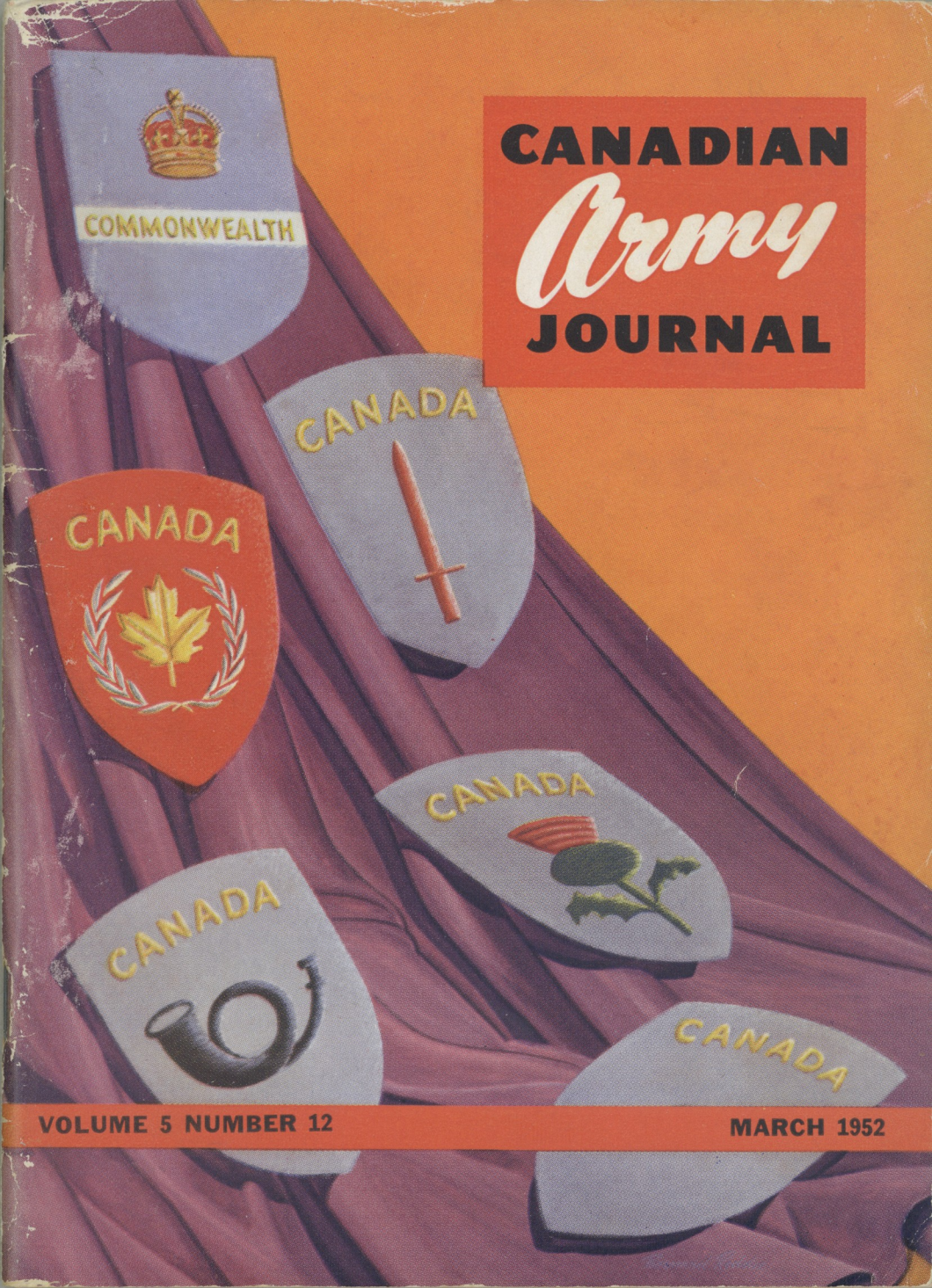


CANADIAN Army JOURNAL

VOLUME 5 NUMBER 12 MARCH 1952

CONTENTS

Index for Volume 5 of the Journal on page 73

The Cover

Formation badges worn by Canadians in the 25th and 27th Canadian Infantry Brigades in Korea and Europe, respectively. *Top:* The First Commonwealth Division badge, worn on the left sleeve by Canadian troops fighting in Korea. *First row, left:* Badge of the 25 CIB, worn on the right sleeve. *Right:* Badge worn by the 1st Canadian Infantry Battalion of the 27 CIB. *Second row, left:* 1st Canadian Rifle Battalion badge, 27 CIB. *Right:* 1st Canadian Highland Battalion badge, 27 CIB. *Bottom:* Badge worn by all other troops of 27 CIB, including Headquarters.

CANADIAN Army JOURNAL

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 MORE FLEXIBLE REGIMENTAL ORGANIZATION

By
CAPTAIN J. L. HUNTER, PPCLI No. 1 ARMY ADMINISTRATIVE UNIT,
ARMY HEADQUARTERS, OTTAWA

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

The Canadian Army at present contains 69 named infantry regiments, three in the Active Force and 66 in the Reserve Force. (In addition, there are six "new" battalions, belonging to no regiment, detailed for duty in Europe.) The vast majority of these regiments have only one battalion each. These battalions all have separate histories and traditions. They are in no way connected together, and are, in fact, potential rivals.

This kind of regimental organization has, in my opinion, two serious faults, and the time has come for them to be examined. There seems to be something wrong when the infantry battalions of the 27th Canadian Infantry Brigade had to be formed from elements of five units each. These mixed battalions represent a partial breakdown of the regimental system, since they have no past of their own, and no firm base on which to build a unit tradition and esprit de corps. Unit loyalties are divided five ways. In battle, when things are going badly and cold logic tells men to run away or surrender, good infantrymen then fight on for the honour of their regiment. There is no need to labour the point that infantrymen must have regiments that mean something to them.

The regimental system must be preserved. However, if it is not soon re-organized so that it can easily meet the demands of either a partial or a complete mobilization, it is liable to be supplanted by a system that works better. The result might well be the Royal Canadian Infantry Corps for everyone, with the implication that all units are identical, and all personnel freely interchangeable.

The first fault of the system lies in the number of units. The plain fact is that there are too many named regiments for the number of battalions

in the Canadian Army. They could not all possibly be used in the event of war, and they couldn't be adequately reinforced from their home localities if they were, by some unforeseeable chance, included in an operational order of battle. The Canadian Army Overseas had only 35 named battalions in its five divisions. The British Army, serving a population over three times the size of ours, has only 87 named regiments, including The Glider Pilot Regiment and four regiments of Gurkha Rifles in Malaya. We need fewer named regiments for the existing number of battalions, so that all regiments may share in the duties of Active Service.

The second fault is that there is no connection between the Active Force battalions and those in the Reserve Force. There is no sense of continuity or kinship between the two components. An attempt to establish such a connection resulted in the composite units of 27 Canadian Infantry Brigade. A smaller number of regiments containing both Active and Reserve Force battalions would enable us to form new Active Force battalions from Reserve Force sources without mixing personnel from different regiments, or devising new unit names. Also, more communities in Canada would be identified with the Active Force battalions and would share in their fortunes.

It is proposed that the existing infantry battalions be grouped into four regiments, named on a territorial basis and embracing all Active and Reserve Force battalions in their territories. Each unit would make a small, identical sacrifice in name, but no unit would be sacrificed completely. The battalions in each regiment would be numbered in order of their seniority, but they would retain their present histories, customs and traditions.

It is fully realized that any scheme involving changes in infantry units is usually very unpopular with infantrymen. As a matter of fact, this plan is not too popular with the author himself, who is very proud of belonging to the regiment that was the first to fight in the First World War and in the Korean War, and which is the only Canadian regiment to hold a Unit Citation from the President of the United States. Some regiments may have more to lose than others; or, to put it a better way, some regiments may have more to offer than others to the common background of a larger regiment. It is submitted, however, that no unit would in fact lose anything vital, and that all would benefit by becoming parts of larger regiments. The new regiments would gain great strength by having a broad base in the army and the civilian community. They would become the trustees and holders of all the honours of the present battalions.

And, by becoming more flexible, the new regiments would run less risk of being swept by a mobilization into the soulless mass of the Royal Canadian Infantry Corps.

The detailed order of battle of the suggested regiments is given below, with present names of battalions in brackets. It is assumed that the designation "Royal" would be granted by Her Majesty at our request.

THE ROYAL EAST CANADA REGIMENT, composed of the battalions of Eastern Command and the English-speaking battalions of Quebec Command:

1 RECR (The Canadian Grenadier Guards)
2 RECR (The Victoria Rifles of Canada)
3 RECR (The Black Watch (Royal Highland Regiment) of Canada)
4 RECR (The Royal Rifles of Canada)
5 RECR (Princess Louise Fusiliers (MG))
6 RECR (The Carlton & York Regiment)
7 RECR (The West Nova Scotia Regiment)
8 RECR (The North Shore (New Brunswick) Regiment)
9 RECR (The New Brunswick Scottish)
10 RECR (The Pictou Highlanders (Motor))
11 RECR (The North Nova Scotia Highlanders)
12 RECR (The Cape Breton Highlanders)
13 RECR (The Royal Montreal Regiment (MG))
14 RECR (The Royal Newfoundland Regiment)

LE RÉGIMENT ROYAL CANADIEN-FRANCAIS, composed of the French-speaking battalions of Quebec Command:

1 RRCF (1st Battalion, Royal 22e Régiment)
2 RRCF (2nd Battalion, Royal 22e Régiment)
3 RRCF (3rd Battalion, Royal 22e Régiment)
4 RRCF (Les Voltigeurs De Quebec (Motor))
5 RRCF (Le Régiment De Montmagny)
6 RRCF (Le Régiment De Quebec (Mitrailleuses))
7 RRCF (Le Régiment De La Chaudière)
8 RRCF (Le Régiment De Chateauguay)
9 RRCF (Les Fusiliers Mont-Royal)
10 RRCF (Le Régiment De Joliette)
11 RRCF (Le Régiment De St. Hyacinthe)
12 RRCF (Le Régiment De Maisonneuve)
13 RRCF (Fusiliers De St. Laurent)
14 RRCF (Le Régiment Du Saguenay)
15 RRCF (Le Régiment De Levis)
16 RRCF (Les Fusiliers De Sherbrooke)

THE ROYAL CENTRAL CANADA REGIMENT, composed of the battalions of Central Command:

1 RCCR (1st Battalion, The Royal Canadian Regiment)
2 RCCR (2nd Battalion, The Royal Canadian Regiment)
3 RCCR (3rd Battalion, The Royal Canadian Regiment)
4 RCCR (The Governor-General's Foot Guards)
5 RCCR (The Queen's Own Rifles of Canada)
6 RCCR (The Royal Regiment of Canada)
7 RCCR (The Royal Hamilton Light Infantry (Wentworth Regiment))
8 RCCR (The Princess of Wales' Own Regiment)
9 RCCR (The Hastings & Prince Edward Regiment)
10 RCCR (The Lincoln and Welland Regiment)
11 RCCR (The Oxford Rifles)
12 RCCR (The Canadian Fusiliers (City of London Regiment) (MG))
13 RCCR (The Elgin Regiment)
14 RCCR (The Perth Regiment)
15 RCCR (The Highland Light Infantry of Canada)
16 RCCR (The Lorne Scots (Peel, Dufferin and Halton Regiment))
17 RCCR (The Midland Regiment)
18 RCCR (The Stormont, Dundas and Glengarry Highlanders)
19 RCCR (Cameron Highlanders of Ottawa)
20 RCCR (The Essex Scottish)
21 RCCR (48th Highlanders of Canada)
22 RCCR (The Algonquin Regiment)
23 RCCR (The Kent Regiment)

24 RCCR (The Argyll & Sutherland Highlanders of Canada (Princess Louise's))
25 RCCR (The Toronto Scottish Regiment)
26 RCCR (The Irish Regiment of Canada)

THE ROYAL WEST CANADA REGIMENT, composed of the battalions of Prairie Command and Western Command:

1 RWCR (1st Battalion, Princess Patricia's Canadian Light Infantry
2 RWCR (2nd Battalion, Princess Patricia's Canadian Light Infantry)
3 RWCR (3rd Battalion, Princess Patricia's Canadian Light Infantry)
4 RWCR (The Royal Winnipeg Rifles)
5 RWCR (The Lake Superior Scottish (Motor))
6 RWCR (The Regina Rifle Regiment)
7 RWCR (The Winnipeg Grenadiers)
8 RWCR (The Rocky Mountain Rangers)
9 RWCR (The Queen's Own Cameron Highlanders of Canada)
10 RWCR (The Calgary Highlanders)
11 RWCR (The Westminster Regiment (Motor))
12 RWCR (The Seaforth Highlanders of Canada)
13 RWCR (The Winnipeg Light Infantry)
14 RWCR (The Saskatoon Light Infantry (MG))
15 RWCR (The Canadian Scottish Regiment (Princess Mary's))
16 RWCR (The South Alberta Regiment)
17 RWCR (The Loyal Edmonton Regiment)
18 RWCR (The Prince Albert & Battleford Volunteers)
19 RWCR (The South Saskatchewan Regiment)

(Another method would be to divide the above regiments into two, except for The Royal East Canada Regiment, giving seven smaller regiments. The order of battle then would be:

4 Royal East Canada Regiment, as above;
3 Regiment Royal Canadien-Francais, composed of the French-speaking battalions of Eastern Quebec;
7 Regiment Royal Canadien-Francais, composed of the French-speaking battalions of Western Quebec;
1 Royal Central Canada Regiment, composed of the battalions of Eastern Ontario;
6 Royal Central Canada Regiment, composed of the battalions of Western Ontario;
2 Royal West Canada Regiment, composed of the battalions of Prairie Command;
5 Royal West Canada Regiment, composed of the battalions of Western Command.

(The numbers are allotted arbitrarily to avoid too much similarity of titles. This method would ensure that no regiment started with more than 15 battalions.)

The purpose of this plan is to introduce more flexibility, and a degree of uniformity without too much standardization. Consequently, the only immediate changes that would be required of units would be a change of official title, and a change in the shoulder titles worn on battle dress. Present unit headdress and cap badges, collar badges and other distinctive items of dress would remain as they are.

The matter of regimental colours could be settled later. There is no reason why each battalion should not have three colours: a new regimental colour, the present unit colour, and the Queen's Colour. The regimental colour in each case would carry all the battle honours of all its battalions, while the existing colour would serve to distinguish one battalion from the next, as at present.

The shoulder titles of all regiments would be of uniform size and shape,

the model being the title presently worn by The Royal Canadian Regiment. All titles would have the same background colour—RED for infantry —but for the individual regiments there would be lettering and a border in a distinctive colour, as follows:

RECR—BLUE, for the waters of the Atlantic and St. Lawrence.

RRCF—WHITE, for the lilies of France.

RCCR—GREEN, for the predominant foliage of Central Canada.

RWCR—GOLD, for the predominant colour of the Prairies and the lower mainland of B.C.

Individual battalions of all regiments would be designated by a separate 1¼-inch red cloth disc, with black numerals, sewn on the sleeve directly below the shoulder title. Personnel extra-regimentally employed would not wear a battalion numeral.

This plan claims the following advantages:

The barrier between the Regular and Reserve Force infantry would be broken down. The activities and fortunes of each battalion would be of interest to all, and the exploits of the Regular battalions would be shared in by the whole regiment.

Recruiting would be simplified when new battalions were to be raised in peace time. Instead of having to choose only certain units in each locality to support new mixed battalions, as in Exercise Panda, Army Headquarters could form new higher-numbered battalions of the various regiments. Immediately, every Reserve Force battalion in the regiment would have an interest in recruiting to fill up the new unit, and every community in the regimental territory would have an interest in the new battalion, as long as its local battalion had provided even one man. The publicity possibilities alone would be enormous.

Day to day recruiting for the Active Force might well be stimulated. Every Reserve Force battalion would have an interest in its sister battalions already on Active Service and this interest would extend into nearly every community in the regimental area. Recruiting advertising would gain greatly in effect if it had behind it the permanent support of all the Reserve Force units. At the present time there is no reason why most Reserve Force battalions should feel interested in urging men to join an Active Force unit with which the Reserve Force unit has no connection or kinship or, perhaps, even sympathy.

On mobilization, the selection of battalions for an Active Service Force would be simplified. While all units were ordered to mobilize, certain larger battalions of each regiment would be detailed to the Active Service Force, and would be replaced

in their home localities by new, higher-numbered battalions remaining in the Reserve role. All mobilized battalions would begin recruiting, training and transferring men to the Active Service Force battalions. In this way, all battalions and all communities would have a share in the activities of the regiment, even though all the battalions couldn't go to war.

The training of reinforcements would also follow the regimental pattern. A depot for each regiment would be formed in the regimental area. The depots would receive recruits direct from the recruiting stations, and from the Home Forces battalions after the Active Service Force battalions had been filled. The regimental depots would give basic training, and would then transfer men to training battalions in training brigades, at home or overseas, for advanced training. From training battalions men would be despatched to the battalions in the line as required. The training battalions would be either new battalions, or existing battalions detailed for this duty. The Royal Canadian Infantry Corps would be superfluous and would be abolished.

The value of this plan is that each infantryman would establish and maintain the same regimental affiliation throughout his entire service. In peace or war, in the Reserve Force or in the Active Force, for three years or 27 years, a soldier would belong to the same regiment, although he might serve in several different battalions.

He would, of course, find differences in these battalions. He would find that certain battalions were highland battalions, certain ones rifles, some of them light infantry, and some of them infantry of the line. He would have a new cap badge and perhaps a distinctive headdress in each battalion, but he would still be serving with the same regiment, and would always be a member of the same brotherhood.

This broad affiliation would serve in particular to ease the problems of the long-service Reserve Force soldier who, on mobilization, might be faced with the necessity of transferring to an Active Force unit. Instead of going to another regiment, he would simply transfer to another battalion of his own regiment.

This type of broad affiliation would ensure that casualties were not localized in any one community. Another link would be forged between Active and Reserve Force infantrymen if personnel of the Instructional and Administrative Cadre wore the same shoulder titles as the units they were serving. Further, the presence of a number of units with similar shoulder titles might hinder enemy intelligence in building an accurate picture of our order of battle during active opera-

tions, particularly if battalion numbers were removed from time to time.

It is felt that the system of regimental affiliation is what is important to the infantry, and that this system must be preserved. The matter of unit titles is of small importance in the long run, and is of no importance to those who will fill the ranks on mobilization, since they are civilians with no military connection. The bulk of the recruits for Exercise PANDA did NOT come from the Reserve Force itself, although they may have felt more willing to join a unit with a name than to join the Army through a sterile Personnel Depot.

Those to whom unit identity is most important are the soldiers now serving in the units, or with an extensive background of service in a unit. With these people the writer has the greatest sympathy and co-feeling. However, it should be remembered that, at the high levels of command, the feelings of the infantry are not really held very sacred. Units were arbitrarily combined during the reorganization of 1936. During the Second World War, 12 Canadian Infantry Brigade was formed on a temporary basis, one of its units coming from the Royal Canadian Armoured Corps, and another from the Royal Canadian Artillery. 13 CIB arrived in the United Kingdom in 1944 and was promptly broken up to provide reinforcements. A number of infantry units were converted to RCAC, and a number have remained so. Since the war, a number of other infantry units have been converted to RCA. And, of course, the most serious blow of all was the establishment of the RCIC.

It would not be a very big step to the abolition of all existing unit names and the formation of individual numbered battalions. It would probably simplify the bookkeeping if all infantrymen were dressed alike and clustered together in units willy-nilly, while reinforcements were treated as if they were identical spare parts, like the spare parts in bins in MT stores.

It would be good for bookkeeping, but it would be bad for morale, and would adversely affect the fighting spirit of the infantry. The system would not be worth introducing as long as there were a workable regimental system in existence. But the present regimental system does not seem workable, except in peace time, because there are too many named regiments, and each covers too small an area. Therefore, to save the regimental system, and to avoid complete standardization, the infantry regiments should be re-organized on a broader and sounder basis than at present.

RCIC delendum est.

Camp Melville on the Chilliwack River.

OPERATION MELVILLE

By
LIEUT. E. J. MILLS, ROYAL CANADIAN ENGINEERS

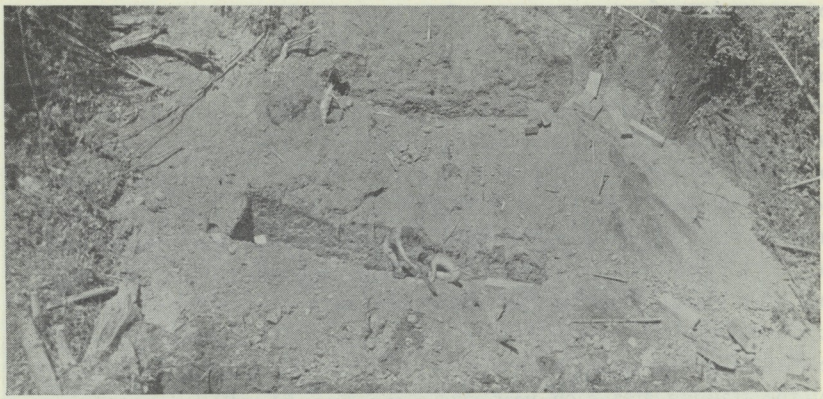
During the Canadian Officers Training Contingent training at the Royal Canadian School of Military Engineering last summer, the first steps were taken to provide what may soon become an invaluable asset in the training of engineer officers. Prior to the arrival of COTC and Service College cadets in May, the School set up Melville Camp, first of a proposed series of summer road and bridge construction camps in the British Columbia hills, a few miles from the permanent school at Chilliwack, B.C. The prime purpose of creating such a camp is to provide training facilities. At these camps, future Royal Canadian Engineer officers are being taught the fundamental principles of military road and bridge construction, a prerequiste for all Sapper officers. The second purpose of the project is to put the effort of training to some material benefit to the community.

The experiment was precipitated

by a series of circumstances. In previous years, COTC personnel had been taught road construction, bridge construction and surveying as entirely segregated subjects. Practical training on roads consisted each year of a separate project such as local road maintenance, black-topping a small section of side road, or construction of short gravel roads in the camp training area. Improvised bridging projects were set up in various parts of the training area each year, and were usually dismantled shortly after completion. Surveying was administered through a week-long preliminary survey camp in the mountains. While each project provided some general knowledge of the subject, it was felt that better understanding of each course could be attained by combining all subjects into a single project. In this way, greater continuity in the training schedule could be attained. It was also felt that the training scheme could be developed into a project that would be of service to the community as a whole. Coupled with this was a directive from Army Headquarters urging that more emphasis be given to the practical aspect of summer training.

In order to fulfill these requirements, the School began a complete reorganization of the Canadian Officer Training Corps Training Syllabus. After consideration of several proposed schemes, it was decided to begin a road construction project between the Army Camp and Chilliwack Lake, which is situated 30 miles from the camp and 2100 feet above sea level. There were several reasons for choosing this project. Chilliwack Lake is situated in rugged country, a country of mountains and valleys, dense forests, rushing streams and heterogeneous soil conditions. It promised almost every construction difficulty imaginable, thus affording the use of all heavy equipment available to Engineers. Surveying would require careful planning, in order to keep within grade limits, and still pass through the line of least resistance. Innumerable gulleys and streams provided an endless variety of bridging sites. Nor could the material value of such a road be minimized, for Chilliwack Lake is a potential vacation paradise, with its sandy beaches, scenic grandeur and abundance of fish. Real estate values would increase considerably, not only at the lake itself but along the entire route as well. Furthermore, the project was a challenge to the skill and ingenuity of the RCE, for all previous attempts to link Chilliwack Lake with civilization had met with little success.

Having selected the project, the next step was the planning of the general route and of the actual construction programme. Many hours were spent mulling over maps and



Excavating for the bridge footings.

aerial photographs of the area to select the major control points for the route. Soil samples were taken to determine the types of subgrade to be encountered. Reconnaissance for a suitable camp site was also carried out.

The planning met with considerable success. It was decided to confine the route to the northern slope of the Chilliwack River Valley, since it eliminated several river crossings, and since eight miles of township road already existed on this side which could be utilized. The results of the soil tests showed the presence of large clay deposits below the 1200-foot contour, necessitating the establishment of several control points above this level.

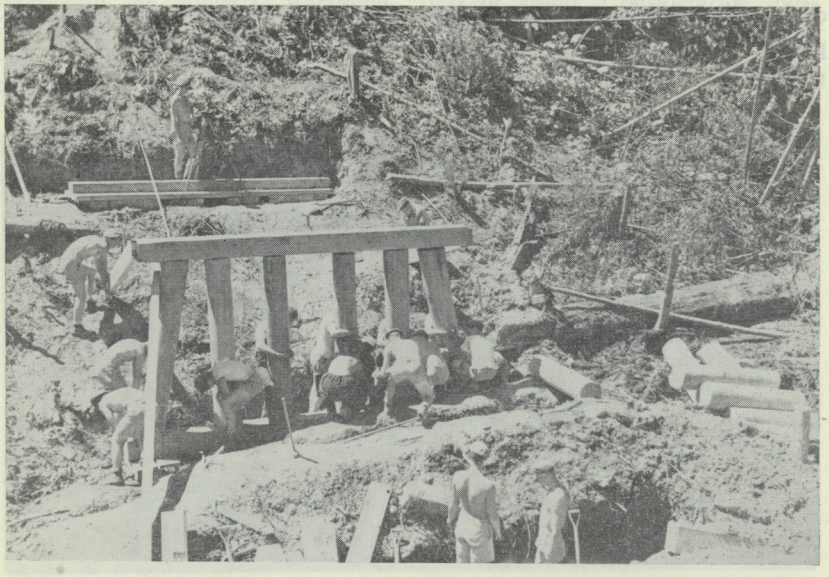
Perhaps the easiest decision to make was the location of the camp site. A flat four-acre grazing pasture was located on the river's edge, one mile past the end of the township road. This promised to be an ideal location, for the river itself afforded an unlimited source of water supply, while the township road could be lengthened to make a favourable supply route to the main camp. The property was privately owned, but permission to set up camp was readily obtained from the landowners, who foresaw the advantages of the plan.

In April the final stages were set for the summer's training. The syllabus was drawn up to include a total of eight weeks at the camp for each COTC troop. Each troop was to spend four weeks on road construction and surveying, and an equal period on design and construction of improvised bridges. Heavy equipment and operators were assigned from the Trades Training Squadron at the Royal Canadian School of Military

Engineering, and provision was made to supply dump trucks from the Royal Canadian Army Service Corps Detachment. The Royal Canadian Electrical and Mechanical Engineers Section was to provide power generation units, and water supply was to be administered by the School's Field Engineering Squadron. The Royal Canadian Corps of Signals also was called into service to provide wireless communication with the School.

The camp was set up late in April under the watchful eye of Captain W. L. Bagnall, a call-out officer who was selected as Commandant of the camp because of his experience in camp administration during Exercise Sweetbriar. Inside of a few days, Captain Bagnall had engineered a miniature "Wainwright", complete with sleeping tents, lecture tents, mess tents, QM stores, canteens, ablution tables and latrines, hot and cold showers and electric lights, not to mention the ever-present parade square. The camp was named "Melville Camp", in honour of Brigadier Melville, Honorary Colonel Commandant of the Royal Canadian Engineers. By the first of May, the camp was completed, and the staff relaxed to await the arrival of the COTC.

There was some consternation amongst the first group of cadets

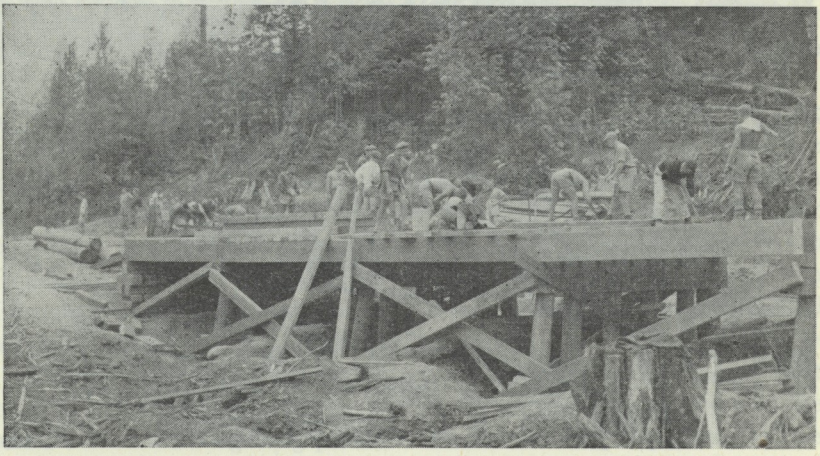


Erecting the supports for the single bent trestle bridge.

arriving at the School, when told of their forthcoming sojourn in the wilderness. Many envisioned an arduous summer of hard-tack, bully-beef and black flies. Since all cadets assigned to the project were in their second year of training, this news came as a drastic reversal of form compared to the pleasant summer they had previously experienced. However, when they moved to Melville Camp all fears were dispelled for the cadets found the pleasant surroundings of Melville much to their liking.

The cadets began their course with three days of lectures. The first two days were devoted to nomenclature, drainage practice and soils analysis, while the latter part of the lectures dealt with the surveying aspect of the project. The class was then split into two groups, one group beginning the actual road construction and the other concentrating on the preliminary and location survey.

During the road construction, each cadet was given an opportunity to take charge of operations, and it was his duty to prepare a programme of work for the following day. These plans were submitted to and assessed by the instructor, and any necessary changes were suggested before the day's work began. While all cadets worked under the supervision of the instructors, they were given as free a rein as possible. The construction equipment available included four bulldozers of various capacities, a carry-all scraper, a Lorrain face-shovel, a motor-grader, and several dump trucks. Although it was not possible to allow any cadet to operate the equipment, each was allowed to



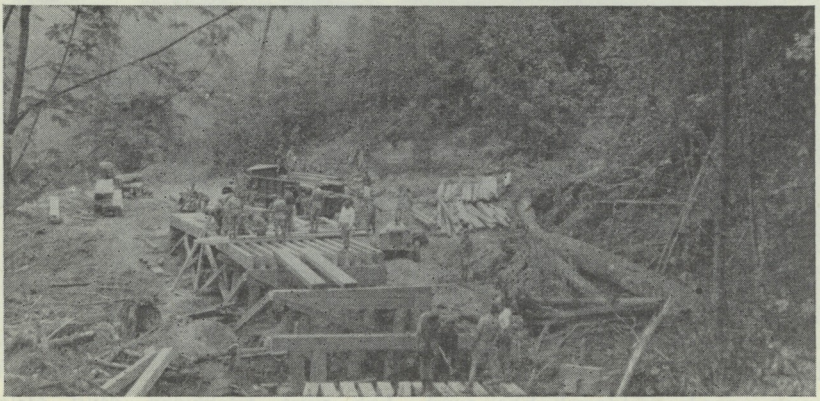
A close-up of the partially-completed bridge.

decide on the placement of the units. All movement of equipment was observed by the instructor, however, to insure that the operators were not being endangered, and any unsound proposal was vetoed. In this way, the cadets were able to study by observation the capacity and manœuvrability of equipment.

Drainage was an important phase of construction. The terrain provided innumerable opportunities for installing culverts, and the necessity of adequate ditches was emphasized by the large run-off from the higher mountains. Various types of culverts were constructed, including concrete-pipe, corrugated iron, wood-box and improvised log culverts. Retaining walls were necessary in many places, as it was learned by bitter experience that the absence of these walls could lead to many hours of back-breaking work with pick and shovel. The importance of interception ditches was quite apparent when operators bogged down temporarily in a mass of wet mud and clay, a circumstance which could have been prevented by re-routing a mountain stream into a culvert.

In all, 1¼ miles of 20-foot roadway, four Class 50 bridges and 14 culverts were constructed during the summer. This was considered to be satisfactory in view of the fact that all cadets and operators, too, were working on a job which was new to each of them. Since a rotation system of detailing work was used, it was not possible to work with a great deal of speed. Consideration must also be given the fact that a height of more than 500 feet was gained during the work.

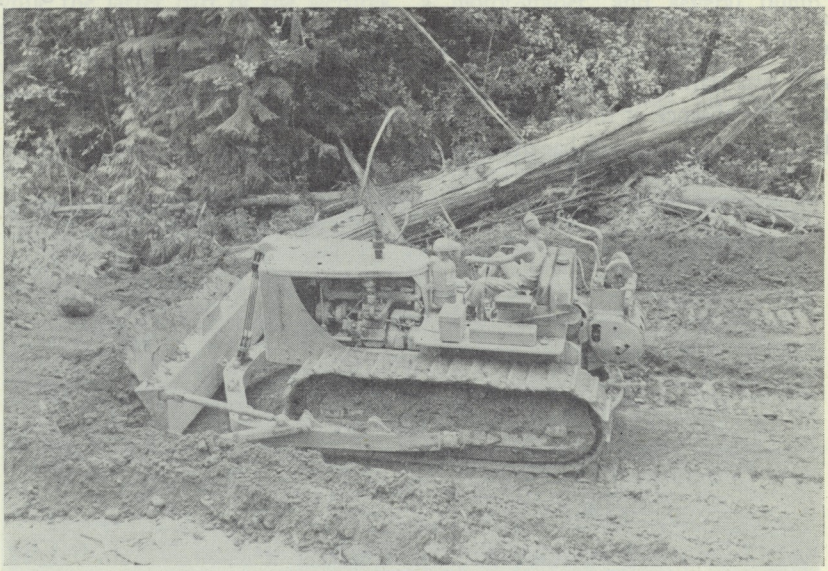
The surveying was carried out by



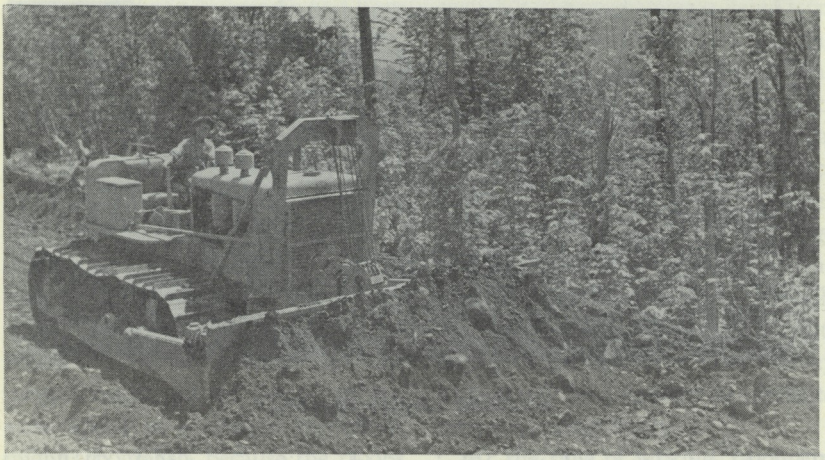
Another view of the bridge under construction.

the cadets in sections. The preliminary survey party began chopping their way through the thick underbrush towards the first control point, which was established about two miles from Melville Camp. This party set a line which was followed by a contour party, and the information obtained was transferred to a large map. From this map the final location of the road was determined and established by the location survey party. Calculations for curves and alignment were carried out by the cadets under supervision of instructors. The profile of the proposed road was then plotted and from this the grade was set. Finally the grade stakes and slope stakes were established to guide the operators in determining the depth of cut or fill required. Although most of the cadets had received instruction in surveying at college, all agreed that the experience gained with instruments was invaluable training. Numerous errors occurred requiring a back-check of measurements, but in spite of this and the very dense bush encountered, the preliminary survey was carried a distance of more than three miles.

The bridging project was perhaps the most interesting part of the training. Before beginning bridge



Operating a bulldozer on grading work. The size of the felled tree in the background gives some idea of the heavy work required to clear timber from the route of the road.

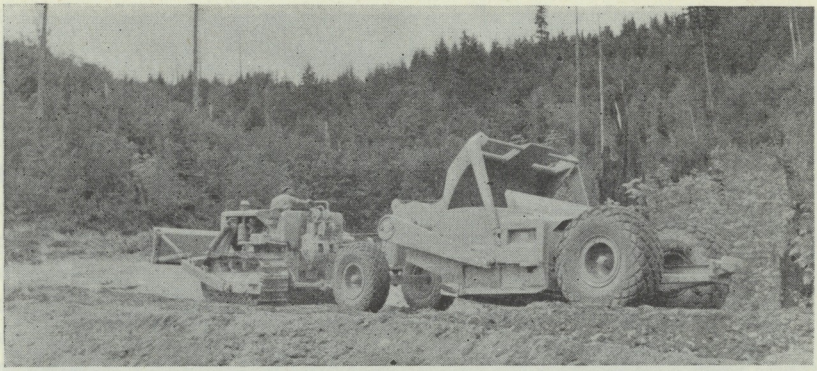


Bulldozing the road to the grade required.

work, the troops were given three days of lectures on the design and construction of improvised bridges. Bridging gaps were provided by a study of the profile of the road and the entire task of design was turned over to the cadets. Each syndicate presented a design, from which the most suitable was selected. The leader of the syndicate whose design was selected automatically became the "consulting engineer" for the project, a position which caused much spirited competition.

Material for the bridge was obtained partly from local timber and partly from the Supply and Equipment Depot at the School. Two Ingersoll-Rand air compressors complete with pneumatic saws and hammers were made available, and were used extensively. In some instances the design called for large I-beams which necessitated the use of a crane to hoist the members into place. Four bridges were constructed in all, each designed to carry a Class 50 load. A total of 385 feet of bridges was erected, having a maximum span between piers of 32 feet and a maximum pier height of 20 feet. The time required for each project varied with the span and the number of cadets available, but averaged 2½ weeks.

In addition to the training already described, the cadets were able to gain first-hand experience in other military engineering subjects. In many instances, bulldozers were unable to cope with the deep-rooted trees, and demolition charges were set off to eliminate these obstacles.



A bulldozer scraper in operation.

Thus the cadets were able to put their previous year's training to good use. They were also able to observe the technique employed in water and power supply, field hygiene and sanitation, and camp administration. The equipment operators, fresh from a course at the Royal Canadian School of Military Engineering, were given an opportunity to handle and maintain each piece of equipment, thereby increasing their versatility.

Because of the recreation available, and because of the high standard of camp administration in general, the morale of the cadets remained at a high level throughout the summer. Ample facilities for after-duty relaxation were provided. A baseball diamond was set up in the camp, and since there were always two troops available, many a spirited game was witnessed during the evenings. Although swimming was not feasible in the swift current of the Chilliwack River, transport was provided twice weekly to take the swimmers to Cultus Lake, a summer resort about 10 miles from Melville Camp. The camp "theatre", an ancient farm building, served as a place to project films sent out from the main camp. During week-ends most of the cadets were free to leave camp by transport, although some were required to remain for week-end duties.

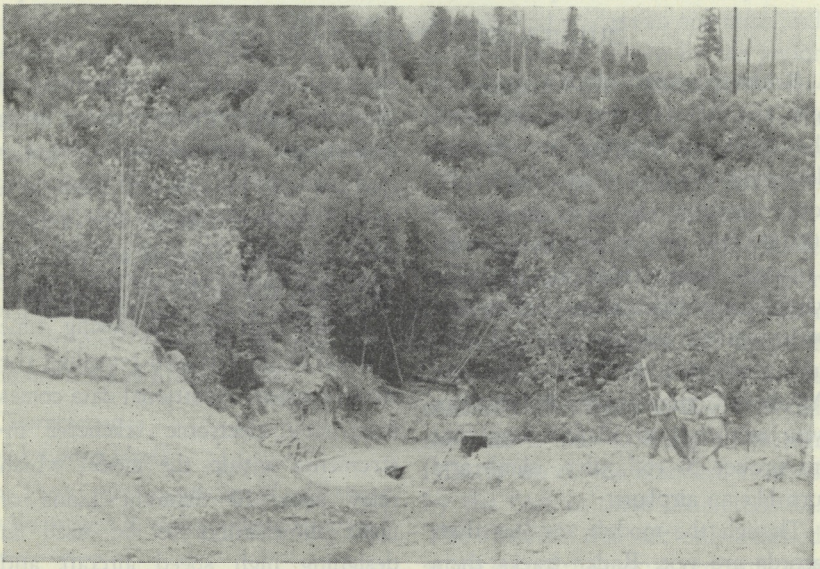
A total of 129 COTC and Service College cadets and Young Officers attended Melville Camp during the summer. In addition, the camp supported a staff averaging 15 men, including operators, instructors and civilian personnel.

Melville Camp was officially closed at the end of September, and dismantled, but two operators remained for a few weeks afterwards in order to consolidate the road for the winter.

It was felt that a huge task had been accomplished in this first attempt, and although the project had several faults, its purpose had been well served. Several distinguished visitors who saw the scheme in action paid glowing compliments to the work being done.

Looking back, however, it must be admitted that there is considerable room for improvement in the new scheme. It was realized that the project could not be geared to the same speed as a civilian contractor might accomplish, because the troops were learning the job as they progressed. Since each cadet had to be changed from one job to another each day, the programme suffered from lack of continuity. Plans are being made to re-organize the control of the road construction. Training programmes will be amended to emphasize the importance of more adequate side slopes, larger culverts and wider ditches. A more extensive coverage of soils will be made possible by the acquisition of a fully-equipped soils laboratory for the 1952 project. Closer supervision of the survey section will be necessary to eliminate time-consuming errors.

At the time of writing, reconnaissance is being carried out for a new camp site. It will not be known whether or not the camp site will be



This photograph shows the heavy bush through which the Engineers pushed the new road.

Widening the road with a bulldozer.

changed until all factors have been weighed. However, it is definitely known that the scheme will be continued this year, with renewed speed and effort, and all eyes will be on the Engineers for the day when they will open the gates of the Chilliwack River Valley to the public.

Supersonic Proving Ground

Rocket-powered models fired out over the Atlantic from an island off the coast of Virginia are helping determine the best shapes for tomorrow's airplanes. Some fly as high as 100,000 feet and as fast as 40 miles a minute before plunging into the water miles from shore. These experiments in aerodynamic behavior are conducted by the National Advisory Committee for Aeronautics with models 4 to 12 feet long that are pre-set to roll, dive, climb and turn like an airplane.

Though the models are lost their records are not. Radar tracks them and provides a running record of their velocities. The latter is obtained through Doppler velocity radar, using two large saucer-shaped antennas that are side by side and move as a unit. Continuous radio waves from the transmitter antenna are reflected back from the model to the receiver antenna, with the increasing time interval of their return revealing the model's speed. Additional data comes from tiny electronic telemeter instruments within the model which relay back 10 different kinds of flight information to be used in designing high speed aircraft and missiles.—*Popular Mechanics* (U.S.).

TANKS AND INFANTRY—THE NEED FOR SPEED

LIEUT.-COLONEL R. M. P. CARVER IN THE "JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTE"*

Since the end of the war, much attention has been paid to ensuring that the pre-eminent position of the infantry is maintained in peacetime, to maintaining a higher standard of infantry training, and to integrating all arms in support of the foot soldier. This is all healthy and good; the Royal Armoured Corps, more than any other arm, should welcome every effort which may lead to an improvement in the standard of training of the infantry. However, some of us have a fear, shared by many infantrymen, that infantry training today tends to concentrate too much on the operations which were found comparatively easy during the last war and not enough on those operations which were the most difficult, which demanded the highest standard of infantry training, and which paid the greatest dividend for the least expenditure of human lives.

Characteristics of Infantry Units

Tank soldiers, most of all those who served in independent armoured brigades which supported several different divisions, infantry and armoured, realize, perhaps better than many infantrymen, the widely varying standards and characteristics of different infantry formations and units.

If I had been asked at the end of the war, or were asked now, in what particular I found the greatest difference between the various types of infantry, I would have said that it was in the speed at which they could organize and execute an operation and in the initiative shown by the junior commanders. The standard in airborne and motorized infantry units generally was higher in these respects than in the regular infantry divisions. The standard within infantry divisions varied immensely, from those which equalled or surpassed mobile or airborne formations to those which were agonizingly slow. If, again, I were asked what was the greatest need of the infantry to-day, I would say that it was to bring all British infantry up to the standard reached by the best in these characteristics. The standard was not only reached at the end of the war; it probably was at its highest in the Eighth Army at

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

the end of the North African campaign. There were many occasions in Northwest Europe when I could not help wondering what fate some of the more stately formations would suffer if they had to consider a serious counter-attack by the enemy, or try and compete with the type of operations we had to undertake in the desert before Alamein.

Functioning of Command

The Germans and the Americans both rightly accuse us of being ponderous in action. It is wrong to assume that this is a national trait. When trained for mobile and rapid warfare, the Briton is second to none. The main reason is that we have not sloughed off the effects of World War I. The difference in outlook and method between those who started the war in the desert, where failure to act quickly led inevitably to capture or worse, and those who had trained for many years in England, was most noticeable when we got to Tunisia, Italy, and Normandy. The tendency of training in peacetime, or in England in wartime, to hold extensive post-mortems after exercises, to stress the importance of careful planning and detailed foresight, and to see that everyone is in the picture, important as these factors are, led, and still leads, to the lengthy and detailed conferences and the meticulous planning which is so often criticized by Americans and causes so ponderous a functioning of the military machine. Contrast it with Rommel's method of command and note the results. This criticism is not confined to the infantry; many armoured formations, particularly army tank brigades, were equally ponderous.

Mobile Warfare

First among the causes of slowness on the battlefield, therefore, is the ponderous functioning of command, a legacy of World War I. Second is our general concept of land warfare, also a legacy of that war, unfortunately reinforced by a good deal of experience in the last war in such theatres as Italy and the Far East, and aggravated by the type of operations in which the Army has engaged, since the end of the war, in Palestine, Malaya, and Korea. In discussing this, it is as difficult to maintain a central, reasonable, and realistic attitude, without being misunderstood, as it is in politics. One is accused by the extreme advocates of mobility of giving in to the mentality of World War I, and by the average infantryman of trying to resurrect a discarded theory that wars can be won by mobility alone without the infantry.

The basic principle, which was as true thousands of years ago as it is today, is that the pitched battle is not decisive unless it leads to the conditions in which mobile forces can be

employed. Unfortunately, history and the popular conception of war on land throw the limelight on the pitched battle, and only students of war, as a rule, study and remember the moves which precede and follow. But it is those moves which force the decision. That, surely, is the main lesson to be learned from the experience of 1914–18—and from the *Iliad*.

Attrition is a wasteful, indecisive, and despairing method of warfare, in which victory, if it comes at all and is worth having when achieved, goes to those with the greatest reserves of manpower. To take only one example, the battle of Alamein was not of itself decisive until it led to the conditions in which we could employ our mobile forces. It was the pursuit after Alamein which decided the campaign in Africa. If this principle is kept firmly in mind, and the well-planned battle is seen as the means of creating as rapidly and cheaply as possible the conditions of mobile warfare, one gets one's values in proper perspective, and the importance of training, organizing, and equipping one's army for mobile warfare becomes evident.

Training

Let us take training first. There is a tendency to divide operations up into those executed by infantry divisions and those carried out by armoured divisions, and to imagine that there is a clear-cut division between the two. In the first case, that is, operations executed by infantry divisions, the actions involve a well-planned battle, where all details have been worked out in advance, and the sudden, hand-to-hand type of fighting, carried out at infantry pace with infantry as the primary fighting arm, supported by tanks on the basis of an armoured regiment to an infantry brigade. In the second case, that is, operations carried out by armoured divisions, the actions involve the pursuit, with tanks as the primary fighting arm, supported by infantry. The fact that there may be a mobile battle or a period of mobile warfare, which is neither pursuit nor withdrawal, often is forgotten. There were many such battles on the Russian front during the war, and the campaign in France in 1940 was another example in this type of combat. Perhaps the best example in our own experience was the prolonged battle around Tobruk, in 1942, often called the battle of Gazala.

The result of this is that training tends to concentrate on the well-planned battle (with all the details worked out in advance) for the infantry division and the pursuit for the armoured division. Although the former involves very intricate and detailed staff work and the most intimate integration of all arms, both are fundamentally simple and compara-

tively easy, as they are not possible without a considerable degree of superiority over the enemy. The real test of quality in leadership and training comes in all the various types of operations between the two, which will be the decisive stage. It is these stages which seem to be neglected in training, principally because they are extremely difficult to practice with any realism. Neglect of training for this type of action, however, may prove disastrous.

Organization

This attitude also has a serious effect on organization, particularly in the armoured division. Success in these operations depends largely on speed, for it is only by superior speed that the initiative can be seized and maintained. It must be the constant aim of all concerned to develop operations as rapidly as possible beyond the speed of the man on his feet, and to prevent them from returning to that tempo. This is true not only because a man on his feet moves so slowly, but also because the speed of control is inevitably so slow in dismounted operations. Speed on the battlefield is not solely, nor even primarily, dependent on the actual miles an hour which tanks or other vehicles can achieve. It depends most of all on speed in acquiring and disseminating information, making decisions, issuing and transmitting orders, and, most important of all, in translating them into action.

Reorganization Wastes Time

One of the principal, if not the chief, causes of delay is that of reorganization within units and formations in order to execute orders received. The process of "marrying-up" different arms to suit the requirements of the task, particularly if they are not accustomed to fighting together, can be very lengthy, involving not only tactical grouping, but also signal and administrative arrangements. Failure to "marry-up" properly will lead to failure in the execution of the task. It is, therefore, of vital importance that the normal organization of a formation should suit as wide a variety of tasks as possible, and it is here that the proper balance of armour and infantry becomes extremely important.

In the well-planned battle, particularly if mine fields have to be cleared, the infantry generally is the primary fighting arm and a proportion of one squadron of tanks to one battalion, considering the area of ground covered, is normally both suitable and sufficient. At the other extreme, in the pursuit, if the country is open and if opposition is light or completely disorganized, it may be possible to operate an armoured brigade with the support of only one motorized infantry battalion. Under these conditions, a greater proportion of infantry will

only tend to slow down the tempo of operations. In any but open country, or where there is practically no opposition, as we discovered in Northwest Europe, a higher proportion of infantry to tanks probably will be needed, particularly now that we have to face the menace of the bazooka type weapon.

Standard Formations Were Effective

The experience of Northwest Europe led almost all armoured formations to adopt a standard brigade formation of two armoured regiments and two infantry battalions, the latter motorized or regular infantry battalions, carried wholly or partly in armoured personnel carriers or on the tanks. This had been the standard formation of the German panzer division for a long time. The brigade was formed into two groups, each consisting of an armoured regiment and an infantry battalion, and, within the group, squadrons and companies were "married-up" into squadron-company groups. Almost all, armour and infantry alike, who experienced this formation came to appreciate how effective it was for a wide variety of operations. I personally employed it with great success in conditions as different as the hand-to-hand fighting and the "break-out" in Normandy; the second stage of the clearance of the area between the Maas and the Rhine in February 1945, a well-planned battle under the most difficult conditions of ground and weather; the "break-out" from the Rhine bridgehead; and subsequent operations up to the Baltic. That this combination of mobility, fire power, and ease of control, with the decisive characteristics of infantry, could be employed in such a variety of conditions without any reorganization was a decisive factor in speeding up operations and in raising the standard of co-operation between armour and infantry to a very high degree. The only time it was not suitable was during prolonged defensive operations, or where major obstacles, such as defended mine fields, rivers, or ground impassable to tanks, prevented the full employment of tanks. Although these conditions occurred fairly often, they were of short duration.

The Formation of the Future

It seems to me, therefore, that success in the decisive stages of land warfare depends on our ability to employ this type of formation effectively. We shall not be able to do so unless we train for it and are organized on that basis. It needs a high degree of training, particularly in the infantry, and demands far greater speed of thought and action and a higher degree of initiative on the part of company and platoon commanders

than normally is achieved as a result of training for the well-planned battle. It demands from both armour and infantry a high standard of radio discipline and battle drill.

Change in Outlook Needed

It is, perhaps, most unfortunate that, at present, the armoured division is organized with the tanks all in one brigade, and almost all the infantry in the other. On rare occasions (very rare in Europe), the armoured brigade might fight as a whole, but the infantry brigade never without at least one regiment of tanks. For the vast majority of operations, I am sure that the division should be organized as two identical brigades, each of two armoured regiment-infantry battalion groups. If that is how they will fight, that is how they normally should be organized. I am not impressed by the argument that an "armoured" brigadier must train and normally command and administer the armour, and an "infantry" brigadier the infantry. It is only by training and commanding the other arms that the commander who has to lead them in battle will learn to understand them fully.

However, it is not only in armoured divisions that a change in outlook is needed, but also in infantry divisions and independent armoured brigades. There is a tendency to think that the only way to employ an independent armoured brigade in an infantry division is to allot one armoured regiment to each infantry brigade and leave it at that. In the initial stages of a well-planned attack, that normally will be the right answer; but I am sure that it should be the aim of infantry division commander to employ his armoured brigade as a brigade, by the addition of an infantry battalion, carried in armoured personnel carriers if possible. In addition, as the situation warrants, other combinations are possible.

Conclusion

The process of passing an armoured division through an infantry division to achieve the "break-out" is a complicated and often a slow business, which is apt to lead to a loss of momentum and initiative. The infantry division must start the "break-out" itself with its own armour and must be prepared to fight a mobile battle thereafter. Success in these vital operations depends on rapid decision and action, on the ability to create, seize and exploit opportunities with the least delay. This will be possible only if all arms, particularly armour and infantry, are trained, organized, and equipped to this end. With the number of formations and units in the Army being increased, now is the time to concentrate on this type of training.

THE NECESSITY FOR MOUNTAIN TRAINING

FROM "ALLGEMEINE SCHWEIZERISCHE MILITARZEITSCHRIFT" (SWITZERLAND)*

In weighing the question of what type of special training is necessary for our Army, we must start with the premise that the Army must be trained for action in any section of our country. Both the Commission of National Defence and our National Administration have expressed themselves unmistakably, on various occasions, to the effect that our Army must be able to fight on the plains, in the Jura, in the Lower Alps, or in the high mountains. It is understandable, in view of the terrain configuration of our country, and the military and political significance of its various areas, that the defence of our Mittelland area is in the foreground, and that, primarily, that type of training is necessary that will render our forces capable of action in this area.

Mountain Defence is Important

Our entire training is shaped in accordance with this requirement. Our armament, also, is adapted to the requirements of the Mittelland defence. First place in our over-all training, alongside of anti-aircraft defence, is quite properly accorded to anti-tank defence and the schooling of our ground forces in mobile manoeuvres.

We must, however, realize that our men need to be able to operate in the defence of our country in areas other than the Mittelland. Thus, it also is necessary to train our Army for defence on our mountain fronts. Even though we understand clearly that mountain warfare is neither of primary significance nor of a decisive character, the idea that mountain warfare is but an incidental matter is erroneous. Such a concept must be rejected because of our own particular conditions. Our entire southern and eastern frontiers are of a pronounced mountainous character. The experiences of the last war, in Italy, teach, moreover, that fighting in a terrain corresponding to our Lower Alps imposes the hardships and difficulties of mountain warfare on troops.

North-South Axis Over the Alps

In the event of a war in Western Europe, the north-south axis over the Alps will be of great significance,

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

for the routes between the West German area and the Mediterranean are of vital importance to both belligerent parties. Complete security of these lines of communications is assured only to the one who controls the Western Alps. And whoever wages war on us, to force the Swiss people to their knees, also will have to take control of the Alps. By recognizing this fact, it becomes clear that our Army must be trained and ready for employment in the mountains.

Weighing the Military Requirements

It is often stated that this fitness already exists, because our country has at its disposal a large number of mountain experts and skiers. However, such statements are not sound. There exist several major differences between the requirements of civilian mountain activities and skiing and those required for mountain warfare. He who believes and maintains that the availability of thousands of mountain experts and skiers suffices for our preparedness for military operations in the mountains is drawing a false conclusion. He is like those who were stating that we were a nation of marksmen and, therefore, needed no weapons training for combat. He who assumes that we can fall back on the civilian mountain requirements for our troops for mountain warfare is voting for improvisation, which, today, is definitely refused recognition in all training branches of the Army. It is one of the greatest lessons of war, as learned in both World War II theatres, as well as in Korea. Nothing can be improvised for combat in difficult terrain, and so far all improvisations have failed in the mountains.

We must realize the significance of this lesson. It is not enough to organize and equip a force for mountain combat; it must receive specialized mountain training, because the requirements for mountain warfare are many and varied.

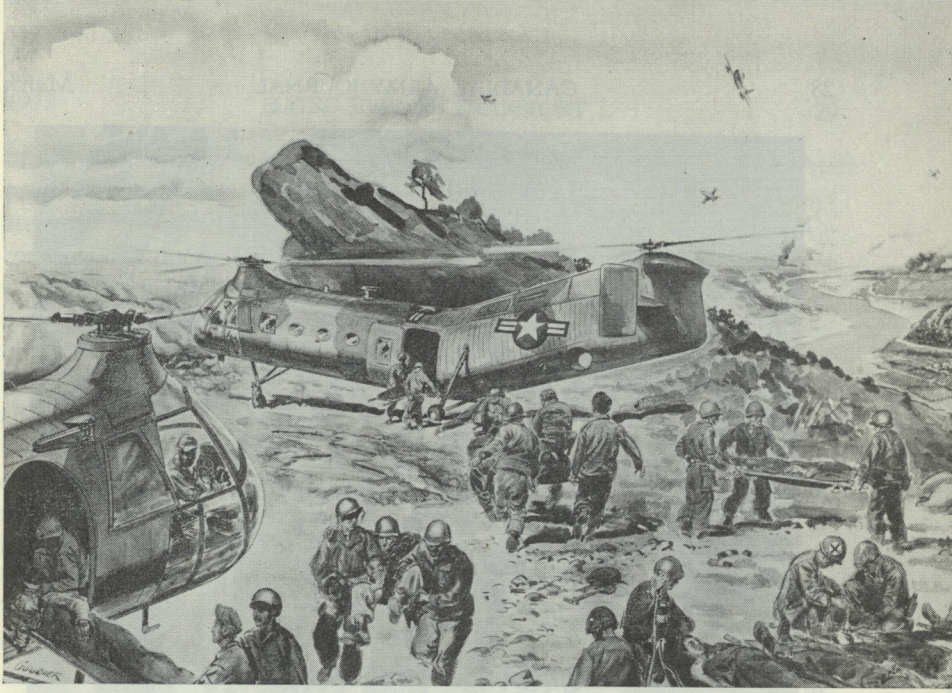
Summary

In summary, it may be stated that our Army needs constant and consistent mountain training. This comprises both mountain refresher courses as well as occasional mountain manoeuvres. It also includes voluntary courses in mountain warfare, as valuable complementary training.

Only through mountain training on a broad scale will our Army's fitness for that form of combat be assured.

Television Landings

The (U.S.) Navy has disclosed that its new giant carrier, the *Forrestal*, will use a secret television system to help planes land on the deck. The 59,000-ton craft is expected to be commissioned in about three years.—*News Release.*



This picture is an artist's conception of the Piasecki *H-21* helicopter, nicknamed the "Workhorse". It may be used for a variety of transport work.

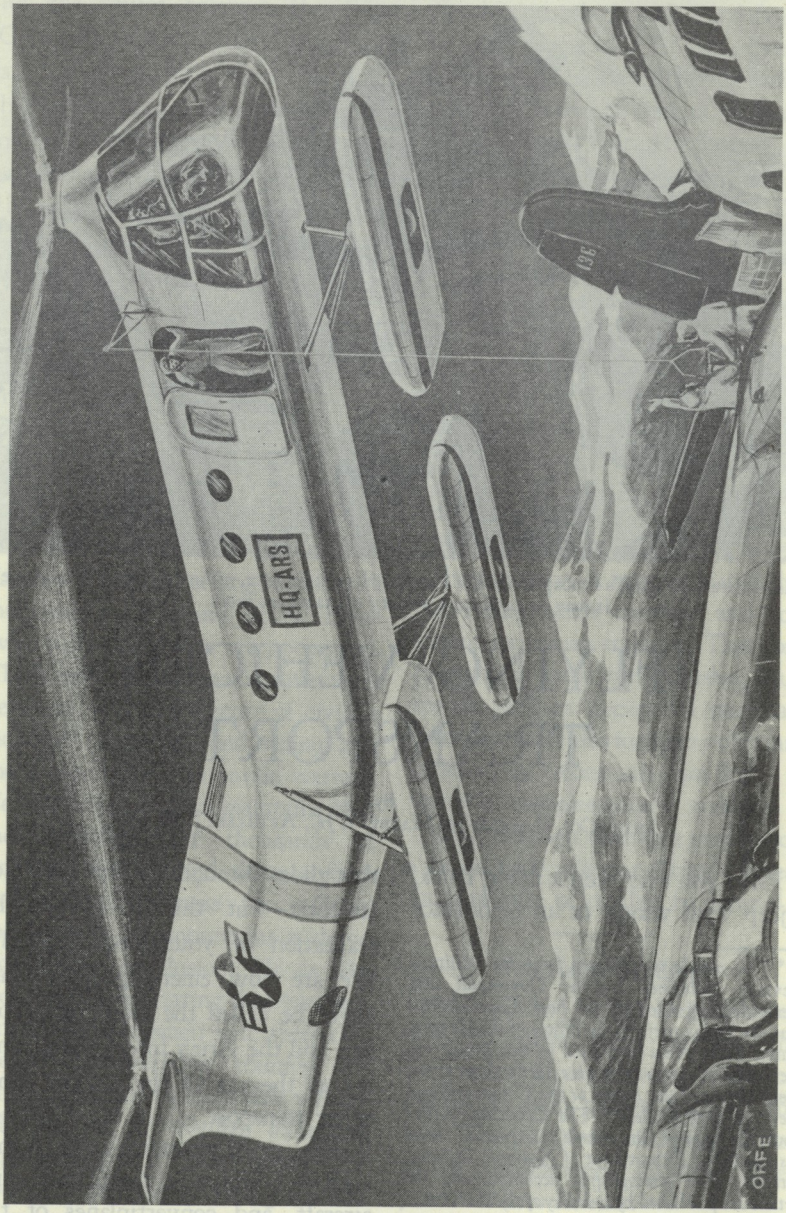
FLYING VEHICLE TRANSPORT

By
LIEUT.-COL. CHARLES W. MATHENY, JR., ARTILLERY [U.S.]*

Have you ever seen a flying truck, a jeep with wings, or an ambulance that glides through the sky? It sounds fantastic—but this is almost the realization of your modern Army. We are now emerging from what might be called the motor transport age, and the Army forces are advancing to the use of the newest types of air transport.

The use of aircraft by the Army, such as helicopters, small fixed-wing aircraft, and convertiplanes of the

* *This article is reprinted from the* Military Review, *published by the Command and General Staff College at Fort Leavenworth, Kansas. In his preface, the Editor of the* Review *states: "The views expressed in this article are the author's and are not necessarily those of the Department of the Army or the Command and General Staff College." The* Canadian Army Journal *applies the same reservation with respect to the Department of National Defence, Ottawa. The photographs accompanying the article are published by courtesy of the* Review—Editor.


HQ-ARS
ORFE

future, which can operate without prepared landing strips in the forward areas of the battlefield, opens new concepts of ground operations which can affect important changes in the nature of land warfare. The more extensive use of aircraft transport by front-line fighting units does not alter the role of the combat soldier, but further stresses the fact that the character and equipment of the front-line fighting soldier, that we have known in the past, gradually is being changed in modern warfare. These changes are coming about through the adaption, for use in Army units, of modern transport, weapons and communications which have been made available by recent technological advances. A modern army must continue to have well-trained, physically hardened, intelligent, high calibre, technically qualified combat soldiers, but the techniques, equipment, and the methods of ground combat will be revised and reoriented toward utilizing the advanced technical ability of the average citizen of today.

Modern Transport

A primary factor concerned with the modernization of Army tactics is the use of modern transport. Air transport, both in the form of long-distance cargo planes of the Air Force, and in the form of short-haul helicopters of the Army, will revolutionize current thinking as to the logistical support and tactical mobility of land forces.

The Army is extremely interested in helicopters. The characteristics of this new type of vehicle, which include speed (3 to 4 times that of ground vehicles), the ability to operate without roads or airfields, and the ability to move military loads over water and terrain obstacles, make it apparent that helicopters will complement and replace, to a considerable extent, the present vehicular transport of front-line Army units.

Recent technical advances in helicopter design and operation are attracting increasing attention to their utilization in divisions and smaller tactical units, to add speed and flexibility to Army tactical operations and to battlefield logistical support in the forward areas. By utilizing the most modern and improved types of transport adaptable to use in Army combat units, the mobility, combat effectiveness, and resulting efficiency of these units can be improved. Helicopters will be used as short-haul transport in corps, divisions, and smaller tactical units to provide greater mobility to ground combat operations by the air movement of

An artist's conception of the *H-21* being developed for the U.S. Army and Air Force. This helicopter features an "omniphibious" landing gear which enables it to land on snow, ice, water or land without changing the gear.

men, matériel, and equipment in the combat areas.

As recently as the early 1930s, the Army converted its transport from horses to motor vehicles. The continued modernization and improvement of organic Army transport in combat operations is logical—from the motor vehicle to the helicopter—and the use of this faster means of transportation in Army units does not change or affect the roles or missions of these units.

The Army is beginning to make greater use of helicopter transport, and a conversion from vehicles to this new type of air transport is taking place in certain specialized units, and for certain missions. This does not create a necessity for an Army Air Force, since aircraft can be integrated into our present units to fulfill Army requirements most advantageously and economically.

The use of this new type of air transport, of particular interest to the Army, which has been made available by natural evolution and advances in modern transportation and recently developed to the point of practical employment in Army units, does not infringe on the roles and missions of

Proposed for air evacuation as well as for observation, the *XH-26* helicopter, above, is designed so that it can be dropped from larger planes, unpacked by two men and put in the air in approximately 20 minutes. It is being developed under the sponsorship of the U.S. Army Ordnance Corps.

the Navy (including the Marines) or the Air Force. Helicopters are visualized as "flying jeeps" and "flying 2½-ton trucks" because they will perform similar transport tasks without the use of roads or airfields.

The use of these "flying trucks" in the Army is something new, and everyone realizes that there are many aspects of their use and further development which must be improved. Present limitations on the effective employment of helicopters are of the same nature, mainly technical, as those which have been encountered during the development of other means of transportation. It is accepted that present shortcomings such as load limitations and mechanical reliability will be overcome, as in the past, in the gradual process of further development.

Helicopter Transport Company

The Army now is organizing helicopter transport companies for allocation to divisions primarily for the purpose of providing a rapid means of transportation for infantry units. These helicopter transport companies will operate in the divisions in the same way as the present truck transportation companies. They will perform a variety of tasks including the transport of supplies, food, and ammunition. Each company has 21 transport helicopters and 2 small helicopters for command and reconnaissance purposes. A unit is capable of transporting, in one lift, the personnel and equipment for the combat elements of an infantry rifle company. In addition to using helicopters in transportation companies, they also may become a part of the equipment of battalions and companies of combat and combat support units that can use them advantageously.

Contemplated Use

Small helicopters have been used in the combat arms of the Army since 1947. Helicopters now are being used for tasks similar to those performed by the jeep. These tasks consist of transporting personnel, wire laying, reconnaissance, fire control, flank security, the movement of security patrols from one location to another, the evacuation of wounded from front-line positions, and even for flying hot food to men stationed in advance outposts.

The Army will use light cargo helicopters to transport personnel, supplies, equipment, and ammunition; to evacuate the wounded; for the rapid movement of reserves from rear areas to the front lines; to move tactical units from one position to another to counter enemy attacks or to initiate offensive operations; to conduct vertical envelopments either separately or in combination with flank envelopments; and to facilitate

mountain, arctic, and jungle operations where the use of ground vehicles is restricted.

In arctic regions, the difficulties and limitations imposed on military operations primarily by transport may be eliminated, to a considerable extent, by the use of helicopters. They can be used for night as well as daylight operations, since they do not require lighted landing areas. Transport helicopters will allow for a wider dispersion of troops on the battlefield, yet permit their rapid concentration at a decisive point.

When the lift capacities of helicopters have been increased, it is quite possible that all types of supplies and ammunition can be so transported to speed the advance of a modern army. Heavy lift helicopters may be used to transport artillery pieces to gun positions in otherwise inaccessible terrain. In river crossing operations, helicopters can be used by the engineers to facilitate bridge construction and the movement of heavy equipment to the far shore prior to completion of a bridge. Eventually, the proper use of helicopters may so increase the mobility of Army units as to render those units, in the forward areas, virtually independent of conventional lines of communications.

In this new field of transport, the Army has requirements for rotary wing type aircraft from those capable of carrying one person to one capable of transporting 50,000 pounds for limited ranges. Small, single-place, two-place, and four-place (¼- to ½-ton capacity) command and reconnaissance helicopters can provide transportation for purposes of control observation, and the emergency evacuation of casualties; in short, perform tasks similar to those now accomplished by the jeep. Next in size are utility helicopters (¾- to 1-ton capacity) which will carry from 6 to 10 persons or 3 to 5 litter patients and provide a faster means of transportation for the odd jobs now performed by the weapons carrier and ambulance. A light, cargo transport helicopter—a "flying 2½-ton truck"—is necessary to carry loads approximating 2 tons or 15 persons. Larger transport helicopters are required to provide the necessary heavier transport for battlefield logistical support and tactical operations in the forward combat areas. Heavy lift helicopters will meet the requirements for a "flying crane", capable of moving heavy equipment over terrain obstacles.

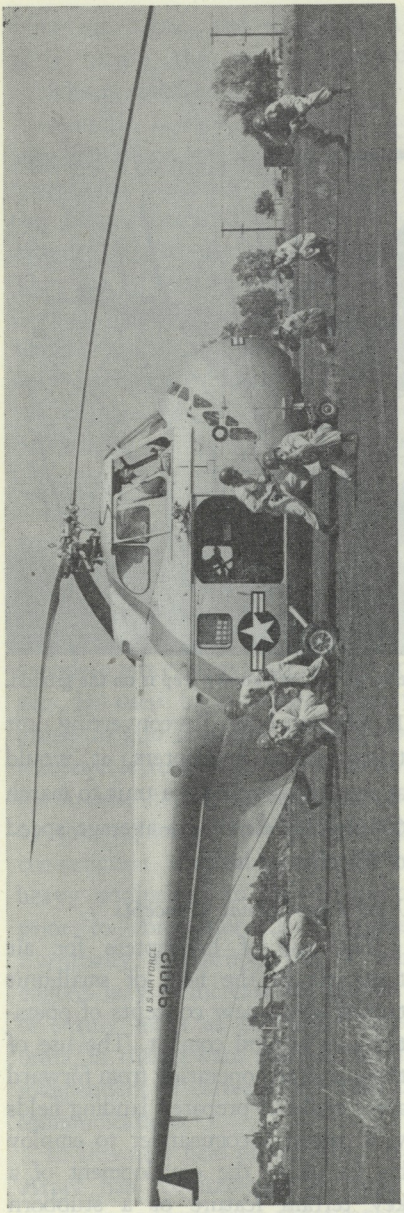
Prior to the 1930s, ground manoeuvres were measured by the average distance that infantry or cavalry units could march in a day. After the conversion of the Army's combat transport from horses to vehicles, land operations were based on the average distances that combat units

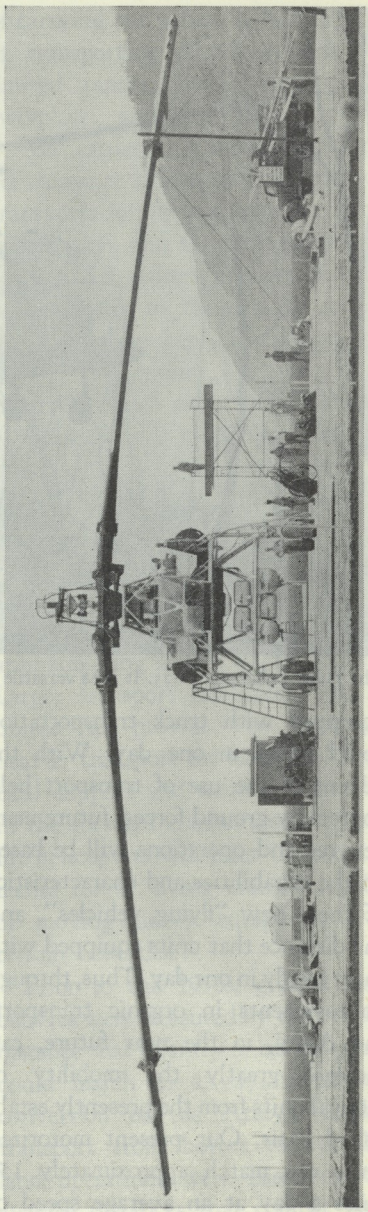
The Hiller helicopter *H-23*. It is as versatile in the air as the well-known jeep is on the ground.

equipped with truck transportation could travel in one day. With the advent of the use of transport helicopters by ground forces, future manoeuvres and operations will be based on the capabilities and characteristics of these new "flying vehicles", and the distance that units equipped with them can fly in one day. Thus, through improvements in organic transport, the Army, in the near future, can increase greatly the mobility of tactical units from the presently established basis. Our present motorized units can march approximately 150 miles a day at an average speed of 15 miles an hour. By converting unit transport to helicopters, it would appear reasonable for a unit to march 600 miles a day at an average speed of 60 miles an hour.

New Operational Concepts

The use of helicopters for air transport in the field of small-unit tactics opens new concepts of operations in ground combat. The use of these aircraft, operating from forward areas without prepared landing fields will permit a commander to employ his forces in the envelopment of a key terrain feature or a stubborn


U.S. AIR FORCE
62012



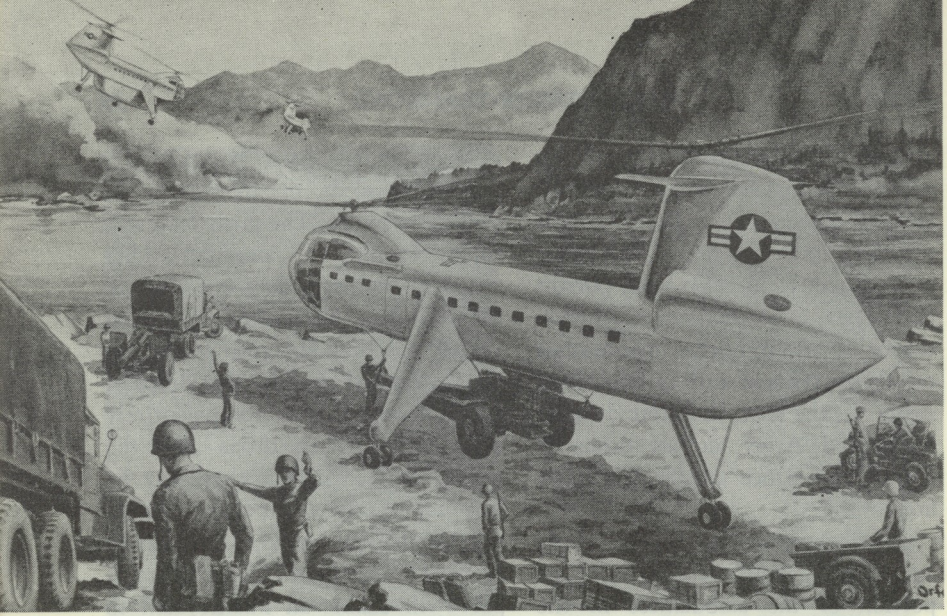
centre of resistance by rapid air movement instead of by difficult ground movements. The potentials resulting from the use of helicopter transport in connection with pursuit operations, in stopping enemy breakthroughs, and in normal manoeuvres on the battlefield can be visualized easily. In the past, the ground forces have used Army aircraft primarily for reconnaissance and field artillery fire control.

The helicopter, used as a "flying ambulance", will replace a large portion of the ambulances in the forward combat areas, since it can pick up the wounded in the front lines and transport them directly to base hospitals in a fraction of the time now required by vehicular transport. The "flying ambulance" can facilitate the evacuation of wounded in cold weather operations where, at temperatures of 40° below zero, immediate evacuation is imperative to prevent the wounded from freezing.

The use of helicopters to transport relatively large units will revolutionize mountain warfare. Alpine operations formerly have been limited by the slow tedious movement of small groups of highly trained specialists. All supplies have been "backpacked", pulled on sleds or toboggans, or packed on mules. The great technical superiority that the American soldier normally possesses does not exist in the mountains. No tracked or wheeled vehicle has been designed to replace the pack-board or mule. Air drops of equipment have not been entirely satisfactory. When drops miss the target by several feet, they may be lost completely or it may require a several hour cross-country trip to retrieve the supplies. Helicopter transport will enable an infantryman to seize important heights rapidly, heights that formerly were accessible only to qualified mountaineers after hours of difficult climbing.

With the strides which are being made in the development of larger type helicopters, it is quite possible that the movement of certain types of supplies over normal terrain for distances of approximately 100 miles can be accomplished more expeditiously and economically than by present methods. The logistic support of rapidly advancing troops was a major problem of World War II which may be overcome by the use of transport helicopters. In addition to providing a faster and more flexible means of transportation, it is to be expected that numerous intermediate supply points, medical installations, and other support facilities can be eliminated, resulting in a considerable

Left, above: The Sikorsky *H-19* light cargo helicopter which can transport 8 to 10 men. *Below:* The *XH-17* "Flying Crane", capable of moving heavy equipment over terrain obstacles.



An artist's conception of the *XH-16* being used to transport a 155-mm howitzer.

savings in logistical personnel and equipment which, in turn, would contribute to a reduction in supporting troops. The consequent reduction of traffic on the highways in the combat area should reduce congestion and maintenance problems.

Transport Capabilities

A rough calculation of the transport capabilities of helicopters *versus* vehicles indicates that 105 helicopters (payload, approximately 3,500 pounds —cruising speed, 100 miles an hour) could move some 2,500 tons (5 days of supply for a division) an airline distance of 60 miles in 24 hours. In comparison, between the same two points (estimated road haul distance 80 miles), 105 2½-ton trucks can move some 1,000 tons (2 days of supply for a division) in the same 24-hour period. Improved transport helicopters are expected to have payloads of 4,500 pounds and, with this greater payload, they could move approximately 3,500 tons (7 days of supply) as compared with 1,000 tons for the vehicular transport. As a rule of thumb, we might say that it takes about three trucks to move as much as one helicopter, with similar capacity, when performing tasks of a short-haul transport nature in areas where adequate roads are available and the ultimate destination is accessible to trucks.

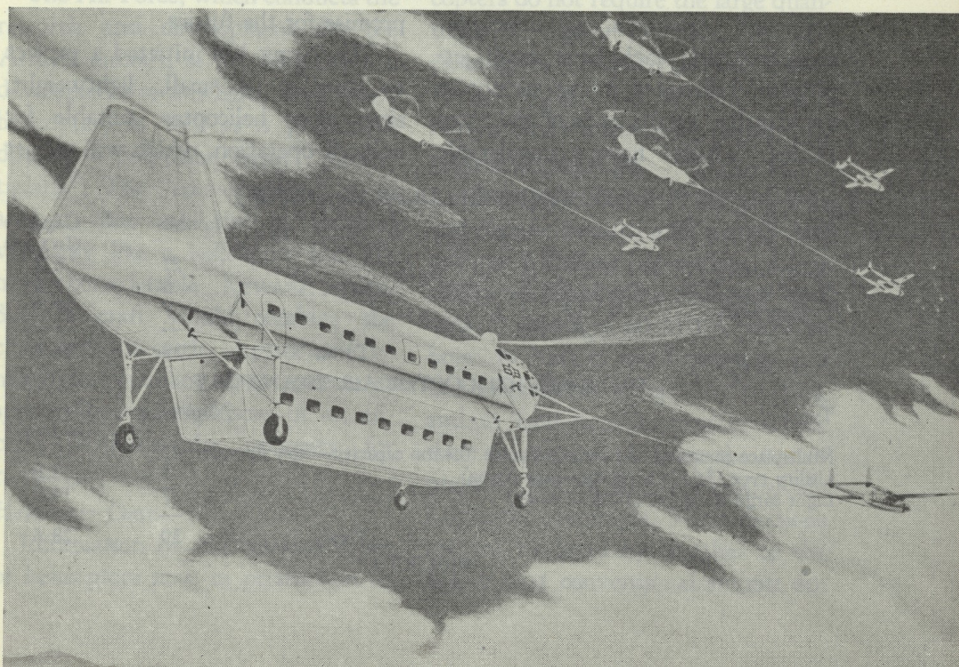
In due time, the vehicles of some combat units may give way to rotary wing aircraft. Even in the current state of development, the load capacities of helicopters compare favour-

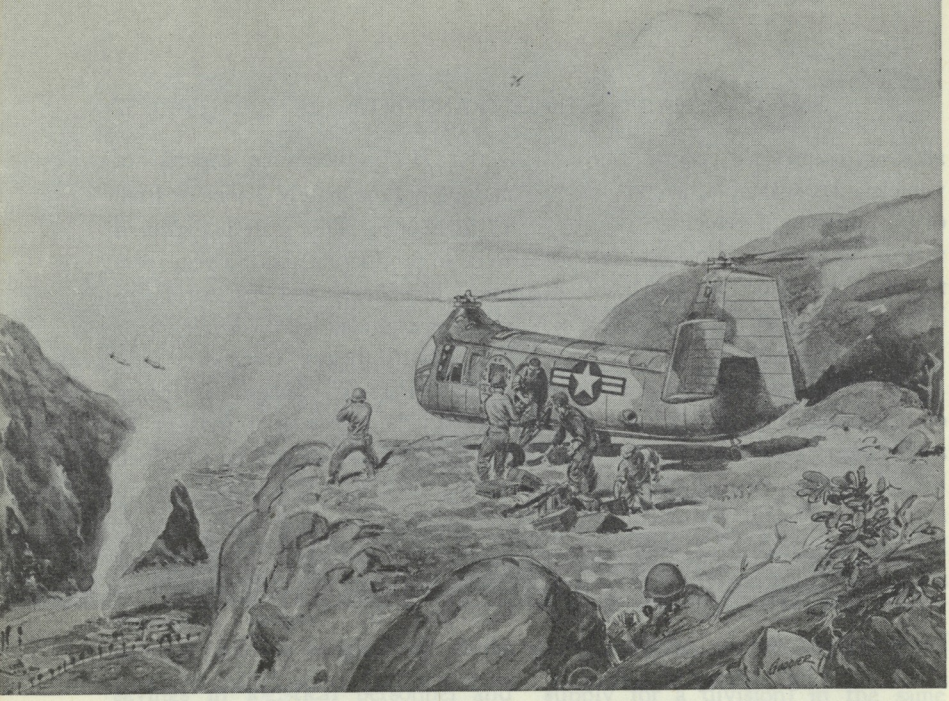
ably with present general purpose vehicles. For example, a comparison of the capacity of vehicular transport *versus* helicopter transport for an infantry battalion is indicated in Figure 1 (see page 38.)

Research Progress

There are two general categories of helicopters now flying: command and reconnaissance helicopters capable of transporting a cargo up to approximately ½ ton, and utility helicopters capable of transporting a cargo of approximately ¾ to 1 ton. The Piasecki Helicopter Corporation has developed, for the Army and the Air Force, a light transport helicopter —the *H-21*—which is capable of moving approximately 2 tons or from 15 to 22 men. This craft is expected to be in production about a year from now. The Army and the Air Force also have under joint development the *XH-16* (heavy transport) helicopter (Piasecki) which is being designed to transport 3 tons or 25 troops. The *XH-16* will be equipped with a large detachable pod or compartment which is a new development in air transport. There also is under development a turbine-powered helicopter by Hughes Industries which is designed to lift approximately 9,000 pounds. Hiller, McDon-

An artist's conception of the *H-16* helicopter being towed. The basic configuration is a twin tandem rotor, detachable pod capable of carrying 6,000 to 8,000 pounds of cargo or 40 combat loaded troops.





Another painting showing the Piasecki *H25A* being used at an outpost or observation post in the forward area.

nell, and American, all helicopter manufacturers, each have small jet-powered helicopters flying (jet motors are attached to the ends of the rotor blades) which have considerable promise for the future.

The Army has initiated a project to develop a small, lightweight, single-place helicopter, suitable for military operation, which will use jet

PRESENT VEHICULAR TRANSPORT

Type	*Number*	*Capacity* (In tons)
¼-ton truck	27	6.8
¾-ton truck	5	3.8
2½-ton truck	7	17.5
Totals	39	28.1

PROPOSED HELICOPTER AIR TRANSPORT

Type	*Number*	*Capacity* (In tons)
Multiplace command and reconnaissance (0.4-ton capacity—now flying)	27	10.8
Utility type (¾-ton capacity—now flying)	5	3.8
Light cargo transport (2-ton capacity)	7	14.0
Totals	39	28.6

FIGURE 1.

propulsion. Jet propulsion has been adapted to pilot models of one- and two-place helicopters. This offers the advantages of greatly simplified design, construction, maintenance, operation, and reduced initial cost. Jet propulsion has the current disadvantage of relatively high fuel consumption. However, future developments may reduce this. Range limitations, imposed by high fuel consumption, are not a serious disadvantage in the Army's concept of mobility, which is concerned largely with movements for short distances. While the fuel consumption is great, the cost is low, since a jet will use almost any type of petroleum product, from crude oil to gasoline.

The Air Force, which conducts the research and development for the Army's aircraft, is in charge of the development of this light, single-place helicopter, as well as a project to develop a two-place Army "convertiplane". The "convertiplane" is an aircraft that can rise or descend vertically like a helicopter and yet have considerable forward speed. Such a craft would combine the characteristics of the airplane and the helicopter, enabling it to operate at speeds approaching those of an airplane without the necessity for runways.

Helicopter Data

Information on the various types of helicopters now in production or under development by the principal manufacturers in the helicopter industry is shown in Figure 2 (see page 40.) In addition to those shown on page 40, the Kaman, American, and McDonnell Aircraft Corporations have small helicopters in various stages of development.

As with other new types of transport or equipment which has been developed in the past, a considerable reduction in cost can be expected after industry has established mass production techniques and is producing in quantities. The helicopter is a rather complicated piece of equipment, but small craft eventually should be as simple to manufacture as the present-day automobile. Helicopters do not require the large quantities of rubber for tires that are essential to ground vehicular operations. On the other hand, they will require larger quantities of aluminum.

Logistic Capabilities

The supply of isolated ground units and beach assault and supply are primary helicopter operations. Their ability to fly undetected over tree tops at speeds of 80 to 130 miles an hour, to land in small clearings and unload complete units ready to fight, and to land supplies exactly where they are wanted without the use of prepared landing fields are exclusively helicopter operations. These missions are not hindered by weather to the degree that conventional aircraft are

HELICOPTER DATA

Type	Approximate Capacity	Speed	Proposed Use
		PIASECKI HELICOPTER CORPORATION	
HUP-1	¾-ton (6–8 persons)	105 mph, cruise 130 mph, maximum	¾-ton "flying weapons carrier"
H-21	2-ton (15–22 persons)	105 mph, cruise 130 mph, maximum	2-ton "flying truck"
XH-16	3-ton (25 persons)	.....	3-ton "flying truck"
		UNITED AIRCRAFT CORPORATION (SIKORSKY DIVISION)	
H-18	0.4-ton (4 persons)	105 mph, cruise 130 mph, maximum	"Flying jeep"
H-19	1-ton (8–10 persons)	90 mph, cruise 110 mph, maximum	1-ton "flying weapons carrier"
		BELL AIRCRAFT CORPORATION	
H-13	¼-ton (2–3 persons)	75 mph, cruise 90 mph, maximum	"Flying jeep"
YH-12	¾-ton (8 persons)	85 mph, cruise 105 mph, maximum	¾-ton "flying weapons carrier"
		HILLER HELICOPTER CORPORATION	
H-23	¼-ton (2–3 persons)	75 mph, cruise 90 mph, maximum	"Flying jeep"

FIGURE 2.

affected, and reduced mobility under bad weather conditions approach more nearly the restrictions imposed on ground vehicles.

Helicopters have been found by experience to be extremely useful in Korea where the road and rail systems are inadequate and the terrain is mountainous. Particularly is this new type of transport applicable in areas where ground movement is difficult or restricted, such as the Far East and most parts of Central Eurasia. The great mobility possessed by combat forces having organic air transport, which does not require landing fields, is one means of utilizing the advanced technical ability possessed by the United States to overcome some of the advantages, such as man-power, possessed by nations in the Soviet orbit.

If helicopter transport had been available in Korea, division and corps commanders might have used it to extricate surrounded units from the Changjin Reservoir area, thereby reducing the casualties and equipment losses of those units which were forced to battle their way through enemy territory to the Hungnam beachhead. Conventional aircraft were utilized for the evacuation of wounded in this emergency, but their use was restricted to operations from hurriedly constructed airfields.

The Sikorsky *H-18*, a four-place helicopter, is well suited for transporting personnel or cargo.

Susceptibility to Attack

Contrary to common belief, helicopters are less vulnerable and less susceptible to attack from the air than are vehicular transport. Truck convoys usually operate on highways which can be identified easily from the air, and the only evasive tactics against air attack are to move to the side of the road, or, if the highway permits, to pull off the road. Helicopters are more difficult to locate from the air than are trucks because their movement is not confined to any particular route and they can be widely dispersed. The evasive tactics of a helicopter, when attacked from the air, can be much more effective than the restricted movements of a vehicle on a highway. Helicopters are extremely manoeuvrable in that they can change altitude quickly and completely reverse the direction of flight momentarily. In relation to speed, vehicular transport usually operates on roads at a speed of approximately 25 miles an hour. On the other hand, helicopters normally operate at a speed of 75 to 130 miles an hour. In comparing the vulnerability from ground attack of a helicopter with that of vehicular transport, it has always been more difficult to hit an aircraft in flight than

Two more Hiller *H23*'s.

a vehicle on the ground. Recent combat experience in Korea has indicated that, contrary to popular belief, bullet holes in the rotor will not effect seriously the flight of a helicopter.

The Future

Looking to the future, it is not unreasonable to expect that a considerable portion of the vehicular transport now utilized by certain front-line Army combat units, such as the infantry regiment, will be converted to air transport capable of operating without landing fields. Certain divisions may even be partially or completely equipped with organic helicopter type air transport. During World War II, amphibious vehicles, which could operate on land and water, were developed, and it is probable that an "airphibian" helicopter, which can operate both in the air and on the ground, will be developed in the near future for use by Army forces. "Airphibian" craft of the fixed wing type already have been developed for commercial use and certified by the Civil Aeronautics Authority; similar principles might well be adapted to the helicopter.

Combining the characteristics of an aircraft and a vehicle into one mechanism would eliminate the necessity for the use and availability of both types of vehicles for certain special purposes. "Airphibians", suitable for operation in military units, would be most useful in situations

which now require travel in both an aircraft and a vehicle. Thus, in the near future, Army ground combat units may utilize, to the utmost, the tactical advantages to be gained through the use of short-haul aircraft transport adaptable to operation in Army units.

Savings

Helicopters and light aircraft used for transport will save time, effort, and increase our combat effectiveness in numerous ways. Some of the ways in which savings might be accomplished are:

1. The helicopter, used as a flying ambulance, probably will replace two or three vehicular ambulances for each helicopter placed in operation. The helicopter ambulance can pick up wounded personnel in the front lines and take them quickly to a base hospital for specialized care, thereby reducing fatalities among the wounded, reducing intermediate medical installations, and reducing the requirements for highly specialized medical personnel.

2. Numerous intermediate supply points may be eliminated, resulting in a savings in logistical personnel and

The Hiller "Hornet" which may be used for casualty evacuation.

equipment. Reduction of traffic on the highways in combat areas should reduce congestion and maintenance problems. The establishment of mobile floating Army supply depots, on old Liberty ships or similar vessels which could be moved easily along coastal areas or up navigable rivers from which helicopters could pick up supplies or spare parts and fly them directly to front-line fighting units, may add to the efficiency of the supply and maintenance system. Depots and maintenance repair installations of this type would be well suited to operations in Korea, Western Europe, or the Mediterranean area.

3. The use of transport helicopters would reduce substantially Army requirements for assault boats for river crossings and amphibious equipment required in landing operations.

4. Considerable savings already have been realized in an Army mapping operation in Alaska during the summer of 1950. It is reported that, utilizing helicopters to complement vehicular transport, the Army engineers were able to complete in one summer (2½ months) what would ordinarily require 6 summers (equivalent to 6 years, since this work only can be done during the warm months). On the basis of this experience, the Corps of Engineers has requested a substantial number of helicopters to expedite future surveying operations.

5. In January 1950, a rescue crew of trained mountaineers equipped with Army oversnow vehicles (*Weasels*), skis, ahkios, and ice climbing gear spent 3 days in reaching a crashed plane near the crest of a Yukon peak. On the third day after the crash, a helicopter was obtained. In less than 2 hours after take-off, the helicopter had picked up the injured and returned them to a hospital. It had returned for a second trip before the mountaineers reached the crashed plane.

6. Helicopter transport, in many instances, can make possible the rapid pursuit and exploitation of a routed enemy. Such tactics produce valuable savings in manpower and matériel.

7. Helicopter transport can be used to extricate surrounded units, eliminating many casualties and realizing considerable savings by the recovery of equipment which would otherwise be lost or destroyed.

8. Helicopters are a valuable means of transport for messengers and wire reconnaissance for signal units. A signal battalion commander in Korea stated that the use of one airplane permitted him to take 20 jeeps off the road for messenger service.

9. Each combat engineer battalion has one helicopter to reconnoitre roads and bridges, locate fords on rivers, and assist generally in engineering work. These craft save time and speed up many miscellaneous tasks.

10. Approximately 70 per cent. of the observed fires of the field artillery are conducted from organic aircraft, and thus, through improved observation, the combat effectiveness of the artillery has been increased.

Naval Usage

Experiences of the Navy, in operations in Korea, indicate that the roles which the helicopter has performed justify changes in the configuration of major ships for the purpose of carrying these aircraft. They have been extremely useful as a communications link between ships, and between ships and land liaison groups, permitting conferences to be held among widely separated parties that were working together, resulting in increased combat effectiveness. Some consider that the helicopter is far superior to the conventional aircraft in the role of observing fire. The helicopter has certain limitations, but none peculiar to conventional type aircraft for comparable usage. Based on these experiences, it is anticipated that naval commands will be asking for larger numbers of helicopters.

Conclusion

Army experiences, in actual combat operations in Korea, have proved the value of helicopters. The potentialities and the advantages to be gained from the use of aircraft adaptable to operations in Army combat units are fantastic. With proper encouragement, this is one of the fields in which great advancements will be made during the next few years. The "flying truck" is something new, but we cannot wait until it is completely perfected to start using it. All the services should find them extremely useful. The future improvements in this new type of air vehicle, and in the techniques of using it, will be of great benefit both to the military services for military operations and to the civilian economy for commercial purposes.

Struck Off Strength

In his biography of *Genghis Khan* (New York, 1927) Harold Lamb relates how that great War Lord turned his Mongul Horde into a permanent military organization, spending the winter hunting but subject to immediate call:

In the spring he announced that councils would be held, and all the higher officers expected to attend. "Those who, instead of coming to me to hear my instructions, remain absent in their cantonments, will have the fate of a stone that is dropped into deep water, or an arrow among reeds — they will disappear."

THE FIRST CANADIAN V.C.

By
J. M. Hitsman, Historical Section, Army Headquarters, Ottawa

"Forward, the Light Brigade!"
Was there a man dismay'd?
Not tho' the soldier knew
Someone had blunder'd:
Their's not to make reply,
Their's not to reason why,
Their's but to do and die:
Into the valley of Death
Rode the six hundred.

Thus wrote Alfred Lord Tennyson after news of Balaclava had reached England. Seven Victoria Crosses were later awarded to survivors for deeds of gallantry but the only officer to be so honoured was Canadian-born Lieutenant Alexander Roberts Dunn.

The second son of the Receiver-General of Upper Canada, Alexander Roberts Dunn was born on 15 September 1833 at York and received part of his education at Upper Canada College. After his father returned to England young Dunn attended Harrow before being appointed Cornet (by purchase) in the 11th (Prince Albert's Own) Hussars in 1852. When England drifted into war with Russia in 1854 he was a lieutenant and proceeded with his regiment to the Near East.

The British Army had suffered long years of public neglect and the eight cavalry regiments selected could muster only two squadrons apiece. Thus the Light and Heavy Brigades of some 1,500 sabres really should not have been termed a cavalry division. Moreover, it was to be the first appearance on active service for many units since Waterloo. Yet Sir John Fortescue argues in his monumental *History of the British Army* that the troops* given Lord Raglan "were probably as fine a lot of men, for their

**The British force comprised three battalions of Guards, 26 battalions of the line, 16 squadrons of cavalry and 66 guns. Only six battalions of the line had experienced active service in the preceding 30 years, however, and there was a dearth of battle-experienced officers for both command and staff.*

numbers, as ever were put in the field."

The safety of Constantinople having been assured an Allied force of 26,000 British, 30,000 French and 5,000 Turks was transferred to the Crimean Peninsula in September to seize the port of Sevastopol and put an end to Russian command of the Black Sea. An initial victory at Alma was not followed up, however, and the Russians were given time to strengthen the defences of Sevastopol. Ultimately, formal siege operations got under way but the enemy countered by forming a mobile force to threaten British communications with the base at Balaclava.

On the morning of 25 October this enemy mobile force drove the Turks from some redoubts covering this line of communications but was repulsed by the 93rd Highlanders and two Turkish battalions. The Heavy Brigade then drove off the Russian cavalry while awaiting the arrival of two British divisions to restore the situation. Had the Light Brigade joined in this attack a notable cavalry success might have been achieved but its Commander, Lord Cardigan, was waiting for orders.

When orders did come, however, they were (based on a faulty appreciation of a changed situation and consequently) misunderstood. Instead of recovering the positions and guns which the Russians had captured earlier from the Turks, the Commander of the Light Brigade understood that he was to attack the Russian batteries at the far end of the valley, a mile and a half distant and swept by the further fire of Russian guns on both flanking slopes. The order to advance was given and the Brigade of 675 all ranks swept forward in three lines, the second of which comprised the 11th Hussars*. The leading ranks were reduced to a remnant by musket and artillery fire from the flanks but pressed on and seized the batteries supposed to be their objective, "sabring the gunners there". No support being forthcoming, however, the remnants were formed into two principal bodies for the return. Summing up this episode Sir John Fortescue has written:

> . . . The advance of the Light Brigade into artillery-fire upon three sides was of course a grand but pitiful blunder. The really remarkable thing is, not that the squadrons should have ridden through such a fire without flinching, but that the remnant left at the end should still have been under such perfect control, ready to charge bodies of five times their strength both after the capture of the battery and during their retreat.

Return they did, through the enemy cavalry which had moved in from the flank to cut off retreat, although the whole was found to muster only 195 mounted men. Scattered men, wounded and unwounded, also straggled back. The whole action had

*In the first line were the 13th Light Dragoons and the 17th Lancers, in the third the 4th Light Dragoons and the 8th Hussars.

lasted only half an hour but the Brigade had lost 113 all ranks killed, 134 wounded and 475 horses killed.

It was during the retreat, with rear rank in front and officers in the rear, and while fighting off the Russian cavalry, that Lieutenant Dunn distinguished himself. Noticing that Sergeant Bentley, on a worn-out mount which could not keep up, was being cut off, he wheeled his charger, "one of the most notorious kickers in the regiment", and went back to the rescue. He sabred the first Russian out of the saddle, allowing Bentley time to get to his feet, and then, although his horse became almost unmanageable, he and the remaining Russians "closed and hacked and circled round and round" until he had disposed of them. He later killed a Russian hussar who was attacking Private Levett. Finally losing his charger, he made his way back on foot to the British lines.

Lieutenant Dunn served through the remainder of the Crimean War and then, selling his commission, returned to Toronto. It was not until 24 February 1857 that the *London Gazette* announced that he had been awarded the Victoria Cross, instituted by Queen Victoria only on 29 January 1856 in an effort to provide a new award for outstanding bravery at a time when existing medals had become far too common to be distinctive. When the 11th Hussars had been called upon to elect a recipient for this honour the unanimous choice had been Lieutenant Alexander Roberts Dunn. His citation read:

> Alexander Roberts Dunn, Lieut (late 11th Hussars.) For having, in the Light Cavalry Charge of 25 Oct 1854, saved the life of Sergt. Bentley, 11th Hussars, by cutting down two or three Russian Lancers, who were attacking him from the rear, and afterwards cutting down a Russian Hussar, who was attacking Private Levett, 11th Hussars.

On 26 June of that year he was decorated by Queen Victoria.

Lieutenant Dunn did not remain in civilian life for very long, however, and 1858 saw him assisting the Baron de Rottenburg (Adjutant-General of the province of Canada) to raise the 100th Royal Canadian Regiment of Foot for the British Army. He was appointed its major and proceeded with the Regiment to Gibraltar for a tour of garrison duty. The Regiment was still there when the Baron de Rottenburg retired as its commanding officer in June 1861 and was succeeded by Major Dunn who paid £10,000 for the appointment, an unusually large sum for an infantry regiment. In 1864 Lieut.-Colonel Dunn exchanged to the 33rd (Duke of Wellington's) Regiment which was serving in India. This last regiment formed part of the punitive expedition organized in 1867 for Abyssinia. While waiting at Senafe for the advance actually to get under way, Lieut.-Colonel Dunn went off for a day's hunting and accidentally shot himself. His death

Pay and Allowances Helped

In *Armies and the Art of Revolution* (London, 1943), Lady Katherine Chorley suggests that the success or failure of revolts generally has depended on the attitude adopted by the officers of the existing armed forces. In the France of 1789 and the Russia of 1917, disgruntled career officers considered that they stood to gain by supporting the revolutionaries but in the Germany of 1918-19 officers of the recently defeated army were able, on the excuse of forming Free Corps to maintain order, to liquidate the socialist elements and create a situation which permitted the later rise of Adolf Hitler. According to this author's thesis:

The Spandiards made a similar mistake after the Revolution of 1931, by making half-hearted efforts only to bring the old officers' corps into line with the new spirit of a republican army. Azana, then Minister for War, knew perfectly well that the officer caste was hostile to any genuinely democratic republic but he could not find the courage to dissolve the corps and reconstruct it with men whose political loyalty was proved, even though their technical ability might be a little suspect. All that Azana did was to retire about half the officers on the establishment, but since the proportion of officers to rank and file had been of fantastic size, this measure in fact only put the army on a more or less normal footing. It was further stultified because the dismissed officers were permitted to form a reserve, retaining their titles, uniforms, arms and pay. There was thus every opportunity for them to keep up close connections with the active officers. Thus, in effect, due to Azana's timidity, the reactionaries were given a blank cheque to the army. Five years later, when General Franco's plane landed in Morocco, this cheque was presented for payment.

THE FIRST CANADIAN V.C.

(Continued from preceding page)

on 25 January 1868 cut short a promising military career.

Bibliography

The Hon. J. W. Fortescue, *A History of the British Army*, Vol. XIII (London, 1930).

The Late Sir O'Moore Creagh and E. M. Humphris, *The V.C. and D.S.O.*, Vol. I (London, n.d.).

Henry James Morgan, *Sketches of Celebrated Canadians*, (Quebec 1862).

Major Boulton, *Reminiscences of the North-West Rebellions, with a record of the raising of Her Majesty's 100th Regiment in Canada*, etc. (Toronto, 1886).

F. E. Whitton, *The History of the Prince of Wales's Leinster Regiment (Royal Canadians)* (Aldershot, 1927).

Philip A. Wilkins, *The History of the Victoria Cross* (London, 1904).

FIRE FOR THE GENERAL

Reprinted from the "Royal Canadian Signals Quarterly"*

Generals are not what they used to be. I mean, in the old days, when a rare and valuable officer like a General decided to inspect our barracks, we could usually ascertain whether he was the kind who wanted to find everything just right or who wanted to find something just wrong, or wanted to see soldiers at work or at play or not to see soldiers at all; and we could lay our plans accordingly. But nowadays we never know what they're going to do next. They're modern. They have inhibitions, complexes and repressions. Most difficult people.

We were inspected the other day by General Sir Spurde Feele-Boote. He, we at once found, possessed a fire complex of such virulence that he should have been under treatment by a pyro-psycho-analyst. He buzzed round and round the barrack fire-station like a moth round a night-light, patted some lengths of hose and insisted on having "C" Block's hydrant tested (total bag: a quart of rusty water, three dead newts and what looked like one of Signalman Abernathy's missing socks), with the result that by the time we reached the Headquarters Offices we were all on the jump if anyone so much as struck a match within fifty yards.

The Headquarters occupies a block full of offices, officers, clerks, orderlies and enough files and documents to organize a paper chase from Vimy Barracks to Aklavik, which wouldn't be a bad thing to do with them either. Here the General went into the matter of Fire Orders. He looked all round the Adjutant's office and suddenly enquired "What would you do if you had a fire here now?"

"Try to put it out, Sir", replied the Adjutant, briskly.

For a moment it looked like being a pretty close thing for the Adjutant. Luckily he was able to explain that all local instructions about fires began with that exhortation—ever since Signalman McGillicuddy, who is not so bright, once spent a precious ten minutes trying to get through to the barrack fire brigade office on a defective telephone, while what had begun as a small smoulder developed into a bright, merry blaze.

"In the event of a fire in this building," began the General again

*This article was adapted from one originally published in Punch and written by Authony Armstrong.—Editor.

slowly, with the air of one using two-syllable words to a backward child, "in what manner do you warn the others?"

The Adjutant cast a helpless glance round to see if he could see any Fire Orders anywhere, then pulled himself together, showing a flash of those qualities that had enabled him to remain for two years as Adjutant to a human detonation like Colonel Sam Brownbelt.

"I instantly tell the orderly officer to deal with the situation, Sir, while"—he coughed modestly—"I save the confidential files".

At this point Lieutenant Blazer began to sidle out of the door. Lieutenant Blazer was orderly officer. He too soon gave us reason to be proud of what the manuals call the resource and initiative of junior officers; for detected by the Adjutant and questioned by the General, he explained that the Orderly Officer at once informed the R.S.M. (who at that moment fortuitously appeared outside the door) to take the necessary steps.

"What steps?" asked the General. Blazer choked the obvious answer "Pretty quick ones", and said, "Steps to warn those in the building to get out, Sir."

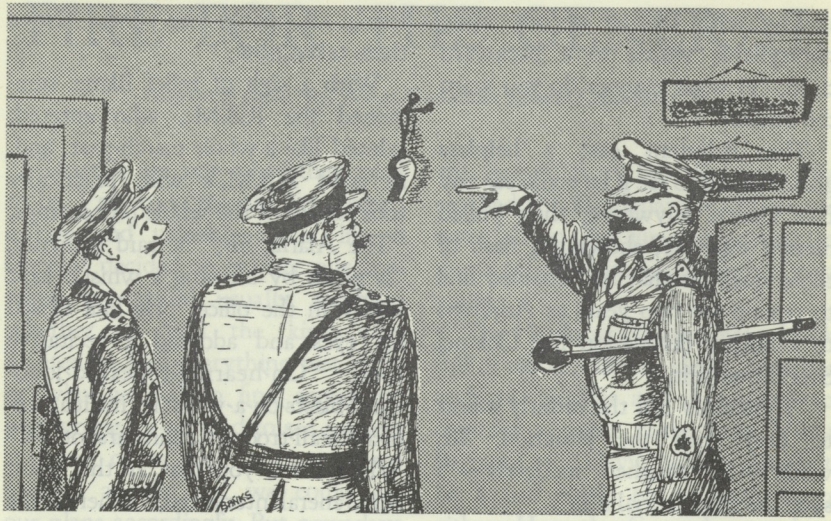
"Well, man, what steps are those?" pursued the General who, had it been a game and he not a General, would have been considered to be losing all along the line. "Have them taken now."

With a sigh of relief Blazer summoned the R.S.M., who entered, saluted like a whole march-past, and, as good R.S.M.'s will, practically took charge of the whole proceedings. "The Alarm, Sir," he said benignly, "is given by blowing a whistle kept handy in the office." He half closed his eyes and adopted a recitative tone. "On-hearing-repeated-loud-shrill-blasts-on-a-whistle-indicative-of-a-fire-all-troops-within-earshot —." When I tell you that at this point the General interjected, "Where is the whistle?", you will see just what we were up against.

The R.S.M., however, is a great man. With the air of one humouring a child he unhooked a whistle from a nail on the wall, saluted and handed it to Blazer, who saluted and handed it to the Adjutant, who to tell the truth, had often wondered what the blazes it was there for anyway. He displayed it to the General, and that we thought, should have settled the matter.

Unfortunately it did not. As I said, you never know where you are with the modern General. He reached across, took it and blew into it.

Nothing happened. Not even, unfortunately, to the whistle. He blew again. Still nothing, except a slight reddening of the imperial face. The whistle seemed to be merely a



"The alarm, Sir," he said benignly, "is given by blowing a whistle kept handy in the office."

blank, possibly for ceremonial purposes. The Adjutant had a go and then passed it to Blazer. He, with the simple faith of a young subaltern in an experienced warrant officer, simply handed it to the R.S.M.

The R.S.M. blew sharply into it. It gave an eerie sort of death-rattle, which was an advance on its previous form, but as a warning signal, just a mess. Anyone within earshot would have been more frightened of the whistle than the fire. But an R.S.M. is, of course, unconquerable. He took it from his mouth, gave it a look before which even Sergeants have quailed, and put it back. This time he didn't just blow—he BLEW.

The death-rattle broke into a gurgle, what appeared to be a plug of old teletype paper shot out of the whistle and cracked a picture on the wall, and a blast like the Montreal Express passing through Highland Creek lifted our berets from our anxious heads and burst open the windows. The Adjutant grabbed at the papers on his desk; Blazer nearly burst into tears. The General said something in Hindustani. The R.S.M. shook the whistle, wiped it on a khaki silk handkerchief and returned it modestly to the General.

"It seems all right now, Sir," he said simply.

The whistle may have been all right, but nothing else was. For, where the General had expected a rush of feet, bugle-calls and all the well-organized confusion of a false

alarm, nothing but a deathly stillness pervaded the office block, broken at last by Signalman Dozer's voice from the orderlies' room next door, remarking to Signalman Pullthrough, "What the divvil was that?"

The Adjutant took the whistle and blew a commanding series of what the R.S.M. would have called "repeated-loud-shrill-blasts". A few repeated loud blasts answered him from the orderlies' room coupled with a malediction on "them kids playing on the road outside".

The R.S.M., about to sally forth and uphold the honour of the regiment, was restrained by the General who in ominous tones asked, "And if the whistle is unheeded, what further steps are taken?"

The Adjutant now recollected the gist of the orders he himself had drafted some two years before and said, "One calls 'Fire', Sir."

"FIRE!" called the General, determined to get to the bottom of this. He repeated it, then went to the door and again shouted "Fire", very loudly several times just as if he were repelling a hostile attack from the turret of his Centurion. We felt miserably that perhaps he ought to have waited until he could see the whites of their eyes.

We did not think that the situation could possibly have become worse,

He . . . blew into it. Nothing happened.

but it did. From the orderlies' room next door appeared of a sudden Signalman Pullthrough. In one hand he held some crumpled newspaper and a bundle of kindling, and in the other a coal scuttle.

"Just coming, Sir" he said affably. I'll have it relaid and going in a minute."

True it had been a chilly fall day, but after that it got very hot. If the General keeps a black list of regiments in his command we must now be so high up as to be somewhere on the preceding page.

Generals are not what they used to be.

OUR MEN IN KOREA

Reviewed by Colonel A. J. B. Bailey, DSO, OBE, ED (Royal Canadian Artillery), Commandant of the Royal Canadian School of Artillery, Shilo, Manitoba

This little book,* only 79 pages, tells the story of the Commonwealth Forces in Korea from the beginning of the Campaign until 31 July 1951. It is an official account prepared in the United Kingdom "for the Admiralty, War Office and Air Ministry by the Central Office of Information". Eric Linklater's story is well told. He writes in a simple and readable style and his sketch maps and diagrams assist in following the actions he describes. He has included a large number of excellent photographs which give a good picture of the conditions under which the Forces operated in Korea.

Mr. Linklater went to Korea in the summer of 1951 and spent some time with the Commonwealth Forces there. Thus he writes as one who has seen the country and its conditions. However, he arrived only at the end of that period of the campaign which he describes and had to gather his information from official accounts and from the accounts of the men who took part in the operations. Although the second-hand accounts do not appear to detract from the telling of his story, one cannot help feeling that accounts at first-hand are incomparable and that perhaps some interesting aspects have been missed.

His book is not a military history. It deals neither with strategy nor large-scale tactics. It is simply a story of the actions of the Commonwealth Forces during the first year of the war, and, particularly, it is a story of the British Commonwealth Brigades. The 27 British Commonwealth Brigade entered the fight in September 1950 with two British battalions to which were added, subsequently, an Australian Battalion, a New Zealand Artillery Regiment, an Indian Field ambulance and, in February 1951, the 2nd Battalion Princess Patricia's Canadian Light Infantry. The 29 British Independent Brigade Group, going into action in November 1950, consisted of three British battalions, a British armoured regiment, a British field regiment and supporting arms and services.

Mr. Linklater describes briefly the

*Our Men in Korea, by Eric Linklater. Published by Her Majesty's Stationery Office, United Kingdom. Available in Canada from the United Kingdom Information Office, 275 Albert Street, Ottawa. Paper bound, 65 cents; cloth bound, $1.25. Postpaid.

work of the Commonwealth Naval and Air Forces. This could have been enlarged to include accounts of the close support of the Army provided by the Commonwealth Air Forces and the Fleet Air Arm; of the air battles in "MIG Alley" participated in by Commonwealth airmen; and of more detailed descriptions of the actions of the ships of the Commonwealth Navies. He does mention the Canadian destroyers *Cayuga*, *Athabaskan* and *Sioux* and their general operations on the coasts of Korea, and he describes, in a short paragraph, the airlift to Tokyo by the RCAF. Not much of value can be gathered from these descriptions.

The account of the Canadian Army concerns mainly the 2nd Patricias and rightly so, for the Patricias arrived in Korea in December 1950 and went into action in February 1951. Thus they led by some months the remainder of 25 Canadian Infantry Brigade Group which commenced operations in May 1951, near the end of that period of the campaign which Mr. Linklater describes.

The feature Canadian story in the book is the gallant stand of the Patricias at Kapuong and, although the account of this battle will be read with interest, Canadians will be disappointed with the brevity of the description and its lack of detail.

Mr. Linklater stresses in the beginning the minor part played by the Commonwealth Forces in relation to the tremendous effort of the United States of America. He stresses also that his story concerns mainly the actions of the British Commonwealth Brigades. Because of this the scope of the book is limited. It is limited to that part of the front on which these Brigades operated and to the periods during which they participated. Thus, although he describes the major phases of the campaign, it is from the point of view of a small section only of the western front. Unless one bears in mind this fact, the perspective may become distorted.

For one who wishes a short readable story of some famous British battalions and one famous Canadian battalion this book will fill the need. For the student of military history the book can serve only as a background for a more detailed account on a much broader basis.

The First Cigarettes

According to Major R. M. Barnes' *History of the Regiments & Uniforms of the British Army* (London), "Cigarette-smoking dates from the Crimea, where the soldiers acquired a liking for it from the Turks, and continued to make their own 'fags' after they came home. (Fag end is a naval word, meaning the untwisted end of a rope)."

FROM PANTELLERIA TO TRIESTE

A Book Review by Lt.-Col. G. W. L. Nicholson, Deputy Director, Historical Section, Army Headquarters, Ottawa

The production of a definitive military history covering a conflict on the scale of the Second World War takes considerable time, and there is much to be said for providing the general public, as soon as possible after the close of hostilities, with an interim account of what the national forces accomplished. Canada set an early example with the publication of an "Official Historical Summary" which told in broad outline the story of the Canadian Army in the war, and recently there have appeared in London the opening volumes of "a popular military history" under the general title, *The Second World War, 1939–1945*. The series of eight volumes is being written by various authors at the request of the Government of the United Kingdom, and, we are told, "is designed to furnish the general reader with a short military history of the Second World War 1939–45, pending the publication of the Official Histories." In the second book to be published in the series Eric Linklater describes the operations of the Allied Armies in Italy*. Because of the significant part played by Canadian forces in that campaign the volume is likely to have a wider appeal to readers in this country than its predecessor (*Arms and the Men*, by Ian Hay), which undertakes to give a general survey of the fighting by the British Army on all fronts (although inexplicably seeming to bring the war in Italy to an end with the capture of Rome).

Mr. Linklater, who in 1941 left the command of Orkney Fortress R. E. for duty with the Directorate of Public Relations, saw service in Italy, and was thus enabled to enliven from his own observation the official campaign records to which he was subsequently given access. (Many will remember from this period his delightful novel about Private Angelo, who "fought and ran in quick succession with the Italian army and from the German army and the British

**The Campaign in Italy*, by Eric Linklater (H.M. Stationery Office, London, 1951). Available in Canada from the United Kingdom Information Office, Ottawa, $2.85 postpaid.

Eighth Army".) These sources, as the author indicates, consisted mainly of a long and elaborate series of documents produced immediately after the war by the British Historical Section of the Central Mediterranean Forces, and a history of the Fifth Army compiled by the Historical Section of the American Forces in Italy. Neither of these works is available to the public. To reduce this wealth of material into 469 pages of no mere chronological record of events but a readable narrative is a task that only a writer of Mr. Linklater's calibre could accomplish. The result is the most comprehensive and accurate account of the Italian campaign that has yet been published.

In evaluating a history directed at the "general reader", it may be useful to inquire what that anonymous being is looking for. Presumably he will be interested in learning how the particular campaign in its conception and conduct fitted into the general strategy of the war; he will want to know what forces were engaged and how they were employed, and he will rather read accounts of major battles than descriptions of static periods of relative inactivity, being content to be spared much technical or administrative detail. Besides studying the generalship displayed in these operations he will want to see something of the common soldier in action, and, being only human, he will probably have no serious objection to finding frequent allusions (providing these are not unflattering) to the unit in which he himself served or which was mobilized in his own community.

Mr. Linklater has adequately met all but the very last and obviously impossible demand. It will at once be recognized that in describing a major campaign in which two full army groups opposed each other for nearly two years it is neither practicable nor desirable to write from the close perspective of the regimental history. Fortunately some reduction to a common denominator is possible. "If one considers the history of any one of twenty infantry battalions," notes the author in his Introduction, "one will quickly discover some period during which it maintained, against the usual hard opposition, a fairly steady advance and suffered, day by day, fairly constant losses . . . The battalion simply went on, enduring its anticipated casualties, over lavish mountain ridges or through lush green country full of unseen peril, to no visible goal . . ." In a single volume the story of these day-to-day activities cannot be told with the detail they deserve, and the reader must be left to interpret and expand in his imagination such frequently recurring phrases as: "The advance was maintained against strong opposition . . ." "their objective was

achieved after bitter fighting . . ." It is a tribute to the author's skill that in spite of the obvious limitations imposed upon him he has contrived to identify in action, in some cases as many as a dozen times, 125 individual infantry battalions and 47 armoured regiments of the Commonwealth forces (the designations of many American and other Allied units below divisional level appear in the text, but are missing from the index.) He has done well by Canadian units, introducing separately all but one of the fifteen infantry battalions which fought in Italy; rather strangely though, of the eight Canadian armoured units receiving mention only the Three Rivers Regiment is identified by name as well as by its less familiar number.

From the reduction of Pantelleria, which preluded the Allied invasion of Sicily, to the occupation of Trieste on the day of the final capitulation of General von Vietinghoff's armies, the course of events is unfolded in a broadly flowing narrative that owes its momentum to the author's good sense of proportion. (Incidentally, for those who want a thumb-nail sketch for ready reference, the Introduction contains a useful 2000-word summary of the campaign.) He sets down the strategic decisions that emerged from Casablanca and Quebec and the other big conferences (unfortunately, although understandably, his limited scope does not allow him to examine the conflicting viewpoints debated at those important meetings), and clearly demonstrates how the campaign was subject "to influence from afar and always open to the interference—benign to the larger view but sometimes inimical to local prospects—of the Combined Chiefs of Staff". The Commander-in-Chief of the Allied Armies in Italy was never allowed to forget that his operations were secondary to the western invasion of Europe, and to that end, even though his resources were frequently and considerably reduced to benefit the rival theatre, he had to exert continual pressure in order to retain the maximum number of German forces on his front. And so he "maintained the offensive, hustled the enemy, and kept his armies moving always, save only for a little while in the frozen depths of winter".

For the enemy Mr. Linklater has a qualified word of tribute. He avers that "the swiftness, sagacity, and brave robustitude of their fighting must be recognized, not only for the sake of truth . . . but also to ensure for the Allies their due credit in defeating them". Canadian soldiers, whose lot it was to meet in many a struggle the elite of Kesselring's Armies—the 1st Parachute Division, the 26th Panzer and the 90th Panzer Grenadier Divisions—will readily endorse this recognition. Nowhere did

the Germans show more convincingly their profound aptitude for war than in the remarkable resiliency with which they recovered from the shattering blows inflicted on them in the major battles of the campaign, so that after their losses behind the Sangro, in the Liri Valley and at the Gothic Line they could re-shape "from broken battalions and the rabble of defeat a rearguard of unimpaired morale". The enemy picture which the author gives us is in general limited to identification of the formations opposing the Allied divisions in the various sectors of the front, and would appear to be based largely on the findings of Allied Intelligence staffs during the fighting. The German side of the story is conspicuously absent, and it is a matter of some regret that Mr. Linklater's official sources of information do not appear to have included the voluminous captured war diaries and other enemy records of the campaign.

During their progress across Sicily and up the length of the Italian peninsula Allied troops captured in bitter fighting or occupied unopposed on the heels of a retreating enemy many hundreds of communities, varying in size from vast cities to unpretentious villages and humble hamlets. Some, like Messina and Rome and Florence the world knew well already; others, like Agira and Casa Berardi and San Fortunato, have won claim to remembrance in this country because they were taken at a heavy cost in Canadian blood and Canadian heroism. But what of the numerous other places whose names stand like milestones along the armies' path? The steady pace at which his narrative unfolds has forced the author to introduce these in rapid succession, with the result that the reader who wishes to follow the campaign intelligently must constantly keep his finger inserted at the page carrying the appropriate regional map. Consider, for example, the following description of the 1st Canadian Division's advance westward from the Foggia plain—an advance which brought the Canadians their first serious fighting on the Italian mainland. (Each of the eleven geographical names in this paragraph is making its first appearance in the book.)

After the fighting for Motta — which was taken on the 2nd of October — and unopposed entry into Troia and Bovino, the 1st Brigade, having captured Volturara, was directed against Campobasso, while the 2nd, on its left, advanced over the difficult minor roads of the Sannio mountains. Resistance grew stiffer, and the Parachute Division was reinforced by the 29th Panzer Grenadiers between San Marco and Baselice. These villages were taken on the 4th and 5th, and on the 7th the 3rd Canadian Brigade forced the crossing of the Fortore with such vigour that it drove forward, unchecked, to expel the Germans from Pietracatella and Gambatesa, to which the rearguards had withdrawn, and on the following day the Division advanced along its whole front under heavy rain, but made no contact with the enemy.

There are 51 maps in the book, and

the reader is grateful for every one of them, even though they bear no operational information, and a number of misspelled place-names suggest hasty compilation. Nor is the text entirely free from such blemishes—it is a bit startling, for instance, to see General von Senger und Etterlin, the Commander of the 14th Panzer Corps, referred to as General von Senge und Ettalin.

Canadian readers may spot certain omissions, all of them relatively minor. Former members of the 1st Canadian Special Service Battalion may wonder why the account of the operations of the 1st Special Service Force (all references to which appear to have escaped the notice of the indexer) fails to recognize its international composition; veterans of the 12th Infantry Brigade will notice that of all the Canadian formations which fought in the campaign it alone does not receive mention; and there will be many whose imagination was stirred by the gallant assault of the Assoro pinnacle in Sicily who will regret the absence of any reference to that notable exploit of the Hastings and Prince Edward Regiment.

But these are carping criticisms when measured against the solid merit of the book as a whole. Mr. Linklater has rendered his readers a valuable service in providing an informative, reliable and well-balanced record of the campaign, illuminating it with the descriptive colour which he can so skilfully apply. "The soldiers' war in Italy was a hard one," he writes, and Canadian veterans of the campaign will not dispute the statement. There will be some of these, however, whose memories of those frustrating days the book revives, who may gain therefrom a new and wider perspective and come to realize, perhaps for the first time, the manner in which their individual contribution and that of their comrades from the Dominion fitted into the larger roles of division, corps, army and army group—and indeed the whole Allied effort.

Avoid the Local

Although conducted with all seriousness in view of the prevalent belief that a German invasion of England was still possible in the spring of 1941, there was bound to be a certain lack of reality about the early Canadian training exercises. Thus, according to the minutes of one post mortem conference:

Brig stated that in siting Bde H.Q. we must avoid the village pub. It might occasionally be necessary to site it at one in order to obtain hard surface for parking, but usually some farm house can be found which provides the necessary requirements.

THAT ASTONISHING INFANTRY

A REVIEW ARTICLE BY CAPT. DONALD M. A. R. VINCE, ROYAL CANADIAN ENGINEERS

"Nothing could stop that astonishing infantry. No sudden burst of undisciplined valour, no nervous enthusiasm weakened the stability of their order . . ."—(*Napier on Albuhera*).

"Some of our men enlist for having got bastard children—some for minor offences—many more for drink; but you can hardly conceive such a set brought together, and it is really wonderful that we should have made them the fine fellows."—(*Wellington to Stanhope*).

When The Royal Canadian Regiment was allied to the Gloucestershire Regiment of the British Army in 1925, no one supposed that twenty-six years later the Gloucesters would be the first Commonwealth unit to win a Citation from the President of the United States. But even in 1925 they had, probably more than any other British regiment, a long and intimate connection with the New World. Mr. Daniell's timely history* makes this clear. It is of interest not only to those connected with the Royal Canadian Regiment but also to others interested in the two hundred and fifty years of background that enabled the Gloucesters to win the highest American unit award.

The Gloucestershire Regiment is the heir of two older Regiments of Foot, the 28th and the 61st. The 28th Foot, the older and more famous of the two, originated in the regiment raised by Colonel John Gibson, Lieutenant-Governor of Plymouth, in the spring of 1694. "These are to authorize you," reads his Warrant, "by Beat of Drum or otherwise to Raise Volontiers for a Regiment of ffoot under your Command, which is to Consist of Thirteen Companies of sixty Privat Soldiers, Three Serjeants, Three Corporalls and Two Drummers in each Company." The Regiment so raised was the formation from which came the 28th Foot, the Gloucestershire Regiment and, indirectly, The Royal Canadian Regiment.

The organization for a regiment of foot in the Army of King William III was simple. Headquarters consisted of a colonel, a lieutenant-colonel, a major, an adjutant, a quartermaster, a surgeon and a chaplain. In twelve—the "battalion" companies—forty-six men were armed with muskets and

*Cap of Honour, The Story of the Gloucestershire Regiment, 1694–1950, by David Scott Daniell with a foreword by H.R.H. the Duke of Gloucester K.G., Toronto, Clarke, Irwin & Co. 1951. $4.25.

the remaining fourteen carried pikes. The thirteenth—the Grenadier Company—were distinguished by their muskets and the tall mitre caps which, being brimless, enabled them to sling arms and made thus the hurling of grenades possible. Ten companies were commanded by captains, each assisted by a lieutenant and an ensign. The three remaining companies were commanded by the Colonel, the Lieutenant-Colonel, and the Major, respectively, and these three were paid both for their rank *and* their company. Hence the Colonel received twelve shillings a day as colonel of a battalion, eight shillings a day as captain of a company and four shillings a day for his servants—a sum worth about twenty times its present face value. A colonel not only profited from his pay: "A regiment was a very valuable piece of gentlemanly property; it paid good dividends from clothing and feeding, and could be sold for a handsome sum to the next Colonel." Since the same held true of the captains of companies, the regiment was something of a commercial organization, capable of paying a dividend and expected to do so—a form of free enterprise out of favour today.

To clothe his regiment, Colonel Gibson bought them red coats lined and trimmed with bright yellow. This uniform it was to wear, in various styles, until displaced by Twentieth Century khaki. Besides this "good full-bodied Cloth Coat, well lined which may serve for a wastecoat the 2nd year," the recruits for Gibson's received "a wastecoat, a pair of good kersey Breeches, a pair of good strong stockings, a pair of good strong shoes, two good shirts and two neckcloths and a good strong hatt, well laced." That there was grousing at the quartermaster may be imagined from the fact that half a century later, men of the Regiment were ordered to wear their shoes alternately on their left and right feet, "To prevent their running crooked". Evidently comfort was a minor consideration.

The officers (although of course they had to buy their uniforms) were more gracefully and comfortably dressed. It was an agreeable period in military costume, when the soldier wore the same style of clothes as the civilian and the civilian dressed simply but richly. So Colonel Gibson and his new officers appeared in scarlet, square-cut coats which reached to the knee and had large yellow cuffs and gold laced pockets. A red waistcoat, red knee breeches, white stockings, silver buckled shoes and a wide brimmed, black felt hat livened with white feathers completed their martial appearance.

Appropriately enough, considering their future Canadian alliance and

American citation, the Regiment's first overseas station was in North America. In February, 1697, Colonel Gibson was ordered to lead an expedition to Newfoundland, there to protect the unfortunate colonists from the French. The expedition arrived in St. John's harbour in June, 1697, to find the French gone, the colony ravaged, the dwellings destroyed, and the two hundred and twenty-four surviving settlers departed for England in a French ship. There was nothing for the Regiment but to turn engineer, fortify the harbour and rebuild Fort William. The September cold drove them from the shore to the ships and in October they sailed for home, leaving two companies to complete the work. Of these three hundred men, eighty-six still lived in the spring. Inadequate shelter, improper food, unaccustomed cold had killed seventy-one per cent.

Despite these cruel losses a detachment stayed through the succeeding winter, and in the spring of 1699 their hardiness was rewarded by an administrative oversight:

> "In that year there occurred an incident which the cynical might consider typical of the military. Ten recruits were sent from England to Newfoundland. They arrived and reported for duty. But they were not required, and they were at once sent back to England again. Their comments can well be imagined."

When Gibson's Foot got back to England peace had been made and accordingly all regiments raised since 1680 were "broke". In 1702 the Regiment was reformed with precedence from 1694 and in 1704 Colonel Gibson sold it, a normal occurrence, to Colonel Sampson de Lalo. The scene when the new Colonel took command can be imagined:

> ". . . The regiment paraded under arms, and a senior officer presented the new Colonel to his command with a short and eloquent speech. The parade presented arms and the drums beat, and the Colonel was presented with the half-pike, his badge of office and authority. The new Colonel then took post at the head of his regiment, gave the command to march past, and, after saluting the senior officer, led his men off the parade."

Shortly after the change in command, De Lalo's, as they were now called, sailed for Holland to join the army of the Duke of Marlborough. They left behind their pikes and third colour, carried the new ring bayonet and wore the tricorned hat. The first of innumerable changes in organization and equipment, no doubt they made many lament and grumble. The regiment served under "Corporal John" only long enough to assist in forcing the Lines of Geet (July 1705) and take part in the Battle of Ramillies (May 1706),* and the Siege of Ostend (July 1706). Then they recrossed the Channel to Portsmouth.

**This is the first of the Gloucestershire Regiment's Battle Honours, of which they have more than any other regiment in the British Army. The full list is published at end of this article*—Editor.

Now Mordaunt's (Colonel de Lalo had exchanged regiments with Viscount Mordaunt) they sailed for Spain and formed part of the Allied Army which the Duke of Berwick decisively defeated at Almanza (April 1707).* Almanza cost three hundred men out of a strength of five hundred and thirty-two. They were at Tarragona (April 1708) and then, seasoned veterans, they returned to garrison duty in England and Ireland.

Their only active service between 1708 and 1745, when they were once again defeated by the French at Fontenoy, was a part in the landing at Vigo Bay (September 1719). There was little fighting but it is noted that the Regiment came back to garrison Ireland "with notable recollections of the effects of free wine drunk from the barrel."

The Regiment changed its name several times in these years, being successively Windsor's (1709), Barrell's (1715), Price's (1730), and finally Bragg's (1734). And it had established itself as an excellent unit whose discipline, drill, and appearance was better than average. An inspection report of Barrell's dated 1725 reads:

"In obedience to your excellencies Commands I have reviewed the above regiment. The men are good and the Regiment is well disciplined, performing their exercises and firing extreamly well; the cloathing and accourtrements are very good . . . their Arms are bad . . . I can't but observe to your Excellency the particular care this Regiment have taken to show them selves Compleat, notwithstanding what they have suffered from death and desertion. The men are regularly cleard and no complaints made either against the officers or from ye inhabitants . . ."

In 1742 the Regiment became the 28th Foot, and once again "it took some time for the Army to accustom itself to what must have seemed a dangerously revolutionary change." The last Colonel to give them his name also gave them the first of their nicknames. From Colonel Philip Bragg, their owner for twenty-five years, came the *soubriquet* "The Old Braggs". In 1743, the 28th left Ireland for Flanders, fought at Fontenoy (May 1745) and returned in September to help suppress the Young Pretender's Rebellion. Then, after two more expeditions abroad, to Lorient and Hulst, came the quiet of garrison in Ireland. They stayed there until 1757.

When the War of the Austrian Succession began William Pitt was Secretary of State for War and the Colonies. This great minister resolved to strike at France through its colonies. He sent General Lord Amherst to conquer Canada. The 28th went along and was in Wolfe's assault brigade that landed through the surf at Louisburg. They spent an unpleasant time after the siege des-

*As *a general rule, Battle Honours are not awarded for defeats, for minor actions, or for those fought in the course of an unsuccessful war, regardless of the gallantry which may have distinguished such engagements. Hence the Gloucestershire Regiment have none for Almanza, Fontenoy, Ste Foy, or the War of the American Revolution.*

troying French fishing stations on Ile Royale (now Cape Breton Island), and then came back to Louisburg to endure a second Canadian winter. Spring came at last and in June 1759 the 28th marched out of the captured fortress and embarked in Admiral Saunder's fleet bound for the River Saint Lawrence to besiege Quebec.

The Regiment distinguished itself in the skirmishes that preceded the final assault and once fought a small but vigorous action on their own. When a picquet was surrounded:

> " 'The whole Regiment stood to their arms and rushed into the woods, receiving a smart fire all the way without returning one shot until they got into the woods; they drove the rascals away, took one Canadian prisoner, and observed the tracks of some that had either been wounded or killed and carried off. They left a great many of their trinkets behind them.' "

But such frays did little to reduce the city and, as winter came on, Wolfe determined to risk an assault through a small cove below Cape Diamond.

Early morning of September 13th saw a long line of boats leave the Fleet and creep up the River on the ebb tide. Wolfe, several of his staff and twenty-four volunteers led in the first boat. Immediately following came three hundred and twenty men of the 28th—the first regiment of assault. Two challenges by Montcalm's sentries were answered in French; the little cove was reached; Wolfe leapt ashore; the volunteers scrambled up the path in the cliff and routed the French picquet; the 28th followed and formed up silently in companies on the Plains of Abraham. During the battle the 28th was on the right of the British line, next to the Louisburg Grenadiers who held the right flank. Between these two battalions Wolfe placed himself and waited Montcalm's assault. The 28th held fire until the French were within thirty-five yards, then belched one tremendous volley. The French faltered, the British volleys were repeated, and Wolfe, placing himself at the head of the 28th, raised his sword in the order to advance. Within an hour he was dead. Five days later Quebec surrendered.

The 28th spent another North American winter and were just as cold, miserable and sickly as they had been in Newfoundland and Cape Breton. The winter was enlivened by their third defeat when General Murray met a bloody repulse at Ste Foy (April 1760). In September the battalion marched to Montreal to spend a year in garrison. Thence they sailed to the West Indies. There they participated in the capture of Martinique (February 1762) and the siege of Havana and suffered far more from the dreaded yellow jack than from fighting. Though the expedition lost less than 1000 men in battle, 5000 died in a few weeks. The 28th finally escaped and reached New

York, a fever riddled remnant of 208 all ranks. From New York they returned to Montreal and settled down again in garrison.

Here discipline apparently relaxed considerably, caused either by the terrible strain of tropical sickness or the dismal prospect of snow and ice after the heat of the Indies. As a consequence Montreal saw the incident that gave the 28th another nickname—"The Slashers". The story is an example of the effect of relaxed discipline and the incipient danger in military usurption of civil authority. It is best to quote Mr. Daniell:

"In 1764 . . . in Montreal . . . occurred the incident of 'Walker's Ear.' Thomas Walker was a merchant and a magistrate of Montreal, who resented the pressure of the military authority. He opposed the military government in every way in city politics, and he also took every opportunity to use his position as magistrate to harass the soldiers . . . As a result of this a feud developed between the soldiers and the civil authority, and especially against Thomas Walker. . .

"The 28th decided, among themselves, to deal with Mr. Walker. At nine o'clock on the evening of December the 6th, as he was sitting at supper with his wife, his clerk, and a guest, the door was thrown open and half a dozen armed and disguised men rushed in. The party scattered in natural alarm, and Walker tried to get to his weapons in the next room. He was attacked, defended himself with spirit, was beaten, and had half of his right ear deftly sliced off. The assailants withdrew, taking with them the half-ear.

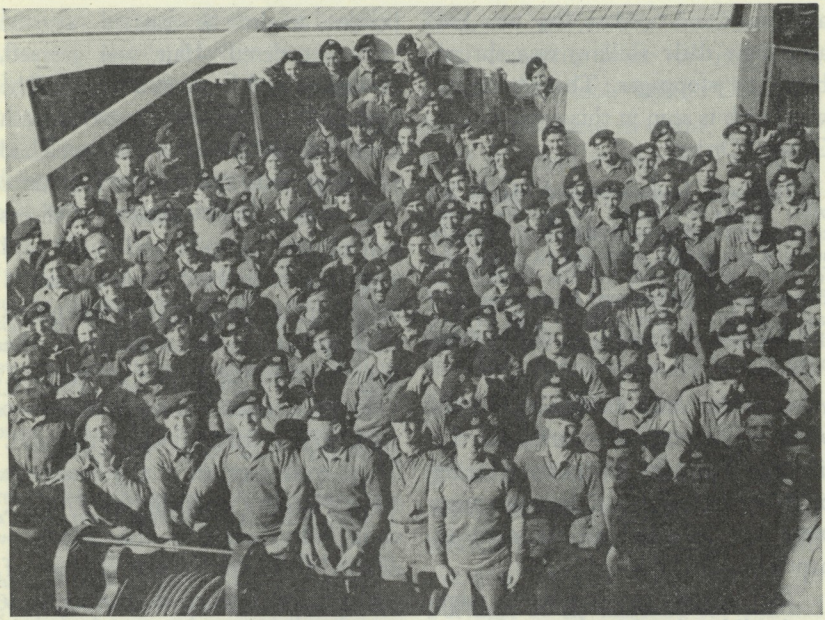
"There was, of course, a great furore in Montreal, and a prolonged inquiry . . . But the soldiers stood by one another throughout all the questioning and nothing could be established, and it has remained a mystery to this day. There was abundant circumstantial evidence: a sergeant borrowed some one else's sword early that evening, bloodstained jackets with 28th facings were found hidden in cupboards, certain men were unaccountably absent from their billets at the time of the outrage. But no one could be brought to trial, and the mystery remained unsolved . . . It seems to have been a close family affair, with officers, sergeants, and privates working together, and their discretion and loyalty to one another in the diligent cross-examination to which they were all put shows an excellent wit and presence of mind."

Not, it may be added, a high standard of discipline.

In 1767 "The Slashers" sailed home. They had been abroad ten years, had helped to conquer half a continent, and had won four new battle honours. This was not their last tour in North America. Having helped to win Canada, they were back in eight years to help lose the United States.

The 28th were in Ireland in 1775 when the American War of Independance began. They were promptly transferred to Boston and later served under that elegant but uxorious numbskull, Lieutenant-General Sir William Howe. At White Plains and Brandywine, they distinguished themselves in assault crossings of water gaps. Then, in 1778 they left for the West Indies, leaving George III's generals to lose George III's Colonies. They took part in the capture of St. Lucia and went home in 1783. They have not campaigned in America since.

Back in England the Regiment found itself with a new title. A General Order of August, 1782, had linked regiments of foot to counties



British Official Photograph

Men of the 1st Battalion, the Gloucestershire Regiment, are seen aboard the troopship which brought them home after a year's service in Korea. One hundred and twenty of those aboard the troopship were survivors of the epic "last stand" battle of the Imjin fought by the "Glorious Glosters" at the Imjin River in April 1951.

for recruiting purposes, so they were now "The 28th or North Gloucestershire Regiment".

What kind of men were these infantrymen of the Eighteenth Century—these Old Braggs? Like any other group they were a mixture, good, bad and indifferent. True, there were criminals and jail sweepings in their ranks but there were a larger number of poor but honest yokels. Daniel Defoe thought them much maligned:

"Our armies have often been raised by Gentlemen . . . among their Tenants . . . and a Captain, to my knowledge, has been able to call every soldier of his Company by name, and to give an Account of his Father, or Mother or Original: true these men have been poor, but brave and honest. Nay, that it should be supposed that all soldiers are Rougues and thieves is a most Scandalous Reproach to the poor men themselves."

(It is a pity that Mr. Daniell's line illustrations do not support Defoe. For the twenty-two drawings portray such a rogues gallery as can seldom have glowered from the margins of a book.) For Defoe's soldier, life was hard and often dull on service, hard and more monotonous in quarters. Since there were no barracks, the troops were generally quartered in

ale-houses and taverns. Pay was low and their daily shilling was shrunk by many stoppages. That discipline was harsh is seen in this extract from General Orders:

> "Hammond Underwood and Martha his wife, Sutlers to General Bragg's Regiment, try'd for defrauding the Officers and Others of sums of money, are sentanced to receive the following punishments by the Drumms of Braggs Regt. viz, Hammond Underwood 1000 lashes with the Cat o'Nine Tails at five different times and Martha his wife half that number . . . "

Almost the only mitigating factors were the economic security of the life, the chance of loot, and wearing of the red coat at a time when men were not ashamed to be seen in handsome clothing.

"Old Bragg's" on the march were a splendid sight. In column of route marching in threes, companies were led by their officers, colours in the centre of the column. The tricorne hat was still worn, black cockade on the left cock. The old square-cut coat, scarlet for officers, red for soldiers, was now looped back to make marching easier and showed the bright yellow lining peculiar to Bragg's. The long yellow lapels were looped with white braid. Red waistcoat, red breeches and long white gaiters completed the uniform. Equipment was simple. A shoulder belt supported the cartouche box on the right side and a broad waist belt carried a sword and bayonet. In marching order haversacks and water-bottles might be carried as the colonel ordered. Hair was greased, powdered and worn in a queue. The principal weapon was the old smooth bore Tower Musket which weighed fifteen pounds and fired a 1¼-ounce ball with a .753 diameter. Officers carried the half-pike and fusil* and sergeants the halberd. Thus accoutred they marched and fought on the plains of Flanders, in the swamps of the Indies and in the forests of America.

In 1793, when war again broke out with France, the 28th were in Ireland. They took part in the grotesquely inept Flanders campaign of 1793-95, were transferred to the Mediterranean, took part in the capture of Minorca, and then, as the century turned, went on to the field of their most celebrated exploit.

On March 8th, 1801, a blue rocket fired into the African sky over Aboukir Bay signalled the assault of a British Army on Egypt. The objective was the destruction of Napoleon's Army of the East. The British landed through the surf, dispersed some light resistance and a fortnight later the decisive engagement took place near Alexandria. On March 21st, General Menou led the French against Sir Ralph Abercromby's force, drawn up across the mile-wide isthmus between the Mediterranean and Lake Mareotis. The 28th, holding a redoubt on

---

* A short flintlock.

the right, were the first to be heavily attacked. While heavily engaged to their front, "enveloped in a complete blaze", a squadron of enemy cavalry swept past the redoubt, wheeled, and daintily dressed their lines preparatory to charging the 28th from the rear:

> "Yelling exultantly, they put their horses to the charge, riding in three ranks, close together, leaning over the horses' necks with sabres at the ready, and the hooves thundered over the sand. It was a supreme moment, but Lieutenant-Colonel Chambers . . . rose superbly to the occasion. He gave the historic order, 'Rear Rank, 28th! Right About Face!'
>
> "The rear rank turned about, and stood with their backs to the comrades, muskets ready. When the enemy were upon them, only a few horse-lengths away, they fired a volley. . .
>
> "I was astonished at the excution which had so instantaneously been done' wrote Sergeant Coates. 'After the volley the 28th faced about again and resumed their fire on their assailants in front, such as had ammunition; but many, having now expended all, resorted to throwing stones.' "

The Egyptian Campaign gave the 28th, in common with other regiments the Sphinx badge and the motto "Egypt". But, alone in the Army, they were permitted to wear their number both on the back and the front of the headdress, a perpetual reminder of two ranks, fighting back to back in the Egyptian sunshine.

With the dawning of the Nineteenth Century wars became bloodier and armies larger, and interest naturally shifts to the larger evolutions of divisions and corps. However, occasions for regimental distinction were frequent and the 28th, in particular, continued to give constant proof of individual quality. 1807 took them to Denmark; 1808 found them in Spain. The regiment marched in the rear guard of Sir John Moore's long retreat to Corunna, sickened with fever at Walcheren and then sailed to join Wellington in Portugal. A detachment fought at Talavera (July, 1809) and two battalions were at Busaco (September, 1810). One or other of the battalions fought at Barrossa (March, 1811), Albuhera (May, 1811), Salamanca (July, 1812), retreated from Burgos and saw their unemotional chief bid farewell to Portugal as he marched for Madrid and Vittoria (June, 1813). They took part in the bloody encounters in the Pyrenees, crossed the Nivelle and the Nive and invaded France.

It was a hard, efficient force in faded red which followed Wellington into Aquitaine. The Duke privately said the rank and file came from "the mere scum of the earth".* But he was loathe to part with them: " . . . The best troops we have, probably the best in the world, are the British infantry, particularly the old infantry that has served in Spain. That is what we ought to keep up; and what I wish above all others to

* Earl Stanhope, *Conversations with the Duke of Wellington* (London, 1881), 14.

retain".* His "Spanish Infantry", the 28th among them, fought once again at Toulouse (April, 1814). Then Napoleon abdicated, the Allies occupied Paris, the troops dispersed and while other battalions were shipped off to face Andrew Jackson at New Orleans, the 28th returned once again to Ireland.

In Spain the 28th had acquired a reputation not only for hard fighting but also for determined relaxation. Commanded by "Mad John Browne" (Lieut.-Col. John Frederick Browne) this was to be expected. The Spaniards knew him as *el Commandante loco* with some reason. Fond of women, one of his tricks whenever he rode abroad was to carry a stick with a small crooked end. "With this he would neatly raise the mantilla of any lady he met in the street", inspect the face, lift his hat and ride on. Before long, when he was seen approaching, mantillas were raised voluntarily, to avoid damage from the stick.

This precaution against an unsteady hand may have been necessary, since the Colonel also displayed a liking for wine. Under him the 28th ran a famous Mess. All officers in the area, 115 in all, were made honorary members and the experiment was a great success.* On the second day of operation "it was necessary to pass a restrictive act, limiting each officer to a pint of port and half a bottle of claret a day." Luckily, porter and brandy were unlimited; they emptied two thousand bottles in a week; and it is recorded that the Mess Sergeant, although he claimed a knowledge of algebra, never untangled the accounts. The Peninsula saw them give their first Regimental Dinner when in May, 1813, they commemorated the second anniversary of Albuhera:

> "The dinner was cooked in every way the old soldier could invent—roast and boiled—soup and bouille. Camp kettles were reversed for ovens to bake pies, and every guest brought his knife, fork and plate. The wine of the country being excellent, we all enjoyed ourselves very much; so much so that some of us bivouacked under the table for the night."

They had good reason for celebrating, since Albuhera had brought them Marshal Soult's sour tribute: "There is no beating these troops in spite of their generals . . . The day was mine and yet they did not know it and would not run."

If gay dinners were occasional, sad ones were frequent and the Regiment still commemorates one of the latter. One action had reduced the

* Quoted in Guedalla, *The Duke* (London, 1932), 290.

* Robert Blakeney (*A Boy in the Peninsular War, The Services, Adventures and Experiences of Robert Blakeney, Subaltern in the 28th Regiment* (London, 1899), 170,) says "upwards of 150 officers dined at our mess daily." Unless Mr. Daniell checked Blakeney's manuscript diary or some other contemporary source, "115" must be a printer's error.

Mess to two members. "At the appropriate moment the senior stood, raised his glass and gave the loyal toast, 'Mr Vice, The King!' " The junior stood "And with admirable quickness of mind changed the customary 'Gentlemen, The King!' to 'The King, Mr President!' " In this way the Gloucesters still honour the Sovereign.

The hundred years from 1814 to 1914 was the 28th's quiet century. After the Waterloo Campaign they had no major fighting for forty years. The Crimean War took them to fight Russians for two years and then quiet again descended until 1914, disturbed only by a gentleman-like campaign in South Africa. Their stations in these years were a roll of the Third British Empire — England, Ionian Isles, Ireland, New Zealand, Gibraltar, Hong Kong, Singapore, Egypt, Australia, where they gave their name to Slashers' Reef; Malta, where they won all the rowing cups; and South Africa, where they were shut up in Ladysmith.

The first forty of these years were, for the Army, years of unbending resistance to change. The last sixty were those of unceasing change, stimulated by the incredible conditions revealed in the Crimean War. The Cardwell reforms produced new barracks, higher pay, short service, altered uniforms, different arms and changed equipment. The line battalions were "linked" in two battalion regiments so the 28th, linked to the 61st, lost their number to become the 1st Battalion, The Gloucestershire Regiment. It is to such a period of injured regimental pride that we owe this order given on a brigade parade. Annoyed by the resounding titles shouted by other colonels, the 28th's roared:

Neither King's nor Queen's, nor Royal Marines,
But 28th, Old Braggs: Brass before and Brass behind,
Never feared a foe of any kind;
Shoulder Arms!

But such individualists were anachronisms in the new army and the abolition of "Purchase" in 1878 meant that they could the more easily be eliminated. This system, in which an officer purchased his first commission and each subsequent step, regulated promotion by wealth rather than by merit. It was capable of producing grey-haired subalterns who could truthfully protest:

"MY LORD,
I was a lieutenant when General Stanhope took Minorca, for which he was made a lord. I was a lieutenant when General Blakeney lost Minorca, for which he was made a lord. I am a lieutenant still . . ."

This, and many more abuses were pruned away and when the B.E.F. went to France in 1914 it was, without doubt, the best trained and best equipped army in which the 28th had ever served.

For four years the Great War of 1914–19 swallowed and consumed the

28th. They formed twenty-four battalions, lost 8100 men, and won five V.C.'s and seventy-two Battle Honours. This war and the World War of 1939–45 reduced a battalion to a small pawn, but the regimental spirit, nourished on the proud traditions of the past, remained as strong as at Louisburg, Alexandria, or Waterloo. Earl Alexander discovered this when he inspected after the retreat from Burma. Although permission had been given to grow beards because of the shortage of razor blades he found the 28th beardless. He made inquiries and the RSM explained: " 'Sir, the 28th prefer to shave.' " Mr. Daniell ends his story with an epilogue on the Imjin action in Korea which won the Gloucesters the United States Presidential Citation. Exactly two hundred and fifty-four years had passed since Gibson's Foot landed in Newfoundland.

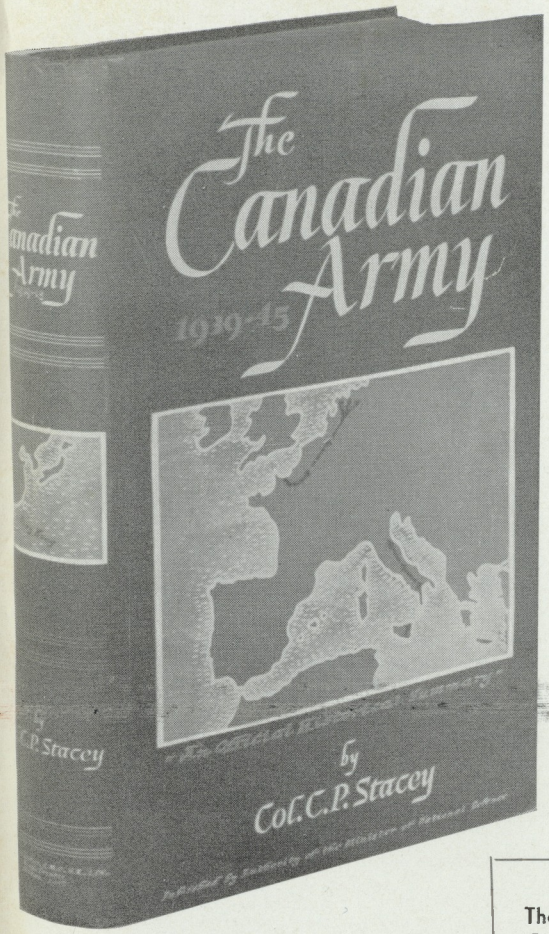
Mr. Daniell has done a good job in relating, with humour and illuminating detail, the twin stories of the 28th and 61st Foot. In such a book it is difficult to have or even to discover a unifying theme. But such a theme does run through these pages. It is the effect, over twenty-five decades and in countless different circumstances, of the regimental traditions on the efficiency and fighting qualities of a unit. "This influence we call the Spirit of the Regiment . . . What it is no man can say; what it can achieve is manifest to all." Mr. Daniell is to be congratulated on presenting such an interesting case history of why in General Foy's words "The English Infantry are the very devils to fight."

Battle Honours of The Gloucestershire Regiment

"Ramillies," "Louisburg," "Guadaloupe, 1759", "Quebec, 1759," "Martinique, 1762," "Havannah," "St. Lucia, 1778," "Maida," "Corunna," "Talavera," "Busaco," "Barrosa," "Albuhera," "Salamaca," "Vittoria," "Pyrenees," "Nivelle," "Nive," "Orthes," "Toulouse," "Peninsula," "Waterloo," "Chillianwallah," "Goojerat," "Punjaub," "Alma," "Inkerman," "Sevastopol," "Delhi, 1857," "Defence of Ladysmith," "Relief of Kimberley," "Paardeberg," "South Africa, 1899–1902," (The above are born on the Regimental Colours) **"Mons,"** "Retreat from Mons," "Marne, 1914," "Aisne, 1914, '18," **"Ypres, 1914, '15, '17,"** "Langemarck, 1914, '17," "Gheluvelt," "Nonne Bosschen," "Givenchy, 1914," "Gravenstafel," "St. Julien," "Frezenberg," "Bellewaarde," "Aubers," **"Loos," "Somme, 1916, '18,"** "Albert, 1916, '18," "Bazentin," "Delville Wood," "Pozieres," "Guillemont," "Flers-Courcelette," "Morval," "Ancre Heights," "Ancre," "Arras, 1917, '18," "Vimy, 1917," "Scarpe, 1917," "Messines, 1917, '18," "Pilckem," "Menin Road," "Polygon Wood," "Broodseinde," "Poelcappelle," "Passchendaele," "Cambrai, 1917, '18," "St. Quentin," "Bapaume, 1918," "Rosieres," "Avre," **"Lys,"** "Estaires," "Hazebrouck," "Bailleul," "Kemmel," "Bethune," "Drocourt Queant," "Hindenberg Line," "Epehy," "Canal du Nord," "St. Quentin Canal," "Beaurevoir," **"Selle,"** "Valenciennes," "Sambre," "France and Flanders, 1914–18," "Piave," **"Vittorio Veneto,"** "Italy, 1917–18," "Struma," **"Doiran, 1917,"** "Macedonia, 1915–18," "Sulva," **"Sari Bair,"** "Scimitar Hill," "Gallipoli, 1915–16," "Egypt, 1916," "Tigris, 1916," "Kut al Amara, 1917," **"Bagdad,"** "Mesopotamia, 1916–18," "Persia, 1918," (Of 72 Battle Honours for 1914–1918 the 10 in heavy type are carried on the Queen's Colour. The Honours have not yet been awarded for 1939–1945).

INDEX

This index has been prepared for the convenience of readers who want a ready reference for all the subjects dealt with in the 12 issues of Volume 5 of the Journal—April 1951 to March 1952, inclusive. Many subjects have been cross-indexed: e.g., the title "(The) American Attack on Kingston Harbour—1812" is also listed under "Attack" and "Kingston". In a like manner, the subject "Canadian Armour Fights in Korea" is also listed under "Armour" and "Korea". It is suggested that this compilation be preserved as a convenient guide to articles published in Volume 5. The indices for Volumes 1, 2, 3 and 4 were published in the March 1948, April 1949, March 1950 and March 1951, respectively.—Editor.



This official summary offers to the soldier and the general reader a dramatic account of the operations of the Canadian Army in the Second World War. Its vivid, clear-cut writing makes it one of the most exciting histories of our time.

Based upon official records, and interrogation of enemy commanders, its authenticity is unimpeachable. From it you can learn the details of the defence of Hong Kong, of the Dieppe raid; of the Italian campaign and the campaign in North-West Europe.

A French edition entitled "L'Armée Canadienne" is available.

This notable volume, superbly produced and illustrated, has all the qualities that one can ask for in a work of this kind.

***Punch*, London.**

Believed to be the first comprehensive official historical account produced by any of the nations engaged in World War II, Colonel Stacey's volume sets a high standard for others to follow.

Canadian Geographical Journal.

This informal, but official, one-volume summary of the Canadian Army in World War II is a pleasure to read.

***Infantry Journal*, Washington, D.C.**

Colonel Stacey always writes clearly and, at certain points, inspired by his theme, he has written some of the finest pages of English prose that I have read in years.

American Historical Review.

The Queen's Printer
Ottawa, Canada. Date.....

Please send me, postage free,..... copies of The Canadian Army 1939–1945 at $2.50 per copy for which I enclose my cheque in the amount of $..... payable to the Receiver General of Canada.

Name.....

Street.....

City and Province.....

OTTAWA
EDMOND CLOUTIER
Printer to the Queen's Most Excellent Majesty
1952

17,200 — 3-52-(5901)
H.Q. 223-C-3