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CANADIAN ARMY JOURNAL

The aim of the Canadian Army Journal, which is published quarterly by the Directorate of Military Training under authority of the Chief of the General Staff, is to provide the Canadian Army with information designed to keep it abreast of current military trends, and to stimulate interest in military affairs. The views expressed by authors are their own and are not necessarily those of the Department of National Defence. Reproductions of the text, in whole or in part, including quotations from the Journal are permitted only if readers are informed of this fact by suitable introductory or interpolated note.

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The Cover

Members of The Victoria Rifles of Canada, Montreal, in action at the Battle of Eccles Hill, 1870, during the Fenian Raids. See "Victoria Rifles of Canada: 100 Years of History", page 37.

NEW CHIEF OF GENERAL STAFF

WRITTEN FROM REPORTS ISSUED BY THE OFFICE OF THE PRIME MINISTER AND THE DIRECTORATE OF PUBLIC RELATIONS (ARMY)

Announcement of the appointment of Lieut.-General Geoffrey Walsh, CBE, DSO, CD, as Chief of the General Staff of the Canadian Army to succeed Lieut.-General S. F. Clark, CBE, CD, was made earlier this year by the Prime Minister, the Right Honourable John G. Diefenbaker.

On relinquishment of his Army appointment, Lieut.-General Clark was seconded to the National Capital Commission as Chairman.

Lieut.-General Walsh

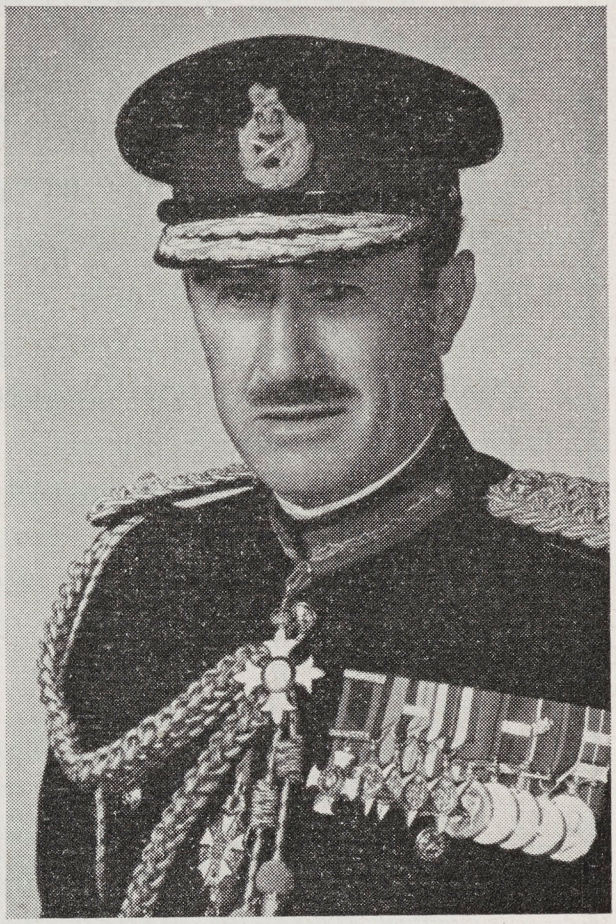
Both appointments were effective 1 October 1961.

BIOGRAPHY:
LIEUT.-GENERAL WALSH

Lieut.-General Walsh was born in Brantford, Ont., 19 August 1909. He was educated at St. Catharines Collegiate Institute, the Royal Military College, the Nova Scotia Technical College and McGill University.

He was commissioned in June 1930 as a lieutenant in the Royal Canadian Engineers. In the early 1930's he served in the United Kingdom at the School of Military Engineering, and on attachments to the British Army. After his return to Canada in 1933 he served in various appointments in Eastern Canada, and at the outbreak of the Second World War was serving in Toronto.

In June 1940 he went overseas with the 1st Pioneer Battalion, Royal Canadian Engineers. He was appointed officer commanding the 3rd Field Company in July 1940. Later that year he became chief instructor at 1 Canadian Engineer Holding Unit.



Canadian Army Photograph
Lieut.-General Walsh

Lieut.-General Walsh again commanded the 3rd Field Company, RCE, in 1941, after which he was appointed Brigade Major, HQ Royal Canadian Engineers Corps Troops.

His promotion to the rank of lieutenant-colonel followed in April 1942 when he was given command of the Royal Canadian Engineers, 1 Canadian Infantry Division.

It was in this capacity that Lieut.-General Walsh participated in the

Spitzbergen operation in Norway, and later in the Sicilian and Italian campaigns. Early in 1944 he was promoted to the rank of brigadier and appointed Chief Engineer with 2nd Canadian Corps, and later served in North-West Europe.

In September 1944 he was appointed Chief Enginer at First Canadian Army and served in that appointment until the end of the war.

Lieut.-General Walsh returned to Canada in August 1945 and was appointed Deputy Quartermaster General at Army Headquarters in October of that year. In April 1946 he was made first commander of the North-West Highway System.

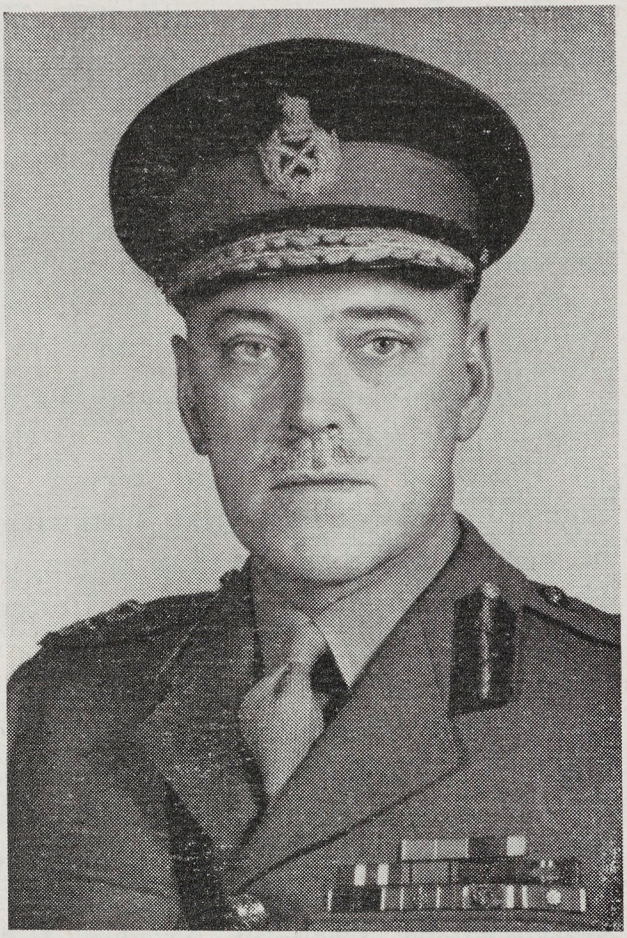
In 1948 he attended the National Defence College, Kingston, and then was appointed Commander Eastern Ontario Area with headquarters at Kingston, Ont. In June 1951 he was selected to be first commander of the newly-organized 27th Canadian Infantry Brigade, and led that formation in Europe.

Upon his return to Canada in January 1953 he was appointed Director General of Military Training at Army Headquarters, Ottawa.

On 1 September 1955 he was promoted to Major-General and appointed Quartermaster General of the Canadian Army.

Lieut.-General Walsh was appointed General Officer Commanding Western Command on 1 July 1959.

During the Second World War he was made a Commander of the Most Excellent Order of the British Empire, and was awarded the Distinguished Service Order. He also holds the Order



Canadian Army Photograph

Lieut.-General Clark

of Orange Nassau (Degree of Commander) from the Netherlands, and the United States Legion of Merit. He was twice mentioned in dispatches.

BIOGRAPHY:

LIEUT.-GENERAL S. F. CLARK

Lieut.-General Clark was born in Winnipeg, 17 March 1909, and received his elementary education at schools in that city.

He is a graduate in electrical engineering (BSc EE) of the University of Manitoba and also holds a mechanical engineering degree (BSc ME) from the University of Saskatchewan.

Lieut.-General Clark began his military career in 1933 as a lieutenant in the Royal Canadian Signals, and served

at Camp Borden, Ont., until 1937. He then went to Army Headquarters in Ottawa as a technical officer in the Directorate of Signals.

In August 1938 he was promoted to the rank of captain and appointed associate professor of electrical and mechanical engineering at the Royal Military College, Kingston, Ont.

At the outbreak of the Second World War he was appointed adjutant of the 1st Canadian Signals and served in that appointment until May 1940 when he was promoted to the rank of major. He proceeded overseas to the United Kingdom in August 1940.

In February 1941 he was promoted to the rank of lieutenant-colonel and appointed to command the 5th Canadian Armoured Division Signals Regiment. His next move came in August 1942 when he was appointed a General Staff Officer, Grade I, at Canadian Military Headquarters in London.

From December 1942 until May 1943 Lieut.-General Clark attended the staff course at Camberly, England. He received his promotion to the rank of colonel in January 1943 and on completion of staff course was appointed Chief Signals Officer, Headquarters, 2nd Canadian Corps. He remained with this headquarters until the end of the war, receiving promotion to the rank of brigadier in November 1943.

He returned to Canada in September 1945 and was appointed Deputy Chief of the General Staff at Army Headquarters in Ottawa.

He attended the Imperial Defence College in 1948. On completion of the IDC course he was appointed Canadian Military Observer on the Western Union Military Committee.

In October 1949 he was promoted to the rank of major-general. At that time (at the age of 40) he had the distinction of being the youngest major-general in the Canadian Army.

His next appointment took him back to the United Kingdom as Canadian military representative with the North Atlantic Treaty Organization in London. This was in November 1949 and in May 1951 he was appointed Chairman of the Joint Staff at the Canadian Army Liaison Establishment in London. Lieut.-General Clark returned to Canada in August 1951 and was appointed Quartermaster General of the Canadian Army at Army Headquarters.

He was appointed General Officer Commanding Central Command with Headquarters at Oakville, Ont., in August 1955 and remained there until being appointed Chief of the General Staff of the Canadian Army on 1 September 1958 when he was promoted to the rank of lieutenant-general.

For his services during the Second World War, Lieut.-General Clark was made a Commander of the Most Excellent Order of the British Empire. He also holds the Order of Orange Nassau, Degree of Commander, from the Netherlands; and the Legion of Merit from the United States.

GOC Western Command

Major-General J. M. Rockingham, CB, CBE, DSO, ED has been appointed General Officer Commanding Western Command with headquarters in Edmonton, Alta. He succeeds Lieut.-General Geoffrey Walsh, CBE, DSO, CD, who became Chief of the General Staff on 1 October.

A native of Western Canada and a

distinguished soldier thoroughly familiar with Canada's northland, Major-General Rockingham commands one of the Army's major operational areas. The largest geographical area of the four commands, it includes the Canadian portion of the North-West Highway System linking Canada with Alaska.

Major-General Rockingham began his military career in 1935 with the Canadian Scottish Regiment and served throughout the Second World War. He was chosen to lead the 25th Infantry Brigade raised for service in the Korean Campaign under the United Nations. Later he commanded the Army's first peacetime division.

Previous to his present appointment, Major-General Rockingham commanded Quebec Command with headquarters at Montreal.

GOC Quebec Command

Major-General F.J. Fleury, CBE, ED, CD, has been promoted to this rank and appointed General Officer Commanding the Army's Quebec Command. The appointment was effective 1 October 1961. He succeeds Major-General J.M. Rockingham, CB, CBE, DSO, ED, who has been appointed GOC Western Command.

With service in the Army dating back to 1930 during his college days, Major-General Fleury has risen through the ranks to become one of the Army's top administrative officers. He served previously as Commander of Eastern Quebec Area with headquarters at Quebec City. This command and his extensive knowledge of the Province of Quebec makes him well suited to head one of the Army's most important commands.

He held senior administrative posts throughout the Second World War. During the interim period of peace he has attended the U.S. Command and General Staff College and the Imperial Defence College. In 1950 he was selected to head the Canadian Military Mission to Japan which laid the ground-work for Canadian Army participation in the first major military intervention by the United Nations.

Prior to his present appointment, Major-General Fleury was Vice Quartermaster General at Army Headquarters, Ottawa.

Former CGS is Honorary Colonel

Lieut.-General Guy G. Simonds, CB, CBE, DSO, CD, former Chief of the General Staff, has been appointed Honorary Colonel of the three Militia artillery regiments of the Toronto Garrison. They are 29 Field Artillery Regiment, 42 Medium Artillery Regiment and 1st Artillery Locating Regiment.

Lieut.-General Simonds was appointed Chief of the General Staff in February 1951 and held this appointment until his retirement in 1955. — *From a statement by the Honourable Douglas S. Harkness, Minister of National Defence.*

DOGS IN SURVIVAL OPERATIONS

By

SERGEANT D. R. HAYES, CD, ARMY EQUIPMENT ENGINEERING ESTABLISHMENT, ARMY HEADQUARTERS, OTTAWA

In the event of a nuclear attack on Canada, a substantial number of casualties will be trapped under fallen debris and demolished buildings. The speed at which these casualties are recovered will greatly increase their chances of survival.

In England during the Second World War, help for persons buried under debris often arrived too late: rescue parties took too long to locate the casualties and in many instances searched in the wrong locations.

In the search for a means to hasten such operations, rescue dogs were introduced and crews were able to start the clearing of debris at the spot indicated by the dogs. As a result, many buried persons who might have otherwise suffocated or suffered fatal injuries were saved.

It is estimated that during the Second World War more than 250,000 dogs served the armies of the Allied and Axis powers for such duties as guard dogs and for rescue operations.

The Exploits of War Dogs

The Home Office Intelligence Branch of the Civil Defence Department in London, England, reports that during the last war specially-trained dogs were used with conspicuous success in a number of incidents, particularly the flying bomb and long-range rocket attacks on Southern England, when the value of dogs was definitely proved to be an adjunct to rescue reconnaissance for casualties. Initially, the Ministry of Aircraft Production introduced a scheme whereby all factory airfields, many Royal Air Force stations and dispersal areas were guarded by dogs, and from this came the idea that as dogs could locate persons in hiding, they might be able to find persons buried under debris as a result of air raids and, if so, save time for overworked Civil Defence Rescue parties.

This called for a different type of training for both handlers and dogs. Eventually, 18 dogs were introduced to London Region, and a total of 165 incidents were handled and 42 live and 508 fatal casualties were located.

The dogs indicated the presence of a buried human in a variety of ways, some pointing, others whining or scratching, and some merely squatting, but it was obvious there was some definite "language" understood only by the handler which enabled him to interpret the dog's message.

Rescue dogs were used with great success in most of the major incidents after their period of training had been completed. On many occasions they

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**Formerly a member of the Royal Canadian Corps of Signals from which he transferred to the Corps of Royal Canadian Engineers in 1960, the author has raised more than 250 dogs, including five Labrador Retriever champions. He first started showing dogs in 1930 and has been a consistent winner in top shows in Canada and the United States. From 1949 to 1954 he represented the Canadian Army in the International Dog Derby, and has served as President or Director of various Kennel Clubs and dog shows in the Ottawa area for many years.* — Editor.

were quick to indicate the position of buried casualties which otherwise would have cost the rescue parties a good deal of time and labour in the removal of debris until the person was uncovered. Generally, the dogs revealed a remarkable ability to distinguish between human and other animal forms, and, in fact, the most highly trained would not be diverted from their task even by the presence of bodies of other animals, birds, etc.

It was found desirable to clear the operation area of other rescues while dogs were searching, but this did not mean that other types of work had to cease, as the dogs seemed to be undisturbed by the sounds of activity around them. The work they did was responsible for the rapid location of many people who otherwise would not have been released in anything like so short a time. Many of those located and saved might not have been alive

Canadian Army Photograph

The Canadian Army's entrant in the International Dog Derby from 1949 to 1954, Sgt. Hayes, the author of the accompanying article, discusses dog-sled racing with two senior officers during the February 1953 derby held in Ottawa. They are Maj.-General W.H.S. Macklin, CBE, CD (left), Adjutant General at that time and now retired, and Maj.-General H.A. Sparling, CBE, DSO, CD, who then was Vice Chief of the General Staff and is now General Officer Commanding Central Command

Courtesy of the Swedish Army

A fire demonstration staged by the Swedish Army Dog Training School at Overgärd near Solleftia.

by the time normal methods would have accomplished their release.

The training of both dogs and handlers is a very specialized subject and one which cannot be undertaken rapidly or without adequate facilities, and the training of dogs for rescue work differs from the training given to dogs for police purposes.

Training in Sweden

In Sweden the Swedish Army conducts a Dog Training School at Overgard (a few kilometres south and east of Solleftia) which raises and trains dogs to fill the requirements of the three Services and certain civilian roles. Here, dogs are being trained as watch or guard dogs and in search and rescue roles.

At a recent demonstration at this school, a small wooden shack built for the purpose, as well as separate piles of wooden debris, were doused with paraffin and set alight. One stack of old timbers and doors covering a soldier buried in a box under sand was close to but not one of those burning. This man had been in position some 45 minutes. Another soldier was buried under about a foot of loose sand, but in the open, a short distance away. He also had been in position for an hour or so. A third soldier was buried in a box covered with planking and about two feet of sand, close to the burning building. He had been in position for two hours. Air and communi-

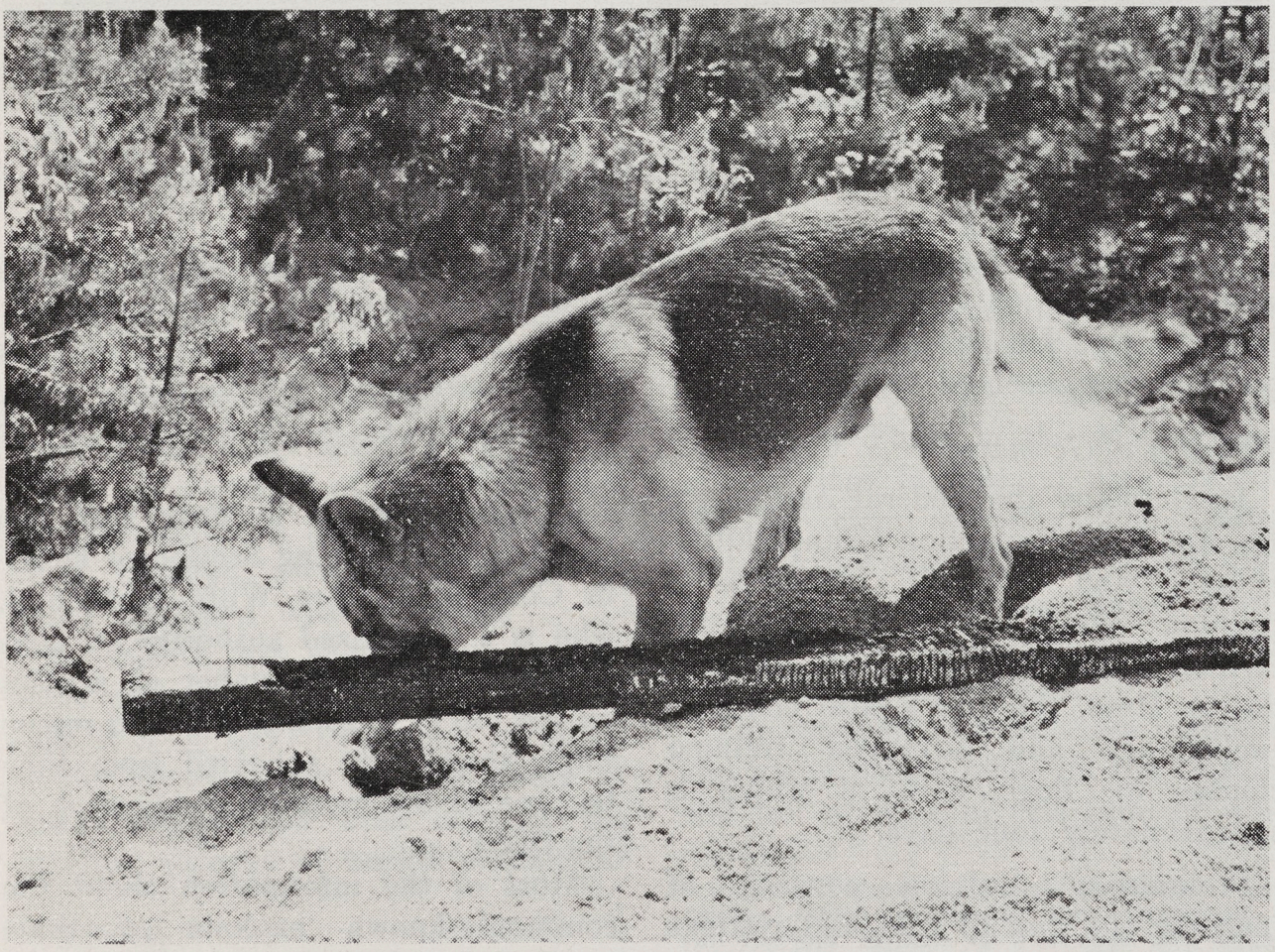
cation was supplied by a two-inch hose running under sand from his box to a point about 50 feet away.

After the fires had blazed for several minutes, fire-fighting vehicles were called in with much use of their sirens, and an instructor deliberately let off three "whizz-bangs". All of this was necessary, it was explained, to let the dog waiting nearby know that a "state of emergency" existed. The dog's collar was then slipped, indicating to him that he now was working, and his handler directed him to search in various directions.

The dog had little trouble in locating the soldier buried in the open. He indicated the position by digging with his front paws; the handler then marked the position with a small flag and went on with the search for the others.

Locating the man under the loose debris of unburned timber came next. Here the dog took more time, returning several times to the stack before finally electing to dig with some assistance from his handler, who removed the odd timber to allow the dog to get at the proper spot. This too was marked by a flag.

In the case of the third buried soldier, the dog showed even more reluctance to commit himself to the position, ranging fairly widely and requiring some repeated orders from his handler. However, he was not thrown off by the two charred boards which



Courtesy of the Swedish Army

Locating a casualty at the Swedish Army Dog Training School.

Courtesy of the Italian Corps of Carabinieri

An obedience demonstration at the Training School of the Italian Corps of Carabinieri.

had fallen from the burnt shack (or were replaced) on the spot where he had to dig. He marked the proper position and received his liver reward.

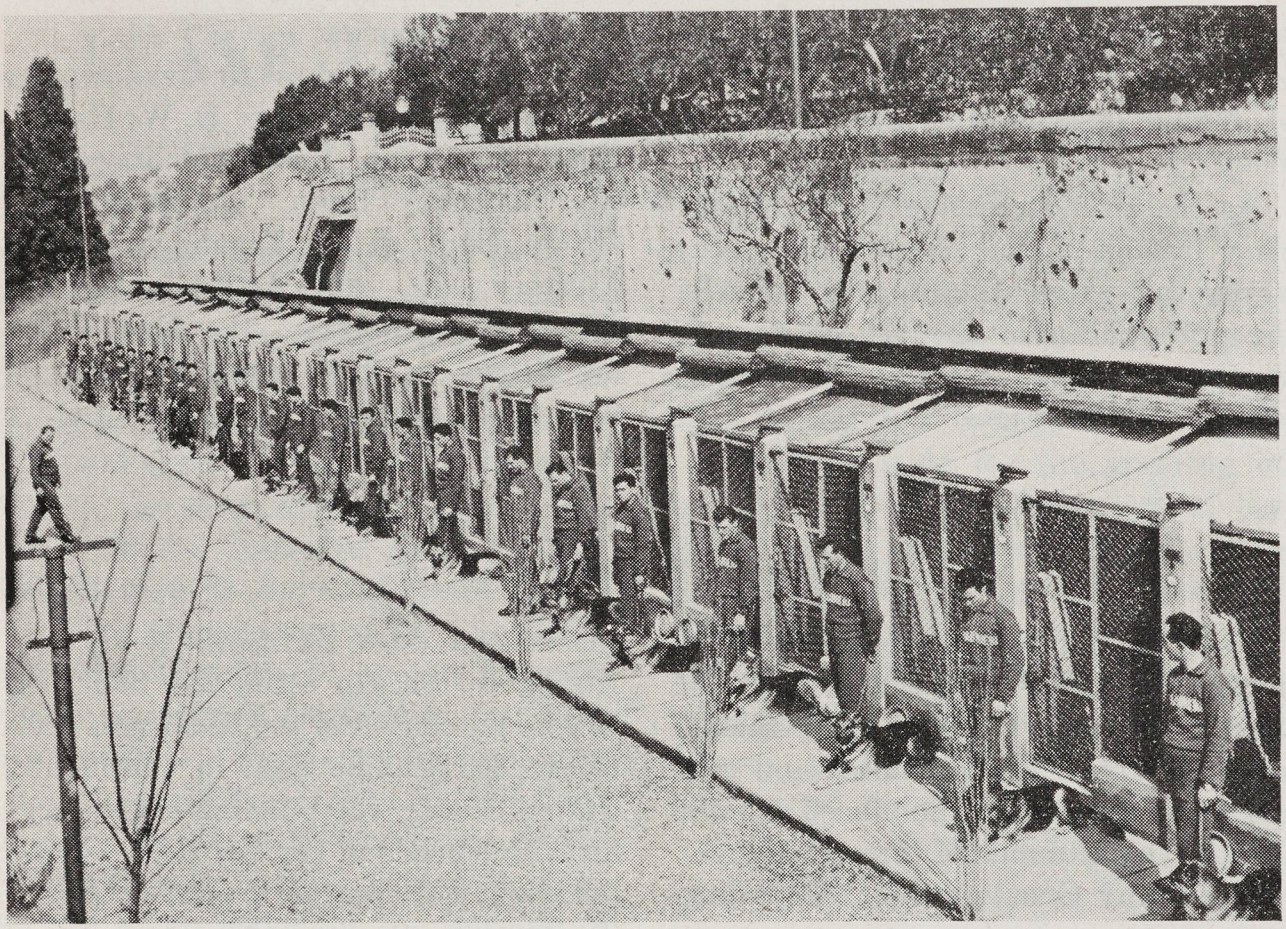
Training in Germany

In Germany the Federal Association for Aid Raid Protection (Bundesluftss-chutzverband (BLSV), conducts a training school at Waldberoehl for civilian volunteers in Civil Defence duties. Here, the BLSV also conducts preliminary and advanced training courses for dogs, each of which is approximately four days.

Preliminary training consists of teaching the dog to find and retrieve human articles of clothing which have just been removed and laid on the ground. When the dog has learned to find these articles in progressively difficult circumstances, he progresses to more advanced training during which he is taught to locate humans buried in rubble.

It is of interest to note that the Chief of the Training Section of BLSV in Cologne is Herr Willy Hoffschild, who is a recognized authority on dogs and has written a number of articles on the use of dogs in search and rescue work which have appeared from time to time in the monthly publication of the BLSV.

Most of the information about the commonly-known exploits of these intelligent animals comes from Sweden where teams of rescue dogs have saved



Courtesy of the Italian Corps of Carabinieri
Trainers and their dogs in front of the kennels at the Training School of the Italian Corps of Carabinieri.

hundreds of lives by their speed in locating persons buried by avalanches. In some cases dogs have been known to indicate the location of persons buried under 30 feet of snow. It has also been proven under actual working conditions that a team of five to six dogs can accomplish in 15 minutes the work of a hundred men working several hours equipped with sounders.

Experience has shown that a dog's sense of smell is more acute by night than it is by day: this factor certainly would increase the working hours of rescue teams, and thus increase the survival chances of buried casualties.*

Summary

Dogs are being trained and employed in various roles in other countries as well as Sweden and Germany. The Royal Netherlands Air Force trains dogs for use in guarding air stations. The Norwegian and Swedish Army contingents of the United Nations Emergency Force in the Middle East employ dogs for use on night patrols and for camp security. The United States Army uses dogs for sentry duty in Korea. In Italy, the Italian Corps of Carabinieri trains and uses dogs for attack and guard duties.

The emphasis which these countries and many others place on the training and use of dogs in this type of work

*Extracts from an article by **Emilio Vieira Lisboa** which originally was published in the* Revista Militar *of Portugal and subsequently in the* International Review of the Army, Navy and Air Force Medical Services, *Nos. 7-8, July-August 1960.*

speaks for itself, as do the many historical reports of the heroic exploits of rescue dogs in the Second World War.

As the ever-increasing threat of nuclear attack hangs heavy over the world today, we might well consider the potentiality of the use of dogs in the important field of National Survival rescue operations.

Acknowledgements

The author wishes to acknowledge the assistance of Colonel E. W. Henselwood, Canadian Naval, Military and Air Attache, Bonn, Germany, and Group Capt. R. B. Ingalls, Canadian Military and Air Attache, Sweden, whose visit-reports to the Dog Training School in those countries were of invaluable assistance to the writer.

* * *

Dogs in U.S. Services

Need for purebred German Shepherd dogs, one to three years old, to be trained for sentry duty at Army missile sites and at Air Force bomber and missile bases has been announced by the [U.S.] Department of the Army.

The Army Quartermaster Corps purchases the dogs for both Army and Air Force use. An estimated 1200 dogs will be purchased in the fiscal year 1962. About 800 will be used in continental United States; the remainder will serve Air Force needs in the Far East.—*From the Army Information Digest (U.S.).*

* * *

Survival in Atomic Attack

Many people immediately write off their chances for survival in an atomic attack. Others feel that survival is not worthwhile if it is to be the "stark, elemental, brutal, filthy" life predicted by some... However, realistic and reasonable evidence does not support such a discouraging outlook. — *K. D. Moll in "Survival in Nuclear War", Ordnance Magazine (U.S.).*

How to Win Friends . . . etc.

Reproduced from the 1 July 1961 issue of *Personnel* (American Management Association), the following is quoted from a letter written by John Paul Jones to the Naval Committee of Congress, 1775:

"Every Commanding Officer should hold with his subordinates such relations as will make them constantly anxious to receive on invitation to sit at his mess table, and his bearing toward them should be such as to encourage them to express their opinions with freedom and to ask his view without reserve." — *Contributed by Captain F.L. Jones, late The Irish Regiment of Canada.*

LEAVE FOR SURVIVAL COURSES

A STATEMENT BY THE HONOURABLE DOUGLAS S. HARKNESS, MINISTER OF NATIONAL DEFENCE

The Treasury Board, on 19 October 1961, approved regulations to enable leave to be granted to employees of the Public Service for the purpose of the special Militia training courses on National survival which started 6 November. The programme is being undertaken by the Canadian Army to train 100,000 men in Survival techniques.

The regulations under the Civil Service Act, approved by the Treasury Board, have been established by Order in Council. These regulations give effect to a decision taken by the Government earlier that employees of the Public Service should, wherever possible, be given leave for the purpose of these courses.

The leave regulations provide that Deputy Heads of Departments may grant leave with or without pay to an employee taking the six weeks' training course at the employee's option; except that leave with pay, other than vacation, compensatory or retiring leave, shall not be granted where the employee receives Army pay and allowances for the period of absence.

Similar provision is made for members of the Militia who may find it necessary to attend their units part time during the courses. The regulations also provide for the granting of leave without pay to members of the Militia who are called out for the purpose of acting as instructors or assuming other responsibilities for the duration of these courses.

There will be four full-time training courses, each of six weeks' duration. The course dates are:

1st course: 6 November — 17 December 1961.

2nd course: 8 January — 18 February 1962.

3rd course: 26 February — 8 April 1962.

4th course: 16 April — 27 May 1962.

These courses will be held at Militia units across Canada. Men who find it possible to participate in this programme should report to the nearest Armoury or recruiting centre.

Spare a Thought for the Junior Leaders

Let us spare a thought for our junior leaders. Our ultimate success rests with them, and they must face the troops in representing superior authority in all its aspects. Often they bear responsibility, with inadequate authority to implement their plans. Sometimes they become the scapegoats for faults mysteriously hidden elsewhere.

Junior leadership is after all a manifestation of senior leadership. Both can only be as good as the system permits them to be, and this is really a system of following the leader. — *Major J.C.F. Moloney, Royal Australian Infantry, in the Australian Army Journal.*

SURVIVAL SIREN SYSTEM

The first phase of the Army's siren warning programme for National Survival is expected to be completed by March 1962, Army Headquarters, Ottawa, has announced.

This phase is a continuation of siren installation in the 16 probable target cities across Canada and cities with a population of over 30,000 initiated by the Department of Health and Welfare. Also included is the installation of sirens in centres of population within a 25 mile radius of the target cities and in centres exposed to likely enemy attack or fallout.

A second phase in the siren programme, which is already underway, will provide siren coverage in cities and centres of population which have subsequently come within the terms of reference of the first phase. It will also improve coverage in localities which already have sirens. Modification of certain sirens to produce a note more distinguishable from background noises is also part of this phase.

The warning signals sounded by sirens convey a minimum amount of information to the public. The warning signals are: The Alert — a steady blast of three minutes or more — which means an attack is probable or radioactive fallout from an attack elsewhere is expected; and the Take Cover — a rising-falling note on sirens for three minutes or more — which means danger of immediate attack. Radio broadcasts designed to provide the additional instructions needed will complement the siren warnings.

Marriage? An Act of Folly!

The following is an extract from the Standing Orders of the 72nd Highlanders of 1873 which was reproduced in the June 1961 issue of *The Queen's Own Highlander,* the regimental journal of the Queen's Own Highlanders (Seaforth and Camerons), United Kingdom:

"It is impossible to enumerate half the miseries which are the inevitable result of marriage to a soldier; officers, therefore, cannot do too much to dissuade their men from it; there are but few men who will not, in after years thank in their utmost hearts, the officer or friend who kept them from such an act of folly; indeed, it ought to be sufficient to point out to such men what some of their married comrades are daily undergoing, to prevent them subjecting themselves to a similar misery.

"...Every man is responsible for the conduct of his wife; if he is unable to control her, he must suffer for his weakness. Should the woman misbehave, the Commanding Officer has the power to strike her off the strength. She must be regular in attendance at Church or Chapel... A soldier's wife or widow wishing to represent anything to the Commanding Officer, must on no account intrude upon him..." — *Contributed by S/Sgt. D.N. McMullen, QMG Branch, Army Headquarters, Ottawa.*

THE TECHNIQUE OF MODERN WAR GAMING

By

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***This article, the third in the series on War Games written specially for the* Journal, *deals with the research technique aspect of the subject. The two previous articles by Major J. K. Hjalmarson, MBE, ED, (Ret.), and Captain E. A. Keenan, CD, appeared in the Winter and Spring 1961 issues, respectively.* — Editor.**

Background

Two previous articles in the *Canadian Army Journal* have described in turn the history of war gaming and the structure and operation of the CAORE war game. This article discusses briefly the modern concept and uses of war gaming as a research technique in military operational research.

The type of war game conducted today is a post-Second World War development. It was initiated as a matter of necessity to provide a method of studying the impact of new weapons and equipment systems upon combat operations. This was a distinctly new role, since previous gaming had been devoted almost exclusively to training or to the testing of specific operational plans.

Scientific research devoted to military problems has been carried out for many years and operational research studies were introduced during the Second World War. At that time, operational research studies were analytical in type, that is to say paper-and-pencil type research. These proved extremely fruitful under wartime conditions and they continue on a very considerable scale today. There are, however, many problems which cannot adequately be studied, particularly in a future time frame, by this method alone. The analytical technique served well during the Second World War for virtually all problems since the context or environment of the battle was well-known. Moreover, the results achieved in such studies were soon tested in battle, as for example in the problems of radar and air defence in the United Kingdom.

It became apparent some 10 years ago, that so many radically new equipment systems were being developed

**The author's Second World War experience included service as a platoon commander with The Royal Canadian Regiment (1940-41); Technical Staff Officer, Canadian Military Headquarters, London, Eng. (1942-44); and the same appointment with Headquarters 21 Army Group (1944-45). A graduate of the University of Western Ontario (Chemistry) and McGill University (Physical Chemistry), Dr. Archer joined the Defence Research Board in 1950. In addition to work at DRB's Suffield Experimental Station, Alta., he was employed in operational research with the Canadian Army and the U.S. 8th Army in Korea, and was on the staff of the Scientific Adviser to the Army Council at the War Office, United Kingdom. He joined CAORE in 1957.* — Editor.

that a more dynamic method of study would be necessary to provide a suitable context in which to assess their performance and their interactions in battle. It is, in fact, a unique situation which has arisen in that, never before, has it been so vital, and at the same time so difficult to foresee the nature of battle some 10 years ahead. It is essential not only that we gain an understanding of how best to organize and employ the new systems currently under development, but also that we gain some foreknowledge of what future requirements there will be as a guide to research and development. With a lead time of some five to 10 years between a concept and a finished product in the hands of the troops, it is vital to establish as far ahead as possible the essential requirements in terms of performance and other characteristics. This is becoming much more difficult as our last battle experience recedes into the past.

A Wide Spectrum of Games

Many different war games have been developed in response to the needs of various studies in many phases of warfare. One or more of these types of games are being played by many armies in the world today. It is not possible within the scope of one article to begin to describe the many types of existing games. The following summary therefore provides merely a brief classification of the basic types.

War games can be divided broadly into two general types. By far the most common and the most important nowadays is the rigid game played in accordance with a fixed set of rules. The rules govern all operations in the game which can be given either a set value or a probability distribution. Such rules provide an internal consistency to the game which is essential for an analysis of the results. It is not the absolute result of any game which is so important; but rather the comparison of the development and outcomes of several games. Comprehensive rules are therefore essential to ensure that, although two games may develop differently due to tactical decisions, the capabilities of the forces and their equipment are the same. Moreover, the rules are scientifically compiled from the best of available factual information and therefore represent as far as possible objective and unbiased data with which to operate the game.

There are two methods of conducting a rigid war game. The original, and still widely used method is the display or hand-played type of game. The CAORE game is an example of this and was described fully in a previous article. It is conducted on a map or a model using symbols to represent the various units being deployed. The symbols are moved on commanders' decisions in accordance with the rules at fixed time intervals and a game resembles to some extent a highly stylized map exercise.

The essential element in the hand-played game is the use of real commanders on opposing sides who are isolated from each other and who make the necessary decisions about all movements in the game. The outcomes of the separate moves, which include intelligence acquisition, firing at targets and so on are derived from the rules. This type of game is used principally when manoeuvre is an important factor

under study and for problems in which the tactical decisions are too frequent and complicated to be represented in any other manner.

Rigid games can also be conducted on an electronic computer, either digital or analogue. This represents the most rigid game of all and only those military operations which can be described precisely in detail can be programmed for a computer. In this type of game, allowance must be made for some finite number of alternative courses of action to provide for command decision at certain points in the game. Such games are usually called combat models. The decision as to which of several courses of action occur at various points in the game is based upon the probability of the decisions being made as a result of what has previously happened in the game. Thus, only those decisions which can be readily and validly established on a basis of past events can be programmed for computer operation.

Considering the enormous number of alternate actions in even a small-scale operation, it is readily appreciated that only relatively simple actions can be played on a computer in any detail. Alternatively, large-scale operations must have a very high degree of aggregation of events for a computer to cope. Thus, for example, it is possible to represent the events of a company-size action in some detail on a computer but in programming a divisional operation only the basic operations down to battalion level can normally be accommodated.

Any attempt to model a combat action in what are essentially mathematical terms implies a basic understanding of the logic and structures of the battle. This has been true in the case of operations which are essentially of Second World War type. When, however, combat of some five to ten years in the future is considered, many new weapon systems and tactical concepts are involved which have not yet been tested with troops on the field, much less have been used in combat. For this, it is necessary to gain sufficient insight by gaming at a low level with a hand-played game. This in turn may not prove entirely adequate if any of the significant component elements of the action are not well enough understood to be gamed. Such problems arise particularly in low-level gaming in which it is necessary to have data on individual activities such as are not played in detail in the higher level games.

To fill this need, a relatively new form of military investigation is being developed known as field experimentation. Briefly, this is a controlled examination of the actual performance of small unit operations under simulated combat conditions and often with simulated equipments. It is scientifically designed and controlled for the purpose of measuring certain basic values or quantities, e. g., the probability of a small patrol equipped with new surveillance devices detecting an enemy unit within a given period of time and a given area.

The alternative to the rigid game is the free or open type of game. In this, the commanders on both sides are not isolated from one another but are able to see each others' moves and actions as they take place. The open game must also be played in accordance with

rules but these may be of a much simpler type imposing fewer restrictions on the play of the game. This type of game is primarily used for exploratory studies and amounts, in fact, to a method of displaying the elements of the system so that they may be more readily visualized and the more obvious interactions noted. In this respect, it resembles more closely the game of chess than does the rigid type of game.

The Role of the Scientist in Gaming

In spite of what has already been stated in this series on war gaming, it probably seems curious to many that scientists should be so intimately involved in such an undertaking as a war game. This involvement is due both to the object of modern gaming and to the essential concept on which it is based. That is to say, scientific participation is necessary both in its design and operation because it is used as a research tool. The modern game is possible due largely to new mathematical and other scientific advances which permit new scope, flexibility and accuracy, both in the preparation of rules and the technique of simulation.

The war game as described here is not simply a map exercise with a few scientists in attendance to run up the results on their slide rule. On the contrary, the scientist is normally integrated fully with a military staff to produce the necessary combination of knowledge and talents to conduct an effective and valid game. In the simplest terms, the scientists provides the data for many of the rules such as weapons performance and is responsible in general for the development of the game. He is also intimately concerned with the programme of games in a given study and in the planning of individual games within the programme. Finally, the scientist carries out the mathematical analysis of the data from the game and correlates them with the operational actions as they developed during the course of the game. These facts together with the subsequent discussion on game methodology should make clear the scientific implications in war gaming today.

Basic Concept

The war game is a simulation of reality and is therefore an approximation. It deals with a very large number of factors: the land battle, for example, is probably the most complex operation which has even been studied by a scientific type of analysis. Combat operations involve the interactions of many different systems, many of which are interdependent to a considerable degree. The object of the game is to simulate the operation of these systems in a valid and realistic manner so that their strengths and weaknesses can be determined. Unless the game can cope with the significant factors and allow them to interact in an essentially normal way, the required results cannot be obtained. A game is in fact deceptively simple in appearance. Unless carefully designed, its logic may be more apparent than real. The object is to achieve validity rather than the illusion of reality which may give the player a false sense of security. There is a constant hazard for the unwary player easily to produce spurious results and invalid conclusions. Gaming requires therefore a clear understanding

of the objective of the study, a valid and up-to-date set of comprehensive rules, a careful experimental design in the game programme and a thorough and objective analysis of all forms of the results.

The basic characteristic of any war game is that it involves conflict situations. Almost every event large or small is in conflict either with the enemy forces, the environment of the situation or with the requirements of other parts of the combat force. The resolution of these conflicts and the compromise solutions which are often necessary constitute the basic problem of the game. Obviously only a limited number of such conflicts can be handled in any one type of game. The conflicts in a game therefore must depend upon the level at which the problem is viewed: the remaining conflicts must be aggregated in the rules.

At the start, once the overall problem has been set, a game designer usually begins by selecting intuitively those sets of factors which are felt to be important and by determining rules for the interactions of these factors. As the game is developed, more factors may be added or some dropped as their relative importance is revealed. There is always an inclination to add new factors rather than to drop old ones and sooner or later the game becomes unmanageable. Thus, there must be a compromise between the desire for realism and the necessity of achieving at least a limited solution within a limited time and with limited facilities. A universal game which can cater to all types of problems is therefore impossible. While the commonest game is that used for general tactical studies, if particular emphasis is to be placed on a specific system or type of systems it is almost always necessary to modify the game and therefore produce a specific game for the purpose. This leads to a hierarchy or echelon of games, one feeding into the other.

A general tactical game, such as at played in CAORE, can be designed to simulate operations at one of the various levels of command normally operating in the field. The one selected should be that best suited to studying the major problems of interest. For example, if the problem is largely strategic in scope, the level of the game should be that of the theatre commander, and the operations within the theatre will be aggregated at the divisional level. That is to say, the basic formation being deployed and represented by a single symbol is a division or at the most a brigade. Probably the most profitable level for general tactical study is either a corps or a divisional level game. In this, the lowest level represented is usually a battalion. The corps game represents a good compromise between a very high degree of aggregation which does not allow study of tactical manoeuvre in detail, and the extreme detail of the lower level games which cannot provide the broader picture of the tactical battle as a whole. The lowest level which has been gamed is the battalion area battle and is a comparatively recent development. This has become necessary to provide an understanding of the structure of the battalion battle in view of the radically new equipments which will be available in the next few years. Once confidence is gained

in the knowledge of the battalion level battle of the future, it is desirable to return to the higher level game at corps or division.

The importance of aggregation in war gaming cannot be stressed too highly. The problem is two-fold : firstly, that of producing single rules for the actions of units rather than playing them in detail to save time and effort; secondly, that of operating the game within the limitations of these rules so that useful information is obtained which is not easily confused with the rules or input data. It is frequently a subtle and complex problem to be quite clear as to what is the real output of a game and what is only an apparent outcome and is in fact directly derived from the starting conditions or the rules.

The Rules of the Game

One of the most important tasks for the scientist in war gaming is the production of an adequate set of rules. In real life, the capabilities and limitations of units and their weapons and equipment systems provide the rules as to what they can do and how long it will take. In a game, on the other hand, only symbols representing the units are deployed and therefore it is necessary to have a set of rules with which to determine their actions either in response to the events in which they become involved or to the tactical decisions of their commanders. Such rules range from a single value such as a movement rate to a range of values represented by a probability distribution. These then are the rails on which the game proceeds.

The basic data from which the rules are derived are obtained from many sources. Originally, these rules came from Second World War records and, where these did not exist, from the combined experience and knowledge of seasoned combat commanders. Constant efforts have been made in the succeeding years to validate these rules, to provide where possible more up-to-date data and the necessary information for new equipments which have not been used before. The latter problem is a considerable one these days. Very often new weapons not yet available for troop trials must be played in a game before there is much reliable data as to their performance. In such cases, it is necessary to use every available method of analysis to estimate as realistically as possible what the probable performance will be under combat conditions. From then on every additional piece of information is also used to improve the scope and validity of the rules.

There is a very definite relationship between the rules and the level of aggregation in a game. At the lowest level, the actions concern the outcome between individual weapons and the smallest tactical groups, i. e. sections. It will be appreciated that in assessing the probable outcome in such actions, there are many intangible and imponderable factors to which it is virtually impossible to assign a value. Such factors as the effect of leadership, morale, physical fitness, weather, terrain, etc., may have a profound and significant effect on the outcome of the action. These cannot properly be taken into account in a game except by way of a general degradation factor which as yet must be largely guess-work.

At the higher levels of gaming in which a battalion or a company action is represented by a single symbol, the factors just mentioned are averaged out and the outcome of an action can be determined by a set of probabilities. In a certain set of circumstances a battalion or a company will have a certain probability of success or failure. In this way, the immeasurable factors which are said to be below the limit of resolution of the game can be avoided in detail. They must, however, be taken into account as far as possible in deriving the general probabilities of success or failure.

The basic characteristic of the modern war game is that it is essentially probabilistic. For those actions or events which may result in one of several possible outcomes, there must be a probability for each of these eventualities. The firing, for example, of an anti-tank weapon can have one of several outcomes depending upon various factors and chance circumstances. Thus, in the rules for a low-level game there is a probability for the range at which an anti-tank crew sights a target. A further probability is necessary to determine the range at which it will open fire, and finally a probability for the damage which occurs if the shot results in a hit. These are for the case of the first shot at the target. If it is a second shot, there is an additional probability as to whether the first shot fired was seen by the enemy tank, and if so whether the enemy tank managed to return the fire.

The actual results of each of these in specific instances in a game are determined by the use of an electronic device which provides numbers between one and a hundred in a purely random sequence to this purpose. If, for example, there is a 50-50 chance of success or failure, a number turning up on the generator between 0 and 50 may be taken as success and a number between 51 to 100 as failure. Over a large number of such events, the game results will show distributions of success and failure such as the rules predict will occur in real operations. We are thus able to be as consistent with reality as is possible. Neither the players nor the controllers in the game should be able therefore to influence the game outcome except by decisions such as the commanders normally make in combat.

The Design of a War Game Programme

As a form of experimental research, war gaming must be considered to be still in a very early stage of development. That is not to say that there is not an extremely valuable payoff even today; but rather that very considerable progress is still needed before it will be possible to design a series of games which will provide results in which one can have full statistical confidence. In a nutshell, the number of games to achieve a conclusive result is a function of the number of variables or factors involved.

To investigate adequately those in even simple actions in a reasonable time requires a very high rate of play. Experience has shown that this can only be accomplished by a means of computer simulation. Such a method allows games to be played over and over again, each play requiring from a few minutes to an hour or so. But as already men-

tioned, computer simulation is as yet very restricted in the type and scope of the operations which can be programmed.

Alternatively, the hand-played game which is capable of representing most levels of combat with a fair measure of confidence is time-consuming to play, ranging from roughly one month to play three to four days of corps level battle to the same period to play one hour of battalion level combat. Clearly, the hand-played game cannot cope with a truly statistically designed series of games.

For the present, therefore, it is necessary to be content with a simple series of games in which, as far as possible, the major factors are controlled in order to derive by comparison general clues, trends, and implications from the progress and outcomes in these games. Without some degree of control of the critical variables, it would not be possible to make even a general assessment with any degree of confidence. In addition, it is essential that attention be focused on certain specific areas and the games oriented in their direction.

Having a clear objective when designing a game programme is critically important. Except for the general exploratory games mentioned earlier in this article, the maximum benefit to be derived from gaming is achieved only when a specific problem can be defined for a series of games. This may be concerned with a major weapon system or the interaction between two major systems, the balance of forces, a test of a specific order of battle, etc. Whatever the problem, the games must be planned so as to highlight the problem and to isolate the major factors involved.

There are, in general, two principles of approach which can be adopted: firstly, the use of standardized tactics in a series of games for both sides, in which case the outcome will depend largely upon the relative aggregate strength of the two sides subject to the effects of chance circumstances; secondly, to employ a given order of battle and to vary its tactical employment. In practice, these are found to be appropriate to two different levels of gaming. Thus, for example, a fixed order of battle in a low-level detailed game permits full attention to be directed to the problem of tactical employment. On the other hand, a relative fixed tactical doctrine in a corps level game allows examination of the relative contributions of major weapon and equipment systems when these are varied from game to game.

Another important factor in war gaming is the time frame in which the problem is to be studied. It is found that the closer the time frame is to the present time, the more specific and detailed are the answers which are required. The further away the time period, however, the less certainty there is in general and therefore the more valuable are the sort of answers which a war game can best provide. This problem is tied in with the limiting resolution of present gaming techniques. A game, for example, when properly designed and conducted can throw considerable light on the various types of fire power which may be needed in a given set of circumstances. It cannot, however, validly establish the exact number of specific weapons but

rather can indicate general weapons strengths required, preferably in the form of their ratios.

Although this may seem a severe limitation in the value of a war game from the immediate, practical point of view, it nevertheless provides an invaluable guide to future requirements. In view of the lead time necessary for the development of new systems, the use of a war game to study requirements five to ten years ahead is an ideal guide to defence research and development. In view of the growing difficulty of forecasting tactical needs well in advance, it is true to say that the use of war gaming for this purpose is rapidly becoming essential.

The Analysis of Battle

What sort of results are obtained from these games and how are they used to investigate the nature and logic of a battle? There are of course various forms which the results can take depending upon the features of the battle which are of primary interest. For purposes of illustration, the assessment of a hand-played tactical game such as that conducted in CAORE will be discussed briefly.

The most obvious type of result from a hand-played tactical game is the insight gained into the operations as to the general nature of the game situation as it developed and the overall outcome at the end. This is an exceeding valuable result if interpreted properly in the light of the limitations of the game design and the inputs that were used. It is, however, all too easy to misconstrue the results of one game as providing general conclusions. A single game result is only one of literally millions of outcomes which are at least theoretically possible. The ultimate object of gaming is to provide highly probable outcomes on which to base conclusions and therefore decisions as to future tactics, equipments, organization, etc.

The tactical game provides a simulated battle experience for the military players from which it is possible to gain considerable insight into the key factors and critical interaction between the major tactical systems. It is a matter of common experience that those who have participated in this type of war game very quickly see the major points of interest and value in a new or novel combat situation.

The problem, however, is not so much to see the results in the individual game, but rather to evaluate such results over a number of games to obtain a generalized result. The object in this is to separate the unique events from those which are common to a number of games and therefore of much higher probability. The unique results have a value in themselves, of course, in providing an indication of the range of possible outcomes for a given tactical situation.

Undue stress, however, should not be given to the final outcome of these games. By far, the most important value obtained is from the events occurring within the game. The final outcome very often is a result of the starting conditions or other external factors not involved directly in conduct of the game. These, of course, can only be examined by means of a higher level game.

The quantitative results of gaming are obtained from the records of the

events which occur in the game. These data relate to the history of the units, sub-units, and individual weapons systems which are represented, and include locations, movements, rounds fired, targets engaged, casualties and damage to both sides, intelligence passed to both sides, etc. There is recorded, in fact, a very considerable amount of data which provides a very useful basis for studying many of the various aspects of a battle. The problem is normally one of time and manpower to sort out these data and to analyse them. A major problem in this respect is that of data processing by mechanical means so that more use can be made of the records. Without this, much of the recorded data remains inaccessible.

In evaluating both of these types of results, the degree of artificiality in the simulation must be constantly borne in mind. In this sense, the game amounts to providing the commanders on either sides with a mental exercise governed by rules and aided by visual devices such as a set of symbols on a terrain model. Missing are all of the uncertainties, the confusion, the misinformation, the individual reactions and idiosyncrasies of the different commanders at various levels, etc. Consequently, there are definite limits to the resolution with which combat actions can be studied by means of a war game. It is not possible, therefore, to read into the results more than can be validly derived from the nature of the game, its rules, and the input data. For example, in a low-level game it is necessary to assume at some minimum level, such as a platoon, that a battle order which is received constitutes a plan for action. That is to say, standard battle tactics or drills are to be employed and that tactical decision therefore does not arise at this level. This restricts the player to representing only a battalion commander, and possibly one or more company commanders.

In analysing the result of the game, it must be remembered that one is dealing with the actions of only a few commanders and not those of an entire echelon of individual decision-makers.

The same problem, in principle, arises in the analysis of the recorded data of a game. Again, in a low-level game it is essential to distinguish between the legitimate results of gaming and those which are implicit in the rules. In a tank/anti-tank action, the anti-tank weapon is given both a probability of firing at a certain range and a probability of a hit and kill at that range. It is not valid therefore to accept as a result of the game the ranges and the kills which occurred except in so far as the game represents the opportunities for these to have happened. Were the game to provide a very large number of such actions, the distributions of ranges of engagements and of hit and kills would simply duplicate the rules for these.

The ultimate goal of tactical gaming is the derivation of general theories of battle. As the understanding of the nature of the tactical battle for a given time period in the future increases, it should be possible by successively aggregating the units played into higher formations to predict with some degree of confidence the outcome of the battle. Such information can be extremely

valuable in the development of various tactical doctrines and orders of battle for different tactical situations.

Summary

War Gaming is not a panacea for all military operational problems. However, if it is scientifically designed and if it is operated systematically in conjunction with other operational research studies, it can provide invaluable insight into complex problems of future combat which can probably not be obtained in any other way except actual combat. It can, moreover, provide probably the firmest basis for projecting into the future, and will be increasingly valuable for this as our most recent combat experience becomes more and more out of date.

Finally, it should be pointed out that war gaming represents a very economical method of study. The cost of attempting even the simplest field exercise is very considerably greater than that of operating a war game. Time is also a critical factor, for as slow as a hand-played game may seem it nevertheless accomplishes far more replications per year than could possibly be achieved with troop exercises.

Maintaining Self-Confidence

Physical fitness is one of the important factors that promote self-confidence, and self-confidence is one of the requisites of a good leader. Confidence, of course, is also closely related to professional knowledge. One would not from choice follow any officer who did not have confidence in himself. If an officer does not have confidence in himself, how can he instil it in his subordinates? On the other hand, if an officer has justifiable confidence in himself and confidence in the men whom he has trained, they will, in turn, have confidence in him. If they have confidence in him, they will follow him. He has been accepted as a leader. It's a simple as that.

Although confidence in one's self is a splendid thing, to maintain it is sometimes difficult. Certainly, on the first assignment, and on most subsequent assignments, he probably will be nervous, and all kinds of ridiculous fears will enter his head. (That is normal for most of us).

A young officer's senior will be sizing him up; his soldiers will be watching him closely—very closely. He must go ahead with his duties. He should for a time "be seen but not heard".

A good leader seeks responsibility; he does not avoid it.

When given responsibility, he does not attempt to delegate it. *Responsibility cannot be delegated.* As a platoon leader, for example, he may delegate certain authority to his non-commissioned officers, but he cannot delegate responsibility. The commander is responsible for everything which those under his command may or may not do, the good as well as the bad. If something should go wrong and he is called upon for an explanation of the failure or the error, he doesn't say, "I told the sergeant."

Those are the famous last words.—*Lieut.-General Samuel T. Williams (U.S. Army, Retired), in "On Leadership", October 1961 issue of the Military Review (U.S.).*

Norwegian ski exercises in the 18th century. Note the use of a single pole.

WAR ON SKIS

By

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Part I

A Russian division plunged deep into the forests of Karelia during the Winter War of 1939-40. Its communications were strung out along a single road, without benefit of flanking protection. The soldiers trudged along, glancing apprehensively at the snow-covered woods which seemed to engulf them, their thoughts constantly returning to the open plains of their native Ukraine.

Suddenly, from nowhere, shots rang out and Russians dropped dead and wounded on the road. The long column hastily deployed, and artillery vainly pounded the unanswering trees. Finnish troops had struck and vanished, leaving only their ski tracks as mute testimony of their mobility. These tactics would be repeated again and again, Russian communications to the rear would be cut, the invaders would be

halted, "sausage-cutting" would begin and eventually a powerful formation would be reduced to small groups of impotent soldiers. The courageous Finns had added another chapter to the long history of war on skis.*

The use of skis for military purposes may be traced far back into the medieval period. It is said that on one occasion in the 12th century an intrepid Norwegian "schussed" through the ring of a besieging force with an important message from a beleaguered garrison. However, the first authenticated use of skis in war occurred at the Battle of Isen, near Oslo, in 1200, when ski scouts exerted an important influence on the result. Succeeding centuries of conflict in Scandinavia brought significant developments both in techniques and organization. Thus, by the middle of the 16th century, the Swedish King Gustaf Wasa had organized an entire ski corps, and he claimed that his men could run the equivalent of 100 English miles in a single day. (In his useful work, *Ski Track on the Battlefield,* V.A. Firsoff remarks that this was "a very good, though not wholly impossible, performance.") About the same time, a force composed of Swedes and Finns defeated a large Russian Army, using skiing tactics similar to those employed by the Finns in 1939-40. In the 17th century both Swedes and Poles made extensive use of these troops. The Swedish general, Jakob de la Gardie, employed 4000 skiers. It is interesting to note that they were equipped with short, broad boards, about five feet long and one foot wide, sometimes described as the "forest ski". This type was considered most suitable for heavily wooded regions, where snow lay deep under the trees and preserved a light texture.

Curiously enough, the Norwegians originally lagged behind their neighbours in this form of warfare. The nobility, following the trend of contemporary European tactics, concentrated their attention on cavalry, although this arm was of little use in the northern winter. However, by the end of the 17th century, the Norwegians had progressed as far as exchanging their summertime mounts for skis in winter, and official reluctance to recognize the utility of regular ski troops gradually disappeared. Consequently, by the beginning of the following century, the Norwegians were more than holding their own with the Swedes. In 1733 a Captain Emahusen produced the first ski drill book for the Norwegian Army, although it was originally written in German.

A Dutch naval officer, who wintered at Trondheim towards the close of the 18th century, contributed a graphic description of Norwegian exercises with ski troops:

Illustrations accompanying the text are from the book *Ski Track on the Battlefield* by V.A. Firsoff, M.A., published by A.S. Barnes & Company, Inc., New York, N. Y. (1943). They are reproduced by kind permission of the publishers. — *Editor.*

**The present article outlines the historical background of military skiing. A second article, to appear in the next issue of the* Journal, *will deal with contemporary developments, including cross-country skiing in the Canadian Army.* — Editor.

"I have now had an opportunity to appreciate in full their speed, which I must confess has stupefied me. In attack a small number of these men should be able to cause great casualties, which the Swedes have felt more than once, and so far as I know they have now followed the example of the Norwegians and set up several companies of such soldiers".

The revival of Norwegian interest in skiing coincided with a decline in Swedish military power. Not until 1806 did Swedish ski regulations appear. An innovation of this period produced a curious weapon for ski soldiers — a long pole with a bayonet fixed to one end. Working up to a good burst of speed, the skier was supposed to project himself, javelin-like, and transfix the petrified enemy. The sight of a long line of skiers, thus armed, descending at great speed might well have tried the courage of their opponents — if firearms had not provided an adequate answer! It is scarcely surprising that the experiment proved unsuccessful, and this otherwise interesting project was abandoned.

During the first half of the 19th century there was a general decline of interest in skiing. Following the Napoleonic period, Europe settled down to a lengthy period of unaccustomed peace and the military aspects of skiing were neglected. In fact, by 1826, there were no ski troops in either Norway or Sweden, exercises being mainly restricted to cadets.

What might be termed the "breakthrough" occurred in the sixties when the villagers of southern Norway developed entirely new techniques of turning — eventually resulting in the

Russian Imperial Guards on skis, pre- 1914 fashion. The stiff knees would cause agony to today's instructors!

Telemark and Christiania swings. These movements were facilitated by the shape of the Telemark ski. Firsoff describes its characteristics:

"The board had a narrow waist and broadened up towards the fore end into a shovel-like, sharply pointed tip, which turned strongly upwards. It also had a very pronounced 'spring' and rose about an inch over the ground below the foot-rest which made for equal distribution of the skier's weight along the whole running surface. This shape was admirably adapted to movement through deep snow, both straight and curvilinear, the shovel-like tip trampling down the snow in front and thus preparing the track, the narrow waist ensuring the maximum of flexibility with the minimum of friction, and the slightly broader heel helping in the execution of turns".

Subsequently, the ridge and round groove (believed to be of Finnish origin) of the Trφndelag ski were added to the Telemark, resulting in the modern ski.

Other developments speeded the transition from old to new techniques. Originally, only one pole ("as tall as the fellow himself", according to an ancient Norwegian adage) was used. This implement could be ridden and used as a brake and, juggling it from side to side, a skier could execute "a clumsy zigzag descent on a moderately steep slope". But as early as the mid-18th century Lapp skiers were using shorter double poles, reaching as high as the skier's armpit, and these gradually proved their superiority. The principal advantages of the double poles were that they lightened the skier's equipment and enabled him to move faster by using both hands on flat terrain and climbing uphill.

The other piece of equipment which underwent radical alteration was, of course, the binding. Many of the older skis had only a toe-strap with a hole bored in the wood of the ski, necessitating use of a sharply-pointed Lapp shoe. (Some of these bindings still survive in Finland and Lapland.) Eventually, however, skiers found that by adding a loop and straps to hold the boot more tightly they obtained much greater control.

Introduction of the Telemark and Christiania swings revived both civilian and military interest in skiing. Slalom techniques were developed, competitions were organized and the era of modern Alpine skiing began.

By 1880 the general staffs of several European Powers were exploring the possibilities of these developments. Both France and Austria led Germany in this field and, in France, the Army actually stimulated civilian interest. French ski drill and equipment were based on Norwegian experience, French officers attending manoeuvres in Norway to learn the tactics of fighting on skis. In 1903 an *École Normale de Ski* was established at Briançon, in the French Alps, soon followed by the setting up of similar schools in the Pyrenees and the Vosges Mountains. Briançon was the scene of the first international patrol race with a marksmanship test, held in 1908 with French, Italian, Swiss, Norwegian and Swedish competitors.

Somewhat similar developments occurred in Austria-Hungary, Switzerland and Italy. Instruction in skiing was introduced into Austrian units before

the end of the 19th centurp; before the First World War every *Jäger* battalion had a ski detachment and the artillery had its own ski patrols. Surprisingly, in view of later trends, progress was slower in Switzerland where, at the turn of the century, Scandinavian techniques proved unsatisfactory for Alpine terrain. (It is interesting to note that much of the impetus given to Alpine skiing in Switzerland came from a small but devoted band of British enthusiasts, who founded the Ski Club of Great Britain in 1903 and introduced the modern Downhill and Slalom races.) The Italian Army was strongly influenced by the French example: like the *Chasseurs Alpins,* the Italian *Alpini* had ski detachments attached to each company.

As previously mentioned, Germany lagged behind France and Austria in developing the military aspects of skiing. Experiments were carried out towards the end of the 19th century, but although there was considerable interest in problems of this form of warfare, the Germans seemingly lacked the "scientific zest" of their neighbours. Their efforts have been described as being of an "episodic character" — although, in imitation of the Austrians, the Germans organized a Volunteer Ski Corps in 1910. Subsequent German progress tended to follow Swiss and Austrian examples.

In spite of her northern location and early experience in Siberia and elsewhere, Russia was also slow to exploit the military possibilities of skiing. It appears that, in modern times, skis were first used by Russian Armies about the end of the 19th century. However, these activities were really confined to the Finnish Rifles (Finland then forming part of the Russian Empire), and cannot be properly described as "Russian" achievements. Nevertheless, at a later stage, special scouting commands known as *Okhotniki,* or "Hunters", were equipped with skis and apparently attained a high standard of performance. As might be expected, the Russians specialized in long-distance movement of groups under severe climatic conditions. Firsoff describes a Russian march that took place in the winter of 1913-14. Three officers and 64 men of the Ismailov Guard Regiment of the First Guards Division, stationed at St. Petersburg, were sent to Kholmogori, near Archangel, for ski training with the local Hunting Command. Six weeks later they returned on skis, covering 1006 verst (about 660 miles) in 20 days, including three days' rest. Generally speaking, however, "though the Russians had some good skiers, their virtue lay rather in endurance than in technical skill and the average proficiency was remarkably low."

Peacetime training, however arduous and realistic, is no substitute for active operations. The First World War gave belligerents their first experience of fighting on skis in Alpine conditions. Accordingly, both the combatants and the neutral, but watchful Swiss and Swedes, gained useful lessons from the struggle.

As already indicated, the French *Chasseurs Alpins* and the Italian *Alpini* were equipped with skis, and had absorbed a fair amount of training by the time war broke out in 1914. They were opposed by ski detachments of the Austrian *Alpenjäger* and certain special

units of the Austro-Hungarian Army. The latter included troops of the old Hapsburg Empire, stationed in mountainous regions such as the Carpathians and Sudetenland, who were available for patrolling and liaison duties. The German contribution came mainly from Bavaria where, in 1914, a volunteer force known as the Bavarian Ski Battalion was raised. This unit later joined a Prussian Ski Battalion in the 3rd *Jäger* Regiment, which was employed on the Alpine front. Special attention was given to the use of ski patrols, mobile machine-gun detachments (mounted on ski-sledges) and staff problems, including medical services.

During the severe winter of 1914-15, French and German skiers fought two major engagements in the Vosges. On the last day of 1914 the *Chasseurs Alpins* distinguished themselves at St. Dié. In the following February an "all-ski engagement" took place between the French and the Bavarian Ski Battalion. Along the mountainous front between Italy and Austria ski patrols were used extensively by both sides. It is reported that Tyrolean skiers achieved notable success at Arresa and Asiago. Austrian skiers also served on the Balkan Front and even in Turkey. In the Carpathians, German and Austrian skiers, suitably camouflaged, harassed Russian formations, which lacked

German ski troops in the Carpathians during the early part of the First World War.

similar troops. The Russian failure to master this form of warfare was mainly due to a political factor and inadequate training. The best skiers in the Imperial Army were Finns, and they were exempt from front-line duties, while the Russian Hunter Commands had not been trained for work in mountains and could not be used advantageously in the Carpathians.

No British troops fought on skis on the Italian Front or in the Balkans. However, during the winter of 1918-19 one company of the 6th Yorkshire Regiment, which served in North Russia, was equipped with skis and sledges and participated in offensive operations along the Murmansk Railway. (It is interesting to note that Sir Ernest Shackleton, the famous explorer, assisted the British force in preparing for its role in this campaign.)

Both Sweden and Switzerland exhibited keen interest in skiing problems of the combatants. The Swiss set up a special Military Ski Delegation to handle these matters in their Army. Also, in the autumn of 1914, a Swiss Volunteer Ski Corps was organized to guard certain portions of the frontiers. Later in the war units were reorganized and a ski drill book was published. In the Swedish Army special attention was devoted to ski training. The importance attached to this training was shown by the fact that the export of skis was banned, together with other war materials, and a military order for 100,000 pairs was placed with one factory. Norway was less affected; but

Finnish ski troops on the march, 1939.

Norwegian Govt. Information Office

French *Chasseurs Alpins* on the Narvik Front, early 1940.

in 1916 it raised a Ski Ambulance Unit of volunteers who gave outstanding assistance to the *Chasseurs Alpins* in the Vosges.

After the First World War skiing became a much more popular sport. Military implications were closely scrutinized and new techniques were developed. With the notable exception of Great Britain, most of the nations of Western and Central Europe introduced skiing in their armies for "operational, auxiliary and recreational purposes." As an example of this trend we may look briefly at Poland where, in 1923, skiing became compulsory in the Army. Firsoff writes:

"Each infantry regiment had detachments of skiers for reconnaissance and liaison work. Particular stress was laid on the ski training in the Northern and Eastern Commands, in the parts of the country with long and snowy winters, where Polish soldiers were trained on the Finnish lines and often by Finnish instructors. Central Poland is practically snowless. But even in the troops normally stationed there ski detachments were foreseen and the personnel were sent for training to the mountainous southern regions. In the Carpathians the Poles had six regiments of Mountain Chasseurs, who were equipped with ski and ski-sledges. Machine-guns were transported on special ski-sledges and dog teams were used as draft power.

"The equipment of a Polish ski soldier consisted of Norwegian... trousers, usual army jacket, jersey, windjacket with hood, regulation army cap with ear flaps, special ski boots, camouflage trousers and jacket with hood, all made of white balloon silk, light touring ski (ash) with adjustable toe-irons, rucksack, field flask, short cavalry rifle [i. e. carbine] and bayonet".

Ski races and tours were organized and every incentive was given by authority to promote better standards of performance. Indeed, Polish efforts might well be cited as a fine example of the excellent results which may be attained by the application of intelligence, imagination and determination to the solution of problems peculiar to this activity.

Military skiing attained new significance in the Winter War of 1939-40, between Russia and Finland, and in certain phases of the Second World War — notably in Norway and on the Eastern Front.

It is quite clear that the Soviet High Command grossly underestimated the importance of ski warfare when, late in 1939, they opened their campaign against the Finns. Marshal Mannerheim, the Finnish Supreme Commander, stated in his *Memoirs* that "the greatest weakness" of the Russian troops was "their lack of familiarity with skis." He added the significant comment, which we would do well to remember, that "even though they started systematic training of their troops immediately after the outbreak of the war, this meant little, because the technique of skiing, especially as practised in war, cannot be mastered in a few weeks."

Hopelessly outnumbered, lacking their opponents' huge resources of armour and aircraft, the Finns nevertheless brought the Russian invasion

Sovfoto, New York City

Soviet ski troops with automatic weapons in the Second World War.

Sovfoto, New York City

Russian Army skiers on an exercise in the Second World War.

to a standstill. The defenders' great assets were high morale, intimate knowledge of the terrain and, in particular, complete mastery of ski fighting techniques. When the heavily mechanized Russian columns crossed the frontier, the Finns wisely avoided direct opposition. "But they laid down ski tracks and 'winter roads', a special Finnish device, consisting of tree trunks laid down on the snow and poured over with water which in freezing acts as mortar and thus provides a carrying surface of sufficient strength to carry even heavy transport, along [parallel to] the routes of the Russian advance. This made possible quick movement of Finnish detachments which could engage the enemy column at various points and always evade a decisive encounter." Russian patrols, without skis, were ambushed and destroyed, and eventually the Russians were confined to narrow, extremely vulnerable axes without control of adjacent forests. Soon the Finnish commandos, known as the *Bielaja smert,* or "White Death", were flying up and down the flanks of the Russian columns. "Using quick-firing Suomi submachine-guns, they would suddenly pour a deluge of bullets into the Russian convoy, causing heavy casualties and interruption of the traffic, and as suddenly they would disappear again into the forest." Firsoff's description is corroborated by Mannerheim, who remarks that "especially at night our people spread destruction round the camp-fires of the Russians." Russian casualties were multiplied by the severe climate; the Marshal mentions that temperatures fell to —46° Centigrade, or 49 degrees below zero, Fahrenheit.

After fighting heroically for more than three months, the Finns were overpowered — but the victors' path was paved with frozen corpses. Finland has demonstrated what a small but resolute and well-trained force could accomplish, adding a brilliant chapter to the history of ski warfare.

The Norwegian Campaign of 1940 and the war on the Eastern Front, which followed Hitler's invasion of Russia, offer many excellent examples of the use of ski troops. In Norway the German lines of communication were continually harassed, and invading parachutists were frequently rounded up by the defenders. On a number of occasions, forward German positions were surprised and destroyed by small detachments of Norwegian skiers. They were assisted by French *Chasseurs Alpins,* operating in the Namsos sector and at Narvik. Some British troops were also equipped with skis, but lack of adequate training hampered their efforts. On the other side, the Germans made good use of ski detachments from Alpine regiments of the Tyrolean contingent. In April 1940 these troops played an important part in outflanking the defence of southern Norway.

On the Eastern Front, in the bitter struggle with Germany, Russia applied the lessons learned earlier, at such heavy cost in Finland. In the interval, great efforts had been made to raise the standard of skiing proficiency in the Red Army. Ski troops were employed both as guerillas and as spearheads of offensive operations. Equipped with automatics, machine-guns and mortars mounted on ski-sledges, and frenquently supported by airborne troops, guerillas operated far in rear of the enemy — disorganizing his lines of communication and demoralizing his troops. It is reported that Marshal Timoshenko made effective use of ski troops in combination with cavalry. According to Firsoff, "one of the major performances of the Red Army skiers was their infiltration into White Russia during February, 1942. They are said to have reached as far as the Latvian border, making contact with the local guerilla bands, disrupting and harassing German communications, carrying out sabotage work and attacking isolated enemy posts."

The Germans appear to have been less successful in their use of skiers — partly because their best Alpine troops suffered heavy casualties in Norway and the opening campaign on the Eastern Front, but mainly because of inadequate preparation on the scale required for operations in this theatre.

Records of military skiing indicate that this form of warfare has long had peculiar significance for northern, heavily-wooded countries with severe wintertime temperatures — in short, for countries such as Canada. It is also clear, as both Russia and Germany learned that the special techniques demanded of ski troops cannot be improvised in an emergency—that, in fact, they can be achieved only by lengthy and arduous periods of preparation. These basic lessons should not be overlooked in any appreciation of future operational commitments.

(To be continued)

VICTORIA RIFLES OF CANADA: 100 YEARS OF HISTORY

By

Lieut.-Colonel G. R. Robertson, CD, Commanding Officer,
The Victoria Rifles of Canada, Montreal

***Material for this brief history of the Regiment has been gathered from the Regimental Archives; "The 24th Battalion, C.E.F., Victoria Rifles of Canada, 1914-1919", edited and compiled by R.C. Fetherstonhaugh (1930); and a tabloid history recently written by Dr. A.S. McCormick, who first served as an officer with the Regiment in the South African War.*—Author.**

The Victoria Rifles of Canada first came into existence in the year 1861, at a time when the outbreak of war between the Government of the United States of America and the seceding States of the South had aroused considerable enthusiasm throughout the whole of North America. This spread of military enthusiasm was keenly taken up by the young men of the Beaver Lacrosse Club of Montreal, who ultimately banded themselves together to form a military organization capable of taking part in any operation which might involve the forces of Her Majesty the Queen in Canada.

At a meeting held on 20 September 1861 the members of the Club formed the "Victoria Rifles Company" and appointed W. Osborne Smith, Esq., their Captain (he was later to become the Regiment's first Commanding Officer). A few weeks later, on 14 December 1861, the number of authorized recruits was increased to 300, comprising a battalion of six companies which was renamed the "Victoria Volunteer Rifles".

At this time relations between Great Britain and the United States were strained as a result of the action of the United States in seizing, from the British Vessel *Trent* on the high seas, the Confederate diplomatic representatives, Mason and Slidell. The result of this action made it clear that hostilities might ensue. Accordingly, the Victoria Volunteer Rifles paraded on three afternoons and three evenings each week in order to become efficient. They drilled on the Champs de Mars or, when weather made this impossible, in the shelter of the Bonsecours Market. It was not long before the results of this concentrated training showed itself, and on 10 January 1862 the unit was formally enrolled as a Militia Unit on Government service with the title "Third Battalion, Victoria Volunteer Rifles".

At that time, Rifle Regiments carried colours in the same manner as Regiments of the Line, and on 30 August the unit paraded on the old Montreal Cricket Grounds to receive colours from the ladies of the City.

On Christmas Day, 1864, a Company of the Victoria Rifles under Captain McGraw left for Windsor, Ont., to oppose a threatened invasion of the

Fenians. They returned to Montreal sometime later when the danger had passed.

On 10 March 1866, when alarms of Fenians Raids were frequent, the Victoria Rifles paraded with units of the Montreal Garrison. Companies were sent out on several occasions and others were held ready for action in the Regimental Armoury, then situated on Victoria Square.

In June 1866 the entire regiment left for Hemingford and Huntington, P.Q., and there remained on duty for more than two weeks, ready to oppose an invasion by a force of Fenians who had gathered at St. Albans, Vermont.

On 24 May 1870 (Queen Victoria's Birthday) the Regiment paraded to honour the day in ceremonial fashion

Graetz Bros. Ltd.

The original officers of the Victoria Rifles of Canada, 1861. Lieut.-Colonel W. Osborne Smith, the Regiment first commanding officer, is at the left.

Reproduction by Graetz Bros. Ltd.

Lieut.-Colonel W. Osborne Smith, the Regiment's first commanding officer (1861).

Reproduction by Graetz Bros. Ltd.

A composite photograph of officers of the Victoria Rifles at Eccle's Hill, 1870.

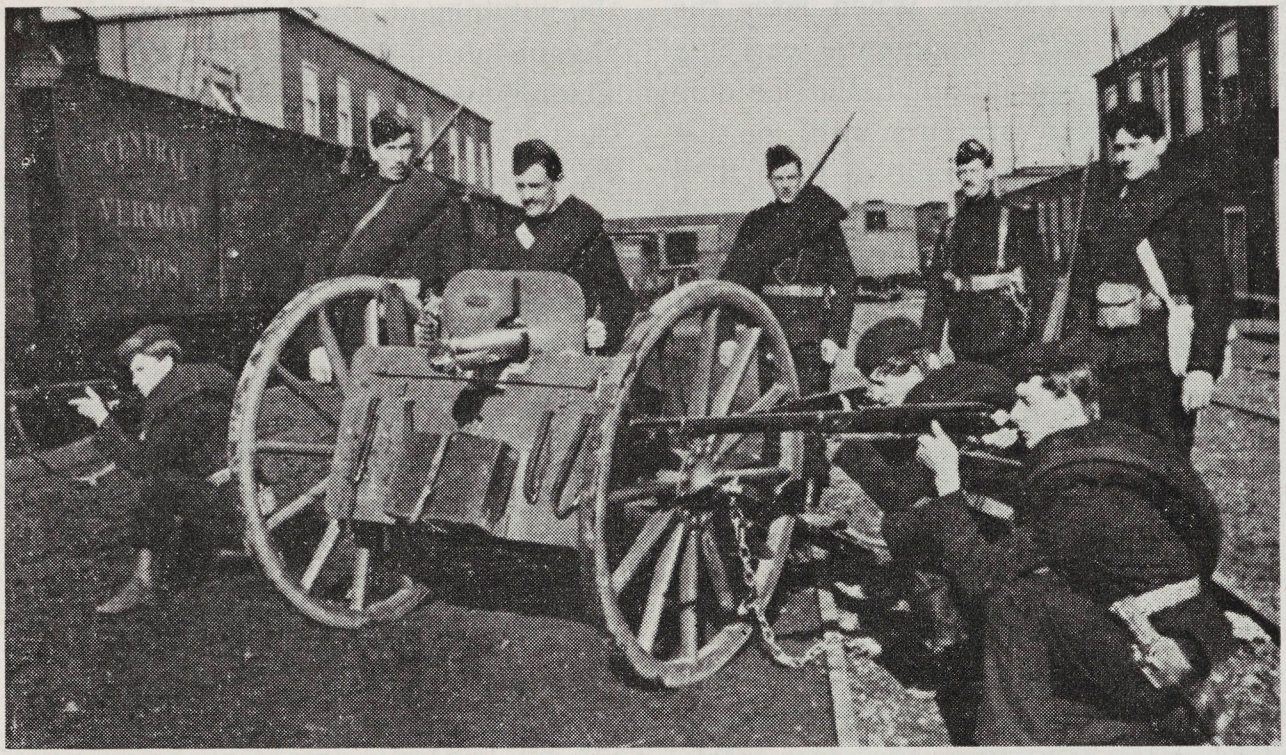
but a message sent to the Commanding Officer, Lieut-Colonel William Henry Hutton, announced that the Fenians were once more threatening the frontier and called for prompt action. Without delay a special service company of the unit under Captain J. W. Crawford, Lieut. E. D. Greenshields and Ensign J.K. Oswald left for the scene of action and on the same day, the five remaining companies under Major E.A. Wite-head entrained at Côte St. Paul for St. Armand, P.Q. When the Fenians crossed the border the Victoria Rifles assisted in driving them back. This engagement was known as the Battle of Eccles Hill. Their action in driving back the Fenian raiders was rewarded by Her Majesty, who granted the Regiment the right to carry on Appointments and Colours "Eccles Hill".

In those days a Regiment was called out on many occasions to aid the Civil Power, some of the notable events being the Guibord riots, 1875;, a guard for the Orange procession, 1877; and the ship labourers' riots in Quebec, 1878

On 5 December 1879 the name of the unit was changed to the "Third Regiment, Victoria Rifles of Canada".

In 1885 the Regiment was warned for duty in the North-West Rebellion but did not proceed as a unit to the North-West, as their services were not required. The Regiment was again called out in 1885 to handle the smallpox riots in Montreal.

Life was not one continual round of riots and *mêlées*, however. The Victoria



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A maxim machine-gun and Victoria Rifles gun crew called out in aid of the civil power during the Valleyfield, Que., strike in October 1900. Bought in England in 1892 by Lieut.-Colonel F.C. Henshaw, the gun was known as "Henshaw's Baby" and may still be seen in the Regimental Museum.

Rifles were famous for their popular social events, and when the Regiment decided to provide itself with an Armoury the citizens of Montreal quickly rallied round with financial support. Band concerts and bazaars were held, and in 1886 a site was bought on Cathcart Street, just south of Montreal's main shopping street, St. Catherine's. The cornerstone for the $20,000 building was laid by Sir Adolphe Caron, then Minister of Militia, and the "Vics" became the first Canadian unit to own an Armoury.

They also became the first Canadian unit to obtain a machine-gun. This then new-fangled weapon, a Maxim, was bought in England in 1892 by Lieut.-Colonel F.C. Henshaw, and still can be seen in the Regimental Museum.

In the South African War (1899-1902) the Victoria Rifles were represented by a total of 89 officers and men. Among the young officers who regretfully had to resign their commissions to join the 2nd Bn. Royal Canadian Regiment (the "First Contingent") and fight the Boers was 2nd Lieut. A. S. McCormick, who returned to the Regiment later and became a captain. Now 85, Dr. McCormick planned to attend the Regimental Reunion in October, bringing his uniform with him because, as he wrote to the Commanding Officer, Lieut.-Colonel George Ross Robertson, "It still fits like a glove."

November 17, 1902, was an important day in the history of the Victoria Rifles. Back in 1862 "the ladies of Montreal" had presented the newly-formed Victoria Volunteer Rifles with

a Regimental Colour. When later the custom of Rifle regiments carrying Colours was discontinued, the Colours remained in the Armoury until, on this solemn November parade in 1902, they were escorted by the entire Regiment to the Regimental Church of St. James the Apostle to be received by the aged chaplain, the Rev. Canon John Ellegood. He had been chaplain since the organization of the Regiment. The parade was headed by a squad of the Regiment's South African veterans under Lieut. A. S. McCormick. The Colour was presented and accepted. Then came the unveiling of the bronze tablet in memory of six members who died in South Africa. As the special guard presented arms, Maj.-Gen. Cotton, with tears streaming down his cheeks, unveiled it. The name of his only son is on the tablet. It was a very affecting moment for everyone in the church.

In August 1908 the Regiment proceeded to Quebec to take part in the Tercentenary Celebrations. The Regiment proceeded to Quebec by steamer and was encamped at Lévis. It was called upon to provide a guard of honour for the arrival of the Prince of Wales when he stepped ashore at Quebec from HMS *Indomitable*. The following day the Regiment took part in the General Review on the Plains of Abraham.

From 1908 to 1914 the Regiment was called on several occasions to furnish guards of honour to the Governor General and other notable personages arriving in Montreal. During these years, in order to maintain the efficiency of the battalion, military camps were organized for training periods in the summer at Farnham, Three Rivers and on one occasion at Lake Manitou. Attendance at camp was considered to be part of the Annual Training and all members of the Regiment were expected to attend unless they could furnish satisfactory reasons for not doing so.

The true test of what the Regiment was ready for and capable of doing came in August 1914 when Great Britain declared war upon Germany. Lieut.-Colonel W. W. Burland, who commanded the Third Regiment of the Victoria Rifles of Canada, volunteered at once for service with the Expeditionary Force with the Dominion Government had authorized. His services were accepted and he was appointed second in command of 14th Battalion Royal Montreal Regiment. This unit came into existence soon after the outbreak of war and served with distinction throughout. Thirteen of its original officers and 338 of its original men were provided by the Victoria Rifles.

On 22 October 1914 Major J.A. Gunn of the Third Regiment was notified officially by Headquarters that he had been chosen to recruit and command a new Battalion in the City. On 31 October it was announced that this unit would be the 24th Battalion, C.E.F., Victoria Rifles of Canada, and a few days later the 24th Battalion was assigned to the Fifth Infantry Brigade, Second Canadian Division, with which it served throughout the war.

Recruiting at this time was brisk and the old Montreal High School of Peel Street, where the Mount Royal Hotel now stands, was converted into

Reproduction by Graetz Bros. Ltd.

The First World War 24th Battalion, Victoria Rifles of Canada, parade along the Champ-de-Mars, Montreal, on their arrival home in May 1919 from service overseas.

a barracks and was used by the 24th Battalion during the whole time they were in Montreal. By the middle of November the same year, the Battalion was practically up to full strength. On 11 May they embarked on HMS Transport *Cameronia* for Davenport, England.

On 1 June 1915, Lieut.-Colonel F. A. Gascoigne was appointed to command an additional Overseas Unit to be formed by the Victoria Rifles of Canada, which was later known as the 60th, with headquarters in the old Armoury on Cathcart Street. No less than 20 active officers of the Victoria Rifles enlisted with the 60th Battalion, as well as a large percentage of the men. The 60th Battalion sailed for England on 5 November 1915 and after training in England arrived in France on 20 February 1916. On 30 April 1917 the 60th Battalion was broken up in France, three companies going to the 87th Canadian Grenadier Guards and the remainder, "C" Company and the Band, being split up between the 5th Canadian Mounted Rifles and the 116th Battalion.

After the 60th Battalion had left Montreal, the Victoria Rifles were called upon to furnish another battalion which was commanded by Lieut.-Colonel F.M. McRobie, known as the "244th Kitchener's Own". Recruiting started in June 1916 and the battalion occupied the old Montreal High School Building formerly occupied by the 24th Battalion.

The 244th Battalion entrained at Montreal on 23 March 1917 for Halifax, where it embarked on the SS *Lapland,* with Liverpool as its destination. The ship unfortunately struck a mine in the Irish Channel and the Battalion suffered casualties before setting foot in England.

The Battalion entrained at Liverpool

for Shoreham and after several weeks of training, it was broken up and sent overseas as drafts to the 24th Battalion and the 14th. What the Regiment accomplished for its King and Country during the Great War is now history, and the Battle Honours which the Regiment has been authorized to use on its Appointments speak for themselves:

Somme, 1916-18.
Arras, 1917-18.
Vimy, 1917.
Hill 70, 1917.
Ypres, 1917.
Passchendaele.
Amiens.
Cambrai, 1918.
Pursuit to Mons.
France and Flanders, 1915-18.

It was during the Battle of Arras that Lieut.-Colonel W.H. Clark-Kennedy, then Commanding Officer of the 24th, won the Victoria Cross for "most conspicious bravery, initiative and skilful leadership". In the words of the London Gazette for Dec. 14, 1918: "It is impossible to overestimate the results achieved by the valour and leadership of this Officer."

During service in France the Regiment suffered heavily: 984 officers and men were killed in action, 22 died of sickness and 2,385 officers and other ranks were wounded. Three hundred and seven honours were awarded to the Regiment including: V.C., 1; CMG, 3; OBE, 2; DSO, 10; MC, 48; DCM, 20; and MM, 142. Ninety-eight other ranks were granted commissions, 61 with the Canadian Forces and 37 with the Imperial Army.

On 10 May 1919 the 24th Battalion embarked on the *Olympic* at Southampton and six days later disembarked at Halifax and proceeded in two special trains to Montreal, arriving on the afternoon of the 18th. The Battalion was in command of Lieut.-Colonel C.F. Ritchie, DSO, MC, one of the original officers of the 24th and prior to the outbreak of war one of the sergeants of the Regiment.

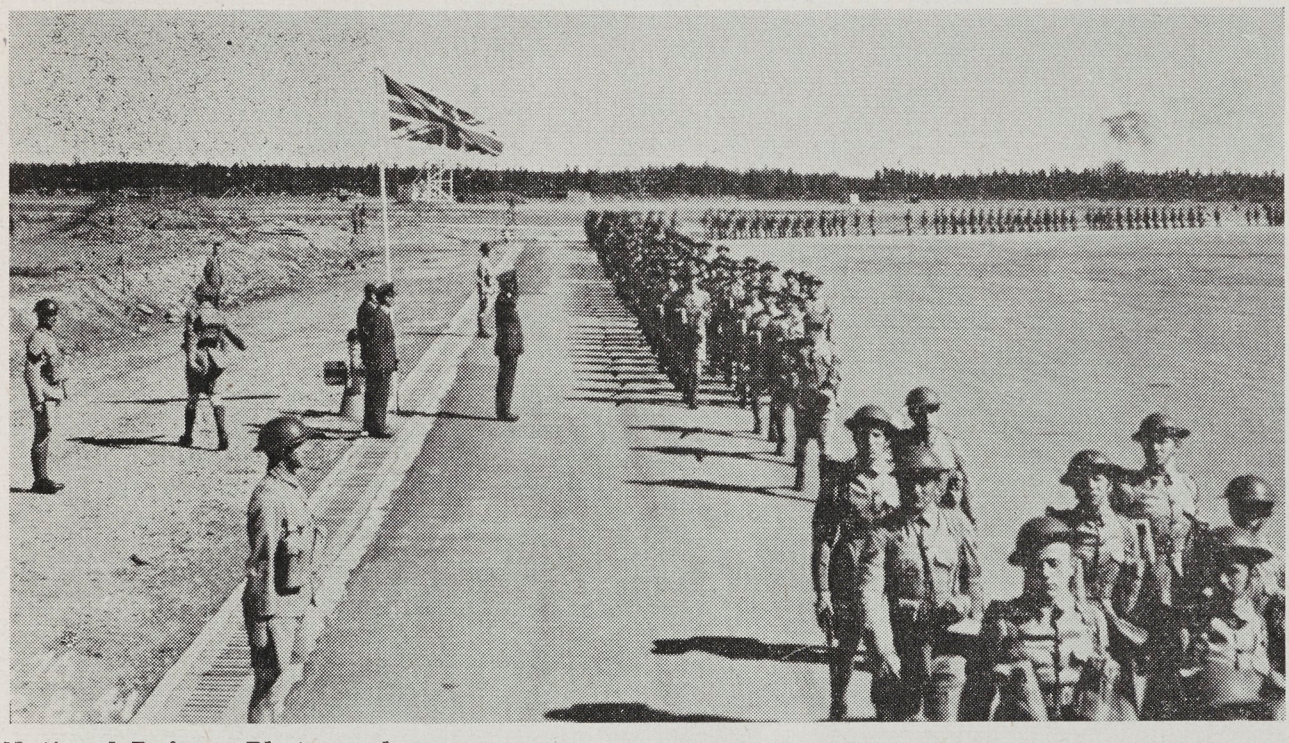
During the year following demobilization there was little activity around the old "Vics", but on 15 September 1920 reorganization of the Regiment was officially undertaken, and upon instructions from Ottawa the name of the Regiment was again changed to "Victoria Rifles of Canada", the designating number "3rd" being dropped. The command of the Regiment was given to Lieut.-Colonel W.W. Burland, DSO, MC, who was in command in 1914.

On Sunday, 10 October 1920 the Regiment paraded to the Church of St. James the Apostle and deposited the King's Colour and Regimental Colour presented by His Royal Highness, the Duke of Connaught, Honorary Colonel of the Regiment, on 26 April 1919 at Whitley Camp, England.

In the Spring of 1928 orders were received to evacuate the old Armoury on Cathcart Street on account of the unsafe condition of the building and foundations. On 29 June 1928 the last parade marched out of the Armoury which had for so many years been the home of the "Vics".

Demolition commenced during February 1929 and the cornerstone of the old building was opened up in August 1929.

During the summer of 1928 the Regiment transferred to temporary quarters in the School House of the



National Defence Photograph

The march past of the 1st Battalion, Victoria Rifles of Canada during the ceremonial review in August 1941 at Gander, Nfld., at the time the battalion was on duty there to guard air bases. Group Captain K.M. Guthrie is taking the salute.

old Douglas Street Methodist Church on Chomedy Street and in 1933 the handsome building which is still the Regiment's headquarters and built on the old Cathcart Street site was officially opened.

On 23 August 1929 it was announced by the Department of National Defence that His Majesty the King had approved of the alliance of the Victoria Rifles of Canada with the King's Royal Rifle Corps of the British Army.

On 26 August 1939 the European situation looked ominous enough for the Regiment to be called out as part of the Internal Security Force, but after more than two months guarding the Lachine Canal, when no threat materialized, it was demobilized.

In May 1940 the Regiment was reorganized again, with Lieut.-Colonel Ritchie, who was one of the 24th's Commanding Officers during the First World War. Lieut.-Colonel I.H. Eakin, now the Regiment's Honorary Colonel, was his second-in-command.

On July 24 orders were received to mobilize the battalion for overseas service. Lieut.-Colonel Ritchie handed over command to Lieut.-Colonel Eakin and promptly set about organizing the 2nd (Reserve) Battalion, Victoria Rifles of Canada, NPAM.

Ironically, that same day, two officers and 150 men from the Regiment left the city as part of the 1st Quebec Regiment, which had just been formed to provide reinforcements for the Second Division.

At the same time, the 40th Reserve Company, Veterans' Guard of Canada, was soon recruited up to full strength under Major J.N. Bales, MC, VD, adjutant of the 24th for much of its

Reproduction by Graetz Bros. Ltd.

Lieut.-Colonel I. H. Eakin, OBE, ED, Honorary Colonel of the Regiment, presents an award.

service in France.

In addition, a company composed entirely of Canadian Pacific Railway employees under the command of Captain E. H. Kent was organized and was known as No. 5 (CPR) Company.

The 1st Battalion was up to strength by September 1940, and after several months in Montreal it moved to St. John's, Nfld., to carry out training and garrison duties there. After three months in St. John's it was posted to Botwood and Gander to guard the air bases.

In August 1941 the battalion moved to Nanaimo, B.C., for more concentrated training, including instruction in combined operations techniques. It subsequently returned to Suussex, N.B., where it was designated to supply reinforcements for the Canadian Army overseas. Some 15 officers and 460 other ranks left in eight drafts

After a tour of duty in the Niagara area the battalion was once more brought up to strength and was sent overseas. However, it arrived in England at a time when reinforcements were urgently needed by units in the field, and once more it was broken up to provide these fresh troops for other regiments.

Some 131 officers and 1742 other ranks passed through the battalion during its existence, and by far the majority of these saw service overseas.

The 2nd Battalion also made a remarkable contribution to the Canadian

Reproduction by Graetz Bros. Ltd.

The home of the "Vics" for 75 years: the Armoury at 691 Cathcart Street, Montreal, built in 1886.

Active Service Force. In the first 20 months of its existence alone, 28 officers and 414 other ranks left for active service.

At the end of the war, the Regiment was reorganized as a unit of the Reserve Force under Lieut.-Colonel R.L. Grout, ED, and the difficult task of post-war recruiting and reorganization was begun. In May 1949 Lieut.-Colonel Grout handed over command to Lieut.-Colonel George Ross Robertson, CD, who commanded until 1952 and subsequently returned to command in 1956.

On 4 May 1951 the Regiment was selected to recruit a rifle company to be followed by an additional company of reinforcements for service in Europe with the 1st Canadian Rifle Battalion of the 27th Infantry Brigade Group.

Rifle Shooting has always formed an important part of Regimental activities and during a century of service the Regiment has produced many first-class shots, won many events and sent many of its members to Bisley.

Today, the Victoria Rifles of Canada, like other militia units, is actively engaged in National Survival training — though preparations for the centennial celebrations also occupied much time this year. And, as if to demonstrate that the old spirit of the Beaver Lacrosse Club lives on, three young NCO's of the Regiment recently undertook a 60-mile forced march from the Armoury to Eccles Hill, scene of the Regiment's first Battle Honour. Without special training, the three — all of whom have sedentary jobs — set out at 0700 hrs. one Saturday, marched until 2200 hrs., eating only the iron rations they carried, slept in a barn and rose at 0400 hrs. for the last leg of their journey.

Before noon, they had arrived, footsore but triumphant, at the stone cairn that surmounts Eccles Hill in tribute to the first representatives of the great tradition of the Victoria Rifles of Canada.

Many events were planned for the Fall of 1961 and early Spring of 1962, including an all ranks reunion weekend, a Regimental Ball and many other special parades and celebrations. However conscious the Regiment may be of its past history and traditions as it enters its second century, it looks to the future with confidence that when the need arises the "Vics" can once again be of service to Queen and Country.

How to Get a Posting

The year before Kitchener's arrival in India, the Commander-in-Chief — himself a cavalry officer — after consulting the Commanding Officers, had strongly recommended a change in the horse establishment of native cavalry regiments. The matter had to be referred to the Military Department for approval, but was returned with a minute signed by a captain saying the change could not take place, as the Department did not agree that the proposal would be advantageous to the Army.—*From "Life of Lord Kitchener" by Sir George Arthur (The MacMillan Co., N.Y., 1920). Contributed by Capt. F. A. Vye, Army Headquarters, Ottawa.*

INFANTRY TEAM TOP MARKSMEN

REPRINTED FROM "THE CAMP BORDEN CITIZEN", CAMP BORDEN, ONT.

The Royal Canadian School of Infantry Team representing Central Command captured all honours to win the Canadian Army (Regular) Central Meeting at the Connaught Ranges in Ottawa in August. They scored 3673 points out of a possible 4560.

In winning the Army Meet, the RCS of I riflemen take possession of the Letson Gold Cup and have the honour of representing the Canadian Army at Bisley, England, next year. The Infantry School competitors ended the gruelling two-day competition with a 77-point margin over the 3rd Battalion, Royal 22nd Régiment, which represented Quebec Command.

Members of the Army Championship Team are Captain S.P. Northrup (Team Captain), Major R.W. Hampton, Captain I.P.F. MacLeod, Lieut. J. D. Bell, WO 2 C.F. Rowell, S/Sgt. W. Lochmanetz, Team Coach S/Sgt. L.A. White, Sgt. S.E.M. Tremblay,

Canadian Army Photograph

Colonel T.R. McCoy, Commandant of the Royal Canadian School of Infantry, Camp Borden, Ont., proudly stands with the championship ten-man rifle team from the School which represented Central Command at the Army's Central Rifle Meet at Connaught Ranges last August. *Left to right (rear)*: Cpl. R. J. Purdy, Moncton, N.B.; S/Sgt. L. A. White, Edmonton; Colonel McCoy; WO 2 C.F. Rowell, Toronto; Sgt. S.E.M. Tremblay, Ottawa; Captain I.P.F. MacLeod, Camp Borden. *Left to right (front)*: S/Sgt. W. Lochmanetz, Vernon, B.C.; Captain S.P. Northrup, Saint John, N.B.; Major R.W. Hampton, Allison, Ont.; Cpl. H.E. O'Neil, Fredericton, N.B.; Lieut. J.D. Bell, St. Catherines, Ont.

Canadian Army Photograph

The Letson Trophy is presented by its donor, Major-General H.F.G. Letson (Retired), to Captain Northrup, Captain of the Royal Canadian School of Infantry Rifle Team.

Cpl. H.E. O'Neil and Cpl. R.J. Purdy. WO 2 Rowell and S/Sgt. White are both previous winners of the coveted Queen's Medal, Canada's highest award in individual competitive marksmanship.

In addition to the Letson Gold Cup, the RCS of I marksmen also won three of the four team events in the Army Championship — the Hamilton-Leigh Obstacle Shoot — in the record time of 49.4 seconds, the Cheylesmore Trophy and the Long Range Match, where they also carried off second-place honours.

Individual marksmanship was demonstrated by several Infantry School riflemen, with Sgt. Ralph Cathline topping the list. Sgt. Cathline, who fired in the Ontario Rifle Association Meet, won the Lieutenant Governor's Trophy, the Mercer Memorial, the Diamond Memorial Cup, the MacKenzie Memorial Trophy and the Ottawa Aggregate, and placed second in the Banker's Trophy Shoot.

A week earlier Sgt. Cathline won the Old Chum Trophy and the Grand Aggregate in the Province of Quebec Rifle Association Meeting at Mount St. Bruno, P.Q. In this same meet Captain Northrup placed second and Cpl. O'Neil third in the Combined Aggregate, and Lieut. Bell won the Air Force Trophy, with Captain Northrup placing second.

The RCS of I team won the Montreal Jubilee Trophy and took first place in the Old Chum and Molson's Team Matches, and second in the Banker's and Grand Aggregate Team Matches.

In the Ontario Rifle Association Matches, the Infantry School Team

Canadian Army Photograph

Four members of the championship rifle team check their scores. *Left to right*: Captain Northrup (Team Captain), WO 2 Rowell, S/Sgt. White, Lieut. Bell.

won the City of Hamilton Trophy and placed second in the Players Tyro Match.

The Dominion of Canada Rifle Association Team Matches were all won by the Infantrymen as they took five out of five to capture first place in the Helmer Aggregate, first and second places in the Sir Arthur Currie Shield, first and second in the Harold L. Borden Memorial, first and second in the Churchill Trophy Match and first place in the Sherwood Team shoot.

Major Hampton won the Cornwallis Trophy and Cpl. Purdy carried home the Gagetown and the Bytown awards.

Lieut. Bell walked away with the High Aggregate to win the King Trophy.

The Helmer Aggregate was won by S/Sgt. White for the highest combined score in the Helmer and Bisley Aggregates.

The impressive record of the RCS of I marksmen climaxed a long string of wins prior to the Connaught competitions. They eliminated all local competition when they won the Camp Borden Rifle Meet last July, then repeated a week later to take first place in the Central Command Meet.

Establishment of the Canadian Army Champion Marksmanship Team begins a new movement towards participation in International Rifle Competitions on the part of the Canadian Army. Major Hampton, who has been the godfather of the idea of international shooting in Canada, has been chosen as coach

Canadian Army Photograph

Sgt. Ralph Cathline of the Royal Canadian School of Infantry, who shot in the Ontario Rifle Association's Meet, is chaired by his comrades after winning the Lieutenant Governor's Match with a score of 146 out of a possible 150.

of the Army Marksmanship Team whose members were drawn from the top individual marksmen at the Army Central Rifle Meeting.

Formation of the Army Marksmanship Team is a result of nearly ten years effort beginning in 1952. The international competition between the RCS of I Rifle Team and the U.S. Army Marksmanship Unit at the Infantry Centre, Fort Benning, Georgia, was initiated in 1957. Now the competition has been expanded so that Canada is represented by the top individual shooters in the Canadian Army.

Soviet Fallout Shelters

The Soviet Union is building enough shelters to protect most of her population from fallout in the event of nuclear war, acording to a report made to the United States Office of Civil and Defence Mobilization. The director of the OCDM has told a [U.S.] Appropriations sub-committee that the USSR is reported to be spending between 500 million and 1.5 billion dollars a year on shelters.—*A news item in the Military Review (U.S.).*

Canadian Army Photograph

Thomas Betle, left, and Samuel Mintz of Winnipeg, Man., who have received Suggestion Award Certificates and cash prizes for developing a new electronic device for use in Army signals equipment.

ELECTRONIC DEVICE AWARDS

FROM A REPORT ISSUED BY THE ARMY PUBLIC RELATIONS OFFICER, MANITOBA AREA, WINNIPEG, MAN.

A piece of electronic equipment perfected after four years of work and study by two Winnipeg men has been adopted by the Canadian Army. It will save the Department of National Defence thousands of dollars and man-hours each year.

The device, a new design of harmonic suppressor antenna coupling, is the brainchild of former WO 1 Samuel Mintz and Thomas Betle, senior civilian signals technician at the Army's Fort Whyte wireless station in Winnipeg.

Experiments on the coupling unit, which is not patentable but a radical improvement on equipment in use, were undertaken in the Manitoba

Signals Squadron workshop at Fort Osborne Barracks where Mr. Mintz was foreman of signals prior to his retirement in 1960 after 31 years' service in the Army. He is now associated with an electronics distributing firm in Winnipeg.

Five of the new units, recently installed in Army signals posts after exhaustive tests, will prevent transmitters from infringing on neighbouring frequencies, common on former equipment used, and reduce interference caused by temperature and voltage changes.

Each unit cost $100 to manufacture and will save 365 man-hours annually at each installation by eliminating the need for constant checks and frequent adjustments by personnel who man the stations 24 hours a day the year round.

Brigadier John Pangman, Commander of the Manitoba Area, presented the designers with award certificates and cash prizes totalling $136 on behalf of the Public Service of Canada Suggestion Award Board, who confirmed the new design following initial tests.

Additional antenna couplings may be put into service in 1962 when appraisals now underway by the Defence Research Board and the Royal Canadian Navy are completed.

Building in Barrels

In a modern-day equivalent of the genie emerging from a bottle, a dramatic new concept that brings forth plastic foam buildings from barrels is being tested at Camp Century in Greenland.

The new concept appears to have significant possibilities from a strictly logistical standpoint, even if it should not actually save in building costs. Shipping of barrels of the liquid plastic, at a density of about 60 pounds per cubic foot, would effect great savings over shipping of regulation building materials.

Now the subject of a feasibility study at the U.S. Army Engineer Research and Development Laboratories, Fort Belvoir, Virginia, the plastic can be mined to form a rigid building section of plastic foam at a density of about two pounds per cubic foot. This means 30 cubic feet of material can be evolved for each cubic foot of shipping space.

The test building now in use are of the modular type. Each panel was foamed in place in molds somewhat in the manner of making a metal casting. These were then sprayed with polyester resin and fibreglass to protect the foam casting; the fibreglass skin also adds to the strength of the foam panels. Each panel, three by ten feet, weighs only 22 pounds.

A building 16 x 24 feet can be made from little more than one barrel of the resins. Preliminary studies indicate that the material has low thermal conductivity, very little if any moisture absorption, is strong, flexible and light in weight.—*Army Information Digest (U.S.)*.

ROTATION: NAPOLEONIC WARS

CONTRIBUTED BY LIEUT.-COLONEL H. F. WOOD, CD, DEPUTY DIRECTOR, HISTORICAL SECTION, ARMY HEADQUARTERS, OTTAWA

The contributor informs us that he came across the following in an old Army monthly. It is extracted from The Royal Military Chronicle General Orderly Book (page 239).—Editor.

* * *

Horse-Guards, 10th April, 1813.—HIS Royal Highness the Commander in Chief is pleased to direct, that when a Regiment embarks for Garrison Duty on Foreign Service, the lawful Wives of Soldiers shall be permitted to embark, in the proportion of Twelve per Company, including the Wives of Non-Commissioned Officers, and Rations are to be issued for them as long as the Corps remains in a Foreign Garrison.

When a Regiment embarks for active Field Service, the number of Soldiers' Wives to be permitted to accompany it, must be limited to Six per Company, or their Embarkation must be altogether forbidden, according to the nature of the Service for which the regiment may be destined.

To such Wives of Soldiers as are not permitted to embark with their Husbands, the Rates of Allowance, authorized by the Act of the 51st of Georges 3d, chap. 106, and by the Act of the 52d of Geo. 3d, Chap. 120, (Extracts from which are contained in the following pages) will be granted, to enable them to proceed to their Homes, or to the Places at which they intend to reside, during the absence of their Husbands on Service.

If a regiment should embark from a Foreign Garrison for Field Service, such Soldiers' Wives as are not permitted to embark with the regiment, are to be sent by the earliest conveyance to this Country: on their Arrival in Great Britain or Ireland, they will receive the Rates of Allowance specified in the Acts of Parliament above alluded to.

When a Royal Veteran Battalion embarks for Foreign Garrison Duty, all Soldiers' Wives of good characters, who are desirous of accompanying their Husbands, are to be permitted to embark.

This Order is to cancel that which is contained in page 255 of the General Regulations and Orders for the Army.

By Command,
Harry Calvert, Adjutant-General.

Extracts from the Act of 51st Geo. III. Ch. 106 — I. "UPON any Regiment, Battalion, Corps, or Detachment, being embarked for Foreign Service, the Commanding Officer thereof shall cause a List or Lists to be made out of all the Wives and Children of the Soldiers belonging to such regiment, Battalion, Corps, or Detachment, to be left at the Place of Embarkation, who are desirous of claiming the Allowance authorized by this Act, for the Purpose of enabling them to return to their homes or place of settlement, either in one List for the regiment, battalion, corps, or detachment, or separate Lists for each Company; and shall give to every such Wife a Duplicate of such Part of such

List as shall apply to each Wife and her Family of Children respectively, certifying thereon, under his Hand, that the Person to whom such Certificate is given is the Wife or reputed Wife of a Soldier in his regiment, battalion, corps, or detachment; and he shall transmit such List or Lists so made out to the Secretary at War."

II. "Each Wife to whom any such Duplicate shall have been delivered as aforesaid shall forthwith take the same to some neighbouring Justice or Magistrate, who shall make out a Route for her, and fill up and sign a Certificate, specifying the Place to which such Woman is going, and her Route, that she may receive such Allowances as are authorized by this Act, not exceeding Two-pence per Mile."

III. "Upon Production of such Certificate to any Overseer of the Poor of any Place through which such Woman shall pass, he shall, out of any Money in his Hands applicable to the Relief of the Poor, pay her an Allowance not exceeding the rate per Mile specified in such Certificate as aforesaid, for the Number of Miles to the next City, Town, or Plate to which she may be going, not exceeding Eighteen Miles, and he shall endorse on such Certificate the Money so paid, and take a receipt from the Woman signed with her Hand or with her Mark, specifying the regiment, battalion, corps, or detachment, to which her Husband belongs, so as that the Description on the receipt may correspond with the Description in the Certificate so produced to him as aforesaid."

IV. "The Sum so advanced by such Overseer shall, upon Production and Delivery of such receipt to the Collector of Excise of the District within which such Overseer acts as such, or any Person officiating for such Collector, he repaid to such Overseers for the Use of the Fund for the relief of the Poor, by such Collector of Excise or other Person, out of any Public Monies in his Hands, and the same shall be allowed in his Accounts; and such Overseer shall give a receipt for the money so paid to such Collector or other person, and such receipt of the Overseer, together with the receipt of the Womand, (*sic*) shall be taken as cash in the Payment of Duties of Excise received by such Collector, and all Sums of Money so advanced out of any Duties of Excise shall be repaid by the Agents of the regiments to which the Soldiers belong whose Wives and Families have been so relieved, or by any other Person to be appointed for that Purpose by the Secretary at War, to such Person or Persons as shall be authorized by the Comissioners of Excise in England or Scotland respectively to draw for or receive the same, for or on Account of the said Dutics.'

V. "Every such Womand shall at the last Place of her receiving any Allowance under this Act, antecedent to her Arrival at her Home or Place of Settlement, deliver up such Certificate to the Overseer of the Poor advancing such Allowance, who shall deliver the same to the Collector of Excise, and the same shall be by such Collector of Excise, transmitted to the War Office."

VI. "Wives of Soldiers not complying with the Regulations herein before prescribed shall be treated as Vagrants . . ."

NEW RESEARCH PROGRAMME

A STATEMENT ISSUED BY THE DEFENCE RESEARCH BOARD, NATIONAL DEFENCE HEADQUARTERS, OTTAWA

The expansion of Canada's scientific contribution to future North American and NATO defence efforts, through the mobilization of the research resources of Canadian defence industry, will become the responsibility of the Defence Research Board with the active cooperation of the Department of Defence Production.

Announced in broad terms by the Hon. Douglas S. Harkness, Minister of National Defence, in the House of Commons on 12 September, the programme will aim at speeding the introduction of new technological advances into the design of military equipment. Canadian industrial organizations should then be in a better position to participate in the Defence Development and Production Sharing Programme already established between the United States and Canada.

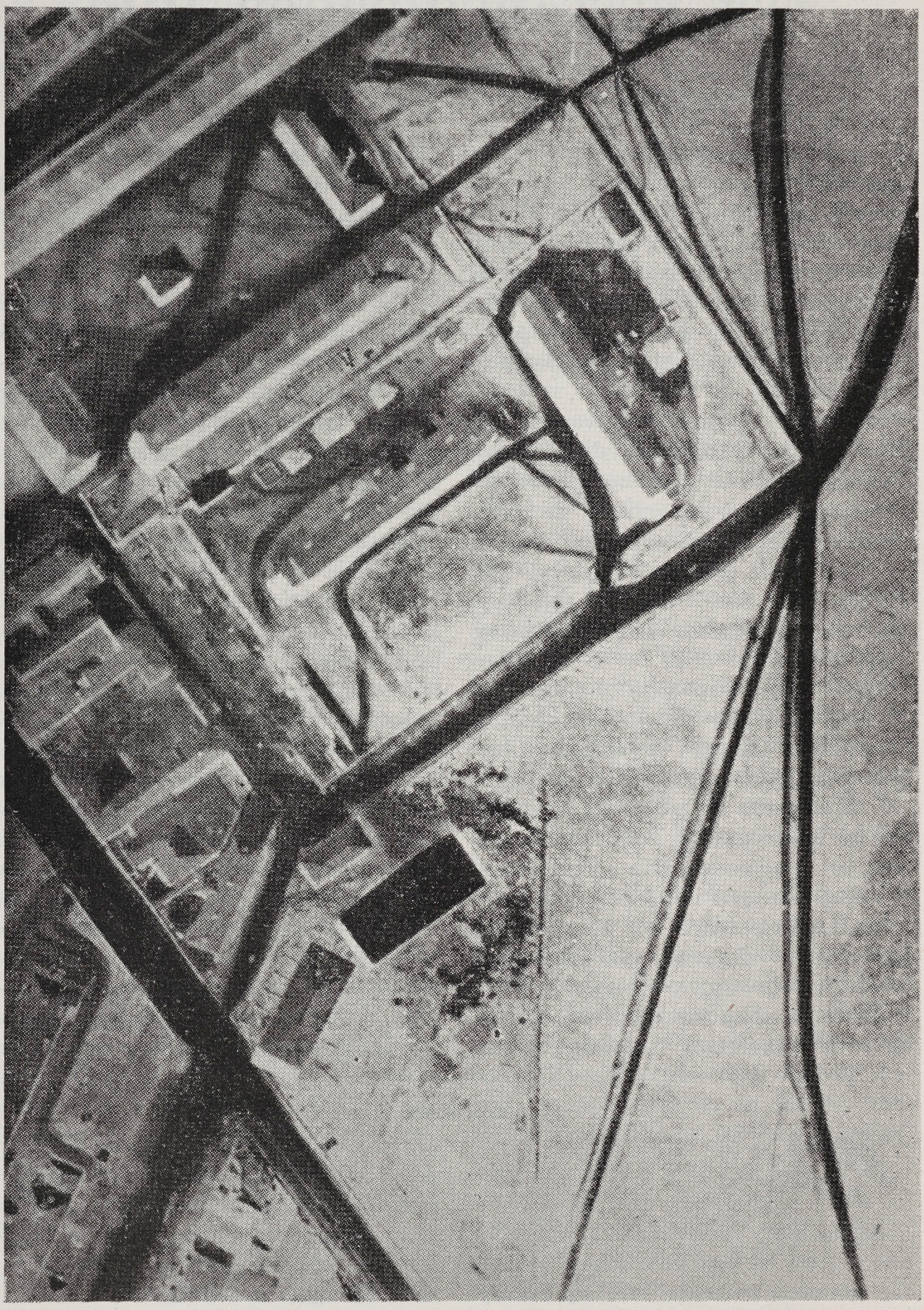
A Directorate of Industrial Research will be established at DRB Headquarters to implement this programme. Heading the new directorate will be John L. Orr, MBE of Ottawa and formerly of Toronto, who will also retain his present responsibilities as Director of Engineering Research at Board Headquarters. A former officer of the Department of Defence Production, until joining the Board's staff six years ago, Mr. Orr's past training and experience equip him to direct the new programme.

The objective will be to encourage industry to strengthen its research and development capabilities by sponsorship of applied research in fields of defence interest. It is expected that industry will advance new ideas leading to research projects in support of which the Government would be prepared to make a substantial financial contribution. Thus it is hoped to stimulate a major expansion of industrial research activity generally, as well as a significant increase in the limited number of research groups presently active in Canadian defence industry.

Emphasis will be placed on the long-term aspects of defence problems and research efforts will be concentrated in selected fields in order to achieve the required level of technological competence. The programme will be closely coordinated with the research activities of Board laboratories, and fundamental research supported at Canadian universities under the DRB extramural grants system.

Initiative

Initiative is the agent which translates imagination into action. It must be used intelligently lest it become irresponsibility or even insubordination, but it must be used courageously when the situation warrants. Military history provides innumerable examples of commanders who, confronted with unforeseen circumstances, have adhered slavishly to instruction and, at best, have lost an opportunity; at worst, they have brought on defeat.



Flashback No. 36

AERIAL PHOTOGRAPHY IN CANADA, 1883

NARRATIVE SUPPLIED BY THE HISTORICAL SECTION,
ARMY HEADQUARTERS, OTTAWA

The aerial photograph on the opposite page was among those taken during August 1883 by a camera mounted in a small pilotless balloon which was hovering at about 1400 feet above the Citadel at Halifax, Nova Scotia. It shows part of the Glacis and North Barracks area.

Halifax still had a British garrison, because of the importance of its dockyard to the Royal Navy, and Captain Henry Elsdale of the Royal Engineers seems to have spent a good part of his tour of duty trying to develop a method for automatically photographing would-be enemy positions from small captive balloons flown like kites.

Ballooning had come to the fore militarily in consequence of successful operations during the American Civil War and the later Franco-Prussian War. Photographs of the enemy countryside had then been taken by occupants of balloons. The British Army was slow to act, however, and the Royal Engineers did not acquire a ballooning establishment until 1878. Even then there was no official interest in air photography. Thus Captain Elsdale's experiments were conducted at his own expense. When posted to Halifax in 1882 he took ideas with him.

Eventually Captain Elsdale produced an ingenious contraption for use with a small captive balloon of about 1000 cubic feet capacity. On top of what would be considered a very clumsy camera by present standards, he placed six photographic plates, resting one over the other with their prepared surfaces downwards. When the balloon was judged to be hovering over the area to be photographed, a clockwork mechanism was tripped by the operator on the ground. The camera shutter opened to permit only an instantaneous exposure of the lens and then the plate was shoved to one side, leaving the next one ready. As soon as sufficient time had elapsed for all six plates to be exposed, the balloon was hauled in and the plates developed. The plan made from enlargements of these negatives was found to tally closely with the known dimensions of the Citadel.

The following year brought promotion to Henry Elsdale and command of the balloon detachment with the Bechuanaland Field Force. After Major Elsdale left ballooning in 1888 his experiments were pursued by other enthusiasts among the Royal Engineers. No official effort or funds were, however, devoted to their development. Only during the 20th century, following the invention of the aeroplane and much more intricate photographic equipment, did it become possible to photograph large areas from the air and quickly obtain positive prints.

"I CAN CURSE DEM NO MORE!"

Among the foreign professional soldiers chosen to train a raw American army during the American War of Independence was Frederick William Augustus Henry Ferdinand, Baron von Stueben, late of the service of Frederick of Prussia, who arrived at Valley Forge in February 1778.

The following is taken from an article "MAAG in Reverse" by Captain Clare R. J. Rogers and published in the August 1961 issue of *Army* (U.S.). — *Editor.*

"Here, in Steuben's words, are some of the conditions he found:

" 'The situation of affairs in general and of our own Army at Valley Forge in particular, is too well known to need a description. My determination must have been firm that I did not abandon my design when I saw the troops. Matters had to be remedied, but where to commence was the great difficulty ... The arms at Valley Forge were in a horrible condition, covered with rust, half of them without bayonets, many from which not a single shot could be fired ... The men were literally naked, some of them in the fullest extent of the word. The officers who had coats, had them of every color and make. I saw officers at a grand parade at Valley Forge, mounting guard in a sort of dressing gown, made of an old blanket or woolen bed cover. With regard to their military discipline, I may safely say that no such thing existed. In the first place there was no regular formation. A so-called regiment was formed of three platoons, another of five, eight, nine and the Canadian regiment of twenty-one. The formation of the regiments was as varied as their mode of drill, which only consisted of the manual exercise. Each Colonel had a system of his own, the one according to the English, the other according to the Prussian or the French style. There was only one thing in which they were uniform, and that was, the way of marching in the maneuvers and in the line of march ... It would be an endless task to enumerate the abuses which nearly ruined the Army as I found it at Valley Forge in the month of February, 1778 ...'

"Steuben worked and swore and worked some more, often rising at three in the morning. When, as often happened, his company of ignorant recruits would fail in some simple maneuver, his temper would get the better of him and he would explode in a mixture of German, French and English, often calling for Benjamin Walker, his aide, to come and do the job properly for him. 'I can curse dem no more!' In any event, because of this or in spite of it, he got results. From a mob of ignorant men he created a trained and disciplined army. Officers ceased to shrink from labor with the example of industry like that of Steuben before them, or to consider any part of their duty as beneath them. 'Do you see there, sir, your colonel instructing that recruit?' he asked one of his assistants one day. 'I thank God for that.' "

TROOPS IN SLEIGHS

by

J. Mackay Hitsman, Historical Section,
Army Headquarters, Ottawa

One hundred years ago the garrison of 5122 British troops in what are now the provinces of Ontario and Quebec was being hurriedly reinforced as a result of an Anglo-American war scare.* During the first ten weeks of 1862 some 6823 British regulars were landed in New Brunswick and transported in sleighs up the St. John River valley and across the Madawaska country to Rivière-du-Loup, from where the Grand Trunk Railway had a line to Montreal. Included were two battalions of Her Majesty's Foot Guards, who were (and are) liable for overseas service only in times of emergency.

Fortunately the short-lived "Trent Affair" had been resolved on Boxing Day, 1861, just as the first of the troopships carrying the scheduled 11,175 reinforcements from England began steaming into Halifax. But there was no knowing what might happen before the American Civil War to the south might be brought to an end, so the troop movement was continued as planned. Larger ships proceeded to Saint John, where temporary accommodation had been provided for 3000 officers and men. Shallow-draft steamers moved troops already acclimatized by winter service in Nova Scotia to St. Andrews. Their places were taken, and the size of the Halifax garrison considerably augmented, from the new arrivals.

Although the Lieutenant General Commanding in North America, Sir William Fenwick Williams,† could now be dismissed by one of the newcomers as "a very handsome old gentleman, with charming manners", his staff at Montreal had functioned efficiently. Where buildings could not be requisitioned to serve as temporary barracks at overnight halting places *en route*, log huts were erected by local labour. Sleighs were hired and assistance guaranteed by various lumbering companies, which were also to keep the roads free from drifting snow.

On New Year's Day an advanced guard of the 62nd Regiment of Foot led off from St. Andrews, travelling by train as far as Canterbury, where the railway line then came to an end. The men then continued to Woodstock before dark, travelling eight to a sleigh. Only two sheepskin coats or buffalo robes were available per sleigh, but otherwise the men were well equipped. In addition to the normal uniform and greatcoat, each man wore long woollen drawers and stockings, loose mocassins filled with straw,

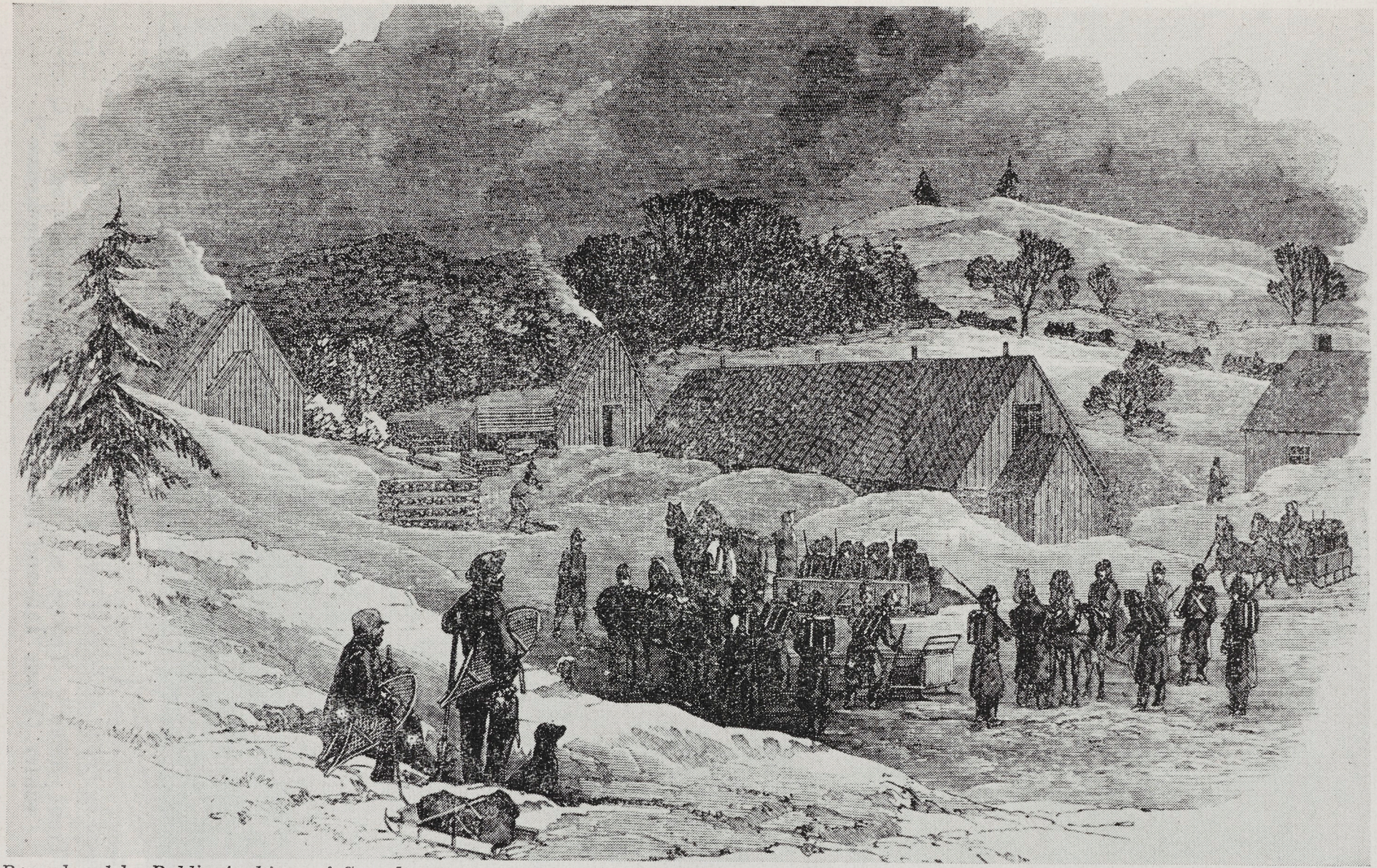
(Continued on page 66)

**The stopping on the high seas of the British steamship "Trent" on 8 November by USS "San Jacinto" and the forcible removal of two Confederate agents travelling to Europe caused the British Government to demand an apology from Washington and to send additional troops to what could be the only possible battle ground.*

†Born in Nova Scotia in 1800, he had climaxed his service in the British Army by a gallant though unsuccessful defence of Kars, while commanding Turkish forces in Anatolia during the Crimean War.

OFF TO CANADA—ARRIVAL OF GRENADIER AND FUSILIER GUARDS AT THE WATERLOO STATION.

Reproduced by Public Archives of Canada from Dent Illustrations



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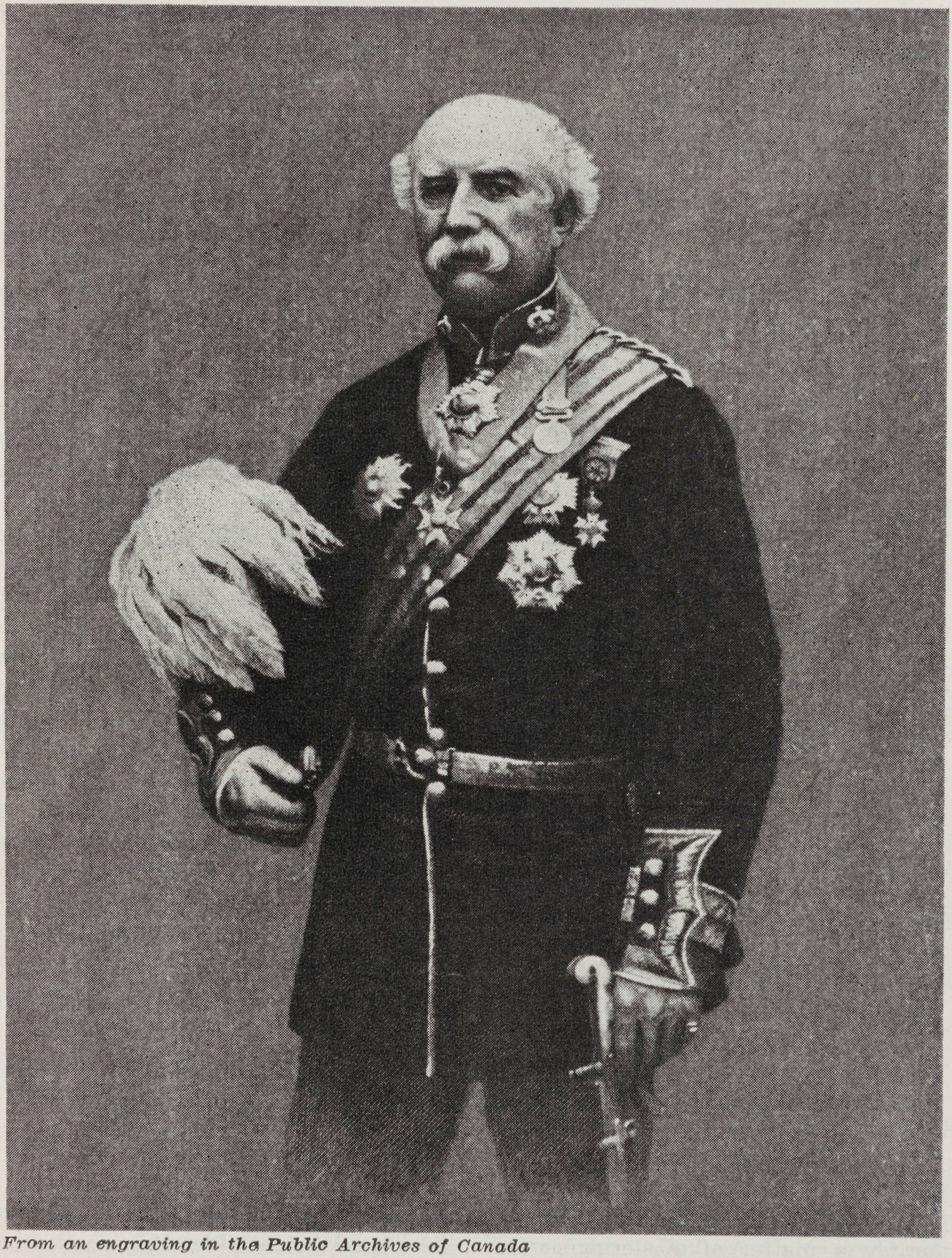
Reinforcements for Canada passing through New Brunswick: Arrival of a detachment of the 63rd Regiment at the temporary barracks, Petersville, N.B. Officers' quarters are at the left, the cookhouse at the centre and the soldiers' barracks at right centre. (From the Illustrated London News, 29 March 1862).

Reproduced by Public Archives of Canada

The "Trent Affair": Troops conveyed overland from Halifax to Quebec in winter. (From "Life and Times of the Hon. Alex Mackenzie").



From an engraving in the Public Archives of Canada

Lieut.-General Sir William Fenwick Williams of Kars, Bt., KCB, "Commander of Her Majesty's Forces and Administrator of the Government in British North America"

a flannel shirt, a thick sweater, a chamois jacket, fur cap and gauntlets, and a woollen scarf. Every man had two blankets, one of which was partially sewn to form a blanket sack. An accumulation of ice on the rails prevented trains running for several days however, and thus limited the use that could be made of this route.

The larger parties of 160 troops which started from Saint John every morning went all the way by sleigh. Ten days were consumed travelling the 319 miles:

In New Brunswick: Saint John to Petersville, Petersville to Fredericton, Fredericton to Dumfries, Dumfries to Woodstock, Woodstock to Florenceville, Florenceville to Tobique, Tobique to Grand Falls, Grand Falls to Little Falls.

In Canada East: Little Falls to Fort Ingall, Fort Ingall to Rivière-du-Loup.

Each morning the men were roused before daybreak and given coffee. They were ready to start by eight a.m. Cooked provisions were eaten at the mid-day halt; rum was issued, but arrangements existed whereby the men could buy hot coffee. The day's journey was finished by six o'clock. In addition to the representatives of the commissariat and barrack-master departments stationed at each overnight stop, there were a medical officer and orderlies on duty. After the men had eaten, they cooked the next day's noon meal and sat around smoking until bedtime.* Nowadays a motorist can drive all the way to Rivière-du-Loup in one shorter day, having neither to have breakfast before daylight nor supper after dark.

Only nine men deserted, from halting places close to the Maine boundary and in response to offers of a substantial bounty for trained soldiers who would enlist in the Northern Armies for service against the Confederacy. Intemperance seems to have been a contributing factor in the deaths of three men from the extreme cold, and in the need to amputate both hands of another soldier.

The heavier military stores were retained at Halifax until spring, when the St. Lawrence would re-open for navigation, but permission was given for officers' private baggage to be landed at Portland, Maine, for dispatch by railroad to Montreal. This last was, however, the only advantage actually taken of the gratuitous and well-meaning offer made by U.S. Secretary of State William H. Seward to use facilities available in the State of Maine. There is no truth in the legend, repeated by a number of American and Canadian historians, that British reinforcements travelled across Maine to get to Canada.

**J. Mackay Hitsman (ed).. "A Medical Officer's Winter Journey in Canada", Canadian Army Journal (October, 1958).*

The Art of Leadership

Acquiring the art of leadership is simply a matter of mastering certain techniques, understanding men, and building up those sterling qualities that give effective full expression to your natural talents. The average man can be a good potential leader provided he is willing to work diligently at being one.—*Lieut.-General Arthur G. Trudeau (U.S.).*

ARMY'S MULTIPLE-PURPOSE RADAR

A radar set that can locate enemy weapons before their fire reaches the target has been developed for the Canadian Army by the National Research Council in Ottawa.

Ten production models to be manufactured by Rautheon (Canada) Ltd., Waterloo, Ont., will be ready for delivery to the Royal Canadian Artillery late in 1962.

The highly mobile compact unit called Radar Set AN/MPQ-501 can be mounted on all current versions of NATO armoured carriers as well as the Canadian Army's new Bobcat.

Besides its ability to locate enemy mortar, artillery and rocket sites quickly and automatically, it may be used for surveillance and surveying.

On picking up a projectile in flight, automatic computers provide the enemy's firing position at the push of a button. This information is passed on to the guns which can fire in retaliation within the minute.

Completely Canadian in design and development, it was demonstrated at Sennelager, West Germany, to representatives of NATO countries during the summer of 1960. The equipment is said to be superior to any other radar set of its type.

It is the result of more than 16 years of research and development by the Army and NRC scientists. Mounted on an armoured carrier, the new radar set can be put into action in less than five minutes. It is completely self-contained and with its own power supply and air filtering it combines operating efficiency with a high degree of mobility, reliability and protection.—*From a report issued by the Directorate of Public Relations (Army), Ottawa.*

The Origin of DUKW

(We are indebted to Lieut.-Colonel F.W. Young, MBE (Retired), Librarian at the Staff College, Camberley, England, for the following explanation of the origin of the designation DUKW for the amphibious vehicle popularly known by that "name". It has been forwarded by a Canadian Army officer who was interested in the origin of the name of this 2½-ton amphibious truck, and who received this information from Lieut.-Colonel Young while on a visit to Camberley. — Editor).

"1. Code letters from an American manufacturer's handbook (General Motors) to designate certain features of the vehicle:

D — The year of first manufacture
U — Utility
K — Front-wheel drive
W — A six wheeler

The letters being accidentally pronounceable were adopted as official service nomenclature.

"2. Or if you think the DUKW was a German invention, then perhaps it derives from *Deutsch Unter-See Kreig Wagen,* i.e., a German under-sea battle wagon.

"I think '1' above is the more likely."

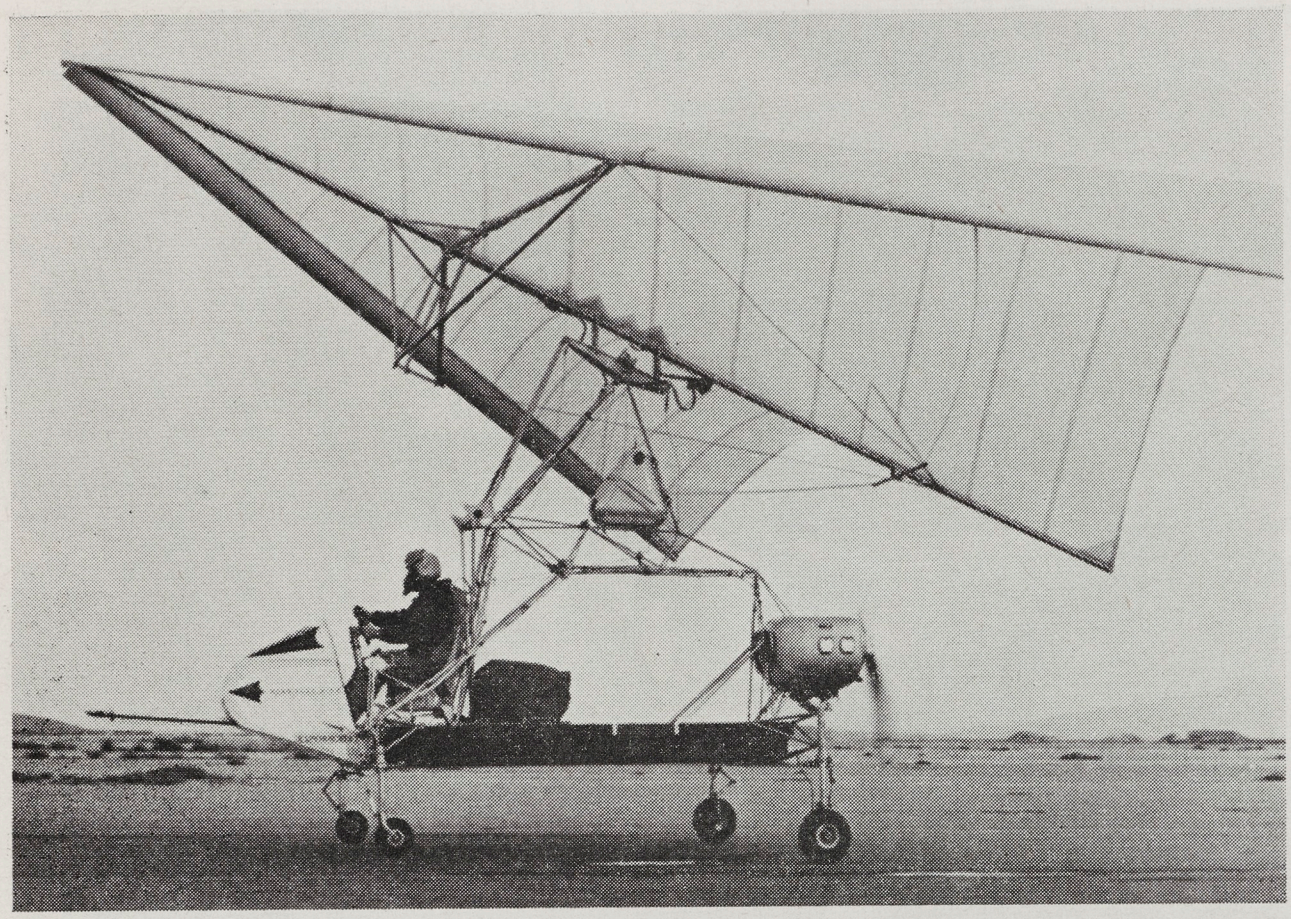
PPCLI DEDICATION CEREMONIES AT YPRES

National Defence Photograph

The Princess Patricia's Canadian Light Infantry was honoured by the presence of their Colonel in Chief, Lady Patricia Ramsay, at memorial dedication ceremonies held at Ypres, Belgium, in October. The principal ceremony was the unveiling and dedication of a memorial plaque to the regiment's founder, the late Brigadier A. Hamilton Gault, and members of the regiment who lost their lives in the First World War. The ceremonies were held near the site of the regiment's, and the Canadian Army's most costly battles of that war. Lady Patricia, whose name the regiment bears, is seen arriving aboard a special RCAF flight from England at the Koksijde Royal Belgian Air Force base. Others in the photograph, left to right, are Major E. Sharpe, PPCLI; Brigadier Cameron B. Ware, commanding 4th Infantry Brigade Group, who is Colonel of the Regiment; Lieut. P.A.H. Dupille, PPCLI; and Mrs. Ware. Accompanying Lady Patricia was her husband, Admiral Sir Alexander Ramsay, and Mrs. Gault. — *From a report contributed by Lieut. P.A.H. Dupille.*

Passenger Hovercraft

The VA-3, Britain's first passenger-carrying Hovercraft, will be in operation by the Spring of 1962. It will carry 24 passengers at speeds of about 70 miles an hour on a cushion of air a few feet above the sea. — *News item.*



Ryan Aeronautical Co. (U.S.)

The *Flex Wing* aircraft.

"FLEX WING" AIRCRAFT TESTED

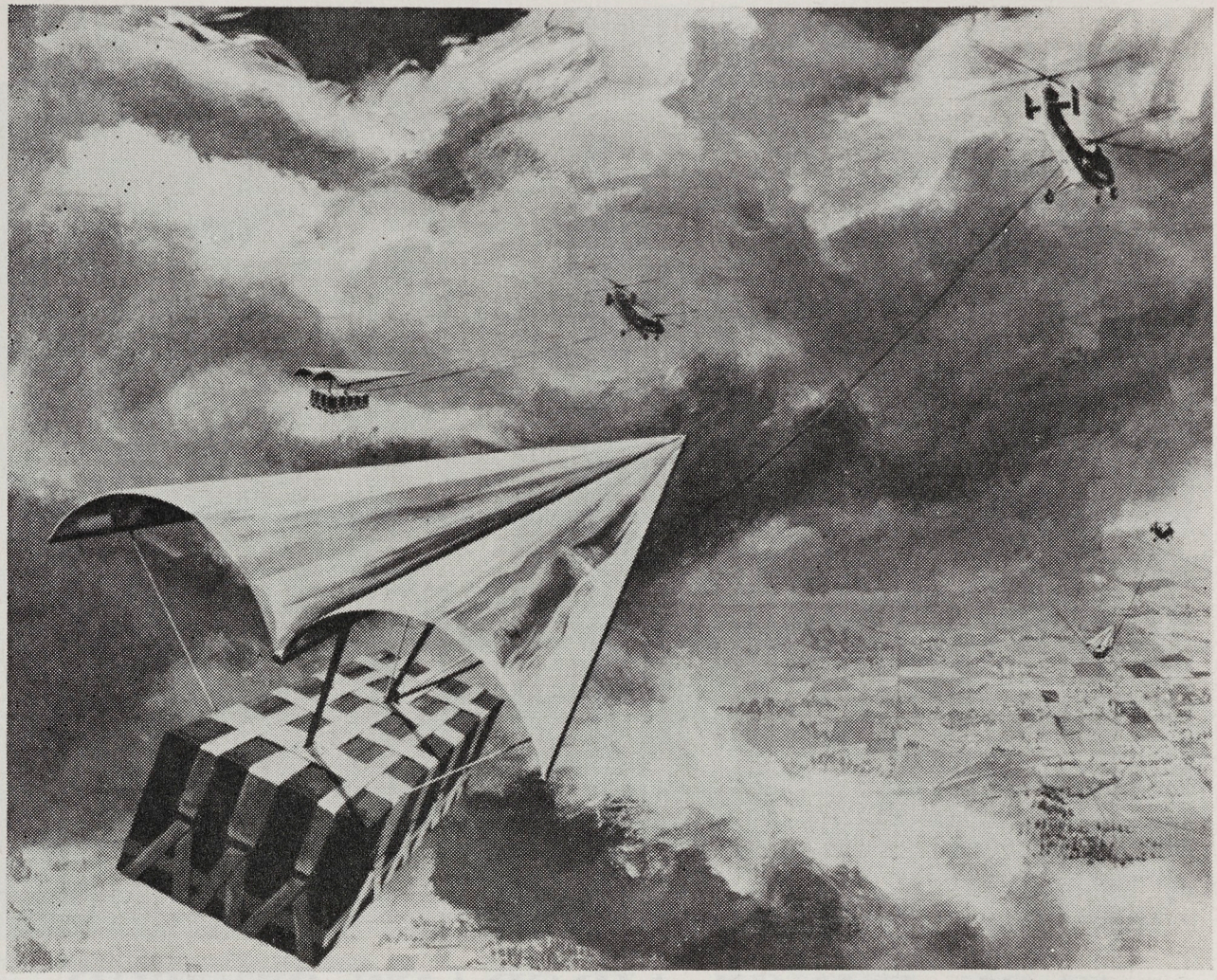
From the Military Review (U.S.), September 1961

A radically new type of aircraft with no conventional control surfaces is being flight-tested on contract from the [U.S.] Army Transportation Research Command. Designated the *Flex Wing,* it carries its pilot and 100-horsepower engine below a kite-like fabric wing. Control is accomplished by tilting the wing with respect to the heavy, low hanging engine. In addition to its low cost, the new type offers promise of meeting battlefield requirements for short takeoff and landing on rough fields and for very slow flight at tree-top level.

The prototype already tested flies at altitudes under 500 feet and at speeds up to 60 miles per hour.

The *Flex Wing* is a remarkably inexpensive vehicle; the cloth wing is supported above the flat, truck-bed type body by a light truss structure. The engine is mounted at the rear; the pilot sits at the front. Four lightweight wheels make up the landing gear.

The craft is extremely stable, is easier to fly than a conventional airplane, consumes fuel at a low rate for its payload capacity, and has a simple structure, power plant, control system, and accessory group. Its payload, it is hoped, will be more than 50 per cent



Ryan Aeronautical Co. (U.S.)

The *Flex Wing* supporting a helicopter-towed load.

of its gross weight, compared to less than 30 per cent for most solid-wing transports. Its control system somewhat resembles that of a blimp; although it cannot bank in the normal sense, it can climb, dive, and turn efficiently, and is difficult to stall.

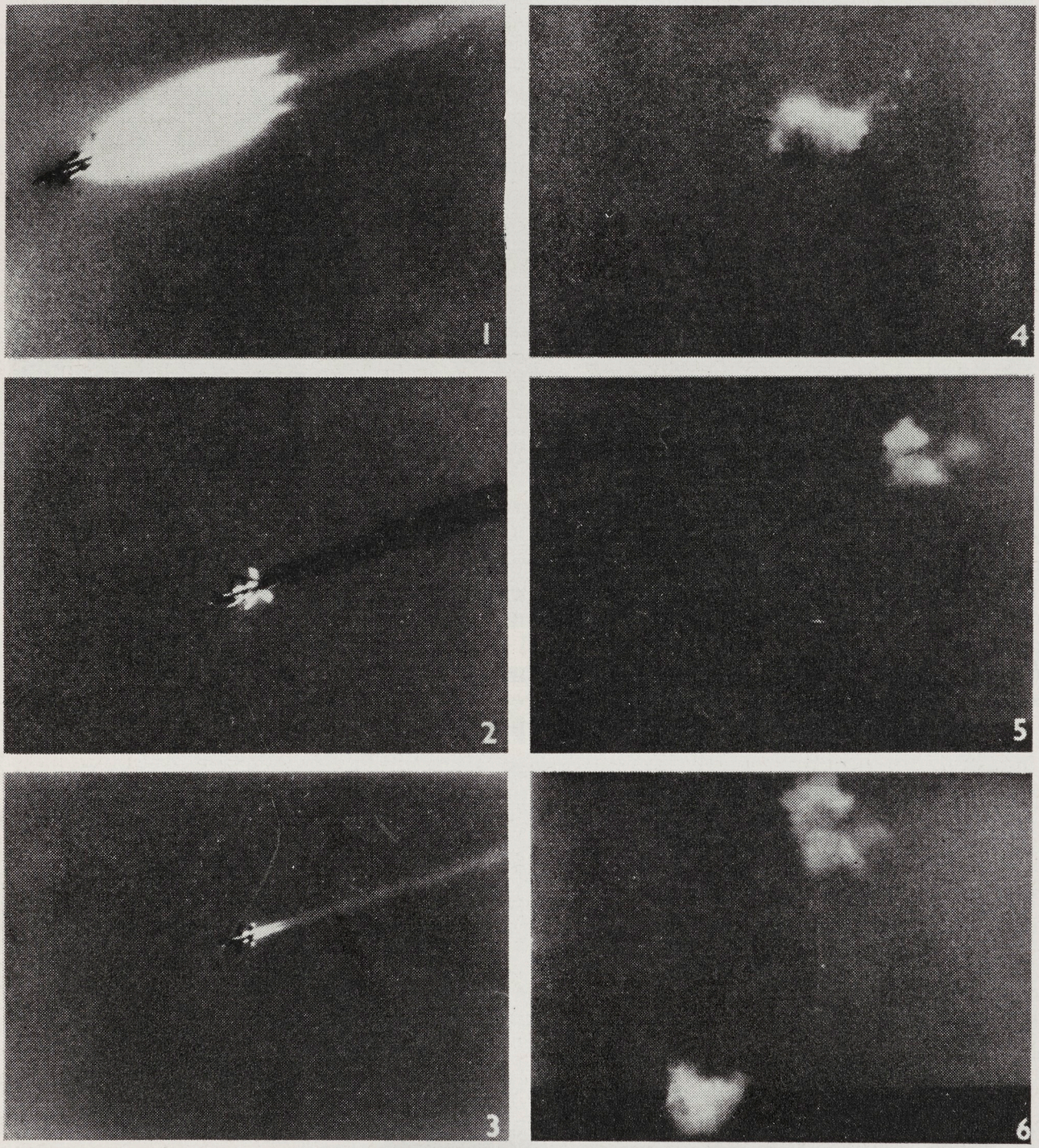
Experimenters also report that flexible-wing aircraft may have large loads slung under them and then be towed like gliders behind fixed-wing aircraft and helicopters. It has been estimated that the payload of a helicopter may be increased six times by towing such gliders. The stability of the flexible wing makes it unnecessary to have pilots aboard the gliders.

While an extremely wide variety of application is conceivable for the flexible wing, the one that seems most promising for the Army is the small battlefield transport.

An Army Job

Of particular importance now is the improvement of our capabilities—as well as those of selected countries—to meet subversion, insurgency, and guerilla actions. This is primarily an Army job.—*General George H. Decker (U.S.).*

BLOODHOUND II DESTROYS TARGET

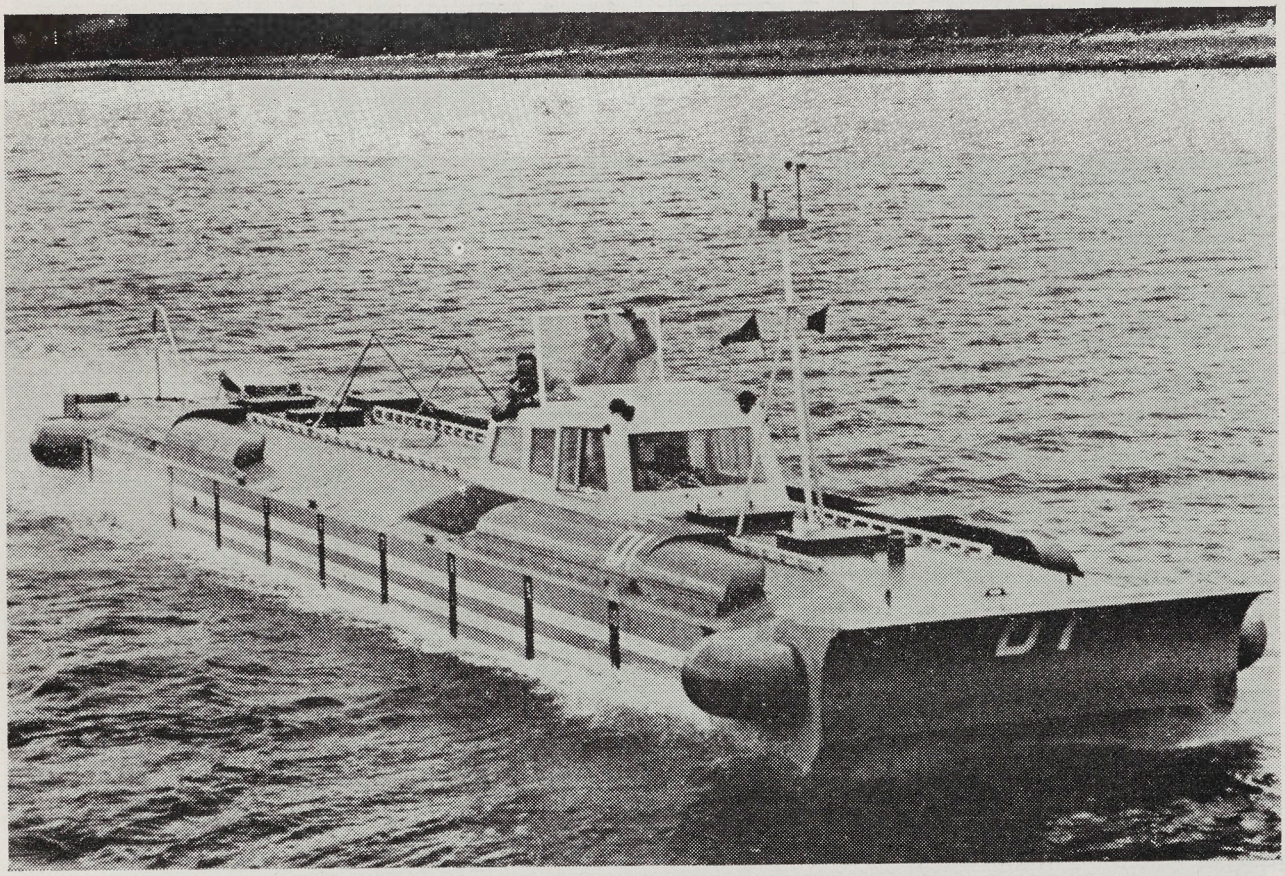


Six still frames from a film showing a remarkable interception by a Bristol-Ferranti Bloodhound Mark II missile (not fitted with a warhead) which hit and brought down a fast jet target aircraft flying well below 1000 feet. These are the first pictures to show the successful development of the Mark II which, as well as its ability to destroy very low-level targets, also has greater range and lethality than the Mark I now in service with the RAF. Taken at the Ministry of Aviation's weapons range at Aberpoth, Wales, this film shows: 1. Missile taking off. 2. Booster motors separating from the missile. 3. Missile flying on its two Thor ramjet engines. 4. Target hit. 5. Target falling with smoke from the impact at top right. 6. Target hits sea.

LATEST TANK, BRIDGE LAYER

United Kingdom Information Service Photographs

Above: The British Army's latest tank, the 45-ton "Chieftan', crosses a bridge placed in postion by a Centurion Bridge Layer during a recent demonstration. Taken off the secret list shortly before the demonstration, the Chieftan is claimed to be the world's most powerful tank. Equipped with a high-velocity cannon, the tank can operate on diesel fuel, high-octane gasoline or paraffin. *Below*: The Centurion Bridge Layer lowers a massive steel bridge capable of spanning a 45-foot gap. Demonstrated recently, the bridge can take the weight of heavy tanks and similar armoured vehicles.



British Information Services

New hovership design.

NEW BRITISH HOVERSHIP

Undergoing trials on Gare Lock, Scotland, is a 60-foot experimental hovership. Designated the *D1,* the 4½-ton prototype vessel uses two 25-horsepower engines to furnish high-pressure air to lift the bottom out of the water while its side walls remain submerged to a depth of about six inches. Two 35-horsepower outboard engines with variable pitch propellers provide forward propulsion to "sled" it across the water.

The British builders of the hovership hope to have a passenger-carrying version in operation by the end of 1962.

A major objection to previous air-cushion vehicles was the spray produced by the air cushion which caused obscuration and required protection for passengers and cargo. The provision of light side walls to contain the air cushion appears to have eliminated much of this difficulty.—*News item in the "Military Review" (U.S.).*

Nuclear Power forCivil Use

An official of the Atomic Energy Commission has estimated that the homes of more than a million Americans will b eusing electric power produced from nuclear energy sources by the end of 1962. Five nuclear power plants are now in production, and five more are expected shortly.

British Official Photograph

A fork-lift vehicle loaded with heavy stores rolls up the ramp of a new lighter.

RAMP POWERED LIGHTERS FOR ARMY

A United Kingdom Information Service report

The British Army has demonstrated a new ramped powered lighter (RPL), the first of which are to be sent to Singapore where they will be operated by the 10th Port Squadron.

The new craft, designed to carry a 50-ton cargo, will have civilian as well as military applications; similar craft have been used for upriver operations, carrying heavy equipment and stores.

The new RPLs are 72 feet overall, weigh 55 tons deadweight and can be handled as deck cargo. They can carry a 50-ton tank or other armoured vehicles, or four loaded three-ton trucks. Speed is about nine knots.

The main engines are two Rolls Royce C6Sflm electric starting marine diesels, developing 190 b.h.p. at 1800 r.p.m. driving two outboard bronze propellers. The deckhouse aft provides accommodation for a master and engineer in a double cabin, and for four crew in a general mess room. A galley space with an electric cooker is provided.

The ramp operating winches and after capstan, made by Vickers Armstrong, are hydraulic operated by pumps driven by the main engines.

A Maxim

Either I command or I am silent.—*Napoleon.*

NEW HOVERSLED DEMONSTRATED

United Kingdom Information Service

This "Hoversled", which enables a wounded man to be moved over rough terrain with a minimum of discomfort, was shown at a recent demonstration at the British Army's Fighting Vehicles Research and Development Establishment, Chobham, Surrey, England. The sled consists of a simple platform supported on an air cushion which is maintained by a motor-driven central fan, and it can be pushed or pulled by hand or towed behind a vehicle. The Hoversled is being developed by Britain's Folland Aircraft Company, and is not an official project at present, although it is undergoing trials with the Royal Army Medical Corps.

Looking to the Air

Now, paradoxically, for better ground or battlefield mobility, we are concentrating on the air!

We find we must look to the air to attain the revolutionary improvement we require in mobility for ground forces. We are working to develop true air vehicles that will fly just above the "nap of the earth", permitting the combat soldier of tomorrow to overcome normal terrain obstacles, such as mud, swamps, rivers, and forests. This type of vehicle will have the take-off and landing characteristics of the helicopter, coupled with the advantages of the fixed-wing aircraft in forward flight.—*General Arthur G. Trudeau in the Military Review (U.S.).*

An Appeal for Donations

The Canadian War Museum

By

Mr. L. F. Murray, Secretary and Curator, Canadian War Museum Board, Ottawa

The Canadian War Museum was established in 1880 for the purpose of collecting, preserving and displaying arms, equipment and other implements of war which have a bearing on the military history of Canada dating back to the early days of the colony.

During the first 15 years of its existence the Museum concentrated on the collection of numerous relics and records pertaining to the late 19th Century. During this period small displays were set up in the Woods Building, Ottawa, which was then occupied as Headquarters of the Department of National Defence. These displays were discontinued in 1896 due to a shortage of accommodation.

Following the First World War a large collection of trophies was selected in Europe and brought to Canada. A Commission headed by Sir Edmund Walker was named to deal with these war trophies and a wide distribution was made to various Cities and units of the Canadian Militia throughout Canada. Chosen pieces were retained for inclusion in the collection of the War Museum.

The work of placing these trophies on exhibition was undertaken in 1938. A building used as storage for the collection, situated at 350 Sussex Drive, was altered and renovated to accommodate a small portion of the trophies. The Museum was opened to the public on 17 January 1942.

The Museum has since then welcomed thousands of visitors including school groups from as far away as Quebec, Toronto and New York, and the Southern U.S.A. It has also been made available for special research to students, historians and specialists in military matters.

The Museum is administered by the Canadian War Museum Board, which is composed of the Director of the Human History Branch of the National Museum of Canada, the Dominion Archivist, and representatives of the Navy, Army and Air Force. The Curator of the Museum serves as secretary of the Board.

Following the Second World War, arms and equipment of the various countries involved in the fighting in Europe found their way little by little into the Museum collection. The bulk of these trophies were received mainly from the armed services. Generally it has been quite easy to obtain arms and heavy equipment, but in the case of clothing and personal equipment the story is quite different: practically all the clothing on hand has been donated by retired personnel of the services. This source has been satisfactory in the case of officers' uniforms but not so good in the case

of others ranks. As a matter of interest it is noted that the Museum has in its possession only one set of the 1907 pattern web equipment used in the 1914-18 conflict, and only one infantry and one cavalry tunic of the general issue pattern of that period.

Although the Museum has quite a good collection of modern equipment, it is somewhat disturbing to admit that there is a definite lack of items pertaining to the early history of Canada and especially the Riel Rebellion, the Fenian Raids and the numerous wars between England and France in America and of the continuous battles with the Indians.

Serious efforts are being made to overcome this shortage of relics of the early period of our history and it is hoped that it is not too late to remedy the situation. It is possible that some of the important relics of those days are still lying in forgotten corners, waiting to be picked up and placed where every effort will be made to keep them for posterity. The small staff of the Museum and the limited funds available are not sufficient to undertake the extensive travelling that would be necessary to obtain significant results, and consequently the Museum must depend and rely on the goodwill of Canadians at large to locate and report the existence and availability of these relics. It is felt that units of the Active and Reserve Forces of the Canadian Army, located as they are across Canada, could be of some assistance in providing the missing links.

Suggestions and offers of specimens are always welcome. These should be made either by interview or in writing to the Curator of the Canadian War Museum, 350 Sussex Drive, Ottawa.

Sitting Below the Salt

Any idea that members of the Canadian Army Overseas did not associate with the "top people" in the United Kingdom during the Second World War is absurd and may be corrected by reading unit war diaries. The following example is taken from the 1st Corps Field Survey Company, RCE, War Diary for 29 March 1942.

"Lieut. Trorey returns from week-end leave with Mr. Hinks, secretary of Royal Geographical Society. He had lunch with [Air Chief Marshal] Sir Charles Portal [Chief of the Air Staff] who spoke to him; he ordered Trorey to pass the salt." — *Contributed by Major W. A. McDill, RCE, Historical Section, Army Headquarters, Ottawa.*

Buffalo, Ogdensburg to Note

98 Years Ago: The Governor General of Canada has given notice through Lord Lyons to the Secretary of State of rebel plots hatched in the British provinces to deliver the prisoners on Johnson's Island in Lake Erie, and burn Buffalo and Ogdensburg. Adequate measures to defeat the enterprises have been promptly adopted, and Major-General Dix has been ordered to Buffalo to adopt measures for the security of the frontier.—*From the files of the Army-Navy-Air Force Journal (U.S.).*

A Letter to the Editor

Information Sought

Editor, Army Journal.

I am in the process of writing a narrative history of the Campaign in Sicily and I am seeking personal anecdotes and reminiscences of soldiers who fought in that campaign.

I am wondering if any of your readers would be able to assist me.

The book will include the viewpoints of all nationalities who fought there, including the Germans and Italians.

Especially interesting to me, in addition to personal memories, would be any diaries, documents or photographs of those days which would help me to give a lively and balanced picture of the fighting.

If any of your readers could help, I would take the greatest care of any material loaned me and return it when I have completed my research.—*Major Hugh Pond, MC, Gate House, Woburn Hill, Addlestone, Surrey, England.*

Real Soldiering?

Rough Notes by an Old Soldier (During Fifty Years Service) (London, 1867) by Major-General Sir George Bell, who served in Canada during the Rebellions of 1837 as a captain in the 2nd Battalion of the 1st (The Royal) Regiment of Foot, provides interesting reading:

"We found the 32nd Regiment at Montreal, a corps as remarkable for their hospitality as for their gallantry in the field. We joined their mess for a few days until we got up our *sign.* Captain Markham, a great sportsman, kept his mess well supplied with game. Moose-deer, wild fowl, venison of different kinds were always falling to his gun. He would be out for weeks at a time in the snow, with his Indian hunters, following moose-deer, and bivouacking at night in the snow with only a blanket, but a big fire at his feet. He was a man of wire;but he was not iron, and broke down at last in an East Indian climate." — *Contributed by J. Mackay Hitsman, Historical Section, Army Headquarters, Ottawa.*

Queen's Honorary Dental Surgeons

Her Majesty the Queen has graciously approved the appointments of two Queen's Honorary Dental Surgeons from the Canadian Army. They are Colonel Hugh. R. McLaren, CD, LDS, DDS, DDPH, Ottawa, and Colonel D. W. Henry, CD, DDS, Montreal. Both are senior officers in the Royal Canadian Dental Corps (Militia), and their tenure of office in the Queen's appointment will be for a period of two years.

STAFF LEADERSHIP

Major L. G. Clark, MC, Royal Australian Infantry, in the Australian Army Journal

So much has already been written on the subject of the leadership of soldiers that very few new ideas remain to be expressed. Indeed, today's serving officer is so well versed on the techniques of handling his men that, academically, our soldiers are surely among the best led in the world. However, in the field of command and staff relationships at a headquarters, it is presumed that, when officers are to deal with each other, the key word is "performance." All their effort is directed to ensuring that those units subordinate to the Headquarters are implementing the commander's policy. Consideration is rarely given to the principle that imaginative leadership of the members of a staff is equally as important as leadership in the field, even though different activities are involved. Many are unaware that such a requirement exists.

The following general cases of possible defective staff leadership may emphasize or bring to light some present or previous experience of the reader, and should emphasize that a problem often exists and requires attention.

Situations

The undesirable staff situations following are not attributable to your superiors, or to the next higher headquarters, or some other organization. They may well exist in your own headquarters, under your own roof, whether it be at company or Army level. You may have commenced these situations, you may have inherited them and have allowed them to exist or even worsen. You may not even know they exist. The responsibility cannot be placed elsewhere, nor can the situations be blamed on compassionate problems, personality clashes or plain inefficiency. These situations are categorised as follows:

(a) Leadership by crisis.
(b) Absolute leadership.
(c) Biased leadership.
(d) Leadership by default.
(e) Leadership by suggestion.
(f) Leadership by mutual agreement.

Leadership by Crisis

This is well known under the term of "panicking." One of the symptoms is stated over-politely as—"The boss sneezes and everybody springs to attention." Both the importance and urgency of a requirement are over-emphasized. It must receive Number One priority. The trouble is that most requirements receive this same priority. Tension is rampant; the staff are always puting out brush fires but the smouldering forest fire goes unnoticed. There is no time for calm, considered action. Deadlines never cease and the man on the end never stops running. Fatigue and animosity breed easily. Nothing receives attention unless it is involved in a crisis. The staff are prevented from doing first things first, and from devoting varying time and effort proportionate to each task.

Absolute Leadership

In this set-up the commander must approve everything first, and you get a blast if you use initiative and act for him. The commander changes every paper you send him or you would think he was not competent to handle it. The staff soon learn this and see no need to make sound recommendations. Incomplete staff work is thus encouraged. The commander's desk is a bottleneck and the wheels completely stop when he is away, even for a short time. It is apparent trained staff officers are not required.

Biased Leadership

This is the man who "does not see the big picture," that is, the commander who previously was a DAQMG, and now over-emphasizes "Q" business, or was a GSO 2 and had never left "G" Branch, or a DAAG and had never done a tactics course. If this bias is evident in the commander, it will occur with the staff in their own branches. The commander does not have one headquarters composed of parts, he has a collection of individual players. This unfortunately is partially encouraged by the present vertical chains of command, which often prevent lateral or horizontal channels from functioning.

Also under the "biased leadership" types are the following:

(a) The "Death or Glory" commander who places all his emphasis on operations and training. These must go on at full speed; the "A" and "Q" are left to themselves, somehow to catch up. Their advice and protests go unheeded until eventually the whole headquarters grinds to a halt when administration breaks down.

(b) The "Peace at any Price" commander who ensures his headquarters and Command has a brilliant administration record. Every administrative regulation is ruthlessly enforced, staff duties are impeccable. No operation or training activity can take place without an AQ overinsurance. Soon "G" branch loses its initiative, and training becomes unimaginative and commonplace.

Leadership by Default

This sorry category of staff leadership is one which takes place by itself, with no conscious decision having been made, or if a decision is made it was at too low or too high a level. Or, alternatively, a decision is delayed so long that the problem disappears or is absorbed by a bigger one. This type of leadership is evidenced by such examples as the "Write me a summary" commander. Nothing is acceptable that has not been reduced to one sheet of paper. What he does not realize is that the major decisions are being made by the staff officer who decides what to omit from one sheet of paper.

We all know that type of report which indicates the percentage of effectiveness which a unit has achieved. Direction by a commander that the percentage be raised higher—even to 100 per cent—can often be realized and the commander will be pleased. What he is blisfully unaware of is the countless hours spent by the staff changing figures to make everything come out 100 per cent, making the system of comparison quite ineffective.

Leadership By Suggestion

The following three examples of suggestion have been experienced. One

of the most valuable tools of leadership anywhere is a suggestion programme which is a channel for new ideas to be encouraged and advanced. Many suggestions are killed by delegating far too low the power to disapprove a suggestion. The successful commander places the power of disapproval of suggestions at the same level as the power of approval.

Then there is the staff conference, under the chairmanship of the commander, called for the purpose of solving a problem and/or selecting the best of several alternative solutions. How many times have you seen the chairman making his views known at the start of, or early in, the conference. You will agree that there was really no real purpose in having the conference. How many times have you been given the job of conducting a survey or writing an appreciation, and the commander who gave you the job helped you by speaking the conclusions and recommendations paragraphs when he gave you the job?

Leadership By Mutual Agreement

Some commanders will not receive a paper from their staffs which contains differing opinions of staff members. The staff are required to solve their disagreements prior to the paper being presented. This has merit, but if the commander is not very careful he will have a system which produces watered-down compromises, which are easily approved by him or, since everyone agrees, the paper goes directly to the most junior staff officer for signature. If the commander is not very careful his decision-making days are over, because he never gets a chance to make one.

Conclusion

It is not proposed to offer any remedy to the above undesirable situations, but if the reader recognizes only one of them as a characteristic of his own headquarters, or as similar to the way he himself employs his own staff, and remedies it according to his own judgment, then staff leadership cannot fail to raise itself to a higher plane. Or, if the defect is recognized and understood, and still accepted as a method of staff leadership, at least the disadvantages can be faced. Alternatively, if one of the above problems are recognized, then the reader may well be on a happy staff.

One Hundred Years Hence

I believe that in 100 years people will look back on the middle of the 20th century as a nightmare period when mankind suddenly discovered the means to destroy itself, and was seriously considering using this as a preferable alternative to reconciling different political views.

The Arthur Bryant of 100 years hence will, I hope, record in his book *The Age of Insanity* that this period of madness did not last long, and in the early 1960's these weapons of mass destruction were outlawed and destroyed forever. — *Lt.-General Sir John G. Cowley in the Royal United Service Institution Journal (United Kingdom).*

Book Reviews

A VERY STRANGE GENERAL

Reviewed by Lieut.-Colonel H.F. Wood, CD, Deputy Director, Historical Section, Army Headquarters, Ottawa

On the twenty-second day of September, 1922, there emerged from the Underground Station at Charing Cross a tall and very ugly man, dressed in the uniform of a Field Marshal of the British Empire. He hailed a taxi and directed it to his London residence, a house in Eaton Place. As he alighted at his front door, he was confronted by two men, one of whom took a shot at him with a pistol and missed. The tall Field Marshal thereupon drew his sword and advanced on his adversaries. They fired again and this time he fell, mortally wounded.

Ever since his tragic end, people have wondered why Sir Henry Wilson did such an appallingly stupid thing. He was a brilliant man with a quick perception that should have stopped short of swordplay against pistols. But an even more perplexing question has also remained unanswered. What on earth was a Field Marshal in dress uniform doing in the subway?

Sir Henry Wilson's whole life is filled with similar puzzlers, and Mr. Basil Collier has done his best to explain them in his book.* But even this experienced biographer and novelist has been able to bring to true focus the life of that most complex of modern British generals.

Henry Wilson obtained a commission in the British Army in 1884 via "the back door" — that is to say, as a direct entry from the militia. His first service was with the Rifle Brigade in Burma, where he received a wound on the face that, when added to the features he had been born with, made him, in his own words "the ugliest officer in the Army". Full of breezy self-confidence, and an enormous zest for living, he occupied his time thereafter pursuing twin ambitions: to do his soldiering in England and to enter the Staff College. He achieved them both and on the outbreak of the Boer War he was a Brigade Major serving in Aldershot.

Much of the controversy surrounding Wilson began when extracts from his diaries were published after his death. Collier feels that the abuse heaped on his subject by writers concerned with the personalities in the First World War derives from a misreading of these diaries. Unfortunately, in refuting the charges of conceit, sharp dealing and intrigue, he quotes no other source himself, and simply contradicts the unpleasant allegations made by Wilson's critics.

Wilson's capacity for outspoken criticism of his superiors begins with his career as a staff officer in the South African campaign and since the

**Brasshat*: A Biography of Field Marshal Sir Henry Wilson. By Basil Collier. Published by Secker and Warburg and available from British Book Service (Canada) Ltd., 1068 Broadview Ave., Toronto 6, Ont. $7.25.

overall effect, in spite of Collier, is that every disaster was the result of not listening to Wilson, and every success was due to his genius, the man begins to irritate rather early in the book. We are told that he was charming, witty and brilliant— and there is ample evidence of this — but the man's overwhelming conceit detracts from much of the charm.

Returning to England with Lord Roberts, (who left the South African War to Kitchener under the mistaken impression that it was over), Wilson did a short stint as Commanding Officer of a reinforcement training battalion, and several long tours at the War Office. If you can believe his diaries, as his biographer certainly does, he greatly influenced the Army reforms that were begun as a result of the humiliations of South Africa. More ominously, he cultivated many friends in that dangerous world of journalism that soldiers are traditionally supposed to avoid.

Another reviewer of this book has remarked perceptively that "British military opinion favours 'character' rather than 'braininess' in its leaders." Wilson was certainly "brainy" and at the same time fluent and persuasive, but in his case these qualities did not retard his career. When the famous Esher Committee set about re-organizing the War Office, Wilson was consulted with such deference that he found himself selecting his own superior officer in the newly-created Directorate of Staff Duties. That this did little to diminish his self-esteem was quickly demonstrated when brevet Lieutenant-Colonel Wilson attempted to persuade the Military Members of the Army Council to resign in protest against a Treasury objection to Wilson's plans for a General Staff.

When he failed in this remarkable endeavour and was blocked by the CGS in an attempt to wangle the post of Commandant of the Staff College, the savage side of Wilson's nature was disclosed. The CGS, who had before been a beloved superior, suddenly appears in Wilson's diary as "useless" and "a waster". At this stage the author's thesis that Wilson was unjustly treated once more wears thin when he says "The things that mattered [to Wilson] were the efficiency and good name of the army. If either of his seniors did threaten the army's welfare he would have no compunction in helping to get rid of them". This is heady stuff — this always being right!

On New Year's Day, 1907, Wilson at last achieved his aim, Commandant of the Staff College. The position brought with it promotion to brigadier-general for the man who had been a substantive Captain only four years before.

Wilson was at his best at the Staff College. His undoubted talent for clear thought and explicit speech was transmitted to his staff and through them to the student body of subaltern officers. But his cozy dinner parties of journalists, cabinet ministers and influential men in all walks of life continued to absorb his interest.

The most significant event in his life during this period was the close friendship he cultivated with his opposite number in France, Ferdinand Foch. That ebulient personality found much common ground with the witty outspoken Englishman who spoke

French so fluently and seemed so desperately keen on closer ties between their two countries.

Wilson was a keen and perceptive strategist and his quick mind anticipated the probable German moves should a war break out. In his next posting, in the key role of Director of Military Operations, he made himself an expert on the topography of the frontier regions of Belgium and France by personal visits and careful study. Thus, on the eve of the First World War, this clever, ambitious and impetuous man was well equipped, not only to handle the great task of mobilization, but also to dole out gratuitious advice to his superiors.

From the beginning, Henry Wilson shared with many of the soldiers of his day a low opinion of the frock-coated politicians with whom he had to work. Unlike many, however, he never bothered to conceal it. He spoke of them contemptuously as "the Frocks" to their faces and publicly insulted, with barbed quips, such prominent figures as the British Prime Minister and the American President.

Before the war began, there broke over Britain what has come to be known as the Ulster Crisis or the Revolt in the Curragh. It is in the telling of this tale that Wilson's biographer betrays an outlook so High Tory that he can still use the term "middle-class" in describing politicians and make it sound like a sneer.

The issues of Home Rule for Ireland are too complex to summarize here, but it is clear that during the crisis Wilson freely exercised what the author describes as "a citizen's privilege of putting pressure on the Government through the Opposition — to do so seemed not merely a privilege but a duty". This attitude was not unusual in those days. Late in the war, the CIGS, Sir William Robertson, would write "I put my duty to the Empire first, and to the Government second". It was not an attitude calculated to achieve harmony.

When war came, Wilson went off to France as a senior staff officer under Sir John French. Almost at once he was influencing events again, admonishing French, lecturing Joffre, and by implication, saving the day for all. But before he could win the war single-handed, he was given new responsibilities as Liaison Officer with the French Army.

In this role he did valuable work eliminating misunderstandings, but his favourite role, as usual, was handing out opinions on the prosecution of the war. In February 1918, Llyod George made him CIGS but the two fell out and in 1922 Wilson retired and ran for Parliament. His death at the hands of Irish terrorists cut short this new career.

One would be wrong to give the impression that this is not a fascinating book. It deals, after all, with a fascinating man and the tale is told crisply and well. Many of Wilson's critics have gone too far in blaming him for things that went wrong in the war — as if, having found a villain, they would charge him with all the crimes in sight. But to the author's claim that Wilson was not a "political" general, one can only murmur, "Not Proven". His motives remain a mystery.

CHURCHILL ON THE AMERICAN CIVIL WAR

Reviewed by Lieut.-Colonel T. M. Hunter, CD, Historical Section, Army Headquarters, Ottawa

No living person rivals Churchill as an authority on the exercise of high command in war. His numerous histories and other works, including the brilliant biography of his illustrious ancestor, Marlborough, and the immense sweep of his experience and responsibilities in two World Wars have ensured his unique position.

Now, in the centennial year of the beginning of the great struggle between North and South, we are privileged to review the old master's account of the American Civil War.* "Review" is the appropriate word, for the present study is merely a reprinting of a portion of the author's *History of the English-Speaking Peoples: The Great Democracies,* which appeared in 1958. The publishers have shown shrewd judgment in reprinting this portion of the earlier history at this particular time — and, it must be added, at relatively low cost.

Churchill does not attempt a detailed analysis of the Civil War — a field so thoroughly tilled that an increasing number of new "ploughs" are confined to old "furrows". In little more than a hundred pages, he soars above the panorama, occasionally swooping with eagle's eye to investigate a problem of particular interest. On the other hand, he is too experienced to rush directly into the conflict without considering the kaleidoscopic factors in the background of the war, and we have read nearly a third of the book before we hear the first, fatal shots fired at Fort Sumter. The remainder of the volume is devoted largely to a study of McClellan's fruitless campaign against Richmond and the struggle between Lee and his successive opponents, ending in Grant's victory.

The author refuses to be drawn into the familiar controversy over Confederate strategy after the First Battle

**The American Civil War,* by Winston S. Churchill. Published by Cassell, London, 1961. Available from British Book Service (Canada) Ltd., Kingswood House, 1068 Broadview Ave., Toronto 6. $3.00.

A Very Strange General

(Continued from preceding page)

One final conclusion is that the author belongs to that body of Englishmen who don't like the French. Some of his judgments of Foch, for example, are outrageously unfair. Colonel de Grandmaison, the advocate of the *Offensive à Outrance*, was not a star pupil of Foch, and was not even at the Staff College while Foch was commandant. Still, Collier does improve Sir Henry's posture in history. The older view of him as a demoniacal intriguer who sneered at honest men was overdrawn; this extraordinary soldier's chief shortcoming seems to have been that he simply couldn't resist an audience.

of Bull Run. "It is still argued that the Confederates should have struck hot-foot at Washington. But Johnston at the time thought the Confederate army more disorganized by victory than the Federals by defeat. He had not seen the rout. Jackson and other Confederate Generals were eager to advance on Washington. Who shall say?" But at a later point in his narrative he states unequivocally that the Confederates "lost their best chance of victory" in the period following the battle.

Churchill writes admiringly of "the agile, flexible grasp which Lee had of war", reminding us of the calculated audacity with which Lee disposed of superior Northern forces under McClellan, Burnside and Hooker. However he is on more debatable ground when he dismisses Lincoln's attempts to counter Stonewall Jackson's operations in the Shenandoah Valley as "a classic instance of the dangers of civilian interference with generals in the field". A close examination of the messages between Lincoln and his commanders suggests that distinguished pro-Southern writers, such as G.F.R. Henderson and D.S. Freeman, exaggerated the confusion created in the President's mind by Jackson's cat-and-mouse tactics in the Valley. In his searching history, *Lincoln Finds a General,* K.P. Williams has shown that, although Lincoln undoubtedly made mistakes, his primary object was aggressive, to destroy Jackson, rather than defensive, out of fear for the safety of the capital.

When considering Lincoln's "interference" on these and other occasions, we must always remember that up until a late stage of the struggle he found little inspiration in the performance of his generals. For that matter, it is well known that during critical periods of the Second World War Churchill, himself, did not hesitate to interfere (or attempt to interfere) with the plans of his commanders in the field. Yet who would deny that Churchill was better served by Wavell, Auchinleck and Montgomery than Lincoln was by McClelland, Burnside and Hooker? At a later point in his history, Churchill observes: "No rule can be be laid down upon the High Command of states and armies in war. All depends upon the facts and the men. But should a great General appear the civil Government would be wise to give him full scope at once in the military sphere." Decisions on problems of politico-military coordination are determined by facets of character, no less than the sufficiency of plans.

The author draws an interesting comparison between the Civil War and the First World War. "At Washington the Western theatre was viewed in much the same way as was the Eastern front by the Allied and associated Powers in the First World War. It was secondary, but also indispensable. It was not the path to victory, but unless is was pursued victory would be long delayed." This remark reflects the author's views as a vehement "Easterner" in the protracted arguments over Allied strategy of the later conflict. Certainly the importance of the Western theatre in the Civil War, particularly as regards Grant's development, has become increasingly apparent to students of the conflict.

While properly concerned with the problems of High Command, this his-

tory does not neglect the fighting troops. Of particular interest is the treatment of the Gettysburg Campaign. The author points out that neither Lee nor Meade wished to fight at Gettysburg; but they were drawn into "the greatest and bloodiest battle of the Civil War" by the inexorable logic of events. The magnificent Churchillian gift of prose is fully displayed in the description of Pickett's charge: "In splendid array, all their battle flags flying, the forlorn assault marched on. But, like the Old Guard on the evening of Waterloo, they faced odds and metal beyond the virtue of mortals. The Federal rifled artillery paused till they were within seven hundred yards; then they opened again with a roar and cut lanes in the steadfastly advancing ranks. On they went, without flinching or disorder; then the deadly sound, like tearing paper, as Lee once described it, rose under and presently above the cannonade. But Pickett's division still drove forward, and at trench, stone wall, or rail fence closed with far larger numbers of men, who if not so lively as themselves, were at least ready to die for their cause." Many bloody battles would follow — but at this precise moment the great issue between North and South was decided.

This volume contains a number of indifferent maps and a profusion of illustrations. The latter are excellent. Besides reproducing studies of the principal commanders, they contain many authentic photographs of the opposing troops' routine activities as well as of the carnage of battle.

No student of the Civil War can fail to profit from a perusal of Churchill's slender volume. As a commentary by one whose career spans the epoch between the cavalry charge at Omdurman and the first use of atomic warfare, the book should find an honoured place on the shelves of all military historians.

Other Books Received

Canada's Chapel of Remembrance by Mrs. Ella M. Thorburn, OBE, and Dr. Charlotte Whitton, CBE. A reproduction of the story carved in stone in the Remembrance Chapel of the Peace Tower in Ottawa, which is a verbatim record of Canada's part in the First World War. The cover of this booklet (68 pages) bears an embossed reproduction of Canada's coat-of-arms in colour. The designs and lettering of the stone panels, the sculpture of the portals, ceilings and niches, the altar, stained-glass windows and pages from *The Book of Remembrance* are illustrated in 24 full-page plates. British Book Service (Canada) Ltd., 1068 Broadview Ave., Toronto 6, Ont. 75 cents.

A Handful of Rice by William Allister. The story of a group of prisoners, mainly Canadian, in a Japanese prison camp somewhere in Malaya. The author was born in Manitoba and grew up in Montreal. A member of the ill-fated Hong Kong expedition, 1941, he became a prisoner of war. The book is published by Secker & Warburg, London, Eng., and is available from the British Book Service (Canada) Ltd., Kingswood House, 1068 Broadview Ave., Toronto 6, Ont. $4.50.

THE WAR FOR NOTHING?

Reviewed by Captain F. A. Vye, Directorate of Equipment Policy, Army Headquarters, Ottawa

The Algerian crisis is not unfamiliar to the serious student of current affairs. Thanks to informative and public spirited programmes like "Interpol" and "Danger Man", one can clearly perceive the endless villainies of diabolical Algerians. In the space of thirty minutes, atrocities are avenged, terrorists punished; freedom and justice prevail.

The facts about Algeria are stark. One hundred and thirty years of French occupation, seven years of war, perhaps 500,000 French and Algerian casualties — the exact figure cannot be determined. Here exists an unenviable record of famines, land confiscation, repressions, terrorism, counter-terrorism, executions both clandestine and open, tortures freely resorted to be both sides, political stupidity and military despair. In this book* the author remarks: "It is easy to criticize, but when millions of individuals are doing the same thing at the same time, it seems more useful, and more rational, to wonder why they are doing it."

As Director of Studies at *L'École Pratique des Hautes Études* (Sorbonne), Mme. Tillion commands respect and attention in France. During the years 1934 to 1940, she carried out ethnological research in the Aurès Mountains of Algeria. She then returned to France and became the chief of a Resistance network. Arrested in 1942, she stood in jeopardy of death on five separate counts. She received instead three years of imprisonment (from Germany) and three decorations (from France).

In order to analyse the character of the French colons in Algeria, the writer devotes several interesting pages to the status of French Canadians.

The book gives a clear picture of the relative order of battle in Algeria. The non-Moslem population, numbering approximately 1,000,000, is high when compared to the neighbouring countries of Tunisia and Morocco. Their strength is augmented by the presence of the bulk of the French army (14 divisions, 500,000 men). They are faced by some 9,000,000 Moslems, from whom are drawn several thousand well-organized fighting cells. At least half of these operate from Tunisia and Morocco. In Algeria, as in other parts of the world, the dominant white minority is shrinking. Applying present growth differentials, the white population will be outnumbered by nineteen to one in 1980.

There are two factors which help to explain the curious spectacle of Frenchmen attempting to destroy freedom in their own image. One, of course, is the character of the colons, moulded during the years 1830 - 1870. While predominantly French, many trace their ancestry to Spain, Italy and Malta. In the process of establishing and holding their French identity, they

**France and Algeria.* By Germaine Tillion; translated from the French by Richard Howard. Published by Alfred A. Knopf, New York, 1961, and available in Canada from McClelland & Stewart Ltd., 25 Hollinger Rd., Toronto 16, Ont. $3.50.

passionately refused rights equivalent to their own to the native majority. Today, they are aptly described as "concentrated, organized, armed, terrified, aggressive". Their predicament woefully resembled that of other societies in the southern reaches of North America and Africa.

The second factor is of equal importance, although the book does not dwell upon it. The Army is sick of defeat. Not even the best efforts of the *Section Administrative Spécialisé,* the psychological service of the French army, can remedy matters. The occupation of France was too rapidly followed by withdrawal from Syria, Lebanon, Morocco and Tunisia; followed by dismal, smashing defeat in Indo-China. Algeria is therefore the last bastion. These two diverse elements, if not soul mates, at least make agreeable bed mates.

The writer states that prior to February 1956, the machinery of the Algerian revolution was quite insignificant and little known to the Moslem masses. It inspired in them feelings of "vague approval, vague anxiety, and great curiosity". At this time, the first major F.L.N. cell was discovered and destroyed. The incident was greatly played up by the French press, and Moslems generally learned (not without satisfaction) the importance of the organization. By April 1956, rebel recruiting was well underway; money poured in from every side. Not to be outdone, the colons formed counter-terrorist organizations with equal zeal, and the battle was quickly joined. The French government did nothing to ease the "betrayal complex" of the colons and soldiery, according to the author, but managed in the process to increase the already adequate distrust of the Moslems. The book traces with great care the course of events leading up to the January 1961 referendum. It unfortunately went to press before the army revolt of April 1961 occurred.

Why then has this been a war for nothing? The French military forces in Algeria are certainly too strong to sustain outright defeat in the field. It would appear possible for them to forestall the inevitable, as the British have done in Kenya. It may be no longer fashionable to dispatch "gunboats down the river". The point is, as a military operation, it is still feasible. In this situation, however, the odds are heavily stacked against France. The rebels receive active support from the various Arab nations (the only topic on which the latter can unanimously agree), and moral support from the remaining members of the Afro-Asian bloc. Even that great proponent of freedom for the masses, Mao Tse-tung, has pledged total and unconditional aid for the Algerians.

If the French have lost, then the Algerians have won. Not so, says Mme. Tillion! Apart from Saharan prospects (which France is most unlikely to abandon), Algeria is an impoverished country. It is estimated that the 400,000 Algerians now working in metropolitan France support (directly or indirectly) a third of the rural Moslem population in Algeria. Should France sever all connections with an independent Algeria (as she did with Guinea, for example), what would happen to these workers? Presumably, repatriation, accompanied by a corresponding evacuation of all Europeans

from Algeria. The author shrewdly assumes that many wealthy Moslems would join this exodus. Those Algerians that must perforce remain would inherit "collapse of capital, reciprocal massacres; economic, social, cultural, biological ruin". Hence inevitable defeat is attached to military victory — a sobering motto for our times.

The book acknowledges that a breath of sanity was (and is) contributed by General Charles André Joseph Marie de Gaulle. His first act on assuming the presidency was to grant general amnesty to all rebels condemned to death. In September 1959, he announced his intention of granting Algerians the right of self-determination when all fighting ceases. This policy was supported by the public referendum held on 6 January 1961 (by 75% of the vote in France, and by 69% in Algeria. The latter vote was surprising, in view of the F.L.N.'s annoying tendency to kill or otherwise intimidate any known supporter). It is no exaggeration to state that without de Gaulle, there will be no lasting satisfactory solution for Algeria.

The ultimate solution is therefore not war, but reconciliation. This is asking for a great deal.

A Soldier's Life A Century Ago

The following is taken from *Rough Notes by an Old Soldier* written by Maj.-Gen. G. Bell (two volumes, Day and Son Ltd., London, 1867):

"I was dreadfully disgusted at my new quarters; two wretched little rooms not fit for a dog-kennel, fitted up and furnished with four rickety old chairs that paid barrack damages enough in their day to furnish a drawing-room; two small deal tables patched and impaired, very black from old age, and a smoky chimney; three rusty fire-irons of great antiquity, an old bellows and an iron candlestick completed the dwelling of a captain in the British army. I wished myself back in India a hundred times over.

"If we left Chatham tattered and torn, we were in no better condition when we marched up to Edinburgh Castle to be inspected next morning... The good people were hospitable and kind, and took a more favourable view of the "Royal Scots", their oldest corps, and did not forget that they had done something at Culloden in the olden time, and that in later days we had only to unfurl our standard at any time, and let them see there was not a more brilliant spectacle of British valour emblazoned on any colours ever presented by a crowned head to any regiment; and we were proud of them. Old musty General officers who had never seen service could not understand this; all they cared about was *the* book of regulations and counting one's buttons, and measuring the distance with a pocket-rule from button to button with great gravity. I do not know if this put men in good training for the battle-field, but I know it made them very jocose and merry *after* the ordeal was over!"—*Contributed by S/Sgt. R. C. Wellstood, Historical Section, Army Headquarters, Ottawa.*

TALL GENERAL WITH LONG SHADOW

Reviewed by Lieut.-Colonel H. F. Wood, CD, Deputy Director of the Historical Section, Army Headquarters, Ottawa

Any book about Charles de Gaulle is worth studying these days — even the ones he wrote himself — for this strange, uncompromising man is standing very close to the centre of the world stage, and we know little of what really goes on behind that stone face with its de Bergerac nose.

The author of *The Triumph of Integrity* says in his preface that it is his intention to enlighten us on this issue, but in the end he is only partially successful, for he allows his admiration to rob him of his critical faculties.* To Duncan Grinnel-Milne, de Gaulle is Superman. When a biographer can say, seriously, that "he [de Gaulle] walked with the dignity of a king and championed France with the panache of a medieval knight", he discloses himself as a disciple, not an historian.

The book begins with the crisis in France in 1940, follows de Gaulle to London and his struggles to create a Free French contingent, then cuts back to a description of the man's origins, his early career in the French Army and his battles against the complacent oldsters who led the obsolete armies that would tragically fail the test of blitzkrieg.

Charles de Gaulle's father was a scholar, a philosopher who taught at the Jesuit College in Paris. The son grew up full of a mystical devotion to the concept of *France* and *La Gloire*. That such a man would attract the emotional Churchill while he repelled the pragmatic Roosevelt is understandable; what is less easy to understand, in spite of Grinnel-Milne's attempts at explanation, is de Gaulle's refusal to compromise on any issue, great or small, about which he had a preconceived point of view.

De Gaulle was wounded several times during the First World War in the course of some very gallant actions, and was ultimately captured by the Germans. Marshal Pétain was his first Commanding Officer and described him as "an officer without equal". In 1940, as head of the Vichy government, the aged Marshal signed his former subordinate's death warrant *in absentia*.

Between the wars de Gaulle lectured in military history at St. Cyr and in 1934 his famous book *Vers l'Armée de Métier* was published. It was ridiculed by the High Command for its concept of a small army of six Armoured Divisions and less than a thousand copies were sold. But one of them fell into the hands of a certain Colonel Guderian who proceeded to use it as a guide in developing the first Panzer Division. Six Armoured Divisions would have stopped the German blitzkrieg of 1940 in its tracks.

When the Second World War began, de Gaulle was commanding a tank regiment in Lorraine, and had already adopted as his emblem the ancient

**The Triumph of Integrity* (A portrait of Charles de Gaulle). By Duncan Grinnell-Milne. Published by The Bodley Head, London. Available from British Book Service (Canada) Ltd., Kingswood House, 1068 Broadview Ave., Toronto 6, Ont. $7.00.

device of that region — the two-armed cross — that Churchill was to find so heavy. His fine regiment, trained in mobile war, was immediately dispersed to support the slow moving French infantry in penny packets and de Gaulle was given a staff appointment. The stage was thus set for tragedy — a tragedy that would establish de Gaulle as a military prophet on the same lonely mountain-top as Liddell Hart, Fuller and Martel.

The author describes the disintegration of France in 1940 in considerable detail. He accuses Weygand and Pétain of conspiring from the first to deliver their country to the Germans, a charge I have not seen devoloped elsewhere, and flogs away endlessly at those dead horses, Laval and Darlan. As his country succumbed, de Gaulle left for London and the rest of the book is an account of his efforts to build up a Free French force outside and a Resistance movement inside his prostrate homeland.

The villains of this period, according to the author, are not so much the Fascist enemies as the American President and his Secretary of State. "Good grey" Cordell Hull, as the republican magazines called him, distrusted and disliked de Gaulle and said of him that he showed "few signs of political acumen". Hull had no corner on political acumen himself. Roosevelt paid him very little heed, but the President seems to have become infected with Hull's prejudices against the Free French.

De Gaulle's seizure of the islands of St Pierre and Miquelon in defiance of Hull's objections was never forgotten in the U.S. State Department. De Gaulle's biographer explains the seizure by stating that the British Foreign Office told de Gaulle that an agreement had been reached between Canada and the United States, and the former was about to land a force and take over the small French possessions. This seems highly unlikely, for there was no such agreement. Hull favoured one, but Canada refused to move without the concurrence of the British Government.

Again, the author plays down the bickering between de Gaulle and the over-extended Wavell as the leader of the Free French tried to get his own way over Syria.

The triumphant entry into Paris in 1944, the Reconstruction, de Gaulle's self-imposed retirement into private life and his subsequent return at the time of the Algerian crisis are treated almost as postscripts. Perhaps it is just as well, for by this time the reader is tiring of all the glory and the panting prose. If only the author had been able to discover just one thing his hero did badly, we could forgive him much.

In the end, however, he makes his point. The career of Charles de Gaulle is indeed a Triumph of Integrity, and one has to search a long way back to find a parallel for it. Thorny, unbending men who clothe themselves in rectitude and refuse to compromise have not often succeeded in achieving their aims.

Loyalty

A citizen's life belongs to his country.
—*Napoleon.*

BACK IN THE VALLEY

Reviewed by J. Mackay Hitsman, Historical Section,
Army Headquarters, Ottawa

There is a great deal about the Shenandoah Valley campaigns of 1862 and 1864 that is similar. The Confederate object was to ease the pressure on Lee's Army of Northern Virginia which was protecting Richmond. The method was to advance up the Shenandoah Valley and threaten Washington from the flank and rear, where there was no Federal unity of command. On both occasions the Army of the Potomac was forced to send back large forces to make Washington secure. Because of the glowing praise heaped on Stonewall Jackson by the late Colonel Henderson, countless officers seeking promotion have studied how that wily Confederate commander ranged freely up and down the Valley in 1862, striking at will and almost with impunity whenever one or other of the second-rate Federal generals was caught with his logistics down. General Jubal Early's attempt to repeat in 1864, with Jackson's old Second Corps, got off to an equally good start but then bogged down and was finally turned into a fiasco by a competent Federal general, the young and vigorous Phil Sheridan. This is the theme of General Stackpole's latest study* of the American Civil War.

Following retirement from the Pennsylvania National Guard some years ago, General Stackpole decided to combine the military knowledge acquired in two World Wars with the facilities of his own publishing house. The result has been five well-thought-out Civil War studies, profusely illustrated and mapped, and selling for considerably less than most of the myriad volumes that keep appearing. The author admits that once started, there can be no stopping and implies that further volumes are shaping up in the back of his mind—dealing, of course, with events which also happened almost in his own backyard.

General Robert E. Lee must have realized, like everyone else during the late spring of 1864, that the Confederacy could not win. But there was still a chance to avoid losing: if President Lincoln failed to get re-elected a war-weary North might negotiate a peace. On June 12, therefore, he ordered Lieutenant-General Jubal Early to give the government and people in Washington a good scare. "Old Jube", who had been with Jackson, did just that, taking his divisions within musket shot of the Washington forts. The Lincoln Administration screamed for reinforcements and enough veterans were quickly transferred from the Army of the Potomac to give the Federals a superiority of two to one. This, however, ended any similarity with 1862.

General U.S. Grant sent the up-and-coming Major-General Philip H. Sheridan to correct matters. This 32-year old West Pointer had started the war as a captain. After making a success of A

**Sheridan in the Shenandoah: Jubal Early's Nemesis.* By Edward J. Stackpole (The Stackpole Company, Harrisburg, Pennsylvania). 1961. $5.95.

& Q appointments, he got his chance as a commander. At this time he had just finished turning the Army of the Potomac's Cavalry Corps into a more formidable force than the late J.E.B. Stuart's cavalry had ever been.

Jubal Early was an experienced commander and physically brave, but he lacked what the author calls "moral courage"— the ability to make prompt decisions on a battlefield and give the orders which can turn local success into overwhelming victory. The extremely tolerant Robert E. Lee, whose greatest weakness would seem to have been a tendency not to demand enough from his subordinates, forgave Early's failures at Opequon, Fisher's Hill and Cedar Creek, but others did not. Complete surprise was achieved at Cedar Creek. In the absence of Sheridan, the Confederates successfully attacked the unsuspecting, and scattered Federal divisions at dawn, from the front, flank and rear. At the crucial moment, however, Early called a halt. In consequence, the returning Sheridan was able to rally the fugitives and launch a counter-attack which turned the tables completely. Before the day was much older, the Confederates were in headlong flight and Sheridan had secured an important enough victory to ensure the re-election of Lincoln.

The author has an easy style and keeps his narrative beautifully simple. From time to time there are brief digressions, but these are merely designed to persuade younger readers that armies and war have not changed as much as some publicists would have them think. The following three examples have been selected at random:

(1) "Army politics is a fact of military life; always has been and always will be, particularly among professional Army men whose competition for advancement reaches its zenith during a war, when expansion of the armed forces provides opportunity for rapid promotion . . . Brigadier General George Armstrong Custer [was] one of the fair-haired boys who had risen in meteoric fashion in the cavalry service while most of his army colleagues among the captains continued to wear the same insignia which had adorned their shoulder straps at the start of the war."

(2) "Sheridan's position at this moment, while not precarious, was at least uncertain. His mission was to destroy Early and strip the Valley clean, but his orders had not stipulated a time schedule for the operations. Good generalship implies more than mere willingness to attack. The enemy's capabilities must be carefully evaluated and the possible plans open to him weighed against one's own ability to counter each. The character of the terrain is also important. More often than not the victorious general is the one who appraises each facet of the situation accurately and commits his forces only at a time and place most favourable to himself."

(3) "The Union commander's plan had been carefully thought out to the last detail and was a good one. Its principal weakness, if so it could be called, was that precise execution depended on a strict adherence to a time and space schedule, which rarely works out in practice, to the exact result contemplated when poring over maps in the quiet atmosphere of a headquarters tent."

SOVIET MILITARY AND POLITICAL THINKING

Reviewed by Major T. F. Howard, Directorate of Combat Development, Army Headquarters, Ottawa

From a painstaking examination of military articles appearing in the Soviet Press, published books and an analysis of Soviet Military Journals, Mr. H. B. Dinerstein has produced a well documented and penetrating analysis of the changes in Soviet politico-military thought in the nuclear age. His book* was prepared as part of the research undertaken by the RAND Corporation (of which Mr. Dinerstein is a senior staff member) for the United States Air Force. The RAND Corporation is a non-profit research organization whose primary concern is United States military security.

The United States Air Force is primarily concerned with the development and maintenance of the strategic nuclear deterrent force. It is natural therefore that this book deals primarily with strategic military and political thinking on general war in which the full range of nuclear weapons would be used and in which air forces, including ICBMs, would play a primary role. However, the roles of the Russian sea and ground forces in a war of this nature are also covered.

Mr. Dinerstein traces the changing Soviet outlook through the humiliating days after the October Revolution, the intervention of European Forces in 1917-20, the successes of the German Army's campaign in 1941 to the growing confidence following their military, political and technological success during the latter half of the Second World War and the following years.

Although the Soviet was confronted in 1945 with the United States in exclusive possession of atomic weapons, the book concludes that Stalin's influence over military thought obscured the true impact of the nuclear weapon. In Stalin's view the nuclear weapon was another weapon in the arsenal and his permanently operating factors such as the stability of the rear, morale, quantity and quality of divisions etc., still applied: put simply, that atomics were not as significant as manpower and industrial potential. This was no doubt conditioned to some extent by the rapid demobilization of the U.S. Armed Forces at the end of the Second World War.

Mr. Dinerstein concludes that Soviet military thought was largely imprisoned within Stalin's guidance and that it was not until two years after Stalin's death, in 1953, that Soviet military thinkers finally came to grips with the major problems arising out of the impact of the nuclear weapon. This is hard to believe since, as the book states, Stalin's control seems in no way to have inhibited the development of advanced and sophisticated weapons systems though it may have obscured, at times, the questions of priorities and the

*_War and the Soviet Union._ By H. S. Dinerstein. Burns & MacEachern Ltd., 266 King St. W., Toronto 2B, Ont. — $6.50.

allotment of resources. In any event the Soviet is now under no illusion as to the stark picture that nuclear weapons have brought to war. The swift and enormous destructive power of nuclear weapons presents the possibility of a decisive defeat in a limited time. An initial surprise attack may gain an irreversible advantage for the attacker. This fact placed an unprecedented weight on seizing the initiative, achieving surprise, forces in being, etc. These, under Stalinist theories, had been considered transitory factors which could not effect the outcome of a long-term war.

The Soviets consider that the nuclear deterrent does not preclude the possibility of war, including allout nuclear war, and therefore the armed forces must be prepared for any contingency. It is not surprising to read that they have gone through much the same process of military thought on the subject of nuclear war as has the West. The theory of disproportionate cost—i.e., is "the game worth the candle"—has been thoroughly explored as has been the merits of pre-emptive attack or preventive war. The need for a deterrent force which can survive a surprise attack and return a devastating blow to the enemy is fully realized. The Soviets consider that the consequences of a surprise attack can be minimized by careful training, indoctrination, civil defence and vigilance. In any event it is their belief that the processes for preparing for war in the democratic countries are such that sufficient warning will be given to permit their striking first.

Mr. Dinerstein points out that the Soviet has a positive approach to the problems of nuclear war. They have not succumbed to the idea that destruction in nuclear war would be so great as to make war pointless. For this reason Soviet military strengh must continue to develop. As the Soviet becomes stronger the danger of a war not of Soviet making recedes.

Although the nuclear war-headed ICBM and IRBM have become the foremost striking power in the Soviet arsenal, the place of conventional forces has not been obscured. Second World War experience taught the lesson that control of the air is important. The prime weapon of the USSR Navy is the submarine and the vulnerability of western sea communications and the United States coastal areas to missiles such as Polaris is well understood.

Soviet military thinking concludes that in nuclear war more, not fewer, conventional forces are required to absorb the losses and sustain the attack. In this respect Mr. Dinerstein points out that the Soviets now possess a highly mobile modern mechanized army which is quantitatively and qualitatively superior to any in the West. In his view its principal role, in a general nuclear war, will be to overrun Western IRBMs in Europe. Undoubtedly this will be one of the roles of the Soviet Army; however, it is here, in my view, that Mr. Dinerstein has neglected to develop an important factor in the evolution of Soviet military power in the nuclear age, and one which leads one to believe that the Soviets have never been in any doubt as to the impact of nuclear weapons on modern war; rather that they appreciated early the probability of a

Canada's Army: Past to Present

Reviewed by S/Sgt. R.C. Wellstood, CD, Historical Section, Army Headquarters, Ottawa

The second edition of Mr. Dornbusch's book, *The Canadian Army, 1855-1958: Regimental Histories and a Guide to the Regiments* has been given a new title.* It is a complete record of the origin, designations and amalgamations of the Cavalry, Armoured and Infantry units and the Corps of the Canadian Army from 1855 to the present (although he has omitted the recent amalgamation of the Royal Newfoundland Regiment). In this edition he has dispensed with the listing of histories but assures us that they will be included in a forthcoming bibliography of the military history of Canada.

Some purists may complain because the Regiments are not in order of seniority, but the alphabetical order makes it much easier to use as a reference work. One shortcoming is the absence of page numbers. Despite this, the book is well worth a much higher price and should be on the bookshelf of every military historian or anyone else with an interest in the traditions of Canada's army. Mr. Dornbusch is to be complimented for this latest work from his prolific military pen. This reviewer well knows the amount of painstaking research that goes into a book of this calibre and the fact that Mr. Dornbusch is a friend from across the border makes it all the more remarkable.

The first edition was limited to 375 copies and sold out in five months; this edition is limited to 400 copies and will certainly sell out quickly. A word to the wise—get it now.

**Lineages of the Canadian Army, 1855-1961.* By C.E. Dornbusch. Hope Farm Press, Cornwallville, N.Y., 1961. $4.50.

Mass and Velocity

The strength of an Army, like power in mechanics, is estimated by multiplying the mass by the velocity; a rapid march augments its morale and increases its means of victory.—*Napoleon.*

Soviet Military and Political Thinking

(Continued from preceding page)

nuclear impasse and provided for the development of balanced forces to pursue their aims under the ominous but sterile shadow of the nuclear deterrent. This is a fact which the West has been slow to realize.

Throughout the book runs the theme of ever-increasing Soviet confidence as balanced military force and industrial/technological strength develops to meet the needs of Communism's expansionist aims.

Within the bounds of the available material, in a field where much of the information is shrouded in official secrecy, Mr. Dinerstein has produced a lucid and well-documented book on current Soviet military thinking which is well worth study

EARLY AMERICAN MERCENARIES

Reviewed by Lieut.-Colonel H. F. Wood, CD, Deputy Director, Historical Section, Army Headquarters, Ottawa

We are not being allowed to forget that one hundred years ago in the United States the first shots were fired in their great Civil War. American publishing houses and university presses are pouring out such a flood of books on the period that we are justified in wondering where it will all end. Every facet of the Civil War (which was already the best documented war in history before the flood began) is being re-examined with tender loving care. So when this reviewer was asked to write something about a book called "The Blue and The Gray on the Nile",* his first reaction was that the authors must have plunged the scraper right through the bottom of the barrel.

But if at first glance it appears that they have tried to cash in on a current trend, by dredging up the story of a handful of Civil War veterans who sold their battle experience to the Khedive of Egypt, a closer examination leads to forgiveness. Their story, told in a style that is fresh and stimulating, gives historical perspective to the current western efforts to train backward armies around the world.

The fifty officers recruited by the Khedive's agent from among the restless and rootless survivors of the great Civil War had no official status and were in no sense a military mission. On arrival they were clapped into heavily-braided uniforms and red fezzes and told to reorganize and train the Egyptian Army so that Ismail Pasha could throw off the Turkish yoke. They did their best, but there was no meeting of minds. They could not understand the way of life in Islamic Egypt and did not try — and the Egyptian officials with whom they had to work reciprocated.

Living apart, as an uncomprehending American colony in a bewildering oriental land, they ended up writing reports to each other that were never read and building up plans on paper that were never used.

The most enduring monument the Americans left to Egypt was the record of their explorations. Several of their number travelled through the Sudan, trekked through Central Africa and surveyed the upper reaches of the Nile as part of a plan for the development of the country.

The authors have brought to vivid life this short period in the emerging life of modern Egypt, as it moved from Turkish province to British protectorate. It doesn't have much to do with the War between the States, but it is a readable and wryly amusing primer on the hazards facing the administrators of foreign aid programmes.

**The Blue and The Gray on the Nile.* W. B. Hesseltine and H.C. Wolf, The University of Chicago Press.

One Master Better

Better one master than a thousand! —*Napoleon.*

CANADIAN ARMY ORDERS

Listed below is a resumé of Canadian Army Orders for the information of military personnel. Details of these Orders are available in all Army units.

CAO 4-2

Motor Vehicle Accidents — Reports to Civil Authorities

(Issued: 27 Nov 61)

This revision reiterates the advisability of cooperating with the civil authorities in reporting accidents involving DND vehicles; places damage to property at $100.00 for all provinces and clarifies responsibility for reporting accidents involving DND or privately-owned vehicles.

CAO 10-4

Physical Training Staff RCIC

(Issued 30 Oct 61)

This revision outlines the organization, direction, command and employment of the Physical Training Staff RCIC.

CAO 10-5

Physical Fitness Policy

(Issued 30 Oct 61)

This new order sets out the policy for physical training and sports in the Canadian Army (Regular). It details the physical training programmes and standards for field units, static headquarters and units and recruits, soldier apprentices and officer cadets; the sports authorized for inclusion in sports programmes and the administration of both the physical training and sports programmes.

CAO 57-4

Participation in Small Arms Competitions

(Issued: 18 Sep 61)

This revision in part replaces QR (Army) 16.22 concerning leave to attend rifle meetings. All members attending will now proceed on duty except that no financial benefits for travelling will be allowed. It also provides that members of all components of the Reserves, instead of CA (M) and CA (SR) only, may be placed on Special Duty to attend Bisley.

CAO 57-20

Canadian Army Marksmanship Team

(Issued: 27 Nov 61)

This new order creates the Canadian Army Marksmanship Team. The team will be formed annually to represent the Canadian Army in competition with the United States Army Advanced Marksmanship Unit. This competition was previously held between the Royal Canadian School of Infantry and the United States Army Advanced Marksmanship Unit of the United States Army Infantry Centre. The Canadian Army Marksmanship Team will include 12 shooting members to be selected by Army Headquarters normally from the best shots competing in the annual Regular Army small arms competition.

CAO 98-1

Establishments — Submissions to War Establishments Committee and Army Establishments Committee

(Issued: 4 Sep 61)

This new order sets out the proce-

dure for processing new establishments and changes to existing establishments.

CAO 128-24
Honours and Awards — Recommendations for Awards in Peacetime
(Issued: 2 Oct 61)

This amendment provides that outstanding service in the Congo may now be recognized through the medium of the Sovereign's awards.

CAO 162-1
Leave and Pass
(Issued 16 Oct 61)

This amendment deletes the requirement for the Leave Form (CAFB 322) to be carried on pass but allows the use of this form for this purpose at the discretion of the commanding officer.

CAO 174-4
Medical Examinations — Time Factors
(Issued: 4 Sep 61)

This revision establishes the valid period for medical examinations on enrolment as one year with a recheck after six months and the valid period on release as six months with a recheck after three months.

CAO 218-7
Official Mail — Methods of Mailing
(Issued: 2 Oct 61)

This amendment provides that only mails containing goods or materiel require a postal customs form.

CAO 242-4
Reports and Returns — List
(Issued: 18 Sep 61)

This revision brings up to date the list of reports and returns to be submitted to Army Headquarters.

CAO 270-4
Academic Training
(Issued 16 Oct 61)

This revision provides that when extramural courses at academic institutions have been authorized at public expense they must be prepaid by the applicant and reimbursement is subject to successful completion of the course.

CAO 271-10
Postings and Detachment Postings Approving Authorities
(Issued: 30 Oct 61)

This amendment sets out the method of establishing a reporting date for posting when this has not been done by Army Headquarters.

CAO 272-6
Transportation When Proceeding on Leave
(Issued: 2 Oct 61)

This revision reflects the recent amendment to QR (Army) 209.50 (Transportation on Leave) which replaces the term "Northern Canada" with "Isolated Posts" to bring the article into line with other regulations governing isolated localities, which now are designated as Isolated Posts. It also sets out the tri-service procedure for determining mileage entitlement under QR (Army) 209.50 when members return to or proceed beyond Canada on leave.

CAO 273-1
Travelling Claims — Members Authorized to Travel at Public Expense
(Issued 16 Oct 61)

This revision embodies recent amendments to the table to QR (Army) 209.22, and to QR (Army) 209.32 and certain changes in procedures.

THE ROYAL CANADIAN ARMY SERVICE CORPS

WORKSHOP ON WHEELS

By

MAJOR G. R. LAING, CD (RCASC), DIRECTORATE OF MOVEMENTS, ARMY HEADQUARTERS, OTTAWA*

The Peerless Motor Car Company of Cleveland, Ohio, in 1914 manufactured the "Workshop on Wheels" pictured on the opposite page. Purchases by Canada of much-needed war supplies were hampered by the determination of the United States to maintain a neutral position with respect to the European War which the Kaiser was making. Peerless trucks required for the Canadian Expeditionary Force were therefore assembled by the Canadian agent, Dominion Automobile Company of Toronto.

The Peerless bid in the automotive field started in earnest when they built the motorette of 2¾ horsepower in 1900 under de Dion patents. In 1902, a conventional touring car was introduced in two double-cylinder models of 12 and 16 horsepower. In 1904 the renowned racer, Barney Oldfield, broke all closed track records in a Peerless "Green Dragon" covering nine miles in eight minutes and four seconds at Los Angeles. In 1912 Peerless had a "fat man" feature which made getting into and out of a car simpler by the introduction of the hinged steering wheel. By pushing down a sleeve device, the steering wheel folded back out of the way. In the mid-1920's Peerless produced cheaper four and six cylinder cars which failed to attract the purchasing public, and while their trucks were of excellent quality and performance they could not compensate for motor car losses and the company finally went out of business in 1932.

The initial purchase of trucks, cars and wagons for the CEF was entrusted by Maj.-Gen. Sir Sam Hughes, Minister of Militia and Defence, to T. A. Russell and J. H. MacQuarrie, both of whom were given the honorary rank of Major in August 1914. The Minister's instructions were concise:

Ottawa, August 14, 1914.

Dear Sirs:

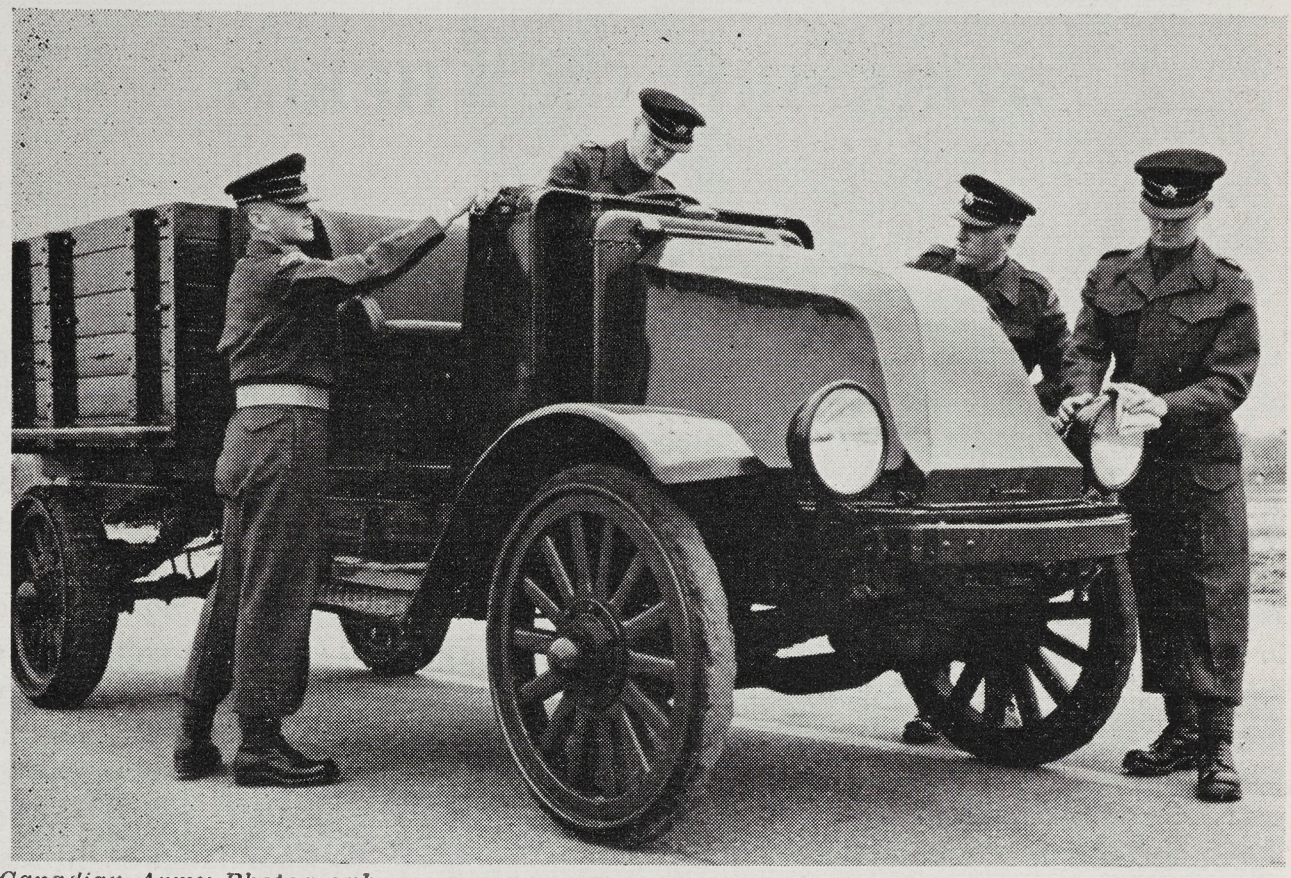
I have the pleasure in commissioning you to select for me, for the Department of Militia and Defence, using your best judgment as many motor trucks as you can conveniently secure, up to twenty-five (25) to be delivered to Valcartier, Quebec, by the end of two weeks from today — the 28th instant.

I shall be obliged if you will, also supply us with chauffeurs for these trucks.

Faithfully,
(Signed) *Sam Hughes*

**The author served in Canada, the United Kingdom, Italy and North-West Europe during the Second World War. His post-war service has included command of Movement Control Units and No. 18 Company RCASC, Fort Churchill, Man. He is presently employed with the Directorate of Movements at Army Headquarters.* — Editor.

FIRST WORLD WAR TRUCK



Canadian Army Photograph

This First World War truck was driven in the Memorial Day parade at Camp Borden, Ont., to mark the Diamond Jubilee Year (1961) of the Royal Canadian Army Service Corps. A 1916 International freight truck, it is equiped with a 17-horsepower motor and solid rubber tires.

Testimony given before the Royal Commission, which in 1915 investigated the purchase of war supplies, shows that Honorary Majors Russell and MacQuarrie purchased for the Canadian Expeditionary Force 23 three-ton trucks with transport bodies and two three-ton trucks with workshop bodies from the Peerless Company through their Canadian outlet. This Royal Commission (see Canadian House of Commons 1917 Sessional Paper No. 60) was headed by the Honourable Sir Charles Peers Davidson, Kt, KC, LLD. Sir Charles was on active service with the Canadian Militia in 1866-7 during the Fenian Raids and followed this with long association with the Victoria Rifles of Montreal, retiring with the rank of Lieutenant-Colonel. Sir Charles had a distinguished legal career, being appointed a Puisne Judge of the Supreme Court of Quebec in 1887 and serving as Chief Justice from 1912 to 1915.

The 2nd Canadian Divisional Field Ambulance Workshop Unit was the first of its kind formed in Canada, and this doubtless accounts for its having the Peerless Workshop trucks. The insignia of the 2nd Canadian Division — the Roman numerals "II" encircled by a "C" — are clearly visible on the front of the workshop truck in the accompanying photograph.

The Field Ambulance Workshop Unit for the 1st Canadian Division was

formed in the United Kingdom and was composed principally of Imperial personnel and was equipped with vehicles of United Kingdom manufacture. The Workshop unit with its mobile machine lorry was deemed a necessity for the CEF following close scrutiny of the results of field trials carried out by the British 27th Division, who are credited with pioneering the mobile field workshop.

The 1st Canadian Divi ional Field Ambulance Workshop Unit proceeded to France in February 1915 with the CEF. Sections joined the Field Ambulance they were to serve: 1 Section joined 1 Field Ambulance on 15 February, 2 Section joined 2 Field Ambulance on 19 February near the same place, and 3 Section joined 3 Field Ambulance on 18 February at Caestre.

After 18 months of war service, the function of the Divisional Field Ambulance Workshop Unit was transferred to the Canadian Army Service Corps, who although a small corps in the pre-war permanent militia (known as the Canadian Permanent Army Service Corps—CPASC) had established itself as a first-class transportation corps. Therefore, to promote general mechanical transport efficiency within the first and second divisions of the Canadian Expeditionery Force, the Divisional Supply Column of the Canadian Army Service Corps took over Field Ambulance Workshop Units. To this day an RCASC Platoon is an integral section of the Field Ambulance.

NORAD's Underground Headquarters

The projected headquarters of the North American Air Defence Command, in the Colorado mountains, has been dsecribed as "the world's most sophisticated cave". By 1965, under present plans, NORAD will be located in its new headquarters deep inside Cheyenne mountain, south-west of Colorado Springs.

NORAD, set up by the United States and Canada operating as a team, is the nerve centre of continental air defence.

Total construction cost for the new headquarters is estimated at $25,000,000. An additional $41,000,000 will be spent on electronic and other equipment necessary to detect enemy attack from the air. The mountain headquarters will have three main chambers, each 320 feet long, 45 feet wide, and 56 feet high. In addition, two utility rooms, each measuring 100 by 45 by 36 feet, will be stored with electronic gear.

The headquarters will have two tunnel entrances, each nearly a mile long. Provisions, water, and fuel will be stored deep beneath the surface.—*News item from the "Military Review" (U.S.).*

"A Sheep in Lions's Skin"

Walled towns, stored arsenals and armouries, goodly races of horses, chariots of war, elephants, ordnance, artillery and the like; all this is but a sheep in lion's skin, except the breed and dispositions of the people be stout and warlike. — *Sir Francis Bacon.*

CANADIAN 5BX PLAN FOR U.S.

The [U.S.] Seventh Army in Germany has launched a new physical fitness programme.

Male personnel under 40 years of age and all commanders of combat and combat support units up to battle group, combat command, brigade, and corresponding levels will be required to take a new Physical Combat Proficiency Test semi-annually.

Those over 40 years of age will take a physical fitness test, appropriate to body build or age, semi-annually. These tests will be based on the "Five Basic Exercises (5BX) Plan" as prescribed for the Royal Canadian Air Force, and to be distributed throughout Seventh Army. Personnel in the over 40 category may, at their own discretion, take the Physical Combat Proficiency Test as a substitute.

The Physical Combat Proficiency Test is designed to measure the physical skills of running, crawling, throwing, dodging and jumping. They will require agility, coordination, strength and endurance.

The proficiency course will include a 40-year crawl (minimum standard — 36 seconds); a horizontal ladder (at least 36 rungs); a dodge, run and jump course (26.5 seconds); grenade throwing (15 points); and a one-mile run (minimum time — 8 minutes, 30 seconds). The physical ability standard to be met is a minimum score of 300 points.

To combat the problem of obesity, all commands will be surveyed during the first month of each quarter for over-weight personnel. Individuals exceeding the standard weight for their height and age will be required to report periodically to a medcial officer who will advise and supervise the necessary corrective measures.—*From the Army-Navy-Air Force Journal (U.S.).*

As it Used to Be

Lieutenant-Colonel Frederick Ernest Whitton's *History of the Prince of Wales's Leinster Regiment (Royal Canadians)* (Aldershot, 1924) gives a detailed but informal account of the mobilization during the spring of 1858 of the 100th (The Prince of Wales' Royal Canadian) Regiment of Foot for overseas service as part of the British Army.

Recruiting was handled by British regiments stationed in Canada, but the men were given only obsolete clothing and equipment and rudimentary training before sailing for England. Proper new uniforms were available at Shorncliffe Camp for the several drafts as soon as they arrived from Canada, but the next comment by the regimental historian will have an ominous sound to many readers who trained in the United Kingdom during the 1914-1918 and the 1939-1945 Wars: "Fifty sergeants from the Brigade of Foot Guards were sent to Shorncliffe to drill the Regiment". — *Contributed by J. Mackay Hitsman, Historical Section, Army Headquarters, Ottawa.*

THE ROYAL CANADIAN POSTAL CORPS

Collar Badge Cap Badge Button

THE ROYAL CANADIAN POSTAL CORPS

DESCRIPTION

Cap Badge

Superimposed on a post-horn surmounted by the Crown, the monogram "RCPC"; below the post-horn and the monogram a scroll inscribed with the Motto "SERVIRE ARMATIS". For Officers the post-horn and Crown are gold plated while the monogram and scroll are silver plated; for Other Ranks, the post-horn and Crown are brass while the monogram and scroll are white metal. The badge is 2 inches high and 2 inches wide.

Collar Badge

The design and materials are the same as the cap badge. The badge is 1 1/4 inches high and 1 1/4 inches wide.

Button

The monogram "RCPC". The buttons are gold plated for Officers and brass for Other Ranks.

Canadian Army Photograph

This photograph illustrates and describes the new collar badge, cap badge and button approved by Her Majesty the Queen concurrent with the granting of the title "Royal" to the Royal Canadian Postal Corps.

"Servire Armatis"

Postal Corps' Golden Jubilee

By

MAJOR F. T. BURGESS, CD, DIRECTORATE OF ARMED FORCES POSTAL SERVICES, NATIONAL DEFENCE HEADQUARTERS, OTTAWA*

The year 1961 marks the 50th anniversary of the Canadian Postal Corps, whose motto *Servire Armatis* ("Service to the Armed Forces") is borne proudly by its members scattered from Victoria to Halifax, and in France, Germany, the United Kingdom, Sardinia, Egypt, Lebanon and the Congo Republic. The third smallest corps in the Canadian Army (Regular), the scope of its employment is exceeded by none.

A "Royal" Corps

In recognition of the devoted service rendered by the Corps during the past 50 years in peace and war, Her Majesty the Queen on 20 June 1961 graciously bestowed upon the Canadian Postal Corps the title "Royal". Henceforth the Corps will be known as "The Royal Canadian Postal Corps".

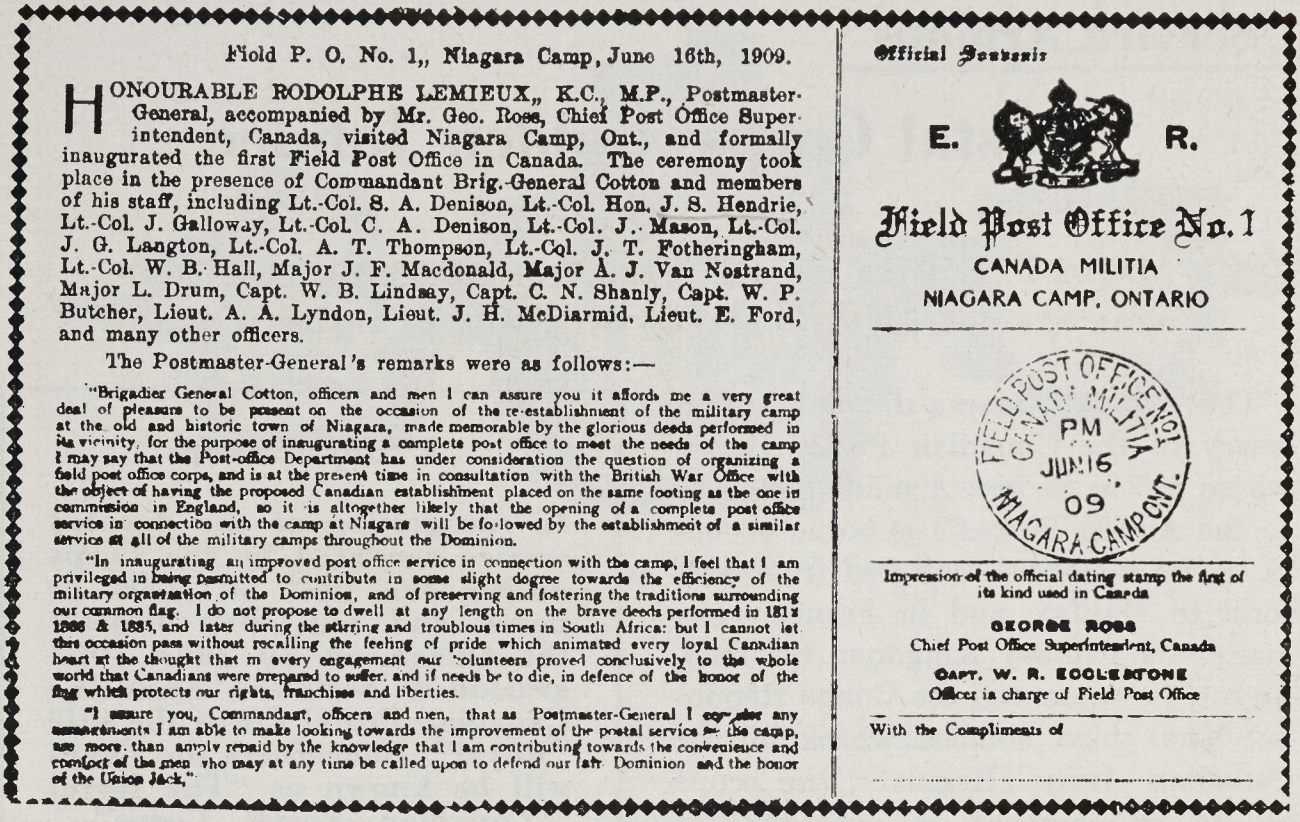
Prelude to a Postmark

In an official report concerning the Second Riel Rebellion, Maj.-Gen. J.W. Laurie† stated in 1885 that he had established a "MPO" (Military Post Office) at Swift Current to serve the North-West Field Force. In mid-January 1900 a "Canadian Postal Corps" Detachment accompanied the Second Canadian Contingent to Capetown and saw service for the duration of the Boer War at Capetown, Bloemfontein and Pretoria. This auxiliary detachment consisted of Captain W.R. Ecclestone (Hamilton); Sgt. R. Johnston (Winnipeg); Privates T.B. Bedell (St. John's); J. Tallier (Montreal); and K. A. Murray (Woodstock, Ont.), all recruited from the Post Office Department.

Following the Boer War, military postal service was first provided at Militia camps in Canada in 1909 when Field Post Office No. 1 was established at Camp Niagara, Ont. The Honourable Rodolphe Lemieux, QC, MP, Postmaster-General, accompanied by

†*According to Army historical records, Maj.-Gen. Laurie was a retired British Army officer who came to this country and joined the Canadian Militia, from which he retired as a full Colonel. In the Second Riel Rebellion his appointment was "Colonel Commanding at Base".*—Editor.

**Enlisting in the Canadian Postal Corps in November 1939, the author proceeded overseas in December and was commissioned in 1941. He served in North Africa and North-West Europe, and in 1944 was posted to Washington, D.C., as Canadian Postal Liaison Officer. Released from the Army in 1945, he was called out in 1950 and converted to the Special Force in 1951. He commanded the Postal Unit in the far East in 1954, and from 1956 to 1959 served in Antwerp and London as Assistant Director of the Armed Forces Postal Services (Europe). During the following two years Major Burgess was OIC of the CPC Detachment, Canadian Brigade Unit, Middle East, which included the appointment of Senior Postal Service Officer, UNEF. He is presently employed as AD Post (Navy).* — Editor.



Field P. O. No. 1,, Niagara Camp, June 16th, 1909.

HONOURABLE RODOLPHE LEMIEUX,, K.C., M.P., Postmaster-General, accompanied by Mr. Geo. Ross, Chief Post Office Superintendent, Canada, visited Niagara Camp, Ont., and formally inaugurated the first Field Post Office in Canada. The ceremony took place in the presence of Commandant Brig.-General Cotton and members of his staff, including Lt.-Col. S. A. Denison, Lt.-Col. Hon. J. S. Hendrie, Lt.-Col. J. Galloway, Lt.-Col. C. A. Denison, Lt.-Col. J. Mason, Lt.-Col. J. G. Langton, Lt.-Col. A. T. Thompson, Lt.-Col. J. T. Fotheringham, Lt.-Col. W. B. Hall, Major J. F. Macdonald, Major A. J. Van Nostrand, Major L. Drum, Capt. W. B. Lindsay, Capt. C. N. Shanly, Capt. W. P. Butcher, Lieut. A. A. Lyndon, Lieut. J. H. McDiarmid, Lieut. E. Ford, and many other officers.

The Postmaster-General's remarks were as follows:—

"Brigadier General Cotton, officers and men I can assure you it affords me a very great deal of pleasure to be present on the occasion of the re-establishment of the military camp at the old and historic town of Niagara, made memorable by the glorious deeds performed in its vicinity, for the purpose of inaugurating a complete post office to meet the needs of the camp I may say that the Post-office Department has under consideration the question of organizing a field post office corps, and is at the present time in consultation with the British War Office with the object of having the proposed Canadian establishment placed on the same footing as the one in commission in England, so it is altogether likely that the opening of a complete post office service in connection with the camp at Niagara will be followed by the establishment of a similar service at all of the military camps throughout the Dominion.

"In inaugurating an improved post office service in connection with the camp, I feel that I am privileged in being permitted to contribute in some slight degree towards the efficiency of the military organization of the Dominion, and of preserving and fostering the traditions surrounding our common flag. I do not propose to dwell at any length on the brave deeds performed in 1812 1866 & 1885, and later during the stirring and troublous times in South Africa: but I cannot let this occasion pass without recalling the feeling of pride which animated every loyal Canadian heart at the thought that in every engagement our volunteers proved conclusively to the whole world that Canadians were prepared to suffer, and if needs be to die, in defence of the honor of the flag which protects our rights, franchises and liberties.

"I assure you, Commandant, officers and men, that as Postmaster-General I consider any arrangements I am able to make looking towards the improvement of the postal service of the camp, are more than amply repaid by the knowledge that I am contributing towards the convenience and comfort of the men who may at any time be called upon to defend our fair Dominion and the honor of the Union Jack."

Official Souvenir

E. R.

Field Post Office No. 1

CANADA MILITIA

NIAGARA CAMP, ONTARIO

FIELD POST OFFICE No 1 CANADA MILITIA PM JUN 16 09 NIAGARA CAMP ONT.

Impression of the official dating stamp the first of its kind used in Canada

GEORGE ROSS
Chief Post Office Superintendent, Canada

CAPT. W. R. ECCLESTONE
Officer in charge of Field Post Office

With the Compliments of

Souvenir postcard — Field Post Office No. 1.

Mr. George Ross, Chief Post Office Superintendent, opened the office on 16 June 1909 and an official souvenir postcard was issued. A photostat of one of these original cards showing the cancellation Field Post Office No. 1, Canadian Militia, PM June 16/09, Camp Niagara, Ont., appears in this article.

A Corps is Born

Despite these historic beginnings, the Canadian military postal service as such dates its seniority from General Order 70 of 3 May 1911 which authorized the formation within the Canadian Militia of a "Canadian Postal Corps" consisting of a Base Post Office at Toronto, commanded by Major George Ross with light detachments at London, Toronto, Kingston, Montreal, Quebec, Halifax, Winnipeg and Calgary.

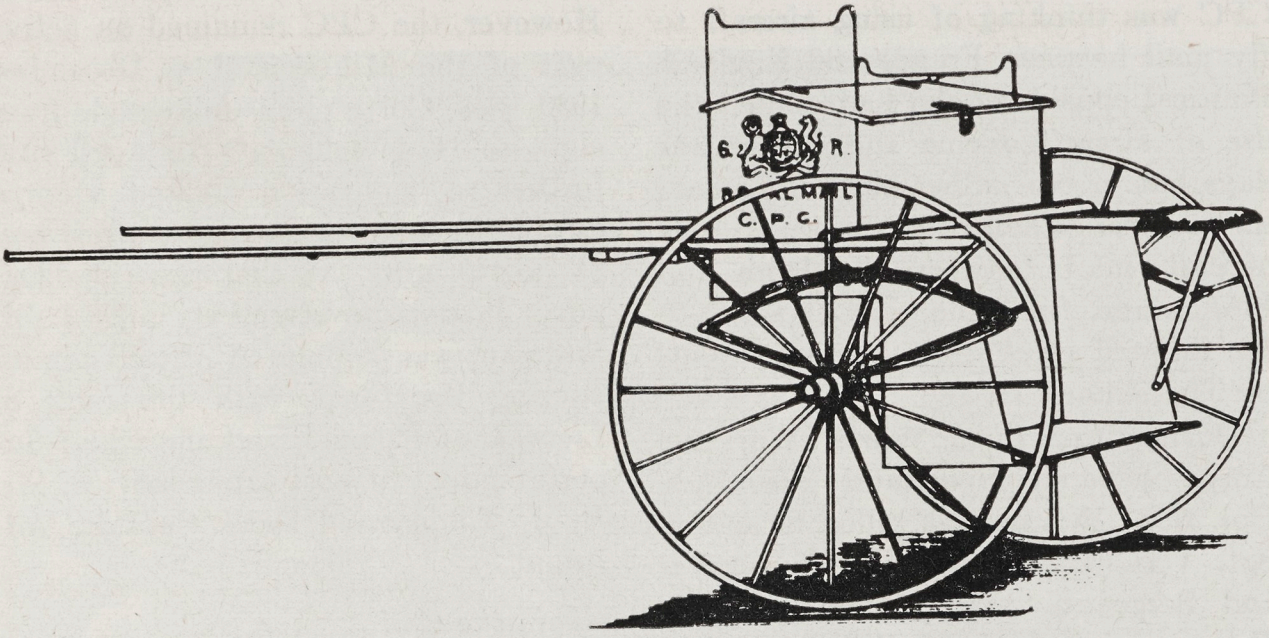
The first officers enlisted in the corps were civilian post office officials — Major G. Ross,, Captain L. J. Gaboury, Lieut. K. A. Murray, Lieut. J.T.F. Verville, all of whom were enlisted in July 1911. Later in January 1912 additional lieutenants were enlisted, including Lieut. W. R. Ecclestone.* Lieutenants Ecclestone and Murray were members of the original postal corps in South Africa.

Even at this time specialized mail vehicles were receiving attention, and an accompanying illustration shows a design submitted by Major Ross in 1911. Available information does not indicate whether this model ever reached production.

Locum Parentis

Since its inception the CPC has been

**Formerly a Captain in the Boer War, this officer left the Army and later re-enlisted as a Lieutenant.*—Editor.



Proposed mail cart (*circa* 1911).

associated closely with the RCASC, as the first Director of Postal Services, Colonel J.L. Biggar, was also the Director of Supplies and Transport, who during the First World War became Quartermaster-General.

Baptism of Fire

The First World War brought the first opportunity the Canadian Postal Corps had to serve with the Canadian Army on active wartime service, and it was early in September 1914 that postal volunteers proceeded overseas with the First Contingent. By the end of the war there were 346 volunteers serving with the CPC in 37 postal units.

Early in the war the CPC was located in London with the British Home Postal Depot where it soon was handling up to 2000 bags of Canadian mail at a time. From this depot the Canadian servicemen's mail was sorted out and subsequently transferred to Calais or Boulogne and Le Havre for onward transmission by rail or trucks to the various railheads and roadheads. In addition, an intricate cross-post service supported by 250 vehicles provided the connecting services between the various corps and divisions of the British Expeditionary Force. This system became very efficient and it could be said with pardonable pride that a letter posted anywhere in the BEF would be delivered to any other part of the BEF within 24 hours. By November 1917 the volume of letter mail had reached 375,000 letters daily.

Providing postal service had its complications and often a post office was improvised in a barn, a dugout or perhaps a bombed-out chateau. A black iron box contained the equipment and postal values necessary to go into business and so it was that wherever the postal box came to rest and the red and white postal flag was hoisted the CPC became operative.

Transport of bulk mails by trucks and train continued right through to the end of the war, but even then the

CPC was thinking of using aircraft to fly mail between France and England. Political considerations had denied the use of aircraft during the earlier war days but in November 1918 an airmail service was established to carry priority official mail between England and France and from the coastal areas to the forward areas and to the Canadians on The Rhine.

During the First World War the Corps suffered five fatal casualties. Cpl. A.W. Britton was killed in action. Sgt. V.D. Thompson died of wounds and Sergeants A.H. Hammill, W.H. Hilton and Cpl. E. M. Wilkinson died of other causes.

The Years Between

Between the First and Second World Wars the peacetime operations of the Canadian Postal Corps were limited. However, the CPC remained an active part of the Militia and in December 1920 the Corps was increased from eight to 11 detachments. In April 1935 further reorganization created a corps establishment of a base post office and 11 postal units. At that time the Deputy Postmaster General, Mr. J. A. Sullivan, was appointed officer administering the Corps with the rank of Lieutenant Colonel, and the Chief Superintendent of post office service, Mr. E. J. Underwood, was Captain Adjutant.

Again the Call

In 1939, the Canadian Postal Corps was again mobilized for active service with 1 and 2 Canadian Divisions. No. 3 Postal unit accompanied 1 Canadian Infantry Division to England, arriving in Aldershot on 18 December 1939.

Mail trucks at a railhead in France, 1915. The officers are, left to right, Lieut.-Colonel K.A. Murray, Major F.A. Warner and Colonel George Ross.

Mail orderlies emerging from a Field Post Office in France, 1915. Providing mail service under these conditions was a complicated business, and much improvisation was necessary to establish a post office

A Brigade Post Office in France, 1915. The officers are Colonel Ross (left) and Major Warner.

By 1941 Canadian postal units were established overseas with a headquarters organization under Major G. W. Ross.

At the other end of the world in late 1941 the CPC were in Hong Kong with "C" Force when the Garrison fell to the Japanese, and suffered as prisoners of war with their British comrades. S/Sgt. C. A. Clark, NCO in charge of the postal detachment, was awarded the Distinguished Conduct Medal. While a prisoner of war he set a fire which largely destroyed the enemy shipyard in which he was forced to work.

During the long years of the Second World War CPC personnel served in many corners of the globe — Kiska, Gibraltar, Sicily, Italy, North Africa, India, Ceylon, Burma, Hong Kong, and Continental Europe and Normandy through to Germany.

There was a natural expansion of the CPC during these years and special units were created such as a port detachment to provide secure handling of great volumes of service mail at dockside in England, and a Tobacco Depot to forward cigarettes and tobacco to the troops through the mail. A vast postal tracing section was established and required to work round the clock on undeliverable mails. Tracing presented many problems arising out of wartime conditions and it is a tribute to the perseverance of this section of the service that much of this mail eventually reached its destination.

A New Departure

In 1942 the Air Officer Commanding the Royal Canadian Air Force Overseas made representations to the Postmaster General of Canada for establishment of a postal service within the RCAF to be manned by Air Force personnel. Agreement was reached whereby 30 members of the CPC would be transferred from the Army to RCAF. Involved in the transfer were four officers and 26 other ranks, and of the latter, five senior NCOs were to be commissioned in the RCAF on transfer. This group of transferees formed the nucleus from which the RCAF postal service developed.

Originally employed to staff the RCAF Section of the Canadian Overseas Postal Depot, the RCAF Postal Service was forced by increasing demands for postal facilities to expand, with officers located at each RCAF District Headquarters, and postal clerks at all RCAF stations in the United Kingdom. Similar assistance was provided Royal Air Force Stations containing a preponderance of RCAF personnel.

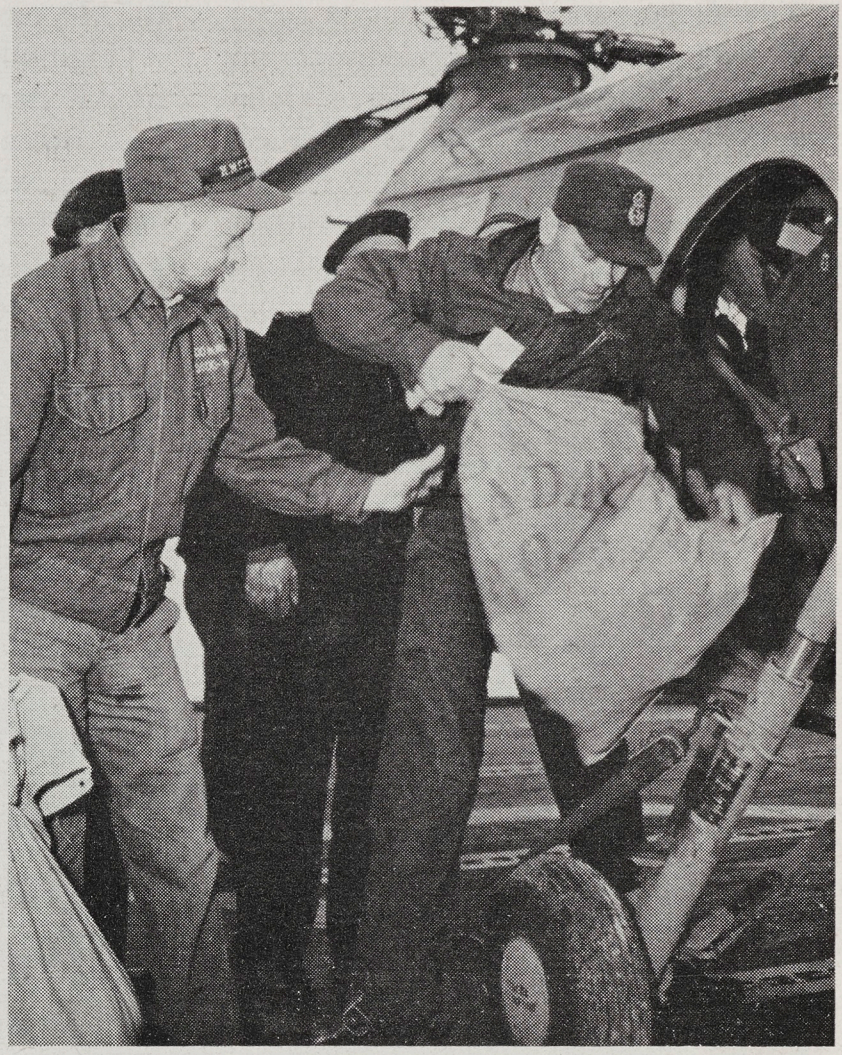
Subsequent to December 1943 it was found necessary to establish offices designated "Canadian Forces Posts"

The RCAF Section of the Canadian Overseas Postal Depot during the Second World War

at Algiers, Cairo, Bombay, Calcutta, Karachi and Colombo to expedite mail for RCAF personnel in those areas, and for Canadian Army Officers seconded to British forces.

"Trans-Atlantic Airlift"

As a result of increasing pressure for a speedier service on letter mail, 168 Squadron RCAF, familiarly known as the "Mailcan Squadron", was formed for the primary purpose of the carriage of mail. The first transatlantic flight was made on 17 December 1943. Originally equipped with B-17 Fortresses, and later Liberators, the Squadron in 30 months of existence made 636 trans-Atlantic flights. Prestwick, Scotland, was the main overseas terminus, with shuttle flights being maintained to the continent, the Mediterranean and the Middle East.



Mail arriving by helicopter aboard HMCS *Labrador* at sea, 1960.

During the Second World War the Canadian Postal Corps and the RCAF Postal service grew to 5080 officers, men and members of the RCAF Women's Division. Nineteen fatal casualties were reported. Of these three were killed in action, three died of injuries, and the remainder of other causes.

During the latter stages of the war a liaison was established with Royal Canadian Navy units in Belfast, Glasgow and Plymouth, but time was against a true tri-service organization. Colonel E.J. Underwood as wartime Director at Ottawa was responsible only for postal services to the Canadian Army and Royal Canadian Air Force units throughout the war. Overseas the Director was represented by Colonel G. W. Ross, Colonel G. H. Lawrence and Lieut-Colonel G. C. Bloomfield, in that order.

A Short-Lived Peace

The year 1946 saw Canadian Postal Corps personnel returning to their peacetime jobs. Most of the former post office employees returned to the Post Office Department. However, in 1950 the Korean conflict again saw the military postal service organized, very

briefly as part of the RCASC and then as a corps under Mr. Ross, who had served as Director of Postal Services overseas in the Second World War.

In the first years the CPC was established as a section under the Director of Supplies and Transport, but on 2 October 1952, as the special force expanded and was absorbed by the regular force, the CPC emerged as an independent tri-service directorate operating as a separate unit within National Defence Headquarters, administered by 1 Army Administrative Unit but reporting directly to the Chief of Naval Personnel, the Quartermaster-General and the Air Member for Personnel. To provide the Canadian forces with postal services in the Far East theatre, a Communications Postal Unit and a Base Post Office were established in Japan and Vancouver to serve the force.

Post-War Europe and the Middle East

While the Korean conflict was making headlines NATO was simultaneously coming in to its own. The despatch of Canadian Forces to Germany and France necessitated the establishment of postal units in England, France and Germany to serve Canadian servicemen there.

The trouble between Israel and Egypt in 1956 led to the creation of a United Nations Force in Egypt and Lebanon where the Canadian Postal Corps still plays a major role in the UNEF by operating the United Nations Base Post Office as well as providing service to the Canadian troops in that area.

In 1960 the United Nations sent a force into the Congo Republic, and to serve the Canadian contingent of

A Military Post Office in France, 1960.

this force the CPC has established military postal service in that country.

"Servire Armatis"

The Golden Anniversary year of the Canadian Postal Corps sees personnel serving in many parts of the world — the United Kingdom, France, Germany, Sardinia, Egypt, the Gaza Strip, Lebanon, the Congo Republic and throughout Canada. CPC personnel serve in Navy, Army and Air Force installations in all provinces of Canada except Newfoundland. Command Postal Units have been formed in Edmonton, Alta.; Oakville, Ont.; Montreal, P.Q., and Halifax, N.S. In addition, the CPC has taken over responsibility for postal orderly duties in units of the Royal Canadian Armoured Corps, Royal Canadian Artillery, Royal Canadian Infantry Corps, and other units of the Canadian Army. From a loosely-knit organization raised to serve servicemen in times of emergency, the Corps has emerged as a continuing entity and will continue to make its contribution to the welfare of the Canadian services in the future. To this aim the CPC is dedicated.

To celebrate the anniversary of the Corps, a commemorative dinner was held in Ottawa by the officers of the Canadian Postal Corps at which guests included former Directors of the Corps, representatives of the Department of National Defence and Post Office De-

Postal Orderlies at a UNEF Post Office in the Gaza Strip, 1960.

Mail vehicles serving 1 Air Division RCAF in France, 1960.

partment, The Royal Canadian Navy, The Canadian Army (Regular) and The Royal Canadian Air Force.

In addition, CPC units in Europe honoured the Corps dead of both wars and postwar periods with wreath-laying ceremonies at Nivelles, Belgium, in memory of CPC comrades who died or were killed during the First World War; Brookwood, England in memory of those who died or were killed during the Second World War; and Choloy, France, in memory of those who have died since the Second World War.

Courage is a Fundamental Attribute

Courage is probably the most fundamental attribute of a commander. It must be the kind of courage that endures despite stress and dangers and reverses. Obviously, the commander must have *physical* courage, for he must set the example. But for the commander more than other men—and the higher the commander, the more pronounced this is—there is a special requirement for *moral* and *spiritual* courage. This is the courage which enables the commander to do what he knows is right, regardless of the consequences to himself. This is the courage to accept criticism and blame in silence when it is for the best interest of the organization or the Nation. Without such courage, there can be no initiative, and any amount of knowledge and imagine will be sterile—for they will produce nothing.—*General Lyman L. Lemnitzer (U.S.).*

U.S. Army Missile Countdown

1944—The first U.S. ballistic missile, a U.S. Army *Private "A"*, successfully fired.

1947—The Nation's first two-stage rocket, a *V-2* with a *WAC Corporal* upper stage, successfully by the U.S. Army to an altitude of 25 miles.

1951—The first successful interception of a bomber in flight by a U.S. Army *Nike Ajax*.

1953—*Redstone*, the nation's first inertially-guided ballistic missile, fired successfully.

1956—First deep penetration of space by a *Jupiter C* which reached to an altitude of 682 miles.

1957—The nosecone re-entry problem was solved by the Army. A *Jupiter* nosecone recovered at sea.

1958—*Redstone* put *Explorer I*, the Free World's first satellite into orbit around the earth.

1959—The first and only U.S. space probe to orbit the sun, *Explorer IV* was launched by the Army.

1960—*Nike Zeus*, first anti-missile fired successfully. A *Hawk* air defence missile intercepted and destroyed a ballistic missile, proving the feasibility of "killing" a missile with a missile.

1961—*Redstone* rockets lifted the first Free World astronauts into space.

— From the "Military Review" (U.S.), September 1961.

Recruiting Drives — American Civil War

"War meetings were designed to stir lagging enthusiasm. Musicians and orators blew themselves red in the face with their windy efforts. Choirs improvised for the occasion sang 'Red, White and Blue' and 'Rally 'Round the Flag' till too hoarse for further endeavor. The old veteran soldier of 1812 was trotted out, and worked for all he was worth, and an occasional Mexican War veteran would air his nonchalance at grim-visaged war. At proper intervals the enlistment roll would be presented for signatures.

"Sometimes the patriotism of such a gathering would be wrought up so intensely by waving banners, martial and vocal music, and burning eloquence, that a town's quota would be filled in less than an hour. The complete intoxication of such excitement, like intoxication from liquor, left some of its victims on the following day, especially if the fathers of families, with the sober second thought to wrestle with; but Pride, that tyrannical master, rarely let them turn back." — *From "Hardtack and Coffee" by John D. Billings, 1887.*

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