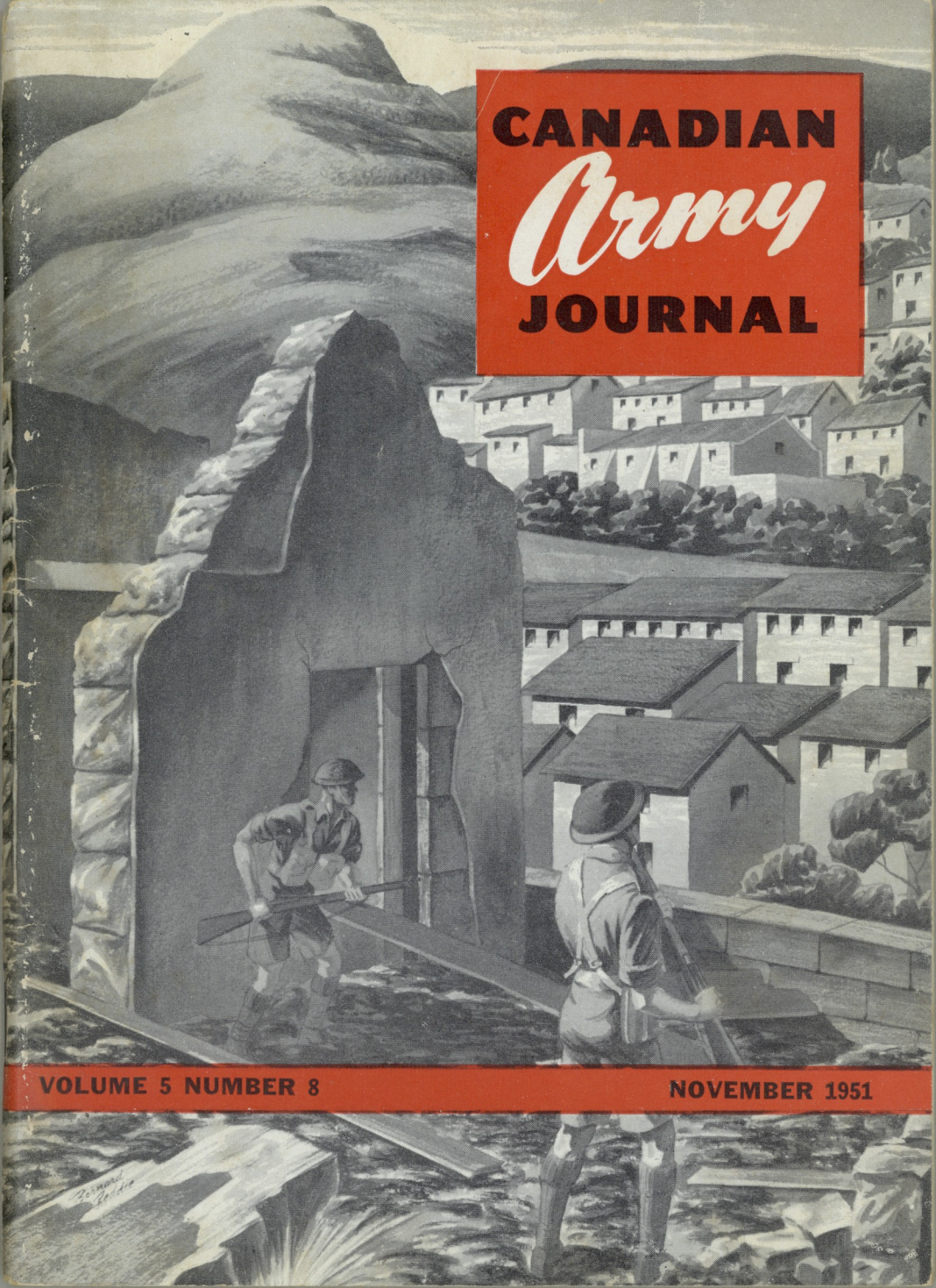


# CANADIAN Army JOURNAL

VOLUME 5 NUMBER 8 NOVEMBER 1951

CANADIAN Army JOURNAL

## CONTENTS



The Cover

Canadian soldiers in the ruins of a captured Sicilian town during the Conquest of Sicily, 1943. (See article on page 5).

The object of the Canadian Army Journal, which is published by the Directorate of Military Training under authority of the Chief of the General Staff, is to provide officers of the Active, Reserve and Supplementary Reserve Forces with information designed to keep them abreast of current military trends and topics, and to stimulate interest in current military affairs.

# A MESSAGE FROM HRH THE PRINCESS ELIZABETH

ST. JOHN'S,

NEWFOUNDLAND.

11th November, 1951.

My dear Prime Minister.

Before leaving I want to tell you how grateful my husband and I are to you and to your colleagues for having given us so great an experience on this journey across Canada. The welcome we received on all sides has far exceeded anything we could have believed possible, and we have been given a picture of the rich variety of Canadian life which we shall never forget, and which has interested us profoundly.

It has given us infinite pleasure to have had the chance of meeting and talking to so many Canadians in every walk of life, and we have been happy to have had with us at various times on our journey your colleagues in the Cabinet. Their advice has been invaluable, and we have much enjoyed getting to know them, particularly as they have given us an insight into Canadian affairs.

I hope that you will convey our thanks and appreciation to all members of the three Services who have done so much to make our tour a success. We are very glad that you made it possible for us to travel in two ships of the Royal Canadian Navy, and in an aircraft of the Royal Canadian Air Force: we know also how much the Army has done at all times for us. Our visits to Navy, Army and Air Force establishments impressed us greatly and we are proud to have been saluted by so

---

*This message from Her Royal Highness The Princess Elizabeth was received by The Rt. Hon. Louis S. St. Laurent, PC, KC, LL.D, MP, Prime Minister of Canada, at the conclusion of the visit of Their Royal Highnesses the Princess Elizabeth and the Duke of Edinburgh to Canada from 8 October to 12 November 1951.*—Editor.

many Guards of Honour of all three Services throughout the length of our journey.

I am sure I need not tell you that this, our first visit to Canada, has made us wish to come back before too long to see more of the Country and its people. I hope very much also that I will soon have the chance of meeting you again.

Yours sincerely

Elizabeth

---

## Message From the Prime Minister to the Department of National Defence

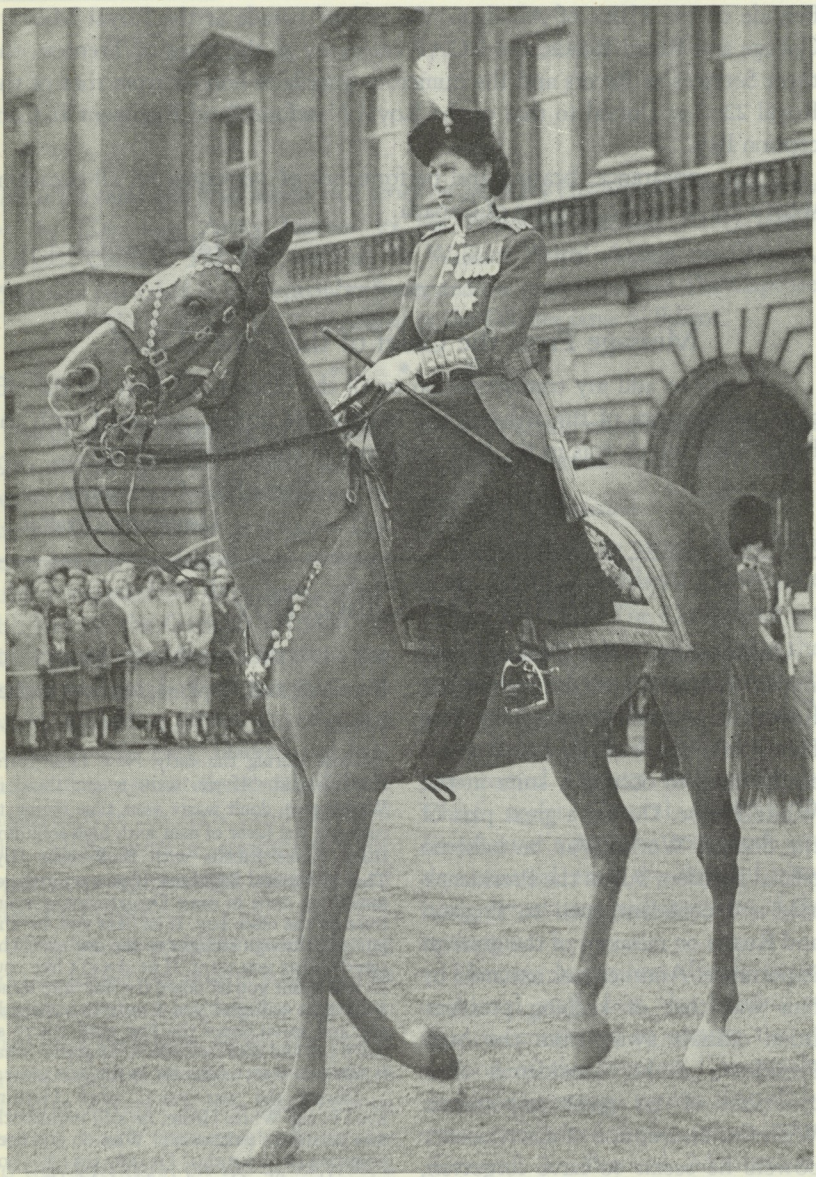
When forwarding the message from Her Royal Highness The Princess Elizabeth to the Department of National Defence, the Prime Minister requested that his own congratulations and thanks be extended to the many who performed the arduous duties connected with the tour in such an efficient and courteous manner.

---

## Message from the Minister of National Defence to the Chiefs of Staff

Now that the tour of Their Royal Highnesses has concluded, I would be glad if you would convey to the officers and men of the Royal Canadian Navy, the Canadian Army and the Royal Canadian Air Force my congratulations on the way in which they carried out their important part in all the arrangements.

From Quebec west to Esquimalt and back to St. John's, Newfoundland, major elements of Active and Reserve Force personnel participated both in planning the arrangements and in carrying them out. These included such notable events as the ceremony at the War Memorial at the National Capital, the visits to the Navy on both coasts, the review of the 27th Canadian Infantry



**HRH the Princess Elizabeth, Colonel,
The Grenadier Guards**

Brigade on the Plains of Abraham, the cadets' parade at the Royal Military College and Royal Roads, the RCAF ceremony at the gates of Trenton, the three Services at Rivers and the numerous guards of honour from that of the Royal 22nd at Dorval to that of the Royal Newfoundland Regiment at Conception Bay.

The appearance, bearing and performance of personnel on all occasions were a credit to the Services of Canada.

(Signed) *Brooke Claxton.*

---

## Message From the Chief of the General Staff

I wish to add my commendation to all the officers and men for the efficient performance of the arduous and honourable duties connected with the Royal Visit which was in the best traditions of the Canadian Army.

(Signed) *G. G. Simonds,*
*Lieutenant-General.*

---

# Only An Office Boy

Unlike many "New Dealers" who arrived in Washington during the first Roosevelt Administration, the late Harry Hopkins remained and eventually came to occupy a suite in the White House. During a great part of the Second World War he held no official position, but as the President's aide and confidant sped to England and Russia on missions of the greatest importance. Another task assumed by him was that of keeping problem-laden officials away from the busy President, if he considered their questions of no great importance. With this assumption of discretionary powers he seems to have forgotten, as Robert E. Sherwood has pointed out in the revealing history of *Roosevelt and Hopkins*, his own earlier advice:

> Once during the early New Deal years, Hopkins said: "If you want to get ahead in Washington, don't waste your time trying to cultivate the favor of men with high-sounding titles. Make friends with their office boy. They're the real Big Shots. If you want to get something done in some Department, concentrate on the office boy. If he likes you, he will put you through straight to the one man who can do what you want. If he doesn't like you, he will shunt you off down the line onto somebody who will give you a note to somebody else and so on down the line until you're so worn out and confused you've forgotten what it was you were asking for in the first place."
>
> During the war years, when Hopkins lived in the White House, he said impatiently to a persistent petitioner: "Why do you keep pestering me about this? I'm only the office boy around here!"—*Contributed by J. M. Hitsman, Historical Section, Army Headquarters, Ottawa.*

# THE CONQUEST OF SICILY

*This is the third and final article in a series on Military History written especially for the Canadian Army Journal by the Historical Section, Army Headquarters, Ottawa. The first, entitled* Sir William Phips' Attack on Quebec, 1690, *was published in the September issue, and the second, entitled* The Capture of Vimy Ridge, 1917, *appeared in the October issue.*—Editor.

* * *

Early on the morning of 10 July 1943 troops of two Allied armies began landing at various beaches in the south-east corner of Sicily. The conquest of the island was successfully concluded 38 days later, when the last of the German garrison retired across the Messina Strait to the Italian mainland. This campaign, in which Canadian forces played a not inconsiderable part, marked the first major blow against the so-called "soft underbelly of the Axis", and provided the Allies with a springboard for operations against the mainland of Hitler's Europe.

The Sicilian operation is interesting to the soldier on several counts. The assault involved amphibious organization on a very large scale. The subsequent fighting meant, on one side, a difficult advance across mountainous terrain which gave great advantages to the defenders; on the other side, a delaying action maintained in the face of superior forces.

*The Plan of Invasion*

The decision to attack Sicily was taken at the Casablanca Conference in January 1943. The Conference set the favourable July moon period as the target date for the invasion, to which was given the code-name "Husky". General Sir H. R. L. G. Alexander was named Deputy Commander-in-Chief under General Dwight D. Eisenhower's supreme command, and was charged with the detailed planning, preparation and execution of the operation.

Planning began immediately under a special staff, but the fighting in Tunisia continued to occupy the attention of the Supreme Commander and his Deputy, as well as that of the two designated army commanders (General Sir Bernard Montgomery

and Lieutenant-General George S. Patton Jr.) until mid-May. The result was that the first outline plan, which called for separate assaults by the United States Seventh Army near Palermo in the north-west corner of the island, and the British Eighth Army near Catania on the east coast, did not meet with the full approval of those who would be responsible for carrying it out. The chief objection was to the wide dispersion of the proposed landings. Eventually the plan was completely recast "on the sound strategic principal of concentration of strength in the crucial area." The landings in the north-west were cancelled and the entire Western Task Force was diverted to the south-eastern assault, being placed on the Eighth Army's immediate left.

The plan as finally adopted fulfilled three main requirements: the landings were to take place on suitable beaches which could be given fighter cover from Allied airfields in Tunisia and on Malta; the major port of Catania would be an early objective (although administrative demands would be met initially by the use of lesser ports, and to an unprecedented extent, particularly in the American sector, by maintenance over the beaches); and the airfields in south-eastern Sicily would be seized in order to ensure protection for our ships lying off the beaches and to afford greater security for further offensive operations.

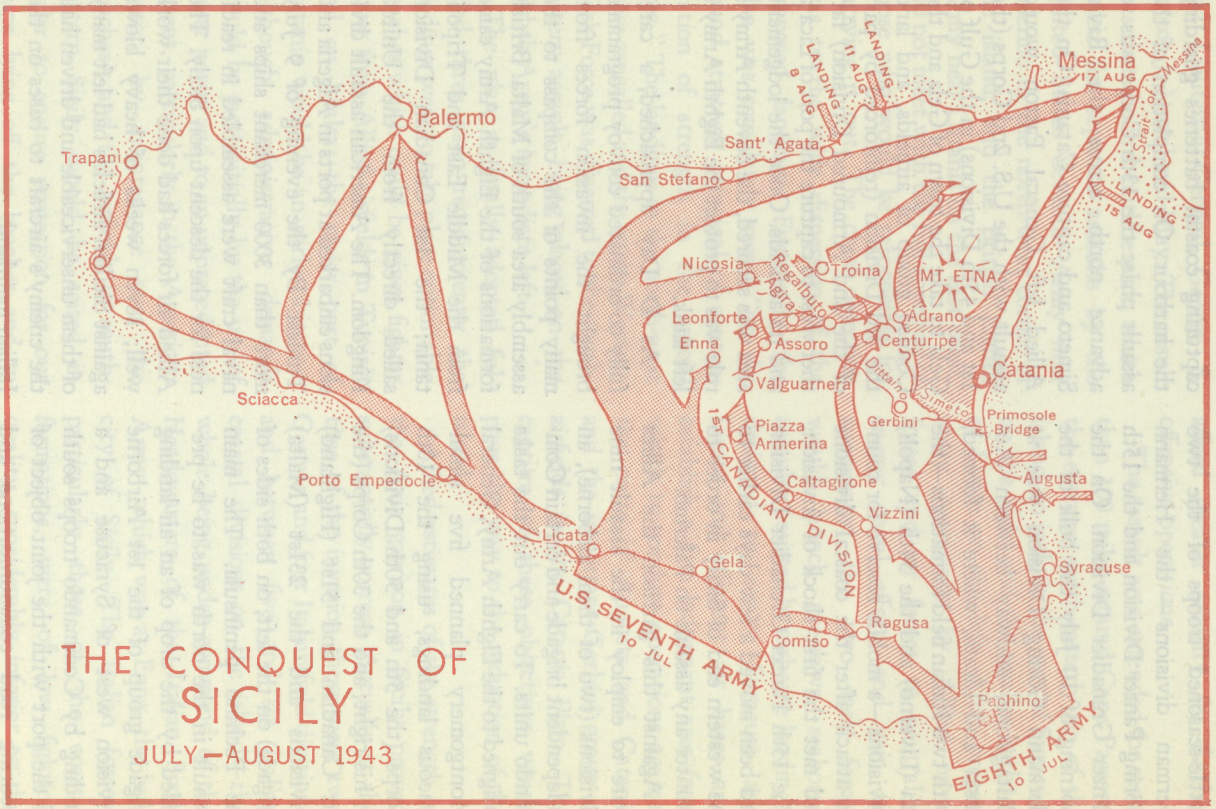
The assault area extended for more than 100 miles around Cape Passero, the extreme south-easterly tip of the island, to include the port of Syracuse on the right and the smaller harbour of Licata on the left. After preparatory operations by Allied naval forces and air forces to neutralize enemy naval efforts and gain air supremacy, the two task forces would launch pre-dawn seaborne assaults, assisted by airborne landings, designed to secure Syracuse and Licata and adjacent air bases and establish a firm lodgement area from which to conduct operations against the ports of Augusta and Catania and the important Gerbini group of airfields in the Catania Plain. The capture of these objectives would pave the way to the reduction of the island.

Allied estimates of the strength of the Axis garrison in Sicily proved substantially correct. Actually at the time of the invasion there were two German and four Italian field divisions and between five and six Italian coastal divisions on the island—the whole being under command of the Headquarters of the Italian Sixth Army, which was at Enna, the hub city of Sicily. The Italian forces, particularly those of the coastal formations, were of low fighting quality, considerably inferior to the

battle-seasoned troops of the two German divisions — the Hermann Göring Panzer Division and the 15th Panzer Grenadier Division. On the morning of 10 July the bulk of the Hermann Göring Division was at Caltagirone, midway between Augusta and Licata, where it formed, with two Italian field formations—the 4th (Liverno) and the 54th (Napoli) Divisions—a mobile reserve for counter-attack after the coastal divisions had met the first shock of invasion. The 15th Panzer Grenadier Division had been moved a few days earlier to the western end of Sicily in order to counter any assault on Palermo.

Against this garrison the Allies were to employ in the assault nine divisions (two of them airborne), an independent brigade and certain Commando units. To carry out the tasks assigned to the Eighth Army, General Montgomery planned five simultaneous landings, using the 13th Corps (the 5th and 50th Divisions) on his right; and the 30th Corps (the 1st Canadian and 51st (Highland) Divisions and the 231st (Malta) Brigade) on the left, on both sides of the Pachino peninsula. The main assault in the north was to be preceded by the drop of an air-landing brigade group of the 1st Airborne Division west of Syracuse and a landing by Commando troops south of the port with the joint object of securing road communications and capturing coastal batteries guarding the harbour. On completion of the assault phase the 13th Corps was to advance north across the River Simeto and capture Catania. On the Allied left General Patton would assault with the U.S. 2nd Corps (the 1st and 45th Divisions) in the Gulf of Gela to take the town of Gela and the Comiso group of airfields, and land the 3rd Division (reinforced by part of the 2nd Armoured Division) farther west to capture the port of Licata and its airfields. Once the lodgement area was secured, the Seventh Army's role was to protect the Eighth Army's left flank.

As D Day approached, a carefully co-ordinated convoy programme brought the invasion forces from many points of the compass to the assembly area south of Malta. British formations of the Eighth Army came from the Middle East and Tripolitania; the 1st Canadian Division sailed directly from the United Kingdom. The American assault divisions embarked at ports in Algeria and Tunisia. By the evening of 9 July more than 3000 merchant ships and naval craft were assembled in readiness for the descent upon Sicily. The Allied air forces had done their work well; seven weeks of heavy blows against Sicilian airfields had left many of them unserviceable and driven half the enemy's aircraft to bases on the Italian mainland.




Historical Section, G.S.

*The Assault, 10 July 1943*

As dusk fell the glider-borne 1st Airlanding Brigade (of the British 1st Airborne Division) and American paratroops of the 82nd Airborne Division—in all 5000 strong—took off from Tunisian airfields for Sicily. Their mission was only partly successful, both formations being widely dispersed. By late evening a gale which had threatened to postpone the seaborne assault moderated, and the first landings were made covered by naval bombardment shortly after midnight. They achieved success in all sectors. Caught completely by surprise, the Italian coastal defences offered little organized resistance, and by the end of D Day the Allies had captured all their initial objectives.

Major-General G. G. Simonds' 1st Canadian Division made its assault with the 1st and 2nd Infantry Brigades on a five-mile stretch of coast just west of the tip of the Pachino Peninsula, while farther west a Special Service Brigade of two Royal Marine Commandos, also under General Simonds, carried out simultaneous landings on the extreme left of the Eighth Army's front. Meeting only very slight resistance the 1st Brigade seized in rapid succession an Italian coastal battery and the deserted Pachino airfield, while on the left the 2nd Brigade linked up with the Commando forces and exploited three or four miles inland. Canadian casualties in the first 24 hours of the invasion were almost negligible.

Neither Army had yet encountered any Germans. On the east coast the 13th Corps, which was commanded by Lieutenant-General Miles C. Dempsey, had made rapid progress during the morning, and by 9:00 p.m. the 5th Division had reached Syracuse—to take the port undamaged. On the right of the Canadians the other formations of Lieutenant-General Sir Oliver Leese's 30th Corps—the 51st Division and the Malta Brigade—had secured Pachino and the eastern half of the peninsula. The assault divisions of the U.S. Seventh Army, having landed in generally rougher surf conditions on the more exposed western beaches, had warded off scattered axis bombing and strafing attacks, and by nightfall were holding firm bridgeheads about Licata and Gela.

*Securing the Bridgehead*

The next three days saw the establishment of the lodgement area envisaged in General Alexander's final invasion plan. On 11 July the 13th Corps gave its bridgehead over to the 30th Corps, and advanced northward on Augusta, which the 5th Division captured early on the 13th. The 30th Corps moved on two axes into the rough table-land which reaches down from Caltagirone to cover most of the south-east corner

of the island. The 51st Division reached Vizzini on the 13th. Advancing on the Corps' left the Canadians found resistance in the towns near the coast completely broken by Allied aerial bombing and naval shelling. By the morning of the 12th they had made contact with the 45th U.S. Division in Ragusa.

Meanwhile, on the Allied left General Patton's forces had gained possession of a continuous bridgehead which extended to a point 20 miles west of Licata. They were putting into use the captured airfields near the coast and preparing to deepen their holdings sufficiently to provide the necessary protection for the Eighth Army's left flank. The Americans had been the first to clash with the Germans. On 11 July their 1st Division had beaten back with the support of naval gunfire three fierce counter-attacks delivered in the Gela area by a battle group of the Hermann Göring Division using 60 tanks.

It was General Alexander's intention that after the assaulting armies had secured a firm base "on a line from Catania to Licata" his forces should proceed "to split the island in half." The first step in this direction would be to seize the central group of road junctions about Enna, and thence press on to the north coast in order to sever the east-west communications completely. Control of the road centres was of great tactical importance, for in the rugged terrain that covered the greater part of the island manoeuvre off the roads and tracks was extremely difficult, if not impossible. The unexpectedly light resistance encountered during the first few days of the campaign enabled General Montgomery to make a start on this plan before Catania had been captured. On 12 July he directed Leese to advance on Caltagirone and Enna, and thence on Leonforte, an important road centre on the main Catania-Palermo highway; the 13th Corps was to continue its drive northward along the coast.

The attack on the Army's right flank met strong opposition. On the night of 13-14 July Commando troops, landing in the Gulf of Catania, secured a road bridge on the main Syracuse-Catania highway; while farther north the 1st Parachute Brigade (of the 1st Airborne Division), dropping at the mouth of the Simeto River, captured the important Primosole Bridge six miles south of Catania. Both bridges were held until the arrival of relieving troops, and on the 16th, after very bitter fighting, a small foothold was established north of the Simeto. Efforts by the 50th Division to break out of this bridgehead failed; it was apparent that the Germans were determined to oppose as long as possible the capture of Catania and the important Gerbini airfields.

*The Canadian Advance into the Hills*

Late on the 15th, when already there were indications of a deadlock at the Simeto, the Army Commander wrote to General Leese urging him in view of the slowdown in operations on the right to "swing hard with our left" and push the Canadians on with all speed to Caltagirone, Enna and Leonforte. The Canadian advance had been resumed after a 36-hour rest ordered by General Montgomery. On 15 July the 1st Canadian Brigade passed through the 51st Division at Vizzini to lead the attack on the Corps' left flank. The Canadian axis of advance was the Syracuse-Vizzini-Enna highway, a section of which through Caltagirone lay within the area of the Seventh Army's bridgehead. The inter-army boundary was adjusted to give General Montgomery the exclusive use of the road, and the American axis of advance was turned sharply westward.

From Vizzini the paved highway ran north-westward over the plateau, climbing beyond Caltagirone into the irregular chain of hills which strikes down through the centre of Sicily from the main mountain barrier in the north. From the earliest days of Sicily's turbulent history the population have been forced to establish their inland communities on easily defended sites, usually on commanding heights. The main roads generally ascended to each of these lofty hill towns, and the Canadians were thus faced with the task of ousting the German defenders from a series of positions of great natural strength.

The enemy fully realized the importance of delaying as long as possible the Canadian advance through the hills. Field-Marshal Albert Kesselring, who as Commander-in-Chief of all German air and ground forces in Italy was directing the Axis operations in Sicily, was faced with the immediate problems of preventing the Allies from reaching Catania and pushing beyond to the Messina Strait in order to cut off the escape route to the mainland, while at the same time holding open his communications in central Sicily so as to allow the evacuation of his troops from the west. He decided to use the Catania-Etna area as a pivot for a withdrawal into the north-east corner of the island. By his orders the bulk of the Hermann Göring Division fell back to the north bank of the Dittaino River, a major tributary of the Simeto crossing the Catania Plain south of the Gerbini airfields. To protect the Hermann Görings' open right flank and preserve a route for the passage of the 15th Panzer Grenadier Division from the west became the important tasks of the German rearguards along the axis of the Canadian advance.

The first encounter of Canadian

forces with the Germans took place on 15 July ten miles beyond Vizzini, when a mobile infantry and armoured column of the 1st Brigade was surprised by Hermann Göring detachments of artillery and tanks lying in wait in a hilltop town. After a three-hour skirmish the enemy retired, having inflicted 25 casualties and achieved his purpose of halting a much superior force. From this time the Canadians met increasingly stubborn opposition, both in the skilful delaying actions fought by the enemy rearguards from strong positions of their own choosing and the ingenious demolitions carried out by the German engineers along the narrow and tortuous mountain roads. It was to take the 1st Division a full week to reach and capture Leonforte, 70 miles by winding road from Vizzini.

Early on the 16th General Simonds sent forward from Caltagirone (which had been taken unopposed after destructive Allied air raids) the three battalions of the 2nd Brigade in troop-carrying vehicles, supported by a regiment of the 1st Army Tank Brigade and two regiments of field artillery (one self-propelled). In a defile three miles south of Piazza Armerina the leading battalion and its accompanying squadron of tanks came under heavy machine-gun and anti-tank fire from the surrounding hills. The infantry, hampered by the failure of wireless communications, fought their way up the steep hillsides, driving the defenders (a battalion of the 15th Panzer Grenadier Division) from the summits, but it was early morning of the 17th before Piazza Armerina was finally secured, and noon before the advance was resumed.

For his next stand the enemy chose a highly defensible road junction narrowly enclosed between high hills eight miles north of Piazza Armerina. Here a side road branched off from the main Enna highway towards Valguarnera, a hilltop town overlooking the Dittaino valley and the western Catania Plain. As soon as the presence of the Germans in the pass was established, General Simonds ordered an attack in force on a two-brigade front, the 3rd Brigade, which was now in the lead, to seize the road junction and press on towards Enna, and the 1st Brigade to strike through the hills on the right and capture Valguarnera. The Germans repulsed with heavy mortar fire an attack up the main road by moonlight, but were driven from their posts on the afternoon of the 18th by a flanking thrust on the right supported by fire from four artillery regiments. In the meantime two battalions of the 1st Brigade had by dawn on the 18th made their way independently across a tangle of ravines and hills to the edge of a ridge overlooking the steep approaches to Valguarnera. Companies had become

separated in the uncompromising terrain, and the breakdown of communications prevented any artillery support. In such circumstances there was no co-ordinated effort by the two battalions against the town, and heroic attempts on a one- or two-company scale were repulsed by counter-attack and by effective fire from the commanding German positions. It was late in the day when the enemy began to withdraw from Valguarnera as the remaining battalion came forward with artillery support to complete the brigade task. The 24 hours' fighting, the heaviest yet experienced by the Division, had been costly to both sides.

The occupation of Enna was left to the U.S. 2nd Corps, and early on the 19th the 2nd Canadian Brigade moved northward from Valguarnera towards Leonforte. During the day General Simonds announced new objectives for the Division, arising from a decision of the Army Commander to abandon temporarily the thrust by the 50th Division against Catania because of strong enemy resistance near the coast, and instead to increase the pressure farther west. General Montgomery ordered the 5th and 51st Divisions on the inner flanks of the two Corps to attack in the centre towards the northern edge of the Plain, and the Canadians to turn eastward from Leonforte and drive towards Adrano, on the south-western skirts of Mount Etna. General Patton, whose forces were meeting only very light resistance as they overran western Sicily, was directed by General Alexander to develop a two-pronged threat eastward along the northern coast and the interior road through Nicosia.

General Simonds now widened his front to two brigades in order to make simultaneous attacks on Leonforte and Assoro, two miles to the east, and cut the highway east of Leonforte. At the same time he directed the 231st Brigade, which had come under his command on the right flank, to advance northward across the Dittaino valley in a threat against Agira, which was to become the target of a full divisional attack.

Assoro, perched near the top of a 2900-foot hill, was taken in a surprise assault by a battalion of the 1st Brigade after a hazardous cross-country march by night, which culminated in a daring ascent of the precipitous face of the mountain. The 2nd Brigade's attack on Leonforte was made frontally, but here again our tactics caught the Germans by surprise. The enemy's destruction of the bridge carrying the main road across a deep ravine south of the town seemed to have given him immunity from attack by our armour. Late on the 21st infantry companies, under cover of a heavy bombardment, fought their way into Leonforte on

foot while engineers began bridging the 50-foot gap. A fierce struggle developed in the streets, and the Canadians were cut off from outside support; but thanks to the strenuous and heroic efforts of the engineers under fire the bridge was completed during the night, and at daylight a "flying column" of infantry with tanks and anti-tank guns burst into the town. There was more bitter street-fighting, but by mid-afternoon Leonforte was clear. The enemy's determined efforts to hold the Leonforte-Assoro ridge marked a change from his earlier rearguard tactics of "delay and withdraw". From now on the Canadian advance was to be stubbornly opposed by strong forces charged with prolonged resistance at all costs.

*The Eighth Army's Change of Plan*

The German garrison in Sicily had been reinforced in the first few days of the invasion by two regiments of the 1st Parachute Division. On 16 July the Headquarters of the 14th Panzer Corps arrived to assume command, and the 29th Panzer Grenadier Division began moving over from the mainland. The Corps Commander, General Hans Hube, with direct instructions from Hitler's headquarters "to fight a delaying action and gain further time for stabilizing the situation on the mainland," acted promptly and with skill. To secure his lifeline to Italy he organized the defences of the Messina Strait, placing a highly capable officer in full charge. To meet the American threat to his right flank (for by 22 July the Seventh Army had captured Palermo and was beginning to push eastward along the northern coast) Hube placed the 29th Panzer Grenadier Division between the 15th Panzer Grenadier Division and the north coast, thereby establishing a continuous defence line across north-east Sicily from Catania to San Stefano.

On 21 July General Montgomery, deciding that Catania could not be taken by frontal attack without incurring heavy casualties, directed all formations of the Eighth Army except the 1st Canadian Division to pass to the defensive along the line of the Dittaino River. The Canadians would carry the Army attack pending the arrival of the 78th Division, which he had ordered over from Tunisia to reinforce the 30th Corps for a drive through Adrano around the west side of Mount Etna.

*The Drive Eastward*

On the afternoon of 24 July the 1st Canadian Division attacked towards Agira (eight miles east of Assoro), supported by fighter bombers and artillery concentrations from five field and two medium regiments. From a rocky ridge a mile east of the intervening village of Nissoria, troops

of the 15th Panzer Grenadier Division threw back with heavy losses successive assaults by each of the 1st Brigade's three battalions. Late on the 26th a barrage from 80 guns crushed the enemy's resistance as the 2nd Brigade took over the attack. The position was quickly overrun and a battalion broke through to fight its way on to a second ridge a mile to the east. Up to this point the nature of the country, which prevented the attackers from deploying on a large scale, had meant that a German force of not much more than one battalion had been successively engaged by five Canadian battalions, one at a time; circumstances had enabled the enemy to give a practical demonstration of the principle of economy of effort. On the night of the 27th, however, the 2nd Brigade put in a two-battalion attack, which drove the enemy from three heights overlooking Agira. The German garrison, whose line of retreat was threatened by the 231st Brigade, withdrew towards Regalbuto. The five-day battle for Agira was the largest and costliest in which the 1st Division was involved in Sicily.

Regalbuto, nine miles to the east, and the lofty hill town of Centuripe were the main outposts in front of the key position of Adrano. Regalbuto was captured on 3 August after the 231st Brigade and the 1st Canadian Brigade had gained control of the surrounding hills in four days of bitter fighting. On the same day the Centuripe stronghold fell to a full-scale assault by a brigade of the 78th Division. The newly arrived division had been committed at the Dittaino on 30 July, advancing from a bridgehead established by the 3rd Canadian Brigade. The 3rd Brigade had then pushed forward on the 78th Division's left flank to clear the enemy from the hills between Centuripe and Regalbuto.

From Centuripe the 78th Division took over the axis of the main highway to Adrano, and the 1st Canadian Division swung north across the Salso River. The task of clearing enemy-held heights towering more than 1000 feet above the river flats involved fighting on foot over rough trackless terrain, with mules carrying wireless sets and supporting weapons and ammunition. On the morning of 5 August General Simonds sent forward a tank-infantry force with mobile artillery which, paralleling a successful attack on the right by the 78th Division, in a brilliantly-executed operation cleared the north bank of the Salso to its junction with the Simeto.

*The German Retreat from Sicily*

The Canadian Division's active participation in the Sicilian campaign ended with a bloodless crossing of the Simeto River by the 3rd Brigade on the

night 5-6 August. Only pursuit operations remained, for after the loss of Regalbuto and Centuripe the enemy had begun falling back from the Catania Plain; on the 5th and 6th he gave up all the towns south of Mount Etna from Catania to Adrano. In the American sector Troina fell to the 1st U.S. Division on 6 August after a bitterly contested five-day battle, but on the northern coast the 3rd Division was held up by determined resistance west of Sant'Agata.

The final ten days of the campaign revealed General Hube's mastery in the retreat. On 26 July Hitler had authorized a withdrawal from Sicily; the evacuation began on 10 August. By sharp rearguard actions and extensive demolitions in the rugged terrain of the Messina peninsula Hube was able to hold Allied progress to his own time-table of withdrawal. Although he had very little air support and no naval support, he maintained effective control of the Messina Strait with his artillery, including a heavy concentration of anti-aircraft guns. Thinning out his forces on a succession of shortening lines of resistance, he succeeded in evacuating to the mainland the entire surviving German garrison and a large quantity of equipment.

During the last week of operations the 30th Corps took over control of the narrowing Eighth Army front. On 15 August the 78th and 51st Divisions completed the encirclement of Mount Etna, and on the same day the 50th Division on the coast reached within 30 miles of Messina. Meanwhile the American advance along the north coast had been accelerated by two amphibious landings, and on the morning of 17 August infantry of the 3rd United States Division entered Messina, followed shortly by British Commando troops, who had landed ten miles down the strait two nights before.

*Comments*

The conquest of Sicily was achieved by a well planned and executed assault on an unprecedented scale against a defended coast, followed by an arduous advance over extremely difficult country. The experience gained in the technique of amphibious warfare, although not as extensive as would have been produced by more strongly opposed landings, was to be of great value to the Allied forces in mounting subsequent operations of a like nature. The fighting inland was a foretaste of the hard campaign in Italy, in which a determined enemy skilled in defensive tactics made the best use of rugged and mountainous country to retard the Allied advance. The German operations in Sicily afford an excellent example of skilful delaying action. The Allied troops had the advantage of numbers and of excellent and powerful air and artil-

lery support; yet the victory was won mainly by the resolution and endurance of the infantry. So far as the Canadian Division was concerned, the course of the operations gave it a harder task than had been assigned to it in the original plan. That it did so well in its first campaign is evidence of the soundness of its training.

As in all amphibious operations, *Co-operation* was of vital importance here. The naval forces covered the landings, put the army ashore and maintained it afterwards; the air forces prepared the way for the invasion and gave constant assistance in the struggle across the island; the infantry relied with confidence on the support of the tanks, the artillery, the engineers and the services. The powerful influence of *Surprise* contributed to the easy success of the Allied assault; on the other hand, the rapid German reaction to the unexpected blow is an effective example of *Flexibility*, which appears also in the subsequent alteration of the Allied campaign plan to meet the new situation, and in the use of improvised seaborne landings to shake loose the Germans and hasten the advance. Efficient detailed *Administration*, as usual, lay at the root of the Allied victory. In this connection, the extensive maintenance over beaches, carried out in this operation with notable success, had considerable influence on the planning of the later assault in Normandy.

BOOKS ON THE CAMPAIGN

Field-Marshal Viscount Alexander of Tunis, *The Conquest of Sicily from 10th July, 1943 to 17th August, 1943* (Supplement to *London Gazette*, 12 Feb 1948).

General of the Army Dwight D. Eisenhower, *Crusade in Europe* (New York, 1948).

Field-Marshal Viscount Montgomery of Alamein, *El Alamein to the River Sangro* (London, n.d.).

Major-General Sir Francis de Guingand, *Operation Victory* (London, 1947).

Department of National Defence, Canada, *From Pachino to Ortona* (Ottawa, 1945).

## Norway's Armed Forces

A recent report released by the Norwegian Defence Department reveals that by the end of 1952 Norway will be able to mobilize 270,000 men in uniform—an increase of 30 per cent. in a two-year period. The Army will have a strength of about four field divisions, the Air Force will be expanded to 11 squadrons of U.S. F-84 Thunderjets, and the Navy will be increased, mainly in escort vessels and mine sweepers, beyond the present fleet of 51 vessels, including five destroyers, two escort destroyers and five submarines. — *Army-Navy-Air Force Journal* (U.S.).

# A TALK TO OFFICERS

*By*
MAJOR-GENERAL H. D. GRAHAM, CBE, DSO, ED, GENERAL OFFICER COMMANDING, CENTRAL COMMAND*

*Gentlemen:* Today you have finished the first phase, and in many ways the toughest part, of your officer training course; you deserve to be very proud indeed and your friends and parents should commend you for your success in passing this really stiff test. I extend to you my sincere congratulations.

And now you will progress to the second phase of the training programme. There you will be introduced to the particular weapons and equipment pertaining to your respective Corps, you will learn the way in which it is organized, you will be taught about the tasks which your Corps must perform and how it must co-operate with other Corps, and you will see how it fits into the large pattern which comprises the Canadian Army.

You will find this second phase intensely interesting, provided, of course, that you approach it with an inquisitive mind—a desire for knowledge, and a determination to give your best to the profession which you have now adopted. There will be times, mark you, when all will not go as you may wish. Some instructors may be a source of irritation and annoyance at times—some orders may seem unreasonable or unnecessary—you may (indeed, I hope you will) have ideas to put forward which you believe will be in the best interests and for the good of the Army—and your proposals may be rejected. You will feel frustrated. But don't forget that all these things happen to every young man in every walk of life.

The Army is no worse and probably no better than any other profession or business with regard to such irritations and frustrations. But mark this well, your success in the Army will be directly proportionate to the loyalty, effort and enthusiasm that you put into it. Political influence, family connection or social background will have no part or place in your success or failure in this profession of arms in Canada.

The standards that guide Army officers in matters of official and personal conduct are found partly in written laws and regulations and partly in unwritten customs and traditions of the military service. They

*This address was delivered to Officer Candidate School graduates at Camp Borden, 2 November 1951.—Editor.

MAJOR-GENERAL GRAHAM

reflect centuries of experience by many armies.

In any Army, but most of all in the Army of a self-governing people, rigid standards of conduct are maintained because its members firmly believe in, and are determined to live by, those standards. Government and military authority prescribe the standards. But the essential belief and determination cannot be created by command—they must originate in the individual officer. Law and tradition concerning his official and personal conduct are effective primarily because he applies them voluntarily in everything he does as an officer.

The mark of an officer consists, therefore, of two elements: knowing what the standards are, and having the strength of character to live by them.

The military code by which we live is much the same as that which guides all honourable men. The big difference lies in the consequences of observing or violating it. For the private citizen, the consequences are personal and limited. For the officer, the consequences go beyond the personal to affect the reputation of the Army and the welfare of the country. An officer's conduct can affect the lives of many soldiers, the outcome of battles, and sometimes may even determine the future security of Canada.

I will say no more: you have up to this point done well. I wish you all good fortune in the future and leave with you these words of advice from a very great English soldier, the first Duke of Wellington:

"The secret of success lies in embracing every opportunity of seeking high and right ends, and in never forgetting that golden rule of the catechism 'of doing your duty in that station of life to which it shall please God to call you'."

---

The Future

Although you may honour—and rightly so—the great tradition of the past, the traditions of the future belong to you.—*Field Marshal Viscount Alexander at a Royal Military College of Canada graduation.*

In The Field

# CANADIAN ARMOUR FIGHTS IN KOREA

Contributed by the Directorate of Armour, Army Headquarters, Ottawa

*The news letter which follows is one of a series of interesting reports on the operations being carried out by "C" Squadron, Lord Strathcona's Horse (Royal Canadians), in Korea. The author, A/Major V. W. Jewkes, MC, has served with Canadian Armour since the beginning of the Second World War. After serving overseas with the 6 Armoured Regiment (1 H), he returned to Canada in 1945 and remained in the Active Force. When the Korean Force was organized, Captain Jewkes was appointed Second-in-Command of "C" Squadron, and was promoted and appointed to command the Squadron in Korea in August 1951.*

*The successful manner in which the various tasks assigned this Squadron were carried out is an excellent example of the spirit of team work which has been developed between the tanks, artillery and infantry of the Canadian Army. This interdependence between the various arms, recognized and exploited fully during the Second World War, has remained the principal factor in all peacetime tactical training of the Canadian Forces. The high degree of success with which this training has been carried out is amply illustrated in this article.*—Directorate of Armour.

* * *

In contrast to the lethargy of August, September and October have been months of activity. A limited, but successful, offensive action has kept the Commonwealth Division occupied, at the same time enabling it to prove itself in its first major engagement. At the time of writing, the assault phase has terminated and the division is digging in along its new front. It would seem that we are returning to the "Torres Vedras" existence of the summer—although so frequently that which seems probable does not occur. The average Korean "crystal ball" is not worth its purchase price.

To revert to past events, however, the first of September found the squadron still in mobile reserve behind the Imjin River with only one troop in the line across the narrow appendix of land that joins the Imjin and Hantan rivers. Curiously enough, al-

though in fact we were ourselves shortly to turn over to the offensive, this was little in our minds at the time, for we were daily expecting a forward sweep by the Communists. Accordingly, the squadron was in an advanced state of readiness, and the fact that the directional forecast proved to be so inaccurate was a point of little importance. We were ready to move.

At 2100 hrs. on the seventh (September) the warning order was received. The following day was spent by Major Jewkes attending divisional and Brigade "O" Groups, and by Captain K. C. Kennedy looking for a more advanced squadron harbour. On 9 September the troop leaders reported forward to the infantry battalions in whose support they would be, and on the 10th the tanks moved into the battalion concentration areas. Captain Kennedy took forward the echelon and the LAD. Our troop from the river appendix was called back into the fold, and by evening the squadron was fully deployed and ready for action on the following day.

With the Royal 22nd Regiment on the brigade right flank went 2 and 3 Troops, whilst 4 Troop reported to The Royal Canadian Regiment. Squadron Headquarters and 1 Troop, now in reserve, also moved for the sake of convenience into the R22R concentration area. Before us was the Imjin river, and beyond the river our objective. We all had the new line on our maps.

The river itself was no problem, because it was ours, and had been since early June. Because of this, and to ease the congestion in the morning when the infantry was to advance, the tanks of 3 Troop under Lieut. D. Lorne Glendinning and 2 Troop under Lieut. R. G. (Bob) Neelin crossed it ahead of time and spent the night on its north bank. They were joined by the R22R in the early hours of the morning and moved onto their objective with the dawn.

By 1100 hrs. on 11 September both troops reported themselves in position, having encountered no resistance. Meanwhile, at 0830 hrs., Squadron HQ and the reserve troop also crossed the river. By 1800 hrs., 4 Troop and The RCR were also reported on their objectives without incident. The first phase was over. It was a bloodless march, carrying the brigade to its goal all along the front without a shot being fired by weapons other than the 25-pounders of the 2 Royal Canadian Horse Artillery, who have always managed to find something to shoot at.

In this manner the kink in the line, which looped back to the river on our front from Chorwon on the central sector, was now almost obliterated. The new line was straight, and therefore shorter. It had still to be dug and wired, however, if it was to become

more than a pencil mark on paper. The ease with which it had been reached was gratifying, but hardly surprising. In fact, all that had happened was that the brigade (or rather, the whole division) had reaped the fruits of its earlier offensive patrolling across the river and taken permanent ownership of the ground it had always rented there through the activity of its patrols. The trick would be to stay once the enemy realized what had happened and knew that we did not intend to go back. Certainly the squadron realized this, and it proved to be so.

On 12 September the business of patrolling commenced again in order to force open a new stretch of no-man's-land in front of the main position. This was necessary for the establishment of the main line, and for it we had to fight, for the ground was new and ranged northward as a succession of hills and rice-growing valleys beyond the limits of our previous excursions. Here we found Chinese aplenty. Both 2 and 3 Troops had a very active day supporting a company of the R22R on to a hill feature called "Point 222" and on to its immediate neighbour. Despite the tank fire, which was being directed with "delay" fuse into the slits of the bunkers, sometimes not more than 25 yards ahead of the infantry, the company failed to make the hill and pulled off to try again the next day. Mortaring and shelling by the Chinese was heavy but not always accurate, for the tanks denied vision to the OPs.

On the 13th, with 2 RCHA in full support, another company of the R22R accompanied by 2 Troop, with 3 Troop in readiness to give fire support, moved on to Point 222 and its neighbour without a shot being fired. In the bunkers they found a total of 75 dead Chinese, killed for the most part by the tank guns and still huddled over their weapons. The bursts of the tank HE shells could be seen on the inner walls and the bunker slits were closed with dirt from the blast from within the dug-outs. It had been a costly and fruitless defence.

Lt. Col. J. A. Dextrase (R22R) was very kind with his praise of the tank support, and we had the gratification of hearing Major-General Cassels* say that he had never seen more intimate and effective tank/infantry co-operation in his life. Such co-operation is born of mutual trust. Our own infantry in particular the R22R and The RCR (and now, too, The King's Shropshire Light Infantry of 28 Commonwealth Brigade) have come to place a great faith in the accuracy of our fire and give themselves its fullest benefit by calling it down on targets not much out of

**Major General A. J. H. Cassels, CB, CBE, DSO, Commander of the Commonwealth Division.*—Editor.

grenade range from themselves. This is as it should be. A good tank gunner can hit a six-foot square target with every shot at 2,000 yards' range and should be trusted to do so. This confidence grows only from training and experience, however. In our case it is increased by the fact that our crews have a deep sense of pride and a desire to work with the battalions because they receive so much help from them when moving in their support. Confidence must be mutual. With us it is.

Upon reorganization, Bob Neelin and 2 Troop remained with the company, strengthening the defence of the feature and seeking targets to the north. Mortar and machine-gun emplacements were engaged with telling effect whilst the infantry dug in. It was well that they dug so thoroughly, for by late evening the enemy began to shell and mortar the position heavily. Sergeant Forbes' tank suffered a direct hit from a mortar bomb which blew away most of the external fittings on its front end but otherwise did the tank no damage. Unfortunately, L/Corporal Elliott, the driver, was on the point of getting out of the tank when the "stonk" fell and was wounded about the head and hand. He was our second casualty from enemy action whilst in Korea.

On The RCR front, meanwhile, nothing of note took place on 13 September. Lieut. S. C. "Strath" MacDonald and Major R. D. Medlin, the company commander in whose direct support he was placed, set off on a long foot reconnaissance to find a tank route on to a hill feature to the north whence it was intended to send a company patrol the next day.

In the centre of the brigade line a shuffle took place. Two companies of the Princess Patricia's Canadian Light Infantry moved forward from reserve to allow the flank battalions to withdraw a company each and so extend their flanks. No. 3 Troop remained in the centre but passed from in support of the R22R to in support of the PPCLI. No. 1 Troop moved up to the R22R right company locality, leaving the squadron with nothing in reserve at all. An A1 Echelon under Lieut. Wm. James (Royal Canadian Electrical and Mechanical Engineers) was also sent across the river with a fitters' element, the Armoured Recovery Vehicle (ARV) and three ammunition trucks, for by now the distance to the troops was becoming too great for efficient supply from south of the river. Ammunition expenditure had been quite heavy and was likely to remain so.

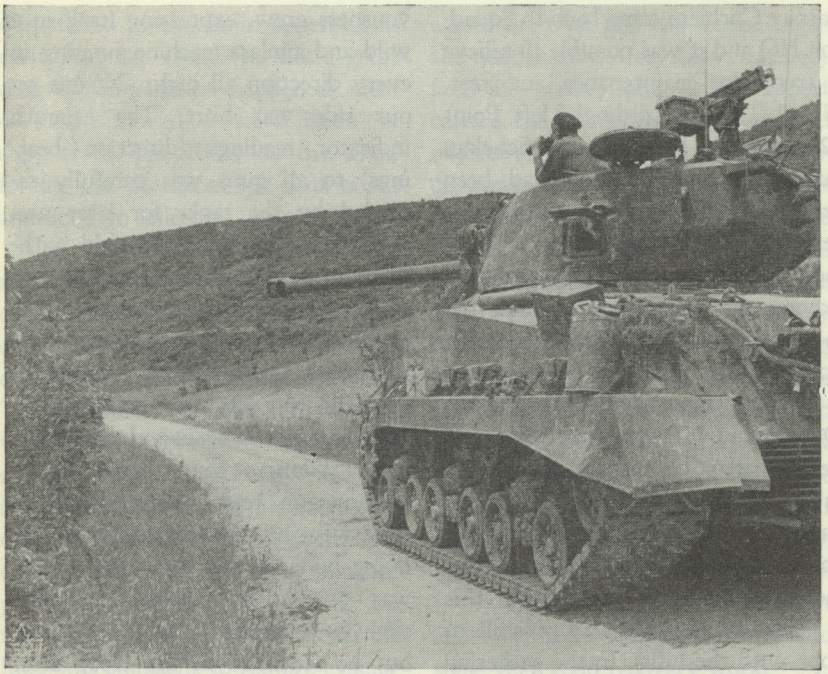
That evening the ARV commanded by Sergeant Hunter made the first supply run into 2 Troop, taking 150 gallons of petrol and 200 rounds of HE. Nothing but a tracked vehicle could reach the position, and the ARV was all we had left. It subsequently made two more runs, taking

in all 600 rounds of HE up to the troop. In order fully to appreciate just some of the supply difficulties that we have had to face, and to get some idea of the difficult country in which we operate, it may be of interest to note that a round trip of 10 miles took four hours and used almost 100 gallons of petrol. The vehicle never got out of extreme low gear. To use it effectively out here we have had to fix "Duckbills" to its tracks to widen them.

On 14 September all four troops were in action again. On the left flank of the brigade Lieut. MacDonald with 4 Troop moved out on patrol with Major Medlin's company of The RCR and spent a very lively day shooting up large bodies of Chinese who were roaming over the surrounding hillsides. At one point Sergeant Prokopetz, the troop sergeant, was heard calling on his wireless set for artillery support on the grounds that his lone gun could not deal with the diversity of targets visible. Throughout the day all tanks came under sporadic mortar fire and a fair volume of small arms, but suffered no harm. By the day's end they had expended all their ammunition, having been forced to ration it strictly in order to make it last. MacDonald estimated that Chinese casualties must certainly have been in the neighborhood of 100 from the tank guns alone, and this was later borne out by the realization that just ahead of his own tank position was a full Chinese battalion. In fact, one of his shells entered the Battalion HQ dugout, killing six officers—an intelligence of which we were quite unaware at the time.

With the Patricias in the centre, 3 Troop carried out a little punitive shooting, dusting up the bunker mouths on the Chinese hill across the valley, whilst on the right flank 1 and 2 Troops fired in support of the KSLI of 28 Commonwealth Brigade. This battalion had relieved the R22R on Point 222 and the ridge to its immediate right and had taken over the task of covering that flank of the brigade main position so that our own battalions could concentrate on strengthening their defences unmolested. With one company of the KSLI went Lieut. Barney Corbiere to act as a ground tank observation officer (TOO) and to control the fire of 2 Troop from Point 222. At the same time Lieut. Doug Smith moved his tanks (1 Troop) in close support of another KSLI company. In both cases the tank support proved effective and opposition was quickly silenced. Smith had the exquisite satisfaction of seeing one of his shells spin the barrel of an enemy 82mm mortar 30 feet into the air, which proved a most effective manner of silencing it.

For the next three days the pattern of action remained almost unchanged,



*National Defence Photograph*

A tank of "C" Squadron, Lord Strathcona's Horse (Royal Canadians), keeps watch over an advancing patrol of Canadian infantry in Korea. Part of the 25th Brigade Group, the armoured corps element in this picture lends support to "D" Company of the Royal 22nd Regiment.

with all troops firing in support of company-size patrols. In particular, the KSLI formed a new friendship for us, for on two occasions the company Barney Corbiere was with became pinned down for a while by small-arms' fire, necessitating the employment of rather close tank fire in order to destroy the machine-guns that were causing the trouble. It was given with extreme accuracy and evoked high praise from the company commander. Later the same day Smith with 1 Troop moved into the KSLI forward patrol base to afford them even fuller support, which pleased them. Throughout this period all troops, but notably 2 Troop, were subjected to varying degrees of ineffective mortaring and shelling. We suffered no more hits and no more damage, although a number of the tanks are badly pock-marked now.

By the 20th of the month it was becoming no longer true to say that our hold on the line was precarious.

Barney Corbiere came back to Squadron HQ and it was possible to relieve a troop for maintenance and rest. No. 2 Troop accordingly left Point 222 and came back into A1 Echelon. After mechanical defects had been rectified it moved into squadron reserve at HQ. To replace it, 3 Troop moved two tanks up to the hill, leaving the other two in their old locations, thus adequately covering both areas.

On the night of the 20th, MacDonald and 4 Troop moved out on a decoy patrol to ensnare the enemy into thinking they were unaccompanied and might be destroyed under cover of darkness. As usual they moved along the ridge lines (for this is generally the only way possible to cope with the hills). In the gathering darkness four sharp silhouettes moved against the evening sky. Down below them snaked a company of The RCR, hidden from the enemy by the folds in the ground. After progressing some two miles to the north they halted for the night and awaited developments. The Chinese reaction was violent but totally unexpected. Instead of coming for the tanks during the night, they anticipated a night attack upon themselves and rushed 12 machine-guns to the head of the spur upon which the tanks stood. These the artillery FOO promptly destroyed by placing a full regimental shoot upon them. Thereafter Chinese nervousness grew, expressing itself in a wild and aimless machine-gunning in every direction all night. No-one on our side was hurt. The azimuth indicator readings (direction bearings) to all guns was carefully recorded by the tanks for later use. Just before dawn, MacDonald withdrew his tanks off the sky-line and shunted them about to simulate departure. Then, when daylight was sufficiently advanced to permit of good shooting vision, he popped them up over the crest again and caught the weary Chinese going home. Three machine-gun teams disintegrated as they were hit walking back to their living bunkers, and the night's work was over. We suffered one man slightly wounded from mortar fire, but he remained in the troop after bandaging.

On 22 September the Squadron A2 Echelon moved up almost to the river. The divisional order still placed a severe restriction upon the number of vehicles across the river and we were therefore forced to maintain only the A1 Echelon of fitters and ammunition, together with the ARV, upon the north bank. It was, however, a satisfactory arrangement and we had to be content with it.

On 24 September all the officers of the squadron met at 3 Troop location for a quick "O" Group upon projected operations. This was our first time together since Smith's troop was

despatched to the Imjin appendix in early August. Thereafter not a great deal of importance happened until 4 Troop moved forward again in support of The RCR on the 27th, forcing the divisional left flank north another two miles.

On the 28th, 1 and 3 Troops moved again as the centre and right of the brigade conformed. Some more excellent shooting opportunities were encountered, our only casualty being Trooper Butkevitch of 4 Troop, who was lightly scratched across the shoulder by a mortar bomb fragment, and one of Smith's crew members who dived too hastily into a slit trench and cut his hand badly on a rusty tin, thus provoking a good deal of laughter from us until it was realized that his hurt was sufficient to require evacuation.

At the turn of the month it became obvious that our new line was not a permanent one and we prepared to shift again. This time, however, we lack the no-man's-land that had previously stretched in front of us. It meant that we would have to fight for further gains. Additionally, we were meeting even more difficult tank country. With every yard that we advanced, supply became more difficult despite some really amazing road building by the engineers. To move further we would have to shift the echelon across the river.

On 4 October the echelon came across the river and the troops began the next assault. Very heavy artillery fire, air strikes and tank support carried the infantry on to their final objectives by night-fall with few exceptions. MacDonald with The RCR had great difficulty navigating the ground, but finally came up on Hill 187 (the highest in area) from the enemy side as that was the only way possible. No. 1 Troop, under Doug Smith, moving in his support, had the misfortune to hit two mines, in each case Smith being the luckless crew commander. Little enemy resistance was manifested, however, making it possible for Bill James and the ARV crew to limp them both home on their own tracks after an all-night effort with the acetylene torch and some very good recovery work.

With the Patricias the story was somewhat different. Lorne Glendinning's 3 Troop had very great difficulty reaching their objective, and three times had to summon the ARV to replace tracks damaged and thrown by the steep hill gradients. On 5 October they were called upon to support a company that could not make its objective, and placed it there by tank fire despite the fact that they were not permitted to give it the truly close support of which they are capable.

By 7 October every last objective had been achieved and the advance came to a halt. Immediate measures to

strengthen the line were undertaken, and to date the situation remains unchanged.

A good deal of shelling and mortaring still goes on, but daily it becomes less harmful as the enemy is forced to pull back his forward gun positions. The tanks have excellent gun sites dominating the enemy forward slopes across the valley and have been destroying enemy OPs, machine-gun nests and bunkers by direct fire. The crew live among the forward platoons of infantry and form part of the company defences. This system, although foreign to all armoured handbooks, is a practical one and accounts in part for the figure of 138 Chinese dead counted after a battalion attack failed to dislodge two companies of Patricias three nights ago. One of the tank's .50 Brownings left a group of seven hanging on the wire the next morning, and another blew the seams out of two machine-gun crews who had ventured too close to it.

Now that we have settled down again, 4 Troop has been rotated by 2 Troop and is back in reserve. We have combined A1 and A2 Echelons north of the river, but have not been able to combine the echelon with Squadron HQ and the reserve troop. This does not seem likely for some time.

After the inaction of August the men have enjoyed the last six weeks. It has been a time of very hard work leading to excellent dividends. We commenced the assault with—fighting tanks [figure censored.—Editor] and have ended with the same number despite one direct shell hit, two mines run over and endless mechanical stress. This is due in no small part to the activities of Lieut. James and the ARV crew who were called out on seven very ticklish jobs, and also to the work of 191 Workshop (RCEME). One of the mined tanks, running back to them under its own power, failed to make the last few miles and was actually repaired on the side of the road. This was done by the workshop in spite of the fact that a major assembly change had to be carried out on the suspension. Within 48 hours both of the mined tanks were back in the squadron. This was a remarkable achievement for which the squadron is grateful.

An undetermined number of tanks were hit by small arms' fire, but have suffered nothing therefrom.

In a news letter of this nature it is hard to draw the line between writing too much and too little. A welter of strange place-names, hill numbers, personalities and other trivia leads only to confusion. On the other hand, if the picture is to be drawn with realism and any degree of accuracy, many fine lines must be drawn before it is finished. It is hoped that the detail of the above has not

# PONCHOS FOR CANADIANS

Rubberized ponchos designed to provide a combination rainproof garment and small shelter for Canadian soldiers, are being issued to many of the troops in Europe and the Far East to replace the familiar ground sheet of the Second World War.

If the poncho meets requirements during the next 12 months it is likely to be accepted for general issue, but it will not replace the more recently issued gabardine "walking out" coat.

The Army wants to see how the new garment stands up under rigorous training conditions encountered by the 27th Canadian Infantry Brigade in Europe, and under actual combat conditions by troops of the 25th Brigade in Korea. Supplies already are on the way to the Far East and will be issued immediately they are received. Shipments will commence shortly to the 27th Brigade in Europe.

The poncho—known officially as "X50"—has been designed for use as (1) a rainproof garment; (2) as a groundsheet; (3) for use in the construction of a two or three-man fox-hole shelter. How it meets these requirements and how the men like it will be reported periodically to Army Headquarters.—*Directorate of Public Relations (Army).*

---

## CANADIAN ARMOUR FIGHTS IN KOREA

*(Continued from preceding page)*

obscured the outline of the main events, and also that sufficient has been said about the major happenings to ensure that they have not become lost in the obscurity of every-day events.

Some other general points may be of interest outside the realm of operations. As regards welfare: this is not something to be worried about when men are really busy—there is no need to, providing food and clothing are adequate. We have, however, maintained a steady stream of men going to Japan for five days' leave. We have also shown films on every possible occasion, both to the LAD and echelon personnel and to Squadron HQ and the reserve troop. On the understanding that this is no war but a police action, it appears seemly to treat it with a certain amount of disdain. So long as Hollywood will produce we are prepared to watch.

The degree of dispersion imposed upon us has made impossible the continuation of the officers' mess. This was a precarious thing at the best of times. We are back on "C" rations and mess-tin living.

June–August 1944

# THE FIRST CANADIAN PARACHUTE BATTALION IN NORMANDY

SPECIALLY WRITTEN FOR THE CANADIAN ARMY JOURNAL
UNDER THE DIRECTION OF LT.-COL. G. W. L. NICHOLSON,
DEPUTY DIRECTOR, HISTORICAL SECTION,
ARMY HEADQUARTERS, OTTAWA

*Only one unit of the Canadian Army — the 1st Parachute Battalion — fought in an airborne role in the Second World War. The post-war importance of airborne troops in the army has made it seem desirable to undertake a careful analysis of this unit's operations during the Normandy campaign. The article which follows is the result of investigation of all possible sources of information.*

* * *

Included in the Allied airborne forces which descended on Normandy on 6 June 1944, immediately before the seaborne landings, was the 1st Canadian Parachute Battalion, commanded by Lt.-Col. G. F. P. Bradbrooke. This unit had been organized in Canada and the men, including 25 officers and 60 other ranks who had previously qualified as paratroopers in the United Kingdom, had received parachute training at Fort Benning in the United States. It was transferred to Manitoba in the spring of 1943 and sent overseas that summer, arriving in the United Kingdom on 28 July. Two weeks later the battalion joined the British 6th Airborne Division, the formation in which it was destined to fight.

A ten months' programme of individual and group training culminated in April 1944 in large-scale airborne exercises by the whole Division. These were dress rehearsals for the then imminent invasion of Europe.

*The Plan and the Drop*

The plan for the assault on the Normandy coast is too well known to require detailed repetition here. The landings were to be made between the Cotentin Peninsula and the River Orne, with the U.S. First Army attacking in the western and

the British Second Army in the eastern half of the front. The British were using two corps, the 30th on the right and the 1st on the left. Under the command of the latter, but slated to operate east of the Orne, was the 6th Airborne Division. Briefly, the role of this force was to secure the left flank of the British assault troops by seizing the area immediately east of the 1st Corps boundary.

Such an area was well suited to the defensive operations planned for the lightly armed parachutists. To the east were the Dives and Divette Rivers, which would form natural anti-tank obstacles once their bridges were demolished. Both rivers flowed through a wide valley which had been inundated by the enemy, thus making the movement of mechanized forces almost impossible except by road. Tactically, the most important feature was a thickly wooded ridge rising steeply from the sea at Sallenelles and stretching south-east towards Troarn where it merges into a plain. Should the enemy continue to control this dominating land, he could bring his fire to bear upon the 3rd British Division's position west of the Orne with devastating effect. In Allied hands, however, the feature provided a shield to be held at all costs against just such a possibility. The ridge was crossed by three roads, at Bréville in the north, at Le Mesnil in the centre and from Troarn in the south. Heading westward over the Orne River and Canal de Caen, these three roads formed part of the enemy's transportation network running parallel to the coast. It was, therefore, as necessary to deny their use to the enemy east of the ridge as it was to hold them in British hands on its western side.

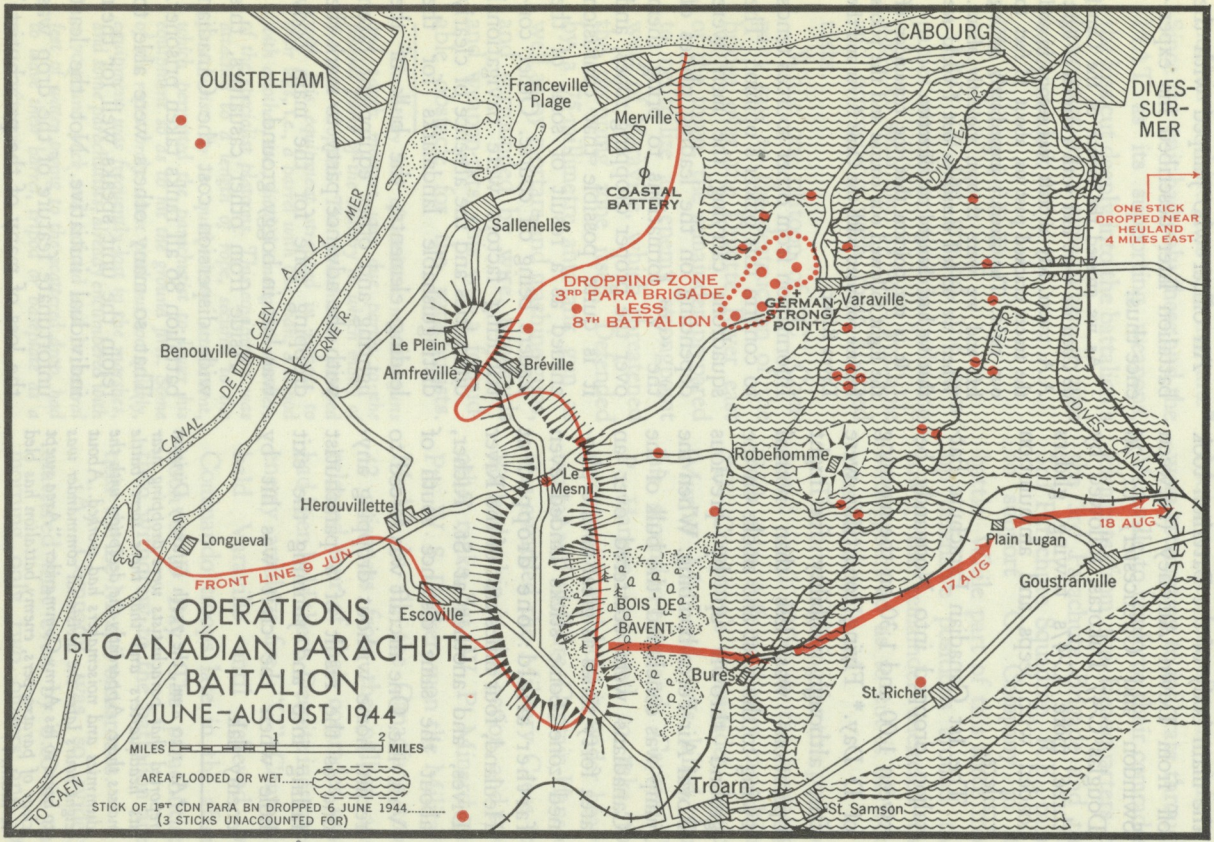
The area to be seized and held by the 6th Airborne Division comprised some 21 square miles. Most of this area was defended by the enemy's 716th Infantry Division (with headquarters at Caen). Important operations were also to be carried out in the area held by its eastern neighbour, the 711th Infantry Division (with headquarters at Le Quesnay). The boundary between these two divisions, which ran from a point a mile east of Franceville Plage to Varaville, then to Bavent and Bures, whence it followed the Dives southeastward, was also the boundary between Rommel's Seventh and Fifteenth Armies.

The G.O.C., Major-General R. N. Gale, gave the 5th Parachute Brigade the task of capturing intact the bridges over the Canal de Caen and the Orne River at Benouville. These were to be the connecting links between the Airborne Division and troops of the 3rd British Division

west of the Orne, and their preservation would materially assist subsequent operations eastward by the British Corps. The 3rd Parachute Brigade was to destroy a coastal battery which stood on the high ground at Merville commanding the beaches where men of the 3rd British Division would be landing and the waters offshore. To prevent the movement of German reinforcements westward from the areas of the Seine and Le Havre, this Brigade was also to destroy the bridges over the Rivers Dives and Divette at Troarn, Bures, Robehomme and Varaville, after which it would retire to the Sallenelles-Troarn ridge to block and hold the roads leading into the area from the south and east. As a further measure to delay the westward movement of enemy troops, fifty dummy parachutists, together with mechanical devices which simulated battle noises, were to be dropped near the headquarters of the 711th Division at the same time that men of the 3rd Parachute Brigade were dropping on their targets. Late on D Day the Division's 6th Airlanding Brigade would fly in by glider to deepen the bridgehead, while the 1st Special Service Brigade (a Commando formation), after landing on the Ouistreham beaches, would cross the Orne and secure the coastal end of the 6th Division's sector.

The 1st Canadian Parachute Battalion, which together with the 8th and 9th (British) Parachute Battalions formed the 3rd Parachute Brigade, was assigned several important tasks. "C" Company was to be dropped 30 minutes in advance to secure and protect the dropping zone for the main body of the Brigade. It would then destroy the nearby bridge over the Divette at Varaville. "B" Company, having under command a section of paratroop engineers, was to destroy the Robehomme bridge over the Dives two miles to the south and cover this demolition from the village situated on a hill overlooking the site. "A" Company was to protect the move to and assault on the Merville battery by the 9th Battalion. When these specific tasks had been accomplished, the Canadian battalion was to take up positions around the Le Mesnil crossroads as part of the 3rd Brigade's defence of the Sallenelles-Troarn ridge.

Late on 5 June the parachutists emplaned. At 10:30 p.m. the 3rd Brigade's advance party, consisting of elements of Brigade Headquarters and of each battalion, plus "C" Company of the Canadian unit, took off from Harwell field (between Oxford and Reading). "C" Company was to be among the first Allied troops in Normandy. An hour later




Historical Section, G.S.

the main body of the Battalion took off from Down Ampney (between Swindon and Cirencester) in 26 Douglas C-47 Dakotas, followed by three more C-47s towing gliders loaded with jeeps and ammunition trailers.

The 1st Canadian Parachute Battalion dropped into Normandy between 1:00 and 1:30 on the morning of D Day.* Flying conditions were fair, although visibility for night operations was less than normal owing to the dust and smoke on the ground thrown up by previous Royal Air Force bombing. When the jump was concluded, the bulk of the Canadians were scattered over an area forty times as great as the planned zone. Some sticks landed even farther afield: one dropped at Heuland, four miles east of the River Dives, and another at St. Richer, about the same distance south of Varaville. One aircraft was forced to return home without dropping anyone as the result of a parachutist falling into and jamming the exit hole when the craft was hit by enemy flak.

*At 1:20 *a.m., the 711th Infantry Division reported that parachutists were dropping near its headquarters and that there were battle noises there. Apparently the deception with the dummies and noisemakers had worked. About eight hours later the divisional commander was to boast to his Army Commander: "Area swept clear of paratroopers, enemy battalion has bled to death. . . "*

An officer who jumped with the battalion later described his experience thus:

> As we crossed the mouth of the Canal de Caen we were met with a stream of light A.A. tracer. My aircraft was second in and the tracer cracked past us, about 15 feet to our right. The aircraft immediately swung left and we were thrown violently about. When we sorted ourselves out I could see that we had changed our direction.
>
> It is my opinion that the remainder of the flight followed our course and the pilots became confused with the Orne River and the Dives River.

Information from other sources tends to confirm this officer's opinion. The squadrons carrying the men were depending on the leading planes of the "V" formations to bring them over the proper dropping zones, and it is quite possible that confusion ensued as a result of some of the leaders being off course. Other contributing factors were navigational difficulties and the absence of clearly distinguishable landmarks for the leading elements; the bulk of the lighting and other equipment taken with the advance party to mark the dropping zone for the main body was lost in boggy ground.

Aside from other casualties, this wide dispersion cost the Canadian battalion 86 all ranks taken prisoner. That so many others were able to rejoin the unit speaks well for their individual initiative. Not the least unfortunate feature of the drop was the loss of many of the parachutists'

medium machine-guns and mortars.* Since the unit had only these and the PIAT as its supporting weapons, the loss cut deeply into the battalion's fire-power at a time when it was badly needed.

*The Fighting on D Day*

Once on the ground, the companies wasted no time in gathering together such men as were available and proceeding with their allotted tasks.

While one platoon of "C" Company saw to the destruction of the bridge over the Divette River east of the town, the remainder prepared to neutralize an enemy strongpoint west of Varaville, which threatened the dropping zone itself. Defended by a 75-millimetre anti-tank gun as well as by mortars and machine-guns, and surrounded by wire, minefields and weapon-pits, this was a formidable obstacle for the parachutists. Moreover, sections of enemy infantry were attempting to infiltrate through Varaville to reinforce their comrades. Elements from the Headquarters of the 3rd Parachute Brigade and the 3rd Parachute Squadron, R.E., came to support "C" Company in its battle. While part of this force took up defensive positions around the town, the remainder encircled the strongpoint so as to cut it off from possible outside aid.

The bitter fighting for this position lasted until 10:30 in the morning. Both sides suffered heavy casualties. "C" Company's commander, Major Murray MacLeod, was killed, but his second-in-command, Captain J. P. Hanson, managed to take the strongpoint and hold it under heavy mortar and shell fire. Captain Hanson was awarded the Military Cross for his leadership in this action, and two other ranks, Sgt. W. P. Minard and Pte. W. S. Ducker, won the Military Medal. In all, the Canadians took 42 prisoners from the pillbox and released four of their comrades who had been held there. Despite increased enemy artillery fire, "C" Company held Varaville until relieved by Commando troops late in the afternoon of D Day. The parachutists then withdrew to the battalion area near the Le Mesnil crossroads.

"A" Company was so widely scattered that even by 6:30 in the morning only two officers and 20

*The heavy loss of medium machine-guns and 3-inch mortars was due partly to the flooded parts of the country in which many of the men dropped. The parachutists jumped with this equipment strapped in kitbags to their legs, i.e., a barrel with one man, a tripod with another, etc., divided among the members of the specialist platoons. This equipment was attached to a length of rope, secured to the parachutist by a quick-release attachment, which permitted the parachutist to lower his equipment so as to hit the ground first. Some of the ropes broke when paid out too quickly, equipment was frequently lost in the marshes, and some parachutists, already encumbered with a 70-pound pack and isolated and in several feet of water owing to the scattered drop, had to leave their barrel, tripod or baseplate as a matter of survival.*

other ranks, about half of whom were from other units of the division, were gathered at the company rendezvous. This small party then set out to cover the return of the 9th Battalion, which by that time had put the coastal battery at Merville out of action. "A" Company assisted the British battalion's withdrawal to Le Plein without encountering much opposition, and late in the afternoon it reached its own battalion's position on the Sallenelles-Troarn ridge.

By the time "B" Company arrived at the Robehomme bridge it had approximately 35 of its own men and 25 others from various units of the Division. But the section of engineers was still missing. Shortly before daybreak, however, sufficient explosives were collected from among the men and the bridge successfully blown without the aid of the sappers. The main body of the company then moved off to Robehomme hill to cover the demolition. Although the village itself was clear of the enemy, there were several sharp encounters with enemy patrols attempting to infiltrate the company's defences. On 7 June "B" Company, now swelled to 150 all ranks by stragglers from almost every unit in the Division, was ordered to withdraw from its exposed position to the battalion area. It overcame enemy opposition to this move and reached the Le Mesnil area during the early morning hours of 8 June.

The Canadian battalion's achievements were typical of the success of the Division as a whole on D Day. The defenders of the area had been hit hard. The 3rd Parachute Brigade had blown all the bridges from Troarn to Varaville and had dealt successfully with the important Merville battery. The glider-borne force from the 5th Airlanding Brigade, which arrived with the pathfinder aircraft, had quickly seized intact the bridges over the Orne River and the Canal de Caen. In the afternoon Lord Lovat's Special Service Brigade arrived and shortly afterwards the Airlanding Brigade began to come in.

That night the 3rd (British) Infantry Division came up to take over the Benouville bridgehead from the 5th Parachute Brigade. At that time the 6th Division's forward defence lines ran from Longueval through Herouvillette and Escoville to the southern end of the Sallenelles-Troarn ridge, then north along the ridge to Amfreville and to the coast at Franceville Plage. With the arrival of the 3rd Division, the divisional supply line was secured. Moreover, General Gale now had under his command in addition to the six parachute battalions, three Commandos and three Airlanding battalions. However, he was still weak in artillery and his armour consisted only of the light tanks of the Divi-

sion's reconnaissance regiment.

Space does not permit anything like a full description of the excellent work performed by all units of the Airborne Division, but the manner in which they organized and stabilized the divisional front in the midst of enemy territory deserves high praise. Vigorous round-the-clock patrolling activity deceived the enemy as to the Division's strength and dispositions and at the same time enabled it to seize and maintain the initiative. The alert and forceful leadership of the officers and N.C.Os. together with the excellent briefing given the men on all aspects of the divisional role accounted in large measure for the success achieved despite the dispersion of the drop. Indeed, the 6th Airborne Division was the most successful of all the Allied divisions in taking and holding its objectives on D Day.

With the aerial phase of the initial assault behind it, the 1st Canadian Parachute Battalion was destined to operate solely as infantry for the remainder of its stay in France; not until March 1945 did the unit make another operational drop.

*The Fighting*
*at Le Mesnil Crossroads*

During the next ten days, the enemy launched frequent and often heavy counter-attacks to find weak points in the 3rd Brigade's defences. These assaults were effectively dealt with, however, usually in their earlier stages, and small-scale attacks of one- or two-platoon strength by both Canadians and British secured points of vantage and helped to stabilize the front. In these operations the Division's limited fire power was supplemented by field batteries of the 3rd (British) Division and by bombardment from two cruisers and two destroyers.* Sporadic shell and mortar fire caused some casualties in the Brigade area, while enemy snipers continued to be a nuisance.

During 7 and 8 June there was considerable action on the 5th Brigade's front, which filled the gap between the Orne and the southern end of the ridge. There units of the 6th Airlanding Brigade, attempting to expand the bridgehead, managed to seize Longueval but met unyielding opposition elsewhere. It was late on the 7th, however, before the enemy's 346th Infantry Division, delayed by the destruction of the bridges and by Allied air superiority, managed to bring sufficient forces west of the Dives to mount attacks in divisional strength against the 1st Special Service Brigade in the north and the

**In the case of Naval support this was done through the medium of Forward Observers Bombardment who dropped by parachute or landed in gliders.*

3rd Parachute Brigade along the ridge. Early on the morning of 8 June, battalions of the German 857th and 858th Grenadier Regiments began their efforts to throw the para-troopers back over the Orne.*

The attack started off badly for the enemy as the Canadian mortars, the number of which had been increased to four from the first re-supply drop, caught him in his forming-up places and caused him a number of casualties. Nevertheless, supported by self-propelled guns and Mark IV tanks, the Germans came on, and when repulsed by heavy, concentrated fire from "B" and "C" Companies' positions, established themselves in some houses across an orchard 200 yards from the Cana-dians. One tank penetrated the forward companies and inflicted several casualties before being driven off by PIAT fire. At 9:00 a.m. "B" Company, led by Captain P. R. Griffin, counter-attacked the enemy in the buildings and despite strong opposition succeeded in driving them out. Later, superior enemy infantry forces supported by tank fire forced the company to withdraw slightly, but it managed to achieve a partial consolidation of the newly won area.

**The day's action is described in the Cana-dian unit's war diary as occurring on 7 June, but there is conclusive evidence in the war diary of the German Fifteenth Army and German situation maps that the attack came in on the morning of the 8th.*

For the rest of the day, both sides were active, but by nightfall the Brigade front was comparatively quiet again.

The fighting for the Le Mesnil crossroads on 8 June brought to the 1st Canadian Parachute Battalion five awards for bravery. Griffin received the M.C., while four other ranks — Sgts. J. A. Lacasse and G. H. Morgan and Ptes. R. A. Geddes and W. Noval — were awarded the M.M. The action of Private Geddes, as described in the recommendation for his award, is typical:

> At Le Mesnil on 8 June 1944 in a com-pany attack this man with his sniper was detached with a Bren group to give covering fire to his section crossing open ground to the objective. When the company was counter-attacked he and the Bren group were cut off but kept fighting and finally found their way in to the company. Twenty-five dead Germans were counted by the stretcher bearers in the area where this team fought.

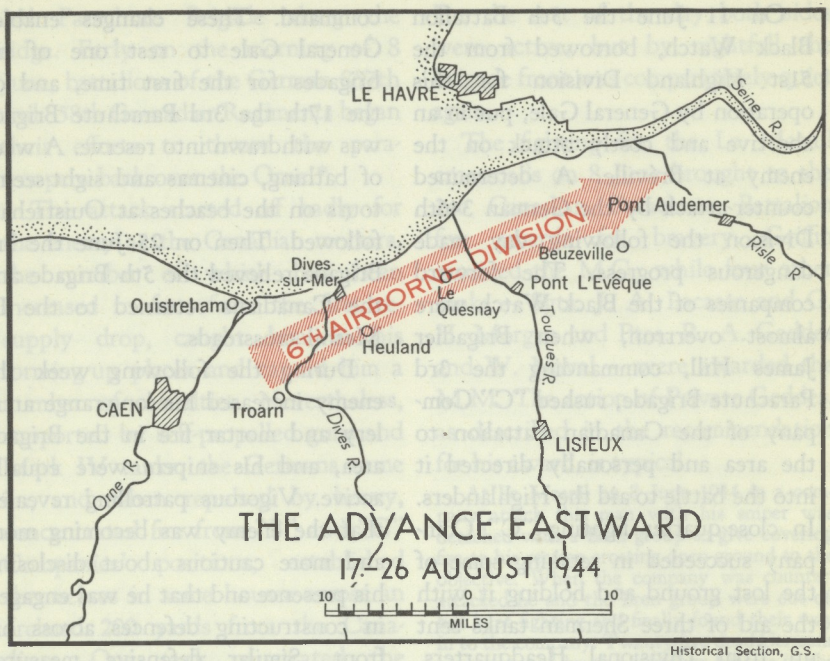
On the 10th the enemy made another strong attempt to break through the 3rd Brigade. This time their main thrust was to the left of the Canadians against Le Plein and the high ground south of Bréville. This village on the ridge was in enemy hands, and as such formed a dangerous salient between the Cana-dians at Le Mesnil and the 9th (British) Battalion at Le Plein. The attack broke under the steady and disciplined fire of the defenders and the enemy retreated to the shelter of the woods leaving behind many dead and prisoners.

On 11 June the 5th Battalion Black Watch, borrowed from the 51st Highland Division for this operation by General Gale, put in an abortive and costly attack on the enemy at Bréville. A determined counter-attack by the German 346th Division the following day made dangerous progress. The forward companies of the Black Watch were almost overrun, when Brigadier James Hill, commanding the 3rd Parachute Brigade, rushed "C" Company of the Canadian battalion to the area and personally directed it into the battle to aid the Highlanders. In close-quarter fighting, "C" Company succeeded in retaking some of the lost ground and holding it with the aid of three Sherman tanks sent up from Divisional Headquarters. That night General Gale struck back in force and cleared Bréville of the enemy. This marked the turning point of the 6th Division's bridgehead battle. The "shield" had held, and thereafter the enemy was never able to threaten its existence seriously.

Although the severity of the fighting at Bréville had greatly exhausted the Airborne Division, it was given some relief on the 14th when the 51st Highland Division took over the front from Longueval to the road junction south-east of Escoville. About the same time the 4th Special Service Brigade came under divisional command. These changes enabled General Gale to rest one of his brigades for the first time, and on the 17th the 3rd Parachute Brigade was withdrawn into reserve. A week of bathing, cinemas and sight-seeing tours on the beaches at Ouistreham followed. Then on 25 June the 3rd Brigade relieved the 5th Brigade and the Canadians returned to the Le Mesnil crossroads.

During the following week the enemy increased his long-range artillery and mortar fire in the Brigade area, and his snipers were equally active. Vigorous patrolling revealed that the enemy was becoming more and more cautious about disclosing his presence and that he was engaged in constructing defences across his front. Similar defensive measures were being taken by the Canadians. By the first week of July, when the 3rd Brigade was again relieved by the 5th Brigade, relatively static warfare had developed.

The Canadians spent the next two weeks in cleaning up and, despite occasional shelling, enjoying their stay at the divisional seaside rest area. There they heard the good news of the fall of Caen and later of the American success at St. Lô. They were also cheered by a rumour (which proved false) that the 6th Airborne Division was shortly to return to England. It was during this period that the Canadians re-




Historical Section, G.S.

ceived seven officers and 100 other ranks as reinforcements. These men were not parachutists, but for the Battalion's present role the arrival of well-trained and equipped infantrymen provided a welcome addition. The use of infantrymen at this stage to reinforce the Battalion was no stop-gap measure but a matter of policy, for the 400 parachutists held in the 1st Canadian Parachute Training Company in England were rightly regarded as a reserve to be kept for future airborne operations. At the end of the Normandy campaign, most of these infantry reinforcements were withdrawn.

When they returned to the line on 21 July, the Canadians took over positions along the Le Mesnil-Troarn road, near the south-western edge of the Bois de Bavent. This was a most thickly wooded region with a dense undergrowth which reduced visibility almost to nil except along the ridges. To make matters worse the weather had broken and the heavy rain which flooded the countryside necessitated the relocation of many of the weapon pits. Fortunately, it was a comparatively quiet week for the Canadians. At the end of July they replaced the 7th Battalion, Argyll and Sutherland Highlanders (of the

51st Highland Division), to the west of the Bois de Bavent. The first half of August saw little change in the situation. Patrol activity continued, although towards the middle of the month less and less information was brought in. It was becoming apparent that the enemy was preparing to withdraw and that the long and dreary static period was drawing to an end.

*Eastward to the Seine*

The advance which in ten days was to take the 1st Canadian Parachute Battalion to the mouth of the Seine, a distance of about 40 miles, began in the middle of August. The 2nd Canadian Corps had broken out of the bridgehead down the Falaise road on 7–8 August. Falaise had fallen on the 16th–17th and the battle of the Falaise pocket was being waged furiously. A general enemy withdrawal was expected and General Montgomery ordered the First Canadian Army to develop operations in the extreme northern sector towards Lisieux. To the 1st British Corps, under whose command was the 6th Airborne Division, fell the task of maintaining pressure in order to speed up the right wing of the Canadian Army in its advance to the Seine.

It was not intended that the Airborne Division would do other than follow the enemy closely as he withdrew eastwards. To help overcome his division's lack of mobility, engineering resources and fire power, however, General Gale could count on the transport and supporting arms of the 1st and 4th Special Service Brigades, the First Belgian Group (Light Brigade), and the Royal Netherlands Brigade (Princess Irene's), which were placed under his command.

The main obstacles to the projected advance were three wide, deep and sometimes tidal rivers. These were first the Dives, bordered by marshes and flanked by the derelict Dives Canal, which was overlooked by a range of hills dominating the whole area; and subsequently the Touques and the Risle, both flowing through deep-cut valleys. It was ideal defensive terrain for a badly mauled yet vigorous enemy. General Gale planned to pass the bulk of his force along the Troarn — Pont-l'Evêque — Pont Audemer route which parallels the coast some ten miles inland, and to use the 6th Airlanding Brigade and the Dutch and Belgian contingents to mop up the area along the coast itself.

The advance began early on the 17th. The 8th and 9th Battalions of the 3rd Brigade captured Bures without opposition and at 8:00 a.m. the 1st Canadian Parachute Battalion began a sweep through the Bois de Bavent. Here too the enemy had

gone, but mines and booby-traps cost the Canadians some ten casualties. By nightfall, the engineers had constructed a bridge over the River Dives and at 9:00 p.m. the Canadians made contact with the enemy at Plain Lugan. They were ordered to seize four bridges which crossed the Dives sur Mer Canal at intervals of 400 yards in the area immediately east of Goustranville. They launched their attack shortly before 10:00 p.m. on the 18th and in less than two hours had secured their objectives, having captured 150 prisoners or, as the 3rd Brigade report puts it, "skilfully liquidated two enemy companies in well fortified positions." This action brought to the battalion two more awards for gallantry, both to "A" Company, which had captured the southernmost bridge intact. Captain J. A. Clancy won the M.C. and Sgt. G. W. Green the M.M.

For another week the entire Division kept up a steady pressure on the retreating Germans, meeting and overcoming isolated points of resistance in the drive eastward, and keeping pace with the 49th (British) Division on its right flank. On the night of the 26th, when the 3rd Parachute Brigade was in reserve at Beuzeville a few miles from the mouth of the Seine, word came that the 6th Division was to move into Army Group reserve on the 30th. By 7 September it was back in England.

Of the 443 all ranks of the 1st Canadian Parachute Battalion who jumped on D Day, 235 — or more than 50%—became casualties during the first twelve days. The total losses suffered by the Battalion during the whole period, 6 June — 6 September, numbered 25 officers and 332 other ranks, of whom 83 all ranks were killed or died of wounds, 87 became prisoners of war and 187 were wounded.

It was no mean feat that the units of the Airborne Division had accomplished since the beginning of their campaign in the early hours of D Day. In all phases of operations they had borne themselves well — in the initial assault when, despite their undue dispersal, they had speedily gained all their objectives; in the long and trying period of relatively static warfare between the Orne and the Dives, where they had withstood frequent and determined counter-attacks by superior numbers and heavier armament; and in the rapid advance to the Seine during which, although handicapped by inadequate transport, they had seldom lost contact with the retreating elements of the German Fifteenth Army. These achievements were well summed up in the message sent by General Crerar to the commander of the 1st British Corps at the conclusion of the Normandy campaign.

Desire you inform Gale of my appreciation immense contribution 6th Airborne Division and all Allied contingents under his command have made during recent fighting advance. The determination and speed with which his troops have pressed on in spite of all enemy efforts to the contrary have been impressive and of the greatest assistance to the Army as a whole.

* * *

### Sources of Information

The principal sources which have been used are the war diaries of the 6th Airborne Division, the 3rd Parachute Brigade and the 1st Canadian Parachute Battalion, and three British publications: By *Air to Battle, the Official Account of the British Airborne Divisions* (H.M. Stationery Office, London, 1945); Lieutenant-General Sir R. N. Gale, *With the 6th Airborne Division in Normandy* (Sampson, Low, Marston & Co., Ltd., 1948) and H. St. G. Saunders, *The Red Beret* (Michael Joseph Ltd., 1950). Also of value was an article by Major J. S. R. Shave, "Go To It, The Story of the 3rd Parachute Squadron, R.E." (*Royal Engineers Journal*, vol. LXIII, June 1949). In addition various operational reports and German documents were consulted. The Air Historical Branch, Air Ministry, has been most helpful; and several former officers of the 1st Canadian Parachute Battalion have kindly given considerable assistance.

---

# Evasive Tactics

Novelist Evelyn Waugh, a wartime officer of the Royal Horse Guards who saw service with the Commandos, has very aptly described in *Put Out More Flags* how his hero managed to evade security regulations and enter the War Office, accompanied by a mad inventor with a bag of bombs:

Veterans of the Ashanti and the Zulu campaigns guarded the entrance. Basil watched them stop a full general. "If you'll fill in a form, sir, please, one of the boys will take you up to the department." They were a match for anyone in uniform, but Basil and the bagman were a more uncertain quantity; a full general was just a full general, but a civilian might be anyone.

"Your passes, gentlemen, please."

"That's all right, sergeant," said Basil. "I'll vouch for this man."

"Yes, sir, but who are you, sir?"

"You ought to know by this time. M.I. 13. We don't carry passes or give our names in my department."

"Very good, sir; beg pardon, sir. D'you know the way or shall I send a boy up with you?"

"Of course I know my way," said Basil sharply, "and you might take a look at this man. He won't give his name or show a pass, but I expect you'll see him here often."

"Very good, sir."

The two civilians passed through the seething military into the calm of the corridors beyond.

The bagman's bombs exploded and there was no second visit but Basil had more luck. By following an extremely attractive A.T.S. corporal he found himself a job and a commission in Crosse and Blackwell's regiment. That is another story, however, and those interested are advised to visit the nearest library or even purchase a copy of *Put Out More Flags* in its Penguin edition.—*Contributed by J. M. Hitsman, Historical Section, Army Headquarters, Ottawa.*

# SOVIET MILITARY AIR TRAINING

FROM AN ARTICLE IN "AVIATION AGE" (U.S.)*

The large manpower reservoir from which the Soviets have to draw upon for likely Air Force personnel is carefully filtered, so to speak, at its very source. At the age of 17, the youth who has completed satisfactorily the primary DOSAV (All-Union Society of Voluntary Assistance to Aviation) flight course is eligible for the Air Force entrance examinations, with certain provisions. He must have had seven years of elementary education if he wants to be a pilot. This is the Soviet equivalent of United States high school preparation. If the candidate is older and desires to become a navigator or bombardier, he must have had 10 years education, or the equivalent of three years of college in the United States.

*Examinations*

The youth takes his three-phase examination at the DOSAV headquarters nearest his place of residence. He undergoes a thorough physical examination. This is followed by a scholastic test in which mathematics is emphasized. Then comes the political test which determines whether or not the youth is worthy of handling the State's aircraft. This is given by MVD officials . . . The Air Force candidate can be eliminated immediately, at this point, if either his parents or grandparents erred even slightly from the Party line. If the boy's forebearers were *kulaks* or land-owning people, bourgeois middle class, officials or even members of any church, or if they were counter-revolutionary, he is disqualified. If he has sufficient DOSAV flying time, he may be permitted to go to one of the *Aeroflot* schools. If the youth can survive this political screening, he is sent to one of the Air Force's flying schools.

*Training*

The selectee goes through a period of basic training which is much the same as that given to Army trainees. Then his flying begins with a critical "primary review" period in the UT-2. This phase reveals to his instructors how well he retained his DOSAV training. If the selectee is too sloppy or otherwise lacking in aptitude, he is washed out during

*This digest is reprinted from the Military Review (U.S.).—Editor.

this 25-hour period. In this event, he can, at best, become a bombardier or navigator if he has sufficient education, or he may be sent to the civil airline school. At worst, he may be sent to one of the schools which train ground crewmen.

*Basic Training:* The selectee progresses to the basic flying state in which he flies *La-7*, *Yak-7*, or *Yak-18* trainers for a period of about 45 hours. During this phase, the youth also gets some instrument training in the American Link or British Bachelor trainers which are built under license in the USSR. The amount of instrument time appears to vary with the particular school.

At the beginning of the advanced phase, the selectee is permitted to state his preference for fighters or multi-engine craft. Normally, he is assigned to the branch of his choice, if he has demonstrated the proper aptitude during basic training. The Soviets are following the American practice, to some extent, of assigning the younger men to fighters and the older, more stable candidates to the bombers. These assignments are made by a school selection board, one member of which is the ever-present *Smersh* representative. From this point on, youths who show special aptitude can be "promoted" out of the course and sent to various instructor's schools.

*Advanced Training:* Between 25 and 30 hours are given to advanced training in obsolete single- or twin-engine wartime aircraft. The favourites for this stage of training are the American *P-39* and *B-25;* but the more numerous *MiG-3*, *La-3*, *La-5*, *La-9* and *La-11* models are widely used. Some *Pe-2* and *Pe-3* types are used, along with *PS-84s*, *Tu-2s*, *Yer-4s*, and *Il-4s*, for bomber aircrew training. This advanced stage ranges from 65 to 100 hours and includes gunnery and a growing emphasis on formation flying. The Soviet instructors prefer live ammunition to synthetic gunnery devices of any kind. Both ground and towed sleeve targets are used for aerial shooting, while considerable small arms' practice is given on the ground. One popular gimmick is a kind of skeet shooting with a small-calibre rifle at a target larger than the United States "bird".

The pilot-trainee takes a final examination in not only his flying but the political courses given under the auspices of the Local Young Communist League. Then, as a junior lieutenant, he is assigned to a fighter or bomber squadron for operational training.

*Readying for Combat*

He is made combat-ready at this squadron stage. The youth flies wing on the veteran in fighter units or spends considerable time as co-pilot in the bomber squadrons. The training

officer, who is usually the deputy squadron leader, keeps a weather eye on all his rookies. He personally is responsible for them, and can be removed if too many of his charges fail to demonstrate the proper progress and aptitude.

Squadrons are kept intact whenever possible, and the "growth of the family" is encouraged for purposes of morale and *esprit de corps*. Pilots seldom are promoted out of the squadron. The practice is to de-activate the complete outfit and re-establish the unit at some other point. In the fighter units, jet training reportedly is given at squadron level in the two-seater *Yak-15C*, which is known to be in large-scale production.

*Ground Crews*

Ground personnel are selected at DOSAV level. Mechanics serve a sort of apprenticeship right in the aircraft plants before they are assigned to operational outfits. Many institute scholarships are available for promising mechanics. In the bomber squadrons, both mechanics and gunners get sufficient flying time to at least "solo" the aircraft. The ground crews show great enthusiasm and take considerable pride in their work as part of the team.

Several schools of higher education are playing an important part in the preparation of future officers. The Moscow Aviation Institute is the most prominent for tactical instruction. The Soviet Air Force War Academy has branches in Moscow, Sverdlovsk, and Chkalov. The Air Force Medical School also is located near Moscow. There is a Motor Transport School at Magnitogorsk, a Political Warfare School at Zaratov, and a Chemical Warfare School near Tashkent. Others include the Kuibyshev Military Engineering Academy, Kharkov Aviation Institute, and the well-known Zhukovski Air Engineering Academy or VVA for the training of designers and engineers. A smaller institute for aero designers is the highly regarded MAI.

*Engineering*

During World War II, a serious kink in Soviet training became apparent. The top-level engineering people were first rate. However, these personnel lacked depth. At the junior and shop levels, the engineers and technicians were too few and too limited in training and talent. The rapid expansion of the older schools and the establishment of new post-war institutions indicate the Soviet's determination to correct this shortcoming.

Insofar as flight training is concerned, its very scope and activity in all parts of the USSR upsets the hope that the Soviets might have been too short on oil for the high-gear training programme required to keep pace with

their large-scale production of military aircraft.

National airmindedness is a vital element of air power. In this, the Soviets boast a tremendous potential. "Sports flying", as they call it, is practiced on a scale exceeding that of private flying in any other country. Aviation, *per se*, has been propagandized to the point where Tupolev or Kozhedub are as familiar to elementary school pupils as are Washington and Lincoln to American school children. Aviation Day is as big an occasion in the USSR as is Memorial Day in the United States.

*Air Conditioning*

The Soviets have capitalized cleverly on the natural fascination aviation holds for the youth. Every high school has its aero club. Each Young Pioneer Club holds classes on model building. Youths who demonstrate an aptitude for some phase of aeronautics —as well as the promise of becoming an "active-participant in socialist construction"—are given physical examinations and enrolled into one of the DOSAV clubs.

Recruits in the DOSAV receive their training free of cost, but they earn their wings through rigid application and study during evenings and week-ends. This is the post-war organization which succeeded the well-known *Osoaviakhim*, whose training activities date back to 1927. The society was responsible also for the disciplined civil defence organization to which many observers credited the low casualty rates during the wartime raids on the larger cities. In addition to these "air raid precautions", today's DOSAV members devote approximately a year to the study of the conventional ground school subjects such as aerodynamics, power plants, construction, navigation, and parachutes. Considerable political indoctrination is included in this course. To break the monotony, students are permitted to make parachute jumps from the 'chute towers that abound in the public parks, trade union recreation grounds, and rural centres. There are reported to be about 1,100 of these parachuting towers under DOSAV supervision. The students' completion of a satisfactory examination is rewarded by primary and advanced glider training.

*Air Training*

The most promising glider pilots are permitted to begin flight training in primary *Po-2* biplane trainers. They receive approximately 30 hours' dual and 20 hours of closely supervised solo time in this plane and the *Yak-11* monoplane. During this period, they also make one or two parachute jumps from aircraft. If they evidence the stomach for serious parachuting, the recruits can gain some measure of local fame by going over the side at

least 50 times to win a "master jumper" badge. (As of May 1950, there were 387 master jumpers registered with the Central Aero Club. Most of these had more than 150 jumps to their credit, and five are claimed to have made 1,000 descents from aircraft.) It is believed that some advanced training is afforded the DOSAV pilots in the growing number of *Yak-18* trainers, and several of the clubs in the larger cities are known to have available obsolete tactical craft such as the twin-engine *SB-2*.

Early in 1949, there were some 400 of these DOSAV "cells" throughout the USSR. This is made more impressive by the fact that, in 1935, the *Osoviakhim* had in operation only 135 flying clubs. Although the purpose of the society is the procurement of air personnel of all kinds, the Soviet Air Force looks to DOSAV for its reserve of pilots. Before the war, the most talented *Osoaviakhim* graduates went to the larger training centres to receive their advanced air force instruction. However, under wartime pressure, many of the larger flying clubs became themselves the basic training schools of the Soviet Air Force.

*DOSAV's Programme*

Although emphasis is laid on flying, the society encourages efforts in other directions. Annual competitions for the design of trainers or sports planes are contested keenly for prizes as high as 40,000 rubles. Between 900,000 and one million youths between the ages of 14 and 18 are conscripted annually for industrial training. After the on-the-job training period is completed, conscripts serve the Government for a four-year period. DOSAV experience enables the youths, many of whom are young women, entering the aircraft industry to complete their training more quickly. And it reportedly entitles the conscripts to special privileges throughout their working periods.

Equally important, the organization is the greatest source of ground personnel for both the Air Force and civil air fleet. To a lesser degree, DOSFLOT (all-Union Society for Assistance to the Naval Fleet) is a source of personnel for the naval air arm and industry.

This factor alone makes the organizations well worth their large subsidies. However, DOSAV and DOSFLOT are of value to the Government in still other ways. They are the largest agencies for arousing national airmindedness in all age brackets. The societies impart to a large portion of the population a considerable amount of technical knowledge.

# RADIATION DETECTION UNIT

*By*
LIEUT. G. C. MURRAY, DIRECTORATE OF PUBLIC RELATIONS (ARMY)*

In an age of possible atomic attack, the Canadian Army has been forced to develop a "sixth sense" — a sense which would enable it to detect the lethal radiations from atomic bombs and missiles.

To ensure that the Canadian soldier in the field would have the greatest possible protection if subjected to atomic weapons, a prototype radiation detection unit was created 18 months ago to do applied research in an entirely new field.

The unit fathered by the Royal Canadian Engineers was dubbed No. 1 Radiation Detection Unit and became a unique formation without counterpart in the British or United States Armies or probably in any army.

Dr. Otto Maass, Scientific Advisor on Special Weapons to the Chiefs of Staff, first pointed the need for the army to devote serious attention to the complex problems likely to be met in the event of an atomic attack. Preliminary studies revealed that a great number of important practical questions could not be answered by available scientific knowledge and it became clear that a small experimental unit was required in order to work out problems on training, techniques and equipment.

The mushroom cloud of the atomic bomb explosion had imprinted itself on the world's imagination as the "pillar of fire" which might herald the end of civilization, and possibly radical changes in conventional warfare as it was known.

The A-bomb brought a new era of weapons. It was the job of the new radiation detection unit to examine possible defensive measures against the bomb with particular regard to problems concerning radioactivity.

This new effect did its insidious damage silently and invisibly and often showed its devastating results on personnel after it was too late

*The author was an Observer (Navigator-Bombardier) with the Royal Canadian Air Force from 1941 to 1945. Following his discharge, he attended the University of Alberta and graduated with the degree of BA. He took two years' post-graduate study at the University of Toronto. Lieut. Murray qualified in the Royal Canadian Armoured Corps through the Canadian Officers Training Contingent. He was employed on the editorial staff of the* Edmonton Journal *before joining DPR (Army) at Army Headquarters, Ottawa.*—Editor.

for protective measures to be taken.

The problems involved in radiation detection techniques were passed to the Directorate of Weapons and Development, and then the Directorate of Staff Duties in the fall of 1949. The Special Weapons Section of this Directorate was given the task of taking appropriate planning action.

The Engineers were considered to have the most suitable academic and training backgrounds to provide the personnel for the new unit. The Corps, which had given birth to the air force and to the armoured corps among others, was used to handling new problems. The Royal Canadian Electrical and Mechanical Engineers were expected to supply officers and NCOs to look after the intricate radiation detection instruments.

Planning began at Ottawa under four officers—Lt.-Col. R. A. Klaehn, Major E. F. Lyons, Major H. E. Staples and Captain K. E. Collins. A special training programme had to be prepared for all personnel in the unit from private to officer commanding. Careful security checks were necessary because of the classified nature of most information on atomic warfare.

In the Atomic Energy Project conducted by the National Research Council at Chalk River, the Defence Research Board and Canada's well-developed electronic industry, were scientists who could give vital advice to the new unit. Otherwise the unit would be clearing new ground with no road to follow.

In February 1950, an approved establishment gave 1 Radiation Detection Unit a headquarters, one calibration troop and a reconnaissance troop.

In the summer of 1951 another recce troop was added. Selected personnel went on courses, while other officers and NCOs went to train at Chalk River.

In May 1950, Captain (now Major) E. F. Lyons was appointed officer commanding 1 RDU. The new unit was based at the Defence Research chemical laboratory in Ottawa. Quarters there provided enough space for the embryo unit with a suitable scientific atmosphere, close to National Research Council and with Atomic Energy Board library facilities available.

Captain J. W. Bailey came from the North-West Highway System as second-in-command after eleven other officers had been moved around to allow his release for the job.

In August 1950 the unit had been completely formed with four officers and twelve other ranks. Major Lyons returned to the Directorate of Weapons and Development to continue planning and Captain Bailey was promoted Major to command the unit.

As No. 1 Radiation Detection Unit prepares to enter Port Hope after an "atomic attack" on the town during "Exercise Hope" held in November, Lt.-Col. R. A. Klaehn of the Directorate of Weapons and Development, Army Headquarters, points out "bomb damage" to Major J. W. Bailey, Officer Commanding 1 RDU. Looking on are Lt.-Cdr. J. P. Keeling of the Royal Canadian Navy's Directorate of Weapons and Tactics, and Mr. J. C. Burger, superintendent of Eldorado Mining and Refining Ltd. at Port Hope.

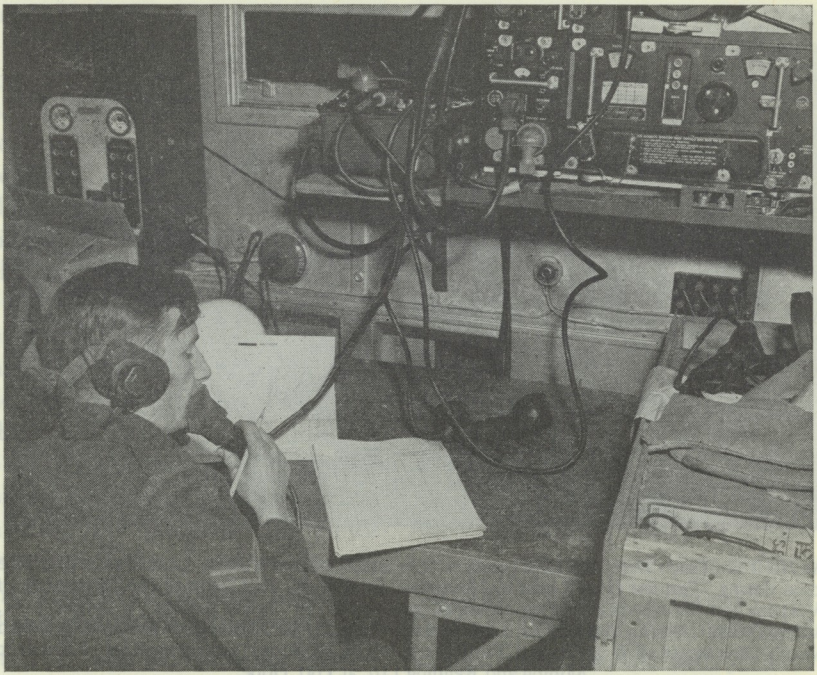
From the beginning, the importance of communications was realized and selected soldiers were sent to army schools to become driver-operators for the monitoring jeeps fitted with 19 sets. Other members of 1 RDU trained with Geiger counters and ion chambers with radioactive materials at Chalk River. Dr. Andre Cipriani of the Atomic Energy Project was appointed liaison officer to the unit.

*Photographs on these pages are published by courtesy of* The Telegram, *Toronto.*— Editor.

No equipment entirely suited to the Army's need existed and instruments used in industry and in laboratories were taken for trial. These intruments were more sensitive and more delicate than those used by prospectors in search of radioactive ores.

From the beginning, Maj.-Gen. F. F. Worthington, federal Civil Defence co-ordinator was interested in the work of 1 RDU and its possible value as a guide in formation of civil defence detection teams.

During the summer of 1950, Captain R. H. Neame, 1 RDU, second-



Cpl. C. L. Kadey receives messages at the operational control headquarters' van from monitoring teams spread across the town of Port Hope during "Exercise Hope".

in-command, conducted a three-week course for 40 Civil Defence instructors at the Royal Military College of Canada. Scientists and Civil Defence officials from all parts of Canada attended the course.

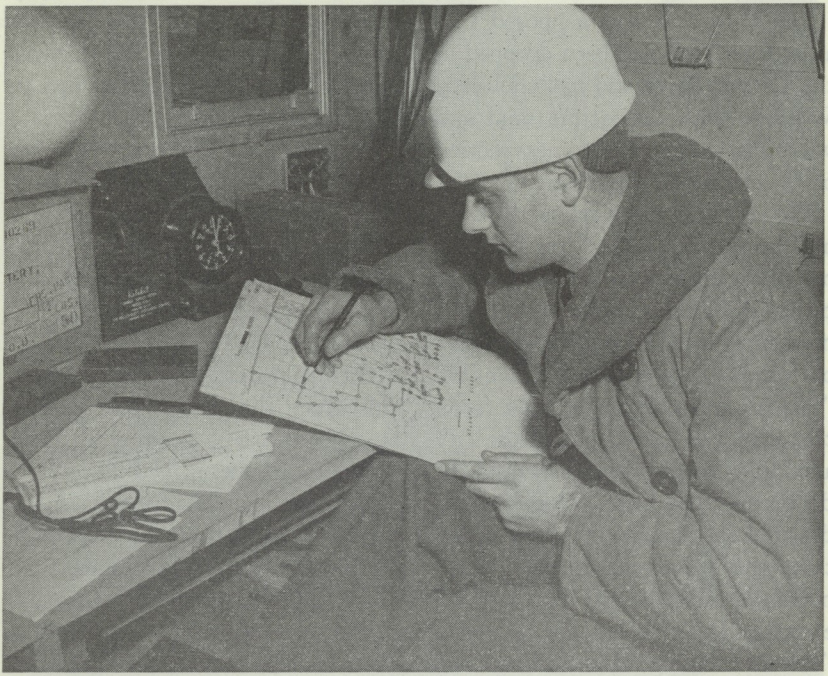
At the same time, Major Bailey ran an experimental course at the Royal Canadian School of Military Engineering at Chilliwack, B.C. Lecture notes from both these courses, together with material obtained in 1 RDU's training exercises, are to be used in a Canadian Army atomic defence training manual.

By this time, the unit was ready to put their training into practice. The Chief of the General Staff approved a series of exercises to be called "Faith", "Hope" and "Charity".

With the possibility the atomic weapons would be used tactically, a major role of Army detection units built on the pattern of 1 RDU would be to provide radiation monitoring services in the field, in Army installations behind the lines and in Canada.

Once trained, such units could go to work in the wake of an atomic attack, measuring radiation in the bombed area and marking off areas in which radiation was deadly. Some by-products of an atomic explosion deteriorate rapidly and become harmless. Others if present in large quantities would make an area untenable for longer periods.

Anyone may be subjected to a certain amount of radiation safely, preferably in small quantities. As with other battle risks—heavy artillery barrages or minefields — the commander in the field may have to expose his troops to the risks of heavy radiation for a short time to achieve a vital objective. A Radiation Detection Unit in the field could tell the commander the amount of radiation present in any locality and advise him of the relative danger to his troops.



Plotting radiation intensities detected by roving teams from 1 RDU during "Exercise Hope" is WO 2 M. S. Sutherland. The two-man detection teams are mounted in jeeps fitted with 19 sets and equipped with Geiger counters or ion chambers to measure radiation and send their results to the mobile headquarters for plotting.

The units would also work in vital defence areas — for example, ports, marshalling areas, military camps and airfields at home — and would be available to assist Civil Defence teams in emergency.

To test their own techniques and to demonstrate to Civil Defence authorities the operational problems of working with radiation detection teams, members of 1 RDU went into action on their first practical exercise at Windsor on Exercise "Faith".

In "Faith", it was supposed that an atomic bomb had been dropped in the Detroit River and had showered Windsor with radioactive mud and water, shattering the business section of the city along the waterfront.

An advance press release describing the atomic "attack" on Windsor had some citizens in a mild state of panic. A Windsor radio station and newspaper were flooded by hundreds of telephone calls asking when the "attack" was coming in, how furniture could be moved out of the city and how much damage would be done by the blast. One woman declared she thought it was a shame that the government should kill hundreds of people just for a training exercise. Thus, promise of a dummy "atomic bombing" showed in a small way the panic and confusion which might result in a real attack.

The detection unit moved into Windsor in response to a call by Windsor's Civil Defence authorities. Monitoring teams did a "dummy run" through the city, radioing atomic radiation intensities back to a central headquarters plotting room where results were marked on a large-scale map. In a real attack this information would enable the Civil Defence authorities to employ their resources to the best advantage.

"Faith" worked out to the mutual advantage of both 1 RDU and Windsor's Civil Defence authority. The Army unit put its detection drills into practice. Civil Defence learned how such units could operate in a disaster.

A second scheme, "Exercise Hope", was carried out in Port Hope in November in co-operation with Eldorado Mining and Refining Ltd. which operates a refining plant in the town. Port Hope had been renamed "Halihope" for the scheme.

In this exercise, radioactive materials from the plant were spotted throughout the town in small quantities. The unit moved in on the assumption that "unfriendly enemy nationals" had left an "atomic bomb" in the harbour for an underwater burst. The detection teams quickly discovered the planted sources of radioactive material plotting the intensities of the material from readings made on their instruments.

At the Eldorado plant, members of 1 RDU had an opportunity to

Capt. L. H. Love, dressed in a rubber suit with respirator and carrying a Geiger counter, points out the centre of heaviest radiation to Major J. W. Bailey, Officer Commanding 1 RDU. The three-pronged symbol on their helmets is the international marker indicating radiation.

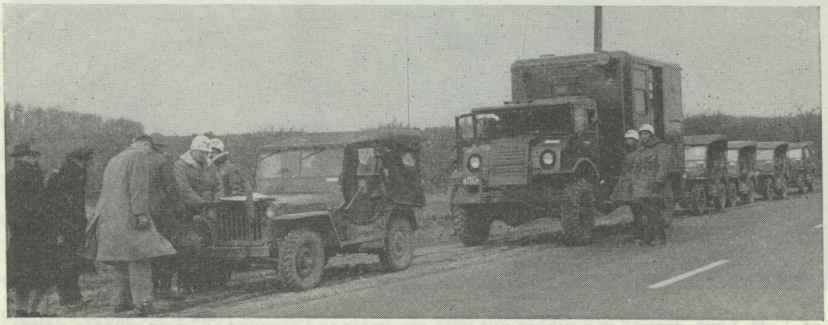
Capt. L. H. Love of 1 RDU checks for atomic radiation during "Exercise Hope". The instrument in his hand is a Geiger counter to measure the amount of radiation present.

check their instruments on highly radioactive sources and to study techniques used in handling the materials and in decontamination by the civilian company.

The original organization of the unit visualized a control plotting headquarters, a radiation calibration section operated by RCEME personnel, and ground recce troops. It is hoped that a radiological laboratory to analyze contaminated food, water and clothing will be added later. An aerial recce section using helicopters or light aircraft might be used. Such a section could do a preliminary survey of bombed areas, estimating damage in advance of a ground coverage.

The unit could also monitor chemical as well as atomic attacks by adding a chemical detection laboratory to the RDU establishments.

In September the unit moved to Kingston's Barriefield Camp. At



This is the compact, highly-mobile No. 1 Radiation Detection Unit used in "Exercise Hope".

# Helicopters Rescue 5,000

REPRINTED FROM THE ARMY-NAVY-AIR FORCE JOURNAL (U.S.)

Nearly 5,000 wounded Allied soldiers in Korea were evacuated from the battlefields by 12 Army Bell helicopters during the first 10 months of this year, according to 1st Lt. Joseph L. Bowler, USA, an Army aviator who recently returned from Korea.

Lieutenant Bowler holds the record for having flown out more wounded men than any other helicopter pilot during the war. He brought out 806 men in 487 missions.

The officer reported that the Army now has three helicopter detachments in Korea, each equipped with four aircraft, and charged with the sole duty of bringing seriously wounded from the battle zone to mobile surgical hospitals, located from five to 30 miles back of the front line. From January to November, 1951, 4,800 wounded men were brought to the hospitals by these detachments, at least one-third of them from no man's land or from behind enemy lines.

The helicopters proved very sturdy, 11 of the 12 originally assigned being still in service. Nearly all were hit one or more times by enemy ground fire, but none was so seriously damaged as to be forced down before completing its mission. One of the 12 wore out, after using up three engines. Each helicopter is capable of carrying two litter patients and one ambulatory case.

## RADIATION DETECTION UNIT

*(Continued from preceding page)*

Kingston, the unit may use the training facilities of the RCEME School. It is also near the middle of the Ottawa-Montreal-Toronto triangle, centrally located in case it may be needed for its active role.

The Atomic, Bacteriological, Chemical School at Camp Borden works in close co-operation with 1 RDU. Lessons learned by the unit will be taught at the school to officers of other army units.

The work being done by 1 RDU is vital trail-blazing in the atomic defence of Canada. The lessons learned by the unit will determine the nature of atomic detection equipment to be used, the drills for plotting radiation, the length of time troops can operate in a contaminated area and the best organization for radiation detection.

The pioneer work of the unit will make feasible the greatest possible protection of Canadian soldiers and civilians in face of any future atomic attack.

1884–1885

# CANADIAN VOYAGEURS IN THE SUDAN

*By*
COLONEL C. P. STACEY, OBE., AND MR. E. PYE, HISTORICAL SECTION, ARMY HEADQUARTERS, OTTAWA

## PART II

### Up the Cataracts to Korti

The S.S. *Ocean King*, carrying the Canadian Voyageurs, reached Alexandria on 7 October, 1884, twenty-four days out from Montreal. The next day the Voyageurs went ashore and were taken by rail to Assiut, travelling in open trucks and making their first acquaintance with the sands of Egypt. On 9 October the contingent started up the Nile in barges towed by a steamer. It was a 12-day journey to Assuan. Each night the Voyageurs pitched tents on shore.

*First Tasks in Egypt*

Above Assuan a portage railway circumvented the "First Cataract." Thence the Voyageurs had a "Cook's tour," travelling as passengers in the whalers, being delivered under tow by Thomas Cook and Son to Wady Halfa. Here was the Second Cataract, and from this point the Nile was less easily navigable by large vessels. Here the expedition was to start its long and arduous advance to Khartoum—860 miles by river to the southward. Here too the Canadians had their first task—to assist in getting the boats up the Cataract, which extended eight and a half miles, to the outfitting yard at Gemai above. A large number of the whalers, which with fixtures weighed 1073 pounds each, were portaged a mile and a quarter by Egyptian soldiers. It took thirty soldiers to carry each boat.

Gemai, "a geographical expression for a mile and a-half of almost straight beach lying just above the second cataract," soon became a busy centre. Here the boats were overhauled after their 4000-mile journey, fitted with rudders and two masts and rigged with small sails. Their equipment included twelve oars, six 15-foot pushing poles and two boathooks. The Voyageurs' camp was moved to Gemai about mid-November, and nine of them offered their help in boat-mending. The officer in charge

reported, "They were the best boat carpenters I had, and their conduct was perfect."

In the meantime Colonel Alleyne, in charge of river transport, decided to make a trial trip with six whalers up to Sarkamatto, at the head of the Dal Cataract, midway between Wady Halfa and Hannek. Foreman Louis Jackson and a gang of his Caughnawagas were assigned to these boats, and a pamphlet written by Jackson later gives a good account of the trip. Colonel Alleyne, in the foreman's boat, was accompanied by his interpreter, his servant and a native swimmer. The party started from Sarras, a few miles above Wady Halfa, on 30 October. That day occurred the first Canadian fatality on the Nile. The foreman having signalled the parties ashore for their mid-day meal, the boats headed across the swift currents for a landing. It was then that Voyageur Louis Capitaine fell overboard while using his paddle in the bow of his boat and was drowned.

The map of Egypt and the Sudan shows six Cataracts, known by numbers, on the Nile between Assuan and Khartoum. This is quite misleading. For one thing, the Cataracts are not the single falls which the name suggests; they are extensive ranges of rapids, several miles long in some cases. And there are far more than six. In the 212 miles between the "Second" and "Third" Cataracts there are in fact seven other cataracts, some of them forming as serious obstructions as those dignified by the geographers with official numbers. To make matters worse for boatmen, the height of the river is constantly changing, and the shape of the channels changing with it; a channel which is easily navigable one week may be quite out of the question the next.

Alleyne's reconnaissance party reached the foot of the formidable Semneh Cataract on the afternoon of the 30th; the boats were lightened and the towlines brought into use. The freight was portaged by camels while the boats were tracked up the rapids. The next seventeen miles, to the Ambigol or Ambako Cataract, were covered with the aid of sails, but tracking was resorted to in places. At Ambigol there was a very swift and crooked channel which made tracking more difficult. The crews of the six boats, which had six Voyageurs in each for this trial, combined to pull each loaded boat up the one-mile cataract. That night the Voyageurs camped on Tanjur island. On 2 November, the three-mile Tanjur Cataract was overcome without much difficulty and by evening the party landed at the foot of Akasheh Cataract.

The following day Akasheh's one-mile stretch of turbulent water was

passed with little trouble. For the next ten miles navigation was good; then came the Dal with its four miles of treacherous currents. With sails set and pulling on the oars the Voyageurs penetrated the rapids for half a mile and then were forced to track. Here Colonel Alleyne's Arab swimmer managed to carry the tow line of the leading boat to shore. Sarkamatto was reached without untoward incident on the morning of 4 November. All were well pleased with the way the boats had behaved.

For the return down the Nile, which started at 9 a.m. on 5 November, four boats were used, the thirty-six Voyageurs forming the crews. Now came the crucial test of the boats. Everything depended upon the skill of the Canadian boatmen, many of whom had had little experience with keeled boats in descending swift waters. As the cataracts were dotted with islands and jutting rocks quick judgement and prompt action were vital. The greatest danger lay where the rocks were submerged and could not be seen until the boats were almost on them.

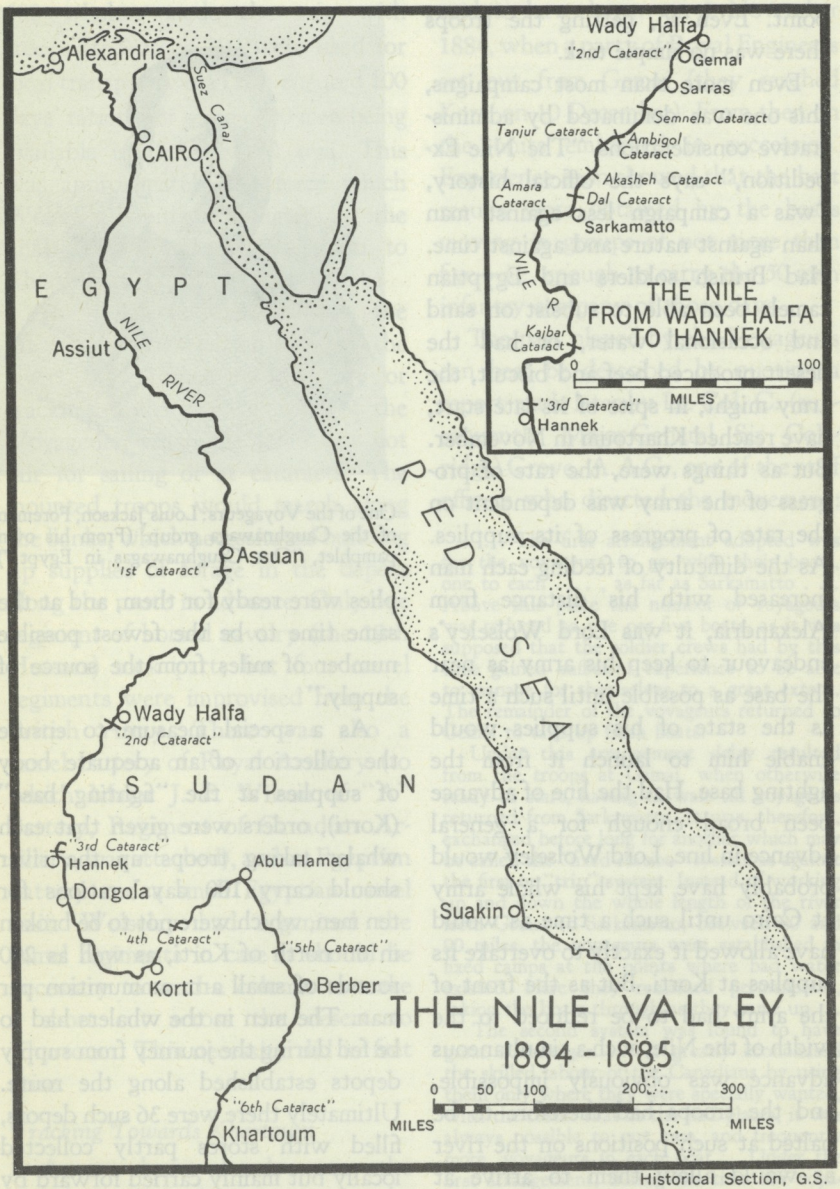
First apprehensions were allayed with the successful shooting of the Dal. At Akasheh a smooth straight channel was discovered in mid-river. Tanjur, however, proved extremely dangerous for shooting, the channels between rocks being very crooked. Ambigol was shot in mid-afternoon; and at the foot of this cataract Alleyne's party met the advanced guard of the expedition proper—five whalers with men of the 26th Company R.E., which had left Gemai with one (Ottawa) Voyageur in each boat on 1 November. On Colonel Alleyne's instructions Foreman Jackson gave the upgoing Voyageurs advice as to the nature of the higher cataracts. Semneh was run shortly before dark that evening, thus completing nearly sixty miles on 5 November.

Next day Sarras was reached and the trial trip was over. Here the right wing of the 1/South Staffords in 31 whalers was ready to ascend. Colonel Denison, who was proceeding with this flotilla, took with him one of the Iroquois Voyageurs who had made the experimental trip.

*Soldiers Can't Eat Sand*

Here we may digress for a moment to explain in more detail Wolseley's plan for the advance to Khartoum.

In September, before the Voyageurs or the whalers arrived, the C.-in-C. had pushed one British battalion (the 1/Royal Sussex) up the river to Dongola in native boats. On 11 September the Mudir of Dongola, a local potentate faithful in his fashion to the Anglo-Egyptian cause, won a victory over the Mahdists at Korti. This assured the expedition an unopposed passage up the river to that




Historical Section, G.S.

point. Even so, getting the troops there was no simple task.

Even more than most campaigns, this one was dominated by administrative considerations. "The Nile Expedition," says the official history, "was a campaign less against man than against nature and against time. Had British soldiers and Egyptian camels been able to subsist on sand and occasional water, or had the desert produced beef and biscuit, the army might, in spite of its late start, have reached Khartoum in November. But as things were, the rate of progress of the army was dependent on the rate of progress of its supplies. As the difficulty of feeding each man increased with his distance from Alexandria, it was Lord Wolseley's endeavour to keep his army as near the base as possible until such a time as the state of his supplies would enable him to launch it from the fighting base. Had the line of advance been broad enough for a general advance in line, Lord Wolseley would probably have kept his whole army at Cairo until such a time as would have allowed it exactly to overtake its supplies at Korti. But as the front of the army had to be reduced to the width of the Nile, such a simultaneous advance was obviously impossible, and the troops had therefore to be halted at such positions on the river as would allow them to arrive at the fighting base as soon as the supplies were ready for them, and at the same time to be the fewest possible number of miles from the source of supply."

One of the Voyageurs: Louis Jackson, Foreman of the Caughnawaga group. (From his own pamphlet, "Our Caughnawagas in Egypt.")

As a special measure to ensure the collection of an adequate body of supplies at the "fighting base" (Korti), orders were given that each whaler taking troops up the river should carry 100 days' rations for ten men, which were not to be broken in on north of Korti, as well as 200 rounds of small arm ammunition per man. The men in the whalers had to be fed during the journey from supply depots established along the route. Ultimately there were 36 such depots, filled with stores partly collected locally but mainly carried forward by boat or camel transport. Since about

600 whalers made the trip with troops (the other 200 were used for local transport work) this ensured 100 days' rations for some 6000 men being available in the forward area. This was approximately the force which Wolseley counted on using for the final lunge forward from Korti to Khartoum.

The whalers were to carry the infantry (seven battalions) up the river, the "passengers" rowing or tracking, under the direction of the Voyageurs, when the wind was not fair for sailing or at cataracts. The mounted troops would march along the banks, which necessitated building up supplies of forage in the depots along the route in advance. Only one regiment of horsed cavalry (the 19th Hussars) took part; but four camel regiments were improvised from the British Army. There was also a camel battery of Royal Artillery (to which Major J. F. Wilson of "A" Battery, Regiment of Canadian Artillery, was attached), and an Egyptian battery and a small Egyptian camel unit. Wolseley had organized the camel regiments in case it should be necessary to send a column to make a short cut across the desert to Khartoum. This necessity did in fact arise.

*Tracking Towards Khartoum*

As we have already seen, the army's southward movement may be said to have begun on 1 November 1884, when a party of Royal Engineers set out from Gemai (they reached Korti on 10 December). From then on the units embarked in succession. Experience soon showed that the best results were obtained by the boats moving in groups of not more than five—i.e. enough to carry the 50-man infantry company of those days.

The part played by the Voyageurs can best be described by quoting a report made later by Lt.-Col. C. (subsequently Major-General Sir Coleridge) Grove, A.A.G., one of the staff officers who directed the movement:

> . . . The first arrangement adopted was for the voyageurs to go with their boats, one to each . . . , as far as Sarkamatto . . . Above this place the number of voyageurs was reduced to one per five boats, as it was supposed that the soldier crews had by this time gained sufficient experience to be able to manage for themselves to a great extent. The remainder of the voyageurs returned to Gemai to take up fresh boats.
>
> Under this arrangement delay resulted from the troops at Gemai, when otherwise ready to start, having to wait till voyageurs returned from Sarkamatto. It was, therefore, exchanged before long for another which may be called the "fixed station" system as against the first or "trip" system. Instead of working up and down the whole length of the river from Gemai to Sarkamatto, between 80 and 90 miles, the voyageurs were established in fixed camps at the points where bad water existed. Here they remained permanently, taking the boats through as they came up. . .
>
> The second system was found to have great advantages. . . It greatly economised the skilled labour of the Canadians by using them only where they were specially wanted, with the result that at the bad places, it was always possible to put two, and frequently more, voyageurs in each boat. . . Under the first arrangement, during the time the voyageurs were coming down from Sarkamatto to

Gemai (from 2 to 3 days each trip) their labour was lost to the expedition. The second system was greatly preferred by the men themselves, as they were far more comfortable in fixed camps and with regular hours of work. . . And last, and most important, was the result that the voyageurs knew the cataracts much better, and that their knowledge kept pace with the changes in the water produced by the fall of the Nile. These changes were so rapid and considerable, that the whole aspect of a cataract would alter in a week. . .

This last system was adhered to [to] the end, with the exception of those men who accompanied General Brackenbury's column, and who of necessity had to move on with the boats. . .

Something of what the job looked like to the men who were doing it can be gathered from a letter written by Colonel Denison to Lord Melgund from Dal on 12 December. He had just completed his second trip to that place ("I was anxious to be among the men as much as possible at the start, and until matters ran smoothly"). His letter seems to indicate that at this time the "fixed station system" had not yet been introduced:

I am glad to say that our men are doing excellent work here and are invaluable — and some of the "hardest cases" make the best men on the river. One officer (Col: Coveney of 42nd Black Watch) was so pleased with his men he left a present of £1 apiece for them. . .

My brother came out to Halfa by way of New York and Trieste . . . even now we are short handed of Canadian officers and have to utilise Col: Kennedy,* as the men work better for us, than the army officers who often do not understand their ways. I am sorry to say we have lost several men by drowning. . . Yet as our men are always in the post of danger in a rapid, it is not surprising we have some casualties. You may not know that whenever we come to a bad rapid, the men are taken out, and two Voyageurs put in and the boat tracked up. If an upset takes place my men run the risk — some dozen or more have been picked up off biscuit boxes or upturned boats. . . We have been worked to death here — but the strain will soon be over. Four Regiments are now above this point and have smooth water to Dongola — except a small rapid at Hannek. Two more Regiments are between here and Semneh and will soon be past. Lord Wolseley will likely move [forward from Korti] about first week in January. In each boat to this point we have one voyageur. We send on only one Voyageur a company from here for Dongola. . .

The generous and unfortunate Lt.-Col. Coveny of the Black Watch (he was to fall in action at Kirbekan on 10 February 1885) had reason to be pleased with the trip made by the left wing of his battalion. It made a record run to Korti—32 days from Sarras, a trip which had taken some units as much as 49 days in the earlier stages of the movement. It was the Royal Irish Regiment, however, that won the prize of £100 which Wolseley offered to the unit making the fastest passage.*

*Wolseley Divides His Army*

In December, when the van of the army was just reaching Korti, Lord Wolseley received information that General Gordon's beleaguered garrison at Khartoum was so short of supplies that it could not hold out much longer. He now took the emergency action contemplated as

* *Lt.-Col. Kennedy was working as paymaster, but Denison felt that his position was still somewhat irregular.*

* *Incidentally, Wolseley was criticized for making this offer. He was "deeply hurt" by a private letter from the Queen in which she suggested that British soldiers should not require such rewards.*

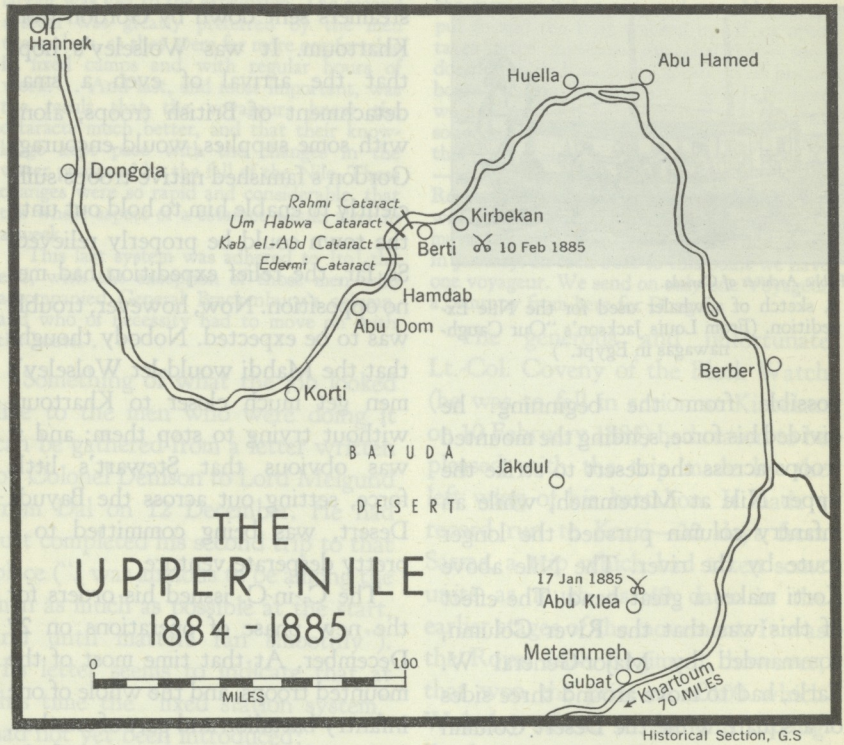
*Public Archives of Canada.*

A sketch of a whaler used for the Nile Expedition. (From Louis Jackson's "Our Caughnawagas in Egypt.")

possible from the beginning: he divided his force, sending the mounted troops across the desert to strike the upper Nile at Metemmeh, while an infantry column pursued the longer route by the river. The Nile above Korti makes a great bend. The effect of this was that the River Column, commanded by Major-General W. Earle, had to move around three sides of a square while the Desert Column marched across the fourth side. Earle's force consisted of four battalions of infantry, a squadron of cavalry, and the Egyptian battery and camel corps. The Desert Column was commanded by Brigadier-General Sir Herbert Stewart, who had under his command the four British camel regiments, the Royal Sussex (also on camels), two squadrons of Hussars and the camel battery, as well as a small naval brigade—all told, about 1800 fighting men.

Stewart's immediate task was to make contact at Metemmeh with steamers sent down by Gordon from Khartoum. It was Wolseley's hope that the arrival of even a small detachment of British troops, along with some supplies, would encourage Gordon's famished native troops sufficiently to enable him to hold out until the town could be properly relieved. So far, the relief expedition had met no opposition. Now, however, trouble was to be expected. Nobody thought that the Mahdi would let Wolseley's men get much closer to Khartoum without trying to stop them; and it was obvious that Stewart's little force, setting out across the Bayuda Desert, was being committed to a pretty desperate venture.

The C.-in-C. issued his orders for the new phase of operations on 27 December. At that time most of the mounted troops, and the whole of one infantry battalion and part of another, had reached Korti; the rest of the army was still strung out down the river. It was clear that the River Column, with many unreconnoitred cataracts to surmount, would need the help of the Voyageurs; it was clear too that it had been an error to engage them for six months only, for to fulfil the contract the British authorities would have to get them back to their homes in Canada by 9 March. Accordingly Lord Wolseley instructed Colonel Denison to re-engage all good voyageurs who were willing for a further period not to




Historical Section, G.S

exceed six months, offering them a large increase in pay (from $40 to $60 a month) and another complete outfit. Denison found the men rather reluctant to comply. He wrote to Melgund on 1 January 1885, "Many of them object to the six months, say if it was three months they would re-engage—but that they are afraid of the hot weather." The Colonel at first did not propose to accept offers to re-engage received from the inefficient young men from Winnipeg; but these adventurous characters—it is pleasant to recall at this point that most of them seem to have been militiamen—were willing, and many of the more experienced boatmen were not; accordingly, he ultimately took them, doubtless reflecting that they must have learned a lot about boat work, the hard way, in the struggle up the cataracts between Sarras and Korti. A far higher proportion of the Manitoba men stayed than was the case with any other group. All told, only six foremen and 83 voyageurs re-engaged. The great

majority of these went up with the River Column. With them went Colonels Denison and Kennedy, to share in the dramatic climax of the campaign, now just ahead. And Surgeon-Major Neilson, volunteering for further duty wherever required, was assigned to the Desert Column and was to find himself in the midst of some of the fiercest fighting of the century.

*The Desert Column*

The Desert Column moved first. Supply difficulties had to be surmounted; some of the units of the River Column had to give up a proportion of the "whaler rations" they had brought up with them to build up the commissariat stores of the overland force, and then could not move themselves until these were replaced. And it was found necessary to establish an intermediate depot for the Desert Column at the wells of Jakdul, roughly halfway across the desert to Metemmeh. This was accomplished by a preliminary operation early in January 1885, and it was not until the 8th that the main body of the Desert Column left Korti a second time for its perilous march.

On 14 January the column moved out from Jakdul, marching on Metemmeh. On the 16th there was contact with the enemy; and the next day, as Stewart's force, formed in square, approached Abu Klea Wells, the Mahdi's army struck. The Arabs "came down on the left rear of the square with lightning rapidity," and the troops' fire was partly blanketed by their own skirmishers running in. Lagging camels had caused this part of the square to bulge out, and the spearmen's impetuous rush drove the rear face back on to the main group of camels in the centre. The Naval Brigade's Gardner gun* jammed; and there were four or five desperate minutes of fighting with cold steel before the soldiers "by sheer pluck and muscle killed the last of the fanatics who had penetrated into their midst" and the rest of the fierce assailants pulled off. During this wild encounter the British had lost 74 killed and 94 wounded. Surgeon-Major Neilson of the Canadian Artillery must have had plenty of chance to display his skill that day. As for the Arabs, "1,100 bodies were counted in the immediate proximity of the square." Such was the occasion, immortalized by Kipling, when Fuzzy Wuzzy broke the British square.

Fuzzy Wuzzy, however, had not stopped the Desert Column. On 18 January it pushed on towards Metemmeh. On the 19th the Nile was sighted, and about the same time General Stewart received a wound which ultimately proved mortal. Colo-

* *A primitive multi-barrelled machine-gun, not unlike a Gatling.*

nel Sir Charles Wilson took over and the column, again in square, moved on. Again the Arabs charged with desperate bravery, but this time there were no skirmishers to mask the fire of the Martinis; "only one Arab succeeded in getting within 100 yards of the square." The column occupied the village of Gubat, on the river near Metemmeh; the latter place was strongly held by the enemy. On 21 January four of General Gordon's steamers arrived from Khartoum and made contact with Wilson's force. The way was open now, it seemed, to join hands with Gordon.

### Sources of Information and Books for Further Reading

Lt.-Col. Denison's correspondence with Lord Melgund is scattered through the series of papers known as G. 19 in the Public Archives of Canada. Col. H. E. Colvile, *History of the Sudan Campaign . . . compiled in the Intelligence Division of the War Office* (2 vols., London, n.d.) [1889?] is invaluable on all aspects of the campaign, including administration. Col. Sir W. F. Butler, *The Campaign of the Cataracts* (London, 1887) is the personal narrative of a senior officer who had a great deal to do with the planning and execution of the advance up the Nile. Louis Jackson, *Our Caughnawagas in Egypt* (Montreal, 1885) is a short, simple personal account by a Voyageur foreman.

*(To be continued)*

---

## Hot Flame

A torch as hot as the sun's surface was demonstrated recently by the Temple University Research Institute.

A tiny blue flame with a temperature of between 9,000 and 9,500 degrees Fahrenheit—believed to be among the highest sustained laboratory temperatures obtained by man—quickly burned a hole through the most fire-resistant material known.

The demonstration included burning through a 3-inch concrete wall in two minutes with a torch which burned powdered aluminum in oxygen.

Researchers said the torch would be invaluable in rescue work to remove trapped persons quickly, especially in enemy air attacks.—*News Release (U.S.).*

# THE PRINCIPLES OF WAR

Capt. K. C. Kennedy, Lord Strathcona's Horse (Royal Canadian)*

*The views expressed in this article are the author's and are not necessarily those of Army Headquarters.*—Editor.

* * *

Sometime ago I re-read an article upon the Principles of War, published in the Canadian Army Journal. The occasion of my re-reading being the private study required for the Pre-Staff examination, the article led me to think more than I might otherwise have done, and seemed therefore to crystalize ideas that previously had been but nebulous in my mind.

Certain points strike me as important relative to this article, and indeed relative to a great deal of the current military thinking and writing. These points seem pertinent even in regard to the accepted doctrines.

A reader who pays attention to the meanings of words cannot, I believe, accept in whole any of the lists of the "principles" of war, for these lists invariably include many advices that are not principles at all. Despite their present soundness they are not principles; and herein lies much that is bad about military writing and which places it so far below that of the other arts and sciences. The very fact that such lists are subject to frequent change should be sufficient to emphasize this. It is true that from time to time certain accepted "facts" are proved false—but this merely serves to show that they were not facts in the first place. The same is true of so-called "principles". When proved unsound they are at the same time proved not to have been principles. Facts and principles are immutable.

Let us be taught a list of principles that remains constant; and let us be taught that only the methods of application alter. Let us be taught that good generalship is achieved in its highest form by an understanding of these principles (the science of war), and by the ability to relate modern application to them both collectively and severally (the art of war).

However, this is not simply an essay in pedantry nor a play upon the meanings of words, and it would be as well, therefore, to do more than search for the definition of the word *Principle.*

The criticism of democracies is that they invariably prepare for the war that has just been fought. That the criticism is true is because of the nature of democracy, which is neither aggressive nor wishes to be.

This does not mean that this con-

**The author is now fighting with his unit in Korea. He wrote this article some time before leaving Canada.*—Editor.

dition must ever remain, because it is within the capabilities of men of intelligence to prepare for contingencies, the fulfilment of which they do not relish. It does mean, however, that unless intelligent and forceful (even if distasteful) application of thought to the science and art of war is put forward it *will* remain true. All of which brings us back to the question: "What are the Principles of War?" It brings us, moreover, to the secondary and hardly less important question: "What are the modern applications of these principles?"

If correctly answered the former question is resolved for all time. The latter is subject to constant change. In the study of these two questions lies the point of this article.

Principles may differ in specific application. Invariably they do; for the human factor is an unknown quantity both physically—in the strains that bodies will endure and the equipments that humans may produce, and mentally—in the depths and shallows of human intellects. The principles themselves remain untouched by these vicissitudes.

To examine very briefly some of the currently advertised "principles", and to propose those that seem to justify themselves as such, in contrast to others in the selected lists of the military staffs that do not:—

*The Object*

It is far from the whole truth to say that the *Object* of war is victory of arms. Wars are fought, whether aggressively or defensively, for the establishment of one or more purposes. Victory of arms is merely a means to an end, and of itself is therefore insufficient. The *Object* must be the attainment of the purposes for which the war is fought, and will constantly govern the conduct of the war. Destruction of men-at-arms is nothing more than the destruction of an enemy's instrument for achieving his own purposes, for the denial of which we are fighting. A defensive war must therefore be so ordered that at its conclusion the victor is still capable of upholding his denial. In the case of an aggressive war the circumstances are reversed and the outcome must be that having won, one is capable of imposing one's will upon the vanquished at least to the extent of one's original purpose.

Maintenance of the *Object* is definitely a principle, for by its nature it is not likely to be suddenly dropped from the list.

*Surprise*

Here, too, is a true principle that will ever remain. Methods of achievement vary, as indeed does the importance of achieving *Surprise* in accordance with the relative strengths of one's own and the enemy forces.

But the outcome of truly ultimate *Surprise* will always be victory without damage to oneself, and must therefore be striven for.

*Flexibility*

Provided the word is given its true meaning, *Flexibility* is a third principle. Its true meaning is its widest meaning, encompassing not only *Flexibility* of troop manoeuvre, of systems of command and types of equipment (which must be permitted change and modification to meet new enemy equipments and methods of use), but also—and more important than its other facets—*Flexibility* of thought on the part of commanders. *Flexibility* is the antidote to surprise. So long as *Surprise* remains a principle, then so long too must *Flexibility* be its answer. The greater truth of this is highlighted when one realizes that given an enemy skilled in *Flexibility* of thought and manoeuvre, even greater *Flexibility* must be applied by oneself to achieve surprise over him. *Flexibility*, or at least the meaning of the word, must remain on the list.

*Concentration*

Here is a fourth principle. Again the lessons of its meaning must be learnt. *Concentration* is not *Mass*. Nor is it blind doggedness. *Concentration* is both mental and physical. It may be practised successfully even if imperceptibly, and the paradox of this principle is that it is generally practiced more successfully when unnoticed. It is therefore rarely synonymous with *Mass*. Colonel Lawrence was probably the greatest modern master of this principle, and at times his concentration was so imperceptible that he deceived his own superiors in equal measure as he did the enemy. *Concentration* is inextricably wrapped up with the principle of object. It is, however, truly a principle, and our fourth.

*Command*

As a fifth principle I would place *Command*. This is a new word as far as the lists are concerned, but to me it seems to override *Co-operation* because it is more fundamental, which is the nature of principles. They are the ultimate beyond which we cannot go. They are first points from which others stem. The principle of *Command* means that co-operation is no longer a difficulty to be overcome by hard work, good liaison, and "give and take" between units and services. By *Command* a one-ness is achieved to a degree that co-operation can never hope for. *Command* must be single. Nations are already heading towards the principle of *Command*, even if the means to its complete attainment are not yet to hand. One should always strive toward perfection even if entertaining few illusions as to its immediate possibility. In this respect co-operation is at present a substitute

and should be recognized as such. Future wars will stress this more strongly, tending ever more closely to reach the principle of *Command*. Eventually *Command* will be so supreme in the hands of one individual or unified group that wars will no longer be possible or necessary. In the meantime the principle of *Command* (reposing in one head) must attempt to overcome the expedient of *Co-operation*.

*Offensive Action*

This is our last principle, but simply it means that winning wars depends upon attempting to win them. This is the principle of *Offensive Action*. The application of *Offensive Action* rests for its success upon close adherence to the above five principles together with an understanding of them. There is little more that can be said about it in this short paper.

Having thus disposed sketchily of what I believe to be the only true Principles of War, there remains a bewildering list of other "principles". These are (perhaps not entirely, for the list grows daily):—

*Movement*
*Administration*
*Mass*
*Economy of Force*
*Security*
*Simplicity*
*Mobility*
*Maintenance of Morale*

I do not intend to examine each in turn for the article would outgrow its value by so doing. What is true of one is true mainly of the others. To look at but some of them:—

*Maintenance of Morale*. This is a very worthy objective and by all means let us not forget it. It is not a principle, however, for many wars have been won without it. It is also strange in that it can be met both by resounding victories and by resounding defeats. (Morale in England was never higher than immediately after Dunkirk.) Nor is it an end in itself. It is merely one of the things a good commander employs to gain the maximum from his troops. It is but a mechanic of war, and nothing more.

*Administration*. This likewise is an adjunct of *Command*. A very necessary and by-no-means-to-be-overlooked asset without which wars are unlikely to be won. I hesitate to class it as a Principle of War.

*Mobility*, too, expresses nothing but a portion of the principle of *Flexibility*, and a very poor portion at that, as it tends to lead one to the erroneous conclusion that by dashing to and fro across a battlefield more quickly than the enemy one can defeat him. It takes no note of mental manoeuvre, nor of physical movement upon a fixed spot. The truth of the matter is that if one is forced to move

—and in itself this a disadvantage—then the smaller the radius of one's movement the better. Movement in itself is generally the outcome of being forced to move, either because one's adversary cannot be overcome from where one is (which would be much more convenient), or because by his menacing attitudes towards oneself it is obvious that by movement alone can one escape defeat (which is also inconvenient). One might as well list discretion as a principle because at times it is expedient to display it. *Movement* is no god to bow to, but an evil to be overcome. It must be practised and ever improved, but not treated as an aim in itself.

*Simplicity* is another evil imposed upon us by reason of our limited intellect. This too is not a principle at all. One would like not to have to be simple, but unfortunately at present to be complex would be disastrous. Training is after all nothing but an attempt to overcome the limitations that impose the need for simplicity. If one can train sufficiently, let us by all means be complex. In the meantime, however, it is well to remember this tenet because it generally applies; but let us not proclaim it to be a principle, which it is not.

So, too, for *Mass*... Success is not on the side of the big battalions but on the side of the intelligent ones. *Mass* in the wrong place is infinitely more harmful than little in the wrong place, and of itself is no panacea.

To revert now to the jibe that democracies invariably prepare for past wars. Provided one is prepared to change the so-called Principles of War from time to time, the logical procedure would be to change them in the light of past events. This indeed is what we do. If, for example, we have fought a war wherein success was achieved by *Movement*, we place this on our post-war list of principles. There it remains until eventually we (or someone else) fight a war in which, by reason of excessive movement, we become defeated. The principle of *Movement* is then replaced by the contrary principle of *Immobility*. So too with *Mass*, *Simplicity*, *Co-operation*, *Security*, etc. All appear on our lists not in the light of the future and in relation to the true principles of war but because of the shadows of the past. A deal of study is expended upon matters that fast become obsolete.

It were as if olden days the Athenians, after the fall of Troy, were to write as a principle "*Wooden Horse*" instead of contenting themselves with the deeper and more permanent truth and correctly writing "*Surprise*".

This then is my theme. Past wars require analysis and understanding, but it is to the principles that we should

A Book Review

# CHURCHILL: MARCHING ON TO D DAY

Reviewed by Colonel C. P. Stacey, OBE, Director Historical Section, Army Headquarters, Ottawa

The fifth instalment of Mr. Churchill's remarkable series *The Second World War* is entitled *Closing the Ring.** It carries the story from the invasion of Sicily in July 1943 to the sailing of the armada for Normandy in June 1944.

This reviewer's opinion of the volume changed considerably as he read it. His first impression was that it was rather less interesting than its predecessors. But as he got into it he found it quite as fascinating as they. Its most particular interest lies in its revelations of and comments on Anglo-American strategic differences of opinion, and the distinctly dissimilar approach of British and U.S. leaders to strategic questions.

It would doubtless be dangerous to assume that the controversies reported here stemmed entirely from differences in national temperament and character; but it is hard to avoid the impression that they do reflect pretty fundamental traits in British and American strategic thinking. On the one side we see the Americans doing unceasing battle for the conception of Operation "Overlord"—the power drive into North-West Europe: keeping their eyes fixed on that ball, refusing to have anything to do with any operation that might interfere with or postpone it, however slightly, and insisting upon the scrupulous implementation, in letter and spirit, of the international agree-

*The Second World War. *By Winston S. Churchill.* [Vol. V] Closing the Ring (1951). Published in Canada by Thomas Allen Limited. $6.50.

## THE PRINCIPLES OF WAR

(*Continued from preceding page*)

look, however, and not to that particular application which by reason of its timeliness and consideration of such factors as terrain, scientific ability and so on prevailed at the time. These latter will always have a fleeting interest at least but should not become dogma for a generation.

ments made concerning it. On the other side we see the British taking a more pragmatic line, concerned with seizing and exploiting the opportunities which the course of the war presented; they recognized the importance of "Overlord", but not the essentiality of doing it on a particular date; they had less respect for the idea of what Churchill scornfully calls "lawyers' bargains". Witness what he wrote to the Foreign Secretary on 26 October 1943 about the state of the Italian campaign:

> The reason why we are getting into this jeopardy is because we are moving some of our best divisions and a large proportion of vital landing-craft from the Mediterranean in order to build up for "Overlord," seven months hence. This is what happens when battles are governed by lawyers' agreements made in all good faith months before, and persisted in without regard to the ever-changing fortunes of war.

The most striking example of these differences is the refusal of the Americans, just at this period, to permit even a small diversion of forces into the Aegean to take Rhodes and make Cos and Leros secure. This Churchill calls "the most acute difference I ever had with General Eisenhower."

One is left with the impression that there was among the Americans considerable distrust of British policy. They were afraid that the British were not really loyal to the idea of invading France; they were afraid that adventures in the Eastern Mediterranean might lead to a Balkan campaign (Churchill emphasizes that he never contemplated entering the Balkans with an army); they were afraid of finding themselves fighting for British imperial interests. This distrust doubtless had its roots far back in American history. It reinforced what may have been an ingrained unyielding quality of mind on the part of the American military leaders. If you look at it in terms of the Principles of War, the Americans were long on *Selection and Maintenance of the Aim;* the British were long on *Flexibility.* Both have their place, and it is the present writer's humble opinion that, looking at the war as a whole, the two outlooks complemented and moderated each other in a most useful and salutary manner.

Churchill writes frankly of his views on the cross-Channel attack. He was "always willing to join with the United States" in it; but "I was not convinced that this was the only way of winning the war, and I knew that it would be a very heavy and hazardous adventure." He tells us what he told Stalin at the Teheran conference:

> I said "Overlord" would certainly take place, provided the enemy did not bring into France larger forces than the Americans and British could gather there. If the Germans had thirty to forty divisions in France I did not think the force we were going to put across the Channel would be able to hold on. I was not afraid of going on shore, but of what would happen on the thirtieth, fortieth, or fiftieth day. However, if the Red Army engaged the enemy and we held them in Italy and possibly

the Turks came into the war, then I thought we could win.

Nevertheless, as D Day drew nearer, the British Prime Minister became more optimistic and more devoted to the "Overlord" idea. It took what amounted to a direct order from the King to keep him from going to sea in a cruiser to watch the landings; and he still writes a bit grumpily about the incident, feeling that he was entitled to risk his life if he wanted to. But most of his readers will feel that it was the King who was right.

One of the Anglo-American controversies is of special interest. The delay in appointing a Supreme Commander for "Overlord", it emerges, was primarily due to the Americans. It was long assumed by Churchill that this Commander would be General Marshall. But late in 1943 the British became aware that the Americans wanted a fundamental change in the proposed command arrangements: they desired that one man should have direction of the whole of the war against Germany—in the Mediterranean as well as in North-West Europe. This was objectionable to the British: partly because they felt that what Churchill called "the principle of equal status which must be maintained among the great Allies" required that they should have the supreme command in one theatre, partly because they regarded the proposed arrangement as militarily unsound. The Americans suggested that there should be a Mediterranean commander and a North-West Europe commander; above them would be the Supreme Commander; and above him would be the Combined Chiefs of Staff, by whom his decisions would still be "subject to reversal". The British Chiefs of Staff remarked that the proposed Supreme Commander would be merely "an extra and unnecessary link in the chain of command". Only when it was clear that the British would have nothing to do with this idea did President Roosevelt suddenly and unexpectedly tell Churchill that he could not spare General Marshall from Washington and that he proposed to nominate General Eisenhower for the "Overlord" command. It seems pretty obvious that if the Super-Supreme Command had been created the appointee would have been Marshall.

* * *

As in the earlier volumes, Canadian references are strikingly few. Most of them concern the first Quebec conference. Probably many Canadians even now do not realize how little their government had to do with the higher direction of the war. The British Prime Minister here makes a contribution to their education:

The President, while gladly accepting Canadian hospitality, did not feel it possible that Canada should be formally a member of the Conference, as he apprehended similar demands by Brazil and other American part-

ners in the United Nations. We also had to think of the claims of Australia and the other Dominions. This delicate question was solved and surmounted by the broadminded outlook of the Canadian Prime Minister and Government. I for my part was determined that we and the United States should have the Conference to ourselves . . .

One would like to have Mr. Churchill's account of the discussions with the Canadian Government that preceded the dispatch of the 1st Canadian Division to take part in the assault on Sicily and the later decision to build up a Canadian Corps in the Mediterranean; but on these and other Canadian policy matters the book is silent.

It covers the first phase of Canadian commitment to the Mediterranean war, but the references to Canada's share in the operations are, not unnaturally, brief and perfunctory. Perhaps the only point here of which a Canadian can legitimately complain occurs in the short account of the Sicilian campaign. Like General Eisenhower in *Crusade in Europe*, Mr. Churchill has no eyes for the Eighth Army's leftward sector, where the 1st Canadian Division was fighting its hard mountain battle. "There was a lull on the British front till the 78th Division arrived from Tunisia". It was during this "lull" that the Canadians took Leonforte, Assoro and Agira.

On the higher strategy of the Italian campaign the author has many important things to say. He writes at length and pungently about the planning and execution of the Anzio landing; he was disgusted with the failure to exploit the initial surprise by pushing inland to the Alban Hills. And it is noticeable that he reveals that during this period he more than once expressed doubts about advancing too far up the Italian peninsula. In the autumn of 1943 he was of the opinion that the Allies should not seek to go beyond the narrow Pisa-Rimini line and debouch into the valley of the Po. A year later they did this, and suffered very heavy losses in doing it. It will be interesting to read Mr. Churchill's account of this phase in his next volume.

* * *

In *Closing the Ring*, as in preceding volumes, not the least fascinating feature is the appendices where the author prints a selection of the minutes and memoranda in which he encouraged all and sundry to greater and more effective activity and let them know that he was watching all their proceedings, large and small. It must have shaken the DMI at the War Office to receive this:

Why must you write "intensive" here? "Intense" is the right word. You should read Fowler's *Modern English Usage* on the use of the two words.

On another occasion Mr. Churchill raised the question of the "horribly bloated staffs" which were "lurking" at Algiers:

I certainly wish this matter to be taken up

with a view to recalling and putting to some useful work these highly paid and no doubt highly skilled and experienced officers. The best thing would be to form a Sacred Legion of about one thousand Staff officers and let them set an example to the troops in leading some particularly desperate attack.

Here is the Prime Minister urging the Lord President of the Council to find a little more grain, out of his surplus, for "the domestic poultry-keeper:" "It costs no labour, and the extra eggs are not an undue reward for the enterprise and initiative of the owner. Moreover, it gives him an interest and something to talk about." He also addressed himself to the question of raising the legation in Cuba to the status of an embassy: "Great offence will be given if all the others have it and this large, rich, beautiful island, the home of the cigar, is denied."

* * *

When this volume was written its author was leading the Opposition in the British House of Commons. Now he is back in Downing Street, and it is to be feared that his public responsibilities may interfere with his literary labours. Let us hope for the best. It would be no small misfortune if this history were not to be completed.

---

# Airlift and Airdrop Manoeuvre

According to reports from the Combat Cargo Command in Korea, the [U.S.] 315th Air Division has just successfully completed "Operation Show Off", the greatest airlift and airdrop training manoeuvre of the Korean War, dramatically demonstrating the amazing manoeuvrability and speed of an airborne army. Nothing but a full-scale combat drop could have equalled the operation in magnitude or in preparation, officials stated.

Brig. Gen. John P. Henerbry, Commander of the 315th Air Division and Air Commander of the big operation, revealed that there were almost 9,000 individual instances of airlift or airdrop, involving more than a million and a half passenger miles, and more than 63,000 plane miles, including an airdrop of about 4,000 troopers of the 187th Regimental Combat Team.

Air Force observers believe that the demonstration proved that the extensiveness of an airlift is not limited by the number of aircraft on hand. Rather, any number of paratroopers and heavy military equipment can be placed at airstrips near the front lines and later dropped over the "fighting area" by shuttling the planes back and forth to the zone on a taxi service basis.—*Army-Navy-Air Force Journal (U.S.).*

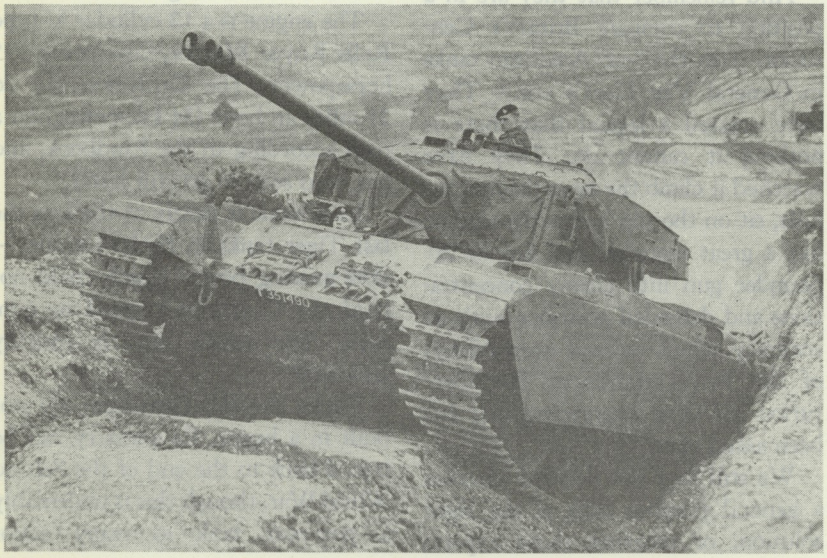
# THE CENTURION TANK IN ACTION

By
ROBERT JESSEL*

I think we have now heard the last of the myth that Britain cannot design and build a tank. The War Office and the Ministry of Supply have killed the lie in the most effective way you could desire. They have given British armoured regiments a tank of outstanding excellence—the Centurion.

They have shipped quantities of these tanks to Korea, and used them in battle for a year under some of the toughest conditions you can find anywhere in the world. It was a risk. On

**The author is a well-known writer on military affairs and was formerly with the* Manchester Guardian *and the* Daily Express, *London. This article was obtained through the United Kingdom Information Office, Ottawa.—* Editor.



*UKIO Photograph*

A Centurion tank tanking a steep gradient. The side-plates are for protection against anti-tank grenades. So far as is known, Britain's Centurion is the only new tank to be produced in quantity since the end of the Second World War.

the battlefield you cannot conceal a tank's defects, and since December, 1950 both crews and enemy have learnt a lot about the Centurion—from both ends of the gun.

And the verdict? I do not know just what the Chinese or the Russian tank technologists have had to say about the British tank. But we do know what the British and Americans —and the soldiers of other nations in Korea—have said. They have come to know it well—as you do when your life depends on the support of a new weapon.

*The Soldiers' Verdict*

And remember that they are in a position to compare Britain's Centurion with the best American tanks in General Van Fleet's army. They have created a legend that there is nothing it cannot do. They have watched it climb the most precipitous hills, sit on the top below the skyline like a great monster, and fire its 20-pounder gun into enemy concentrations and defended positions with an accuracy which amazed even officers of the Royal Artillery. The Centurion has done everything that has been asked of it.

We still have not decided whether a general purpose tank is the right solution, or whether those experts are right who urge the need for two types of tank—one for close infantry support and heavy slogging matches against the Joseph Stalin kind of tank, and another lighter cavalry tank with a long range and the capacity to drive deep behind the enemy's lines when he begins to crack.

*Weight—Speed—Armour*

But let us look for a minute at the Centurion tank. It weighs 50 tons—ten tons more than the Churchill tank and 17 tons more than the Comet. Its gun is a 20-pounder, and it also has a 7.92mm machine-gun and smoke dischargers. The 20-pounder has a special stabilizer to enable it to fire accurately while the tank is moving forward on uneven ground.

The engine is a 12 cylinder V-type Rolls Royce Meteor, developing 635 horsepower. The Centurion can do 21 miles an hour (34 kilometres) on a road according to the handbook, and has been seen to go still faster.

Its armour is nearly as thick as the last Tiger tanks in Hitler's armies—slow-moving beasts which could not rival the Centurion's speed or gunnery. The tank's cost is roughly £31,000.*

Tanks like the Centurion are not built in a hurry. Its ancestry can be traced back to the end of the Second World War, though this is undeniably a post-war tank in many major respects.

*Approximately $88,350.—Editor.

OTTAWA
EDMOND CLOUTIER
Printer to the King's Most Excellent Majesty
1951

17,000 — 11-51-(5433)
H.Q. 223-C-3