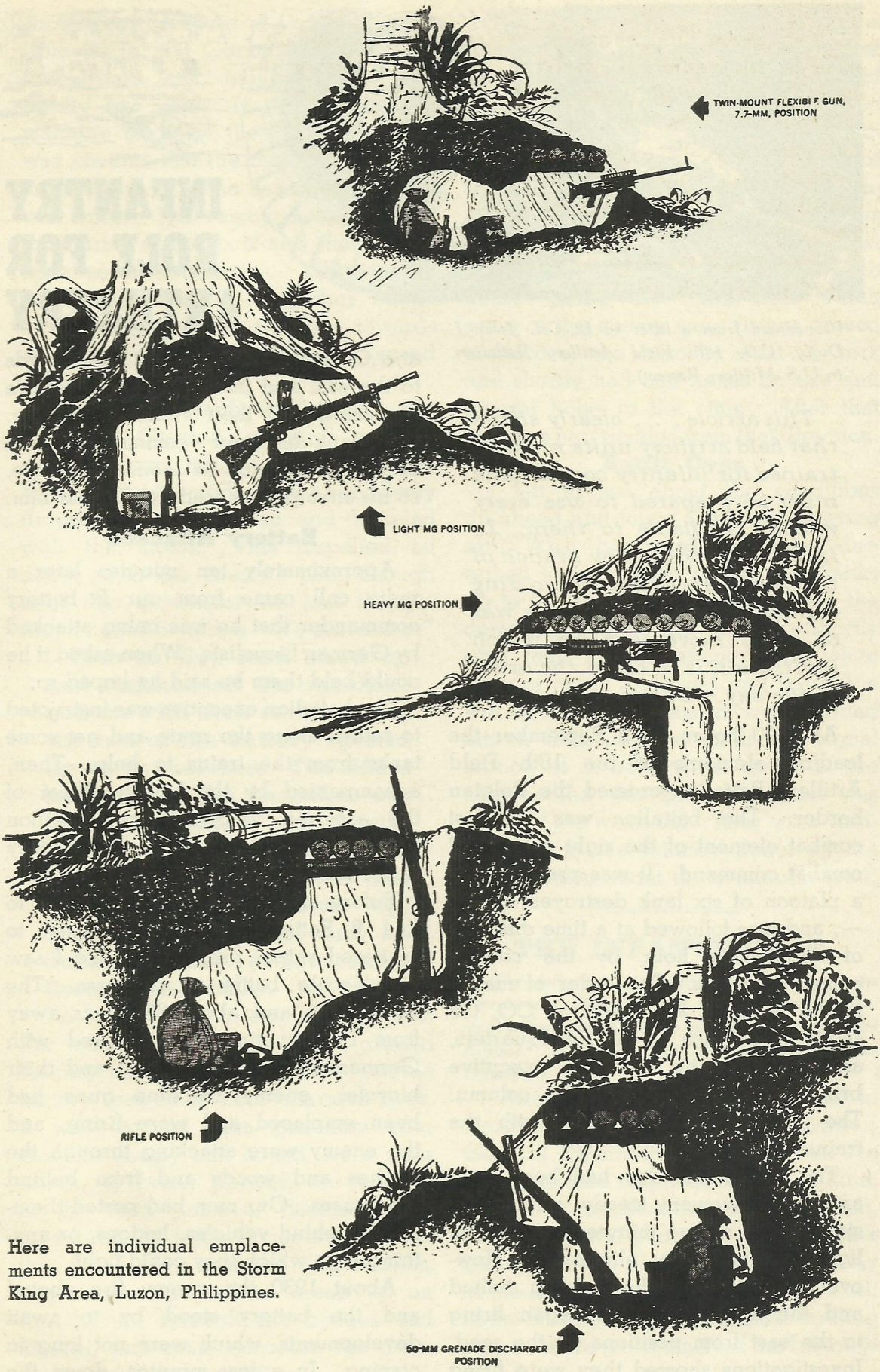
Direct Hits Necessary

Various types of individual emplacements encountered not only on Storm King Mountain, but throughout the entire hill area, are illustrated on Page 21. Each individual position had been equipped to withstand a fairly long siege. Since these positions had only narrow apertures, direct hits with grenades, demolitions, and artillery were necessary to reduce the threat from these points and thus permit further assault.

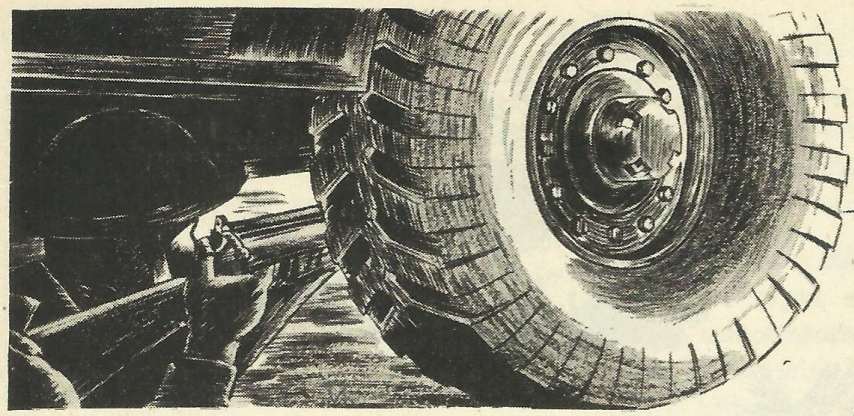
Most of the enemy's caves and tunnels were mutually supporting, and were further protected by fire from a series of gun positions dug-in on high ground above and to the flanks. These caves and tunnels could be reduced only by continuous direct artillery fire, white-phosphorous smoke, demolitions, flame throwers, and field expedients devised on the spot.

No matter how heavy a concentration of fire the U.S. supporting weapons placed on these positions—and the weapons included M-10's, and 105-mm and 155-mm artillery—the final elimination of the Japs hiding in the cave recesses was in plain truth the job of the assaulting infantry. Using both day and night tactics, under constant fire from Jap supporting positions on the flanks and front, and exposed on the bald face of the mountains without concealment of any kind, the infantrymen found it necessary to carve footholds out of the steep slopes in order to maintain balance and permit the free use of weapons.

Moreover, it was necessary to carry close-assault weapons and demolitions up these slopes, and then get them into position for the final assault.



Here are individual emplacements encountered in the Storm King Area, Luzon, Philippines.



INFANTRY ROLE FOR ARTILLERY

(Condensed from a letter by Lt.-Col. John J. Duffy, C.O. 18th Field Artillery Battalion, in U.S. Military Review).

This article . . . clearly shows that field artillery units must be trained for infantry combat and must be prepared to use every weapon available to them. In fact, no troops of any branch of the service are certain of avoiding combat as infantry in this war of rapid movement, in which infiltration is so often the order of the day.—Editor.

At 1800 hours on 2 September the leading elements of the 18th Field Artillery Battalion crossed the Belgian border. The battalion was the last combat element of the right column of combat command. It was preceded by a platoon of six tank destroyers of the —, and was followed at a time distance of about one hour by the combat command trains. The order of march in the battalion was battalion CO, CP section, Batteries C, A, Headquarters, and B, with the battalion executive bringing up the rear of the column. The service elements were with the trains.

The action that day had been light and the movement steady, with occasional stops of five minutes or so while light resistance was eliminated. However, about 1830 the column halted and the tank destroyers began firing to the east from positions on the road. Investigations showed they were firing at a German column about 1,000 yards to the east and that the Germans were scattering and their vehicles burning. The tank-destroyer commander had orders to continue as soon as possible, so no attempt was made to bypass him.

Battery Attacked

Approximately ten minutes later a radio call came from our B battery commander that he was being attacked by German bicyclists. When asked if he could hold them he said he hoped so.

The battalion executive was instructed to return along the route and get some tanks from the trains to help. Then, accompanied by the liaison officer of the armored field artillery battalion and his half-track, I reached B Battery about 1900.

Before arrival, I had expected to find B Battery's column subjected to scattered sniper fire, but instead I saw a full-scale battle in progress. The road north and about 75 yards away from the junction was covered with German dead and wounded and their bicycles, enemy machine guns had been emplaced and were firing, and the enemy were attacking through the ditches and woods and from behind the houses. Our men had posted themselves behind vehicles, hedges, or anything from which they could fight.

About 1930 the enemy fire abated and the battery stood by to await developments, which were not long in coming. In a few minutes, down the

road from the cover of the trees came from 75 to 100 Germans followed by five trucks and half-tracks approximately ten yards apart. There were machine guns on the vehicles and it was obvious that the men on foot were armed, but for some reason not a shot was fired. The enemy were carrying their arms at the port and their intentions seemed doubtful. When about one hundred yards away they began to yell "Sieg Heil!" and run towards us. Their vehicles picked up speed behind them.

About thirty yards in the lead was a single German carrying a light machine gun with a tripod mount. When about 50 yards away he suddenly dropped to the ground and fumbled with the mount. This dispelled all doubt as to the enemy's plan, though until that movement we had thought they might be yelling "We surrender."

Four or five men stood up and finished off the machine gunner with their carbines and the rest of the battery opened up on the column. The fifties and one of the bazookas cut into the vehicles and shortly had all stopped dead and burning. The ammunition of one enemy half-track went up, adding to the noise, and no doubt causing a few more German casualties.

The advantages of terrain were with the enemy, who had high ground looking down onto our road, yet the battery seemed to bear charmed lives. It was learned from prisoners later that the enemy had hoped, by a mass attack, to break through the column at the road junction, thinking it to be a force of a few vehicles only. When this failed they changed their tactics, dispersed, and tried to creep up on the column through the hedges and ditches, and some occupied the nearby houses and opened fire.

This phase of action sounds like a dime thriller, but it was. The distances involved were well within carbine and bazooka range so that every weapon in the battery except the guns was in action. An example of the action of the battery as a whole was the teamwork displayed by the machine gunners and the bazooka men at the corner. When the machine-gun fire at the two houses along the road, from which some of the enemy were firing, proved ineffective, the bazooka went to work and shortly had one house on fire and several holes in the other. After that we were not troubled from that direction.

Battle Over

I left to see about the conditions up ahead and found the roads clearing up. What happened later was described to me. They moved four tanks up to the left flank and completed the demoralization of the enemy. Shortly after their arrival (about 2115), white flags or shirts appeared and the battle was over. The prisoners were herded into a field and left with the signal section of B Battery. A count of the able bodied was 248. No count was made of the wounded. They were turned over to the military police of the rear echelon about thirty minutes later.

THE INFANTRYMAN

(The following statement was made by the Secretary of State for War in the British Parliament when referring to the invasion of North-West Europe. It was extracted from Progress Bulletin-Infantry.)

"After a delay of 24 hours due to weather the Supreme Commander, General Eisenhower, directed that the assault should begin on the 6th of June. The great machine was set in motion. All that careful planning could provide had now been done, and the issue lay in the skill, the strength, and, above all, in the courage of the individual fighting man — more particularly of the Infantryman."

日本軍人

(JAPANESE SOLDIER)

(Condensed from U.S. Soldier's Guide to the Japanese Army)

Lack of information is a most fertile source of exaggeration, distortion, and legend which, if unrefuted, eventually assumes the stature of accepted fact. For years the Japanese were taken lightly as military antagonists, and the confidence of the Western World in its disdainful appraisal of their military and naval capabilities seemed justified by the Japanese failure to achieve decisive victory in the Chinese war.

Then, following the outbreak of the war with the United States and Britain, a succession of speedy and apparently easy victories stimulated the rise of the legend of the invicibility of the Japanese soldier.

Training Is The Answer

Several years of combat experience against the Japanese have replaced such fanciful notions by more realistic evaluation. While the military capabilities of the Japanese soldier still are appreciated, it is now realized that he has pronounced weaknesses. As a soldier his good qualities are not innate but are the result of careful training and preparation for specific tactical situations. Hence an accurate appraisal of the Japanese soldier must give adequate attention to the Japanese system of military training and show its effect on his physical, mental, and temperamental characteristics.

ENTRANCE INTO THE ARMY: All Japanese males between the ages of 17 and 45 are liable to call for compulsory military training and service. Those from 17 to 19 are not actually inducted into service but are given some training as part of the Second National Army, although they may volunteer for active service. It is reported that voluntary enlistments of 15-year-old boys now are accepted for service in mechanized, air, and signal units.

When the Japanese conscripts reach induction age they have had a considerable amount of military training. In peacetime, conscripts underwent rigorous training for two years, progressing from section and platoon exercises to regimental manœuvres . . . Army Apprentice Schools provide training in technical fields such as aviation, signal-equipment operation and maintenance tanks, artillery, and ordnance. Primary school graduates from 14 to 15 years of age are accepted, and graduates of these apprentice schools provide a pool of trained technical personnel for the army.

Academy Graduates

Many officers of the Japanese Army are graduates of the Military Academy. Cadets were selected from graduates of the three-year courses at the Junior Military Schools. Besides these, enlisted men under 22 and non-commissioned officers under 25 were permitted to apply for admission, as well as candidates-at-large from 16 to 18 years of age. After two years training in the preparatory school the cadets performed eight months duty with troops. This tour was followed by 18 months study at the Academy. After a four-month probationary period as sergeants-major the Academy graduates received their commissions.

CHARACTERISTICS AND TRAINING: The Japanese soldier is small in stature in comparison with Americans. His average height is 5 feet 3½ inches; his weight, 116–120 pounds. His limbs are short and thick. Despite the reputation of the Japanese for quickness and agility, the average soldier even after rigorous training is apt to be awkward. His posture is faulty, and his normal gait shuffling. His teeth usually are poor and often are protruding.

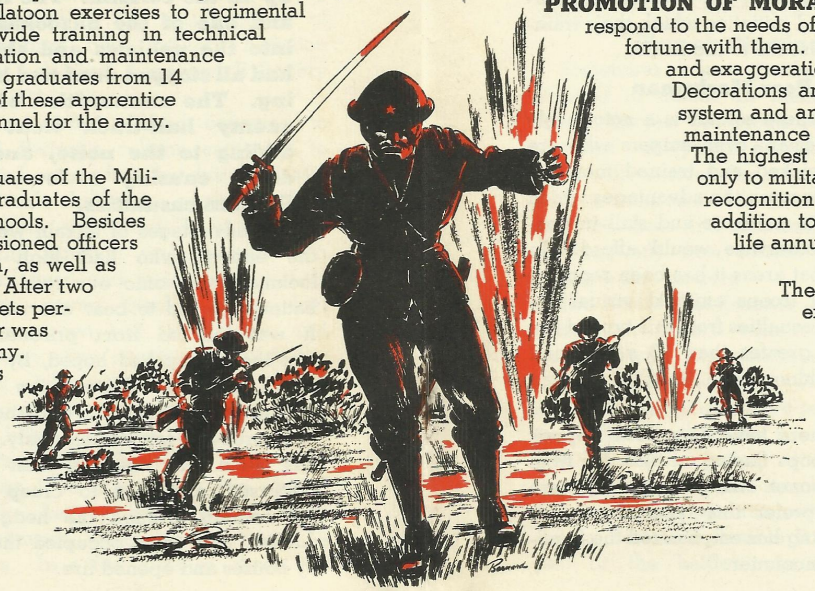
The physical hardihood of the soldier is enhanced by the most rigorous training which emphasizes physical condition, calisthenics, and wall-scaling. Arduous marches, which include much double time and uphill movement, eventually, enable him to make extremely difficult marches with full pack under most trying conditions. Much marching and tactical training are done in adverse weather — in blistering heat or bitter cold — and there is much open-air bivouacking in rigorous climate.

Field exercises are as realistic as they are strenuous. Every effort is made to simulate the noise and confusion of battle; live ammunition is used, and casualties have occurred as the result of this realism. All infantrymen and engineers are taught sniping and scouting techniques, even though many will not be called upon to perform these duties in actual combat. There is much stress on night operations, and whenever possible the training program includes at least one night problem per week, with special attention to small-unit exercises.

The training of the Japanese soldier also aims at the inculcation of qualities and ideals deemed necessary for military success. Recruits are admonished to cultivate unflagging alertness and readiness to check-mate the ruses and stratagems of the enemy. Resistance to the spread of rumors is stressed, and soldiers are exhorted to control their anger and suppress private grudges on the ground that military success depends to a great extent on harmonious relations within their unit. High standards of morality, according to training doctrine, must be maintained in the camp or on the battlefield.

PROMOTION OF MORALE: The Japanese soldier is urgent to be quick to respond to the needs of his comrades-in-arms and willing to share his good fortune with them. Honesty is stressed as a necessary soldierly virtue, and exaggerations and lies are to be shunned as dishonorable.

Decorations and awards are important in the Japanese military system and are considered prime factors in the development and maintenance of high standards of individual and unit morale. The highest award is the Order of Golden Kite, which is open only to military personnel. Admission to the order is granted in recognition of conspicuous service against a foreign foe . . . In addition to the honor, inclusion in the order carries with it a life annuity.



Annuities Received

The Order of the Rising Sun, membership in which also entails receipt of an annuity, is open both to civilian and military personnel who have performed meritorious service. There are eight classes with only the two lowest available to enlisted men. Length of service and good conduct are recognized by inclusion in the Order of the Sacred Treasury which has eight classes, two of which are open to enlisted men.

Medals of three classes are awarded for distinguished, meritorious, and exceptional service, respectively. To those whose services are "not inconsiderable" but not of sufficient distinction

to justify award of one of the three medals, monetary grants are made. Campaign and good conduct medals also are presented, and there are badges of proficiency in various technical skills.

Despite precepts and the inducements of decorations and awards, major crimes and military offenses are not rare in the Japanese Army. Robbery, rape, and trespass are recurrent offences . . . Surrender or desertion frequently is the result of harsh discipline, especially corporal punishment or reprimands that humiliate the soldier, and the enlisted man is especially prone to desert or surrender in the event he has reason to believe he has been forsaken by his officers.

Such a man is the Japanese soldier, in so far as composite portrayals are valid.

CONDUCT IN BATTLE: In combat the Japanese soldier is strong and hardy. On the offensive he is determined and willing to sustain sacrificial losses without flinching. When committed to an assault plan, Japanese troops adhere to it unremittingly even when severe casualties would dictate the need for abandonment or modification of the plan.

Good Discipline

The boldness and courage of the individual Japanese soldier are at their zenith when he is with his fellows, and when his group enjoys advantages of terrain or fire power. He is an expert at camouflage and delights in deceptions and ruses. Japanese troops obey orders well, and their training and discipline are well exemplified in night operations.

Surrender is considered a great disgrace not only to the soldier but to his family, and his religion teaches the Japanese soldier that it is the highest honor to die for his emperor . . . "Fight hard," the Japanese soldier is told. "If you are afraid of dying, you will die in battle; if you are not afraid, you will not die . . . Under no circumstances become a straggler or a prisoner of war. In case you become helpless, commit suicide nobly."

Yet in recent operations there have been pronounced indications that Japanese soldiers are not too eager to die, especially when the odds are against them. Heavy casualties, on occasion, have had a weakening effect on the morale of survivors; a Japanese order points out that "too many graves with markers are not good for security or morale."

Japanese units by no means always have been steadfast under fire; on occasion they have been routed "squealing like pigs." The group pattern of their lives as civilians, with its restraints of religion, deference to the head of the family, and subservience to the state, leaves an indelible impression on the individual soldier who is unimaginative and slow to improvise when thrown upon his own resources. Loss of officers is a great blow to Japanese units, for the enlisted men and non-commissioned officers frequently fail to assert the self-reliance and initiative which their training system seeks to inculcate.

Poor Marksman

The Japanese soldier is a notoriously poor marksman; even snipers who are specially picked and trained men fail to capitalize upon the advantages which their infinite patience and skill in concealment otherwise would afford. In some combat areas it has been reported that Allied troops enjoyed virtual immunity to casualties from this type of fire at ranges greater than 50 yards, and snipers seldom have fired at moving targets.

While there have been local reports of their troops fleeing in disorder from Allied bayonet charges, the Japanese generally prefer this type of combat. Their training has emphasized the hand-to-hand encounter.

BATTLE PATTERNS

(The Fighting Forces)

Battle patterns, or battle drills, as we call this aspect of infantry fighting, is often miscalled "Minor Tactics" and consequently decried by those who learned their soldiering between wars. Battle patterns are not tactics but become part of a tactic when applied to enemy ground and circumstance in battle. Like other weapons, they are rigid, have their limitations and must be kept within these limits. They are not apart from other weapons but grow and change in accordance with the evolution of those weapons.

A new battle pattern is sometimes the direct result of a new weapon, such as the tank. The tank was evolved to solve two problems. First, to penetrate the deep trench and wire system of defence used in the last European War. Secondly, to exploit the penetration, in the soft back areas. The first use was directly in support of infantry and therefore patterns or drills had to be worked out and practised in conjunction with infantry.

Trench Clearing

Sometimes a new battle pattern is evolved to defeat an enemy pattern. Again, the last war produced a number of these. A typical example was the rigid drill evolved for trench clearing, with its detailed and numbered bayonetmen, bombers and riflemen. Again, it is frequently new terrain which demands a new pattern.

The North-West Frontier calls for one pattern, a pattern which grows and changes with experience and the introduction of new arms. The Burmese and Malayan jungles have led to the introduction of other new ones. If we go well back in the history of war we find the patterns clear and simple: the ponderous Greek phalanx with its long spears; the more flexible Roman maniple; or the battle pattern used by Frederick the Great of Prussia, a pattern designed by his father and based on concerted firing by infantry marching in step.

These were comparatively simple patterns, but to-day the terrific multiplication of complicated weapons and the rapid development of the third dimensional arm, the aeroplane, has caused a parallel increase and complication in battle patterns, while they still remain basically simple, each one interlocked and overlaid by others. Pattern is superimposed upon pattern, until we get that incredibly involved three-dimensioned fantasia, Combined Operations.

The critically minded with some battle experience may say "They do not function in practice." A little deeper thought on the matter, however, will reverse that opinion. If we take the sports which require team technique and tactics, e.g., cricket, we find that the Hobbs and Bradmans do not acquire their beautiful stroke-play by merely "having a go"; rather do these come from hours of concentrated practice at the technique. In football, too, why do professionals have much higher standards of play than amateurs? Because they practice daily, individual and collective drills — patterns — which, when applied on the playing-field, produce that good combination which so impresses us as spectators.

Game of War

So it should be in the infinitely more complicated game of war. Never should Bill of No. 1 Rifle Group be in the slightest doubt as to where Sgt. Eyewash's section is . . . If they are well trained they are moving in the correct section pattern and in correct relation to the platoon pattern.

MARLBOROUGH A

(Condensed from an article by Lt. Col. A. H. Burne, D.S.O., in The Fighting Forces)

A comparison of the merits and qualities of two great generals is always a fascinating study, and never more so than at the present day when we are fortunate in possessing several soldiers who can be described as "great generals." The one I select for this study is Field Marshal Montgomery, partly because his deeds and the reasons for them are better known than those of any other of our generals. I select the Duke of Marlborough for comparison because he is probably regarded by most soldiers as the greatest general that we have produced. . .

Let us, therefore, see if we can discover in what respects the Knight resembles the Duke. To do it I propose to review Marlborough's campaigns and battles very briefly, noting as we go along any points of resemblance between the two men and their methods.

Campaign of 1702

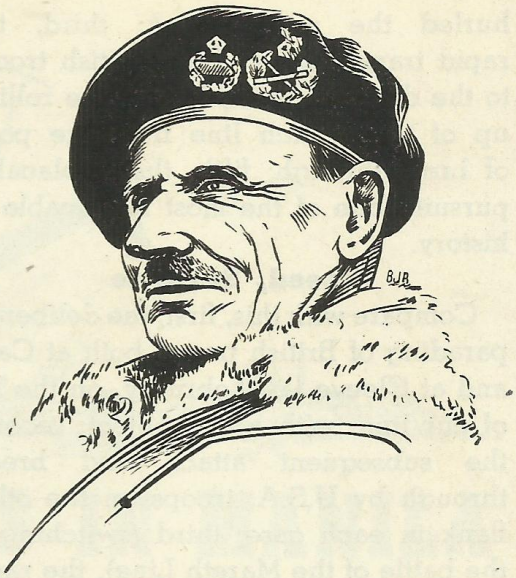
I open, then, with that curiously neglected campaign of 1702, Marlborough's first, and not the least remarkable. Let us consider the situation in which he found himself when he assumed command of the Allied army at Nimwegen in July, 1702. . .

The military position was . . . bad. A short while before the army had been driven back in confusion from Cleeve to Nimwegen. Boufflers with an exulting French army stood opposite him on the line Udem to Goch. Indeed the situation was strikingly similar to that at the opening of our recent offensive by the Canadian 1st Army, which held practically the same line as did Marlborough's army on the eve of his offensive.

The direction of attack was, however, quite different. Marlborough discarded the proposed attack on Cleeve and after prolonged wrestling with the Dutch persuaded them to agree to a much more imaginative one. "Patience will overcome all things," he declared at this time. Do we not detect a similar patient persistence in Montgomery—that careful calculation and quiet building up of the requisite strength before commencing an attack, that refusal to be rushed before he is quite ready? He waited no less than seven weeks after smashing Rommel's attack on the Alamein line before launching his famous counter-attack.

But the newly-appointed commander-in-chief had to acquire something more than the mere acquiescence of the other generals in his plan: he had to acquire their confidence in his leadership. This he accomplished in a remarkable manner. He took them out for a ride one morning in sight of the French camp. Pointing to it he uttered the memorable words: "I will soon rid you of those troublesome neighbours!" Boastful words! But he was as good as them. Rapidly throwing bridges across the Meuse (not Maas, please!) he dashed across them with his whole army under

'ND MONTGOMERY



cover of darkness, and advanced rapidly south for five days. The effect was instantaneous: Boufflers hastily struck his camp and marched south also, recrossing the Meuse at Roermond in order not to be cut off from France.

It Came Off!

Declaring in advance what you are going to do is a dangerous device for a general to adopt, but the greater the risk the greater the reward—if it comes off. And it did come off! Does not this bring to mind the situation of Montgomery at the outset of his command of the 8th Army, and of his confident boast: "We will knock Rommel for six out of Africa"?

We note that the essence of Marlborough's plan was a fierce attack on the left flank with his best English troops, in order to draw in the French reserves to that wing, thus weakening the centre which was then attacked and penetrated by the cavalry.

The plan worked admirably and if we may compare tactics with strategy we are reminded of the opening moves of the Falaise campaign, where the Anglo-Canadian attack on the left drew against it the cream of the German reserves, thus reducing the strength of the other German wing, and thereby making it the easier for the American 3rd Army to break through.

The feature of the year 1705 was the breaking of the famous Lines of Brabant, a formidable line 60 miles long, stretching from Antwerp to Namur. Slightly longer than the lines of Alamein they had this in common, that the flanks were practically impregnable; Marlborough solved the problem by a combination of secrecy, speed and surprise. Forming up his army ostentatiously opposite the southern flank of the line, he did a sudden forced march by night, 20 miles in all, and surprised the French garrison in the centre. Breaking through here, he marshalled his cavalry in a headlong attack on the French cavalry of reserve who were hurrying up, and scattered them to the winds.

Now turn to Alamein . . . By various ingenious means Rommel was induced to believe that our main force was facing the southern end of his line, but by a rapid night march of approximately the same length as Marlborough's the bulk of our armour was transferred to the right centre of the line, and there the main attack was thrown in. Unlike Marlborough's it lasted several days, but the result was the same in both battles.

We come to "the year of victories," 1706. The Battle of Ramillies was, in my opinion, Marlborough's most brilliant victory. Consider its dominant features. First, a deliberate parading of the British troops on the right of the line, with the intention of attracting thither the attention of the French commander and the cream of his army; second, a consequent weakening of the other flank of the French line, against which was then

hurled the main attack; third, the rapid transference of the British troops to the decisive point; fourth, the rolling up of the French line from the point of break-through; fifth, the implacable pursuit—one of the most implacable in history.

Speed, Surprise

Compare with this, first, the deliberate parading of British troops both at Caen and at Cleeve last February, on the left of our line, with a like object; second, the subsequent attack and break-through by U.S.A. troops on the other flank in each case; third (switching to the battle of the Mareth Line), the rapid transference of our armour from right to left flank; fourth, the consequent penetration at Hamma and rolling up of the Axis position; fifth, the rapid pursuit to El Akarit and still more rapid to Enfidaville. The fundamental principles of swiftness and surprise are equally evident throughout.

We can pass by 1707 and come to 1708, the year of Oudenarde and the seventh siege of Lille. The campaign opened badly by the recapture by the French of Bruges and Ghent. Marlborough was lying at Brussels, and instead of advancing straight against the enemy he resorted to his successful strategy of 1702; that is, he marched west across their lines of communication. The result was equally successful; the French fell back hurriedly, and the two armies collided at right angles near Oudenarde; whence the Battle of Oudenarde. The chief point about this manœuvre for our present purpose is speed and the demeanour of the troops under Marlborough's command, during the wonderful march to the battlefield.

Need I labour the comparison with the 8th Army and its confidence in its leader and its consequent high morale?

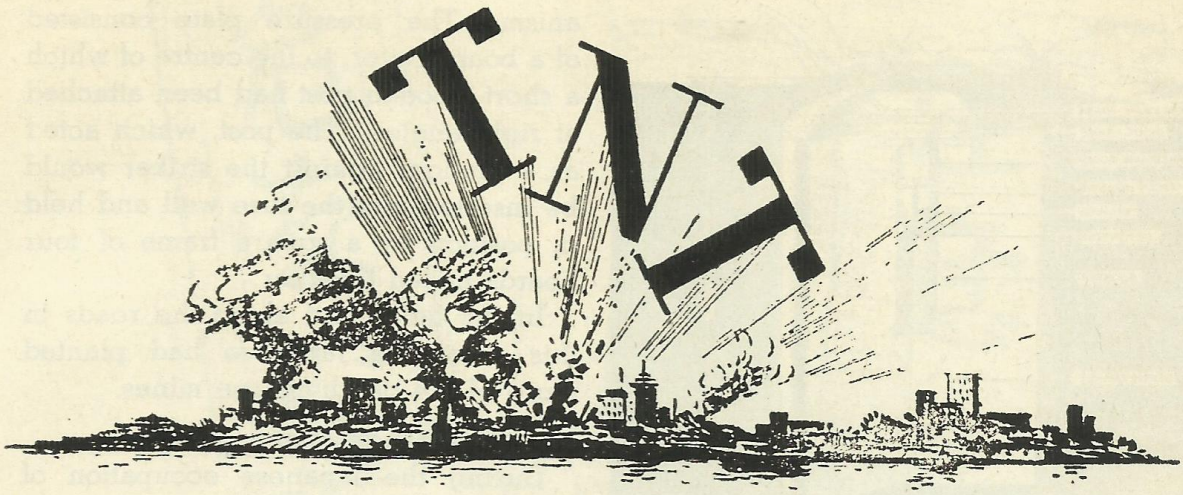
As for the actual battle, we can detect a striking likeness to that of the Falaise pocket. In each, the first attack is carried out by British troops on one flank. To this flank the hostile commander's attention is drawn, as also his best troops; in each the second attack is carried out by Allied troops (Dutch and U.S.A.) and it takes the form of a wide-flung enveloping movement; lastly, the two flanks converge on one another in a great "pincer" movement, and the hostile army makes a wild rush to escape from the fast closing jaws. In each case the unerring eye of the master detected the opening presented to him and took instant advantage of it.

In the preliminary moves before the siege began he (Marlborough) made a very shrewd prediction. . . . of the French moves, which prompted Mr. Churchill to write: "His power of putting himself in the enemy's shoes and measuring truly what they ought to do . . . was one of his greatest gifts."

Montgomery's Predictions

Now it is credibly reported of Montgomery that long before the Battle of Alamein he told some assembled officers that he estimated it would take eight to ten days to nibble through the Alamein position (it took ten) and that Rommel's armour would meet him in a final contest at Aqaqqar —which it did. His further predictions as to the course of events have all except one, proved true. Consider, in particular, that far-reaching plan that led to the fall of Antwerp. I believe that some officers, when they saw the word Antwerp in orders while they were still on the wrong side of the Seine, were frankly incredulous. Consider the mixture of audacity and complex planning involved in this breath-taking operation.

The year 1709 was that of Malplaquet, a battle in which the rival commanders Marlborough and Villars, both rose to the height of their powers . . . Yet the mastery of Corporal John shone clearly through it. First, the attack on the two wings, leading to a certain dispersal



JAP DEMOLITIONS IN MANILA

(*U.S. Intelligence Bulletin*)

The battle for Manila, in which American troops for the first time engaged the Japanese in combat in the streets and buildings of a major city, uncovered a pattern for destruction by demolition that surpassed all previous use of mines and explosives by troops of the Japanese Empire.

As U.S. troops pushed into the outskirts of Manila early in February, the Japanese commander on Luzon chose to abandon the Philippine capital, except for a comparatively small, fanatical force which was left behind to delay the Americans, destroy the city, and ultimately die in its ruins. Typical of the defences encountered were those in Loloma Cemetery.

Occupying an area of half a square mile, Loloma Cemetery is located in Northern Manila and from it the Japanese were able to cover an airfield and two highway approaches to the city. Here the Japanese had built pillboxes, dug trenches, and emplaced two 120-mm dual-purpose naval guns. Three 25-mm single-barrel, naval anti-aircraft

(*Continued on Page 32*)

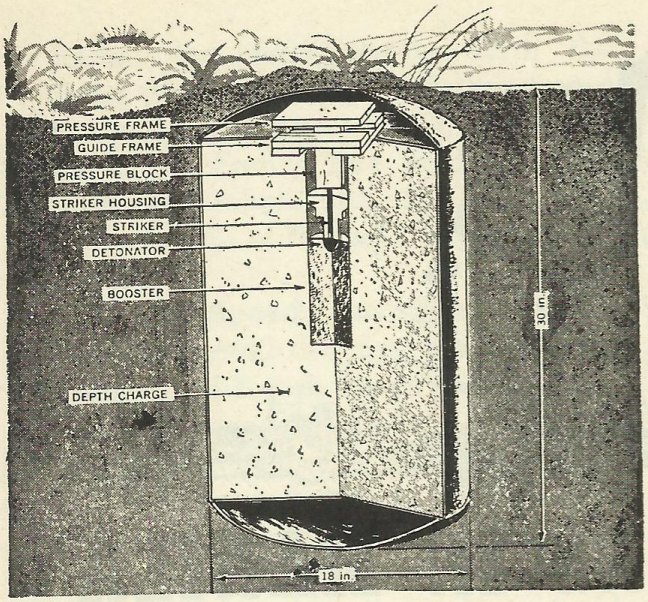
MARLBOROUGH

(*Continued from Page 30*)

of the French troops, as at Blenheim; then the massing of the guns in the centre and the breaking of the line at this point, and lastly the cavalry action beyond the point of penetration. We have here once more the lineaments of Alamein; all that is lacking is the pursuit after the battle.

The last campaign of all, that of 1711, is considered by some to be the most brilliant of the lot. Villars had constructed his boasted Lines of Ne Plus Ultra and Marlborough penetrated them by the same stratagem.

Drawing up his army ostentatiously on the western end of the line he appeared to make elaborate arrangements to attack, whilst all the time his heavy artillery was en route for the opposite flank. Then by his most famous forced night march he completely outwitted and outmarched his opponent Villars and crossed the line almost as easily as he had crossed those of Brabant. In the course of this great march he sent a simple message down the line: "The Duke desires that the infantry will step out." And step out they did with a vengeance! The spirit of the 8th Army!



Quarter-section sketch of a Jap naval depth charge improvised as a land mine.

guns had been installed in pillboxes for ground fire. These pillboxes resembled mounds covering tombs, were sodded, and had tombstones or statues mounted on them.

Despite these elaborate defences, the Japs did not defend Loloma. They withdrew, leaving behind an extensive mine system on the northern and eastern approaches to the cemetery. Among the graves and along the inner road network, 120 naval anti-submarine depth charges had been laid about 20 to 30 feet apart. These charges had been expertly camouflaged with sod, and could be detonated by a man's weight.

The Japanese depth charge, which contains 250 pounds of explosive, is 30 inches long and 18 inches in diameter, and resembles an ash can. A well, or tube, set in one end of the charge, holds a booster, a detonating cap, and a simple striker pin.

There is no safety pin or retaining spring to hold the striker immobile. After a mine had been buried, the Japs set an improvised wooden pressure plate in contact with the firing mechanism. The pressure plate consisted of a board cover, to the centre of which a short wooden post had been attached at right angles. The post, which acted as a plunger against the striker would be inserted into the fuze well and held in position by a square frame of four boards nailed together.

In the fields and along the roads in this area, the Japanese had planted more of the depth-charge mines.

Buildings Were Arsenals

During the Japanese occupation of Manila, the enemy had turned many buildings and homes north of the Pasig River into arsenals and munitions dumps. These arsenals were defended by 20-mm and lighter-calibre machine guns and depth-charge mines buried along the approaches. The Japanese would set fire to these buildings as they withdrew, and the mines within them would go off with terrific explosions.

Besides the depth-charge mines, the Japanese in some sections of the city reverted to their now common practice of burying aerial bombs as mines. Dewey Boulevard, Manila's waterfront thoroughfare, was mined for some distance with 250-pound bombs. A similar minefield of these bombs—in this case, electrically detonated—was located in the outskirts of the city.

JAP AIMING MARK

(From a British battalion commander in Burma in Current Reports from Overseas.)

"During an ambush that we had set one bright moonlit night, a Bren gun well sited at the foot of a large tree failed to open fire. Later we found the Bren gunner dead, and a line of bullet holes running down to the roots of the tree from a point about 10 feet above the ground.

"Other trees near it were pock-marked in the same way. The Japanese unable to see what was at the foot of tree because of the shadow but able clearly to see their stems in the moonlight, had taken the trunks as their aiming marks and sprayed their fire downwards."

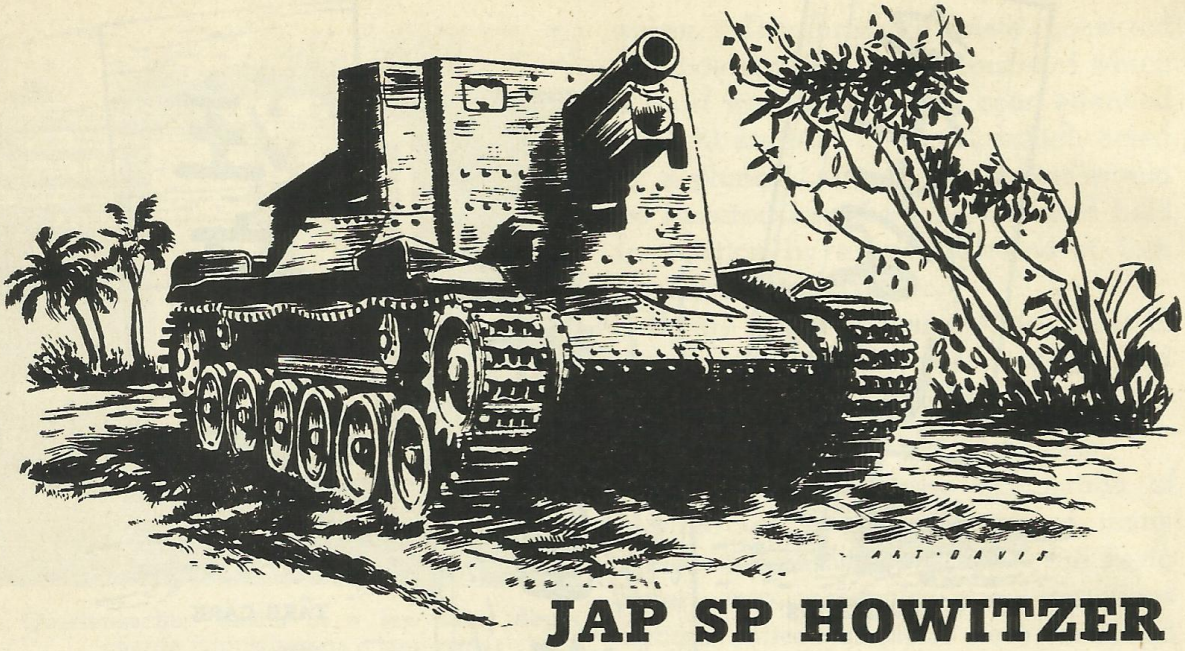
JAPANESE SIGNPOSTS

(U.S. Intelligence Bulletin)

The inability of the average American or other Allied soldier to read and interpret Japanese signs sometimes causes an unnecessary loss of life. The Japanese persist in regarding their language as a code undecipherable to Allied soldiers, and do not hesitate to mark openly with signs such danger spots as areas and installations which have been mined or booby-trapped.

During the New Guinea campaign, five men in a jeep were killed when they drove into a minefield which had been marked plainly for Japanese troops to avoid. Only after the accident was it discovered that the area was defined by some 20 signs—all in Japanese.

In Japan proper, extensive use is made of signs and notices. Because this tendency has carried over into army life, it would be well for U.S. troops to take advantage of it and memorize the principal warning signs likely to be encountered in the field. For the benefit of those interested, they are published on this page.



JAP SP HOWITZER

Capture on Luzon of a Model 38 (1905) 150mm howitzer mounted on the chassis of an improved Model 97 (1937) medium tank gives U.S. forces their first specimen of Japanese self-propelled artillery. (See sketch above).

Appearance of such a weapon in combat had been expected since October 1941 when the British reported the existence of a Japanese self-propelled gun, believed to have been an experimental model. The self-propelled version of the 150mm howitzer is reported to have a maximum depression of –5 degrees and a maximum elevation of 30 degrees. No details of traverse are available. The howitzer and its crew are protected by a shield, 1 inch thick in front and ½ inch thick on the sides.

It is surprising to find the Model 38 howitzer used in this self-propelled role, since it had been regarded as obsolete because of antiquated design, low model velocity and slow rate of fire.

The Model 97 (1937) medium tank, the chassis of which has been adapted for this self-propelled howitzer, is the most modern Japanese medium tank encountered to date. The complete tank weighs approximately 15 tons. As far as is known, the chassis of the original and improved models of this tank are identical. Both have a suspension with six bogie wheels and front-sprocket drive; a 12-cylinder, air-cooled Diesel engine developing 150 horsepower at 1,500 revolutions per minute; and frontal armour thickness of 25mm (0.98 inch).

It is comparatively easy to know what you want to do in any kind of war. Leadership consists in knowing whether you *can* do it — the risks you ought to take. In the jungle the chief risks for the higher commander, brigadier and upwards, are administrative. He must learn to be a judge of administrative risk.

—Lt. Gen. Sir William J. Slim, Commander 14th Army, in Current Reports from Overseas.

NEW HAND GRENADE

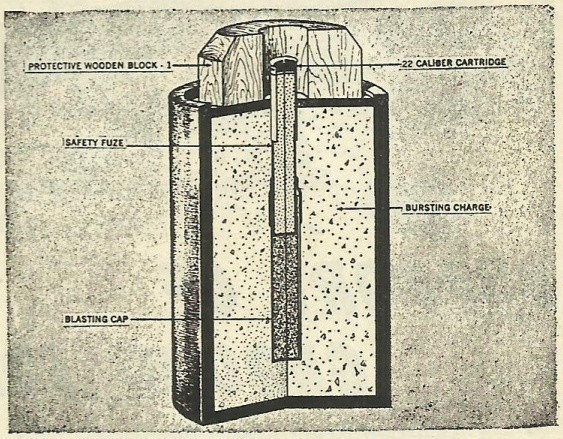
(U.S. Intelligence Bulletin)

A new Jap hand grenade of simple design, apparently manufactured in a Manila factory, made its appearance in the fighting on Luzon. (See sketch.)

A substitute for standard types, this grenade has been found in two main models—one with a cast body, the other manufactured from 3-inch sections of galvanized iron pipe—and is 2 inches in diameter. The grenade is filled with TNT, and, in the case of the pipe sections, the ends are closed by metal disks.

Blasting Cap

The detonator consists of an ordinary blasting cap crimped to a 1½-inch length of safety fuze. The other end of the fuze is crimped in a .22 calibre rimfire cartridge. This whole unit is set into the top of the grenade through a 1-inch length of iron tube large enough to hold the cartridge with the rimfire end exposed. A small hole is punched in the cartridge near its base to form an escape port for smoke from the fuze when it is ignited. The fuze is ignited by striking the exposed base of the cartridge against a hard object. Some grenades have been found with



small, wooden protective covers fitted over the cartridges.

A Japanese instruction sheet found in a box of these grenades gives the following directions:

1. Remove paper wrapping (or protective wooden block).

2. Upon striking the detonating cap against a hard object such as a rock, you will hear a weak sound.

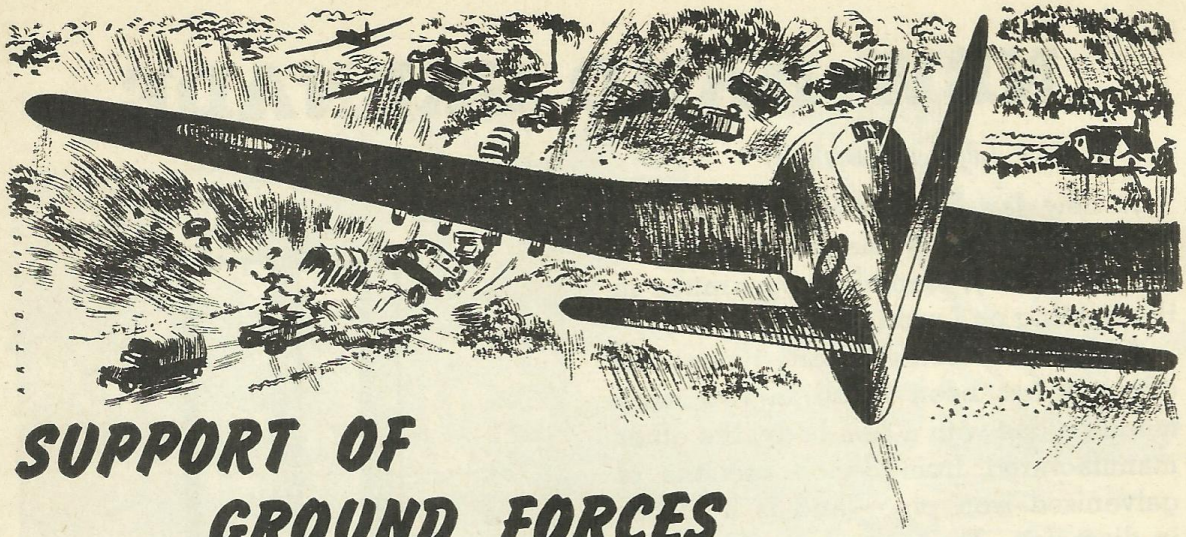
3. Smoke will appear from the hole. Grenade will burst about 5 or 6 seconds after detonation . . . There is likely to be a misfire if the detonating cap is struck incorrectly. It is of course very dangerous to handle a faulty grenade; therefore special precautions must be taken.

INTERROGATION

(Current Reports from Overseas)

"We sometimes use a photographic interpreter and the latest air photographs to help with the interrogation of prisoners. The rough location of positions, as reported by prisoners, can be pin-pointed, and the scrutiny of photographs will often stimulate the memory of prisoners and so bring out additional information. Photographs also permit an immediate check on a prisoner's veracity, and he is apt to be very careful when he sees a photograph slipped under the stereoscope to verify any statement he has made."

—From a U.S. Army Source.



SUPPORT OF GROUND FORCES

(Current Reports from Overseas)

Aircraft equipped with rocket projectiles have been used on a large scale in support of the ground forces in many recent operations. The object of these notes is to make known the type of targets against which this weapon has been used most successfully, and the results it has achieved.

Types of targets

The following are suitable targets for rocket projectiles:

(a) Tanks;
(b) "Soft skinned" vehicles;
(c) Locomotives and rolling-stock;
(d) Headquarters and strongpoints in villages;
(e) Field artillery.

The following targets, though they have been attacked by rocket projectiles, are not normally regarded as ideal:—

(a) Small bridges and lock gates;
(b) Beach obstacles;
(c) Supply dumps;
(d) Power stations;
(e) Pillboxes.

Results achieved

Every attack by rocket projectiles has had a most profound effect on the enemy's morale, and on many occasions tanks and vehicles have been abandoned undamaged. The following paragraphs contain notes on the effect of attacks by rocket projectiles, based on experience to date.

The heavy rocket projectile penetrates armour on the side, back or top of a German Mark VI tank, and there is ample evidence to show that many of these tanks have been destroyed. A direct hit in the same parts of the Mark IV and V tanks, whose armour is thinner, is even more effective.

A "soft skinned" vehicle is destroyed by a direct hit, but since the effect of a near miss by a rocket projectile is slight, 20 millimetre cannon and machine gun fire are often more effective.

A direct hit on the wheels of the locomotive may cause the whole of a moving train to be derailed.

Rocket projectiles are a very effective weapon against headquarters and strongpoints in village; but, in order to ensure that buildings are damaged sufficiently to prevent the enemy from using them again, a heavy scale of attack is necessary.

A direct hit by a rocket projectile knocks out a field gun, and a near-miss has a good anti-personnel effect.

Attack In Mortain Area

The following account of an action at Mortain illustrates the efficacy of an attack by aircraft firing rocket projectiles.

Early on 7 August, 1944, the Germans launched a counter-offensive against the Allied flank in the Mortain area.

Weather conditions were such that air attack was not possible before mid-day, and by that time the enemy had made considerable progress. The American Air Forces asked the R.A.F. to give them a hand as soon as the weather permitted, and certain Typhoon squadrons were earmarked for the purpose. As soon as the weather improved—and by that time the ground situation had become critical—a large effort was applied.

The first squadrons were despatched soon after mid-day, and the attacks were maintained until dusk. Altogether 294 sorties were flown. No enemy aircraft were encountered, opposition from flak was slight, and our aircraft, being able to fly low over their targets before they delivered their attacks, had no difficulty in identifying the targets. Attacks were made first on the head and tail of the column in order to bring it to a standstill, and then against its entire length.

It was not possible to carry out a ground examination of the results of the attack until two weeks later because the area was still a battleground; and in the meantime the German recovery service was able to complete a considerable salvage programme, as eye-witnesses have testified.

It is, therefore, proper to assume that the vehicles then found represented a small proportion only of the actual number destroyed or damaged, and no doubt an even smaller proportion of those which, though damaged only slightly, had been abandoned by their crews.

The results confirmed on the ground were as follows:

	Destroyed	Damaged	Abandoned (either slightly damaged or untouched)
AFVs....	24	10	5
Transport.	32	23	3

The results claimed by the pilots were as follows:

	Destroyed	Probably destroyed	Damaged
AFVs.....	84	35	21
Transport...	54	19	39

Although it is particularly difficult to attribute destruction or damage to a particular arm or weapon, in view of the numbers of vehicles that were found surrounded by rocket craters, and the numbers that bore almost certain evidence of rocket or 20 millimetre strikes, the pilots' claims appear to have been reasonable.

Every soldier who witnessed the attacks eagerly applauded their success, and readily conceded that if the enemy had continued to attack with the determination he had shown before the Typhoons joined in the battle, our troops might well have been unable to hold him.

FIRE AND ASSAULT

(Current Reports from Overseas)

"The practice of dividing patrols into two definite groups — fire group and assault group — proved successful. The men that formed the fire groups regarded any enemy interference as their own responsibility."

—From a British Army Source.

NIGHT RECONNAISSANCE

(Current Reports from Overseas)

"Reinforcements need more training in night patrols. Above all they should be taught to move silently in boots, and to halt at least every 100 yards for one minute in order to listen. To hear the enemy before he hears you is the golden rule."

—From a British Army Source.

EXERCISE BEAVER

"Exercise Beaver" is an exercise conducted at Petawawa Military Camp in which the latter stages of Corps Training for ORs and qualifying courses for officers are combined.

When Exercise Beaver was first tried in June 44 it was not received with open arms due to its disruption of the peaceful routine of the camp and the obvious undesirability of spending four or five days out doors in the wilds of Northern Ontario. Since then, however, eight Exercises have been held with such success that they are now regarded with a sense of pleasurable anticipation by all ranks concerned.

Training for Overseas

The Exercise is an introduction to the type of training and duties that the soldier must become accustomed to in order to take his place in the army overseas. It gives practical experience to all ranks under field conditions.

The directing staff is made up from the permanent camp staff, and equipment and men are assembled to form a battery of eight 25-prs. While this on the surface appears simple, in a training centre it presents certain organization difficulties. The officers' course, for example, may have from 15 to 36 candidates, all of whom must be rotated through various jobs in the exercises.

There are two types of schemes, one for winter and one for summer.

The winter scheme provides a centralized bivouac area where the administrative staff control eating, sleeping and sanitation and to which all ranks return after the day's work.

The Beaver Exercises done during the winter of 1944-45 ran for five days and four nights and were planned to fit into a simulated tactical picture, continuity of which was provided by the Exercise narrative. Troop officers were required to pass information on all phases of the Exercise to the gunners taking part.

In a winter exercise, care of the men under field conditions is, of necessity, a matter of the utmost concern to the troop officers. Special attention must be paid to the shelters that the troops erect for themselves. On the first night men tend to huddle around the fire instead of bedding down. Persuasion must be used to convince them that a shelter made of boughs and poles, covered with vehicle tarpaulins and floored with shingle-laid fir and balsam bough, can be quite comfortable. The 16-man shelters face one another with a trench fire in between. Each man has six blankets. No casualties have been experienced at 15° below zero.

Summer Exercises

Summer Exercises last an extra day to provide for more tactics. The battery proceeds to HEENEY LAKE, about 40 miles from Petawawa. Excellent bivouac and training areas are available and the 40 mile journey is used to check march discipline and traffic control. Provost personnel were used for this on the last Exercise.

Map reading, deployment, hygiene and sanitation, cooking in the field, night exercises and bivouacking are practiced in the deployment area. On the return from HEENEY LAKE the battery assumes a support role and carries out live firing practice. These firing practices are designed to bring out lessons in troop shoots, link shoots, fire plans, FD (SOS) tasks, smoke and air-burst HE and continuous support.

Officers are assessed during the Exercise on their ability to carry out the instructions issued, on the execution of their duties in the field and parti-

SMALL ARMS CARE

(Condensed from U.S. Military Review)

Few boys grow up without learning to "tinker," whether it be with radios, automobiles or some other type of mechanical equipment. In normal life this is a habit to be admired and encouraged, and it has been a big help to the Army in finding men with mechanical abilities. But there are also occasions in the Army where tinkering is the cause of needless and costly damage to equipment.

This has proven to be the case in the instance of small arms, for many soldiers are attempting unauthorized disassembly and repair of their weapons. The result is that too many weapons must be sent in to higher echelon maintenance units for repair.

Damage Done

The damage that is done by the inexperienced soldier is almost unbelievable. For example, screw heads are ruined by the use of wrong-sized screw drivers or instruments never intended to be used as screw drivers. Set-screws, machine-screws and the like are changed without regard for interchangeability with the result that stripped threads render them useless. Parts of weapons are disassembled or assembled with force, which results in burring and damaging the parts. Care is not taken to protect disassembled parts, so loss or damage to the parts occurs. Tension or compression of springs is changed, trigger pull action is modified and damage usually results.

Modern weapons are manufactured by skilled technicians. Repairing them requires specific tools, the right amount of time and practiced hands — and these essentials are seldom, if ever, available to the soldier in the field. There are only two services the soldier is authorized to perform on his small arms — clean and lubricate. This includes, of course, field stripping, in which no tools are required. The pamphlet for the individual weapon specifies just what may and what may not be done in performing these services. Therefore, it is the unit commander's responsibility to see that the instructions in these pamphlets are made available to and learned by the soldier.

Cleaning and lubricating have been made as easy for the individual soldier as possible, so there is no valid excuse for failing to perform these services.

A rifle, carbine or pistol that is always cleaned soon after firing and for three successive days afterwards will keep its accuracy and dependability indefinitely. So far as the soldier is concerned, proper care, use and handling are the only other requisites for effective maintenance.

These few simple practices, if faithfully and carefully followed, can do much to keep high echelon maintenance of small arms at a minimum.

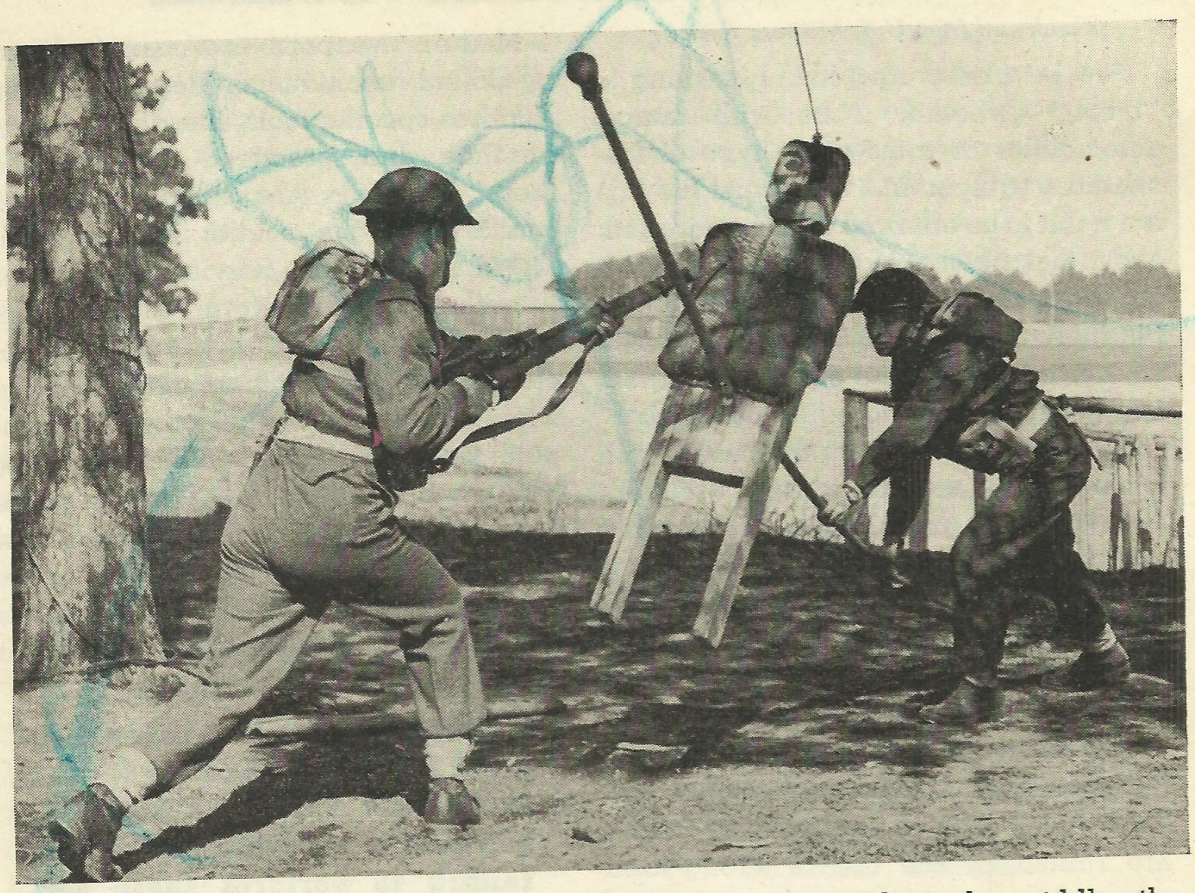
EXERCISE BEAVER

(Continued from Page 38)

cularly on their command and control.

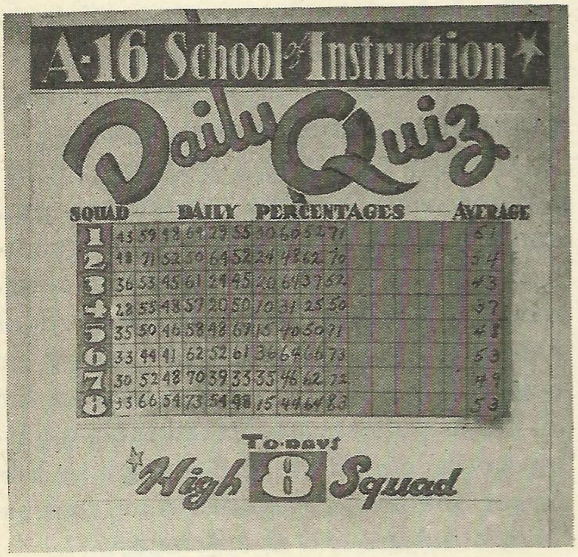
This Exercise is valuable for the experience it gives all ranks in living under field conditions and the experience it gives the officers in man-management. It gives all ranks an opportunity to fight their guns under difficult and varying conditions and enables them to apply to field conditions the lessons learned in the classroom. Officers learn a great deal about the administration of a troop or battery. It provides an opportunity for all ranks to become "formidable fighting men, confident and expert in the use of weapons and able to stand fatigue without undue loss of efficiency."

PASSING IT ON



BAYONET DUMMY

Here's another bayonet dummy that really jabs back at the recruit. It was designed and is in use at A-11 CMG TC, Camp Borden, and as the photo shows, the recruit has to step lively if he's to come off best in the encounter. The dummy is suspended from the branch of a tree so that it swings freely; by fastening a training stick in the middle, the instructor is able to move the dummy at will and give the recruit a lively time. In the photo the soldier with the bayonet is successfully executing a right parry.



DAILY QUIZ

Here is a photo of the Daily Quiz Board in use at the School of Instruction, A16 CITC, Currie Barracks, Calgary, Alta. This is a general knowledge quiz which takes five minutes before the first period each morning, each quiz consisting of six questions which require short, concise answers.

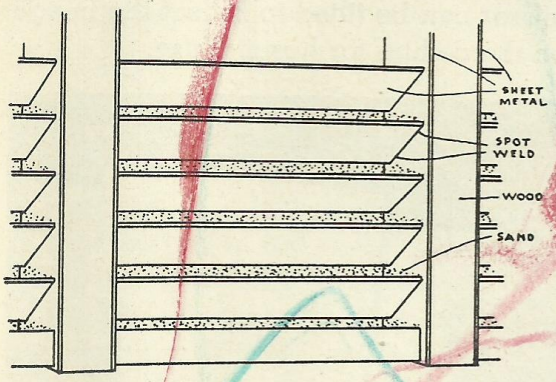
Majority of the questions deal with military matters, but there is a liberal percentage of general knowledge questions. Candidates are required to read Part 1 and Part 2 orders daily, and this is also a source employed in making up the quiz.

The competition is run on a squad basis and scores are posted each day on the board.

BULLET CATCHER AND TARGET HOLDER

No. 48 CI(B)TC, St. Johns, Que., has devised a bullet catcher for the indoor range which reduces range repairs to a minimum. This centre has also installed an improved target holder improvised from standard sandbags. Both ideas are shown in the accompanying illustrations.

The catcher is constructed of 3/8" steel plates measuring 12" x 36". These plates are spot-welded in series of five to vertical side panels, the plates being fixed at an angle of 50 degrees to the side panels, the lower edge being nearest the sand backstop. Where spot-welding is not feasible, the steel plates can be rivetted to the vertical side panels, using 1¼" angle irons.

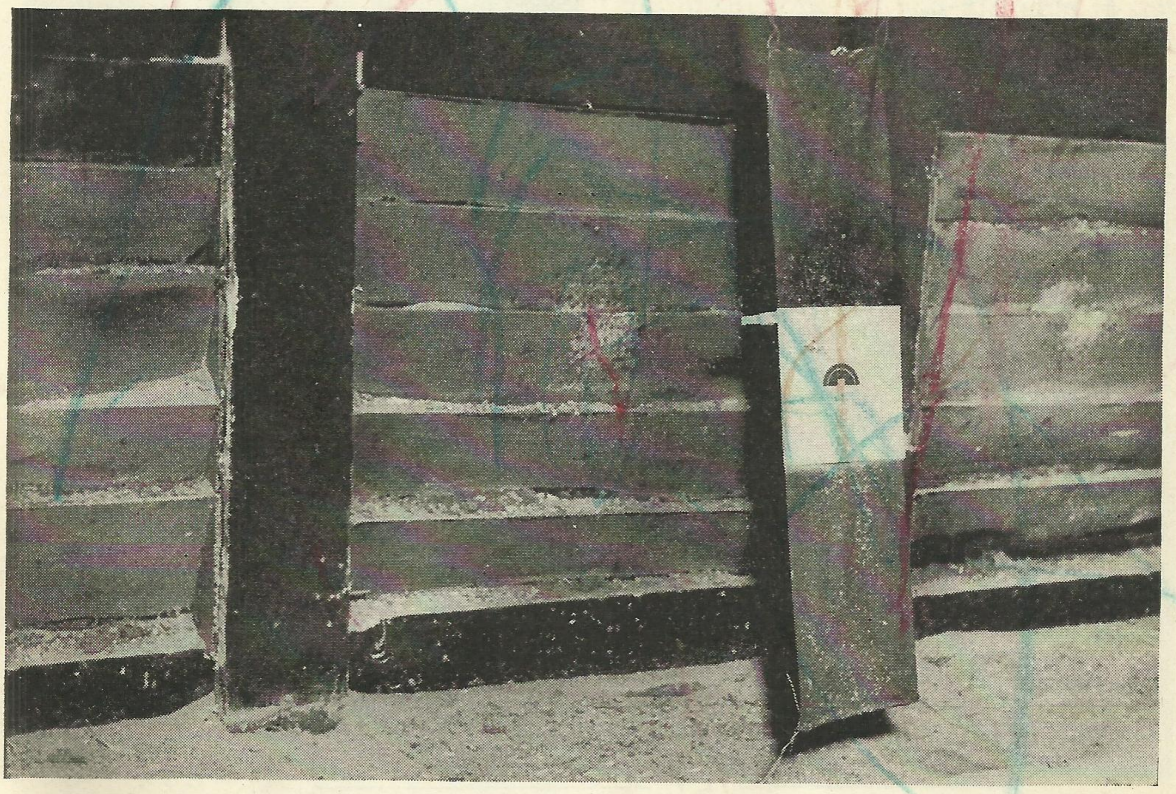


Spaces between the steel plates are filled with sand into which the lead falls. It has been found that there is no danger from ricochets, as spent bullets drop down into the sand. The plates are blackened with lamp-black, which requires renewal about once every six months.

No. 48 reports that installation of this type of bullet-catcher results in a large annual saving in wood.

The target holder is made from standard sandbags, the bags being folded lengthwise to the width of a No. 9c target and stitched with an ordinary stapling machine. They are suspended by means of haywire attached to the floor and ceiling of the range. The bags are lamp-blackened and the targets fastened to them by clothes pegs.

According to No. 48, this type of target holder practically eliminates visual distraction.



MIRROR USED FOR FILM STRIPS

Designed at No. 1 CWAC(A)TC, Ste. Anne de Bellevue, Que., a mirror arrangement is used to project film strips on the screen, as shown in the accompanying illustrations. This enables the instructor to control the class, operate the projector and also point out important features of the pictures.

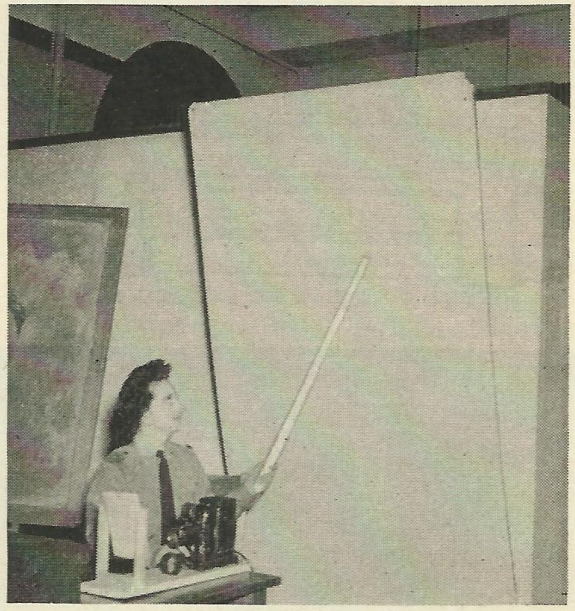
The SVE Model Projector faces the class and the mirror is placed in front of it, the image being projected on the screen. The instructor stands facing the class and controls the machine, which dispenses with the necessity of having an operator; it is also unnecessary for the instructor to stand in the centre or rear of the lecture room.

Mounted On Bracket

A mirror approximately 13½ inches high and 7½ inches wide (not including the frame) was found to be a satisfactory size. The mirror is mounted on a bracket approximately 8 inches high to permit it to swing. The length of the assembly board on which the projector and mirror are mounted is 24 inches. To fill the screen area, which is 48 inches wide, the assembly board should be set an appropriate distance from the screen.

Film should be inserted upside down as usual, but the side normally toward the projector should face the screen. If the film strip is not reversed in this way the image reflected from the mirror will be laterally inverted on the screen, or as though seen through the back of a picture held up to the light.

This device is easily made, and an added advantage is the fact that the mirror can be tilted to reflect the image on the ceiling for hospital use.

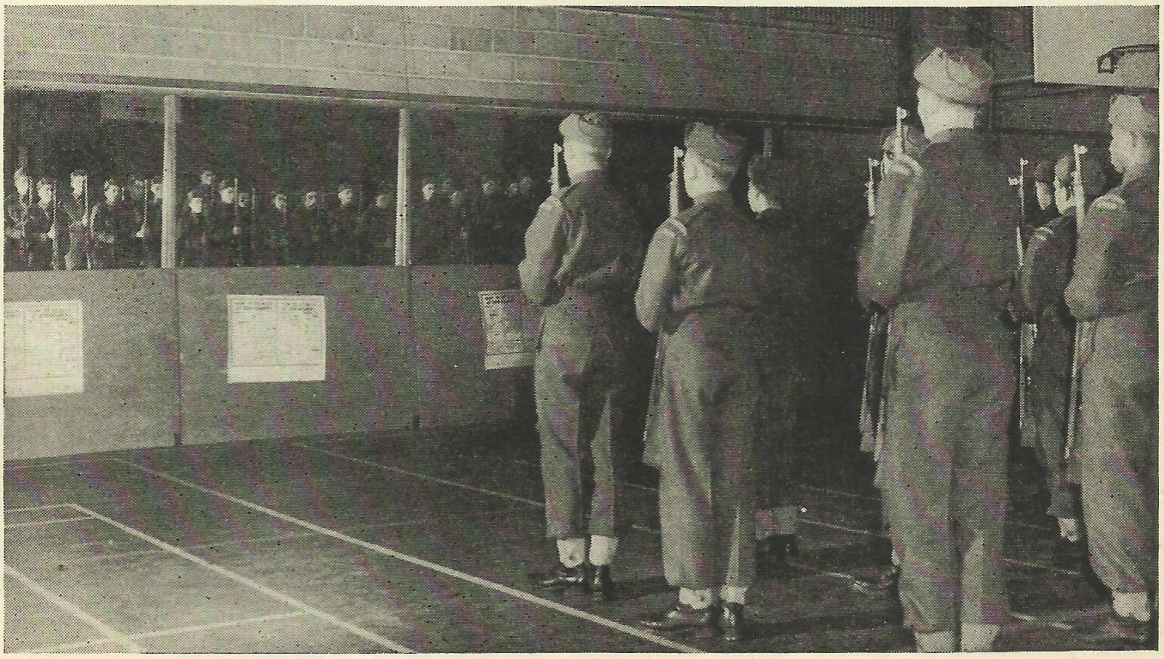


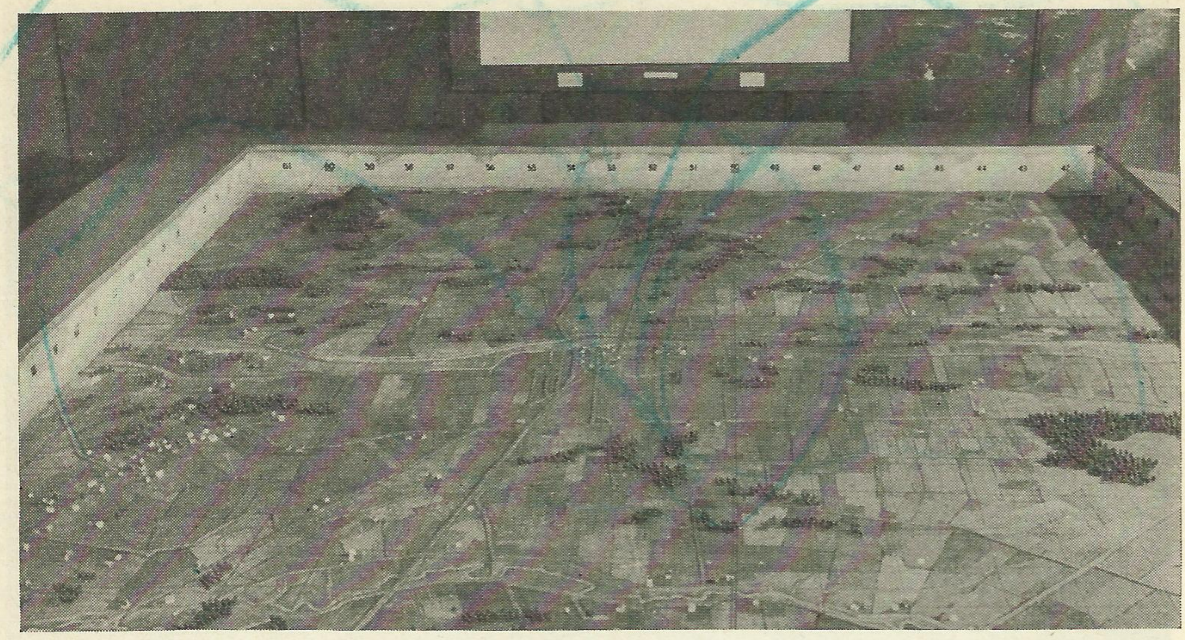
CLASS CONTROL

The above photo shows the class control method in use at A19 CASC TC, Camp Borden. The work being done is the 6-task system of vehicle maintenance, and the arrangement of vehicles and men permits the instructor to have full control of his class at all times. This principle applies equally well to other types of instruction.

IT'S DONE WITH MIRRORS

The McGill University Contingent, COTC, has installed mirrors in the Drill Hall to assist in drill instruction. When facing the mirrors, as shown in the photo below, recruits can watch for their own mistakes, thereby assisting the instructors. If you are able to get hold of some old mirrors, this is an excellent use for them.





RELIEF MAP ENLARGEMENT

A large-scale relief map enlargement, shown in the accompanying photo, has been constructed at No. 48 CI(B)TC, St. Johns, Que. This relief map was built in the form of a table 15 x 14 feet; around the table there is a table-height shelf wide enough to accommodate standard size map sheets, the relief map being sunk approximately 6" below the surrounding shelf.

The relief map is constructed on a Ten-Test base, and the ground features have been built up with Plastex covered with netting and plastered and painted. Scale of the table is 12" over 63,360", and the focal point is the city of St. Johns. Parts of both the St. Johns and Lacolle sheets are depicted. Aerial photos were used in the preparation of the relief map.

Grid Lines Shown

There is seating accommodation around the table for 40 men who use the shelf for writing notes. This table has been found very beneficial in teaching men the rudiments of map using. They are shown, in relief, various objects and features illustrated by conventional signs on the map proper. The proper grid lines are indicated by the use of fine piano wire, and the square numbers are marked on the upright edges around the relief map.

Before taking a route march, recruits are given a lecture on the relief map enlargement. The route they will be taking and the features on the ground are pointed out to them. This helps them to compare the ground with the map when they are on the march.

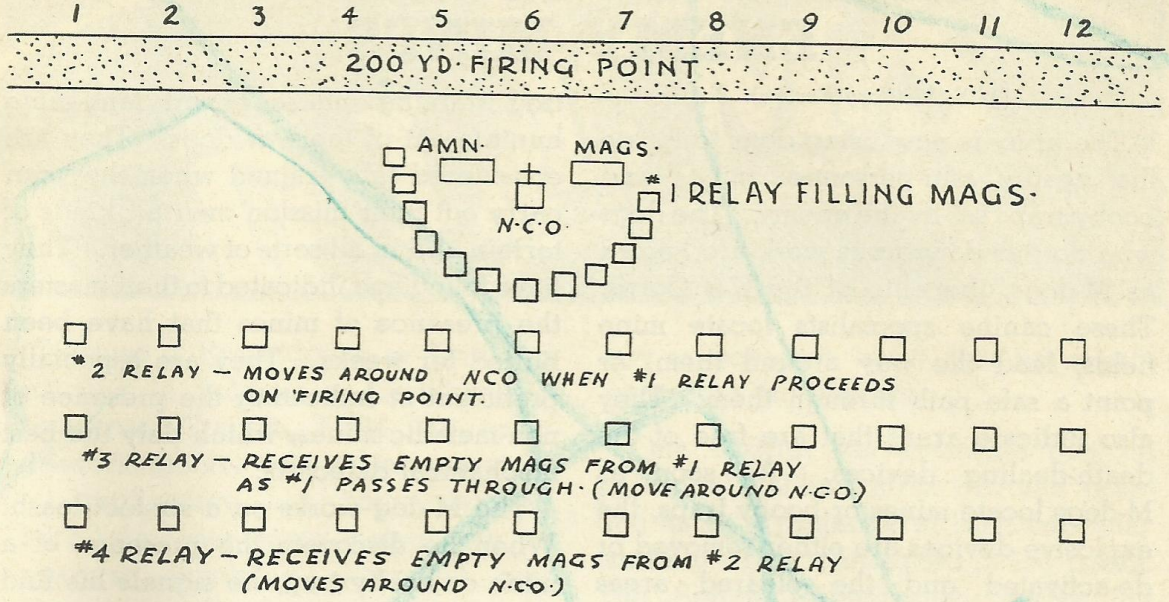
Other Training Centres should find No. 48's idea very helpful in teaching map reading.

MAP DISPLAY

Shown at the bottom of Page 45 is a display installed in the Drill Hall by No. 44 CI(B)TC, St. Jerome, Que., to assist in Map Reading instruction. The panels on either side of the large map showing conventional signs are hung on hinges, permitting the panels to be swung shut over the map. This forms a covering to protect the map when not in use.

Since this map display is located in the drill hall, this training device is protected from the weather and there is plenty of accommodation for a large class under instruction. The idea is quite simple — try it!. ⟶

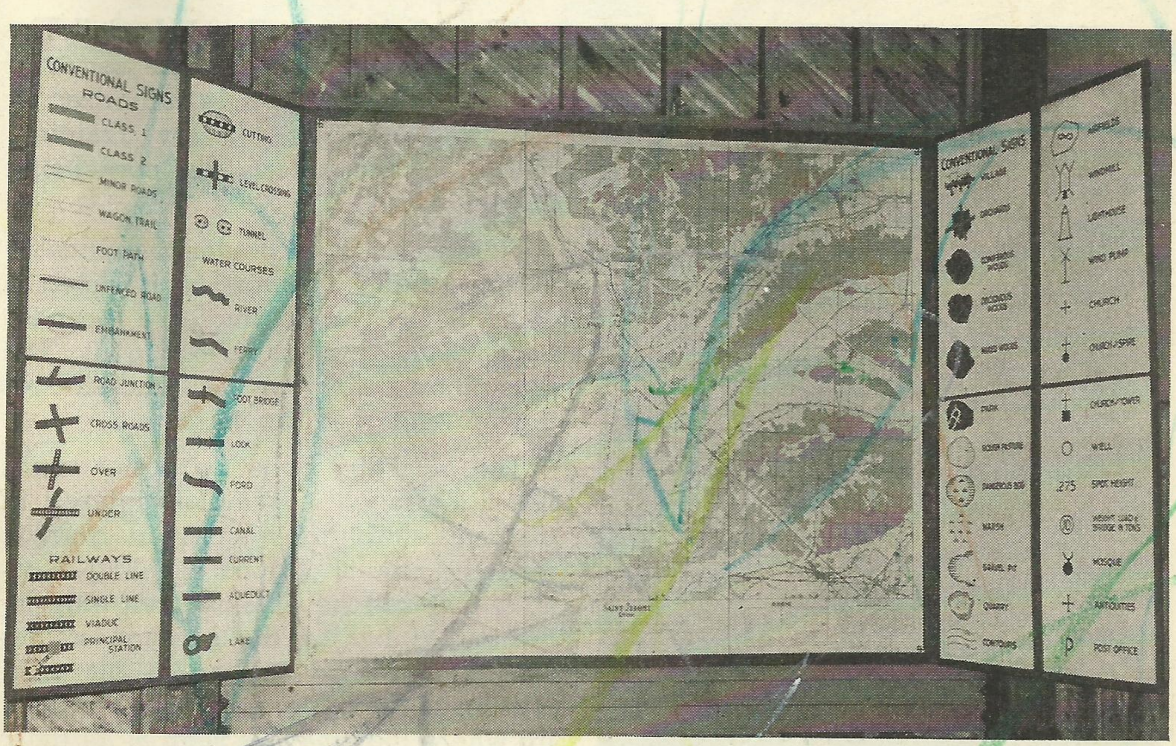
FILLING BREN MAGAZINES



In order that all reinforcement personnel will receive instruction and practice in Bren magazine filling, using live ammunition, a plan has been worked out by A15 CITC, Shilo, which should be of interest to CATM readers.

The new plan consists of having an NCO give instruction to each firing relay who will then fill magazines for their own use and proceed to the firing point. No. 2 relay can receive the same instruction and practice, while No. 1 relay is firing. On completion of firing by No. 1 relay, No. 2 proceeds to the firing point and No. 1 passes empty magazines over to No. 3 relay who then follow through the same procedure. This can continue through all relays. (See sketch above.)

This plan has been found satisfactory and utilizes the time of waiting relays to advantage.



(See description of this photo on Page 44.)

ARMY'S M-DOGS DETECT ENEMY MINES

(U.S. Military Review)

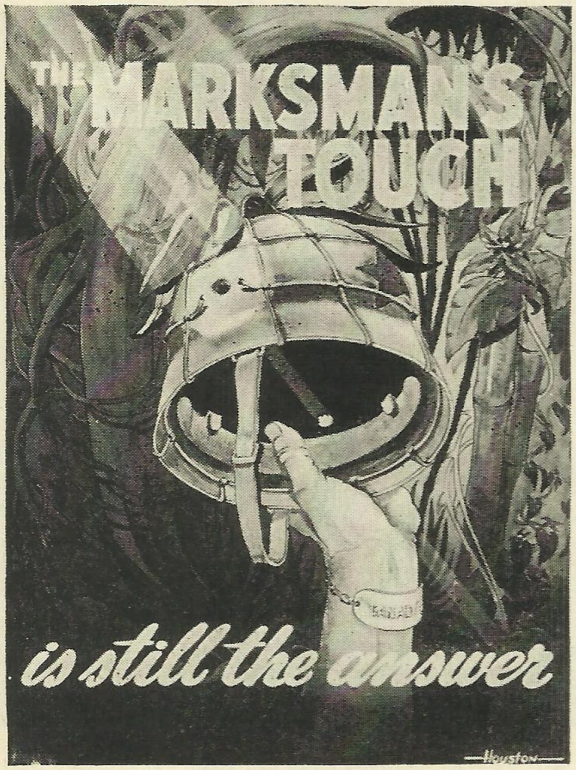
The army is now using dogs to locate the deadly anti-personnel mines and booby traps set by the enemy. The dogs who do this dangerous work are known as M-dogs, the elite of the K-9 Corps. These canine specialists locate mine fields, lead the way around them, or point a safe path through them. They also indicate areas that are free of the death-dealing devices. As soon as M-dogs locate mines or booby traps, the explosive devices are either removed or de-activated and the cleared areas marked with tape.

Take Basic

The Quartermaster Corps developed this mine-detecting method and began training dogs of the K-9 Corps for the work more than a year ago. Following the regular basic dog training, specialized training makes expert land-mine hunters out of the war dogs. They are considered fully-trained when they can carry out their mission over all kinds of terrain and in all sorts of weather. They have found and indicated to their masters the presence of mines that have been buried for weeks. They are especially proficient at indicating the presence of non-metallic mines, which defy the best mechanical detectors.

The M-dog works on a six-foot leash. When he discovers the presence of a mine or booby trap, he signals his find to his handler when at a distance of one to four yards from the concealed device. Each animal, however, invariably alerts at approximately the same distance each time, enabling the handler quickly to find and mark the exact spot of concealment.

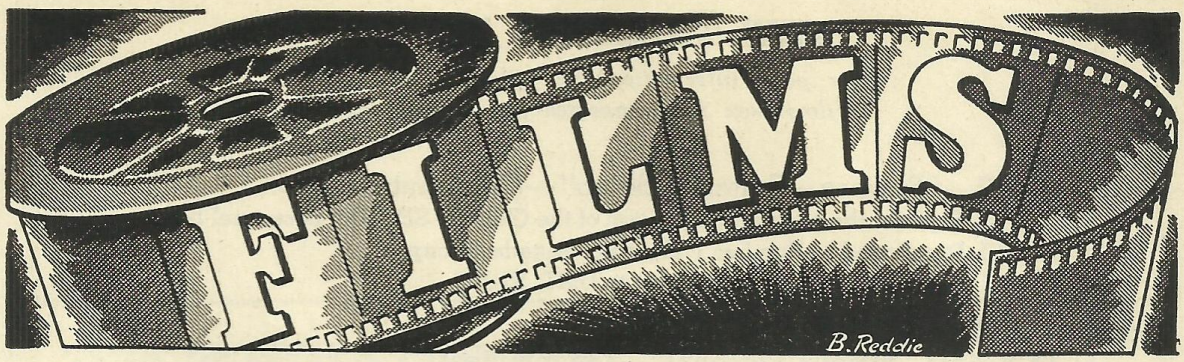
ANOTHER SHOOTING POSTER



"The Marksman's Touch Is Still The Answer" is the latest in the series of Musketry Shooting posters authorized by the Directorate of Military Training, NDHQ. This material is now being distributed.

This poster is particularly applicable to the Pacific Theatre, as it shows a Canadian soldier holding up a Japanese helmet with a bullet hole through it. The illustration speaks for itself and stresses the value of good shooting.

The Musketry Shooting poster series has done much to stimulate interest in marksmanship; they show in graphic form the results of good shooting — results that can be obtained not only by the sniper but by the average soldier who knows how to handle his rifle. Hence, these posters should be posted up where they may be seen at all times by men in training establishments.

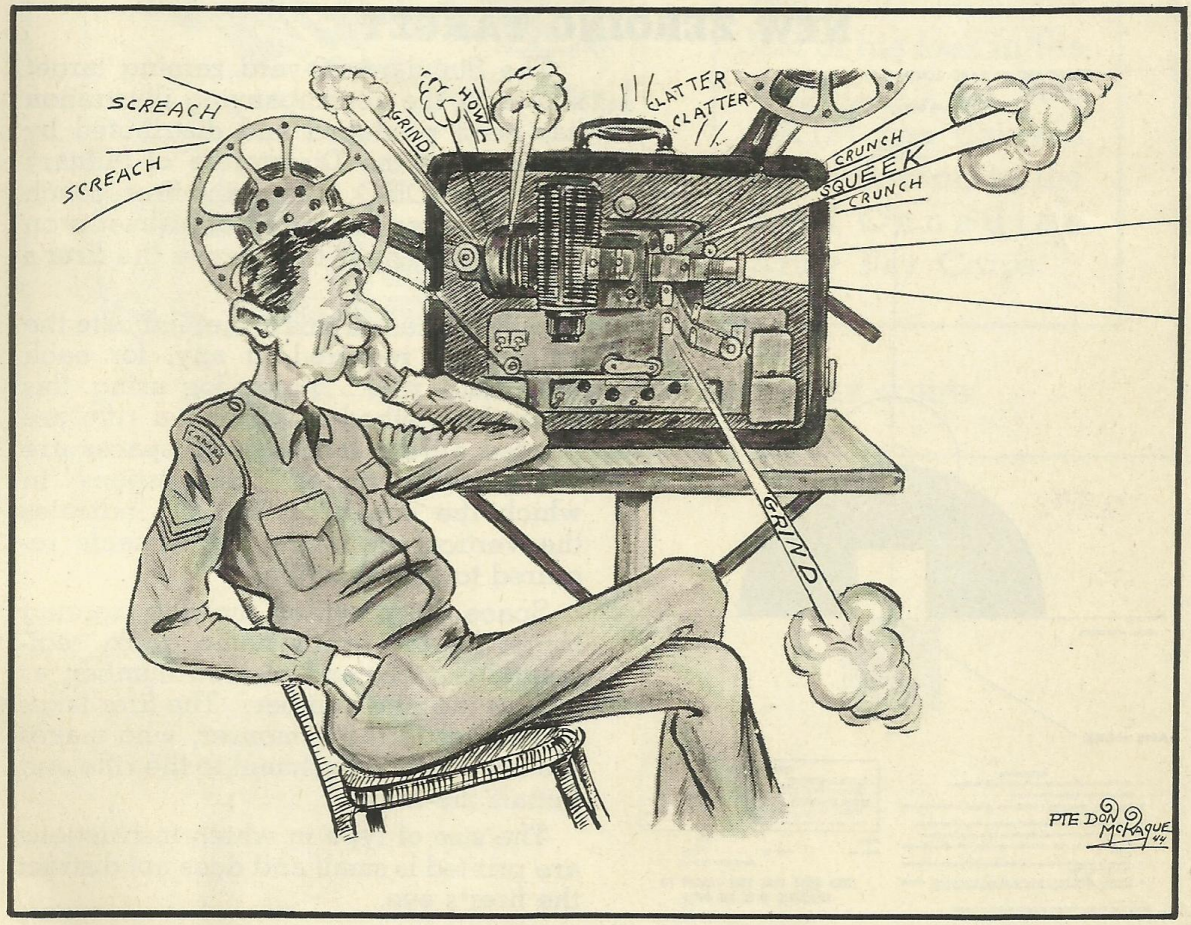


Because a Projectionist or Unit Projectionist is holding a Certificate of Projectionist Training, MFM 370, received several months ago, it is no guarantee that proficiency has been retained. There have been some melancholy experiences involving personnel who either have not been provided with opportunities to practice what they had learned about projection, or have not taken advantage of opportunities existing.

There is authority for revoking MFM 370s when personnel are found to be incompetent. Revoking may be necessary on occasion, but it does not create competent projectionists.

One District has arranged that all personnel holding MFM 370 will practice using a projector at least one hour monthly. This is recorded in log books. The Senior Projectionist checks the record and takes appropriate action when practice has been neglected.

An incompetent Projectionist is a menace. He is liable to destroy films and equipment. What may be even more expensive—he is apt to waste training time.



NEW TRAINING FILMS

(For your information the following Training Films have been approved for distribution)

Obstacles

(a) C-602—"Beware—Butterfly Bomb"—(30 minutes)

(i) Explains the parts and operation of the German SD2 Anti personnel bomb.

(ii) Distributed to Number 1 Training Brigade Group.

(iii) Available on loan by request to DMT, NDHQ.

Medical and Hygiene

(a) TF 8-2093 "Strictly Personal"—(35 minutes)

(i) Deals with feminine hygiene, physical fitness and personal attractiveness.

(ii) Distributed to Number 1 CWAC(B)TC, Headquarters, Pacific Command and all Military Districts for showing to all CWAC personnel.

Camouflage & Concealment ((Film Strip)

(a) CAFS 40-1 "Camouflage"

(i) Covers Personal Concealment and Concealment of Mechanical Transport, Infantry Positions and Field Artillery.

(ii) Distributed to Pacific Command, All Military Districts, Camps and Basic Training Centres.

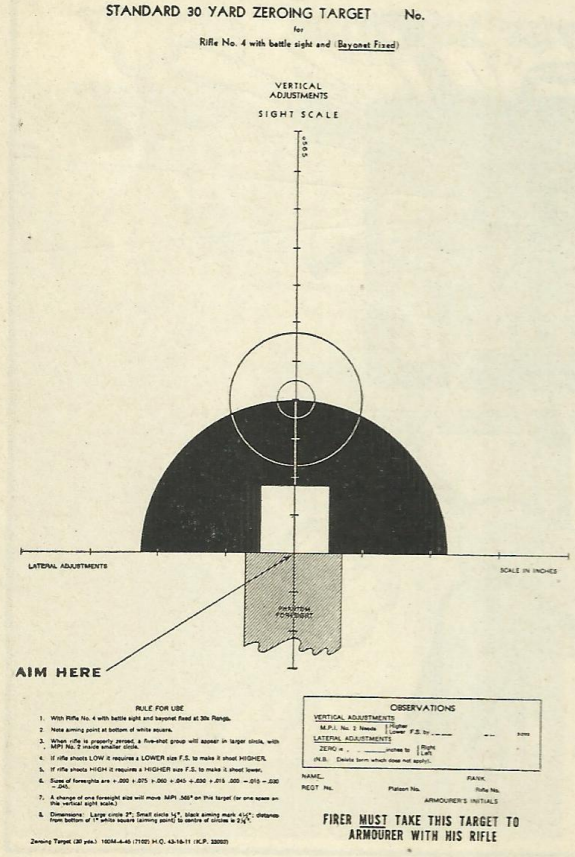
Signals (Film Strip)

(a) FS 11-28 "Phonetic Alphabet"

(i) A film strip accompanied by sound recordings designed to teach the phonetic alphabet.

(ii) Distributed to 0-1 OTC, S-17 CS of I, A-7 CSTC and A-33 CACTE. Also available on loan by request to DMT, NDHQ.

NEW ZEROING TARGET



The Standard 30-yard zeroing target shown in the accompanying illustration has been produced and distributed by authority of the Directorate of Military Training, NDHQ, to assist the firer, coach and armourer in making adjustments on the rifle foresight to improve the firer's aim.

Bullet-holes on this target indicate the adjustment required, if any, for each individual rifle. Rules for using this scientific method of zeroing a rifle are printed on the target itself; spaces are also provided under "Observations" in which the coach or W.T.O. indicates the vertical or lateral adjustments required to zero the rifle.

Space is provided on the zeroing target for the firer's name, rank, regimental number and platoon number, as well as the rifle number. The firer takes this target to the armourer, who makes the necessary adjustment to the rifle and initials the target.

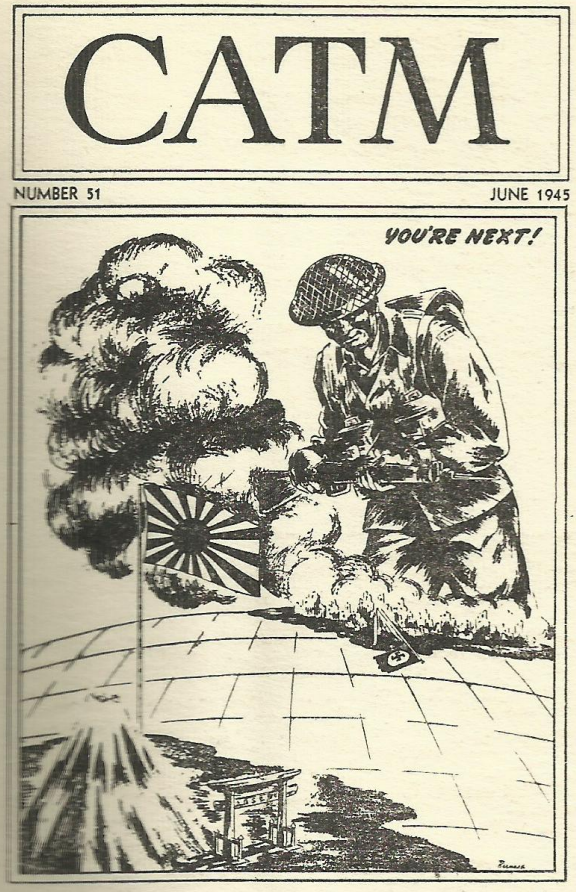
The size of type in which instructions are printed is small and does not distract the firer's eye.

SCHEDULE OF COURSES - THIRD QUARTER 1945

School and Course	No.	Course Begins	Course Ends	Vacancies Offrs	Vacancies OR
Royal Military College, Kingston, Ont.					
CWSC (A Wing)	12	13 Aug	1 Feb	48	
CWSC (B Wing)	7	8 Aug	13 Nov	48	
A-19 CASCTC, Camp Borden, Ont.					
QM & QMS	29	9 Jul	11 Aug	20	20
QM & QMS	30	20 Aug	22 Sept	20	20
Adv Clerical Course	30	2 Jul	28 Jul	—	48
	31	13 Aug	8 Sep	—	48
	32	10 Sep	6 Oct	—	48
CWAC (A) TC—ADV TRG Wing					
Regt Offrs	2	11 Jun	30 Jun	15	
	3	9 Jul	28 Jul	15	
	4	6 Aug	25 Aug	15	
	5	3 Sep	22 Sep	15	
NCOs	8	18 Jul	14 Aug	—	40
	9	22 Aug	18 Sep	—	40
	10	26 Sep	23 Oct	—	40
Practical Domestic Science					
	13	4 Jul	25 Jul		15
	14	1 Aug	22 Aug		15
	15	5 Sep	26 Sep		15
A-32 C PRO C TC, Camp Borden, Ont.					
Provost	29	16 Jul	11 Aug		38
	30	20 Aug	15 Sep		38
	31	24 Sep	20 Oct		38
S-3 CSAS, Long Branch, Ont.					
Platoon Weapons	1047	17 Aug	28 Sep	32	96
	1048	5 Oct	16 Nov	32	96
Chemical Warfare	971	20 Jul	10 Aug	16	64
	972	10 Aug	31 Aug	16	64
	973	7 Sep	28 Sep	16	64
	974	28 Sep	19 Oct	16	64
Physical Trg	945	27 Jul	17 Aug	3	25
	946	17 Aug	7 Sep	3	25
	947	14 Sep	5 Oct	3	25
Inf Range Finder	8	3 Aug	17 Aug	5	8
	9	21 Sep	5 Oct	5	8
3-in. Mortar	1022	17 Aug	14 Sep	5	8
6-pr A tk Gun	1088	17 Aug	7 Sep	5	8
	1089	14 Sep	5 Oct	5	8
Familiarization Course TC Instrs					
	3	22 Jun	29 Jun	24	
	4	6 Jul	13 Jul	24	
	5	25 Jul	1 Aug	24	
	6	8 Aug	15 Aug	24	

School and Course	No.	Course Begins	Course Ends	Vacancies Offrs	Vacancies OR
INSTRS TRG WING					
Technique of Instr					
Serial	13	20 Jul	3 Aug	10	20
"	14	3 Aug	17 Aug	10	20
"	15	24 Aug	7 Sep	10	20
"	16	7 Sep	21 Sep	10	20
"	17	28 Sep	12 Oct	10	20
DRILL & DUTIES					
Serial	13	20 Jul	3 Aug	10	50
"	14	3 Aug	17 Aug	10	50
"	15	24 Aug	7 Sep	10	50
"	16	7 Sep	21 Sep	10	50
"	17	28 Sep	12 Oct	10	50
RIFLE COACHING					
Serial	14	20 Jul	1 Aug	5	15
"	15	3 Aug	15 Aug	5	15
"	16	24 Aug	5 Sep	5	15
"	17	7 Sep	19 Sep	5	15
"	18	28 Sep	10 Oct	5	15
S-19 CBDS					
Bomb Disposal Refresher	12	23 Jul	28 Jul		
Bomb Disposal Refresher	13	13 Aug	18 Aug		
Bomb Disposal	15	3 Sep	29 Sep		
A-22, CAMCTC, Camp Borden, Ont.					
Hyg & San (Offrs)	36	9 Jul	13 Jul	25	
	37	13 Aug	17 Aug	25	
	38	10 Sep	14 Sep	25	
Regt San Duties (OR)	31	3 Jul	21 Jul	30	
	32	7 Aug	25 Aug	30	
	33	4 Sep	22 Sep	30	
FIRE FIGHTERS	10	25 Jun	14 Jul	26	
	11	23 Jul	11 Aug	26	
	12	20 Aug	8 Sep	26	
	13	17 Sep	6 Oct	26	
A-5 & A-6 CETCs					
Mines & Booby Traps	9	9 Jul	21 Jul	As allotted	
	10	6 Aug	18 Aug	As allotted	
	11	10 Sep	22 Sep	As allotted	
S-2 CDN Arty School, Petawawa, Ont.					
Elementary Gunnery for Trg Centre HWE	53	29 Jul	25 Aug	As allotted	
Assistant Instrs	54	19 Aug	15 Sep	As allotted	
Obs of Fire	55	2 Sep	12 Sep		
Elementary Gunnery for Trg Centre HWE	58	23 Sep	6 Oct	As allotted	
S-5 CD & MS					
Unit MT	40	13 Jul	7 Sep	8	—
	41	27 Jul	21 Sep	8	—
	42	10 Aug	5 Oct	8	—
	43	24 Aug	19 Oct	8	—
	44	7 Sep	2 Nov	8	—
	45	21 Sep	16 Nov	8	—

THIS MONTH'S COVER . . .



CATM dedicates its cover this month to the triumphant Canadian soldier who has fought furiously and famously through nearly six years of war; who has seen the downfall of two enemies and who now stands ready to face the last of his foes in the Pacific. To do this, CATM has delayed its dedication to the Royal Canadian Army Pay Corps.

Next Month—THE ROYAL CANADIAN ARMY PAY CORPS

OTTAWA
EDMOND CLOUTIER
Printer to the King's Most Excellent Majesty
1945

23,500—6-45 (7348)
H.Q. 54-27-35-101
K.P. 90831

"THE WAY I FIGURE IT THERE'S ONLY HIM BETWEEN ME AND CIVVY STREET!"

I should have scanned this earlier but whatever I can be a lazy bastard, I digress, splicing page 25&24 was a bitch ~~but so such~~ it also seems some kid figured the last pages could use some color. I included a loose course sheet I found in the book, Aside From all that its an interesting glimps into the time period,

Enjoy B/K/