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ROYAL CANADIAN ORDNANCE CORPS

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CATM

Canadian Army Training Memorandum

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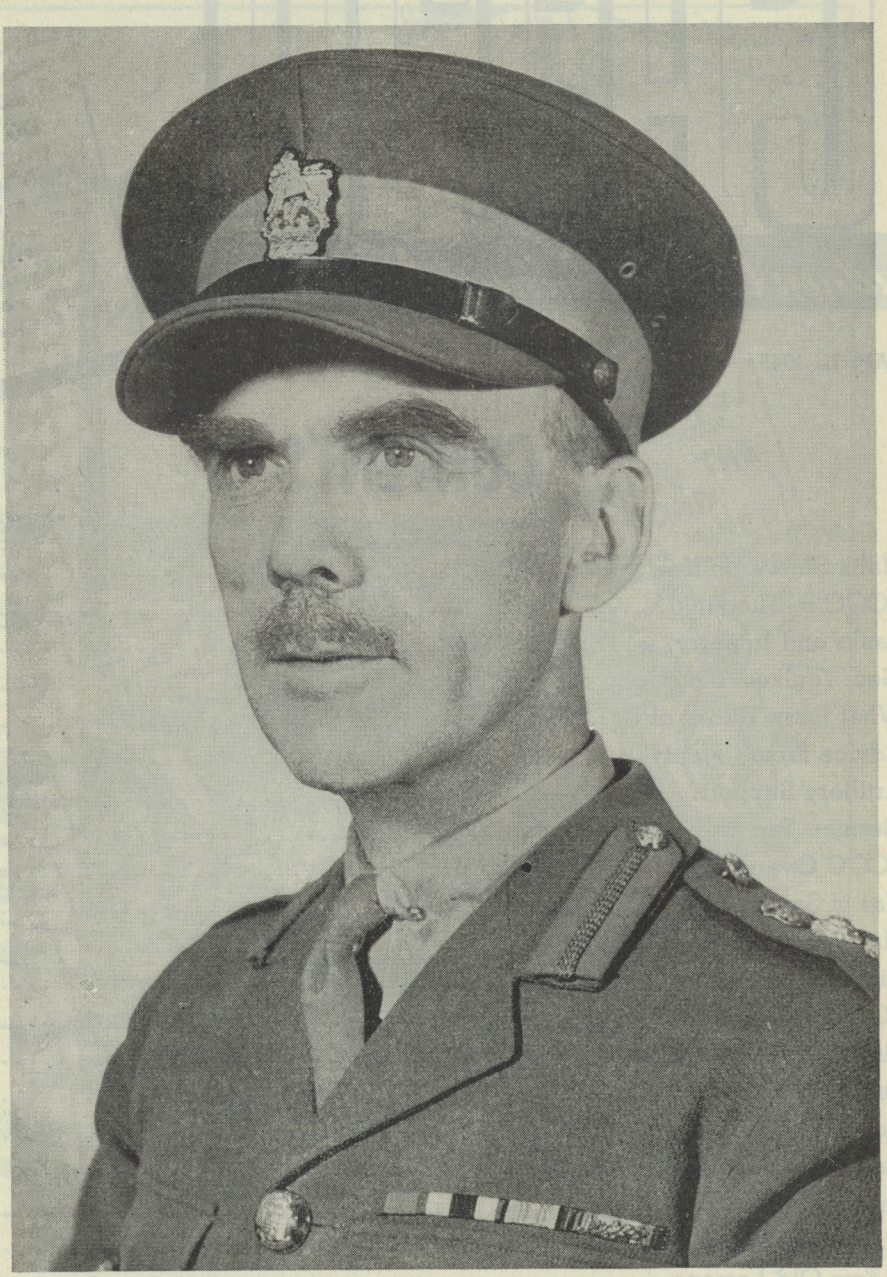


Col. R. P. Saunders, D.S.O., M.C.

Officer Administering Royal Canadian Ordnance Corps

ORDNANCE CORPS

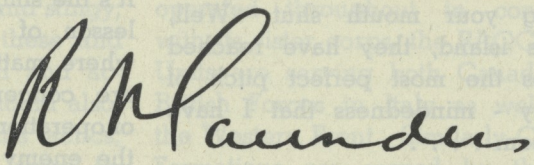
"Ordnance Services" is a comprehensive term embracing the whole activities concerned with the supply of war equipment for the army. The function of supply is vital, and the discharge of that function in this respect is the responsibility of the Royal Canadian Ordnance Corps.

Our Corps was given the present name in 1921, the appellation "Royal" having been bestowed on the existing Canadian Ordnance Corps in recognition of services rendered during the Great War.

We are privileged to wear a badge identical with that of the Royal Army Ordnance Corps, and are proud to trace our history through that Corps and its forebears, which, under many and varied names, has a long and distinguished record in the annals of the British Army and which is honoured to have His Majesty the King as Colonel-in-Chief.

Since the outbreak of the present war, the responsibilities of the Royal Canadian Ordnance Corps have been heavy and have necessitated rapid and extensive expansion of many activities. Both the stores and engineering branches of the Corps so greatly increased in scope that a split became necessary, and in May, 1944, the Corps of Royal Canadian Electrical and Mechanical Engineers was formed. Notwithstanding this reduction in responsibilities, those presently employed in Ordnance Establishments overseas and in Canada number in excess of 23,000, as against a pre-war strength of the Corps of some 500.

When the time comes for the story of this war to be told, it will be found that the Royal Canadian Ordnance Corps has played a not unworthy part in keeping with a tradition of service through the years.



MALTA SHOWS US HOW!

All angles considered, newspaper and radio reporters have probably less reason to like Security regulations than almost any other group of individuals. These regulations hamper their work, restrict what they may write, what they may say over the air and, by their very nature, are almost bound to get in a correspondent's hair. A public tribute for Security — entirely unsolicited—from a well-known radio reporter is, therefore, a tribute indeed, showing as it does a true appreciation of the need for Security despite the personal restrictions, difficulties and delays which its very necessary observance involves.

The following excerpts are from a broadcast from Malta by radio reporter Bill Herbert of CBC at the time of the meeting there some few weeks ago of Churchill and Roosevelt:

"This is Bill Herbert of the CBC, reporting from Malta. Most of you have heard the word "Security." This is the general military term for keeping your mouth shut. Well, on this island, they have reached perhaps the most perfect pitch of Security - mindedness that I have ever seen. . . . . .

Best Examples

"One of the best examples of Security, I think, came during our efforts to speak to the people about the meetings of Mr. Churchill and President Roosevelt. I first of all tackled the hotel manager. Yes, he said, someone of importance has been here, but I don't know who it is. Then we walked through the main streets of Malta, stopping every little while to speak to a civilian. Here again I drew a blank. Yes, someone had been here, but they didn't know whether it had been Mr. Churchill or the President—it could have been two other fellows, they said. Once I asked a barman if they had been here, and he expressed complete surprise. I might say here, he seemed very, very surprised. I finally decided to get that material from the proper authorities, and here I was given every assistance. But from the civilians, absolutely not a word . . "

Obvious Lesson

There's an obvious lesson, of course, to be gained from Malta's Security-consciousness—a lesson which we, far removed from the scene of operations, have not had similarly impressed upon us and are far too prone to overlook. It's the simple, elementary, oft-repeated lesson of keeping one's mouth shut where matters of military information are concerned. Close to the scene of operations and in places far removed, the enemy works more zealously than ever to gather the bits of information, big or small, which he must have to keep him in the war. Blabbermouths continue to give him that information—for free.

Let's all be adult for a change and take a leaf from Malta's book!

(By Col. H. A. Campbell, Chief Ordnance Officer, Central Ordnance Depot, Ottawa)

In the February issue, CATM published on the inside front cover an observation on war made by the Greek philosopher, Socrates, which warrants repeating:

"SOCRATES ON WAR"

(From Current Reports from Overseas)

"The General must know how to get his men, their rations, and every other kind of stores needed for war. He must have imagination to originate plans, practical sense and energy to carry them through. He must be observant, untiring, shrewd; kindly and cruel; simple and crafty; a watchman and a robber; lavish and miserly; generous and stingy; rash and conservative. All these and many other qualities, natural and acquired, he must have. He should also, as a matter of course, know his tactics; for a disorderly mob is no more an army than a heap of building material is a house.—SOCRATES."

In a lecture delivered at Trinity College, Cambridge, in 1939 before the outbreak of War, General Wavell in referring to the above quotation, said, "Now the first point that attracts me about that definition is the order in which it is arranged. It begins with the matter of administration, which is the real crux of generalship to my mind; and places tactics, the handling of troops in battle, at the end of his qualifications instead of at the beginning, where most people place it."

The above remark is a reflection on the relative importance of the supply services as regarded by one of the outstanding British leaders.

Sister Corps

In this war, as in World War I, the Royal Canadian Ordnance Corps has operated throughout in conjunction with its sister corps, the RAOC. RCOC Units are serving both Canadian and British Forces in Italy as well as on the Western Front. Similarly Canadian Formations are served by the large British static Ordnance Depots.

On the other side of the World in 1943 an RCOC Ordnance Beach Detachment was attached to the Canadian Army Brigade Group, which formed part of the U.S. Army Force which landed on Kiska.

By basing the Canadian Army on British Depots for maintenance it has been possible to avoid duplication in the organization of the Ordnance Services as a whole, which is all important in respect to the conservation of both manpower and equipment.

The Role of Ordnance Services In the Field

The modern army on wheels requires the right spare part in the right place at the right time. To meet that requirement is the keynote, the main object, of the field organization and system of Ordnance services. This organization has evolved from the four years' experience in War prior to D-Day, and it embodies the lessons learned in France, Norway, the Middle East and the campaigns in North Africa, Sicily and Italy. The procedure finally adopted for the operational maintenance of 21 Army Group in its assault over the beaches of Normandy and beyond differs fundamentally to a marked degree from the conventional system with its large Base Ordnance Depots situated in the actual theatre of operations.

It will be of interest to consider briefly the reasons leading up to this vital change in procedure.

Effect of Combined Operations on Planning of Ordnance Services for the Second Front

In Combined Operations no matter what the size of the force, it is essential to ensure operational maintenance over the beaches from the start. As the scope of the operation and the size of the force increases the task of maintenance becomes more complex. Largely as the result of experience gained in the landings in North Africa and also in the numerous exercises carried out in various parts of the UK, a definite procedure was evolved. The primary object was to provide a simple and flexible system of ensuring the supply of replacement equipments, spare parts and clothing and general stores.

Principles of Operational Maintenance

From the outset of an opposed landing, when the first assault troops are fighting for a foothold, the first flight of the maintenance organization is at the same time landed on the beaches. This formation is known as the Beach Group, a carefully devised and equipped organization provided to make certain that the assault troops receive all the immediate essentials in rations, petrol and ammunition, engineers, signals and medical services, Ordnance and EME Workshop services necessary to maintain them in action.

Included in the Beach Group is a small specially trained Unit called an Ordnance Beach Detachment (OBD). The personnel are skilled in the handling of ammunition and stores and receive adequate military training to ensure that they are capable of putting up a fight, if necessary. All ranks are of high medical category in order to stand up under the severe strain of working for long hours under trying conditions on the beaches in bad weather.

The OBDs land with ammunition and selected stores called Landing Reserves (LRs) set up dumps and get ready as rapidly as possible to make issues of vital requirements to replace battle losses and expenditures. The LRs are made up from scales of estimated essentials, those "bits and pieces" without which units cannot function; in fact a sort of austerity scale of tools for the job in hand.

LRs are normally prepared on a Brigade Group basis to maintain the formation for a period of 30 days. They may be duplicated if necessary.

As the assault force forges ahead and makes the beachhead secure, the follow-up troops land close behind and with them the follow-up supply services, which in the case of Ordnance means a wider range of Ordnance Stores, called Beach Maintenance Packs (BMPs) and additional ammunition with Ordnance personnel to handle them.

Wider Range

The BMPs are an extension of the LRs and give a wider range of replenishment to the troops in action and essential spares to enable EME Workshop Dets to begin Second Echelon repairs

At this stage additional Store-Holding Ordnance units will begin to arrive with their stores lorries. These are the Brigade Sections of Divisional Ordnance Field Parks and they will probably land with their formations.

In the meantime the beach supply organization will be expanding and rear maintenance areas established on a more elaborate basis.

The next stage in the operation will be the building up of the essential supply services, which in the case of Ordnance, entails the initial steps in the forming and stocking of static installations for ammunition and stores. This stage cannot reach its ultimate form until the capture of the requisite ports.

Planning of New Ordnance Supply Procedure for Second Front

Four factors must be considered when deciding what large Store Depots are necessary in a new theatre of operations:

(1) The need to hold stocks close enough to the forward troops to ensure prompt maintenance of their War equipment and clothing and to build up essential reserves to meet abnormal needs such as a break in the L of C.

(2) The importance of siting large depots in a locality reasonably safe from serious interference by the enemy.

(3) The need to restrict to essentials the demands of shipping.

(4) The time which must elapse before it is possible to lay out and completely stock the static Ordnance Depots to maintain a theatre.

Long Sea Voyage

In the past, including the operations of the British Army in France in 1939-40, Base Ordnance Depots (BODs) were formed irrespective of the length of sea voyage separating the theatre of operations from the UK. When the theatre of operations necessitates a long sea voyage, there is no option but to build up a large and complete range of stores of all natures as it is the only way to ensure adequate maintenance. This involves the establishment of one or more BODs. As lines of communication lengthen the installation of forward holdings of stores becomes necessary. Such establishments are known as Advanced Ordnance Depots (AODs).

Through experience in the landings in North Africa, Sicily and Italy, it was decided that for a theatre of operations in which only a short sea voyage was involved, the provision of large storeholding depots in the actual theatre was not required. By taking full advantage of modern communication and transport facilities, the large Central Ordnance Depots in the United Kingdom could actually function as Main Base Depots. It would then be necessary to stock in the theatre only a restricted range of fast-moving and operationally vital stores to meet the more immediate requirements of the forces. These stocks would be held in the theatre by Advanced Ordnance Depots (AODs).

This was a far-reaching decision, and has unquestionably been a great factor in the successful operational maintenance of British and Canadian Forces since D-Day, despite the unfavourable weather conditions during those critical first weeks.

The AOD (Short Sea Voyage) can be established rapidly (even to being served over the beaches), and, if required, can be moved to a new location in a relatively short period of time. It is, therefore, the most suitable large Ordnance storeholding unit for use in mobile warfare.

Functions of AOD (Short Sea Voyage)

The main functions of an Advanced Ordnance Depot (Short Sea Voyage) are:

(a) (i) To hold a limited stock of stores in frequent demand and items of equipment of operational importance.

(ii) Spares for all echelon repairs and a comprehensive range of assemblies.

(iii) Selected items held as a GS Reserve, including a Repair Pool of complete equipments.

(b) (i) Through the medium of a Stores Transit Sub-Depot to:–

(i) Receive and transmit daily to the Main Base Central Ordnance Depots in the United Kingdom, **normally by Air,** Indents for all items not available in AOD stocks.

(ii) Sort and distribute forward to Troops the daily flow of stores received in transit from the Central Ordnance Depots in the UK in response to Units' Indents.

(ii) Arrange the priority return to the UK of repairable assemblies for repair.

(iii) Arrange the priority return of empty Industrial Gas Cylinders (Oxygen, Acetylene, etc.)

To fulfil its roll, the AOD is divided into:—

(a) Three Stores Sub-Depots.

(b) A Vehicle Company.

(c) A Stores Transit Sub-Depot.

(d) A Forward Trailer Section.

(e) A Returned Stores Depot.

The general functions of the above-mentioned sub-units are conveyed by their names. The Forward Trailer Section, however, is worthy of note. It is a semi-mobile unit which acts as a stores spearhead of the AOD, holding a range of those fast-moving spare parts most urgently required during operations. One sub-section carries a reserve of clothing and general stores.

Main Base Depots in the UK.

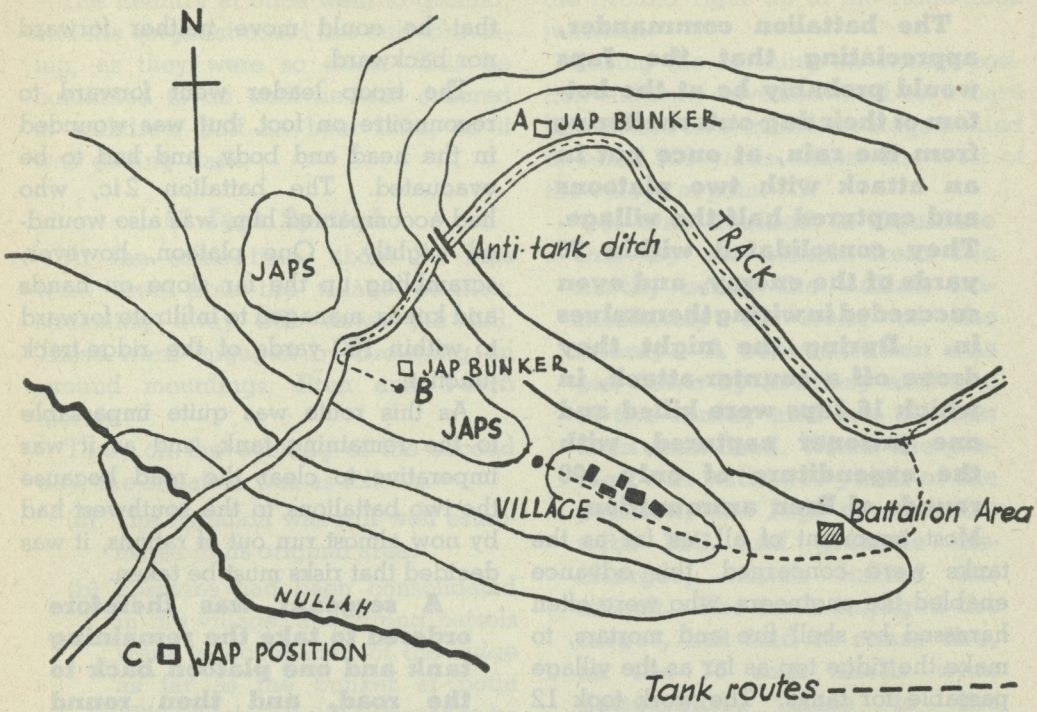
From the foregoing it is evident that Ordnance Services in the Field are backed by a powerful group of base installations in the UK. Upon these large Central Ordnance Depots depends the ultimate responsibility for the supply to Ordnance units in the field.

The full load of preparing, packing and assembling the truly stupendous quantities of Landing Reserves and Beach Maintenance Packs was assumed by the various Central Ordnance Depots during the winter months and early spring of 1944.

This service was carried out not only by Ordnance personnel, but by the ATS, the Pioneer Corps, and civilians working for long hours under adverse conditions.

The present organization of Ordnance Services, in the field, and in the U.K. which has been briefly outlined is not the final and perfect system. Such over-riding factors as limitations in available man-power, problems in storage space and the pressing need for economy in all directions, have enforced measures of compromise.

The organization is nevertheless practical, adequate and flexible. It has, above all, given the field units of the Corps determined confidence in their ability to serve the fighting troops well.



HOW TANKS AND INFANTRY WORK TOGETHER IN BURMA

(ATM—Australia)

(The account which follows was extracted from the war diary of a tank squadron operating with our troops in Burma. It is a good illustration of the degree of co-operation which is being reached on this front.)

The Japs were reported to have taken up positions, as shown in the sketch map, astride the track which was part of our L. of C. They were known to be in occupation of the village, and the ridge extending to the knoll on the north side of the track.

It was imperative to open up communications again, since two of our battalions, some distance to the south-west, were now entirely cut off by the enemy from their supplies.

An infantry battalion had succeeded in establishing itself on the spur to the east of the village, and it was therefore decided that this battalion, with the assistance of one troop of tanks, should drive the Japs off the high ground and open the track for our convoys.

FIRST DAY: The troop moved out at 0900 hours, the troop leader and squadron leader going ahead to reconnoitre with the battalion commander. After a plan to attack along the road, and back S.E. towards the village, had been rejected, it was decided that an armoured reconnaissance should be made from the battalion area, west towards the village.

Get Tanks Up

The first problem was to get the tanks up to the battalion area, the starting point for the armoured reconnaissance. This involved engineer work, and the towing of the tanks by a D8 tractor, to get them up the steep slope. The task was completed by 1300 hours, and the troop leader made ready to go forward for his reconnaissance, covered by one tank and supported by one platoon, when a cloud burst rendered the ground impracticable and ruined the visibility.

The battalion commander, appreciating that the Japs would probably be at the bottom of their dug-outs sheltering from the rain, at once put in an attack with two platoons and captured half the village. They consolidated within 50 yards of the enemy, and even succeeded in wiring themselves in. During the night they drove off a counter-attack, in which 16 Japs were killed and one prisoner captured, with the expenditure of only 100 rounds of Bren ammunition.

Most important of all, as far as the tanks were concerned, this advance enabled the engineers, who were often harassed by shell fire and mortars, to make the ridge top as far as the village passable for tanks. The work took 12 hours to accomplish, and was a fine achievement.

SECOND DAY: At 0630 hours, the troop, supported by two platoons, started to climb up to the village area, intending to push up west, if possible, to the junction of the ridge and the track.

Two of the tanks got up the ridge with great difficulty, considerable skill being shown by both drivers. The third tank threw a track when almost at the top. However, two tanks were sufficient for the task, and they proceeded to clear the west end of the village. Going on into the jungle beyond, they shot up several bunkers, slit trenches and tree snipers, at ranges generally under 100 yards.

Progress Impossible

When the troop leader had gone some 60 yards beyond the village, he reported that further progress on the right was impossible, owing to a steep dip and an even steeper rise on the other side. The corporal in the tank on the left reported the same obstacles, but he went on down the dip and found that he could move neither forward nor backward.

The troop leader went forward to reconnoitre on foot, but was wounded in the head and body, and had to be evacuated. The battalion 2ic, who had accompanied him, was also wounded slightly. One platoon, however, scrambling up the far slope on hands and knees, managed to infiltrate forward to within 150 yards of the ridge-track junction.

As this route was quite impassable to the remaining tank, and as it was imperative to clear the road because the two battalions to the southwest had by now almost run out of rations, it was decided that risks must be taken.

A sergeant was therefore ordered to take the remaining tank and one platoon back to the road, and then round right - handed by the road, to clean up the Jap resistance to the south of the road and west of the village. As it was impossible to turn, in order to get his tank off the ridge he had to back it through the battalion positions, and get it winched down the steepest bit by a D-8 tractor.

He then advanced along the road, dealing with enemy fire as it was met. He used 75 mm HE to destroy a Jap bunker at the point marked "A" on the map, and the enemy dead were so mutilated they could not be counted.

The sergeant with his tank now joined up with the original platoon from the ridge, and a third platoon was ordered to attack the enemy on the north side of the road. They succeeded, however, only in establishing themselves in the vicinity. The tank now swung S.E. back along the ridge for about 50 yards, when an undisclosed and very strong Jap bunker suddenly opened up at 5 yards' range. This bunker is marked "B."

The infantry at once went to ground, and the sergeant could fire only Browning, as they were so close. This he continued to do until he was ordered to withdraw half an hour later, as it was getting dark.

90 Japs Spotted

At the same time, about 90 Japs were seen from the village position, streaming away S.E. down the hill. These were engaged by Browning on ground mountings, Bren and 3-inch mortar.

Thus, on the evening of the second day, the situation was as follows:—

(a) The battalion was still well established in its original area.

(b) Positions had been consolidated in the village, and strong patrols were in occupation of the ridge as far as the bunker at point "B", which was still believed to be in enemy possession.

(c) A platoon post was in contact with the enemy locality to the north of the road.

(d) The corporal who had ditched his tank on the ridge had managed to turn it and get it back. So there were now two tanks in the village position and another in the old battalion area.

THIRD DAY: Reconnaissance made by the battalion disclosed that the Jap positions on both sides of the road had been abandoned during the night, and as a result the battalion occupied the ground right up to the ridge-track junction.

During the morning an enemy position suddenly revealed itself on a bare hillock and on a small bare ridge behind it, some 700 yards almost due west of the village at point "C."

It was decided to liquidate this by an attack from the north, using the nullah immediately in front of the enemy. A concentration was put down by artillery and one of the tanks, and one platoon then assaulted. When the platoon was within 75 yards of the position, the Japs opened fire with MG and grenade discharger, which halted the attack. The tank engaged the target, but had to cease fire, as the 75 mm shells were dangerously close to the infantry.

However, by moving back to the nullah the platoon allowed more room for tank fire. The Jap position was in full view of the village from which the tank was firing, and this time the fire was more effective.

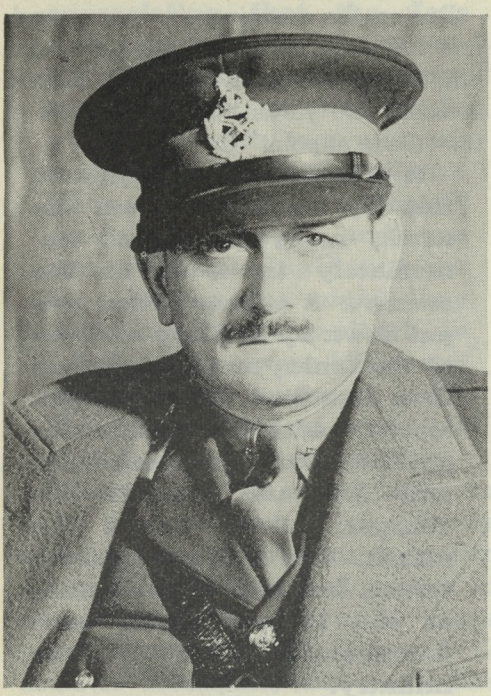
When the infantry entered the position, they found 25 dead bodies, one MMG and two LMGs.

The road was now open, and ration convoys going through to road-head contacted the troops who had been cut off for three and a half days. Their wounded were evacuated on the return journey.

"I shall desire every officer to endeavour by love and affable courage to command his soldiers, since what is done for fear is done unwillingly and what is unwillingly attempted can never prosper."

—Earl of Essex, 1642
(General of the Parliamentary Army)

LT. GEN. CHARLES FOULKES, C.B.E., D.S.O.



Lieut. Gen. Charles Foulkes, C.B.E., D.S.O.

(This biography was compiled for CATM by the Historical Section, NDHQ)

General Foulkes is the senior Canadian field commander overseas who is not a graduate of R.M.C., but he shares with a group of other senior officers the peculiar seriousness and professional devotion which mark so many soldiers of his generation.

Like his fellow Corps Commander, General Simonds, he was born in England and was brought to Canada at an early age. His birth place was Stockton-on-Tees and he was one of eight children of Mr. C. Foulkes. He first went to school there but when he came with his family to London, Ont., he eventually passed through London Collegiate Institute into the University of Western Ontario. He had completed his first year there with a very good record when he entered the Permanent Force.

He showed early interest in military affairs to which he gave his accustomed serious study, and while still a student of 19 years of age, he joined the Second Machine Gun Battalion of the N.P.A.M. in 1922. In a few weeks he was a qualified sergeant and he received his first commission a year after enlistment; during 1924 he qualified as captain and in machine gun subjects at the Canadian Small Arms School and also passed his proficiency in riding. So in the spring of 1925, at the close of the College year, he applied to enter the Permanent Force. During that summer he served as an instructor at the Small Arms School where he won unusual praise from the Commanding Officer and was promoted captain in his regiment. In the fall he entered upon the Long Course at R.M.C. without further examination. This course was designed for non-graduates of R.M.C. who wished to become regular soldiers. Completing his course successfully he was attached to The Royal Canadian Regiment and reported for duty at "C" Company in London, Ont., on 11th August, 1926.

For a short time his technical interests led him to think of the Ordnance Corps but happily he was retained in the Infantry. He instructed in the Small Arms Course in the fall of 1927 and in the next summer was transferred to "B" Company in Toronto. Because of his special interests and abilities he was selected by his regiment to take the first Instructors Course in Machine Gun Carriers—at that time the Carden-Loyd—at Kingston and Petawawa during 1931. His colleague from the P.P.C.L.I. was one of the founders of the Canadian Armoured Corps, later Major-General Worthington, now G.O.C.-in-C. Pacific Command. Capt. Foulkes returned that fall to London, with his Carden-Loyd Carrier. He spent the summer of 1932 attending Small Arms Courses in Eng-

land, especially at Netheravon and Winterburne Gunner on Salisbury Plain. While in England he received permission to marry and on the 5th of August he was married to Miss Phyllis Beck who returned to Canada with Capt. Foulkes at Christmas. She now resides in Victoria, B.C., with their eleven-year-old son.

Special Knowledge

Capt. Foulkes for the next few years concentrated on making training use of his specialized knowledge; he was on the staff of the Small Arms School at Sarcee in the summer of 1933 and spent the spring and summer of 1934 on Machine Gun Training at Connaught Ranges where he was chief instructor both of the Central Camp for N.P.A.M. and at the Canadian Small Arms School, whence he proceeded to Valcartier. The work of a GSO III at District Headquarters consists largely of supervising the type of training in which Capt. Foulkes was now an expert, and in September 1934 he received this appointment in Kingston succeeding Capt. Mann (now Brigadier Mann, who, years later, succeeded General Foulkes as Brigadier, General Staff, First Canadian Army). Capt. Foulkes at this time was marked for higher staff training, and after qualifying as usual by the Militia Staff Course and the Preparatory Course for Camberley in the fall of 1935, he returned to his staff duties for another year. During 1936 he was transferred to M.D. 2 in Toronto and it was from there in December that he sailed for England to attend the Staff College. In Toronto he left as his successor Capt. Kellar, now the Major-General Kellar who led the Third Division in the van of D Day and was wounded last July.

The two years spent by Capt. Foulkes at Staff College were uneventful in the sense that they followed the normal course with the distinguished results that characterised so many Canadian officers in England in those years. General Foulkes' colleagues today include many who in the last decade shared similar experiences in England and brought themselves to the attention of senior British officers as well as their senior Canadian fellow officers.

Back to Old Post

Capt. Foulkes returned to Canada in January 1939 to his old post in Toronto. A motor accident following the visit of Their Majesties to Niagara Falls in June fortunately had no permanent results, and Capt. Foulkes spent the normal busy summer of a Permanent Force General Staff Officer. In August he was on the directing staff for the Militia Staff Course at Port Hope when the imminent outbreak of war brought that course to an abrupt close; he was immediately transferred to London, Ont., as GSO II. There he succeeded Major Brownfield, recently Brigadier C.R.A., First Canadian Army, who, at that time, with the approach of danger in the East calling for gunners on our coast, had been transferred to New Brunswick. Capt. Foulkes arrived in London the day before mobilization and was plunged into work with a reorganized and, in part, new staff, undertaking duties far beyond those usual for the General Staff Branch. He had already been slated to be Brigade Major of the Third Canadian Infantry Brigade under Brig. C. B. Price (later major-general commanding Third Canadian Infantry Division), and when Brigade Headquarters was set up in November, Capt. Foulkes joined them. After a few weeks largely spent in reviewing his new troops with General McNaughton and his Brigadier in Quebec and the Maritime Provinces, Major Foulkes sailed for England on the 9th December, 1939.

For a year he was one of those hard working General Staff Officers who with the commanders drove the First Canadian Division through their basic

and combined training at the same time that they were alertly on duty during the most critical stage of the defence of Great Britain. Tours of duty in General Reserve, on the South Coast, in association with British troops (including the newly organized Home Guard in Sussex trained in part by the Canadians) gave to the leaders of the First Canadian Division a much more energetic and more varied and responsible task than is generally realized. It was during that testing period that relatively junior leaders and staff officers discovered their own aptitudes and were given commensurate increased responsibilities which have since brought them to the senior appointments in the field. Among these was Charles Foulkes.

Returns to England

When the Third Canadian Division was being assembled in Canada in late 1941, their first Commander, now Lieut.-General Sansom, and his staff came out to Canada to direct them, and among these was Lieut.-Col. Foulkes, their new GSO I. He returned to England with the Division where they took up their life as troops in training. For six weeks during the next winter Colonel Foulkes had experience of command with the Regina Rifle Regiment. After having been with the Third Division for a year he left them to take command of his own original formation, the Third Canadian Infantry Brigade, in August 1942. The 1st Division, to which they belonged, was rapidly reaching the peak of their training, but Brig. Foulkes was not to see his first fighting with them, for three months before they left for Sicily, he succeeded Brig. Simonds as Brigadier, General Staff, First Canadian Army. There he was the right-hand Operations and Training Assistant for General McNaughton, leaving Army Headquarters in January 1944 to take over the 2nd Canadian Division from Major-General E. L. M. Burns. Three days earlier, the new General Foulkes had been awarded the C.B.E.

And so it was with this 2nd Division whom he had trained during their last year in England, that General Foulkes at last commanded in battle. In July, hard on the track of his old comrades of the 3rd Canadian Division, General Foulkes' division, which soon became part of the 2nd Canadian Corps under General Simonds, was particularly active in clearing the line of the Orne River and was prominent in the battle for the Falaise pocket. In this latter they were particularly pleased with victory, because they had suffered more than others in the initial unsuccessful attempt to seize Falaise. In the swing to the north across the rivers, the 2nd Canadian Division again bumped into more stubborn resistance than most, and achieved success at more bitter cost. They also shared with others of their corps the stubborn, dirty fighting north of Antwerp and in the capture of South Beveland. The stubborn, loyal, skilful tactics of the 2nd Division in their fighting in Normandy and then in Holland is characteristic of the quiet, determined, aggressive thoroughness of their commander.

Strong Leadership

This strong and steady leadership marked General Foulkes as a leader of high capability; so when General Burns retired from the First Canadian Corps in Italy last November, General Foulkes again succeeded him in this higher command. There, with his old 1st Canadian Division among others under him, he is the senior Canadian chief in the celebrated British Eighth Army, which has in recent months found the 1st Canadian Corps to be one of its most numerous and most constant components. In these operations he won the D.S.O.

WHAT JERRY THINKS OF US

(U.S. Intelligence Bulletin)

A German prisoner, a Panzer Grenadier who had spent 16 weeks at Cassino, told his British interrogators that, in his opinion, Allied soldiers had made a number of outstanding mistakes in combat. He discussed these in some detail, and, while his views are not necessarily endorsed, they are worth examining as an indication of how some enemy troops may expect us to fight in the future. On the other hand, this same prisoner's battalion commander, addressing his company officers on the subject of the battalion's performance in battle, analyzed the unit's shortcomings in forthright language. The comments of these two men are specially interesting when read in sequence.

Comments on Allied Methods

"Allied infantry attack very cautiously and bunch up too much when they move against their objectives," the Panzer Grenadier said. "They are very negligent about seeking concealment, and therefore can be seen most of the time. When they move against their objectives, their lines are not staggered enough and are deep instead of wide.

"Allied soldiers on the double, upon coming to a sudden halt, frequently remain in a kneeling position, simply waiting to be shot at, instead of throwing themselves to the ground. Then, if nothing happens, they get up on the same spot where they were kneeling before, and continue their advance. I think this is extremely dangerous, especially when the terrain is dotted with snipers, as it is in Italy. I myself have seen at least a dozen Allied soldiers die because of this stupidity.

"In the German Army we think it is only common sense for an attacking soldier to select an objective for each phase of his advance. Upon reaching an objective, he immediately throws himself to the ground and crawls 10 to 15 yards to the left or right, carefully avoiding observation. He waits there a few seconds before continuing his advance.

"Sometimes, however, the Allied Infantryman will drop after a shot has been fired and will roll to the right. We Germans know this. We have also noticed that Allied infantry run toward their objectives in a straight line, forgetting to zig zag and thus making an excellent target.

"In Italy, especially, attacking forces can use rocks to better advantage

Belgium
November 1944

Commanders must constantly talk to the troops under their command; the more that troops can see their commanders, hear them talk, and be put "in the picture" by them, the higher will be their morale. A commander must constantly study the state of morale, so that he may seize the psychological moment to initiate a series of talks to his troops.

B. L. Montgomery

(B. L. Montgomery)
Field Marshall,
C-in-C,
21 Army Group

than they do. While I was at Cori, there was a large space between two rock formations, which afforded a clear field of fire. We covered it with a Light Machine Gun. The first Allied troops who tried to pass between the rocks moved very slowly and in line, and some of them were hit. Not until then did the others dash through the open space.

"Many Allied commanders lack aggressiveness. They do not realize when an objective can be taken; consequently, attacking troops often turn back just before they reach their objective.

"At Cassino I was in a valley with 97 other German soldiers in foxholes and slit trenches. First, a group of Sherman tanks attacked within range of our Faustpatronen. Three of the tanks were knocked out. The infantry, who should have followed right behind the tanks, were about 500 yards behind, and therefore were too far away to seek the cover of the armoured vehicles. The tanks immediately retreated. When the infantrymen saw that the tanks had been turned around, they, too, turned around and retreated. The whole valley should have been cleaned up in a matter of minutes.

Driven Back

"This great distance between Allied armoured units and infantry was apparent almost every time. There was one instance when Allied tanks smashed across our foxholes, to be followed an hour later by infantrymen, who were driven back by a hail of machine gun fire. **WE GERMANS RELY ON YOU TO MAKE THESE MISTAKES.**

"The net cover on the helmets of Allied soldiers permits us to see the outline of the helmet distinctly, and at a considerable distance, in the daytime," the German soldier concluded. "On the other hand, the camouflage that we (Germans) use on our helmets disrupts the outline of the helmet, and the canvas cover can be painted to suit the terrain."

ARTILLERY SUPPORT FOR INFANTRY

(Extracts from Artillery Notes RAA 9 Australian Div).

Arty shoots fall into two main technical sub-divisions:—

(a) Observed shoots

(b) Predicted shoots.

In the former, observation of the target by an OPO, RAAF air observer or "Flying OP" (i.e. an airborne arty offr) is necessary to permit correction of fire. In predicted shoots observation is not necessary and fire is brought down on the target by use of map references of target, surveyed co-ords, gridded air photos, information obtained from previous registration or sound ranging equipment. Observed shooting is more accurate and always used where possible.

The purpose of most shoots falls within one of the following categories:

Registration—To obtain information to enable a target to be subsequently engaged without delay.

Neutralization — To effect the efficiency of enemy weapons by making the firer "keep his head down" and by instilling fear, attacking his morale.

Destruction—To obtain direct hits on targets and destroy them by splinters and blast.

Smoke Screen—To conceal our positions or movements from enemy observation.

There are sub-divisions of these categories but they are not within the scope of these notes.

Arty Fire Plan

Any pre-arranged shooting which has as its object the support of any particular movement such as an attack or a withdrawal, is known as an arty fire plan. All possible steps are taken to guarantee that fire will be brought down in the correct quantity, at the correct place, at the correct time.

A fire plan should be as simple as possible and it is the function of the appropriate arty comd to advise his inf comd on the fire plan and see that the inf comd's requirements are met.

The following are examples of shoots normally undertaken as fire plans:—

(A) A CREEPING BARRAGE: Designed to move immediately in front of an attacking force at the same speed as the attackers will advance. Its main function is to neutralise enemy small arms weapons. The barrage will usually advance 200-300 yards beyond the objective and remain there for sufficient time for the inf to consolidate on the objective. A barrage will, of course, not neutralise weapons on the flanks of the advance and this should always be remembered when arranging such a fire plan.

(B) CONCENTRATION: Fire brought down on a comparatively small area which is known or suspected to contain enemy weapons or personnel. Often used to neutralise weapons (including known hostile btys) which are outside the area covered by a barrage. If these flank weapons are suspected but

their positions are not accurately known, FOOs may move with the forward inf and engage any weapons seen with observed fire. If the positions of **all** enemy localities likely to interfere with an attack are known, concentrations on these areas should be fired rather than a barrage.

(C) SMOKE SCREENS are usually engaged as Fire Plans, but can also be fired at very short notice by use of "Quick Smoke Screen" procedure. An alternative HE plan should always be arranged to provide for the possibility of last minute meteorological changes which make the screen impossible or only partly successful.

(D) DEFENSIVE FIRE: As soon as possible in the planning of a defensive position (even though the position is to be occupied only for a matter of hours) an arty defensive fire plan, fully integrated with that for infantry weapons must be drawn up. The following are the main considerations affecting field arty defensive fire:

(iv) Certain DF tasks should be selected as SOS tasks. In any sector covered by a fd regt, NOT more than six SOS tasks should be selected. Preferably NOT more than three tasks should be selected and often there will only be one for the whole regt. Should the SOS task allotted to any troop be not required, that troop may be used for other DF tasks; the time required to switch being about two minutes. These are normally tasks close to our own positions and designed to cause casualties to assaulting troops and their reserves. Fire on SOS tasks is called for by locality comds.

Ready To Engage

When not otherwise employed, all guns remain loaded and laid on SOS tasks ready to engage them immediately on receipt of the order to do so. All guns will be manned by one sentry who, on receipt of the order, fires the gun. The detachment man the gun, and the programme as ordered, is fired. The call for fire may come by any means. In open country, particularly at night, verey signals are often used. This is not a satisfactory method in the jungle and telephone communication is the more likely means.

Defensive fire (other than SOS tasks) is fired on the order of the Div Comd or on his authority by the Bde or Bn Comd of the threatened locality. Ammunition expenditure, rates of fire and duration of fire is decided by formation comds.

(v) Counter Battery fire is an integral part of arty defensive fire.

(E) HARASSING FIRE: Is designed to harass and delay the enemy's preparations. It will rarely inflict considerable casualties unless fired at well-used roads, landing beaches or areas crowded with personnel. At night it interferes with sleep and keeps the enemy constantly on the alert. It should be fired in irregular bursts at a number of targets in the area so that it is completely unpredictable. Harassing fire must be co-ordinated in order that our patrols will not be endangered. It will only be authorized by Div H.Q.

Japanese reports indicate that they dislike it intensely and there are numerous instructions issued by them to attempt to minimize its effectiveness.

LIAISON

The gunner officer will ask the following questions when his assistance is required.

1. Where do you want the fire? Infantry must describe the target, its position and size. If possible, point

it out on the ground. If not possible to do this, give map references or references from another easily identified object or feature. e.g. Reference the burning Tank on the beach NORTH 200 yards there is a clump of bamboo about 100 yards square—it contains approx 20 Riflemen, not dug in—they are holding us up.

2. What do you want? Do you want it neutralized, destroyed, harassed, blinded by smoke?

3. When do you want it? Give the time at which you want effective fire brought down, the duration of the engagement. If using Timings, be sure that you synchronize your watch with the arty officer.

4. How do you want it? Surprise or not? If surprise essential, preliminary ranging may not be desirable. If no ranging permitted the fire would not be as accurate as it would be if registration had been carried out. In many cases, registration is essential. Do you want an intense bombardment or a gentle "stir up"?

5. Where are own troops? Gunner MUST always know this. Answer can be by reference to a map or by describing a feature which marks forward troops. e.g. "None of our troops WEST of the main road".

Observed Fire

(i) Defensive fire tasks will normally be registered by observed fire. This, however, is not always possible as the position may be occupied at last light or during the night. Where the maps are reliable or survey data is available, areas may be selected from the map and predicted fire arranged. Normally no DF task should be engaged by less than a troop. The tasks selected are numbered or lettered from the right. For each DF task in the sector supported by a fd regt, data will be worked out to enable the fire of all or any troop to be brought down on call. Where an attack is made on our positions during the hours of daylight, it will be usual for the enemy to be engaged by observed fire and not by calling for any particular DF task.

(ii) **Arty defensive fire tasks should be arranged to cover ground dead to infantry weapons. This arrangement will economise arty resources.**

(iii) In the initial stages of an attack, arty defensive fire should be directed against known headquarters, centres of communication, likely forming-up places etc., with a view to maximum disorganisation of the attack.

TAKE YOUR BEDROLL!

(From CMHQ Monthly Training Liaison Letter)

In view of the numbers of reinforcement officers arriving (in England) from Canada who have **NOT** a bedroll, and since officers' camp kit is issued here only after they have been warned for an overseas draft, it is suggested that officers should be advised to provide themselves with a sleeping bag prior to leaving Canada. They are very difficult to obtain in the United Kingdom.

GERMAN TACTICS

(War Office Weekly Intelligence Review)

ABUSE OF BRITISH UNIFORMS: An Allied escapee reported that in Italy SS men dressed in ragged British uniforms have been posing as British escapees in order to ferret out, through the Italians, real escapees. The following case was said to have occurred: Two SS men in dirty battle dress blouses approached an Italian farmer and asked him to put them into contact with other escapees. The farmer, believing their bonafides, took them to the hideout of two escapees whom they promptly arrested.

NIGHT FIGHTING—SOME U.S. LESSONS FROM ITALY: (a) The German soldier does not like to fight at night and does not fight at night as well as during the day. In several instances German security at night has been found to be lacking. Some instances have also indicated that the German soldier when surprised at night has become confused and has been an easy victim of the well-trained night fighter.

(b) At night, don't use bird-calls as signals. There are no birds in the battle area—they all leave. However, cats and dogs stick around, so dog-barks and cat-howls, if well done, are alright. The Germans use cat-howls a lot. If a German uses a cat-howl, lie down and answer him the same way. He will then come towards you and you can get him with your bayonet.

A RUSE EXPOSED: A British battalion reported that on more than one occasion the Germans were seen to be firing their automatics up in the air and generally behaving in a way that seemed to indicate that they wanted to give themselves up. But later on it was confirmed that the Germans fire in the air in this way to indicate that they have penetrated our defences.

SPIES: The German Intelligence in Italy is said to make frequent use of what is officially described as "Front-laufer" (literally: front runners). These are Italians, often boys of 12-14, who are sent through the Allied lines to get information on troop movements, gun

positions and unit identifications. The majority of the boys are said to be of exceptional intelligence and many of them are sons or relatives of Fascist party officials. They are briefed at the "I" branches of Corps or Divisions before leaving. A headquarters driver PW had heard that their information had often been very valuable. He himself had driven several of them to divisional HQ. They were well clad when they entered the HQ but set out on their mission in rags.

THEY CAN'T TAKE IT: A NCO PW stated that phosphorus shells have been extremely effective against AFVs, having in several instances started fires. The moral effect of their use is considerable. Another PW reported an engagement in Normandy on 14 July when 14-16 tanks were lost, 15 to what PW called a phosphorus shell which penetrated the side of the tank and started an instantaneous flame which allowed no one to escape from the tank: this had had a very depressing effect on the bystanders.

HOW TO SITE A CORPS HQ—GERMAN FASHION: According to a PW 76 Pz Corps HQ selection of sites seemed to have been conditioned by Allied air superiority: only buildings 200-500 yds from main roads were selected. Only single houses were used no matter how far away from adjacent houses. This was done after it had been found that Allied aircraft seldom attacked single houses or houses not adjacent to roads. Since the HQ was not small, it was a problem to find suitable quarters for all departments together. This sometimes necessitated placing one department in the main building and the other departments in other buildings sometimes as much as 2,000 yds off. This was an awkward arrangement as far as communications were concerned but it was found safest.

JOYS OF WAR: According to a PW taken in Italy, the following salient differences between training and practice has struck him: In theory, the soldier should get down to the prone position in the regulation fashion. Actually, no one does. One gets down the best and quickest way one can.

Slit trenches in theory should be dug in the prone position. This, however, takes a long time and speed is essential. PW found it much better to dig quickly in a bent position, thus offering a larger target but for a much shorter period.

PW was taught to dig slit trenches suitable only for flat terrain. In the Italian mountains the Germans dug only shallow holes, long enough and wide enough for two men to lie in, covered them with foliage, stones and loose soil and left a hole just big enough to crawl in head first. Tent shelter halves were used as covers. These holes still became water-logged but were better than regulation slit-trenches. The Germans are taught to eat hot food and, especially, drink hot beverages to prevent colds, and to keep clothing dry. In the line, PW had neither hot food nor drinks and no opportunity to dry his clothes.

HE NEVER MISSED!

(Extracted from Life).

Five men of a six-man patrol from the 101 U.S. Airborne Division operating in Holland chose Tommy-guns for their work because they wanted more firepower. The sixth man, to the surprise of his mates, rejected the Tommy-gun in favor of an M-1 rifle. Then they remembered. This man with the M-1 would be nice to have along. He never shot unless he had an enemy head dead in his sights. And he never missed!

RCOC OVERSEAS

(By Lt.-Col. R. S. Reckert, ED (RCOC), Directorate of Military Training)

Originally a small staff of RCOC proceeded to the U.K. during the later months of 1939 and located at CMHQ and a garrison town in the South of England. Supervision, requirements, accounting and liaison were the principal duties, as supply was in those days based almost entirely on British Depots.

The first complete Ordnance Unit to be despatched overseas was then known as an Ordnance Field Park (OFP). It left Western Canada on 24 Jan 40, arriving at a garrison town in the South of England on 8 Feb 40. This unit was quartered with an AFW which arrived on the same flight. These two units constituted the backbone of the Ordnance Services in those early days, and it was from these units, augmented by subsequent reinforcements that RCOC and RCEME installations developed to their present important role overseas.

Assisted In Defence

In April 1940, this O.F.P. was moved to a Central Ordnance Depot (COD) in the Midlands for training, and played a large part in equipping of units and installations for the expeditions to France and Norway. During June of 1940, this unit was called on to assist in the defence of an important Midlands city by erecting and manning the barricades and defence posts.

About this time an initial supply of Canadian-built vehicles arrived in U.K. for the Canadian Forces. An RCASC unit undertook the handling of the MGO vehicles in addition to their own QMG supply. This supply grew to such proportions that it became necessary for RCOC to undertake the handling of MGO vehicles.

A detachment from the OFP was ordered to the South of England to take over this duty and on or about 7 Jul 40, the Canadian MT Depot came into being. This installation was perhaps the best known throughout the Canadian Army, as all units, at one time or another, visited here for the purposes of taking over the Unit "A" or "B" Vehicles.

Spare Parts in the meantime were handled by British Depots, but subsequently it became necessary to install a Spare Parts depot in conjunction with the Cdn M.T. Depot.

A third installation was added in the nature of a small inspection and repair staff. This ultimately grew to become the Heavy Repair Workshop, and took care of all fourth line repair until the arrival of a Base Ordnance Workshop (BOW).

In the meantime the original accounting and liaison staff expanded. Divisional Dumps came into being. A clothing depot was opened, and ultimately a General Stores and a Returned Stores Depot commenced operations.

Further Field Units arrived from Canada, in the form of OFPs, Mobile Laundry and Bath Units and Salvage Coys.

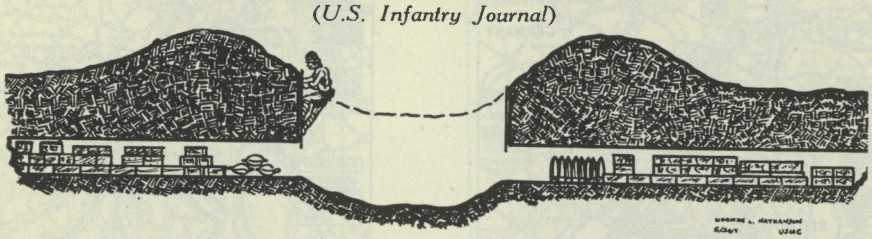
Reinforcements were originally held in a Coy of a General Holding Unit, subsequently moving to another area and commenced operations as a Canadian Ordnance Reinforcement Unit.

Put to the Test

As the war progressed, and Ordnance facilities were put to the test by medium of RAOC operations, continual changes in installations and functions were necessary. The structure of OFPs went through three complete changes; Decontamination was deleted from the Mobile Laundries; the Canadian Base Ordnance

SHELL-HOLE GALLERIES

(U.S. Infantry Journal)



On Guam the Japs built storage dumps by digging galleries in the walls of craters made by our air and naval bombardments. From the air nothing but an apparently undisturbed crater could be seen—and who bothers to bomb a shell-hole?

Depot (CBOD) turned back certain supply functions to British Depots and concentrated on vehicle supply and certain types of Spare Parts; the separate supply of QMG and MGO vehicles was abandoned in favour of a single supply of MGO vehicles; and finally a complete re-organization came about, due to the formation of RCEME.

Liaison with RAOC units in Operational Theatres was intensified in the latter part of 1942 with particular attention given to operations in the Mediterranean area.

Preparation for Landings

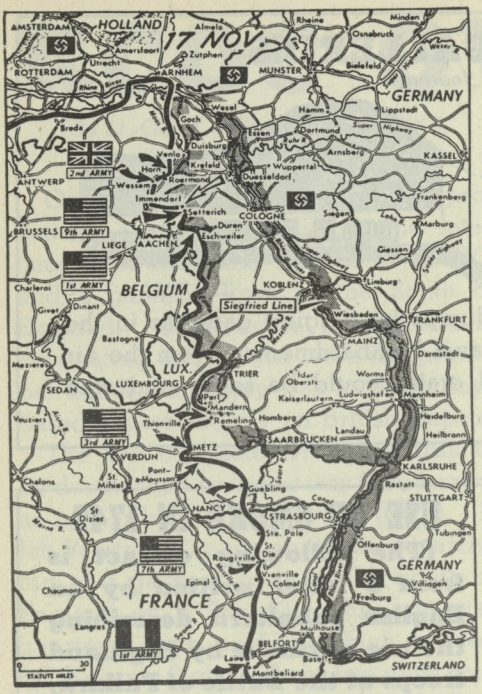
Subsequently, RCOC Units and installations played an important part in the preparation for the landings in the Mediterranean and Normandy theatres.

When Canadian formations ultimately embarked for these operational theatres, they proceeded with the assurance that the supply and service in the matter of Arms, Clothing and Equipment was second to none; and when the history of these campaigns is written, further laurels will be added to the Arms of the RCOC.

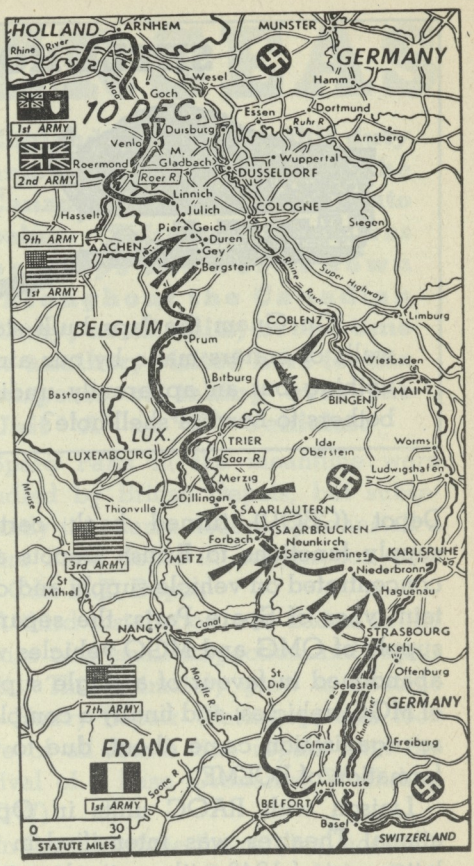
USE OF SMOKE IN 1745

(The following extract is from a letter written by an English subaltern describing the use of smoke by Highland troops at the Battle of Falkirk, 1745. It appears in "Echoes of Old Wars" compiled by Col. E. Field, R.M.L.I., and published by Herbert Jenkins Ltd., London, Eng.—Editor).

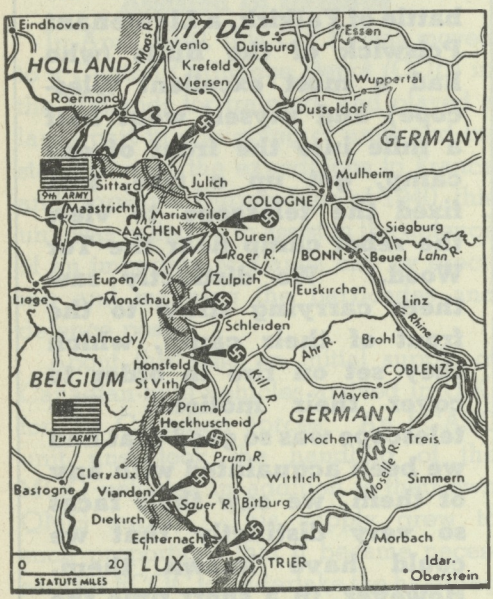
"Did I inform you that the morning of the day of the battle of Falkirk, a Lieutenant Poiswick of the Buffs (who had a most excellent telescope) and myself went half a mile into the front of our camp, got up a tree, and fixed the telescope to view the rebel camp near the Tor Wood. We distinctly saw them carrying straw to the front of their camp, which they set on fire in order to cover their motions. The telescope was so good that had we been acquainted with any of them, we saw their faces so very distinctly that we could have known them. However, in a short time the smoke effectually covered them."



The front on 17 November. Arrows indicate Allied drives. The British were approaching Roermond; the Ninth was checking a German counterattack at Immendorf.

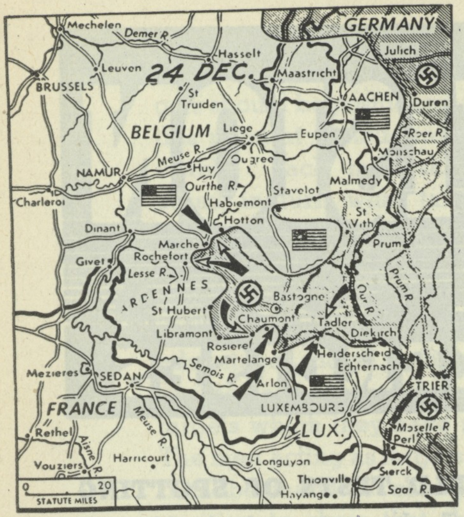


On 10 December, the American First Army was pushing east of Aachen; the Third was beating off heavy counterattacks across the Saar in the Dillengen area. Heavy line is approximate battlefront. Coblenz and Bingen were hit by 1,150 Allied planes.

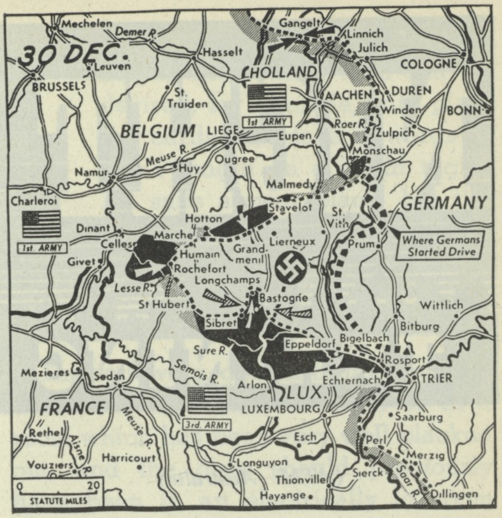


The first major German offensive since Normandy hit the First and Ninth Army fronts at seven points on 17 December. Penetrations were made in Belgium and Luxembourg. American forces broke up a German assault on Mariaweiler. Shaded area is approximate front.

By 22 December the German penetration into Belgium had been blunted, but a new attack toward Thionville was under way. Counter-attacking Americans south of Monschau took Rocherath. Shaded line was the front at the start of the German offensive.



The German drive looked like this on 24 December. Bastogne was encircled, but not captured.

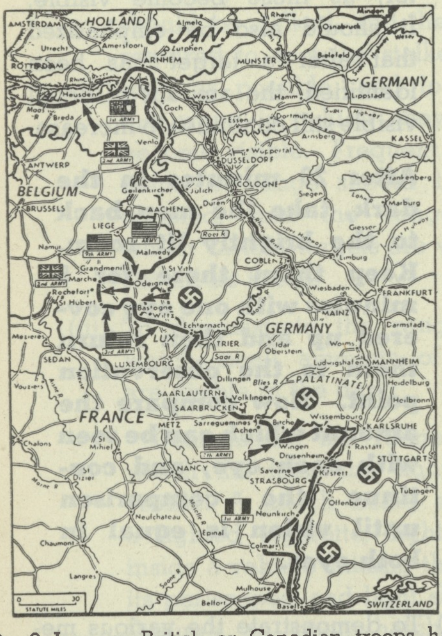


German forces (shaded arrows) were counter-attacking the Third Army's drives to cut the salient in the Bastogne area, which garrison had been relieved after an epic stand. Black territory is that retaken by the First and Third Armies after the German advance reached its peak.

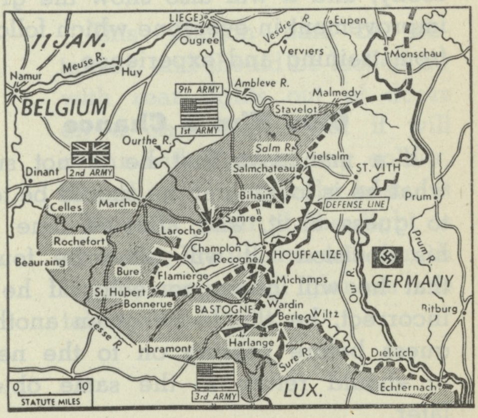
EUROPEAN THEATRE

(U.S. Coast Artillery Journal)

For the information of its readers, CATM herewith presents a series of maps showing the progress of the Allies in the European theatre of war from 17 Nov. 44 to 11 Jan. 45.



On 6 January British or Canadian troops had crossed the Maas at Heusden to take prisoners. At the Belgian salient the Allies took Odeigne; German counterattacks were gaining at the Western end of the salient, and Northeast of Bastogne. Americans gained in Luxembourg. In the South the Americans were trying to stop the enemy at Wingen, to erase a German bridgehead near Kilstett, and to eject the Germans who had entered Neukirch.



Arrows show Allied drives against the German salient on 11 January. Shaded area indicates farthest German penetration. The Germans were retreating from the Western tip of the salient. The First Army took Houffalize 15 January.

NIGHT VISION

TRAINING EXERCISES

(ATM—Australia)

The following exercises can be carried out by groups with little or no special apparatus, and they provide practical instruction and training in night vision. They can also be used by instructors to discover which members of their unit have outstandingly good or well-trained night vision, and whether any suffer from night blindness. It is clearly important that those with outstandingly good or bad eyesight at night, as judged on practical tests, should be known, so that the proper jobs can be found for them.

In working through these exercises instructors should encourage competition. This will demonstrate the ability which some men possess in seeing and in interpreting what they see correctly, and it will also show the great improvement in everyone which follows from training and experience.

Give Him a Chance

If a man says that he is not sure what he is looking at, he should be told to guess at it, and allowed time for his decision. It will often be found that he will guess correctly; if he is incorrect, he should be given another guess before passing on to the next, or should return to the same object later.

(a) FIELD TESTS OF SPOTTING

(i) To demonstrate the building-up, destruction and protection of Dark Adaptation: Take the men straight from a brightly lit room to some nearby observation point on a starlit night. While their dark adaptation is developing they are required to identify targets which have been previously arranged by the instructor, as these become visible. It should also be emphasized that after a target has been identified, the amount of detail visible still continues to increase.

After 20 minutes in the dark, take the men back to the brightly lit room. Keep them there for 5 minutes with one eye covered up and then return them to the observation point. Now compare the amount which can be seen with each eye, and continue the comparison until vision is equal in both eyes.

(ii) To demonstrate the various methods of spotting targets: When the men are fully dark adapted, take them to a second observa-

tion point. About a dozen men, vehicles and other familiar targets should be positioned around this point at various ranges just visible. Each man should be asked in turn what targets he can see. Instruction can then be given in the technique of scanning, in "aim-off vision," and in recognition, and any advantages noted. Binoculars can be used to show the men the targets which they have missed. The men acting as targets should then be made to change their position to show that they are more easily spotted when moving, especially on the sky-line, or against a white background, and that they are more difficult to see when they are near large objects with which they appear to merge.

Stalking

During this period the party should be stalked, and the men required to spot the stalkers as soon as possible, and to note the ways in which they first become visible. Frequent judgments of range should be attempted, and the ranges at which various targets are visible should be found.

(iii) To demonstrate the ranges at which small amounts of light are visible in the dark:

Demonstrate the range from which the following lights are visible: A match being struck; a lighted cigarette; light from inside a vehicle shining through its periscopes; and light shining through an open hatch seen from rising ground. Various simple competitive tests can be devised, for example, with playing cards held face upwards at arm's length on a starlit night. All suits appear black, but the card can be named by a man using "aim-off vision" correctly.

(b) INDOOR DEMONSTRATION

The following demonstrations should be carried out either at night or in a room which has been very well blacked out, and the class should previously have been in an electrically lit room for 20 to 30 minutes.

(i) Apparent movement of light: After a few minutes in the dark, place on a table a torch, with the glass covered by several layers of white paper, one layer of red paper and a diaphragm, with a central hole ¼ in. wide, so that a dim red spot of light is produced simulating a vehicle rear light. The room should be otherwise completely dark.

After this light has been watched for about a minute or less it may appear to start moving. Different men will disagree as to the direction of apparent movement.

This illusion can be obtained, and should be looked for with rear lights out of doors on a dark night, but it will occur with light of any colour, though red is usually best. It will only occur if the light is stared at; the illusion will vanish if only occasional glances are taken at the light.

RCOC IN CANADA

(By Lt. Col. J. D. Petrie, Assistant Director of Ordnance Services (Administration))

If you look back to the autumn of 1939, you will recall the problem that was presented in clothing and equipping the rapidly mobilizing Canadian Army in the early days of the war. You will remember the 1914-18 pattern uniforms that had seen long service with the NPAM together with web equipment, rifles and other equipment of the same vintage. You will also recall what small quantities of these items there were available to meet the sudden pressing requirements.

If you compare all this with our situation today, with all Canadian soldiers splendidly equipped, Ordnance Depots adequately stocked, and a steady flow of equipment moving to the battle theatres, you will say that here is a very worthwhile achievement. It is an achievement of the Canadian people and closely interwoven in this achievement lies the current history of the R.C.O.C.

At Outbreak of War

At the outbreak of war, the Corps had a strength of 40 Officers and 448 Other Ranks with Headquarters and a Central Ordnance Depot in Ottawa, and District Ordnance Depots in each of the Military Districts. These Depots were housed in 114 buildings comprising 1,230,789 square feet of storage space. Today, the Corps in Canada has a strength of 867 officers and 16,476 other ranks and, in addition to the Central Ordnance Depot in Ottawa, has Central Ordnance Depots at Halifax, Amherst, Montreal, Toronto, London and Saskatoon. All depots now comprise 571 buildings with 8,047,432 square feet of storage space.

The functions of the Corps include design, experiment, provision, storage, receipt, issue and salvage of ordnance stores. These now comprise approximately 230,000 types of items and as the flow through Canadian Ordnance Depots last year was approximately 1,640,000 tons, something of the magnitude of the task of providing ordnance services will be readily appreciated.

Directorates

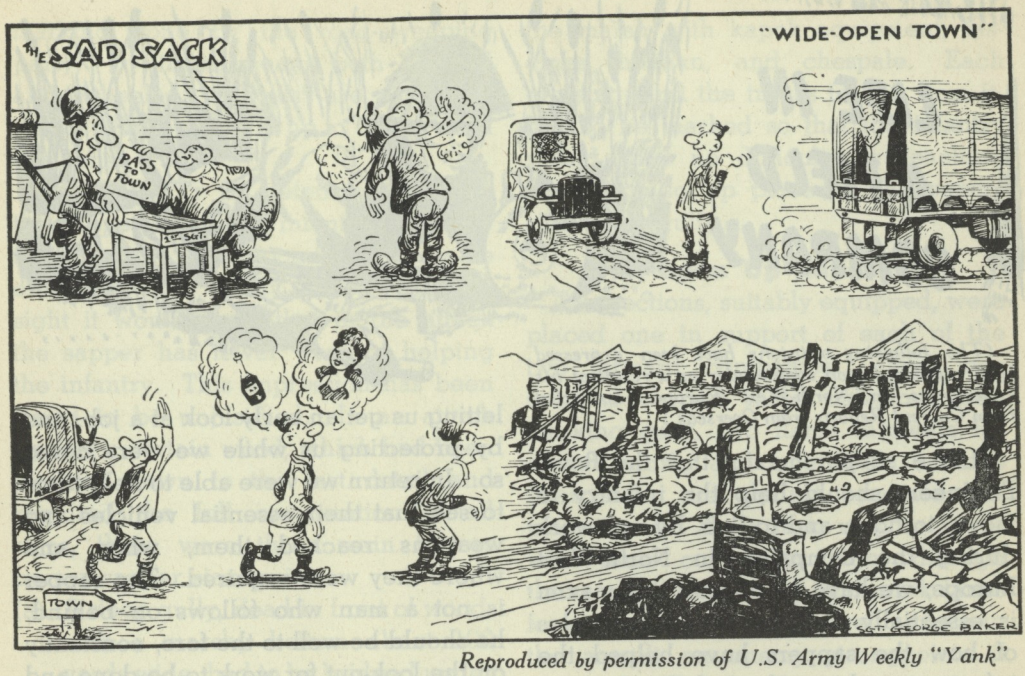
At the start of the war, there were three Directorates within the M.G.O. Branch:—

The Directorate of Ordnance Services,
The Directorate of Mechanization and Artillery,
The Directorate of Clothing, Equipment and Manufacturing Establishments.

As the growth of the Branch took place, these Directorates were superseded by the following:—

Directorate of Ordnance Services (Administration) —D.O.S. (A)
Directorate of Ordnance Services (General Stores) —D.O.S. (G.S.)
Directorate of Ordnance Services (Technical Stores) —D.O.S. (T.S.)
Directorate of Mechanization —D. of Mech.
Directorate of Mechanical Maintenance —D. of M.M.
Directorate of Artillery —D. of Arty.
Directorate of Chemical Warfare and Smoke —D.C.W. & S.
Directorate of Ordnance Services (Storekeeping) —D.O.S. (S.K.)
Directorate of Design of Vehicles and Small Arms —D.D.V. & S.A.
Directorate of Communications and Electrical Design —D. of C. & E.D.
Canadian Army Requirements (Ottawa) —C.A.R. (O.)
Army Salvage and Disposal Board —A.S. & D.B.
Directorate of Inter-service Research and Development —D.I.R.D.

There are many special problems peculiar to the individual Directorates set out and in meeting them the special



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qualifications of scientists, engineers, accountants, lawyers, manufacturers, merchants and many other trades and professions have been utilized to advantage.

The maintenance of technical equipments was the responsibility of the D. of M.M. When the R.C.E.M.E. was formed in May, 1944, this Corps took over the operation of technical workshops from the R.C.O.C. under the technical direction of the D. of M.M. which was redesignated D.M.E.

Operations Increased

In the initial stages of the war, the Corps efforts were chiefly devoted to the equipping of Canadian troops prior to despatch overseas and shipment of stores to allied nations which were in excess of Canadian requirements, was a relatively small factor. But, as Canadian production of equipment grew and to provide a central control of equipments manufactured in Canada for various allied nations, the operations of the Central Ordnance Depot, Ottawa, were greatly increased, and large Central Ordnance Depots were established at London and Montreal known as Central Mechanization Depot and Longue Pointe Ordnance Depot respectively. These three Central Depots have vital roles in the supplying of stores, not only to the Canadian Army Overseas, but also to the British Army and various other United Nations. A continuous flow of AFVs, guns, wheeled vehicles, general stores and clothing is shipped overseas by these Depots, not only to the UK, but in many cases direct to the various theatres of operations. The R.C.O.C. Central Ordnance Depots in Canada operate in modern warehouses and employ the latest methods in the use of mechanical materials handling equipment. The procedure followed measures up most favourably to that in the large stores-holding establishments of the various Services in the U.S.A.

The role of the Corps during this war may be said to be divided into three phases, — first, initial development and supply; second, — improvement of methods and continuing supply; and, third, — conditioning and repair and disposal or storage. We are now in the second phase of this role; the third phase lies ahead.

LIFE IN A FIELD COMPANY

(The following opinions have been expressed by a sapper platoon commander as a result of his experiences in North-West Europe.—Extracted from Current Reports from Overseas.)

It is a sapper maxim that the Royal Engineers should help the infantry to move, to fight, and to live. By our work during the campaign in North-West Europe, we have found that this maxim is essentially true and some examples of how the sappers have helped the infantry to achieve these three aims are given in the following paragraphs.

TO MOVE: An organized system of tracks, roads, and bridges has to be ready for vehicles as soon as they arrive at the scene of battle. In a divisional advance, one of the first tasks of the sappers is to open up a divisional axis immediately the leading assault troops have gone ahead. But before this can be done, reconnaissance and planning are necessary.

Experience has shown that a large number of likely obstacles can be appreciated beforehand by: (a) careful study of air photographs; (b) prisoner of war reports; (c) preliminary reconnaissances by sapper NCOs with infantry escorts. By these three methods obstacles were foreseen long before they were reached, and plans were made in advance for dealing with them.

Well To The Fore

Co-operation with the other arms was excellent, and they always treated us with the greatest consideration. In particular, the divisional reconnaissance regiment and the leading infantry battalions helped us enormously by letting us get an early look at a job, and by protecting us while we were doing so. In return we were able to help them to see that their essential vehicles and weapons reached them, when and where they were required. The sapper is not a man who follows on behind; he should be well to the fore, constantly on the look-out for work to be done and always alert to pass back every scrap of information that may be of use.

The task of opening up the axis of advance follows the reconnaissance and planning. This work may necessitate the attachment of a mine-clearing party of minimum strength, yet maximum efficiency, to each forward infantry battalion. As the battalions advance, these parties search for and clear, or mark, mines in road verges, and at the entrances to fields and lanes.

But one word of warning: the sappers should always be in contact with the infantry, or they may find themselves innocently heading straight into enemy territory without any infantry to protect them.

If possible, each mine-clearing party should be supported by a similar party moving close behind it. The task of this party is to open up a tank track more or less parallel to the main axis to mark it, and to make openings through hedges, ditches, and banks, with the help of such mechanical equipment as the CRE has allotted. They should also improve the route

marking done by the road-sweeping party. By these means both tracked and wheeled vehicles are provided with a safe route right up to the forward positions.

TO FIGHT: In defensive warfare, the sapper helps the infantry primarily to prepare strongpoints, to create obstacles, and to lay mines. At first sight it would seem that in the attack the sapper has fewer ways of helping the infantry. This impression has been found to be unjustified. In an attack against a certain wood, which had been planned down to the last detail and required the full co-operation of all arms, there were three main factors from a sapper standpoint:

(a) A deep gully, dead in front of wood, with a marshy bottom about 100 yards wide, had to be bridged under cover of darkness, in order to allow the infantry to form up an assault without their presence being known to the enemy until the last moment.

(b) Reconnaissance by sapper NCOs and information from prisoners of war disclosed the fact that there were undoubtedly mines, both anti-personnel and anti-tank, in front of the wood, and in the wood itself.

(c) Previous experience had shown that pillboxes and dug-in enemy tanks would probably have to be neutralized.

Platoons Allotted

Thus the sapper problem was an extensive one, and unless it was carried out efficiently, the infantry would not reach their objectives, or if they did, they would not be able to stay on them. Platoons were allotted to battalions, and the work of the platoon under the command of the left battalion gives some idea how the problem was solved.

One section of this platoon, reinforced by infantry pioneers, was responsible for making six crossings over the marsh with kapok equipment, fascines, hessian, and chespale. Each crossing, and the tracks to and from it, had to be marked so that the infantry would have no difficulty in reaching their forming up place on the enemy side of the gully.

Open Up Lanes

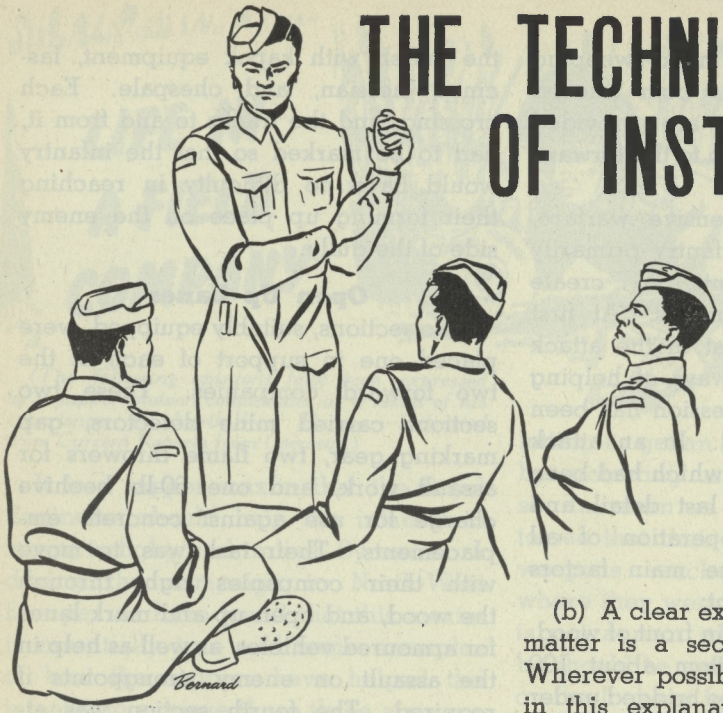
Two sections, suitably equipped, were placed one in support of each of the two forward companies. These two sections carried mine detectors, gap marking gear, two flame throwers for assault work, and one 60-lb beehive charge for use against concrete emplacements. Their task was to move with their companies right through the wood, and open up and mark lanes for armoured vehicles, as well as help in the assault on enemy strongpoints if required. The fourth section was attached to the reserve company, with the role of clearing mines from a lateral road which ran through the wood.

The preliminary task of getting the infantry across the gully was successfully accomplished under cover of darkness without the enemy's knowledge. Thus surprise was achieved. The forward companies crept forward under the barrage, entered the wood, and reached their objectives after hard fighting.

TO LIVE: There were numerous ways in which the sappers helped the forward infantry to live. They kept open lines of communication, cleared occupied areas of mines and booby traps, and even buried many of the dead cattle that were found; but their main task was the production of a good water supply.

Finally, but not least, the sappers were often employed to open up tracks to enable the medical jeeps to drive right forward to the front line. This work was always particularly appreciated.

THE TECHNIQUE OF INSTRUCTION



Much of the instruction that is done in the army has as its object the acquisition of a skill—such as skill in handling a weapon. Such skills and drills are normally taught in squad formation and since there is no "royal road" to acquiring muscular skill much practice in addition to instruction is necessary.

The very nature of the subject presents the instructor with three major problems—(1) how to develop efficiency in his squad; (2) how to minimize the monotony and boredom of the practice periods required; and (3) how to stimulate a desire for self-improvement in the members of his squad. Certain techniques and devices may aid the instructor in finding the best solution to each of these problems.

1. Efficiency in instruction is aided by:

(a) The use of small squads wherever possible. The exact size of the squad is a matter that will be determined by the nature of the subject, local conditions, the number of instructors available and other factors. In general though, it may be said that certain stages of training in driving require one instructor for each candidate. The same may be said of coaching in musketry. Close order drill on the other hand permits of a greater number of candidates per instructor.

(b) A clear explanation of the subject matter is a second aid to efficiency. Wherever possible it is well to include in this explanation something of the purpose—some reason why this particular drill is taught.

Demonstration

(c) Since the eye is normally a better teacher than the ear it follows that a demonstration of the drill or skill should supplement any explanation. It is vitally important that the demonstration should be as nearly perfect as humanly possible. In many cases it is possible to combine effectively the demonstration with the explanation.

(d) Finally, the chief aid to efficiency in the development of a skill is adequate supervised practice during which the learner is constantly checked for mistakes which must be corrected immediately. It is important that the early practice periods should be adequately supervised so that bad habits may not be practiced. By the same token it is necessary that the mistakes made should be corrected immediately.

2. The second major problem facing the drill instructor is how to minimize the monotony and boredom that are inherent in the practice necessary to

achieve efficiency in the drill or in acquiring a skill. **The solution to this particular problem may be aided by:**

(a) Giving a definite purpose—particularly a battle purpose—to the lesson. Most of us are normally and naturally self-centred and are therefore willing to undergo long periods of practice only if we are convinced that there is a purpose to the ordeal.

Short Periods

(b) Repeated experience has shown that frequent short periods of practice are less monotonous and more effective than lengthy unbroken periods. Within the limits of the timetable, care should be taken to provide a varied programme.

(c) The judicious use of the "stand easy" may do much to counteract monotony. Four 10-minute periods of intensive practice each followed by one or two minutes of "stand easy" will normally accomplish more than a continuous 45 minutes.

(d) Games, such as the time honored "O'Grady on Parade," are useful devices for breaking the monotony of practice and they also have a desired smartening up effect in that they keep each member of the squad on his toes.

3. In the final analysis proficiency in any skill or drill is usually the outcome of desire on the part of the candidate to achieve proficiency. **The will for self-improvement may be fostered by:**

(a) Judicious use of praise. Nothing is more stimulating to continued effort than an occasional "Well done."

(c) Competitions—provided they are sufficiently varied to allow talents of various natures full scope—may supply the urge for improvement.

(c) Demonstrations by finished performers also provide a stimulus for improvement. A really smart gun crew —Bren gun team—a drill platoon has immeasurable value in setting up a goal of achievement for the unskilled group.

(d) Suitable awards in the way of extra privileges may also be used to promote this desire for improvement.

The acquisition of a mechanical skill or the attainment of proficiency in drill can be acquired only by travelling the hard road of practice. It is hoped that the above hints may make that road a little less arduous.

GOOD SHOOTING!

(Extracted From Toronto Evening Telegram)

Sgt.-Maj. Gordon Keeler, M.M., of St. Catherines, "took over" another house from the Huns and used it for himself and his crew of snipers.

Keeler, an expert marksman, who never lets his rifle out of his hand, picked out his own and targets for each companion. He got two Germans sure at 600 yards, while his pals also cleaned up.

Keeler killed one German sniper who was using a rifle with a fine telescopic sight. Mechanics are now fixing the Nazi's sight to Keeler's rifle.

How Much Infantry?

(U.S. Infantry Journal)

How much Infantry, how much Air Force, how much Artillery? Determining the proportions, the balance, of a modern army is one of the toughest problems—whether the fighting force is being designed for war or to keep down war.

When an army is being hastily expanded for war, the developments of campaign and battle must be roughly estimated, and the probable value of each combat and service element in each of the battle teams must be carefully weighed. In lining up a peacetime force, a similar estimate of the situation has to be made.

In both situations the answers to the questions How much Infantry? How much Air Force? How much Artillery? and how much of all other kinds of troops? depends upon the best answer that can be found to a still broader question—What might this army have to do?

In either situation the structure of the Army as originally planned is certain to need changing as changes come in the war or the world, and in weapons. In this, war may mean that men trained for one kind of a task have to be reassigned and trained for another job.

In this war it has meant, more than anything else, that forces of several other kinds have to be cut down in order to make more Infantrymen. This has been true, not just in our own army, but in most if not all of the others, friendly and enemy.

Our own army has had a lower proportion of Infantry than any of the other big armies—and a higher proportion of Air Forces . . . .

Even before the German drive in December we had begun to draw upon our Air Forces, our Anti-Aircraft, and some of our Services for men who could

be made into Infantrymen. That last battle made it plainer than ever that the war could only be won through having enough Infantry divisions. Early in the battle, the British authorities announced publicly that 250,000 more ground troops would be created from men in the air and service forces. It seemed probable that we would be making the same kind of shift and very possibly on an even bigger scale.

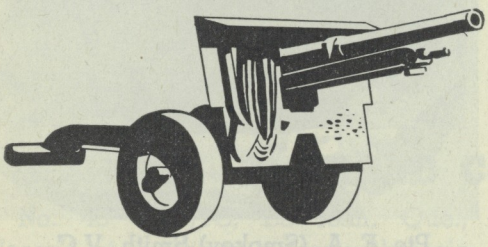
The last battle of the year's end seemed also to show some other things—things vital to the successful conclusion of the war and to the proper proportioning of the post-war army to come.

It appears beyond all doubt that, as always in the past, supporting air power could never be counted upon in bad weather. Every army must be prepared to do without such support, including air reconnaissance, when it has to fight in a theatre where periods of close weather are to be expected. No Commander could ever afford to gamble on this point.

The December battle also sharpened the doubt in the mind of the ground fighter as to whether supporting air

units can ever become as efficient as heavy artillery for the tasks that heavy artillery can perform. This seemed unlikely, especially in view of the possibility that the robot bomb or some similar development might make heavy artillery still more efficient in man-power per ton of projectiles accurately placed on the target area per hour or day.

But above all there was the question whether we had not overestimated the effectiveness of the long-range bomber units in comparison with Infantry divisions within the framework of the



maximum army as established. And whether we would not need to convert more air units—considerably more—into Infantry and Artillery.

Such questions, in their immediate aspects, can only be answered by the highest authorities, for they alone have all the facts of the situation. But these very same problems will be among the most important ones when the time comes to determine the make-up of our postwar army. . . .

Story of Infantry

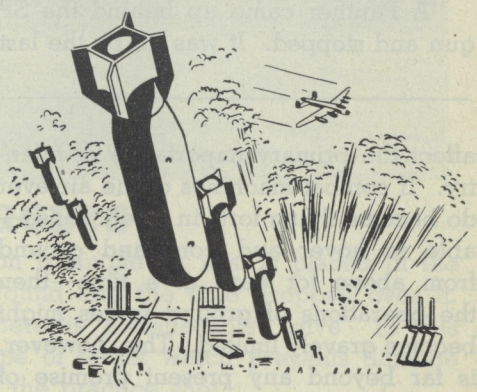
It will be particularly necessary to tell the full story of infantry in the war. The strong tendency toward reliance on machines right after the German 1940 blitzkrieg; the Russians' use of millions of infantry and other ground troops to stop the blitzkrieg of 1941; the German uses of infantry divisions on a scale comparable to the Russian; our own reliance on infantry in the Pacific campaigns as well as the campaigns of Africa and Europe—all these phases must be given the most careful study.

Not one side of the whole subject can be neglected or minimized. And especially must we guard against any further tendency to overrate the combat value of air forces. The fact that flying will probably become more common in the pursuits of peace will make it all the more necessary to emphasize the military limitations of the combat plane. It will make it all the more necessary to be certain that our nation is kept fully aware of the central, vital place of infantry in the armies of the future.

To establish this fully it will be particularly necessary to reassess, openly and fully, the value of air forces in war, especially in the light of the buzz bomb. The bomber with its crew, delivering tons of explosives on a distant target, is equivalent to artillery of very long range.

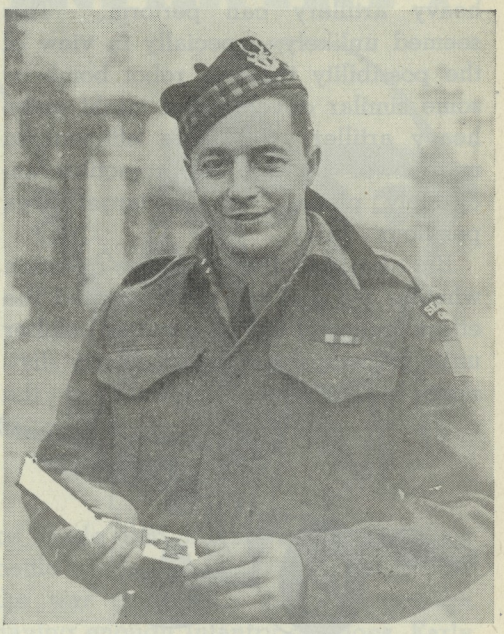
At the present, the buzz bomb gives some promise of becoming a less costly substitute for the bomber for some of its chief purposes. It is hardly to be expected that in an alert air force such as our own there will be much tendency to resist "unorthodox" ideas, even when these may replace to a considerable extent the great and costly machines we now make use of by the thousands. . . .

It is hard to imagine now what further development of warfare might radically



ACTIVE CONSOLIDATION!

(This matter-of-fact report extracted from the war diary of a Canadian Infantry Battalion fighting in Italy has none of the "death-and-glory" flavour about it. It tells simply the part played by men of a tank-hunting platoon. Among them was a certain Pte. Smith. Not an unusual name, but to readers it will recall an act of outstanding courage in the line of duty and in the face of terrific odds. For this Pte. Smith is none other than "Smokey" Smith—V.C. winner!—Editor).



Pte. E. A. (Smokey) Smith, V.C.
Seaforth Highlanders of Canada

"Getting there and staying there were two acutely different problems. Behind our troops were enemy machine-gunners and Infantry with enemy tanks, SP guns and Infantry on all sides. It was here that the recently formed tank-hunting platoon proved its worth.

"German tanks came up from behind the buildings in C company area. The sergeant in charge of tank-hunting platoon, deployed his platoon, and road blocks and Hawkins Grenades (75s) were set out at road junction. A small German Staff car came down the road, and negotiated our little mine-trap unharmed. A chap with a PIAT, in wait, hit it at point-blank range. There was not much left of the upper half of the driver's torso. When the car hit the ditch, an Officer got out shouting—probably a Senior Officer since he seemed to be shouting orders. These were his last orders. Behind the staff car came a 75 mm full-track SP gun. It blew a track on a 75 grenade, delighting the tank-hunting platoon, who demolished the crew by putting a 36 grenade into the turret.

"A Panther came up behind the SP gun and stopped. It was hit by the last PIAT bomb of Pte. Smith, but not knocked out. It turned around, and some ten infantry, who had been riding on the back of it, charged Pte. Smith. Pte. Smith shot them down with his tommy, killing several and dispersing the rest. Meanwhile another SP gun came around the road on the other side of the church. It was hit by a PIAT and knocked out. A Panther tank came up behind it, tried to get around, stuck in the ditch, began to back up and was hit by a PIAT. It was a complete 'brew up;' the conflagration illuminated the area for an hour or two."

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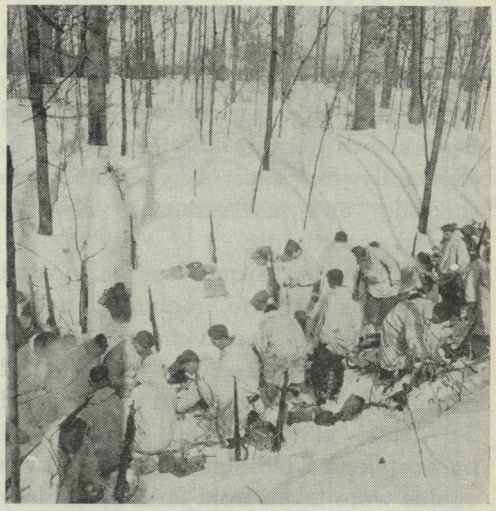
affect the primary importance of infantry. If combat machines of the air ever do become flying forts in a real sense—able to hover and command ground from above for days at a time—then the operations of ground forces might become gravely limited. This, however, is far beyond any present promise of science. The development of further anti-air measures seems far more probable—robot fighter planes, perhaps. Nothing now appears at all likely as a substitute for infantry assisted by the other combat forces of the ground and the air.

PASSING IT ON



FIELD COOKING

No. 48 CI(B)TC, St. Jean, Que., doesn't let weather interfere with basic training—nor eating! As shown in the above photos, recruits are taught in a practical way the value of field cooking. Using only their mess tins, they improvise a "stove" with poles and go to work preparing lunch. On the left, a couple of hungry men cook their raw meat and vegetables; on the right, a number of soldiers get down behind an embankment out of the wind to cook the mid-day meal. And does it taste good! Note the camouflaged winter clothing.

PIAT TARGETS

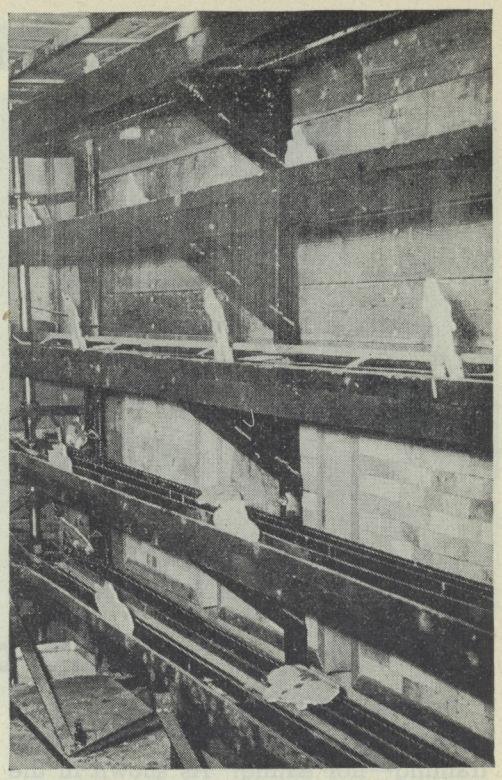
As shown here, worn-out tires can still serve a useful purpose. A16 CITC, Currie Barracks, Calgary, Alta., uses them as PIAT targets and reports they are very satisfactory. The construction is simple—a post is placed in the ground and the tires dropped over it. There is considerable "give" to this type of target which prevents damage to the practice shot.

MOVING TARGET

The accompanying photo and plan illustrate a moving target device in use at A16 CITC, Currie Barracks, Calgary, Alta. The moving target was developed because A16 believed it would promote better rifle shooting. Men in training have shown considerable interest in it, especially for after duty competitive shooting, and marksmanship has improved accordingly.

The moving target was fabricated mainly from salvage, including bullet-proof sides of condemned artillery limbers and encased drive shaft and gears. The gears were cut on salvaged 3-8" steel plate and all patterns cut by acetylene welding torch. The drive chains were taken from farm machinery and run on guides built up from angle iron which forms part of the frame work. The power is supplied by a 3 h.p. electric motor and geared down through a standard auto transmission from which the reverse gear was removed.

The individual targets were made to scale from 1/4" plate and represent advancing infantrymen, jeeps, motor-cyclists and German tanks. They operate in two speeds. The five rows of



targets move simultaneously and are all equidistant from the firing point. Five firers can use the targets at one time. This moving target is 18 feet long, 16 inches wide and 6 feet 9 inches in height. (*See plan page 39.*)

ROUTE MARCH TRAINING

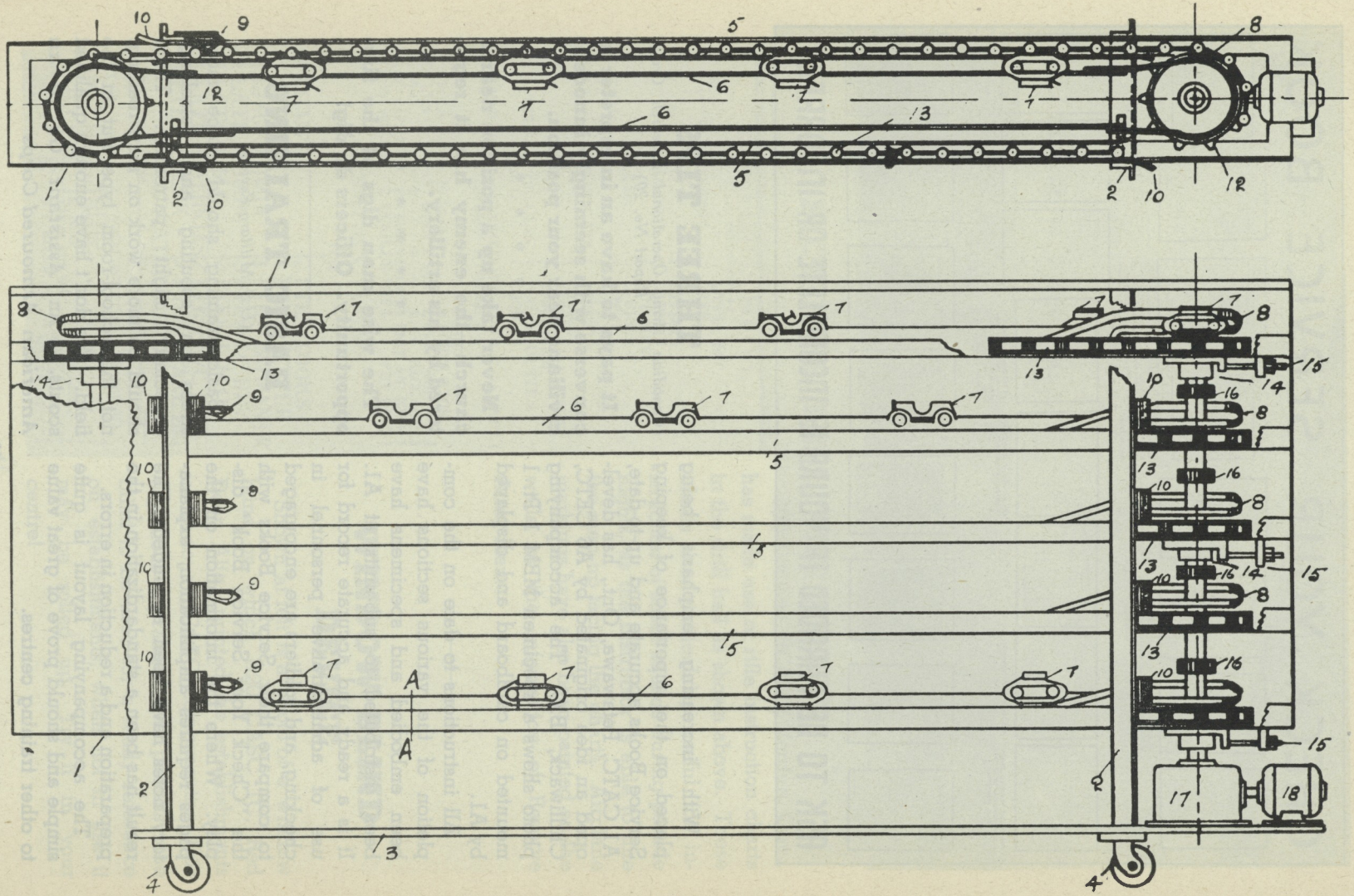
A plan of combining route marches with other types of training is being promoted by A29 CICTC, Camp Ipperwash, Ont. The platoon or section leaders are given a form on which is noted subjects to be taught during the march. Subjects are listed in one column and remarks on the action taken are written in another. This report is handed in to O.C. Training Wing, by 0800 hrs. on the morning following the march.

Subjects on A29's form are: protection (air, ground, when halted, AFV's), judging distance, fire orders, tank obstacles, road blocks, gas, what weapons were carried, meals actually cooked, water arrangements, care of feet.

All subjects mentioned on the form are not necessarily covered on one march, but each march will include a certain number of subjects. For instance, protection against A.F.V.'s, J.D. and Gas might be included on one march, while Fire Orders, Tank Obstacles and Road Blocks could be covered on another.

By the use of this form, every march becomes something more than just another route march. Different phases of training are covered, and thus interest is stimulated in the march itself.

Training centres that are not already using this plan will find it well worth-while.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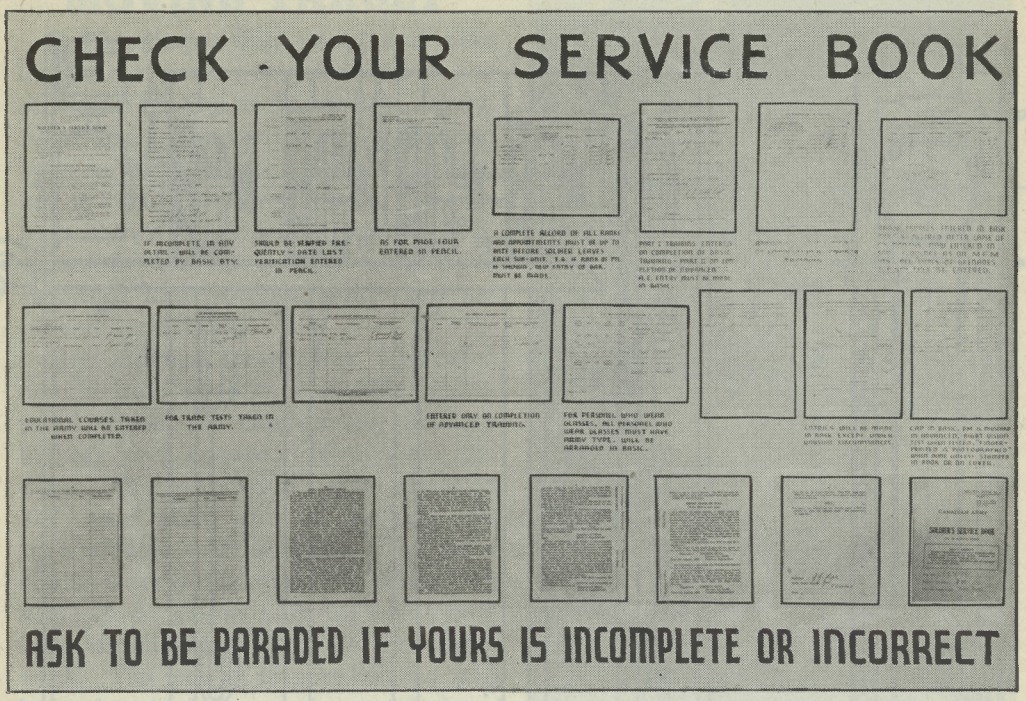


With increasing emphasis being placed on the importance of keeping Service Books accurate and up-to-date, A1 CATC, Petawawa, Ont., has developed an idea originated by A6 CETC, Chilliwack, B.C. The accompanying photo shows a specimen MBM 1 Pt. 1 mounted on cardboard and displayed by A1.

All instructions to date on the completion of the various sections have been embodied and specimens have been distributed to sub-units at A1. It is a ready and accurate record for use of administrative personnel in checking, and soldiers are encouraged to compare their Service Books with the "Check Your Service Book" display. Where the information on the pages requires amplification, explanatory notes have been appended. The result has been a standardization in the preparation and a reduction in errors.

The accompanying layout is quite simple and should prove of great value to other training centres.

THREE TIPS

(Canadian Army Operational Research Group Report No. 20)

It pays to have an interpreter to converse with seemingly innocent civilians near your position.

* * * * *

Never take up a position near a church—the enemy has it registered by his artillery.

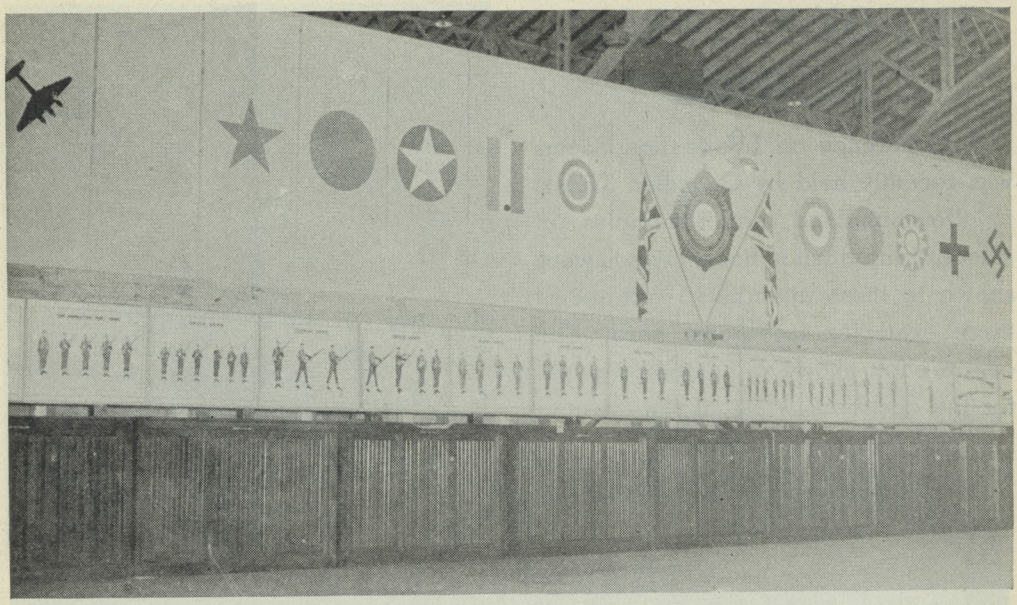
* * * * *

The wise man digs at the first opportunity. Officers do dig!

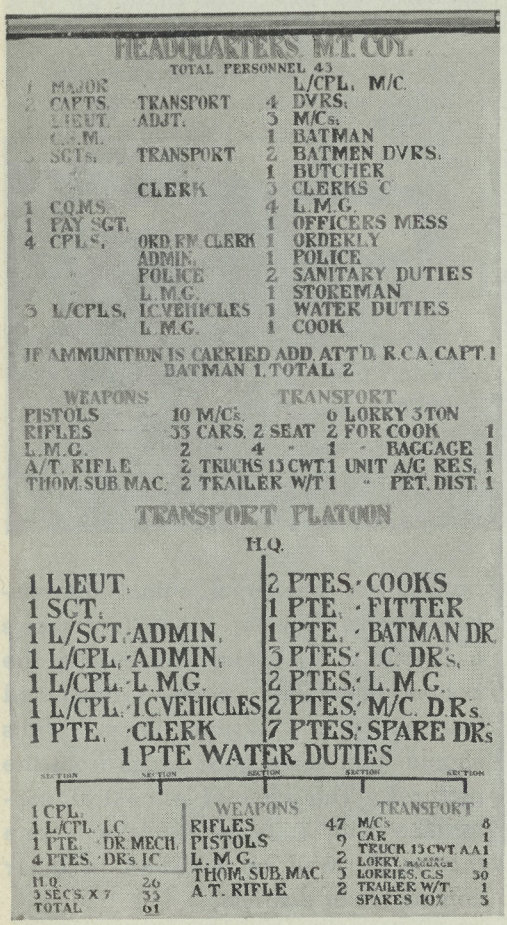
BASIC TRAINING

(U.S. Military Review)

Basic training should place more stress on scouting and patrolling, especially night patrolling. There should be more work on map reading, not the school-room type but in the field. We don't have enough qualified scouts. — *An Assistant G2 of an American Armoured Corps*



PICTURES TELL THE STORY



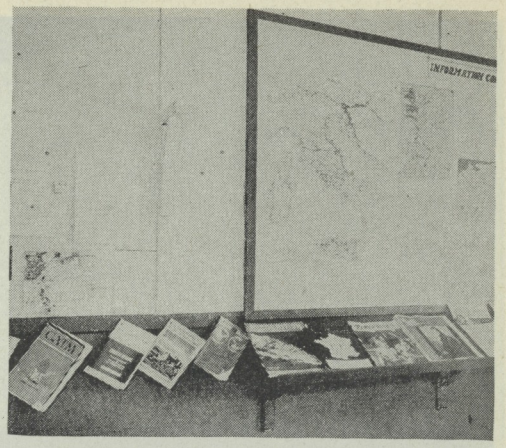
3(R) Division, RCASC, Verdun, Que., has made use of rifle instruction charts in the drill hall as shown above. These charts are particularly useful for instruction of small squads during parade nights, as the instructor is able to line the men up facing the charts. Airplane markings have also been painted on the walls for the information of Reserve Army men.

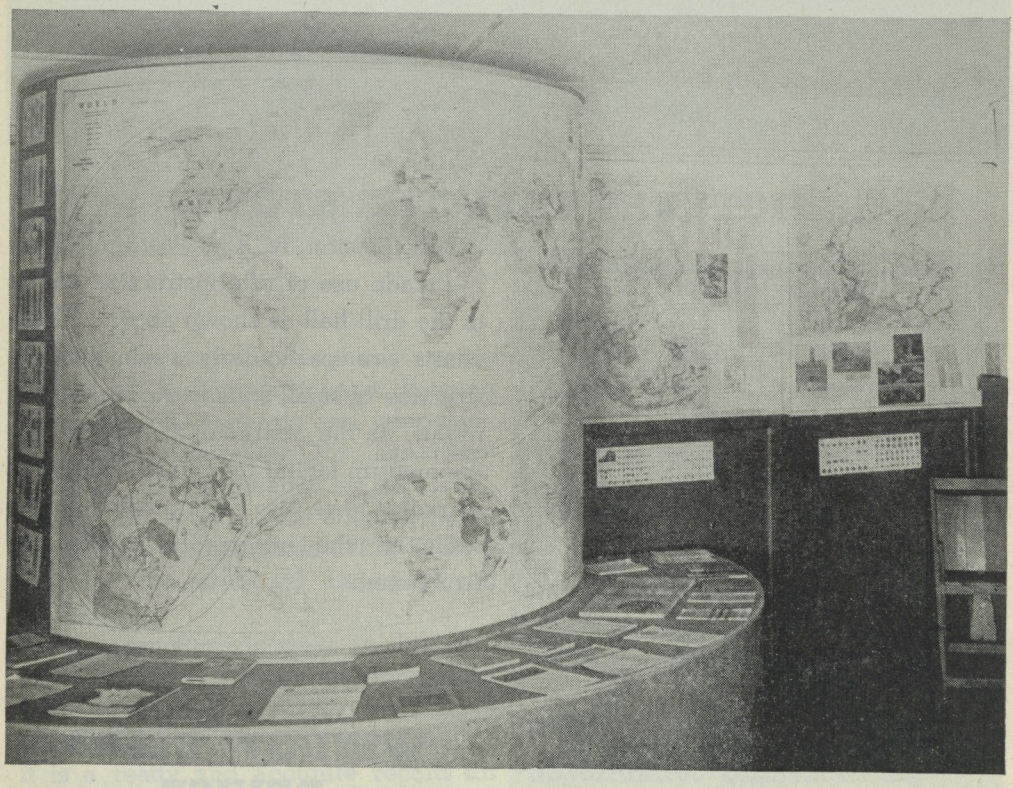
WINDOW BLIND DEVICE

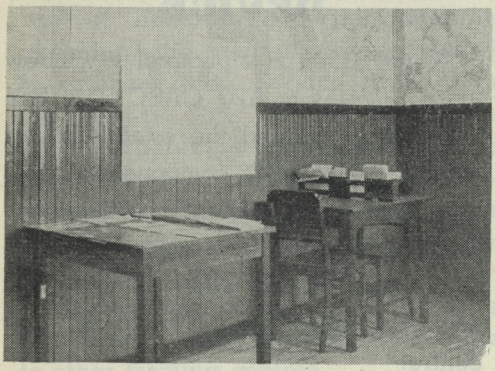
Shown at left is a photo of a window blind on which A20 CASC TC, Red Deer, Alta., printed the establishments of various RCASC components. This ingenious arrangement permits the blind to be used for a ready reference on establishments; when not in use it may be rolled up. Try it in your centre!

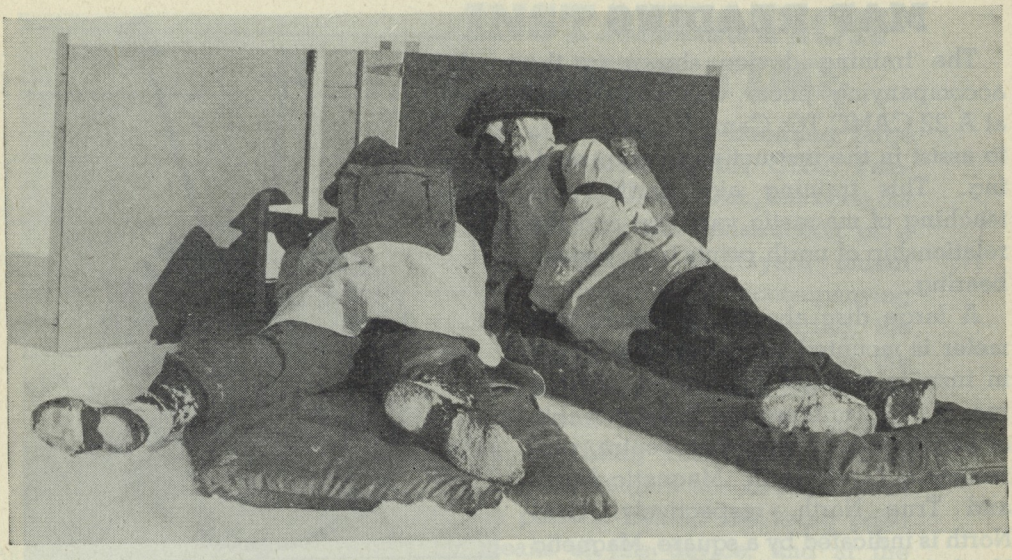
INFORMATION ROOMS

A conference on Information Rooms was recently held by Canadian Troops in Newfoundland and examples of standard Information Room layouts were shown to those attending. Pictures of three examples are shown here. The centre photo shows an exhibit prepared for the occasion, while at the top and bottom are photos of actual Information Rooms. The top illustration shows a layout in a Bofors Hut, while the bottom illustration shows a combined Information and Writing Room. Units should gain some good ideas from the pictures. The idea of a central conference with suitable displays is one that might well be followed in other commands or districts.





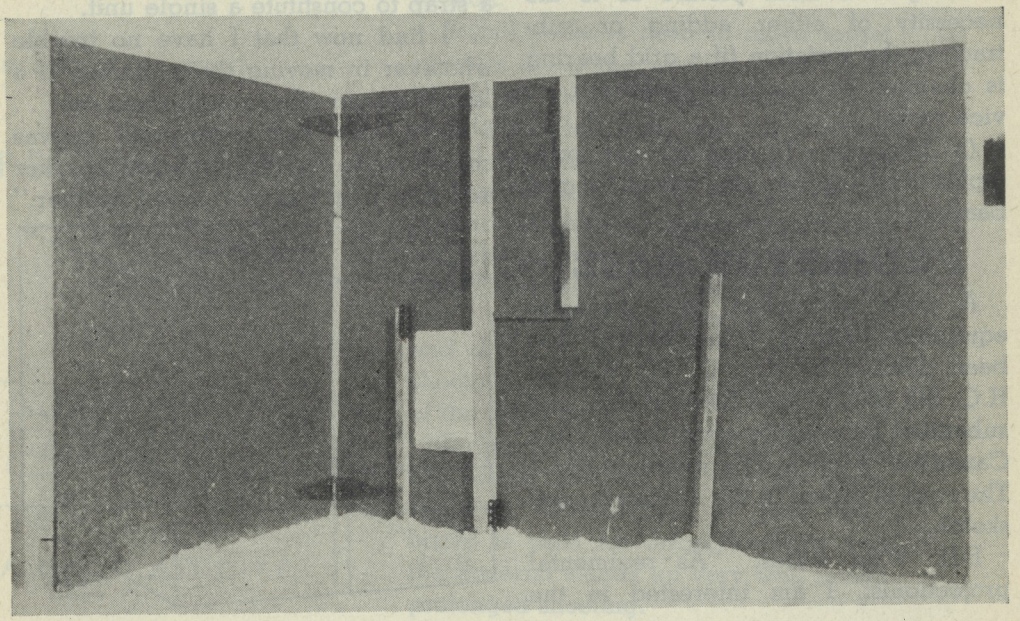




WEATHER-SCREEN

The weather-screen shown here was constructed at A14 CITC, Aldershot, N.S., to afford protection for both the firer and coach. The screen has two hinges, one at the top and the other at the bottom, to permit it to be adjusted according to the location of the target and direction of the wind. Two loopholes for the rifle have been cut in one side as indicated in the illustrations and a cover which slides in a slot blocks one opening while the other is in use. The two loopholes permit the screen to be turned over so as to give protection from the wind on either flank.

Any training centre can construct this screen; some plywood or masonite, a few strips of wood and a couple of hinges and screws are all that is needed. The 18" ruler seen against the screen gives some indication of its height. A height of approximately 30" will prove satisfactory.



MAP READING

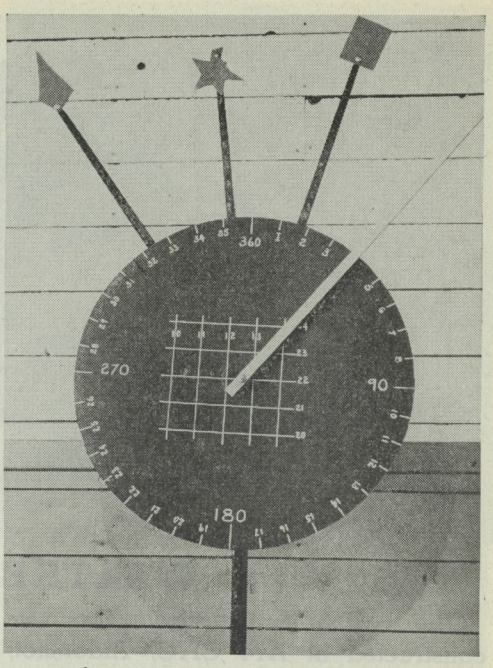
The training device shown in the accompanying photo was constructed at A 22 CAMC TC, Camp Borden, Ont., to assist in the instruction in map reading. This training aid clarifies the teaching of magnetic variation and the relationship of north points to any given bearing.

A large disc about two feet in diameter is mounted on an upright, which in turn is fastened to a stand. At the rear of this disc there are three movable arms pivoting on the same centre, representing Grid North, Magnetic North and True North, respectively. Grid North is indicated by a square, Magnetic North by an arrow and True North by a star. On the front of the disc a similar movable arm is mounted on the centre to represent a bearing.

In the centre is a group of grid squares, the sides of which are parallel with and at right angles to an axis passing through 0 degrees and 180 degrees. The vertical ones are numbered 10 to 14 and the horizontal ones, 20 to 24.

USE: (a) North Points—To show the variations, the disc can be moved so as to give a clear picture as to the necessity of either adding or subtracting the variation (if a grid bearing is changed to a magnetic bearing, or vice versa).

(b) Bearings—To explain the principles that apply in taking a grid bearing.

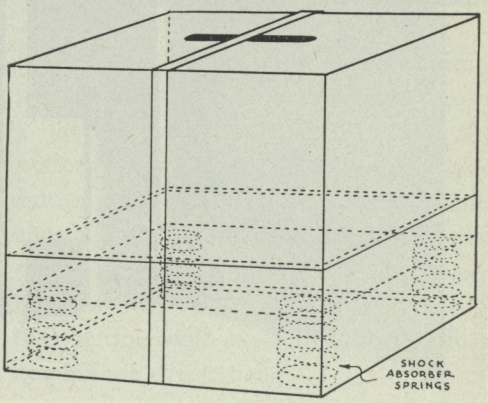


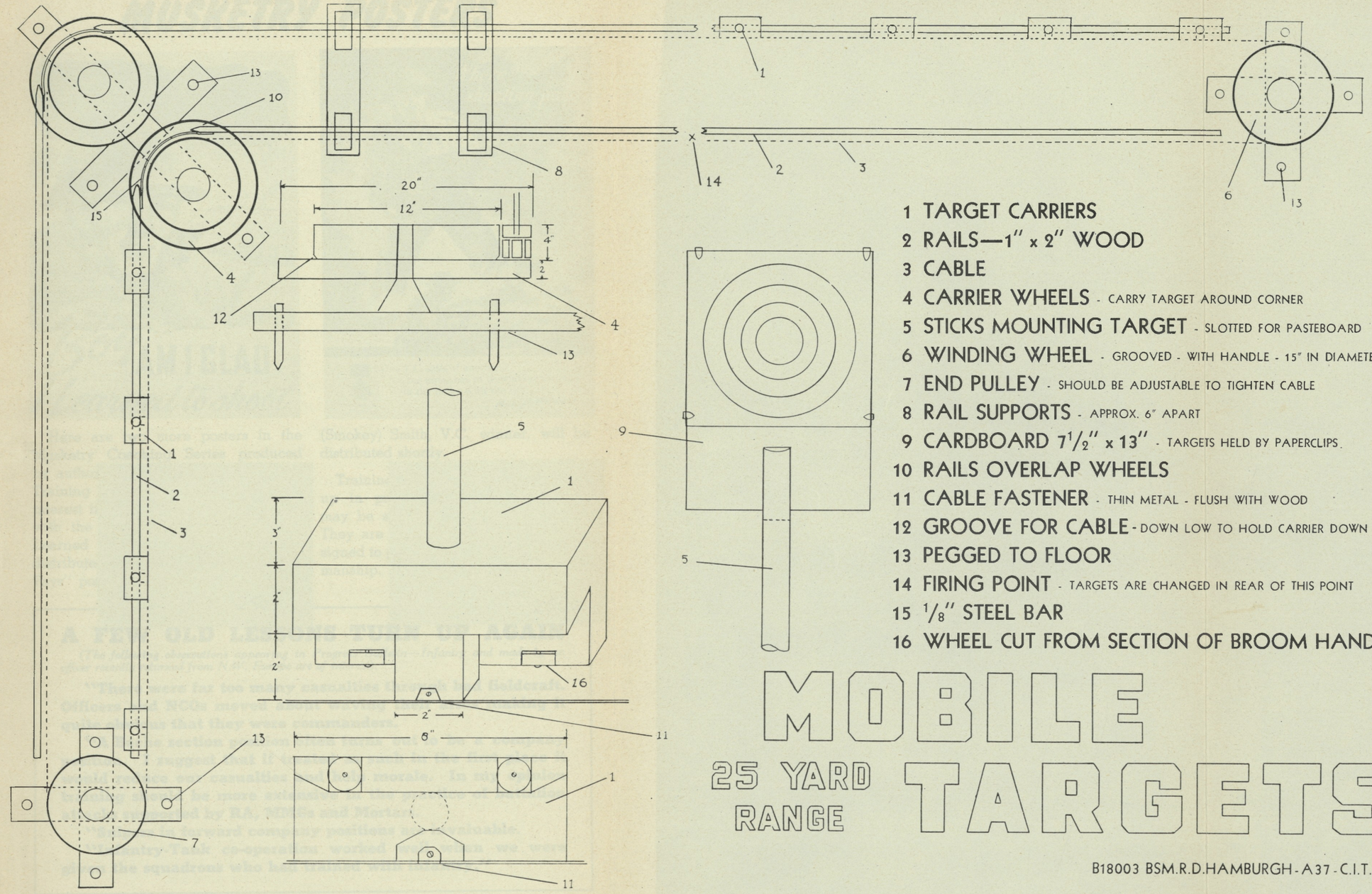
PROJECTOR CASE

A case to protect film projector equipment during transportation has been devised by Bdr. C. W. West of H.Q. 5th (B.C.) Coast Regt., R.C.A. and submitted for consideration through the Canadian Army's "Suggestion Box." The case is shown in the accompanying sketch.

Bdr. West writes: "As regimental projectionist, I am interested in the care of equipment entrusted to me. In going from camp to camp I often found that the only transportation available was a Jeep or truck. There is too much fine precision mechanism in a projector to stand up to this rough type of transport, therefore I had a false bottom (see sketch) made containing springs similar to those found in a car-cushion, the whole bound together with a strap to constitute a single unit.

"I find now that I have no trouble whatever in moving the projector in a Jeep, truck or other rough transport . . . I have also had waterproof canvas covers made for the projector, speaker and screen for transport in wet weather."





1 TARGET CARRIERS
2 RAILS—1" x 2" WOOD
3 CABLE
4 CARRIER WHEELS - CARRY TARGET AROUND CORNER
5 STICKS MOUNTING TARGET - SLOTTED FOR PASTEBOARD
6 WINDING WHEEL - GROOVED - WITH HANDLE - 15" IN DIAMETER
7 END PULLEY - SHOULD BE ADJUSTABLE TO TIGHTEN CABLE
8 RAIL SUPPORTS - APPROX. 6" APART
9 CARDBOARD 7 1/2" x 13" - TARGETS HELD BY PAPERCLIPS
10 RAILS OVERLAP WHEELS
11 CABLE FASTENER - THIN METAL - FLUSH WITH WOOD
12 GROOVE FOR CABLE - DOWN LOW TO HOLD CARRIER DOWN ON WHEEL
13 PEGGED TO FLOOR
14 FIRING POINT - TARGETS ARE CHANGED IN REAR OF THIS POINT
15 1/8" STEEL BAR
16 WHEEL CUT FROM SECTION OF BROOM HANDLE

MOBILE 25 YARD RANGE TARGETS

B18003 BSM.R.D.HAMBURGH - A37 - C.I.T.C.

INSTALLATION SAVES TIME

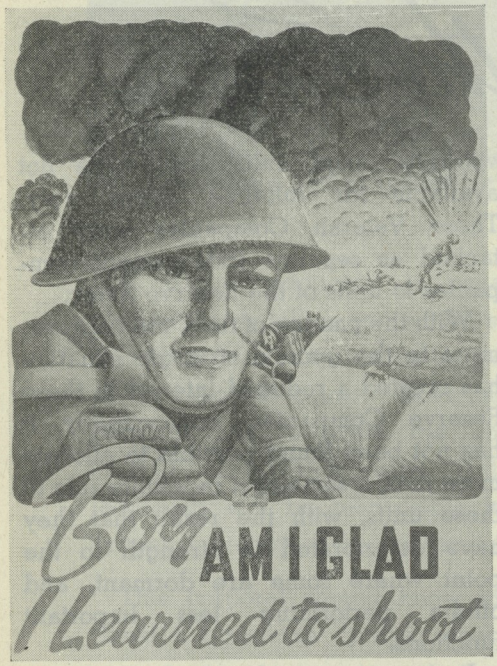
The normal time of handling large numbers of firers at A37 CITC, Petawawa Military Camp, Ont., has been cut to one-third by the construction of a mobile target on a 25-yard indoor range, as shown in the accompanying plan. While one relay is firing, the next relay is placing targets on the carrier, name rank and number having already been marked on the targets. When the firing relay completes its practice the targets are brought back to the position behind the firing point by means of this device, and at the same time new targets move forward to the forward target position. This change of targets requires less time than is required for the relay on the firing point to pick up its empty rounds and the new relay to take over.

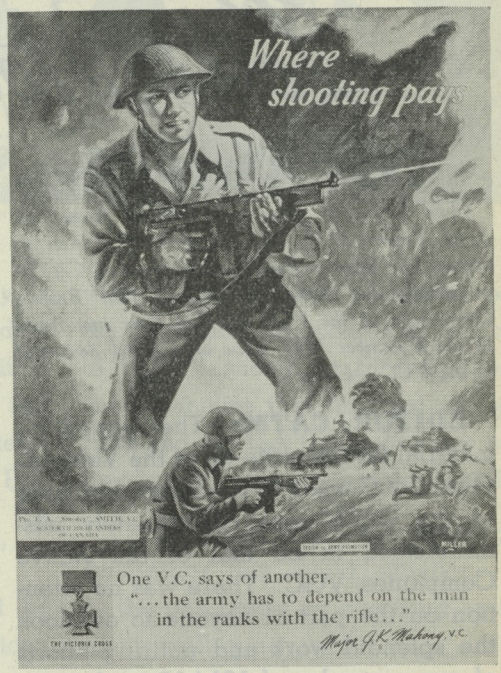
The use of large wheels to carry targets around the corner at the front end of the range was found to be the best. It also saves space. The wheels are constructed of wood; if possible, the front wheel bearing assembly from an auto should be used to reduce friction.

Signal cable is used to move target carriers along the wooden rails. Rails could be made to run along either the right or left wall, with the winding wheel well in rear of the firing point so that targets may be brought to the rear to be changed without interfering with the progress of the firing practices. Using two sets of carriers, one at the firing point and the other at the front end of the range, allows for continuous shooting with no one going in front of the firing point.

Target mounts are made from ordinary broom handles and can be easily replaced. Beaverboard or good cardboard is used for target backing and the material stands up very well under prolonged shooting.

MUSKETRY POSTERS





Here are two more posters in the Musketry Coaching Series produced by author Training interest i with the Learned distribute Pays" po (Smokey) Smith, V.C. winner, will be distributed shortly.

Trainin up in pr may be s They are signed to manship.

2501

2566

A FEW OLD LESSONS TURN UP AGAIN

(The following observations appearing in Progress Bulletin—Infantry and made by an officer recently returned from N.W. Europe are of interest).

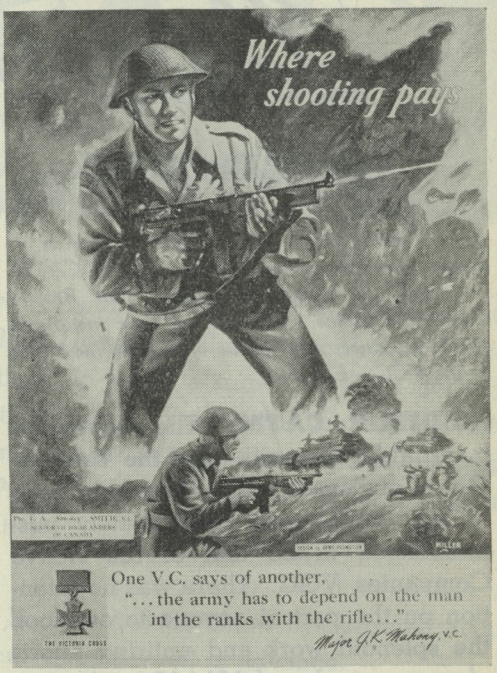
"There were far too many casualties through bad fieldcraft. Officers and NCOs moved about waving their arms making it quite obvious that they were commanders.

"A Boche section position often turns out to be a company position. I suggest that if treated as such in the first place it would reduce our casualties and help morale. In my opinion training should be more extensive in the practice of battalion attacks supported by RA, MMGs and Mortars.

"Snipers in forward company positions are invaluable.

"Infantry-Tank co-operation worked well when we were given the squadrons who had trained with infantry."

MUSKETRY POSTERS



Here are two more posters in the Musketry Coaching Series produced by authority of the Director of Military Training and designed to promote interest in better shooting. The poster with the caption "Boy Am I Glad I Learned To Shoot" has already been distributed, and the "Where Shooting Pays" poster, which features Pte. E. A. (Smokey) Smith, V.C. winner, will be distributed shortly.

Training centres should tack these up in prominent places where they may be seen at all times by recruits. They are eye-catching illustrations designed to promote enthusiasm for marksmanship.

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Letters to the Editor

VGC RESERVE

(The following letter was received from Col. J. M. Taylor, M.C., Director of VGC. It is in answer to a letter in the February issue of CATM in which the writer complained that Reserve Companies of the VGC had not been mentioned in the December 1944 issue of CATM dedicated to the VGC.—Editor).

EDITOR, CATM:—The request for material for the write-up of the Veterans Guard of Canada in the December issue of the CATM was unfortunately misunderstood to be that of the Active Companies, VGC. There was no intention on the part of anyone to overlook the splendid work and untiring efforts of our comrades of 1914-18 in the war effort.

This applies to the magnificent response from the Atlantic to the Pacific Coast. It is known and much appreciated that many of the Reserve Company personnel in some of the remote places of Canada, after a hard day's work, travelled 15 and 20 miles to a centre twice a week to put in their drill, and it is further known that a great many of those fellows tried ever so hard to get into the Active Companies. But unfortunately "Old Man Time" had added his hand to the ravages, as well as effects of services rendered in the years 1914-18, and the Medical Boards had their definite instructions as to the standard of age and fitness to be met.

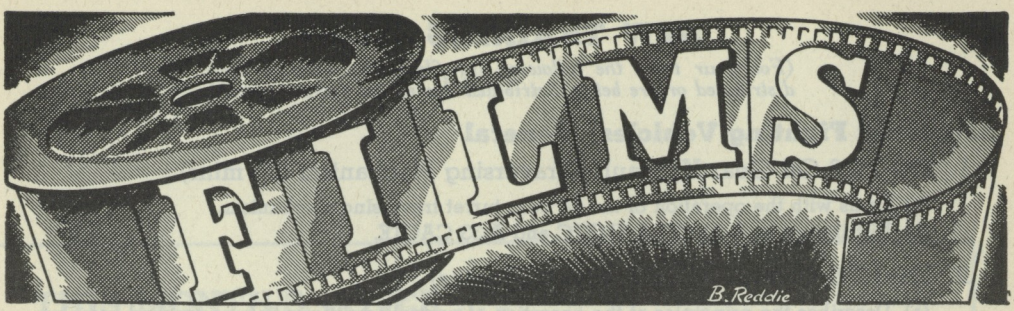
Reserve Companies of the VGC were organized during the stage of the war when the strategic situation required an urgent strengthening of the Reserve Army. VGC, having been formed at this period, it was decided to organize special Reserve Companies in which veterans could enlist who were not available for full-time active duty. These Veteran Companies were attached as separate independent companies to units of the Reserve Army.

With the passing of time, the improvement in the general strategic situation has created a reduced interest in these Reserve Companies, consequently it has not been found possible to allocate more than a somewhat indefinite role to these units, with the result that they have deteriorated in strength to the point where some are dormant, and others performing less important functions.

It is not considered desirable to perpetuate within the Reserve Army separate units exclusively for Veterans because it is felt that full advantage to the Reserve Army of the experience of veterans of the past and present wars can best be obtained by the integration of veterans within the Reserve Army units. This experience would be lost if veterans were segregated into separate units.

The changing conditions which by necessity have involved the inevitable curtailment in the number of units, is undoubtedly unwelcome news to the officers and ranks affected. Nevertheless the grateful and sincere thanks of the Director of VGC is extended to all.

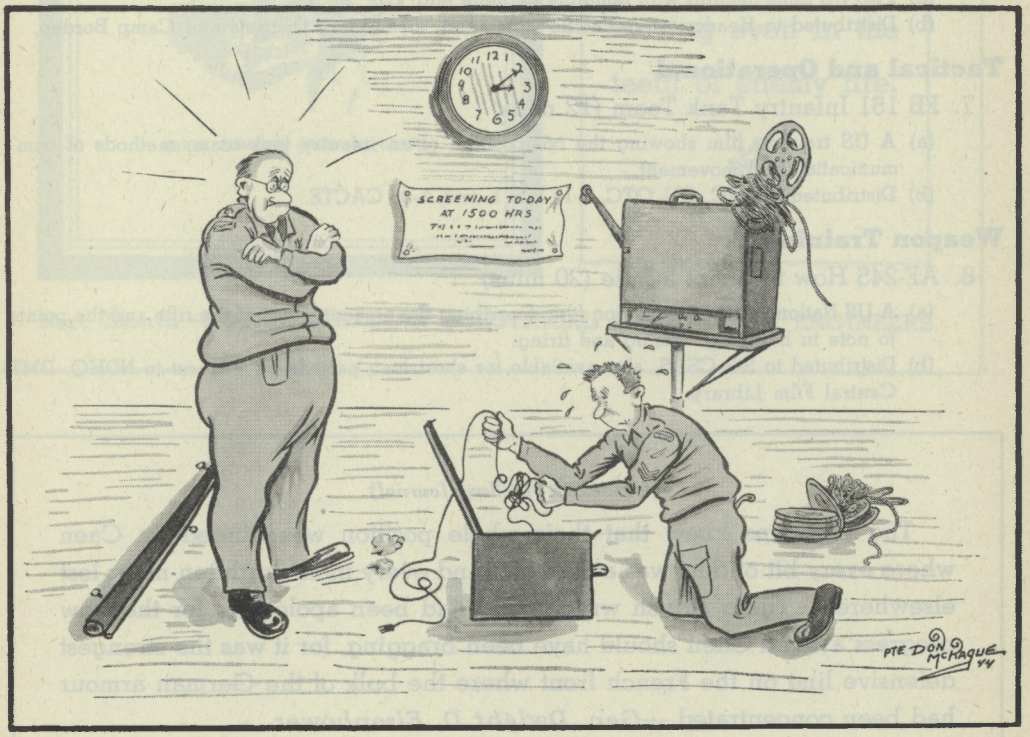
That their service entailed very considerable personal sacrifice is fully appreciated. It is fully realised that the effort was of the greatest value and was an important factor in the several military efforts, thus contributing in great measure towards ultimate Victory.
—**Director of VGC.**



A Unit Projectionist is usually a pretty reliable fellow and would seldom find himself in the embarrassing position of the corporal below. Obviously this corporal has forgotten the contents of R.O. 4221 which states "Unit Projectionists will be responsible for the proper operation of the equipment."

This corporal should know that he could not provide "proper operation" without keeping his projection equipment and films in good order and ready to start "a show" on short notice. He should realize that he must revise the films and see that the reels are properly numbered and in the right containers.

Officers responsible for planning film screenings can avoid situations such as the one below by checking arrangements well in advance.



NEW TRAINING FILMS

(For your infm the following trg films have recently been distributed or are being distributed during the current month)

Armoured Fighting Vehicles—General

1. TF9-1376 Oil Gear Hydraulic Traversing Mechanism (20 mins)
   (a) Deals with the operation of the oil gear turret traversing mechanism.
   (b) Distribution to A-21 CO & EMETC and A-33 CACTE.
2. TF9-1285 Controlled Differential (20 mins)
   (a) Describes the principles of the operation of controlled differentials on tracked vehicles.
   (b) Distributed to A-21 CO & EMETC, S-8 CATS and A-33 CACTE.

Armoured Fighting Vehicles—Weapons

3. C-534 Browning LMG—Mechanism (19 mins)
   (a) Deals with the loading, firing and automatic firing mechanism of the Browning LMG.
   (b) Distributed to A-33 CACTE and A-21 CO & EMETC.

General Interest

4. CA-16 This Man's Army (25 mins)
   (a) An introduction of the recruit into Army Life.
   (b) Distributed to Headquarters Pacific Command, all Military Districts, Borden and Petawawa Military Camps; A-3 CATC, A-6 CETC, A-7 CSTC, A-21 COCTC, A-23 CC & AAATC and all Basic Training Centres.

Medical and Hygiene

5. MN 1712A Personal Hygiene for Women, Part I (45 mins)
6. MN 1712B Personal Hygiene for Women, Part II (30 mins)
   (a) Two US films dealing with feminine hygiene and VD.
   (b) Distributed to Headquarters Pacific Command, all Military Districts and Camp Borden.

Tactical and Operational

7. FB 151 Infantry Tank Team (12 mins)
   (a) A US training film showing the composition of an infantry tank team, methods of communication and movement.
   (b) Distributed to RMC, O-1 OTC, S-17 S of I, and A-33 CACTE.

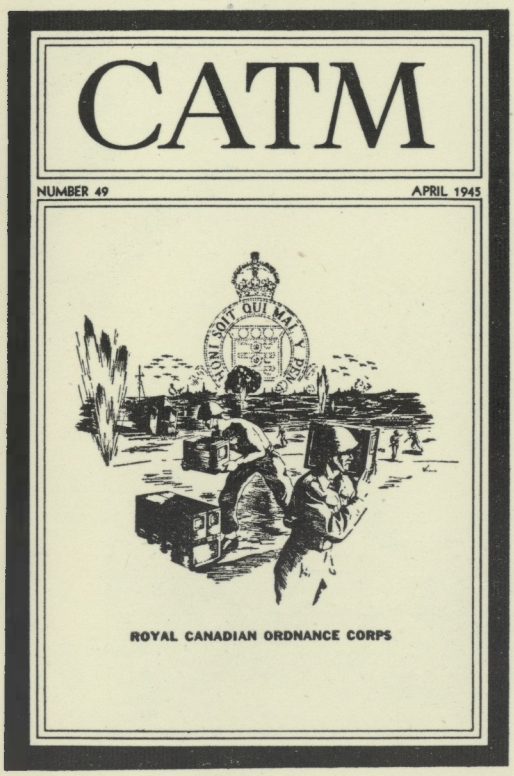
Weapon Training

8. AF-245 How to Shoot a Rifle (20 mins)
   (a) A US National Rifle Association film describing the nomenclature of the rifle and the points to note in handling, aiming and firing.
   (b) Distributed to S-3 CSAS, also available for short loan periods on request to NDHQ, DMT Central Film Library.

(U.S. Coast Artillery Journal)

The Germans knew that their whole position was hinged on Caen where every bit of dust was a diamond and every inch worth ten miles lost elsewhere. Those British writers who had been apologetic for the slow progress around Caen should have been bragging, for it was the strongest defensive line on the French front where the bulk of the German armour had been concentrated.—*Gen. Dwight D. Eisenhower.*

THIS MONTH'S COVER . . .

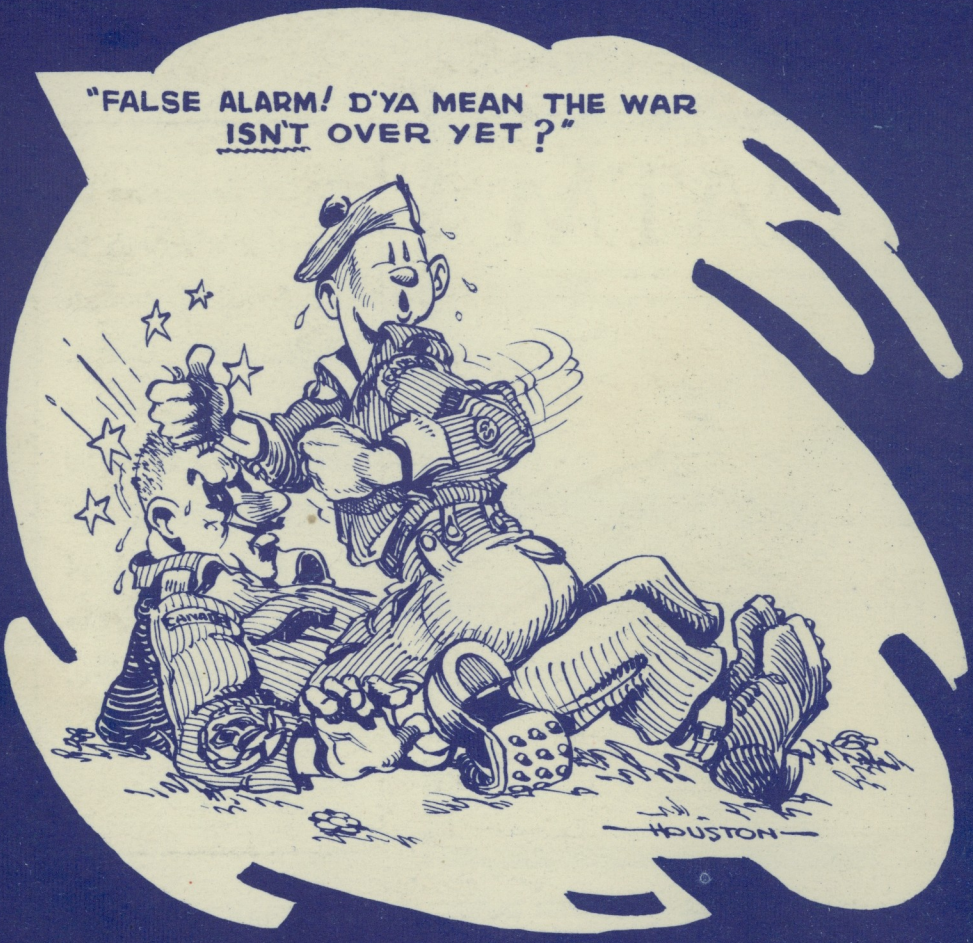


CATM dedicates its cover this month to the Royal Canadian Ordnance Corps. This Corps provides the army with its war equipment, and supplies are kept moving even in the teeth of enemy fire.

Next Month—ROYAL CANADIAN ELECTRICAL MECHANICAL ENGINEERS

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

25,000—4-45 (6914)
H.Q. 54-27-35-101
K.P. 9427


"FALSE ALARM! D'YA MEAN THE WAR ISN'T OVER YET?"
HOUSTON